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**Greg Spotts**SDOT Director

#### Dear Seattle,

At the Seattle Department of Transportation, we have a responsibility to make Seattle a more walkable, bikeable, transit-friendly, greener, and climate-resilient city. Since transportation emissions are the number one source of climate pollution in Seattle, we have a big role to play through policies and programs to reduce carbon emissions and mitigate the local effects of climate change.

We are proud to release our first-ever Climate Change Response Framework, which can guide the department's activities and help us meet the goals contained in the Mayor's Transportation & Climate Justice Executive Order.

This framework lays out SDOT's vision to intensify our work to reduce transportation emissions, by making it easier, safer, and more welcoming for people to walk, bike, and take transit. In addition, we're committing to utilize city policy to help electrify trips and reduce the carbon emissions of all types of delivery and trucking. We'll also lead by example with right-sizing and electrifying our own fleet, and use innovative ideas cocreated with our communities to broaden equitable access to sustainable travel options.

This framework acts as a critical input into the Seattle Transportation Plan (STP), our 20-year vision for the future of our transportation system. As we developed this plan, we heard that you want us to be bold and transformative as we intensify our climate response. The STP will work hand in hand with the One Seattle Plan to create a healthy, sustainable future for Seattle. These efforts will have benefits well beyond reducing climate pollution, creating safer streets and improving air quality and health outcomes, especially in those neighborhoods disproportionally impacted by climate change.

Supporting better, more efficient access to sustainable modes will create the biggest shift in our transportation culture and reduce climate pollution. Now is the time to mobilize and accelerate our climate response, and I invite you help us take the next step together.





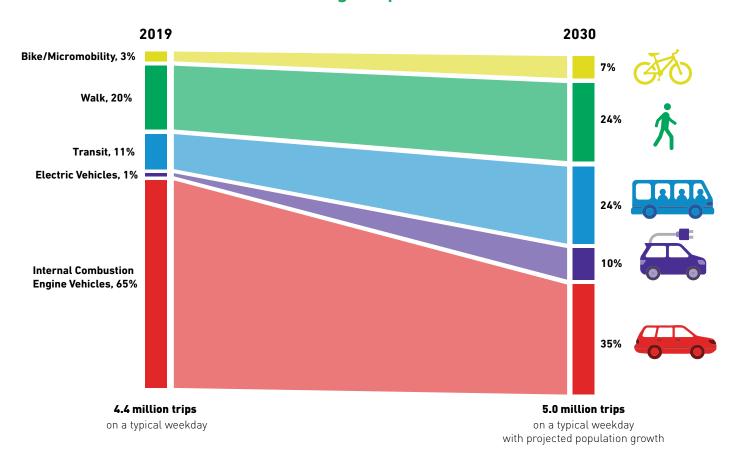
# **Executive Summary**

# Our climate is changing and we want to meet the moment.

Investments in walking, rolling, biking, and transit – many of them thanks to voters for the Levy to Move Seattle and Seattle Transit Measure – have helped move the needle. However, as our population has grown, we find ourselves a long way from meeting our goals of reducing greenhouse gas (GHG) emissions from transportation: 82% GHG reduction from a 2008 baseline; and for 90% of all personal trips and 30% of all freight trips in the city to be zero emission by 2030.

Transportation is the largest GHG emission contributor in Seattle and the area where we at SDOT have the most influence to make meaningful change. So, we're stepping up, developing the Climate Change Response Framework (CCRF) to accelerate a reduction in Seattle's transportation emissions.

#### **Potential Outcomes of the Climate Change Response Framework**



Mayor Harrell's December 2022 Executive Order directed SDOT to develop a framework for transportation-focused climate change response

# Climate Change Response Framework Strategies



**1. Create a Culture of Climate Action and Optimism.** The work starts here, at SDOT. This framework will guide our overarching approach and urgency to respond to climate change, transform our organizational culture, and affirm how our climate goals guide project development – all while centering community co-creation and climate justice.



**2. Make short trips safe, affordable, and zero-emission.** So many of our daily trips – especially our non-commute trips – cover short distances and can be accomplished outside of our personal vehicles with the right infrastructure, services, and programming. We will accelerate climate-friendly investments at the neighborhood scale to make this happen.



**3. Make it more convenient, reliable, and affordable to ride transit.** Robust transit service, prioritizing transit efficiency on our streets, and safe, sustainable, and reliable connections to buses, light rail, and the streetcar will be the backbone of our climate response.



**4. Enable use of climate-friendly travel choices.** We'll continue to expand innovative and community-centered programming so that using shared and zero-emission travel options helps Seattleites save money, improves public health, and transitions us away from 20th-century, car-dominant transportation options.



**5. Improve freight efficiency.** Moving goods and delivering services in more efficient ways not only reduces emissions, it's also good for business by improving operations and predictability. Co-creating solutions that work for our service providers and businesses, including large-scale freight and maritime industries, means we can leverage our climate response and strengthen our local communities for a win-win.



**6. Electrify Seattle.** Electrification strategies will reduce emissions for necessary personal and freight vehicle trips. We are committed to supporting our partners in infrastructure installation and pilot programing, and leading by example with our own fleet to help accelerate the electrification of all vehicles. We'll also support the electrification of regional transit fleets with our partners at King County Metro and Sound Transit.

There is good news: much of this work is simply doing more of what we're already doing

# The CCRF is composed of 27 strategies across 6 categories. Each one is detailed further in Chapter 5.



#### Create a culture of climate action and optimism

- → Lead by Example Through Internal Operations and Processes
- → Co-create Climate Solutions and Optimistically Communicate the Benefits



#### Make short trips safe, affordable, and zero emission

- → Explore Launching an E-Bike Rebate Program
- → Implement Low-Pollution Neighborhoods
- → Accelerate Pedestrian, Bike, and E-Mobility Network Implementation
- → Expand and Reduce the Cost of Shared Micromobility
- → Expand the Bike and Micromobility Parking Program
- → Launch a Community and Mobility Hubs Program



#### Make transit more convenient, reliable, and affordable

- → Accelerate Bus-Only Lane Installations and Other Travel Time + Reliability Improvements
- → Continue to Support Partners in Expansion of Link Light Rail Network
- → Support Increased Transit Oriented Development (TOD) with Transit Expansion
- → Continue to Fund Bus Service Increases
- → Increase Reach of Reduced Transit Fare Programs



#### Enable use of climate-friendly travel choices

- → Expand Reach of Existing Transportation Demand Management Programs
- → Pursue Off-Street Parking Pricing and Usage Reforms
- → Support the State and Region in Advancing Mobility Management Strategies
- → Explore Launching a Mobility Wallet Program
- → Implement On-Street Parking Reforms
- → Pursue Reforms to Limit Off-Street Parking Supply in New Development



#### Improve freight efficiency

- → Enable More Right-Sized, Zero-Emission Urban Delivery Vehicles
- → Implement Commercial Vehicle Permitting and Delivery Fees
- → Increase the Number of Commercial Vehicle Loading Zones



#### **Electrify Seattle**

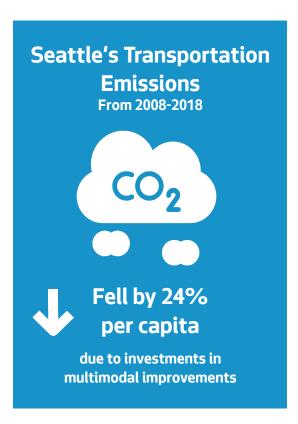
- → Support Electrification of Personal Vehicles
- → Support Electrification of Freight Vehicles
- → Support Electrification of Shared Mobility Vehicles
- → Support the Transition to Zero-Emissions Transit
- → Electrify the City Fleet



By 2030, we estimate that we can almost double the share of zero emission trips in Seattle through implementing the CCRF. We can make progress now by scaling up, innovating, and accelerating this work.

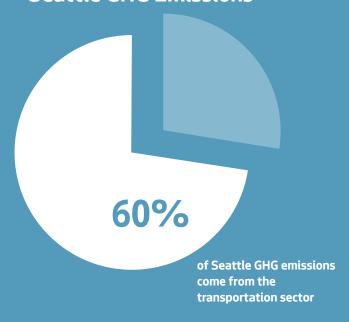
A successful climate response means making it easier to walk, roll, bike or take transit for most trips, while electrifying as many remaining necessary car and freight trips as possible.

The CCRF outlines strategies that we and our partners need to implement to effectively respond to climate change – while maximizing impact by creating significant community benefits. This is our work plan to reach our climate goals and achieve the healthy, safe, and equitable future we envision for Seattle.



Achieving our climate goals will require bold action and transformation

#### **Seattle GHG Emissions**



#### How can SDOT make an impact?

Because Seattle's primary energy source is carbon-free hydropower, the majority of the City's emissions come from transportation. The CCRF highlights strategies to reduce the emissions we produce as we travel around our neighborhoods, across Seattle, and beyond. Broadly, we want to make it easier for you to shift towards more efficient, shared, and sustainable travel options, while remaining personal and commercial vehicle trips become increasingly electric. At SDOT, our influence over street design, space allocation among travel options, and supportive programs means we play a central role.

We are all in this together.

#### **CCRF Goal**

Each of the strategies proposed in the CCRF helps achieve the climate action goal set forth in the draft Seattle Transportation Plan (STP) – a 20-year vision for the future of the city's transportation system:

#### Respond to climate change through innovation and a lens of climate justice.

The CCRF is rooted in climate and environmental justice, which links to our <u>Transportation Equity Framework</u> (<u>TEF</u>) and nearly a decade's worth of guidance delivered by the City's <u>Environmental Justice Committee</u> and through its <u>Equity and Environment Agenda</u>. Like the TEF, the CCRF emphasizes affordable and accessible options for transportation and mobility for all people, with an emphasis on improvements that will benefit historically underserved communities.

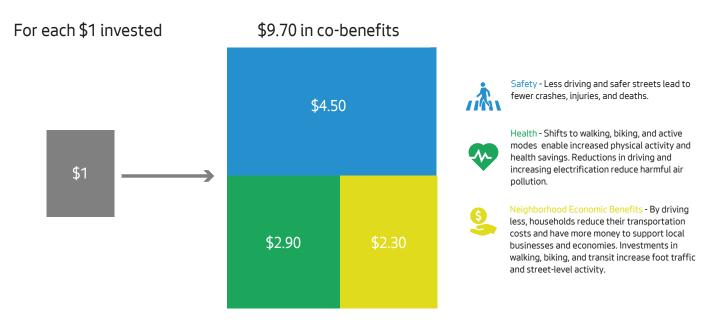
In large part, our future will be achieved by accelerating efforts to increase walk, bike, and transit trips in significant numbers. Centering our approach on a shift to sustainable and efficient travel options will help us transition to a transportation culture that's more balanced and multimodal.

Implementing the CCRF will help shape and preserve the healthy, safe, and equitable future Seattle we envision

#### **Community Benefits**

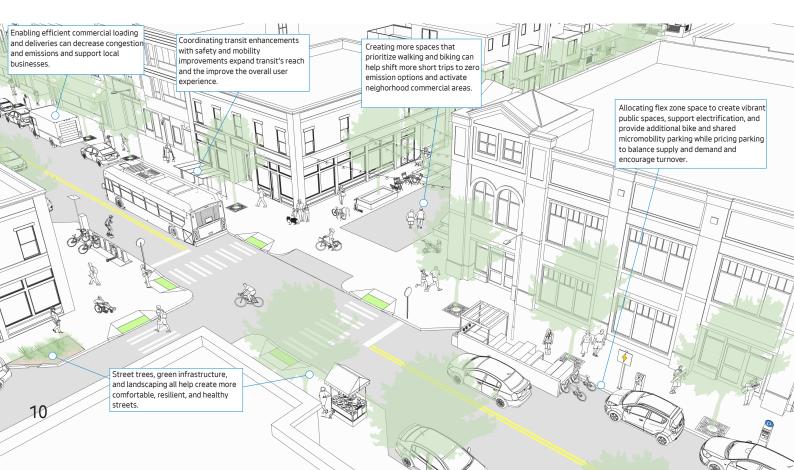
The benefits of climate action - through a lens of One Seattle - span well beyond the environment. The actions needed to address climate change will:

- » deliver climate justice and transportation equity
- » make our streets safer
- » improve health outcomes
- » result in direct economic benefits to local communities



Co-benefits are based on the estimated reduction in vehicle miles traveled from CCRF strategies and quantified using the United States Department of Transportation's Benefit-Cost Analysis Guidance for Discretionary Grant Programs

#### Benefits at the Neighborhood Scale



The CCRF community benefits are organized in four categories. Each one is detailed further in Chapter 2.



#### **Climate Justice**

Climate justice means that the benefits of climate action are provided to people disproportionately impacted by climate change, while the burdens and responsibilities for addressing it are taken on by groups and communities who can more easily afford to do so.



#### **Safer Streets**

Climate response supports Vision Zero by creating a stronger and safer active transportation and transit network. Almost every intervention we can make that has a safety benefit has a climate benefit, and the nexus of climate and safety benefits comes from growing the share of trips made by climate-friendly travel options like walking, biking, and riding transit.



#### **Healthier Communities**

As we create more opportunities for people to build physical activity into their daily routines, everyone will be walking and rolling more often – especially for short trips. Concurrent health benefits will come from cleaner air and greener streets as emissions are reduced and we repurpose car-dominant spaces into more balanced, enjoyable streetscapes.



#### **Thriving Economy**

Investments that make it easier to walk, roll, or take transit can help our economy thrive, with more foot traffic that supports local business. Analyses of past transportation investments across the country indicate that a dollar invested in sustainable transportation projects creates significantly more jobs compared to a dollar spent on a road or highway project.

#### How Will We Deliver?

To implement the CCRF strategies, we must position our department for success. This includes building the support, capacity, and funding approach necessary to implement the CCRF and move toward our climate goals. To deliver the CCRF, we will:

- » Lead and Inspire: We will inspire and collaborate with agencies, cities, and peers across the region, country, and globe to demonstrate impact and support for climate action and the many community benefits it provides.
- Expand Capacity to Deliver Climate Action: We will position our department to more effectively advance programs, policies, and investments that mitigate climate impacts and advance climate justice. This includes climate-focused leadership at all levels within the department and the staff and resources to implement the CCRF strategies.
- » Expedite Project Delivery: We will restructure our processes and priorities so we can take action and make an impact quickly - becoming more nimble, responsive, and streamlined, with an equity-forward approach.
- » Advocate for Necessary Legislation: We will advocate for legislative changes at all levels of government to implement certain CCRF strategies.
- » Inform a Funding Approach: We will rethink our funding strategies, especially as we work with communities across the city to develop an equitable long-term funding approach to holistically address transportation needs.
- » Measure and Report: We will consistently measure the progress we're making toward our climate goals and transparently report on our progress. Testing out strategies and evaluating our progress will help us maximize the efficiency and benefits of our climate change response.

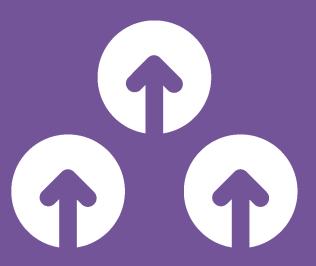




**The Opportunity** 

### **Chapter 1: Summary**

- » Seattle is already experiencing the impacts of climate change.
- » A sustainable and vibrant future is a top priority for the City and Seattleites.
- » The CCRF identifies what is required of us at SDOT to accelerate our response to climate change.
- » Fortunately, Seattle has already set a strong foundation for climate response, and we're ready to rise to the occasion.



#### Now is the time to accelerate our climate response

Transportation accounts for about 60% of Seattle's core GHG emissions, according to our latest Community Greenhouse Gas Inventory. In 2013, we set an ambitious climate goal for 2030 to reduce GHG emissions from transportation by 82% (based on a 2008 baseline). While Seattle has seen a recent per capita reduction in vehicle miles traveled (VMT), by 2018, the most recent date that data was available not impacted by the 2020 pandemic lockdown, we only reduced overall transportation emissions by less than 5%. We can make progress now toward our goals and reduce long-term climate impacts, but we must revamp our efforts with more speed and scale. This means doing even more of what we already do today: prioritizing sustainable travel options and reducing vehicle miles traveled.

By scaling up and accelerating our climate work, we can make progress on our equity work. Our actions can begin to reduce climate impacts that fall disproportionately on Black, Indigenous, and People of Color (BIPOC) communities, immigrants, refugees, people with limited English language proficiency, people with disabilities, low-income residents, and other groups and communities we have historically underserved. These impacts are often coupled with worsened health effects due to disproportionate exposure to pollution from fossil-fuel powered cars and trucks.

The CCRF is a decision-making tool for organizational and policy changes required to make meaningful progress toward our 2030 climate goals. The CCRF also guides necessary investments and highlights strategies and funding approaches for accelerated implementation.







#### A One Seattle approach to climate response

In December 2022, Mayor Bruce Harrell signed Executive Order 2022-07: One Seattle Climate Justice Actions to Reduce Emissions from the Transportation Sector. This declaration pledges 23 actions to equitably accelerate emissions reduction in the transportation sector, build a green economy, and invest in community resilience to respond to climate change.

One of the Mayor's actions instructed SDOT to develop a transportation-focused framework to inform policy and investment needed to reduce the high proportion of citywide emissions from the transportation sector, and to achieve our ambitious climate goals. It recommended that direction from the framework inform transportation climate strategies and actions in the One Seattle Comprehensive Plan, the Seattle Transportation Plan, and a future transportation funding package. The CCRF is the product of this Executive Order directive.



Beyond documenting SDOT's framework for climate response, many of the other actions in the Executive Order are uplifted here in SDOT's CCRF. These are core strategies in our climate response, and include:

- » Engaging in community conversations to co-create Low Pollution Neighborhoods
- » Continuing and accelerating investment in bus and transit priority lanes
- » Capitalizing on transit investments through programming and equitable service, such as through free and reduced transit fare programs
- » Expanding programs like Healthy Streets and School Streets to make walking, biking, and rolling safer and more accessible for everyone
- » Partnering with other city departments on incentives to electrify vehicles, especially for women and minority business enterprises, and small businesses in environmental justice communities
- » Setting a path forward to electrify and create a zero-emissions shared mobility landscape
- » Incentivizing zero-emissions freight options, including through innovative programs at the curb
- » Advancing plans for zero-emissions SDOT and citywide fleet operations

These One Seattle strategies are core to SDOT's CCRF, along with many more strategies. Read on to find out how we developed our framework through a lens of opportunity and community benefits, focusing on solutions that are implementable.

#### Introducing the Climate Change Response Framework (CCRF)

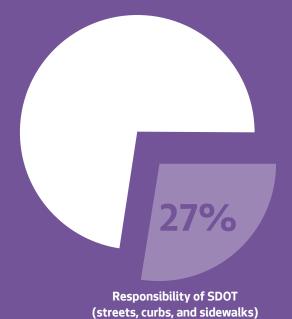
The CCRF identifies what is required of us at SDOT and our partners to effectively respond to climate change and its long-term impacts to realize our desired future. The CCRF is composed of strategies and actions that:

- » Accelerate the reduction of GHG emissions and vehicle miles traveled
- » Transition people and goods movement to zero-emission and low-emission transportation options
- » Increase investments in infrastructure and services that make it more convenient and affordable to walk, roll, bike, and take transit
- » Work toward climate justice by prioritizing the most disproportionally impacted communities through an equitable distribution of the benefits of climate action

We at SDOT, in partnership with the Office of Sustainability and Environment (OSE), the Office of Planning and Community Development (OPCD), the Office of Economic Development (OED), Seattle City Light (SCL), the Mayor's Office, King County Metro, Sound Transit, and private partners, will implement the CCRF, prioritizing strategies that have the highest impact on GHG reduction and are most cost effective at meeting climate targets.

The CCRF is rooted in climate and environmental justice, which links to our <u>Transportation Equity Framework</u> (<u>TEF</u>) and nearly a decade's worth of guidance delivered by the City's Environmental Justice Committee. Like the TEF, the CCRF emphasizes affordable and accessible options for transportation and mobility for all people, with an emphasis on improvements that will benefit historically underserved communities. Many of the tactics adopted in the TEF will be elevated through the CCRF, especially those related to safety, transit access, and mobility and transportation options.

#### Seattle's Land Area



#### What is SDOT's role?

Twenty-seven percent of Seattle's land is made up of streets, curbs, and sidewalks. At SDOT, we're responsible for the design and management of many of these spaces. It's a limited amount of real estate to move our rapidly growing city of people and goods. We help buses and freight deliveries run on time, create enjoyable public spaces, manage and increase the urban tree canopy, and build a network of bike lanes and sidewalks to serve people of all ages and abilities. The travel choices Seattleites make every day are directly related to the way we allocate these spaces.

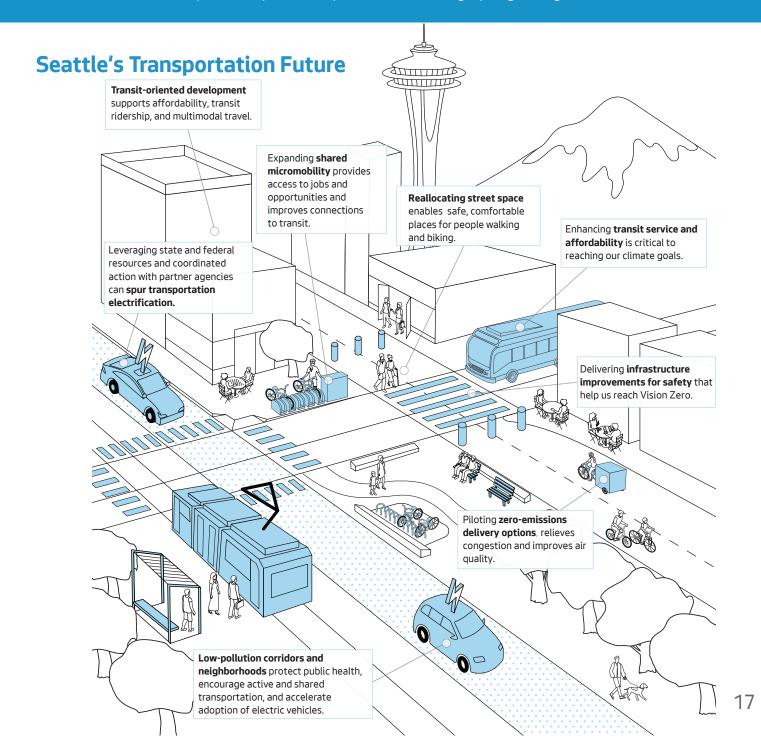
Our role is to operate the transportation system (e.g., signals, markings, signage, and right-of-way allocation) to maximize the comfort, convenience, and safety of people walking, biking, taking transit, and moving goods, as a means to encourage sustainable travel choices.

# The CCRF is also connected and supplementary to our draft STP goals, as well as other existing City plans.



The strategies in the CCRF are geared towards reducing transportation emissions and progressing towards our climate goals, they will help shape a transportation system that works better for people across Seattle. Creating a safer, more comfortable, and more convenient experience for people using low-emission forms of transportation will help reactivate downtown, better connect neighborhoods, and create new opportunities for residents and businesses.

A sustainable and vibrant future is a top priority for the City and Seattleites. Through years of community engagement during planning efforts, including the development of the STP, we heard you consistently support climate response. Seattleites are demanding progress toward climate justice. The future we want is within reach if we rapidly transition to a more inclusive city, a city built for more mobility and better access for all. Many of us will still drive in the future, ideally in electric vehicles (EVs) – but through the CCRF, we will make it easier to replace many vehicle trips with more walking, cycling, rolling, and transit.



Sustainability is among one of six priority goals proposed in the draft STP. The CCRF will help to inform the STP, with climate response prioritized in line with other key goals like safety and equity.

STP priority goals:



#### Safety

Everyone feels safe traveling in Seattle, and there are no serious injuries or fatal crashes



#### Maintenance & Modernization

Improve city transportation infrastructure and ready it for the future.



#### Equity

Co-create with community and implement restorative practices to address transportation-related inequities.



#### **Mobility**

Provide reliable and affordable travel options that help people and goods get where they need to go.



#### Sustainability

Respond to climate change through innovation and a lens of climate justice.



#### Livability

Reimagine city streets as inviting places to linger and play.

The CCRF incorporates elements of previous City plans and goals, including Vision Zero, the Transportation Equity Framework, and the Clean Transportation Electrification Blueprint.

The CCRF was used, along with other foundational plans and goals, to inform the development of the STP, which will be supportive of Seattle's forthcoming Comprehensive Plan update, the One Seattle Plan. One Seattle and the STP will guide the city's growth and transportation evolution over the next 20 years.

Our work that uplifts climate, safety, and equity will be referenced and built upon in larger departmental and citywide planning efforts, resulting in an intentionally coordinated approach to creating our future city.



#### Now is the time to mobilize.

Seattle residents, city staff, and elected officials at all levels support an accelerated climate response.

- The Seattle Public: Through engagement around the development of the Seattle Transportation Plan, climate change is consistently listed as a top concern. Voters also supported the Levy to Move Seattle and Seattle Transit Measure, both of which bolster climate-friendly travel options.
- Black, Indigenous, and People of Color (BIPOC) Communities: Seattle's BIPOC communities, low-income
  communities, and immigrant and refugee communities the most at-risk in the face of growing climate
  impacts have supported climate action for years.
- Mayor's Office: In December 2022, Mayor Harrell signed Executive Order 2022-07: One Seattle Climate
  Justice Actions to Reduce Emissions from the Transportation Sector, directing City departments to work
  together to prioritize and expand actions that equitably reduce or eliminate GHG emissions within the
  transportation sector.
- **City Council:** In July 2022, City Council passed <u>Resolution 32059</u>, directing City staff to revise goals and policies to reduce overall GHG emissions, including efforts to reduce VMT and over-reliance on personal vehicles.
- City Boards and Commissions: Several of our boards and commissions such as the Seattle Pedestrian
  Advisory Board, the Seattle Bicycle Advisory Board, the Transportation Equity Workgroup, the Green New
  Deal Oversight Board, the Environmental Justice Committee, the Urban Forestry Commission, and the
  Seattle Planning Commission, have all provided feedback on how to build a more equitable transportation
  system and more resilient communities.
- State Government: Washington State has launched numerous programs and initiatives to combat climate change and reduce transportation emissions, and now mandates that municipalities consider climate change in their Comprehensive Plan updates. The State Legislature is considering establishing a road user charge in the future, in part to harmonize transportation funding and climate policy objectives.
- Federal Government: In January 2023, the Biden Administration released the "U.S. National Blueprint for Transportation Decarbonization," establishing a road map to address the climate crisis, which acknowledges that we must eliminate nearly all greenhouse gas (GHG) emissions from the sector by 2050, in a way that is safe, accessible, affordable, equitable, and provides sustainable transportation options for people and goods.



The good news is that we are prepared for this moment and have already set a strong foundation for climate response. In fact, we're already seeing a per capita reduction in VMT in Seattle. Much of the necessary work is simply an expansion or acceleration of what we're already doing. And a lot of what we've done, shown below, is thanks to voters who've approved the Levy to Move Seattle and the Seattle Transit Measure:



**Improved transit travel time** and reliability on 14 routes in 2020 and 2021.



**Increased the bike** network by building more than 45 miles of bikeways since 2016.



**Made transit more affordable** by providing over 10,000 residents with free or subsidized ORCA passes.



**Launched bike and scooter share programs** that have increased mobility choices, with over 3.7 million trips taken in 2022.



Made safety improvements like intersection daylighting to slow down vehicles and shorten pedestrian crossing distances.



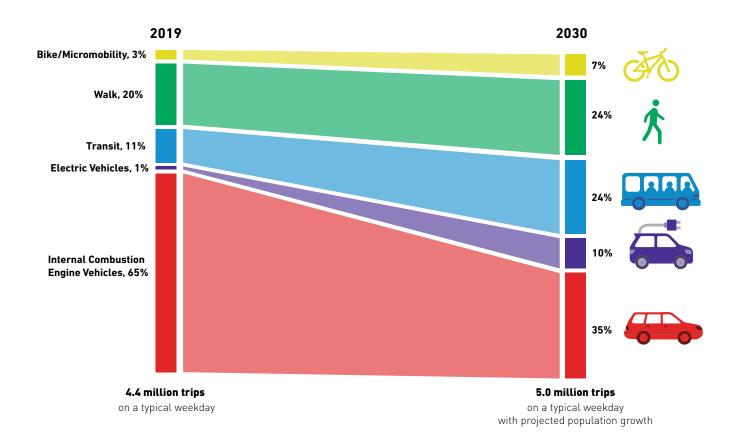
**Innovated our streets** using pilots and quick-build, temporary solutions like Healthy Streets and Cafe Streets.



Despite this foundation, we still have a lot to do to rapidly reduce GHG emissions and VMT, and to make walking, biking, and taking transit more common means of transportation. Climate change impacts will require us to not just build on, but go well beyond our many successes to date.

#### **Evolving Toward a More Multimodal Future**

Even as Seattle continues growing, by implementing the CCRF strategies and hitting our targets we estimate that we can almost double the share of zero emission trips in Seattle.



Seattleites have consistently supported a climate response for many years – so, it's not a question of "if" we respond, but a question of "how." We must create a more sustainable future.

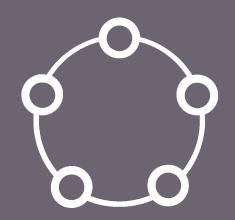
### Let's take the next step together.



**Community Benefits** 

### **Chapter 2: Summary**

» Reducing greenhouse gas (GHG) emissions and the miles we drive isn't just good for the environment, it also makes our communities safer, healthier, more vibrant, and economically resilient.



# Community Benefits of Reducing Greenhouse Gas (GHG) Emissions and Vehicle Miles Traveled (VMT)



Climate Justice



Safer Streets

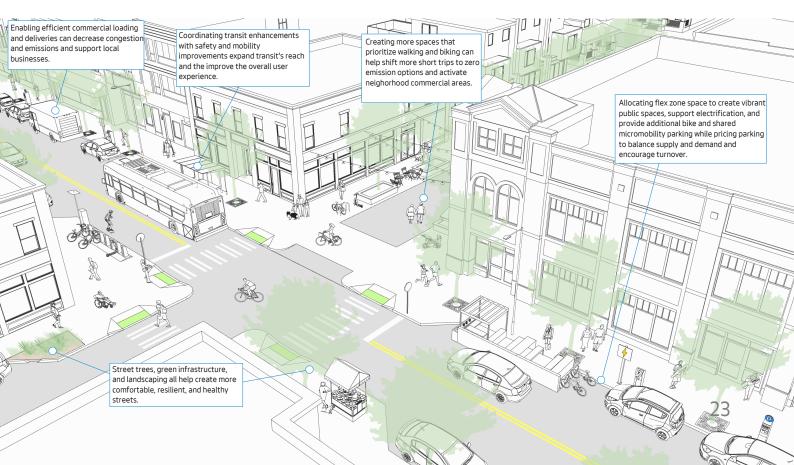


Healthier Communities



Thriving Economy

#### Climate investments are worth the money



#### **Community Benefits of Reducing GHG and VMT**

Investing in climate-friendly transportation solutions can provide a wealth of benefits for the safety, health, and economic resiliency of Seattle's communities.

#### For each \$1 invested

\$8 - 10 in co-benefits





**Safety** - Less driving and safer streets lead to fewer crashes, injuries, and deaths.



Neighborhood Economic Benefits - By driving less, households reduce their transportation costs and have more money to support local businesses and economies. Investments in walking, biking, and transit increase foot traffic and street-level activity.



**Health** - Shifts to walking, biking, and active modes enable increased physical activity and health savings. Reductions in driving and increasing electrification reduce harmful air pollution.

Co-benefits are based on the estimated reduction in vehicle miles traveled from CCRF strategies and quantified using the United States Department of Transportation's Benefit-Cost Analysis Guidance for Discretionary Grant Programs



#### **Climate Justice**

Climate change poses the greatest threat to those least responsible for it, including but not limited to, BIPOC communities, low-income communities, immigrant and refugee communities, and others that we have historically underserved. The concept of climate justice means that the benefits of climate action are provided to those most disproportionately impacted by climate change, while the burdens and responsibilities for addressing it are taken on by groups and communities who can more easily afford to do so.

We are committed to centering equity in our climate response and championing climate justice as part of our One Seattle vision and commitment to advancing a Green New Deal for Seattle. Using the Transportation Equity Framework as our guide, we will ask the questions of who benefits, who is burdened, and who is at the table as we consider each of the programs and investments recommended in the CCRF. We will do this before, during, and after designing projects and activating programs, and we will explore more avenues to cocreate climate- positive projects with local communities.

Climate justice response can be a powerful driver of transportation equity by expanding transportation options and improving reliable connections to work, school, and health care. Climate justice response will also reduce the overall costs of household transportation, result in cleaner air in neighborhoods higher on the Race and Social Equity (RSE) index, and create new low-carbon jobs, ultimately helping to reduce our current transportation disparities.



#### **Safer Streets**

Like many cities around the country, Seattle adopted Vision Zero, which is a goal to end traffic deaths and serious injuries on city streets by 2030. Right now, Seattle sees more than 10,000 crashes a year, with a 3-year average of 28 people losing their lives and nearly 180 people seriously injured. These are our friends, neighbors, and family members.

Climate response supports Vision Zero by creating a stronger and safer active transportation and transit network. Reducing the need to drive will help reduce trips, and in turn reduce the likelihood of vehicle crashes and resultant injuries and deaths. Together, climate response and Vision Zero strategies can create safer streets for everyone.



#### **Healthier Communities**

Climate response creates opportunities for people to build physical activity into their daily routines, meaning everyone is walking and rolling more often - especially for short trips. Active transportation, paired with a reduction in emissions and improved air quality, improves overall physical and mental health, and therefore reduces healthcare costs over time. We saw in 2020 just how quickly air quality can improve, with noticeably cleaner air after just a few weeks of reduced emissions during Covid-19 lockdowns. Academic studies suggest that asthma rates are higher in communities with more transportation emissions, regardless of regular exercise habits. And climate-friendly installations, like tree canopies, make communities more resilient to extreme heat events.



The American Public Health Association identifies health advantages from transportation networks focused on walking, biking, rolling, and riding transit:

- » Active transportation as part of everyday travel is as effective as structured workouts for improving health.
- » Public transit riders take 30 percent more steps and spend roughly eight more minutes walking each day than drivers.
- » A 30-minute round-trip bike commute is associated with better mental health.
- » Walking or biking 30 minutes a day can lower the risk of certain cancers.

Most trips within Seattle are relatively short, but we rely on cars for a large share of these short trips.



The average trip within Seattle is **2.2 miles**.



**41%** of trips in Seattle are less than 1 mile.

**73%** of trips in Seattle are less than 3 miles.



2 out of 3 car trips within Seattle are less than 3 miles.

#### **Thriving Economy**

The Covid-19 pandemic created negative impacts on downtown Seattle, not to mention small businesses across the city. We are prioritizing support for revitalizing our downtown and local economies, most recently through Mayor Harrell's 2023 Downtown Activation Plan, and we're already starting to see energy and vibrancy return. Climate response is one lens through which we can accelerate revitalization efforts. More spaces for people to gather, linger and play on people streets and in public spaces will bring direct economic benefits, such as increased retail sales, attraction of new businesses, and welcoming locals and tourists alike to vibrant, walkable destinations. This will be a focus for our recovery downtown, and in our neighborhood centers too – with a strong emphasis on community-centered spaces and support for locally-owned businesses to thrive.

In addition to neighborhood benefits and cost savings, many specific programs and investments proposed in the CCRF will also create thousands of good-paying jobs for Seattle residents and spur additional economic growth. Analyses of past transportation investments across the United States show that a dollar invested in walking, biking, or transit projects creates significantly more jobs compared to a dollar spent on road or highway projects. Accelerating the transition to electric vehicles will also lead to new jobs, and new workforce development and training initiatives will be needed so historically underserved communities benefit from the transition away from internal combustion engines. From 2010 - 2019, Seattle added 80,000 new jobs across all sectors. Our estimates indicate that the CCRF's climate response investments alone could generate over 10,000 new jobs over the next decade.

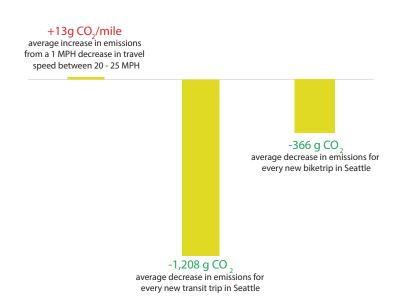




#### What about the trade-offs?

Redesigning our streets to improve walking, biking, and transit can be challenging. We often hear that repurposing space used for cars could increase congestion and negate any project's climate benefits. While it's true that cars typically emit more carbon dioxide per mile on average as travel speeds decrease (about 13 additional grams/mile for every one MPH decrease in travel speed between 20-25 MPH), many projects in Seattle and nationally that decrease the amount of space dedicated to cars have no or minimal impact on vehicle travel times, according to the Federal Highway Administration.

The climate gains from shifting more trips to walking, biking, and transit more than compensate for marginal decreases in vehicle speeds. When we add new active transportation infrastructure to our network, we make it more comfortable to choose walking and biking. When we prioritize transit movement through dedicated lanes and signals, we make it easier to choose transit. All of these investments make it easier to shift certain trips away from cars and to other options, which in turn reduces vehicle miles traveled and resultant emissions. These choices will become easier as neighborhood destinations like schools, retail, and healthcare are located in new areas as we implement the One Seattle Comprehensive Plan.



In Seattle, every new transit trip eliminates 1,208 grams of carbon dioxide on average and every new bike trip eliminates an average of 366 grams of carbon dioxide.





The Solution

### **Chapter 3: Summary**

- » The CCRF strategies include a few new programs we will need to create; however, the majority of the strategies detailed in the CCRF are things we already do - we just have to dramatically scale up and accelerate their delivery to reach our climate goals.
- » Many strategies rely on partnerships, especially when it comes to electrification and freight decarbonization. Our work alongside partners is essential to success.

We organized the strategies into 6 categories:



Create a culture of climate action and optimism



Make short trips safe, affordable, and zero-emission



Make it more convenient, reliable, and affordable to ride transit



Enable use of climate-friendly travel choices



Improve freight efficiency



**Electrify Seattle** 

#### **Identifying solutions**

We followed a rigorous, data-driven approach—combined with analysis of community feedback received through parallel planning efforts—to identify the strategies and actions to include in the CCRF. We modeled the climate impacts of the CCRF's portfolio of current projects and programs, as well as a range of potential new actions. Through development of an innovative tool—known as the Climate Calculator—we are able to understand the potential impacts of existing and new strategies on GHG emissions, vehicle miles traveled, and travel choices. Staff across SDOT were involved in developing the Climate Calculator, and staff at other City departments and partner agencies were regularly consulted.

#### **CCRF Strategies**

We organized the strategies into 6 categories, detailed below. The full list of CCRF strategies can be found in Chapter 5.



# Create a culture of climate action and optimism

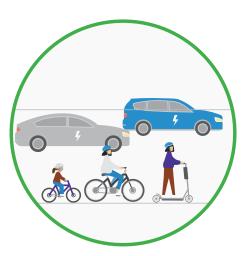
The work starts here, at SDOT. This framework will guide our overarching approach and urgency to respond to climate change, transform our organizational culture, and affirm how our climate goals guide project development, while centering community co-creation and climate justice.





## Make short trips safe, affordable, and zero-emission

So many of our daily trips – especially our non-commute trips – are short distances that could be accomplished outside of our personal vehicles with the right infrastructure, services, and programming. We will center co-creation and investment at the neighborhood scale to make this happen.





### Make it more convenient, reliable, and affordable to ride transit

Robust transit service, prioritizing transit efficiency on our streets, and safe, sustainable, and reliable connections to buses, light rail, and the streetcar will be the backbone of our climate response.





## **Enable use of climate-friendly travel** choices

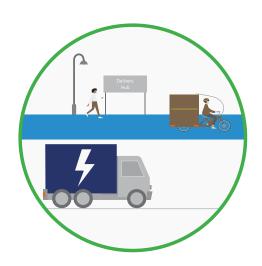
We'll continue to expand innovative and community-centered programming so that using shared and zero-emission travel options helps Seattleites save money, improves public health, and transitions us away from 20th-century, car-dominant transportation options.





#### Improve freight efficiency

Moving goods and delivering services in more efficient and climate-friendly ways not only reduces emissions, it's also good for business by improving operations and predictability. Co-creating solutions that work for our service providers and businesses, including large-scale freight and maritime industries, means we can leverage our climate response and strengthen our local communities for a win-win.





#### **Electrify Seattle**

Electrification strategies will drastically reduce emissions for necessary personal and freight vehicle trips. We are committed to supporting our partners in infrastructure installation, pilot programming, and leading by example with our own fleet, to help accelerate the electrification of all vehicles. We'll also support the electrification of regional transit fleets with our partners at King County Metro and Sound Transit.

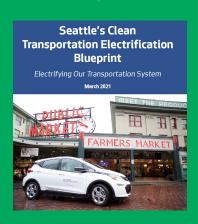


#### **Partnering for Success**

The CCRF solutions are mostly in SDOT's control and see SDOT playing the leading role to implement and accelerate them to reduce transportation emissions. But to achieve the maximum benefit across the full suite of strategies, we will rely on strong partnerships with other City departments, partner organizations like King County Metro and Sound Transit, and other public, private, and non-profit sector partners.

Seattle's response to transportation sector climate emissions is already positioned for success due to Mayor Harrell's *One Seattle* approach and recent Executive Order, as well as several existing initiatives. Here are just two examples of how we partner with others to advance CCRF strategies – and there is more of this to come!

#### **Readying our Streets for Electric Vehicles**



Seattle's Clean Transportation Electrification Blueprint, released in 2021, sets the stage for emissions reduction that will occur through the electrification and right-sizing of vehicle trips that today are powered by fossil fuels. Here at SDOT, we are actively working with partners at OSE, SCL, and SDCI so the right-of-way can be ready for more charging opportunities for vehicles of all types, large and small. This includes developing a policy for EV charging in the public right-of-way, especially in underserved communities; supporting infrastructure siting with SCL and other partners; streamlining permitting; and engaging in supportive programming and communications on EV charging – all in balance with our other core values. See the Electrify Seattle section of Chapter 5 to learn more.

#### **Enabling Zero-Emissions Freight Trips**

Our climate response must be supportive of our local economy, and this means that goods and services are able to get where they need to go. Partnerships and implementation of the Transportation Electrification Blueprint have resulted in new innovative incentive options to help decarbonize the freight sector.

One of these is an <u>Electric Trucks Incentive Pilot</u>, launched in 2023. The program will support local truck drivers' transition to electric freight vehicles and improve air quality in the port-adjacent communities of the Duwamish Valley, where heavy freight activity is one of the largest contributors to air pollution.

This program is a perfect companion to SCL's <u>Fleet Electrification Program</u> offerings to businesses interested in transitioning to a zero-emissions fleet. SCL offers free, expert guidance, including a comprehensive fleet assessment, charging infrastructure support and "make-ready" incentives, and installation rebates that could result in up to 50% cost savings. In concert with our partnerships with SCL on <u>curbside charging locations</u>, it has never been easier to make the transition.







# **Implementation**

### **Chapter 4: Summary**

How do we reach our climate goals?

- » We will lead and inspire
- » We will expand capacity to deliver climate action
- » We will expedite project delivery
- » We will advocate for necessary legislation
- » We will work to inform a funding approach
- » We will measure and report



We know implementing the CCRF strategies will be challenging - changing the status quo always is. While there are many demands on public resources and funds, we know that if we fail to address climate change, achieving our safety, equity, mobility, and livability goals will become impossible. But if we respond well, these goals all become much more achievable.

#### How do we reach our climate goals?

To meet the challenge, we must commit in ways we haven't in the past in partnership with Seattleites and other city departments. These are the foundational steps we at SDOT believe are necessary to realize our desired future:

### 1. Lead and Inspire

We know that Seattle alone cannot mitigate and reverse climate change. We must inspire, motivate, and collaborate with agencies, peer cities, and partners across the region, country, and globe to demonstrate climate impact and support for climate action and the many community benefits it provides. Seattle is already seen as a leader in this space in the United States and abroad. We're committed members of C40, a network of global cities collaborating to deliver the urgent action needed to confront climate change; our mayor and city council have signed an executive order and legislation mandating climate response; and we work with the county, state, and region to reduce GHG emissions and support sustainable and resilient communities.

There is more work to be done, however, and our climate response is more impactful if we work together with other cities, regional partners, the private sector, and most importantly, local communities. We are committed to continuing to lead on progress needed toward mitigating and reversing the impacts of climate change.

### 2. Expand Capacity to Deliver Climate Action

Swift implementation of the CCRF requires leadership, streamlining, and a cross-functional implementation team.

**Leadership:** We will explore creation of an internal climate-focused office to oversee CCRF implementation and institutionalize climate action within SDOT. This is similar to the role our Office of Equity and Economic Inclusion plays to center transportation equity in our work. The climate office would work across the department and with outside partners, like OSE, to expand capacity and integrate climate consciousness into all aspects of our work. The climate office could also support divisions across the department so their operations and activities are advancing climate outcomes and driving toward measurable targets.

**CCRF implementation team:** Our ability to execute an accelerated climate response through CCRF implementation depends on resources – whether new or reallocated. In addition to strategic hiring, we will explore assembling a new cross-functional CCRF Implementation team focused on accelerated plan and project implementation. Whether it's a major snowstorm or the recent repair of the West Seattle Bridge, we have a long history of rapidly organizing cross-functional teams to problem solve, coordinate on immediate action, and deliver projects. We will intentionally apply that practice to our climate change response.

### 3. Expedite Project Delivery

We will explore restructuring our processes and priorities to quickly make an impact. Because time is of the essence to address climate change, one of the key strategies we will employ is to become more nimble, responsive, and streamlined in our delivery of projects and programs. This will mean more quick-builds and faster delivery of programs that help to meet our climate goals – without compromising our focus on equitably co-creating projects with communities.

We will also continue to review policies, procedures, and programs on an ongoing basis so climate outcomes are not just discussed but delivered upon. We will continue to support what demonstrates real impact on outcomes, and redirect resources when they could be used more effectively elsewhere. Examples of ways we'll expedite project delivery include:

- » Positioning our work for climate action and connecting benefits to safety, equity, health, and the economy.
- » Identifying ways to bundle or streamline contracting and procurement processes to reduce time for project delivery, such as developing an on-call contract for climate-focused projects.
- » Reallocating staff duties toward climate change response.
- » Streamlining processes and teams while retaining our strong focus on racial equity, partnering with local communities, and our other core values.
- » Supporting a training program and/or collaboration with Seattle Colleges to create a pipeline of employees to help build CCRF projects.



# 4. Advocate for Necessary Legislation

Many of the strategies in the CCRF will require updates to existing local laws, along with certain laws or policies at the state and federal levels. We will need to seek City Council approval for local legislation to enable some CCRF strategies; each strategy in Chapter 5 indicates whether legislation may be needed. Packaging various provisions into climate-focused bills could streamline the legislative process of introducing many individual bills to Council. Additional legislation for other strategies may be needed at the state level, with requisite coordination efforts from City staff.

Specifically, legislation (local and/or state) may be needed to:

- » Create new and modify existing programs
- » Update requirements and streamline regulations
- » Enable new funds and funding mechanisms
- » Provide flexibility in how existing funding streams can be spent if these are barriers for climate supportive efforts

# 5. Inform a Funding Approach

Funding climate investments may require new mechanisms, leveraging existing revenue sources, and adjustments to how we fund transportation services, programs, and infrastructure. The CCRF identifies several funding opportunities and financial strategies to support rapid implementation. We are currently developing a transportation funding plan in concert with the Seattle Transportation Plan (STP). Our ability to respond to climate change with urgency means we need to be strategic about funding sources. For example, we may find that more nimble local sources may be desirable in place of or to complement federal funding – which is competitive and comes with more administrative requirements – for certain climate-related projects. Regardless, our ability to advance elements of the CCRF will be dependent on available dollars.

Our response alone will not be enough to influence all the shifts needed toward more sustainable and carbon-free travel behavior. This is a unique moment for creativity and cross-sectoral collaboration. It provides us an opportunity to tap into partnerships, initiatives, and ventures with foundations, private enterprise, employers, developers, and other public agencies to deliver change. Big, bold, and cross-sector initiatives can strengthen our funding models and project delivery approaches moving forward.

# **CCRF Funding Principles**

Five key principles will guide the way we seek resources to respond to climate change in partnership with other departments, state, and federal sources.

- **1.** Accelerate progress the longer we wait, the more expensive our climate response will be. Strategic funding now will reduce future impacts and emergencies.
- **2. Consistency with our vision and core values -** pursuing climate response should align with our vision for an equitable and safe transportation system and align with other core values as defined in the draft STP (equity, safety, mobility, livability, and maintenance & modernization).
- **3. Equitable funding distribution** access to and the benefits of climate funding should be directed first to those most disproportionately impacted by climate change. This is no different than our general approach to investing in areas and alongside communities that have been historically underserved.
- **4. Predictability and stability** sustained resources for climate-positive projects will enable consistent and demonstrable progress for many years. We can deliberately apply a climate-response lens as we engage in long-term planning for funding our projects.
- **5. Transparency and accountability** climate funding both where the money is coming from and how it is spent should be transparent to everyone and yield measurable progress towards Seattle's climate and community goals.



We have identified six key funding categories that can be leveraged to fund CCRF strategies. Some of these funding mechanisms may be more conducive to rapid response than others.

**General Fund** 

Click on each funding catergory to learn more

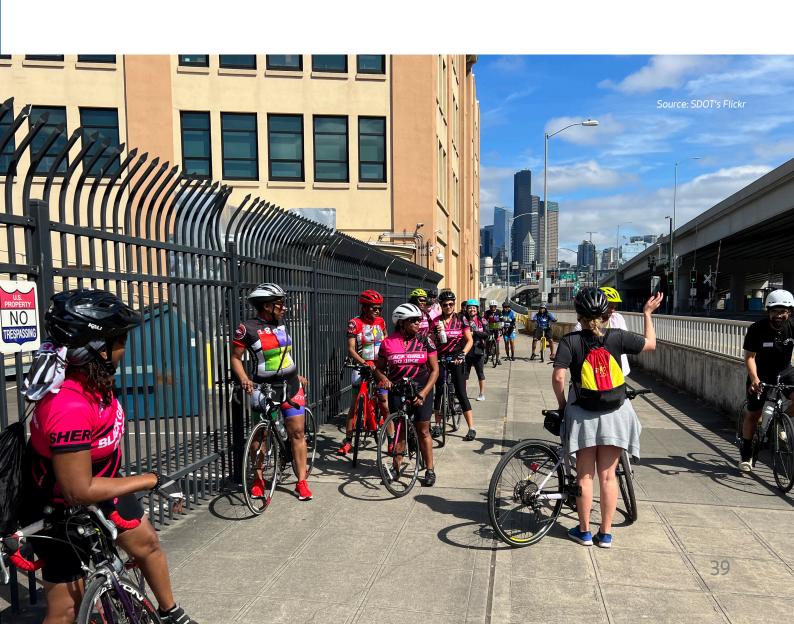
**Transportation Levies** 

**Tax Revenue** 

**State and Federal Grants** 

**Transportation Demand Management (TDM) Programs** 

**Innovative Partnerships** 

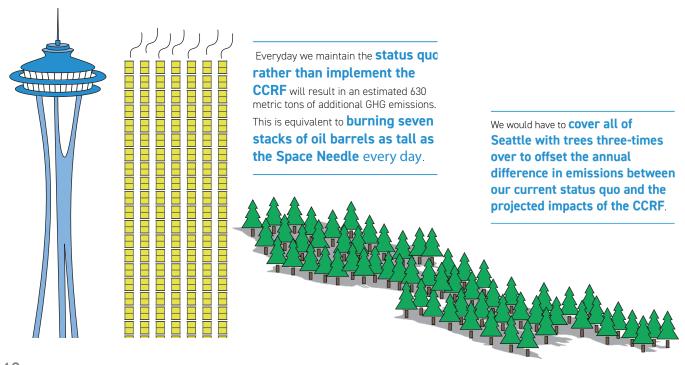


# Actions to Unlock CCRF Funding.

**Securing funding is climate leadership.** Funding is central to advancing CCRF strategies, and 2023 is a critical moment to invest. Every additional year of inaction will hinder our ability to achieve deep emissions reduction benefits.

So, what actions should we at SDOT take in the near-term to advance implementation? While securing funds includes a mix of strategies, we will focus on the following to position us to act more boldly on climate response.

- Establish federal and state grant priorities. In partnership with the Office of Intergovernmental Relations, City Budget Office, the Office of Sustainability and Environment, and Seattle City Light, we will align on prioritization of projects ripe for external funding. The process will define the projects, programs, and initiatives that could be included in grant applications, especially burgeoning climate- and equity-centered funding programs within the Federal Transit Administration, Department of Energy, Federal Highway Administration, Environmental Protection Agency, and the Joint Office of Energy and Transportation.
- Establish an externally-facing climate partnerships team and begin cultivating innovative partnerships. We will work with the Office of Sustainability and Environment, Office of Economic Development, Seattle City Light, and other department liaisons to collaboratively brainstorm, build, fund, and deliver innovative partnerships that can execute various CCRF strategies. See the callout with guidance on the following page for building climate response partnerships.
- Prioritize and integrate CCRF strategies into the STP funding plan. We will organize many of the capital and programmatic CCRF strategies so that the funding plan associated with the STP is positioned to be climate-forward while aligning with our other core values. It is likely that Seattleites will be asked to vote to fund and implement a subset of these strategies through future levies and/or other funding source(s). Additional public engagement throughout 2023 and into 2024 on the STP will shape the development of how we fund elements of the CCRF.



# How to Build a Climate Response Partnership

Responding to climate change will take all of us. Seattle is home to civic innovators, philanthropic organizations, private industry and employers, institutions, and community organizations that bring the financial capital, mobility and technology solutions, public and private property, and influence needed to reduce carbon emissions. At SDOT, we have a unique opportunity to tap into the innovative spirit of the Puget Sound region and create smart, cross-sectoral, and financially-viable climate solutions.

**Where do we start?** We can work with and help to organize partners and align interests so community-centered, effective, and rapid implementation is focused on equity and climate outcomes. We can be successful if we apply the following guidelines:

- Work with partners and align on a common challenge. We aim to position partnerships around a mutually agreed upon challenge, or set of challenges, rather than focusing on specific solutions. We can be a key convener to unpack the challenge with our prospective partners, such as the UW Mobility Innovation Center, Urban Freight Lab, and many others.
- » Incentivize partner buy-in. We will consider a range of incentives such as greater regulatory certainty, research and performance support, and leveraging public sector tools toward shared goals with our partners.
- » Build a partnership fund. We can identify public funds and services needed to attract philanthropic and other private funders that can jointly finance partnerships through capital solutions, infrastructure, and/or operations. Solutions could include things like rapid deployment of tactical bike lanes, advancement of low-pollution neighborhoods, downtown revitalization strategies, and many more.
- » **Invite solution innovation and build the partner coalition.** We can invite innovators, infrastructure developers, technology providers, and mobility solutions vendors to address the identified challenges and use a partnership fund to support implementation.

We see a strong opportunity in the revitalization of our downtown following the pandemic as an area to test climate solutions that are co-created with private partners and result in a more vibrant and equitable city core.



# **6.** Measure and Report

We will consistently measure the progress we're making toward our climate goals and transparently report progress to the communities we serve. We know we are not going to get everything right, so evaluating our progress will help us tweak strategies when something is not working. Measuring and reporting our progress will also allow Seattleites to hold us accountable to our responsibilities in responding to climate change. Like other projects and plans in our portfolio, we will work on public facing dashboards or other means of communicating progress in ways that provide current information and that are easily accessible, alongside our partners at OSE, SCL, and other departments.



# Let's take the next step together!

A prosperous, equitable, and resilient Seattle is within reach if we work with our partners and communities to implement this Climate Change Response Framework. We've laid a strong foundation and successfully implemented a lot of the low hanging fruit. Now is the time to accelerate our efforts and enhance the strategies we need to respond to climate change. We are committed to providing a safe, equitable, and healthy city where traveling around is convenient, affordable, and fun! Let's take the next step together.



The Strategies

# **The Strategies**

	<ul> <li>Create a culture of climate action and optimism</li> <li>→ Lead by Example Through Internal Operations and Processes</li> <li>→ Co-create Climate Solutions and Optimistically Communicate the Benefits</li> </ul>	46
	<ul> <li>Make short trips safe, affordable, and zero emission</li> <li>→ Explore Launching an E-Bike Rebate Program</li> <li>→ Implement Low-Pollution Neighborhoods</li> <li>→ Accelerate Pedestrian, Bike, and E-Mobility Network Implementation</li> <li>→ Expand and Reduce the Cost of Shared Micromobility</li> <li>→ Expand the Bike and Micromobility Parking Program</li> <li>→ Launch a Community and Mobility Hubs Program</li> </ul>	48
	<ul> <li>Make transit more convenient, reliable, and affordable</li> <li>→ Accelerate Bus-Only Lane Installations and Other Travel Time + Reliability Improvements</li> <li>→ Continue to Support Partners in Expansion of Link Light Rail Network</li> <li>→ Support Increased Transit Oriented Development (TOD) with Transit Expansion</li> <li>→ Continue to Fund Bus Service Increases</li> <li>→ Increase Reach of Reduced Transit Fare Programs</li> </ul>	54 1
	<ul> <li>Enable use of climate-friendly travel choices</li> <li>→ Expand Reach of Existing Transportation Demand Management Programs</li> <li>→ Pursue Off-Street Parking Pricing and Usage Reforms</li> <li>→ Support the State and Region in Advancing Mobility Management Strategies</li> <li>→ Explore Launching a Mobility Wallet Program</li> <li>→ Implement On-Street Parking Reforms</li> <li>→ Pursue Reforms to Limit Off-Street Parking Supply in New Development</li> </ul>	59
<del>\$</del>	<ul> <li>Improve freight efficiency</li> <li>→ Enable More Right-Sized, Zero-Emission Urban Delivery Vehicles</li> <li>→ Implement Commercial Vehicle Permitting and Delivery Fees</li> <li>→ Increase the Number of Commercial Vehicle Loading Zones</li> </ul>	65
	Electrify Seattle  → Support Electrification of Personal Vehicles  → Support Electrification of Freight Vehicles  → Support Electrification of Shared Mobility Vehicles	68

→ Support the Transition to Zero-Emissions Transit

→ Electrify the City Fleet

# How to Read the Strategies

# Name of the strategy

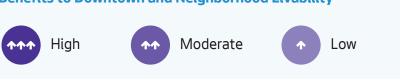
# **Strategy Description**

This text describes the strategy and how it can be part of our response to climate change

# **New or Expanded Program GHG Reduction** High New Medium Expanded Low



# Benefits to Downtown and Neighborhood Livability



# **Strategy Lead and Partners**

- Lead
- **Partners**



# Lead by Example Through Internal Operations and Processes

As a large department with complex operations, we will explore all available opportunities to mitigate GHG emissions associated with our work, while quickening our delivery of climate-positive projects and programs.

- **Expedite Project Delivery**: We will work to streamline processes so we can take action and make an impact quickly - becoming more nimble, responsive, and outcome-driven, while retaining a strong focus on equity and co-creation of projects with local communities. Quick-build projects and pilots can have significant impacts, fast. We've learned through the COVID-19 pandemic that we can respond quickly and provide positive results for communities when the need arises.
- Grow Staff Expertise and Leverage Resources: Our ability to successfully respond to climate change depends on resources - whether new or reallocated. In addition to strategic hiring, we will explore assembling a new cross-functional CCRF Implementation team focused on accelerated plan and project implementation. This will help deliver projects more effectively to rebalance the right-ofway and prioritize climate-friendly travel options.
- Leverage Procurement: We will identify all levers available to influence procurement and contracting to create positive or neutral climate impacts.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

Lead: SDOT Partner: FAS

#### Cost

# **Legislation Needed**



Medium

Yes

# **Community Benefits**



Climate Justice



Safer Streets



Healthier



Communities

Thriving Economy

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate



Moderate

# Co-create Climate Solutions and **Optimistically Communicate the Benefits**

Here at SDOT, we are just one piece of the puzzle to address climate change. We need committed partners and residents willing to accelerate their own response and take actions - big or small, occasionally or all the time - alongside us. In order to more effectively build necessary partnerships and momentum on this work, we will improve the way we communicate and share information about climate change and our climate action work with other city departments, partners, and the general public. While we're aware of our current emissions trajectory, we're also optimistic about the work we've already done and our ability to mitigate future impacts and deliver community benefits in the form of safer streets, healthier communities, thriving local economies, and climate justice. We'll partner and communicate so we can co-create solutions, share ownership of the commitment, and broaden our climate optimism across Seattle. Let's take the next step together.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: City Departments, Regional Partners, Private Sector, General Public

# Cost

# **Legislation Needed**



Low

No

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate



Moderate

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# Explore Launching an E-bike Rebate Program

A number of cities and states have implemented rebate programs for e-bikes to provide residents with additional mobility choices and an option to reduce driving. For example, Denver, CO, launched an e-bike rebate program, which was estimated to have cut 2,040 metric tons of carbon dioxide in 2022 and saved nearly \$1 million in avoided fuel and electricity costs. Here in Washington, legislation was recently approved at the state level for rebates ranging from \$300 to \$1,200 depending on the income level of the purchaser. As the State advances rulemaking and evaluates legal questions on implementation, Seattle will continue to explore a program to supplement this state funding, making e-bike ownership a reality for many potential buyers. A program could be structured so higher rebate levels would be available for low-income individuals and qualifying residents.

# **New or Expanded Program**

# **GHG Reduction**



New



High

# **Strategy Lead and Partners**

Lead: TBD

• Partners: OSE, SDOT, and SCL

# Cost

# Legislation Needed



High

Yes

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate





High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Implement Low-Pollution Neighborhoods**

As part of Seattle's C40 commitments, we will implement concepts to create low-pollution neighborhoods that promote walking, biking, electrified transit, electric goods delivery, and more space for people to gather and engage in their communities. Concepts in low-pollution neighborhoods may take the form of low-emissions zones (including delivery-specific low-emission zones), eco-districts, resilience districts and super blocks. The strategy may also establish specified zones that scale fees based on vehicle emissions levels.

In Mayor Harrell's Executive Order 2022-07, we committed to engaging in community conversations in 2023 around planning these neighborhoods, aligning them with the goals of the Seattle Transportation Plan, and informing investments in a future funding plan. We will continue to work with partners at OSE and other departments to determine implementation considerations and co-create them with communities and private sector partners over the next several years.

# **New or Expanded Program**

# **GHG Reduction**



New



High

# Strategy Lead and Partners

- Lead: SDOT
- Partners: OSE, General Public;
   Private Sector

## Cost

# **Legislation Needed**



Medium/Revenue Positive (depending on program design)

Yes

# **Downtown Benefits**

# **Neighborhood Benefits**



High



High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# Accelerate Pedestrian, Bike and E-Mobility Network Implementation

We are continuously working to expand Seattle's pedestrian, bike, and e-mobility networks to improve safety, comfort, and connectivity. Expanding these networks will make walking, rolling, biking, scooting, and related travel (e.g., wheelchairs, adaptive cycles, larger format cargo bikes, skateboards, and other wheeled and/or electric mobility devices) more attractive and feasible options for more people and more types of trips. We will accelerate the implementation of these networks, with a focus on critical sidewalk connections, access and curb ramp improvements, protected bike lanes, multi-use trails, and other "bike+" facilities for all ages and abilities.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

Lead: SDOT

# Cost

# **Legislation Needed**



High

No

## **Downtown Benefits**



Moderate

# **Neighborhood Benefits**



High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Expand and Reduce the Cost of Shared Micromobility**

Seattle currently hosts bike and electric scooter share programs and offers reduced fares for low-income riders.

- **Expand the bike and electric scooter share program**: We launched a free-floating bike share program in 2017 and scooter program in 2020. In 2023, there are two bike share vendors permitted to deploy 4,000 bikes citywide, and three scooter vendors permitted for 6,000 scooters. Increasing the number of bikes and scooters available will provide more coverage of devices citywide and make these options more feasible and convenient, leading to additional replacement of car trips.
- Free and reduced fares for shared micromobility: Permitted bike and e-scooter share operators are currently required to offer discounted prices for low-income riders. Expanding this program could offer unlimited free rides to all qualifying residents, with the City contributing additional funding to supplement vendor programs.

# **New or Expanded Program**





Expanded



Low

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: Micromobility Operators

# Cost

# **Legislation Needed**



Low

Yes

# **Downtown Benefits**



High

# **Neighborhood Benefits**



High

# **Community Benefits**



Climate Justice



Healthier Communities

# **Expand the Bike and Micromobility Parking Program**

Seattle has installed more than 3,000 bike parking spaces since 2015. As the City expands the bike network and access to shared bikes and scooters, we will continue investing in convenient, safe parking options for bikes and micromobility, and consider the needs of larger family sized devices, cargo bikes, and other evolving form factors. We will focus geographically on secure device parking at transit centers and repurposing street space for larger bike and scooter corrals and shared micromobility parking areas. A high availability of parking for sustainable travel options removes a significant barrier for many people who might want to bike, scoot, or use similar wheeled devices. This can lead to higher replacement of existing car trips.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Low

# **Strategy Lead and Partners**

Lead: SDOT

# Cost

# **Legislation Needed**



Low

Yes

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate





High

# **Community Benefits**



Safer Streets



Healthier Communities



# Launch a Community and Mobility Hubs Program

Hubs are places where transportation connections, travel information, and community amenities are co-located to create a comfortable, seamless, and easily understandable travel experience. Community and mobility hubs are generally located at major transit facilities and places where frequent services intersect to allow easy transfers between travel options. They increase access to transit and make it easier to link trips together, ultimately reducing driving trips.

# **New or Expanded Program**

# **GHG Reduction**



New



Low

# Cost

# **Legislation Needed**



High

No

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate



High

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: KCM, Sound Transit, SCL, TNCs, Car Share Operators, Micromobility Vendors, Private Sector

# **Community Benefits**



Safer Streets



Healthier Communities



# Accelerate Bus-Only Lane Installations and Other Travel Time + Reliability Improvements

Seattle works closely with King County Metro and other transit partners to improve travel time and reliability through projects such as bus-only lanes, transit signal priority, boarding enhancements, and streamlining fare payment. These are proven tools to improve bus riders' experiences and attract new riders. Some of these tools, particularly bus-only lanes, require reallocating street space, often away from general purpose traffic or on-street parking and toward our most efficient means of transportation. We will target an expansion of bus-only lanes and other tools, focusing on high ridership routes and routes serving historically underinvested areas of Seattle. Other travel time and reliability improvements will be implemented on many remaining routes.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

Lead: SDOT + KCM

# Cost

# **Legislation Needed**



High

No

# **Downtown Benefits**

# **Neighborhood Benefits**



High





High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# Continue to Support Partners in Expansion of Link Light Rail Network

Sound Transit is expanding the Link light rail system across the region, bringing high-quality transit to more communities. We work closely with Sound Transit and local communities to conduct station-area planning that will make it easier to access these new light rail stations by climate-friendly travel options. We will continue to do so with recent and forthcoming expansion projects, notably in West Seattle, Uptown, Interbay, and Ballard, in order to increase transit ridership and decrease driving for the "first-and last-mile" portions of transit riders' trips.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

Lead: Sound Transit

Partner: SDOT

# Cost

# **Legislation Needed**



High

No



High

**Downtown Benefits** 

# **Neighborhood Benefits**



Moderate

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# Support Increased Transit Oriented Development (TOD) with Transit Expansion

Coordinating transit investments with land use updates and development provides significant climate benefits. By increasing density and providing a greater diversity of uses, transit-oriented developments enable people to walk, bike, or use transit for more of their daily needs. As new light rail lines are constructed, bus service is redeployed, and bus-only lanes are implemented, we will collaborate with the Office of Planning and Community Development, King County Metro, and Sound Transit to encourage TOD. This includes potential land use changes in concert with the forthcoming One Seattle Comprehensive Plan update.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

- Lead: OPCD
- Partners: SDOT, SDCI, Sound Transit, KCM, Office of Housing

# Cost

# **Legislation Needed**



Low

Yes

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate





High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# Continue to Fund Bus Service Increases

The 2020 Seattle Transit Measure is a voter-approved levy to fund additional transit service and improvements for Seattle residents, workers, and visitors. The program runs through 2027, after which additional funding will be required to continue providing enhanced service, provided that current labor and equipment shortages are resolved. As a whole, CCRF strategies will shift a significant number of additional trips to transit, requiring expanded service above existing levels. Continued voter approval for funding for bus service increases would accommodate this increased transit demand. It can help support all-day service that meets community needs for all types of trips.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

Lead: SDOT + KCM

# Cost

# **Legislation Needed**



High

Yes (Levy Approval)

# **Downtown Benefits**

# **Neighborhood Benefits**



High





High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Increase Reach of Reduced Transit Fare Programs**

Seattle and King County Metro currently provide a number of reduced fare programs to qualifying transit riders, including the Regional Reduced Fare Permit for older adults and people with disabilities, ORCA Lift for low-income households, zero-fare ORCA cards for all Seattle Housing Authority residents, and free fares for youth as part of recent statewide legislation. Increasing the share of qualified residents participating in these programs through additional marketing, outreach, funding, and staffing will support the goal to increase transit trips.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: KCM, Sound Transit

# Cost

# **Legislation Needed**



High

Yes (Levy Approval)

# **Downtown Benefits**

# **Neighborhood Benefits**



High





High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Expand Reach of Existing Transportation Demand Management Programs**

Commute Trip Reduction and Transportation Management programs help reduce drive-alone trips and commute trips at large employers and development sites. We will expand these programs and their toolkits for better equity outcomes in our programming by focusing more on small employers, noncommute trips, residential locations, large events and during periods of major construction, and on areas outside the city center. Diversifying sites and trip types that benefit from transportation management programming will provide additional reductions in drive-alone trips, and better serve people who make trips at non-traditional commute hours, and to and from destinations outside of Downtown.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: Commute Seattle, Community groups and the General Public

## Cost

# **Legislation Needed**



Low

Yes

## **Downtown Benefits**

# **Neighborhood Benefits**



Moderate



High

# **Community Benefits**



Climate Justice



Healthier Communities



# Pursue Off-Street Parking Pricing and Usage Reforms

Currently, a majority of Seattle's off-street parking supply is offered to employees or tenants at low or no cost, and does not reflect the true cost of driving. Policy reforms and piloting creative uses for existing off-street parking can help to level the playing field for climate-friendly travel options. Implementing some of these strategies could require legislative changes.

- Parking "Cash Out" Subsidy: Access to free or subsidized off-street parking and the continued
  development of large, off-street parking facilities encourages driving while detracting from climatefriendly travel options. For existing sites with off-street parking, and for any new sites built with onsite parking, we will evaluate opportunities for "parking cash out" that could require employers who
  offer free or subsidized parking to also give employees the option to receive a cash equivalent in lieu
  of this benefit.
- Increase and Expand Reach of Commercial Parking Tax: In collaboration with other City departments and City Council, we will explore increasing the city's commercial parking tax rate, and/ or increasing the number of parking stalls subject to the tax, to better reflect the true cost of driving and encourage climate-friendly travel choices.
- Pilot Alternate, Climate-Friendly Uses: The pandemic and its aftereffects have resulted in
  underused off-street parking supply, especially downtown. We will work with willing partners on pilot
  programs that make use of these spaces in ways that promote climate-friendly transportation, such
  as multimodal delivery and consolidation hubs, secure bike parking, and electric vehicle charging.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: Private Sector (for pilots)

#### Cost

# **Legislation Needed**



Revenue Positive or Low

Yes

# **Community Benefits**



Healthier Communities



Thriving Economy

# **Downtown Benefits**

# Moderate

# Neighborhood Benefits



High

# Support the State and Region in Advancing Mobility **Management Strategies**

Regional interest in identifying and pricing the cost of driving has increased in recent years as the state and region work to combat climate change, better manage our transportation network capacity, prepare for reduced gas tax revenue due to vehicle electrification, and scale up investments in transit, walking, and biking. Using market mechanisms such as parking and vehicle fleet pricing can improve air quality and public health, encourage low-emission travel options, and increase revenue available for other CCRF priorities.

Mobility management strategies would need to center racial and social equity benefits, and would represent a continuation of commitments by the City and region made over the last decade to explore a variety of equitable pricing mechanisms. This includes demand management tools that could influence travel choices and create revenues to invest in sustainable transportation options, freight movement, and innovation. We will work with regional partners as they explore pricing options that are equitable and do not put the city at a competitive economic disadvantage.

# **New or Expanded Program**

# **GHG Reduction**



New



High

# **Strategy Lead and Partners**

Lead: SDOT

Partners: OSE, PSRC, WSDOT

# Cost

# **Legislation Needed**



Revenue Positive

Yes

## **Downtown Benefits**



High

# **Neighborhood Benefits**



High

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities

# Explore Launching a Mobility Wallet Program

As the number of options for getting around Seattle increases, it is important that accessing and paying for these options is integrated and affordable. A mobility wallet program would provide residents with money for transportation options like transit, shared micromobility, and other mobility services. It could reduce transportation burdens and barriers to economic opportunity, while incentivizing the use of shared mobility options. We will continue to explore options that simplify the experience of paying for and using sustainable travel options, in concert with our transit agency and private sector mobility partners.

# **New or Expanded Program**

# **GHG Reduction**



New



Medium

Cost

# **Legislation Needed**



Medium

No

# **Downtown Benefits**

# **Neighborhood Benefits**



High





High

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: KCM, Sound Transit, TNCs, Micromobility Operators, Car Share Operators, Private Sector

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Implement On-Street Parking Reforms**

On-street parking management helps people and goods move efficiently throughout our city. We use upto-date parking data to employ performance-based parking pricing, adjusting parking rates at the curb by neighborhood and time of day to regulate demand. This increases business access through parking turnover, limits drivers from circling, and minimizes the resultant impacts on emissions, safety, and congestion. We will look for opportunities to expand both the geography of on-street parking along with rates charged in order to realize additional climate benefits.

- Expand paid on-street parking: Free curbside parking encourages people to drive more than they otherwise would. We will seek to increase the number of paid parking spaces across the city with a focus on neighborhood business districts to reduce unnecessary driving and encourage the use of less expensive and less polluting transportation options. In addition to climate benefits, expanding paid parking can help manage demand as housing supply grows while we implement the future One Seattle Comprehensive Plan.
- Increase on-street parking rates: Increasing parking rates in high-demand areas improves parking turnover and provides a disincentive for car trips, especially short, drive-alone trips. We will pursue increases to minimum and maximum allowable rates for on-street parking, which are defined in the Seattle Municipal Code (SMC). Pricing parking at higher levels will more fully account for the market value of driving's negative impacts.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



High

# **Strategy Lead and Partners**

Lead: SDOTPartner: SPD

# Cost

# **Legislation Needed**



Low

Yes

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities

# **Downtown Benefits**



High

# **Neighborhood Benefits**



High

# Pursue Reforms to Limit Off-Street Parking Supply in New Development

Parking minimums require developers to provide a high amount of off-street parking for each project, which decreases space for housing and increases car ownership, driving, and housing prices. In 2012, legislation eliminated parking minimums in the city center and several urban villages, and this approach could be expanded citywide. Additionally, many cities apply parking maximums to limit the over-building of parking, especially in areas well served by transit and in areas of mixed and dense land uses. We will closely coordinate with partners such as the Office of Planning & Community Development and Department of Construction & Inspections to consider expanding the elimination of parking minimums and/or seek out areas to establish parking maximums to reduce parking supply and leverage the significant investments happening in Seattle to expand the transit, walking, and biking and e-mobility networks.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Medium

# **Strategy Lead and Partners**

- Lead: SDCI
- Partners: SDOT, OPCD

## Cost

# **Legislation Needed**



Low

Yes

# **Downtown Benefits**

# **Neighborhood Benefits**



Low



# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



# **Enable More Right-Sized, Zero-Emission Urban Delivery Vehicles**

We have identified many ways to encourage and work with private sector partners on more sustainable and efficient goods delivery solutions. We will increase our engagement with the local business community so we are informed on existing delivery behavior and how we can work towards right-sizing and electrifying those mechanisms. Right-sized options for first-and-last mile delivery will contribute to a neighborhood-scale, pedestrian-friendly streetscape with less noise and air pollution. Smaller vehicles in urban neighborhoods also increase safety: they decrease the severity of traffic collisions, especially for pedestrians, cyclists, and other exposed travelers.

- Launch a commercial electric cargo bike program: Electric cargo bikes and similar small devices can effectively replace a portion of last-mile deliveries made by larger vans and trucks in urban areas, lowering emissions and reducing congestion. We will create a process for businesses to work with us so we can assist with the transition and work together to overcome barriers.
- Expand number of neighborhood delivery hubs: Neighborhood delivery hubs, which are central drop-off/pick-up locations for goods and services at the neighborhood level used by multiple delivery providers, retailers, and consumers, can support private industry in testing and expanding sustainable delivery options. We piloted one in 2021 and will look to enhance them in the future. We also may launch e-cargo bike lending libraries in combination with hubs, engaging businesses and community groups throughout.

# **New or Expanded Program**

# **GHG Reduction**



New



Medium

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: OSE, OED, Private Sector

# Cost

# **Legislation Needed**



Medium

Yes

# **Community Benefits**



Climate Justice



Safer Streets



Healthier Communities



Thriving Economy

# **Downtown Benefits**

# 11

Moderate

# **Neighborhood Benefits**



High

# Implement Commercial Vehicle Permitting and Delivery Fees

Efficient urban goods delivery is essential to a thriving economic environment. Streamlining deliveries can benefit businesses, relieve congestion, and reduce emissions. We are modernizing the commercial vehicle permit program and exploring changes that may be helpful to commercial delivery by working with industry partners. Through a federal SMART grant, we will establish new commercial vehicle permit policies and pilot a digital permit. This will reduce congestion, improve access to the curb, and promote more sustainable forms of delivery. We may also evaluate different pay-per-use pricing structures for loading zones based on use cases, per-parcel delivery fees, and automated payment systems.

# **New or Expanded Program**

# **GHG Reduction**



New



Medium

# **Strategy Lead and Partners**

- Lead: SDOT
- Partners: OSE, Private Sector

# Cost

# **Legislation Needed**



Revenue Positive

Yes

# **Community Benefits**



Climate Justice



Healthier Communities



Thriving Economy

# **Downtown Benefits**

# ↑↑ Mo

Moderate

# **Neighborhood Benefits**



Moderate

# Increase the Number of Commercial Vehicle Loading Zones (CVLZ)

Installing additional commercial vehicle loading zones decreases the time freight and delivery drivers spend cruising for parking or double-parking in travel lanes, through improved odds of quickly finding an available zone. We will continue to increase the number of CVLZs located in business districts across the city, decreasing congestion and pollution caused by idling and circulating trucks.

# **New or Expanded Program**

# **GHG Reduction**



Expanded



Low

# **Strategy Lead and Partners**

Lead: SDOT

• Partners: Private Sector

# Cost

# **Legislation Needed**



Low

No

# **Community Benefits**



Climate Justice



Healthier Communities



Thriving Economy

# **Downtown Benefits**



High

# **Neighborhood Benefits**



Moderate

# **What About Electric Vehicles?**

We're very enthused about the cleaner air and reduced emissions benefits that EVs can bring. And you are too: Seattle's uptake of EVs in 2022 was roughly 3 times the national average, and our annual growth in EV adoption for personal vehicles is over 25%! The benefits of EV adoption are especially notable in Seattle thanks to our carbon-neutral electricity supplied by Seattle City Light.

There has been significant interest from community partners across the city in participating in the EV transition with us. In 2022, we received over 1,800 requests for locations to install curbside charging as part of our Level 2 pilot with SCL. We've also heard feedback on the importance of electrifying transit and high mileage vehicles, to create benefits to environmental justice communities through reduced emissions and cleaner air. We are all eager to evolve our personal, commercial, shared, and transit vehicle fleets to electric and other non-emitting forms in the near future.

As we electrify Seattle, we will remain cognizant of resource extraction needs for EV batteries, waste and disposal concerns around them, and the progress we need to make towards Vision Zero. All of these are relevant when we consider an EV-prominent future. We have heard from members of our Transportation Equity Workgroup (TEW) that our climate response strategies should be mindful, and that we should limit unintended consequences to our environment that will need to be addressed in future years.

Our role at SDOT is to support the EV transition through our permitting and planning processes, while always centering our core values, especially equity and safety. The CCRF does not rely exclusively on EV adoption to reduce transportation emissions, but recognizes they are an important piece of the puzzle alongside many other CCRF strategies that make it easier to walk, bike and take transit. We are committed to supporting the installation of necessary EV infrastructure, working with public and private partners on programs to electrify commercial freight vehicles, supporting electrification of shared mobility and transit, and leading by example through an electrified and right-sized City fleet.



# **Support Electrification of Personal Vehicles**

All-electric vehicles produce zero tailpipe emissions and can significantly reduce GHG emissions from transportation. Between federal rebates, state-level incentives and sales targets, and Seattle City Light's work on public charging and incentive programs and partnerships, there are efforts underway at many levels to encourage a shift to EVs. We are working closely with SCL to pilot new Level 2 curbside charging facilities, with a focus on serving communities that often lack access or financial capacity to install off-street charging. This is one step in SCL's comprehensive Transportation Electrification Strategic Investment Plan (TESIP), which is committing resources and making investments to modernize the electric grid and enable a once-in-a-century transformation of our transportation ecosystem. The TESIP also frames how EV access needs to be prioritized for all Seattleites, regardless of means.

Through the CCRF, our climate change response at SDOT will focus on building multi-benefit streetscapes and delivering programs to advance multimodal mobility options. This includes enabling publicly available EV charging, especially in underserved communities. We remain committed to supporting our City and regional partners to accelerate the transition. We'll develop a policy for EV charging in the public right-of-way, support infrastructure siting with SCL and other partners, streamline permitting, and engage in supportive programming and communications on EV charging – all in balance with our other core values.

# **New or Expanded Program**

**GHG Reduction** 

Not Applicable to SDOT



High

# **Strategy Lead and Partners**

Lead: SCL

Partners: OSE, SDOT

# Cost

# **Legislation Needed**



High

No

# **Community Benefits**



Climate Justice



Healthier Communities

# **Downtown Benefits**



Low

# **Neighborhood Benefits**



Low

# **Support Electrification of Freight Vehicles**

As the largest city in the most trade-dependent state, Seattle has long recognized the importance of freight and urban goods movement. The Port of Seattle and the freight community are taking many positive steps to electrify and reduce emissions, for example through electrification of drayage trucks and programs to position their workforce for this transition. With the increased volume of goods movement due to postpandemic consumer preferences and a growing regional population, it is important to accelerate a transition to reduce emissions and detrimental impacts to public health. Freight electrification incentives and strong partnerships can encourage the transition of private fleets to EVs and support market transformation in freight and goods movement.

# **New or Expanded Program**

**GHG Reduction** 

Not Applicable to SDOT



High

# **Legislation Needed**



Cost

High

No

# **Downtown Benefits**

# **Neighborhood Benefits**



Moderate





Moderate

# **Strategy Lead and Partners**

- Lead: SCL + OSE
- Partners: Port of Seattle, NW Seaport Alliance, SDOT, Private Sector

# **Community Benefits**



Climate Justice



Healthier Communities

# Support Electrification of Shared Mobility Vehicles

Mayor Harrell's 2022 Executive Order requires City staff, in partnership with transportation network companies (TNC) and taxi stakeholders, the Utilities and Transportation Commission, and community partners, to develop a proposal that sets a path for TNC and car-share vehicles operating in Seattle to transition to zero-emission by 2030. We will participate in these discussions so that ridehail (e.g., Uber and Lyft), car share, and taxi companies transition all shared mobility vehicles to zero-emissions models by 2030.

# **New or Expanded Program**

# **GHG Reduction**

Not Applicable to SDOT



Medium

# **Strategy Lead and Partners**

- Lead: OSE, SDOT, FAS, SCL
- Partners: TNCs and Private Sector

# Cost

# **Legislation Needed**



Medium

To Be Determined

# **Community Benefits**



Climate Justice

# **Downtown Benefits**

Low

# **Neighborhood Benefits**



Low



Healthier Communities

# Support the Transition to Zero-Emissions Transit

We will work with and support our partners at King County Metro, who have a goal of achieving a zero-emissions bus fleet powered by renewable energy by 2035. While primary coordination by the City lies with our utility, Seattle City Light, we at SDOT can support our service partners at Metro as they roll out charging facilities at their bases located within Seattle. Meanwhile, Sound Transit's Link light rail system runs entirely on carbon-free electricity – the first major light rail system in the country to go completely green. With transit projected to be the workhorse travel option that absorbs the most trips and VMT that shift out of cars, we are fortunate to have regional partners who are transitioning their fleets and providing us with the co-benefits of cleaner air and healthier communities.

# **New or Expanded Program**

**GHG Reduction** 

Not Applicable to SDOT



Medium

# **Strategy Lead and Partners**

Lead: KCM

• Partners: SCL, Sound Transit, SDOT

## Cost

# **Legislation Needed**



High

No

# **Community Benefits**



Climate Justice



Healthier Communities

# **Downtown Benefits**



Moderate

# **Neighborhood Benefits**



Moderate

# **Electrify the City Fleet**

Transitioning the City's fleet of vehicles to zero-emissions vehicles sets an important example and spurs innovation and action. We will work with FAS, SCL, and OSE to implement pilots in 2023 and 2024 and develop department-specific plans for fleet transitions. We are excited to play a leading role in piloting electrified versions of a variety of our fleet vehicles and equipment. As we do so, we'll also experiment with right-sizing certain tasks - potentially bike lane maintenance - to realize efficiency, safety, and cost savings benefits while we make the transition. Seattle's Transportation Electrification Blueprint and Mayor Harrell's Executive Order 2022-07 provide further direction for City fleet electrification efforts, and we are committed to leading by example alongside our City partners.

# **New or Expanded Program**

# **GHG Reduction**



New



Low

# **Strategy Lead and Partners**

- Lead: FAS
- Partners: SDOT, OSE, SCL, SPU

# Cost

# **Legislation Needed**



High

No

# **Downtown Benefits**

Low

# **Neighborhood Benefits**



Low

# **Community Benefits**



Climate Justice



Healthier Communities



# Appendix A: Funding Categories

# **Appendix A**

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# **CCRF Funding Categories**

Our ability to implement the CCRF will be dependent on available funding. The categories below represent some of the options we may pursue to advance CCRF strategies.

#### General Fund

General funds are derived from various taxes (such as property and sales taxes), fines, fees, and other revenue sources. The general fund pays for a significant portion of operational functions here at SDOT, and also supports a portion of our capital investments. While recent shortfalls due to economic challenges stemming from the Covid-19 pandemic and subsequent recovery will test our ability to maximize funds for climate response, general funds will likely be necessary to deliver elements of the CCRF.

## **Transportation Levies**

A transportation levy is a contribution from taxpayers, approved through a public vote, to fund specific improvements to the transportation system. Levies are used to supplement the general fund and other funding sources listed in this appendix. They provide periods of stable financing for specific transportation system capital and maintenance needs. In Seattle, the current Levy to Move Seattle allows us to improve safety for all travelers, maintain our streets and bridges, and invest in reliable, affordable travel options for a growing city. We also benefit from the voter-approved Seattle Transit Measure, which funds supplemental in-city transit service, along with supportive street and access improvements. With the Levy to Move Seattle due to expire in 2024, the CCRF will be used as an input to guide our future funding strategy as we implement the Seattle Transportation Plan and other priorities. For successful CCRF implementation, any potential replacement levy will likely need to feature a variety of transportation strategies that amplify our climate response.

#### Tax Revenue

The City imposes taxes and surcharges (beyond property and sales taxes) to generate revenue for vital programs or to achieve various policy objectives. This includes taxes on certain transportation-related activities or services, such as commercial parking and transportation network company (TNC) trips. These taxes and fees, or others that may be proposed in the future, can provide additional revenue to implement the CCRF, while simultaneously disincentivizing driving.

#### State and Federal Grants

State and federal grant programs can fund a variety of CCRF strategies, accelerating climate change response in Seattle and regionally. As of 2023, there are currently a plethora of federal programs related to transportation decarbonization that have been or will soon be made available through the Bipartisan Infrastructure Law and Inflation Reduction Act. We will consider which funds to strategically

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pursue to advance climate response efforts, taking into consideration that these funds are often competitive and require administration, detailed environmental analysis, and specific requirements for when and how they are spent.

# Transportation Demand Management (TDM) Programs

TDM refers to a suite of supply and demand management strategies that increase overall system efficiency by encouraging people to avoid driving trips. In Seattle, TDM policies like the Commute Trip Reduction (CTR) program, Transportation Management Programs (TMP), and other developer requirements fund and unlock a variety of programming and infrastructure funding that can lead to behavioral changes. More aspirational mechanisms, such as impact fees, developer-required TDM menus, and mobility management strategies (like tolling, road user / per-mile charges, and/or low- or zero-emission zones) could be pursued to advance CCRF implementation.

# Innovative Partnerships

While public policy and investments are critical, meeting the moment for an urgent climate response should involve the finances, insights, and audience of the private sector. New funding partnerships between the City, businesses, developers, and philanthropy are an attractive path to achieving climate goals. Using seed funding, procurement innovation, process improvement, in-kind support, and inclusive partnership platforms would not only aid us in meeting current goals, but also show buy-in from the private sector – a vital partner in climate action.

# Key Terms, Acronyms, Referenced Documents, and Other Sources

# **Key Terms**

**Black, Indigenous, and People of Color (BIPOC)** - BIPOC stands for Black, Indigenous, and all People of Color (BIPOC). It is a term to make visible the unique and specific experiences of racism and resilience that the Black/African Diaspora and Indigenous communities have faced in the structure of race within the United States. BIPOC is a term that both honors all people of color and creates opportunity to lift up the voices of those communities. BIPOC people now make up over one-third of Seattle's population.

Source: SDOT, Office of Equity and Economic Inclusion, Bi-Annual Report (2020-2022)

**Climate justice** - Climate change threatens the health, livelihoods, and wellbeing of everyone, but it negatively affects specific groups more than others and often makes existing social and health inequities worse. Climate justice is focused on addressing the unequal impacts of climate change by prioritizing the health and safety of those who face the greatest risk as we prepare for and recover from climate events such as extreme heat and cold, wildfires and wildfire smoke, and flooding.

Source: Washington State Department of Health, Climate Justice

**Commercial Vehicle Loading Zones (CVLZ)** - Commercial Vehicle Load Zones (CVLZ) were established to provide, on busy streets, a special parking space for service delivery vehicles to stop.

Source: SDOT, Commercial Vehicle Load Zone Permits

**Commute Trip Reduction program (CTR)** - Seattle's CTR program is a partnership between the State, City, our local Transportation Management Association, and Seattle employers to reduce traffic congestion and air pollution by shifting drive-alone commutes to other modes. The program has seen substantial decreases in driving alone, and currently over two-thirds of CTR affected commuters choose transit, walking, carpooling, bicycling, or telecommuting.

Source: SDOT, Commute Trip Reduction Program

**Electric vehicle (EV)** - Unlike conventional internal combustion engine vehicles that use gasoline, electric vehicles are powered by batteries and electric motors. EVs produce zero tailpipe emissions.

Source: U.S. Department of Energy, Alternative Fuels Data Center

**Environmental Justice Committee (EJC)** - The EJC is a key element of OSE's Equity & Environment Initiative and a central component of Seattle's racial equity work. The EJC centers community ownership in decision-making, environmental program/policy design, and Equity & Environment Agenda implementation. The EJC also plays a key role in strengthening community partnerships with City departments and better connecting community-based solutions into government.

Source: Office of Sustainability and Environment, Equity and Environment Initiative

**Greenhouse gas emissions (GHG)** - Greenhouse gases trap heat and make the planet warmer. Human activities are responsible for almost all of the increase in greenhouse gases in the atmosphere over the last 150 years. The transportation sector generates the largest share of greenhouse gas emissions in the U.S. overall, as well as here in Seattle.

Source: U.S. Environmental Protection Agency, Sources of Greenhouse Gas Emissions

**Metric tons of carbon dioxide equivalent (MTCO2e)** - Carbon dioxide equivalent or CO2e means the number of metrics tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas.

Source: U.S. Environmental Protection Agency, Carbon Footprint Calculator

**Micromobility** - Any small, low-speed, human- or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles, electric scooters (e-scooters), and other small, lightweight, wheeled conveyances.

Source: U.S. Department of Transportation, Federal Highway Administration, Micromobility: A Travel Mode Innovation

**Multimodal** - Multimodal describes a transportation system where people can easily connect different modes of travel like walking, biking, rolling, riding transit, and driving. A multimodal transportation system can improve community health and livability by reducing air and noise pollution, improving physical and mental health, and creating safer roads.

Source: World Resources Institute, "For Vibrant U.S. Cities, Invest in Multi-modal Transportation"

**Seattle Municipal Code (SMC)** - The Seattle Municipal Code is a codification of the general and permanent ordinances of The City of Seattle, Washington.

Source: Seattle Municipal Code, Preface

**Transit oriented development (TOD)** - TOD is a land development pattern that integrates transit and land use by promoting transit ridership while supporting community land use and development visions. TOD strategies focus urban growth around transit facilities and leverage transit investments to help produce regional and local benefits, such as increases in transit ridership, development of housing options, walkable communities, and improved access to jobs and economic opportunities.

Source: Sound Transit, RESOLUTION NO. R2018-10 Adopting an Equitable Transit Oriented Development Policy

**Transportation Demand Management (TDM)** - TDM is about making it easy for people to use lower cost, higher efficiency transportation options. TDM helps people use the transportation system more efficiently through education, incentives, products, and programs that encourage taking transit, carpooling, vanpooling, walking, biking, and teleworking.

Source: Puget Sound Regional Council, Transportation Demand Management

**Transportation Management Programs (TMP)** - The City of Seattle works with building managers to help implement strategies that facilitate tenants' use of a full range of travel options, including transit, walking, carpooling, and bicycling. Successful TMPs provide transit use incentives, promote active commutes, and include parking management strategies.

Source: SDOT, Transportation Management Programs

**Vehicle miles traveled (VMT)** - VMT is a measure of the total annual miles of vehicle travel. VMT per capita is the total annual miles of vehicle travel divided by the total population in a state or in an urbanized area. Reducing VMT is associated with reductions in carbon emissions and congestion, leading to improved air quality and decreased travel times.

Source: Planetizen, What is VMT?

**Vision Zero (VZ)** - Vision Zero is Seattle's goal to end traffic deaths and serious injuries on city streets. It is also an international street safety movement, a shift in thinking and in how we approach transportation safety – pushing us toward the most effective ways to reduce harm and move toward a culture of care and dignity for everyone who uses Seattle's streets.

# Acronyms for Referenced Organizations

FAS - Finance and Administrative Services

KCM - King County Metro

OED - Office of Economic Development

OPCD - Office of Planning and Community Development

OSE - Office of Sustainability and Environment

PSRC - Puget Sound Regional Council

SCL - Seattle City Light

SDCI - Seattle Department of Construction and Inspections

SDOT - Seattle Department of Transportation

SPD - Seattle Police Department

SPU - Seattle Public Utilities

TNC - Transportation Network Companies

WSDOT - Washington Department of Transportation

# **Referenced Documents**

<u>2020 Community Greenhouse Gas Emissions Inventory</u> - This GHG emissions inventory reports on the sources and magnitude of Seattle's core GHG emissions from the buildings, transportation, industrial, and waste sectors to help the City develop effective programs and policies designed to reduce climate impacts. The transportation sector represents the largest contribution to GHG emissions in Seattle.

<u>Equity and Environment Agenda</u> - The Equity and Environment Agenda is a key element of OSE's Equity & Environment Initiative. Developed in deep partnership with community and engaging over 1000 residents, the Equity & Environment Agenda guides our work in advancing racial equity in Seattle's environmental programs and policies.

One Seattle Comprehensive Plan - The Office of Planning and Community Development is currently developing the updated One Seattle Comprehensive Plan in close coordination with SDOT. The plan will guide City decisions about where we locate housing and jobs, and where and how we invest in transportation, utilities, parks, and other public assets. The Plan will seek to make the city more equitable, livable, sustainable, and resilient for today's communities and future residents.

<u>Seattle's Clean Transportation Electrification Blueprint</u> - Seattle's 2021 TE blueprint is an opportunity to build on past successes and lessons learned to advance electrification in all sectors of transportation and make Seattle a healthy and more resilient city.

<u>Seattle Transportation Plan</u> (STP) - SDOT is currently developing the STP - a vision for the future of transportation in Seattle. It is our commitment to building a transportation system that provides everyone with access to safe, efficient, and affordable options to reach places and opportunities.

<u>Transportation Equity Framework</u> (TEF) - The TEF is a roadmap for SDOT decision-makers, employees, stake-holders, partners, and the greater community to collaboratively create an equitable transportation system.

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