

City of Mercer Island CLIMATE ACTION DLAN

Adopted April 2023

Message from the City

Sustainability and stewardship are core values for the City of Mercer Island and the City has long been committed to proactively enhancing and protecting our natural environment, as well as preserving the quality of life for all residents.

One of the biggest threats to the Island—and the entire region—is our rapidly changing climate. Now, more than ever before, we need to take action to protect people, resources,



and the economy from climate-related disasters. The science is clear: our community is already experiencing these changes in the form of hotter, drier summers, unprecedented heatwaves and wildfires, and more frequent and intense rainstorms and flooding in the winter.

The Mercer Island Climate Action Plan outlines a strategic, coordinated approach for reducing greenhouse gas emissions and also preparing the community for the unavoidable impacts of a warming planet.

Over the past 16 months, through surveys, workshops, and public comment, we have learned firsthand what priorities, challenges, and opportunities residents see in the fight against climate change. This input helped staff and the City Council to develop a suite of goals and targets that demonstrate our commitment to reducing greenhouse gas emissions, while preserving our natural environment.

This plan sets Mercer Island on a realistic and well-defined path to transition to clean energy sources, to electrify our transportation, to enhance stormwater and tree planting programs, to reduce waste, and to strengthen our climate resiliency.

For this plan to succeed, community engagement and widespread participation will be critical. We look forward to collaborating with you—every member of the Mercer Island community—to bring this plan to life over the next few years.

Sincerely,

Jason Kintner, Chief of Operations

Acknowledgements

The City of Mercer Island would like to thank the community for their feedback and collaboration throughout the development of the Climate Action Plan (CAP). Special thanks to those community members who participated in workshops and surveys and engaged on Let's Talk.

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Acronyms and Key Terms

ADA Transition Plan	A plan that identifies accessibility gaps and barriers in public right-of-way, parks, and City buildings and defines priorities for investments.			
Adaptive capacity	The potential of a system to adjust to change (including climate impacts) to moderate potential damages and cope with consequences. ¹			
Backcasting	Working backwards to identify past conditions that would lead to a current or future state; method used for estimating past Mercer Island GHG emissions using calculations based on current data.			
Carbon intensity	The amount of carbon emitted per unit of energy consumed. A higher carbon intensity produces more carbon emissions than a lower carbon intensity.			
Circular economy	A model that optimizes resources by keeping materials and products within a closed loop system, which minimizes resource inputs, waste and pollution outputs, and carbon emissions.			
Climate Action Plan (CAP)	A comprehensive and strategic plan that outlines specific strategies and actions that an entity will take to reduce greenhouse gas emissions and adapt to climate change impacts.			
Commute trip reduction (CTR) program	A Washington State Department of Transportation (WSDOT) program that promotes alternatives to driving alone under the Commute Trip Reduction Law (WAC Chapter 468-63). The goal of this program is to shift commuter behavior to more sustainable modes and improve transportation system efficiency. The program generally applies to employers with at least 100 full-time employees at one location.			
Construction and demolition (C&D) waste	A type of debris from the construction and demolition of buildings that is not included in municipal solid waste, including steel, wood products, and concrete.			
Decarbonization	The reduction of greenhouse gases emitted into the atmosphere from fossil fuel- based energy.			
Electric vehicles (EVs)	A road vehicle propelled by an electric motor powered solely by batteries and carrying no fossil fuels.			
Electrification	The transition from using natural gas and other energy sources to electricity (typically generated from renewable energy sources) for buildings, industrial processes, and vehicles.			
Frontline communities	Communities that experience the impacts of climate change earliest and most severely. These often include Black, Indigenous, People of Color (BIPOC) and low- income communities that face historic and current inequities. Frontline communities are also more likely to have limited resources and capacity to adapt to climate impacts.			
Green stormwater infrastructure	A system for stormwater management that captures, filters, slows, and/or reduces stormwater by mimicking natural processes using vegetation and soils.			

¹ U.S. Climate Resilience Toolkit. 2023. Capacity Building. https://toolkit.climate.gov/topics/tribal-nations/capacity-building

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Greenhouse gas (GHG) emissions	Emissions of heat-trapping gases in the atmosphere, including carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O).
Heating, ventilation, and air conditioning (HVAC)	Various technologies to control the temperature, humidity, and purity of air in an enclosed space.
Internal combustion engine (ICE) vehicle	A vehicle that runs on a traditional internal combustion engine typically fueled by gasoline or diesel.
Low impact development (LID)	An approach to manage stormwater runoff that emphasizes conservation and use of on-site natural features to protect water quality.
Leadership in Energy and Environmental Design (LEED)	A certification and framework for sustainable, efficient, and low-carbon buildings.
King County- Cities Climate Collaboration (K4C)	A partnership between local King County jurisdictions that aims to share knowledge and resources to accelerate and enhance regional climate action; Mercer Island is a founding member.
Key performance indicators (KPIs)	Quantifiable metrics used to measure and track performance on goals.
Metric ton of carbon dioxide equivalent (MTCO ₂ e)	Greenhouse gases standardized to equal one unit of carbon dioxide (CO ₂).
Million British Thermal Units (MMBtu)	A unit of measurement commonly used to quantify the thermal energy contained in natural gas.
National Association of City Transportation Officials (NACTO)	A coalition of the departments of transportation in North American cities.
Net zero emissions	The point at which the amount of greenhouse gas emissions produced does not exceed the amount removed from the atmosphere.
Puget Sound Energy (PSE)	Energy utility based in Washington that serves the Puget Sound region, including Mercer Island.
Recology	Mercer Island's waste management company that collects and processes municipal solid waste.
Transportation demand management (TDM)	Public and private programs to manage transportation demand. TDM measures often aim to increase the use of public transportation, carpools and vanpools, nonmotorized travel modes, and flexible work schedules.

EXECUTIVE SUMMARY

Executive Summary

Taking decisive climate action has never been more urgent across the Pacific Northwest. People are already experiencing the economic and health impacts of changes to global climate patterns, including rising temperatures, changes in rainfall and river flow, and reduced snowpack. Communities with significant topography like Mercer Island may be at risk for landslides from intense rain events in the winter, in addition to localized flooding. Conversely, hotter,



drier summers are making wildfire increasingly likely, even west of the Cascade Mountains. Air quality impacts from the persistent smoke plumes generated by regional fires are now all too familiar.²



According to experts at the University of Washington's Climate Impacts Group,³ there is no better example of the changes ahead than the unprecedented June 2021 heatwave that swept across the Pacific Northwest, resulting in recordbreaking temperatures that climbed 30°F above average. Seattle exceeded 100°F for three days straight, reaching a peak of 108°F; Portland, Oregon reached 116°F. As one of the least air-conditioned portions of the United States (just 53% of housing units in the Seattle area),⁴ the region experienced a significant spike in heat-related deaths and illnesses. Exacerbated by an unusually dry spring, the extreme "heat dome" event created additional widespread impacts, including damage to road surfaces, shutting down light rail, power outages, and wildfires.

Unfortunately, heat events will become more common as average air temperatures are now anticipated to increase up to 5.5°F by 2050.³ Every action that communities take today will reduce the severity of future climate impacts, some of which are now unavoidable.

- 2 Extensive detail is available in the Pacific Northwest chapter of the Fourth National Climate Assessment, led by the National Oceanic and Atmospheric Administration (NOAA); U.S. Global Change Research Program. 2018. "Fourth National Climate Assessment." Chapter 24: Northwest. <u>https://nca2018.globalchange.gov/chapter/24/</u>
- 3 Climate Impacts Group, University of Washington. n.d. "Climate Mapping For A Resilient Washington." <u>https://cig-wa-climate.nkn.uidaho.edu/</u>
- 4 US Census Bureau, 2021. American Housing Survey <u>https://www.census.gov/programs-surveys/ahs/data/interactive/</u> <u>ahstablecreator.html</u>

The Washington State Legislature has recently passed legislation such as the Climate Commitment Act,⁵ which places an economy-wide cap on carbon to meet state greenhouse gas (GHG) reduction targets. The State also passed the Clean Energy Transformation Act,⁶ which will eliminate coal power from the electrical grid by 2025 and transition the state to 100% clean electricity by 2045.

Many of the actions required to reduce GHG emissions, improve resiliency, and protect the environment will occur at the local level. The Mercer Island Climate Action Plan (CAP) organizes and prioritizes strategies and actions to reduce GHG emissions and build on the long history of stewardship the community has already demonstrated. This history of climate action includes two successful rooftop solar promotional campaigns, commercial green building requirements in Town Center, very high rates of green power enrollment among residents, and the purchase of 100% wind energy to power all City government operations. The City has converted almost all street and parking lot lighting to LED and has been able to increase its tree canopy by 8% from 2007 to 2017; other milestones can be found on the City's sustainability webpages.⁷

In 2007, the City adopted its first GHG reduction targets in alignment with State goals. In 2011, Mercer Island became a founding member of the King County-Cities Climate Collaboration (K4C): this alliance of 22 local governments helps support climate solutions, share success stories, advocate for legislation, and coordinate multi-city initiatives to achieve shared climate goals and targets. Through the K4C, and guided by the King County Growth Management Planning Council's policies, the City of Mercer Island updated its GHG targets in 2022 to a reduction of 50% by 2030, 75% by 2040, and 95% by 2050, compared to a 2007 baseline.



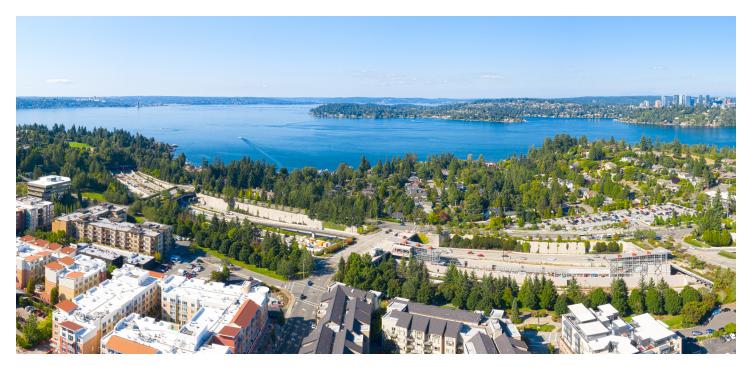
⁵ Washington State Department of Ecology. n.d. *Climate Commitment Act*. <u>https://ecology.wa.gov/Air-Climate/</u> <u>Climate-Commitment-Act</u>.

⁶ Washington State Department of Commerce. 2019. Clean Energy Transformation Act. <u>https://www.commerce.</u> wa.gov/growing-the-economy/energy/ceta/

⁷ The City of Mercer Island. 2022. Key Sustainability Milestones. <u>https://www.mercerisland.gov/publicworks/page/key-sustainability-milestones</u>.

Current GHG emissions (based on 2019 data, the last "normal" year before the COVID pandemic) are approximately **358,777 metric tons, or 14.7 Metric Tons per resident**. Calculations indicate that existing federal, state, and regional climate policies will reduce these emissions approximately 34% by 2030 compared to baseline levels. That leaves an additional reduction of 16% that must be achieved at the local level to meet the "50% by 2030" goal.

This CAP provides a long-term cohesive planning document that organizes GHG reduction and adaptation actions and programs in a strategic manner, ranks implementation priorities, identifies a protocol for tracking progress on a regular schedule, incorporates extensive public input, and enhances the City's existing GHG Dashboard webpage.



PLAN FOCUS AREAS

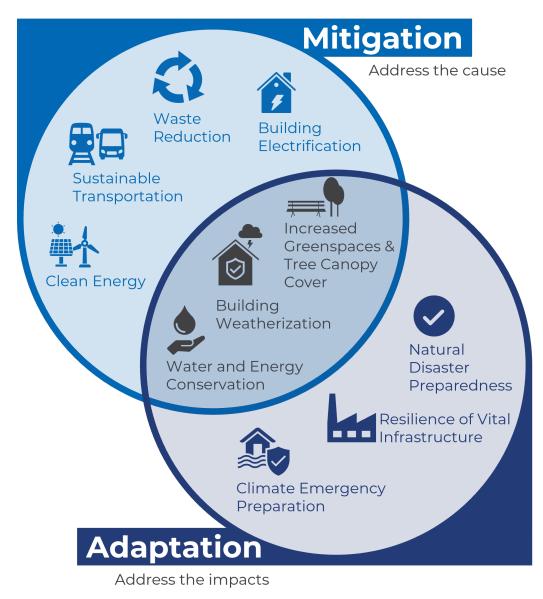
The CAP is the product of months of data collection and analysis and engagement with community members, City leadership, and City staff that ultimately culminated in the development of strategies and actions across six focus areas, summarized below.

Focus area	Future vision
Cross-Cutting & Municipal	Community members and City government are informed and active in local climate action—working together to meet emission reduction targets.
Buildings & Energy	Residents live and work in energy efficient buildings powered by clean, renewable energy.
Transportation	Low-to-no carbon transportation options are safe, clean, accessible, affordable, and widely used.
Consumption & Disposal	The community practices circular economy principles, reducing the amount of resources used, reusing and repurposing materials, and recycling and composting almost all of what's left.
Natural Systems	The community protects, conserves, and restores our natural systems, landscapes, and habitats.
Community Resilience	People and ecosystems are healthy, thriving, and can respond and adapt to climate change.

MITIGATION AND ADAPTATION

There are two types of climate strategies and actions in this plan—climate mitigation and climate adaptation actions. Both are important for addressing and preparing for climate change, and frequently one action addresses both mitigation and adaptation.

- **Mitigation** actions work to address the cause of climate change by reducing GHG emissions and increasing carbon sinks (e.g., transitioning away from fossil fuels by electrifying buildings and expanding tree canopy cover).
- Adaptation actions work to address the impacts of climate change by building resilience and preparing the community and natural environment to adapt to the unavoidable impacts of climate change (e.g., providing community cooling centers and air shelters in case of extreme heat, wildfires, and wildfire smoke).



STRATEGIES & ACTIONS AT-A-GLANCE

Strategies & Actions At-A-Glance

The tables below introduce the key components of each CAP focus area—the **goal**, the sector-specific **targets** needed to achieve that goal, the overarching GHG emission reduction target, and **a few selected key actions** to support these targets. For a complete list of all actions, see the strategies and actions section starting on <u>page 26</u>.



The overarching GHG emissions reduction targets (see <u>page</u> <u>24</u>) reflect a 2007 baseline to align with the original work

done by K4C. Sector-specific targets have been adjusted in this CAP to reflect a 2019 baseline (unless otherwise noted) as it is the most recently completed GHG emissions analysis and the year from which future emissions are forecasted.

Goal: Reduce overall o considerations into Ci	Focus Area: Cross-Cutting & Municipal (CC) Goal: Reduce overall community and municipal GHG emissions, integrate climate considerations into City reporting and decision-making, and encourage community members to participate in local climate action.			
	Tar	gets		
2030 Target				2050 Target
 50% reduction in community GHG emissions (compared to a 2007 baseline). Carbon neutral municipal operations. 		 95% reduction in community GHG emissions (compared to a 2007 baseline) and net zero emissions. Carbon neutral municipal operations. 		
	Strat	egies		
CC1 : Engage and support community climate action. CC2 : Reduce climate impart municipal operations.		pacts of	CC3 : Institutionalize climate considerations into City planning & decision-making.	
Selected Key Actions (full list starts on page 27)				
 CC1.1: Low carbon schools CC1.2: Climate advocacy and partnerships 	 CC2.1: CTR participation & incentives CC2.4: Municipal fleet electrification 			 CC3.1: GHG tracking & reporting CC3.2: Climate-informed City decision-making



Focus Area: Buildings & Energy (BE)

Goal: Reduce GHG emissions from buildings by reducing energy use, electrifying buildings, and transitioning to clean and reliable renewable energy sources.

Targets			
2030 Target	2050 Target		
• 78% reduction in building GHG emissions.	• 97% reduction in building GHG emissions.		
 35% reduction in building natural gas, propane, and fuel oil consumption. 	 92% reduction in building natural gas, propane, and fuel oil consumption. 		
• 22% reduction in communitywide energy use.	• 63% reduction in communitywide energy use.		
Strategies			
BE1: Transition to non-fossil building energy. BE2: Reduce energy use in new and existing buildings.			
Selected Key Actions (full list starts on page 30)			
• BE1.1: Heat pump rebates & education	• BE2.1 : Energy efficiency incentives and programs		
• BE1.3: Contractor incentive & training program • BE2.2: Green building campaigns			





Focus Area: Transportation (TR)

Goal: Reduce GHG emissions from transportation by transitioning to electric vehicles (EVs), expanding multimodal transportation options, and improving cycling and pedestrian networks.

Targets ⁸				
2030 Target			2050 Target	
 65% of new passenger vehicles sold and 20% of all registered passenger vehicles are EVs. 20% reduction in overall vehicle miles traveled (passenger + freight).⁹ 46% reduction in average vehicle carbon intensity. 56% reduction in on-road transportation emissions. 5% reduction in regional air travel fuel use. 10% reduction in aviation fuel carbon intensity. 		 100% of all registered passenger vehicles are EVs. 50% reduction in overall vehicle miles traveled (passenger + freight). 90% reduction in average vehicle carbon intensity. 94% reduction in on-road transportation emissions. 15% reduction in regional air travel fuel use. 95% reduction in aviation fuel carbon intensity. 		
	<u> </u>	egies		
TRI : Plan for expansion of EV infrastructure and fleet electrification; decarbonize offroad equipment.	TR2 : Reduce vehicle travel.		TR3 : Reduce aviation emissions.	
Selected Key Actions (full list starts on page 33)				
 TR1.1: EV Charging Infrastructure Plan TR1.4: EV charging incentives & rebates 	 TR2.1: Pedestrian and Bicycle Plan update TR2.3: Town Center Parking Study implementation 		 TR3.1: Air travel alternatives TR3.3: Regional aviation coordination 	



- 8 Vehicle refers to passenger vehicles (motorcycles, cars, light trucks, SUVs, etc.) and freight trucks; it does not include buses nor trains.
- 9 These targets were selected to align with K4C commitments. However, recent regional transportation modeling indicates there may not be enough tools currently available to achieve these targeted levels of VMT reduction in 2030 nor in 2050. The City will adjust these targets as needed to align with future transportation forecasts.



Focus Area: Consumption & Disposal (CD)

Goal: Reduce community waste and the GHG emissions associated with the consumption and disposal of goods and materials.

Targets			
2030 Target	2050 Target		
• 81% reduction in solid waste GHG emissions.	• 86% reduction in solid waste GHG emissions.		
 70% of all waste diverted from landfills; zero waste of edible food. 	 70% of all waste diverted from landfills; zero waste of edible food. 		
• 11% reduction in tons of landfilled waste.	60% reduction in landfilled waste.		
• 85% diversion of construction & demolition (C&D) waste and other recyclables.	 85% diversion of C&D waste and other recyclables. 		
 No net increase in total community waste generation, including solid waste, recycling, and compost. 	 10% reduction in total community waste generation, including solid waste, recycling, and compost. 		
Strat	egies		
CD1 : Reduce waste generation & landfill disposal.	CD2 : Consume sustainably.		
Selected Key Actions (full list on starts on page 36)			
• CD1.1 : Recycling space/access requirements	• CD2.1 : Community gardens		
CD1.2: Mandatory composting/recycling CD2.2: Local retail options			





Focus Area: Natural Systems (NS)

Goal: Foster climate resilient natural landscape by protecting vital habitats, ecosystems, and conserving water resources.

Targets				
2030 Target	2050 Target			
 City's tree replacement ratio for trees lost on public lands is at least 5:1. Retention of healthy, mature canopy in parks, rights-of-way, and open space areas continues to be prioritized. 5% increase in tree canopy cover on private land.¹⁰ 10% of public open space transitions from active restoration to a monitoring and maintenance phase of management. Landowners participate in active restoration efforts and/or habitat conservation on private land.¹¹ 	 All new City plantings are climate-adapted species. 15% increase in tree canopy cover on private land. 50% percent of public open space transitions from active restoration to a monitoring and maintenance phase of management. 			
	orios			
Strat				
NS1 : Increase urban tree canopy and green space.	NS2 : Foster healthy & resilient natural systems.			
Selected Key Actions (full list starts on page 38)				
• NS1.1: Tree planting incentive program	• NS2.7: Private forest restoration			
• NS1.2: City-led tree planting	• NS2.9: Carbon sequestration			



- 10 The most recent tree canopy assessment was completed in 2018; the next will be completed in 2028 and will inform future policy decisions.
- 11 "Monitoring and maintenance phase" is defined as open space areas with less than 5% invasive plant cover, greater than 60% native tree cover, and a diversity of plant species, tree ages, and forest structure.



Focus Area: Community Resilience (CR)

Goal: Ensure that all Mercer Island residents are prepared for current and future climate impacts.

Targets			
2030 Target	2050 Target		
 10% increase in participation in public programs devoted to climate resilience. 	• 20% increase in participation in public programs devoted to climate resilience.		
• 100% of residents served by emergency response programs and departments.	• 100% of residents served by emergency response programs and departments.		
Strategies			
CRI : Increase resilience of community members to climate impacts.	CR2 : Prepare infrastructure & emergency services for climate change.		
Selected Key Actions (full list starts on page 41)			
 CR1.1: Personal preparedness for wildfires CR1.2: Adaptation incentives 	 CR2.2: Emergency management planning and response CR2.3: Electric grid resiliency 		



INTRODUCTION

Introduction

The City of Mercer Island acknowledges that the island is on Coast Salish Land and honors with gratitude the ancestral land of the Coast Salish Tribes, which includes the Duwamish, Suquamish, Stillaguamish, and Muckleshoot people.

Mercer Island is situated on Lake Washington, with close proximity to Seattle to the west and Bellevue to the east. The



Island is home to a community of 26,000 residents and includes a Town Center to the north and a small commercial business district to the south. Visitors and residents enjoy the Island's natural beauty, with over 475 acres of parkland and open space.

Residents are stewards of the Island and strive to maintain a sustainable community that supports both present and future generations. **This commitment to environmental stewardship is more important now than ever** given the impacts arising from a warming planet. The Puget Sound region has warmed substantially—average annual temperatures are up 1.3°F since 1900¹²—changing the seasonal weather patterns and leading to more frequent and severe winter storms, wildfires, heatwaves, and flood events, and drought in the summer months. These impacts pose a serious threat to our community's natural environment, and also to jobs, health, and wellbeing.

Through this CAP, Mercer Island is joining communities across Puget Sound and the globe in taking action to reduce global GHG emissions and improve resiliency to climate impacts such as extreme heat and wildfire.

Climate Change & Equity

Climate change disproportionately impacts communities globally, regionally, and locally. Frontline communities—those with the least ability and resources to adapt are likely to fare the worst and already do in many locations. To ensure everyone can participate in CAP actions, the City will consider access through incentives, grants, and other support—particularly among low-income and under-resourced residents.

¹² King County. 2017. "Climate change impacts in King County." <u>https://kingcounty.gov/services/environment/climate/our-changing-climate/impacts</u>

PLAYING OUR PART

What the community can do:



Choose nonstop flights and consider purchasing carbon offsets to offset emissions from air travel.

Reduce business travel by prioritizing virtual meetings whenever feasible.



Transition to electric, energyefficient appliances in your homes and offices.



Opt to take the light rail, bus, or bike instead of driving when traveling.

Bus, walk, scooter, bike, and carpool.



Add solar panels to your house or participate in the Green Power Program to help fund local renewable energy projects.

Go electric when you purchase your next vehicle.

Increase local tree canopy and restore natural areas.

What the City is doing and will continue to do:



Promote regional incentive programs to help residents and business owners fund building retrofits, electric vehicles, and other climatesmart purchases.



Engage and educate the community on climate change and climate action.



Promote sustainable and resilient development and ensure City buildings and infrastructure are prepared for climate friendly technologies like electric vehicles and renewable energy.



Reduce emissions from City operations.



Ensure City emergency services and other departments are prepared for current and future climate impacts.



Increase local tree canopy and restore natural areas.

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BACKGROUND AND DATA

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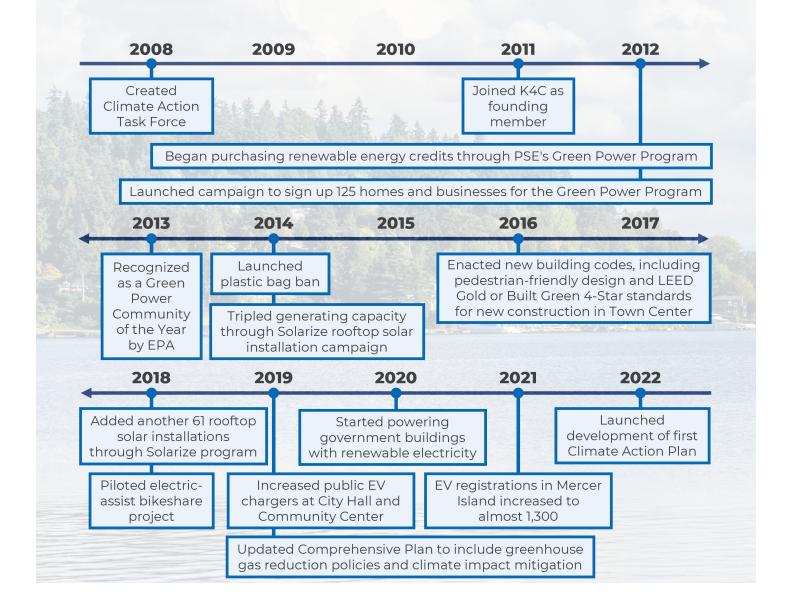
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MERCER ISLAND CLIMATE ACTION TO DATE

This plan builds upon Mercer Island's long history of environmental programs, policies, and accomplishments. In 2007, the City first committed to GHG reductions of 80% by 2050. In 2011, Mercer Island was a founding member of the King County-Cities Climate Collaboration (K4C)—a partnership between local King County jurisdictions that aims to share knowledge and resources to accelerate and enhance regional climate action. Through this partnership, Mercer Island has adopted stronger GHG reduction targets, most recently updated in April 2022. In pursuit of these targets and fostering sustainability more broadly on the Island, **the City has demonstrated local environmental leadership** through numerous programs and initiatives, some of which are highlighted below.



PLAN DEVELOPMENT PROCESS

This CAP was developed through a **multi-phase process informed by data, climate** science, and community, staff, and City Council input. The results of a comprehensive GHG analysis and forecast (described in detail in the <u>"Greenhouse Gas Emissions" on</u> <u>page 23</u>) were used to identify GHG emissions reduction targets and the key strategies and actions needed to meet these targets.



Community Engagement

Development of this plan incorporated community feedback through a range of channels including:

- Two community **workshops**
- **Tabling** events during Earth Day and at Summer Celebration
- A formal **public comment period** where residents were invited to review and provide feedback on the draft plan
- Two public **surveys**



• Ongoing engagement throughout the process via the online "Let's Talk" platform



Themes from community engagement

Overall support for Mercer Island taking action to address climate change.



Concern over climate impacts (e.g., air quality and extreme heat) and support for enhancing community resilience.



Strong interest in advancing climate action through incentives, education, and outreach.



Desire to see climate change integrated into City planning efforts.



Consistent support for tree planting, protection of the natural environment, and access to open space.

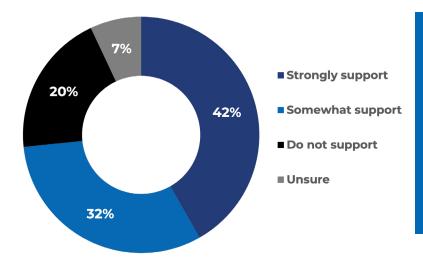


Frequent mention of residential or community solar, electric transportation, an expanded bike lane network, strengthened green building codes, and air quality.

Random Sample Community Survey

The engagement strategy included a random sample community survey administered by mail to 2,500 randomly selected residents (10% of Mercer Island's population)¹³ to gather feedback on proposed CAP strategies and actions. Survey results informed prioritization of potential CAP actions. Key findings from the survey are summarized below. <u>"Appendix D. Survey Report"</u> provides provides the full detail on survey results.

• The majority of survey respondents (74%) strongly or somewhat supported all proposed climate actions.



Top 5 Most Supported Actions:

- 1. CD2.3 | Repair/reuse programs
- 2. NS2.1 | Water efficient landscaping standards
- 3. CD2.2 | Local retail options
- 4. BE1.6 | Solar panel expansion
- 5. CR1.2 | Adaptation incentives

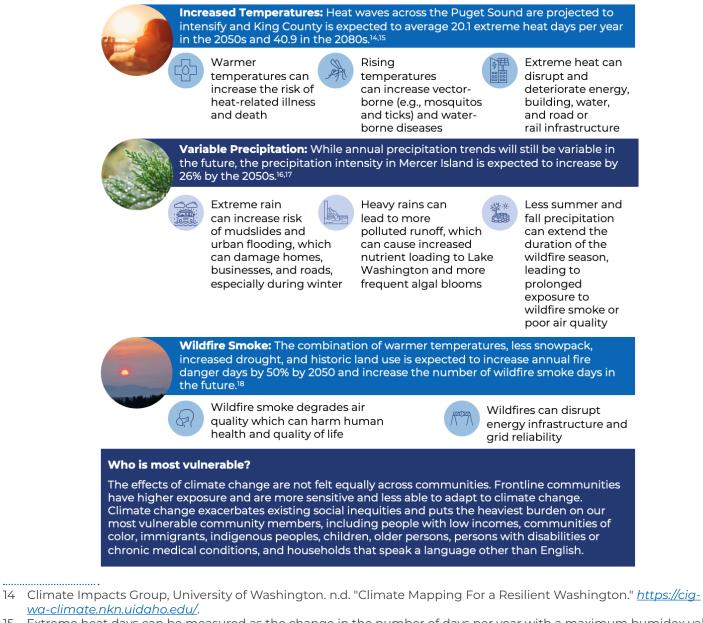
Community Priorities:

- Improved resiliency to climate impacts was the top ranked solution for addressing climate change on Mercer Island.
- Worsening air quality was ranked as the most concerning climate-related threat.

¹³ With 264 responses, the survey achieved an overall 95% confidence level with a +/- 6% margin of error.

CLIMATE IMPACTS

Mercer Island is already facing economic, health and ecosystem impacts from climate change, and the community will continue to experience more intense and frequent **extreme heat events, wet winters, dry summers,** and **smoky days**.



- 15 Extreme heat days can be measured as the change in the number of days per year with a maximum humidex value over 90°F relative to 1980-2009. Humidex is a measure of "experienced" temperature and includes measures of both temperature and humidity
- 16 Precipitation intensity under an RCP 8.5 scenario for the years 2040-2069; Climate Impacts Group, University of Washington. 2021. Projected Changes in Extreme Precipitation. <u>https://data.cig.uw.edu/picea/stormwater/pub/viz/</u>.
- 17 Mercer Island spans four quadrants of the heavy precipitation tool; 26% is the median of the four quadrants (cells 72-61, 72-61, 73-61, 73-62), ranging from a precipitation intensity of 24-28%
- 18 Abatzoglou, John T., Caroline S. Juang, A. Park Williams, Crystal A. Kolden, and Anthony Leroy Westerling. 2021. Increasing Synchronous Fire Danger in Forests of the Western United States. Geophysical Research Letters.

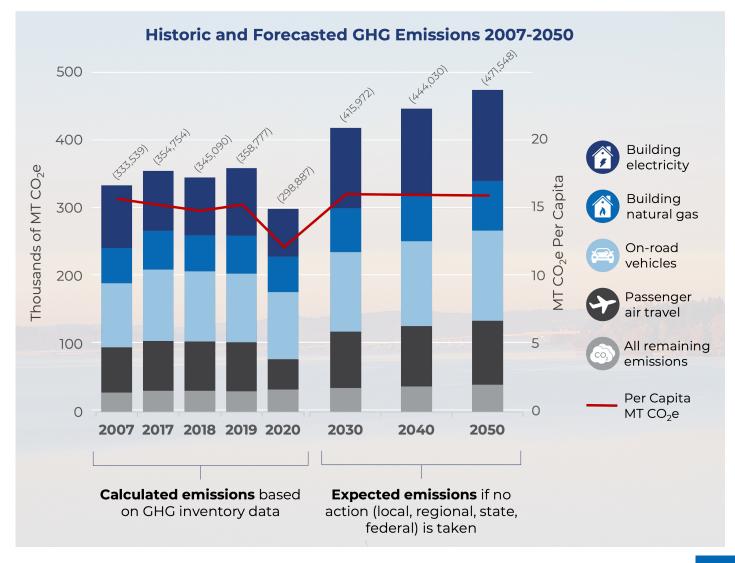
GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions are generated primarily from human activities related to transportation, energy used in buildings, solid waste disposal, and other activities that require the burning of fossil fuels. These gases trap heat in the atmosphere, making the planet warmer and changing local climate patterns.

As shown in the graph below, Mercer Island's largest sources of community emissions are consistently from on-road vehicles, building electricity, building natural gas, and passenger air travel.¹⁹



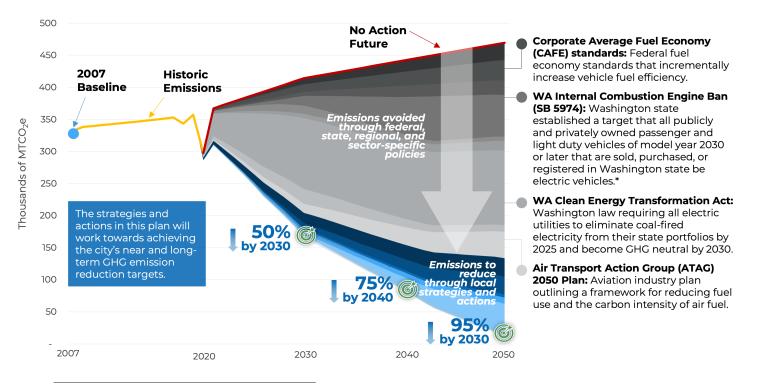
19 The reduction in 2020 emissions was due primarily to reduced travel during the COVID-19 pandemic.



Emissions Reduction Targets

As a founding member of K4C, Mercer Island has been actively working to reduce GHG emissions for more than 15 years. The graph below details a pathway for meeting the shared K4C targets to achieve 50%, 75%, and 95% emissions reductions from a 2007 baseline by 2030, 2040, and 2050, respectively. Setting the emissions reduction target based on a consistent, shared baseline year allows Mercer Island and the other K4C cities to measure and compare progress over time. Mercer Island's emissions for 2007 were calculated by backcasting the 2019 inventory results to 2007 based on the change in service population (residential population plus employment) between those years.

As the graph shows, state and federal climate policies, as well as market solutions, will contribute significantly to meeting GHG reduction goals. The remaining emissions will need to be reduced through local strategies and actions, such as those detailed in this plan.



^{*}This goal aligns with a separate bill (SB 5811) that has allowed the Department of Ecology to adopt California's vehicle emissions standards, which include low-emissions vehicle (LEV) and zero emissions vehicle (ZEV) standards. The California standards require that by 2035 all new passenger cars, trucks and SUVs sold in California will be zero emissions.

STRATEGIES & ACTIONS

Strategies & Actions

The strategies and actions in this CAP represent 59 high-impact actions to chart a path for the community to meet emissions reduction targets and prepare for the impacts from climate change. The King County Climate Action Plan Toolkit and other sources informed this final list of strategies and actions.

Strategies and actions were first assessed based on costs to the City, impact (GHG emissions reduction or increased resilience), and feasibility of implementing the action. Feedback from the community, City Council, and staff informed and helped prioritize the final strategies and actions (see <u>"Appendix B. Multi-Criteria Analysis"</u> for more details on this action prioritization process). The <u>"Implementation Plan" on page 44</u> provides details on the City's plan for implementing CAP actions.

Strategies and actions are organized into six major focus areas, each with a specific goal and set of targets, strategies, and actions. Each piece works together to achieve the City's collective GHG emissions reduction and climate resiliency goals.



lcons

The following icons indicate actions that advance equity, are strongly supported by the community, have been selected as early actions, or have a strong resiliency benefit.

Equity: Action has the potential to enhance equity or reduce historic or current disparities among underserved communities.



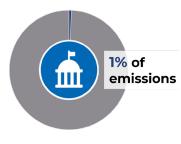
Community support: Action is strongly supported by the community.



Early action: High priority action for early implementation, based on action's relative impact and feasibility.



Resilience action: Action has a high potential to increase climate resilience and help community members adapt to future climate change.



CROSS-CUTTING & MUNICIPAL

City operations account for **1% of total emissions**, with most emissions coming from employee commutes and the municipal vehicle fleet. The City is committed to reducing these emissions and leading by example.

Focus Area Goal: Reduce overall community and municipal GHG emissions, integrate climate considerations into City reporting and decision-making, and encourage community members to participate in local climate action.

Strategy	KPI/Metric	2030 Target	2050 Target	
Engage and support community climate action.	Reduction in community GHG emissions (MTCO ₂ e)	50% below 2007 baseline levels	95% below 2007 baseline levels and net zero emissions.	
Reduce climate impacts of municipal operations.				
Institutionalize climate considerations into City planning & decision- making.	Reduction in municipal GHG emissions (MTCO ₂ e)	100% (Carbon neutral)		

Strategy #1: Engage and support community climate action.

Action ID	Short name	Action description	lcons
CC1.1	Low carbon schools	Support local schools in integrating climate and sustainability education into curriculum and adopting low carbon solutions in their building operations. This may include working with the schools on energy efficiency and electrification, waste reduction and recycling, and sustainable purchasing, and behavior change (such as encouraging carpools to school).	4
CC1.2	Climate advocacy and partnerships Advocate for legislation that supports local climate mitigation and adaptation efforts. Continue to partner with neighboring cities and other regional groups to advance regional initiative to reduce greenhouse gas emissions and increase adaptive capacity.		

Action ID	Short name	Action description	lcons	
CC1.3	Climate outreach/ education	 Develop a climate outreach and education campaign or program to support ongoing community engagement in climate actions. Initiatives may include: Climate challenges, competitions, and climate pledges aimed at inspiring friendly competition among residents 		
		and businesses.		
		• Educational campaigns focused on addressing common misinformation related to home energy use and other everyday activities (e.g., the benefits of using cold v. hot water for laundry).	Ö	
		 Resource sharing campaigns, such as "renewable energy" or "energy efficiency" home tours in which neighbors learn from each other on how to implement renewable energy or energy efficient upgrades in their homes. 		
		 Educational campaigns aimed at helping residents understand the relative impact of various sources of GHG emissions and the potential benefits of existing and proposed policies. 		

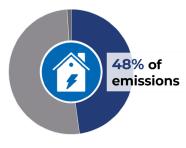
Strategy #2: Reduce climate impact of municipal operations.

Action ID	Short name	Action description	lcons
CC2.1	CTR participation & incentives	Encourage Mercer Island employers to offer work from home and flexible work schedules for employees.	<u>ن</u>
CC2.2	Alternative commuting incentives	Reduce the drive alone rate for City employees through incentives and by improving commute options by site location. Preserve flexible scheduling and remote work options for staff.	
CC2.3	City green building guidelines	Develop green building guidelines to inform future municipal building designs.	
CC2.4	Municipal fleet electrification	Electrify the municipal vehicle fleet.	4
CC2.5	Municipal energy retrofitsComplete energy efficiency retrofits on existing municipal equipment and buildings.		
CC2.6	2.6 Environmentally Preferable Purchasing Policy that prioritizes products with the lowest environmental impact. The policy will guide purchasing decisions within each department, including vehicle and fuel purchases, and construction materials.		

Act	ion ID	Short name	Action description	lcons
CC2	2.7	Municipal renewable energy storage	Expand solar installation and build renewable energy storage systems on City property.	Ö

Strategy #3: Institutionalize climate considerations into City planning & decision-making.

Action ID	tion ID Short name Action description		lcons
CC3.1	GHG tracking & reporting	Continue to maintain a publicly available online dashboard that tracks and reports on CAP and GHG reduction progress on an annual basis. Report to City Council and the community on progress annually.	
CC3.2	2 Climate- informed City decision- making Apply a climate lens to City decision-making around major activities, capital projects, and initiatives.		Ö



BUILDINGS & ENERGY

Mercer Island's buildings and energy account for **48% of total emissions**, making this sector the community's **second largest emissions source**. Emissions from electricity account for 28% of total emissions, followed by emissions from natural gas (15%), refrigerants (4%), and propane and fuel oil (1%).

Focus Area Goal: Reduce GHG emissions from buildings by reducing energy use, electrifying buildings, and transitioning to clean and reliable renewable energy sources.

Strategy	KPI/Metric	2030 Target	2050 Target
	Reduction in building GHG emissions (MTCO ₂ e)	78% reduction compared to 2019	97% reduction compared to 2019
Transition to non-fossil building energy.	Reduction in building natural gas, propane, & fuel oil consumption (MMBtu) ²⁰	35% reduction compared to 2019	92% reduction compared to 2019
Reduce energy use in new and existing buildings.	Reduction in communitywide energy use (MMBtu)	22% reduction compared to 2019	63% reduction compared to 2019

How does the green power program affect emissions?

Residents enrolled in the PSE Green Power Program pay a premium on their energy bill that is then invested in local renewable energy projects that generate clean power sourced by PSE and other regional utilities. Increasing the portion of renewable energy in its energy mix reduces the overall carbon intensity of PSE's electricity for everyone, thereby reducing the emissions generated from powering Mercer Island homes and businesses. The PSE program is monitored and certified by a third party, Green-e, which certifies similar programs nationally. Green-e audits the PSE program annually to ensure that ratepayers' dollars are being invested appropriately.

The individual paying the premium does not receive more electrons of renewable energy than their neighbor. Instead, they are sending a market signal—by paying slightly more now, they are adding more renewable energy in the future to the Pacific Northwest power supply grid for the benefit of all.

²⁰ This target is a measurable milestone in tracking progress toward reaching the overall reduction in building GHG emissions.

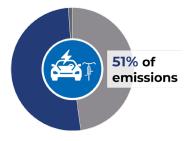
Strategy #1: Transition to non-fossil building energy.

Action ID	Short name	Action description	lcons
BE1.1	Heat pump rebates & education	Partner with PSE and other regional partners to expand regional electric heat pump pilot programs and campaigns to replace natural gas-powered furnaces and increase energy efficiency in existing commercial and residential properties.	4
BE1.2	Solar energy storage & grid resiliency	Accelerate improvements to the energy grid and storage to facilitate the transition to renewable energy sources. Improvements may include subsidy and grant programs to reduce the cost of battery storage in existing buildings and electric vehicle charging/storage system installations.	4 00
BE1.3	Contractor incentive & training program	Work with regional jurisdictions and agencies to expand upstream and midstream incentives for building electrification retrofits to local distributors and contractors. Create or promote a contractor training and/or certification program focused on efficient, electric heat pump installation.	
BE1.4	Building code updates	Implement new building codes as required by the Washington State Building Code Council to transition from natural gas to electricity in new construction.	
BE1.5	Furnace and water heater replacement "burn-out" program	Research the development of a "burn-out" program to incentivize the replacement of fossil fuel furnaces or water heaters with available high efficiency electric alternatives. Consider future policies to require high efficiency electric replacements at time of upgrade.	Ö
BE1.6	Solar panel expansion	Partner with PSE and other regional partners to promote state and federal renewable energy incentives to fund onsite residential and commercial solar power projects.	4
BE1.7	Green Power Program	Host education programs and conduct outreach events to encourage businesses and residents to enroll in the PSE Green Power Program. Partner with other neighboring communities served by the utility to advocate directly with PSE to expand renewable energy production that is local to Mercer Island.	`
BE1.8	Electric panel upgrades	Promote electric panel upgrades upon sale and/or rental turnover for residential and commercial properties to facilitate an easier transition to clean electricity buildings and vehicles.	

Strategy #2: Reduce energy use in new and existing buildings.

Action ID	Short name	Action description	lcons
BE2.1	Energy efficiency incentives and programs	Partner with PSE and other local jurisdictions and organizations to provide and promote energy efficiency incentives and rebate programs for residents and businesses. Partner to offer free home energy audits and upgrade programs for income-eligible residents.	6 110
BE2.2	Green building campaigns	Develop a program to promote green building for residential and commercial properties, including educational outreach.	
BE2.3	Washington Clean Buildings Act promotion	Build awareness of the Washington Clean Buildings Act that requires all new and existing commercial buildings over 50,000 s.f. to reduce their Energy Use Intensity 15% compared to the 2009-2018 average. ²¹ Connect commercial building owners with state resources to learn more about the requirements of the Act.	
BE2.4	Point-of- sale green building requirements	Consider local or regional policies related to point-of-sale green building disclosures. Policy considerations may include disclosure of energy use, energy retrofits, or other considerations at point of sale.	Ö

²¹ Energy use intensity refers to the energy consumed per square foot of building space.



TRANSPORTATION

Transportation is Mercer Island's largest GHG emissions source, accounting for **51% of total communitywide emissions**. Most of these emissions come from on-road vehicles and aviation, which account for 28% and 20% of total emissions, respectively. The remaining transportation emissions come from off-road vehicles/ equipment (including recreational boats), which account for 3% of total emissions.

Focus Area Goal: Reduce GHG emissions from transportation by transitioning to electric vehicles (EVs), expanding multimodal transportation options, and improving cycling and pedestrian networks.

Strategy	KPI/Metric	2030 Target	2050 Target
Plan for expansion of	Proportion of vehicles that are EVs	65% of new passenger vehicles 20% of all registered passenger vehicles	100% of all passenger and transit vehicles
EV infrastructure and fleet electrification; decarbonize offroad equipment.	Reduction in average vehicle carbon intensity (MTCO ₂ e/mile)	46% reduction compared to 2019	90% reduction compared to 2019 ²²
	Reduction in on-road transportation emissions (MTCO ₂ e)	56% reduction compared to 2019	94% reduction compared to 2019
Reduce vehicle travel. ²³	Reduction in overall vehicle miles traveled (passenger + freight)	20% reduction compared to 2019 ²⁴	50% reduction compared to 2019 ²⁴
Reduce air travel	Reduction in regional aviation fuel useReduction in aviation	• 5% reduction in regional aviation fuel use compared to 2019	• 15% reduction in regional aviation fuel use compared to 2019
emissions.	fuel carbon intensity	 10% reduction in aviation fuel carbon intensity compared to 2019 	 95% reduction in aviation fuel carbon intensity compared to 2019

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²² Remaining emissions in 2050 are generated from emissions from freight vehicles, which are expected to transition to electric at a slower rate than passenger and transit vehicles

²³ Vehicle refers to passenger vehicles (motorcycles, cars, light trucks, SUVs, etc.) and freight trucks. It does not include buses nor trains.

²⁴ These targets were selected to align with K4C commitments, not the Puget Sound Regional Council's (PSRC) latest transportation targets based on its recent modeling. The City will adjust these targets as needed to align with future transportation forecasts.

Strategy #1: Plan for expansion of EV infrastructure and fleet electrification; decarbonize offroad equipment.

Action ID	Short name	Action description	lcons
TR1.1	EV Charging Infrastructure Plan	Develop and implement an EV Charging Infrastructure Plan, in collaboration with PSE, that guides expansion of EV charging capacity throughout the city. The plan will include analysis and recommendations on the facilities and infrastructure required for the City and the Mercer Island School District to meet 2030 and 2050 fleet electrification goals. The plan will also include a readiness and capacity study to evaluate increasing EV charging at commercial and residential properties citywide.	
		partnerships, funding, and future policy recommendations.	
TR1.2	Electric school buses	Engage the Mercer Island School District on the development of the EV Charging Infrastructure Plan to ensure site readiness for bus and fleet electrification.	
TR1.3	State EV resource advocacy	Advocate for State resources to fund EV infrastructure planning.	
TR1.4	EV charging incentives & rebates	Explore and develop incentives in partnership with the State and other partners to expand EV charging capacity at commercial and residential properties.	
TR1.5	EV education & outreach	Provide education and outreach programs and materials to educate residents on the benefits of EVs, available EV incentives and rebates to purchase vehicles, EV charger locations, and other information to facilitate EV adoption.	
TR1.6	Electric lawn & construction equipment	Encourage the use of electric gardening equipment through educational campaigns, rebates, and incentives. Implement a ban on gas-powered leaf blowers.	

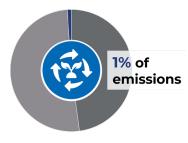
Strategy #2: Reduce vehicle travel.

Action ID	Short name	Action description	lcons
TR2.1	Pedestrian and Bicycle Plan update	Update the Pedestrian and Bicycle Plan, as identified in the Transportation Improvement Plan for completion in the 2026-2027 biennium. Updates to the Plan will incorporate the results of the ADA Transition Plan, evaluate the use of urban street design guidelines such as NACTO, and identify/ evaluate projects to provide a preliminary scope of work, and timeline for future improvements.	4

Action ID	Short name	Action description	lcons
TR2.2	Last-mile light rail connection	Support programs that provide multi-modal last-mile connections to the light rail station, such as through walking, biking, transit, and electric vehicle. Programs could include reintroduction of bike/scooter share programs.	0
TR2.3	Town Center Parking Study implementation	Encourage the use of alternative transportation by expanding time limited parking in Town Center and implementing other recommendations identified in the Town Center Parking Study.	0

Strategy #3: Reduce aviation emissions.

Action ID	Short name	Action description	lcons
TR3.1	Air travel alternatives	Provide education materials around alternatives to air travel for conferences and business travel; educate residents on the carbon footprint of air travel and benefits of regional tourism.	
TR3.2	State and federal aviation industry advocacy	Advocate for state and federal legislation aimed at decarbonizing the aviation sector.	
TR3.3	Regional aviation coordination	Support regional and industrial efforts to reduce regional aviation emissions by promoting the use of sustainable aviation fuel and adoption of aviation fuel efficiency measures.	Ö



CONSUMPTION & DISPOSAL

Solid waste disposal and wastewater treatment account for **1% of communitywide GHG emissions**. Consuming products also creates "upstream" emissions from the energy and fuel used to produce and distribute goods and materials.

The City can reduce these emissions by promoting sustainable consumption and increasing waste diversion. In addition to reducing emissions, waste prevention and diversion can also reduce pollution and litter. Sustainable consumption, in turn, supports Mercer Island businesses by promoting local goods.

Focus Area Goal: Reduce community waste and the GHG emissions associated with the consumption and disposal of goods and materials.

Strategy	KPI/Metric	2030 Target	2050 Target
	Diversion of waste from	70% diversion rate	
	landfills	Zero waste of edible food	
Reduce waste generation & landfill	Reduction in landfill waste (tons)	11% reduction compared to 2019	60% reduction compared to 2019
disposal.	Reduction in solid waste GHG emissions (MTCO ₂ e)	81% reduction compared to 2019	86% reduction compared to 2019
	Diversion of C&D waste from landfills	85% of C&D waste diverted	k
Consume sustainably.	Reduction in community waste generated, including solid waste, recycling, and compost	No net increase in waste generation compared to 2019 levels	Reduce overall waste generation by 10% compared to 2019 levels

Strategy #1: Reduce waste generation & landfill disposal.

Action ID	Short name	Action description	lcons
CD1.1	Recycling space/access requirements	Evaluate new construction requirements and consider policy requirements to ensure adequate space for recycling and compost collection.	4
CD1.2	Mandatory composting/ recycling	Phase in new state mandates for residential and commercial recycling and composting, and enforce waste sorting by an identified year, especially for multi-family buildings and commercial properties where contamination is high.	4

Strategy #2: Consume sustainably.

Action ID	Short name	Action description	lcons
CD2.1	Community gardens	Encourage the development of community gardens at churches, community facilities, multi-family properties, and in other areas.	
CD2.2	Local retail options	Collaborate with the Chamber of Commerce to promote local retail shopping, including programs, marketing, and other seasonal campaigns. Explore potential collaboration with Mercer Island Thrift Shop.	4 0
CD2.3	Repair/reuse programs	Support community reuse programs (e.g., tool libraries, Buy Nothing groups, repair cafés) to promote a circular economy.	4
CD2.4	Low carbon building materials	Partner with contractors and architects to promote carbon- sequestering and low carbon building materials in new construction and renovations. Support State requirements for disclosing and/or limiting embodied carbon emissions of buildings and policies focused on reducing the use of specific materials.	



NATURAL SYSTEMS

Natural systems (e.g., trees, soil) store and capture carbon from the atmosphere and provide important climate resiliency services. For example, natural cooling from tree shade reduces extreme heat stress and decreases energy demand for air conditioning. Conserving valuable water resources also helps ensure that Mercer Island is resilient against future droughts and can maintain a healthy water supply in the years ahead.

Focus area goal: Foster climate resilient natural landscape by protecting vital habitats, ecosystems, and conserving water resources.

Strategy	KPI/Metric	2030 Target	2050 Target
Increase urban tree canopy and green space.	Increase in tree canopy acreage and replacement counts. ²⁵	City's tree replacement ratio for trees lost on public lands is at least 5:1. Retention of healthy, mature canopy in parks, rights-of-way, and open space areas continues to be prioritized. 5% increase in tree canopy cover on private land. ²⁶	All new City plantings are climate-adapted species. 15% increase in tree canopy cover on private land.
Foster healthy & resilient natural systems.	Improvement in ecosystem function.	10% of public open space transitions from active restoration to a monitoring and maintenance phase of management. Landowners participate in active restoration efforts and/or habitat conservation on private land. ²⁷	50% percent of public open space transitions from active restoration to a monitoring and maintenance phase of management.

27 "Monitoring and maintenance phase" is defined as open space areas with less than 5% invasive plant cover, greater than 60% native tree cover, and a diversity of plant species, tree ages, and forest structure.

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²⁵ Target applies only to land acreage that could support tree canopy.

²⁶ The most recent tree canopy assessment was completed in 2018; the next will be completed in 2028 and will inform future policy decisions.

Strategy #1: Increase urban tree canopy and green space.

Action ID	Short name	Action description	Icons
NS1.1	Tree planting incentive program	Develop programs to support and encourage residents and large property owners to plant the right tree in the right place and sustain existing trees with reduced cost or free trees. Offer tree-awareness campaigns and classes to educate the community and develop tree planting demonstration programs.	42
NS1.2	City-led tree planting	Enhance City-led street tree planting in the right-of-way and assess long-term stewardship needs; promote street frontage plantings by businesses.	Ö

Strategy #2: Foster healthy & resilient natural systems.

Action ID	Short name	Action description	lcons
NS2.1	Water- efficient landscape standards	Utilize educational campaigns to encourage drought- resistant and/or native landscaping and design. Work with landscape companies to educate and incentivize drip irrigation and smart management technology. Develop demonstration programs.	42
NS2.2	Water Partner with regional water conservation groups, such as the Saving Water Partnership, to develop and advertise incentives and installation programs to retrofit inefficient water fixtures.		4
NS2.3	Green stormwater infrastructure	Promote green stormwater infrastructure and low impact development (LID) through education and demonstration programs. Provide technical assistance, advice, and assistance to residents.	
NS2.4	Greywater reuse education	Develop campaigns to educate residents and businesses on the financial and environmental benefits of reusing rainwater and greywater. Provide technical assistance, advice, and assistance to residents.	4
NS2.5	Monitoring and maintenance baseline for all City open spaces	Complete an assessment of all City open spaces to establish a baseline for monitoring and maintenance phase.	
NS2.6	Open space restoration	Using the baseline data from NS2.5, expand acreage of forested open space undergoing intensive restoration in order to reach a more stable monitoring and maintenance phase of management. Expand contiguous areas of open space in the monitoring and maintenance phase to improve habitat connectivity and limit boundary effects.	

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Action ID	Short name	Action description	Icons
NS2.7	Private forest restoration	Engage private landowners (businesses, schools, churches, and residential properties) to participate in forest restoration programs. Develop programs and incentives to increase canopy cover, improve diversity of native species and forest structure, reduce invasive species, and add resilient, climate- adapted landscaping.	
NS2.8	10-Year Citywide Tree Canopy Assessment	Continue to perform an assessment of the citywide tree canopy every ten years. Use data and findings to modify strategies and actions related to increasing forest canopy and improving forest health.	
NS2.9	Carbon sequestration	Assess the carbon sequestration (the rate of carbon stored in plants, soil, and habitats) of existing public land in Mercer Island and explore ways to increase sequestration levels through changes to land management practices.	



COMMUNITY RESILIENCE

Increasing community resilience—the community's ability to adapt and respond to unavoidable climate impacts—is a necessary part of effective climate action.

Focus area goal: Ensure that all Mercer Island residents are prepared for current and future climate impacts.

Strategy	KPI/Metric	2030 Target	2050 Target
Increase resilience of community members to climate impacts.	Participation in public programs devoted to climate resilience	10% increase	20% increase
Prepare infrastructure & emergency services for climate change.	Number of residents served by emergency response programs and departments	100% of residents	

Strategy #1: Increase resilience of community members to climate impacts.

Action ID	Short name	Action description	lcons
CR1.1	Personal preparedness for wildfires	Partner with Puget Sound Clean Air Agency and other regional organizations to conduct outreach and education to prepare residents for wildfire emergencies. Opportunities include HVAC filter upgrades, DIY filter fans, use of masks, pet care, and other planning and safety tips.	tt J
CR1.2	Adaptation incentives	$10W_{-}$ emissions share-cooling devices on residential and	
CR1.3	Urban flood management	Assess areas most at risk for local flooding and ensure emergency systems are prepared to address flooding emergencies.	0

Strategy #2: Prepare infrastructure & emergency services for climate change.

Action ID	Short name	Action description	lcons
CR2.1	Hazard Mitigation Plan update	Partner with King County on the next update to the Countywide Hazard Mitigation Plan (timeline estimated in 2025) to ensure climate impacts are included in plan update.	TTÖ

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Action ID	Short name	Action description	lcons
CR2.2	Review and update City's emergency management plans to ensure readiness to respond to climate emergencies, such as providing community cooling centers and air shelters in case of extreme heat and wildfires. Ensure communication materials are developed and ready for quick deployment during climate emergencies.		tt 🌙
CR2.3	Electric grid resiliency	Encourage the State to implement requirements to improve the resiliency of the electric network, including the undergrounding of power lines.	Ö.

IMPLEMENTATION PLAN

Implementation Plan

The City will need to collaborate with local, regional, and State organizations, the community, and local businesses to implement CAP actions. This section addresses key implementation considerations and provides a framework for CAP implementation.

"<u>Appendix A. Implementation Matrix</u>" details the implementation plan for each individual action.

OVERSIGHT, ACCOUNTABILITY & FUNDING

Some key components of successful implementation are clear roles and responsibilities and annual progress reports. Upon adoption of this plan, the City will do the following:

- Prepare an **annual report** for City Council and the community on implementation, challenges, and overall progress on meeting GHG reduction goals.
- **Report communitywide GHG emissions** on a gross and per-capita adjusted basis as compared to a 2007 baseline.
- Develop **budget and work plan recommendations** for City Council consideration each biennium to support CAP recommended actions.
- Pursue **grants and partnership** opportunities to support implementation of CAP actions.
- Identify CAP related **advocacy items** for inclusion in the City's annual legislative priorities.

MONITORING, EVALUATION, & REPORTING

Monitoring, evaluating, and reporting on CAP programs and policies is important to understanding the City's progress and will include:

- **Conducting a communitywide GHG inventory** every two years, ideally aligned with partner cities in King County's Eastside.
- Updating the Climate Action Plan approximately every 10 years, incorporating lessons learned from CAP implementation, updated climate science, and new or revised targets, strategies, and actions. In the meantime, plan strategies and actions may need to be adapted to address new technologies, legislation, and market opportunities that may emerge before the next formal update.
- **Regularly updating the City's CAP webpage** so that community members can stay informed, get involved with implementation, and track progress toward goals and targets.

COMMUNITY INVOLVEMENT

Community support and participation are key to achieving community-wide emission reduction and climate resilience goals. Community members can support CAP implementation in a variety of ways, including:

- Participating in new and ongoing climate initiatives.
- **Promoting** public education and engagement campaigns by staying informed and sharing opportunities with friends, family, and neighbors.
- Volunteering to help with implementation of CAP actions.
- **Advocating** for additional funding by engaging with local, regional, State, and Federal representatives.

The City will continue to engage with the community throughout implementation of the CAP. In 2023 and 2024, the City work plan includes expanding the <u>heat pump rebate and</u> <u>installation program</u>, continuing the Mercer Island <u>Climate Challenge</u>, seeking funding for public EV charger planning and installation, and exploring the reintroduction of bike/ scooter-share programs.

"<u>Appendix A. Implementation Matrix</u>" below details the implementation plan for each individual action.

CODE UPDATES

Several CAP actions may require revisions to the city code. For example, code amendments are required by current and upcoming state law, including **BE1.4**: *Building code updates*, and **CD1.2**: *Mandatory composting/recycling*. All future code amendments will be incorporated into the biennial workplan that is directed and approved by City Council.

Appendix A. Implementation Matrix

The Implementation Matrix below outlines the key factors that the City will consider in implementing each action in the CAP. The Matrix is organized as follows:

Timeline for implementation	The expected timeline to start implementing the action. See <i>Timeline Key</i> below for additional details.
Cost range	The estimated annual cost to the City for implementing an action. See Cost Key below for additional details.
Lead department(s)	The City department(s) that will ultimately be responsible for overseeing the implementation of an action.
Outside partner(s)	Known local and regional partner(s) who may support implementation.
Implementation considerations	The general factors that the City considered in determining the timeframe for implementing actions and will consider in implementing an action moving forward.

IMPLEMENTATION PLAN KEYS

Timeline

Ongoing (O)	Action is already underway and/or is part of existing City programs.
Near term (NT)	City will begin implementing action within the next 1-3 years.
Mid-term (MT)	City will begin implementing action within the next 4-6 years.
Long term (LT)	City will begin implementing action within the next 7-10 years, or more.

Cost

\$	Action implementation will not incur additional cost beyond current staffing, programs, etc. or will require minimal new cost (<\$10k)
\$\$	Action implementation is expected to cost \$10K-\$25K
\$\$\$	Action implementation is expected to cost \$25-\$50K
\$\$\$\$	Action implementation is expected to cost \$50-100K
\$\$\$\$\$	Action implementation is expected to cost \$100K or more

"The Cost of Inaction"

Failure to act on climate change has implications not only for community health and wellbeing, but also to local and global economies.

Delaying action incurs both direct costs from damages caused by climate impacts (such as destruction to infrastructure and increased insurance costs to address increased wildfire and flooding) as well as potential savings missed through advancements to lower cost energy and other technological advancements. Many experts predict that over several decades these costs could far outpace the costs of investing in climate action today. On a global scale, some models indicate insufficient action could cost \$178 trillion over the next 50 years—a 7.6% cut to global gross domestic product (GDP) in the year 2070 alone.²⁸

In Mercer Island, these costs of inaction could play out in several ways. For example, postponing the assessment of areas prone to local flooding in Mercer Island (**Action CR1.3**: *Urban flood management*) may result in neglecting key infrastructure upgrades that could save millions from avoided flood damage. Similarly, implementing Action **CR2.3**: *Electric grid resiliency* helps the Island avoid costly future electric outages that disrupt local businesses and often many hundreds of residents.

²⁸ Deloitte. 2022. "The Turning Point: A Global Summary." <u>https://www.deloitte.com/content/dam/assets-shared/legacy/docs/gx-global-turning-point-report.</u> <u>pdf</u>.

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Lead Department

СМ	City Manager	PD	Police Department
CPD	Community Planning & Development	PR	Parks & Recreation
FD	Fire Department	PW	Public Works
HR	Human Resources	SP	Sustainability Program
MI-Emerg	Emergency Preparedness	YFS	Youth & Family Services

Partners²⁹

сс	Chamber of Commerce	MISD	Mercer Island School District
ECP	Eastside Climate Partnership		Neighbors in Motion
ЕКССС	East King County Chambers Coalition	PSCAA	Puget Sound Clean Air Agency
EPA	Environmental Protection Agency	PSE	Puget Sound Energy
K4C	King County-Cities Climate Collaboration	PSRC	Puget Sound Regional Council
KCD	King Conservation District	RCC	Regional Code Collaboration
KCLS	King County Library System	SPU	Seattle Public Utilities
КСМ	King County Metro	ST	Sound Transit
КСОЕМ	King County Office of Emergency Management	Sust-MI	Sustainable-Mercer Island
MIBGC	Mercer Island Boys & Girls Club	WSDOE	Washington State Department of Ecology
MI-CAN	MI Climate Action Now	WSDOT	Washington State Department of Transportation
MIFM	Mercer Island Farmer's Market		

²⁹ This is not an exhaustive list of potential partners. Partners included in this list are just those with acronyms.

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Action may require a code change to implement



Indicates a near term action that may require substantial time to implement and thus should start right away.



Early win—an action that can be implemented early and quickly.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC1.1	Low carbon schools	Support local schools in integrating climate and sustainability education into curriculum and adopting low carbon solutions in their building operations. This may include working with the schools on energy efficiency and electrification, waste reduction and recycling, and sustainable purchasing, and behavior change (such as encouraging carpools to school).	0	\$\$	SP, CM, CPD	King County, MISD, KCLS, CC, EnviroStars, MIBGC	• City currently coordinates with MISD on a number of long- term planning needs; action will build upon this work.
CC1.2	Climate advocacy and partnerships	Advocate for legislation that supports local climate mitigation and adaptation efforts. Continue to partner with neighboring cities and other regional groups to advance regional initiatives to reduce greenhouse gas emissions and increase adaptive capacity.	0	\$\$	SP, CM	K4C, CC, EKCCC	 Annual legislative agenda process is well established.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
		Develop a climate outreach and education campaign or program to support ongoing community engagement in climate actions. Initiatives may include: • Climate challenges, competitions,					★ Early win—action will
		and climate pledges aimed at inspiring friendly competition among residents and businesses.Educational campaigns focused					build upon and expand existing work and outreach, including the ongoing MI Climate
CC1.3	Climate outreach/ education	on addressing common misinformation related to home energy use and other everyday activities (e.g., the benefits of using cold v. hot water for laundry).	0	\$\$\$	SP	Sust-MI, MI- CAN, MISD, EnviroStars, CC, ECP,	 Challenge. Spotlight stories of Mercer Island residents successfully implementing sustainability efforts
		 Resource sharing campaigns, such as "renewable energy" or "energy efficiency" home tours in which neighbors learn from each other on how to implement renewable energy or energy 				MIBGC	 (i.e., residents who have purchased EVs, installed heat pumps, and/or enrolled in PSE's Green Power Program. Promote PSE Green
		efficient upgrades in their homes.					Power program at pop- up events.
		 Educational campaigns aimed at helping residents understand the relative impact of various sources of GHG emissions and the potential benefits of existing and proposed policies. 					

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
	CTR	Encourage Mercer Island employers to offer work from home and					• The City does not currently participate in a formal CTR program, although the City utilizes flexible work schedules to reduce employee travel.
CC2.1	participation & incentives	flexible work schedules for employees.	NT	\$\$	SP, CPD	KCM, ST	• State regulations only require businesses with over 100 full-time employees in one location to participate, meaning only a few large employers in MI may qualify.
							 Remote work surged during the pandemic and the City now offers many options for alternative or flex schedules.
CC2.2	Alternative commuting incentives	Reduce the drive alone rate for City employees through incentives and by improving commute options by site location. Preserve flexible scheduling and remote work options for staff.	0	\$\$	SP, HR	KCM, ST	 Additional gains for nearby City buildings may come with the opening of light rail and for more distant buildings if last- mile connections established.
							• Continue to offer hybrid options for public meetings to reduce car travel.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.3	City green building policy	Develop green building guidelines to inform future municipal building designs.	NT	\$\$\$	SP, CPD, Finance, CM	RCC, K4C	• If this type of policy work is pursued, the City should adopt existing guidelines that have proved effective.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
							• EV pilots have been successful and are ready to scale up as technology and equipment becomes available.
							 Additional charging equipment and capacity upgrades (including backup power supply) will be needed to support more City EV's.
CC2.4	Municipal fleet electrification	Electrify the municipal vehicle fleet.	0	\$\$\$\$\$	PW, SP	PSCAA, Dept of Commerce	• Staff should continue testing effectiveness of EV's and participate in pilot studies before decisions are made.
							• Also requires Long- Term Facility Plan to be completed in addition to citywide EV Plan.
							 City will ensure that transition will be deliberately timed with technological advancements to ensure that EV transition does not impede the City's ability to serve residents, particularly during emergencies.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
							 Well underway; most parking lots and streetlight efficiency projects have been completed.
CC2.5	Municipal energy retrofits	Complete energy efficiency retrofits on existing municipal equipment and buildings.	NT	\$\$\$\$\$	Facilities, SP	PSE	 Further retrofits (e.g., remaining LED lighting, HVAC upgrades) at most City facilities will require significant additional investment to meet current energy code.
							• City will need to include this assessment of additional retrofits as part of the Long-Range Facilities Plan.
							 Remaining retrofits could potentially be funded through rebates/ grants.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC2.6	Environmentally Preferable Purchasing Policy	Develop and implement a municipal Environmentally Preferable Purchasing Policy that prioritizes products with the lowest environmental impact. The policy will guide purchasing decisions within each department, including vehicle and fuel purchases, and construction materials.	LT	\$\$	Finance, SP, CM	СС	 Must be factored into City operational budgets before implementing. West Coast Climate & Materials Mgmt. Forum: Climate Friendly Purchasing Toolkit could serve as a starting point and a good resource to support implementation. Consider integrating with a "Buy Local" initiative for City operations.
CC2.7	Municipal renewable energy storage	Expand solar installation and build renewable energy storage systems on City property.	MT/LT	\$\$\$\$	SP, Finance	Dept of Commerce, PSE, MISD	 Continue to apply for cost-sharing grants. Explore potential for additional school roofs to go solar.
CC3.1	GHG tracking & reporting	Continue to maintain a publicly available online dashboard that tracks and reports on CAP and GHG reduction progress on an annual basis. Report to City Council and the community on progress annually.	0	\$\$\$	SP	PSE, Recology, PSRC	 Early win—data exists on website and will be enhanced as an outcome of CAP. Will include GHG inventory and other Key Performance Indicators (KPI's).

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CC3.2	Climate- informed City decision-making	Apply a climate lens to City decision-making around major activities, capital projects, and initiatives.	NT	\$\$	SP, CM, Finance	N/A	 The strategies and actions adopted in the final CAP will serve as a guidepost for City actions. Invest in climate training for staff, boards and commissions, and City Council to continue to grow knowledge and understanding of the subject.
BE1.1	Heat pump rebates & education	Partner with PSE and other regional partners to expand regional electric heat pump pilot programs and campaigns to replace natural gas-powered furnaces and increase energy efficiency in existing commercial and residential properties.	0	\$\$\$\$	SP	ECP, K4C, Sust-MI, MI- CAN	 Explore opportunities to expand current work on pilot program using Energy Efficiency Grants with other Eastside Cities. Ensure equitable access through incentives and other financial support for low-income residents.
BE1.2	Solar energy storage & grid resiliency	Accelerate improvements to the energy grid and storage to facilitate the transition to renewable energy sources. Improvements may include subsidy and grant programs to reduce the cost of battery storage in existing buildings and electric vehicle charging/storage system installations.	NT	\$\$\$	SP	PSE	 Work would initially be mostly grant applications. May also involve lobbying activity.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE1.3	Contractor incentive & training program	Work with regional jurisdictions and agencies to expand upstream and midstream incentives for building electrification retrofits to local distributors and contractors. Create or promote a contractor training and/or certification program focused on efficient, electric heat pump installation.	0	\$\$	SP	RCC, K4C	 Primarily lobbying effort to increase incentives. Contractor training would be best attempted as regional effort. Promote PSE's pre- screened lists of Recommended Energy Professionals.
BE1.4	Building code updates	Implement new building codes as required by the Washington State Building Code Council to transition from natural gas to electricity in new construction.	NT	\$\$\$	CPD, SP	RCC	• WA Building Code Council requires all- electric (i.e., heat pump) space and water heating by July 2023 for new commercial & multi-family buildings, as well as new single- family homes.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
							• Best attempted as a regional or statewide effort. City will need to seek grant funding for the program.
BE1.5	Furnace and water heater replacement "burn-out" program	Research the development of a "burn-out" program to incentivize the replacement of fossil fuel furnaces or water heaters with available high efficiency electric alternatives. Consider future policies to require high efficiency electric replacements at time of upgrade.	NT	\$\$	SP, CPD	RCC, K4C	 Policy development could impact staffing needs in CPD, particularly related to electrical inspections. City will need to carefully evaluate policy implementation and costs before pursuing.
							• Ensure equitable access through incentives and other financial support for low-income residents.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
							• Evaluate update to City land use code allowing more than 20% roof coverage for non- residential buildings outside Town Center.
	Solar papel	Partner with PSE and other regional					• Continue to apply for Department of Commerce solar grants.
BE1.6	Solar panel expansion	partners to promote state and federal renewable energy incentives to fund onsite residential and commercial solar power projects.	MT	\$\$	SP	PSE, K4C	• Explore community scale solar projects by identifying potential sites and funding opportunities.
							 Explore subsidies to fund solar panels.
							• Ensure equitable access through incentives and other financial support for low-income residents.
		Host education programs and conduct outreach events to encourage businesses and residents to enroll in the PSE Green Power					★ Early win—continue work that has already led to high participation.
BE1.7	Green Power Program	Program. Partner with other neighboring communities served by the utility to advocate directly with PSE to expand renewable energy production that is local to Mercer Island.	NT	\$\$	SP	PSE, CC, EKCCC	• Program participation is also included as part of the MI Climate Challenge.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE1.8	Electric panel upgrades	Promote electric panel upgrades upon sale and/or rental turnover for residential and commercial properties to facilitate an easier transition to clean electricity	MT	\$\$	CPD, SP	RCC	• An educational campaign would be fairly straightforward; but if mandated, this would be a major undertaking with significant staff impacts.
	-	buildings and vehicles.					 Best suited as a regional or Statewide partnership.
BE2.1	Energy efficiency incentives and programs	Partner with PSE and other local jurisdictions and organizations to provide and promote energy efficiency incentives and rebate programs for residents and businesses. Partner to offer free home energy audits and upgrade programs for income-eligible residents.	NT	\$\$\$\$\$	SP	PSE	• Contingent on State grant funding; encourage PSE to restart Home Energy Assessments.
BE2.2	Green building campaigns	Develop a program to promote green building for residential and commercial properties, including educational outreach.	MT	\$\$	SP, CPD	RCC, K4C, Master Builders, CC, EKCCC	• Focus on campaigns and education encouraging residential and commercial property owners to consider alternatives when they rebuild or remodel.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
BE2.3	Washington Clean Buildings Act promotion	Build awareness of the Washington Clean Buildings Act that requires all new and existing commercial buildings over 50,000 s.f. to reduce their Energy Use Intensity 15% compared to the 2009-2018 average. Connect commercial building owners with state resources to learn more about the requirements of the Act.	NT	\$\$	SP, CPD	PSE, CC	 SP and CPD may be able to underscore the outreach work that Department of Commerce and PSE have already done. March 2022 expansion of Clean Buildings Act means City facilities (all of which are <50,000 sq ft) will need to begin reporting by June 2027.
BE2.4	Point-of-sale green building requirements	Consider local or regional policies related to point-of-sale green building disclosures. Policy considerations may include disclosure of energy use, energy retrofits, or other considerations at point of sale.	MT	\$\$\$	SP, CPD	TBD	• Ensure equitable access through incentives and other financial support for low-income residents.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR1.1	EV Charging Infrastructure Plan	Develop and implement an EV Charging Infrastructure Plan, in collaboration with PSE, that guides expansion of EV charging capacity throughout the city. The plan will include analysis and recommendations on the facilities and infrastructure required for the City and the Mercer Island School District to meet 2030 and 2050 fleet electrification goals. The plan will also include a readiness and capacity study to evaluate increasing EV charging at commercial and residential properties citywide. The Plan will identify an implementation strategy including partnerships, funding, and future policy recommendations.	NT	\$\$\$\$	SP	K4C, MISD, PSE	 Consider adding chargers to ROW parking or streetlights. May occur as a joint K4C initiative. Explore subsidies to fund EV chargers. Work with local businesses to install fast chargers at commercial sites, particularly on the South End of the island. Prioritize installation of fast chargers as funding becomes available.
TR1.2	Electric school buses	Engage the Mercer Island School District on the development of the EV Charging Infrastructure Plan to ensure site readiness for bus and fleet electrification.	NT	\$\$	SP	MISD, PSCAA, EPA	 Significant cost that would need grant support; new federal grants coming 2023 (EPA). MISD fast chargers would offer alternatives for City EV's.
TR1.3	State EV resource advocacy	Advocate for State resources to fund EV infrastructure planning.	NT	\$\$	SP, CM	K4C	 Primarily a lobbying effort and part of K4C platform.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR1.4	EV charging incentives & rebates	Explore and develop incentives in partnership with the State and other partners to expand EV charging capacity at commercial and residential properties.	NT	\$\$\$	SP	K4C	• Primarily a lobbying effort.
TR1.5	EV education & outreach	Provide education and outreach programs and materials to educate residents on the benefits of EVs, available EV incentives and rebates to purchase vehicles, EV charger locations, and other information to facilitate EV adoption.	0	\$\$	SP	Sust-MI	• Action builds on outreach underway, but City website needs a dedicated page for this information.
TR1.6	Electric lawn & construction equipment	Encourage the use of electric gardening equipment through educational campaigns, rebates, and incentives. Implement a ban on gas-powered leaf blowers.	MT	\$\$\$	SP	PSCAA	• Gather best practices from other cities
TR2.1	Pedestrian and Bicycle Plan update	Update the Pedestrian and Bicycle Plan, as identified in the Transportation Improvement Plan for completion in the 2026-2027 biennium. Updates to the Plan will incorporate the results of the ADA Transition Plan, evaluate the use of urban street design guidelines such as NACTO, and identify/evaluate projects to provide a preliminary scope of work, and timeline for future improvements.	MT	\$\$\$\$	PW, SP	MISD, NIM, ST, WSDOT, KCM	 Scheduled for 2026- 2027 Biennium in the current Transportation Improvement Plan (TIP); could potentially be moved up with sufficient funding. Prioritize projects that create safer bicycle and pedestrian infrastructure.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR2.2	Last-mile light rail connection	Support programs that provide multi-modal last-mile connections to the light rail station, such as through walking, biking, transit, and electric vehicle. Programs could include reintroduction of bike/ scooter share programs.	NT	\$\$\$\$	SP, PW	Bikeshare companies, KCM, ST	 Coordinate potential bike/ped projects with TIP, and with recent parking study. Continue to explore bike/scooter-share pilots. Explore options to implement additional bike storage facilities at Park & Ride stations, such as lockers or a bike room.
TR2.3	Town Center Parking Study implementation	Encourage the use of alternative transportation by expanding time limited parking in Town Center and implementing other recommendations identified in the Town Center Parking Study.	NT	\$\$	PD, PW, CPD, SP	СС	• Builds on recent parking study; final recommendations are pending.
TR3.1	Air travel alternatives	Provide education materials around alternatives to air travel for conferences and business travel; educate residents on the carbon footprint of air travel and benefits of regional tourism.	LT	\$\$	SP	K4C	• High GHG reduction action but requires regional, State, and Federal collaboration to determine approach.
TR3.2	State and federal aviation industry advocacy	Advocate for state and federal legislation aimed at decarbonizing the aviation sector.	MT	\$	SP, CM	Port of Seattle, EKCCC, K4C	• Primarily lobbying effort.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
TR3.3	Regional aviation coordination	Support regional and industrial efforts to reduce regional aviation emissions by promoting the use of sustainable aviation fuel and adoption of aviation fuel efficiency measures.	NT	\$	SP, CM	K4C, Port of Seattle	 Primarily requires regional collaboration.
CD1.1	Recycling space/access requirements	Evaluate new construction requirements and consider policy requirements to ensure adequate space for recycling and compost collection.	MT	\$\$	SP, CPD	RCC	• Gather best practices from other cities.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
	Mandatory composting/ recycling	Phase in new state mandates for residential and commercial recycling and composting, and enforce waste sorting by an identified year, especially for multi- family buildings and commercial properties where contamination is high.	NT	\$\$	SP, CPD	RCC, Recology, CC	 Ensure that all City facilities also compost food waste.
CD1.2							 Facilitate Recology outreach to multi- family and commercial properties.
							 Partner with Chamber of Commerce to highlight businesses that already compost.
							 Reinforce King County's existing Construction & Demolition debris recycling rules through outreach.
							 Older multi-family facilities have been reluctant to add composting due to loading dock space.
							 Encourage waste haulers to optimize their routes to the nearest transfer stations.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CD2.1	Community gardens	Encourage the development of community gardens at churches, community facilities, multi-family properties, and in other areas.	NT	\$\$	PR, SP	Pea Patch Users, MISD, MIBGC, MIFM	 Early Win—Action builds on enhanced promotion, recruitment, and expansion underway for existing plots at Community Center. Partner with regional schools and community organizations to promote gardening to students and other community members.
CD2.2	Local retail options	Collaborate with the Chamber of Commerce to promote local retail shopping, including programs, marketing, and other seasonal campaigns. Explore potential collaboration with Mercer Island Thrift Shop.	O/NT	\$\$	CPD	СС	• Eligible for renewed Economic Development grant from Port of Seattle.
CD2.3	Repair/reuse programs	Support community reuse programs (e.g., tool libraries, Buy Nothing groups, repair cafés) to promote a circular economy.	MT	\$	SP	King County, Sust-MI, KCLS	

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
CD2.4	Low carbon building materials	Partner with contractors and architects to promote carbon- sequestering and low carbon building materials in new construction and renovations. Support State requirements for disclosing and/or limiting embodied carbon emissions of buildings and policies focused on reducing the use of specific materials	0	\$\$	SP, CPD	RCC, K4C	 Best as a regional/state initiative. Evaluate building code amendment to allow mass timber construction.
NS1.1	Tree planting incentive program	Develop programs to support and encourage residents and large property owners to plant the right tree in the right place and sustain existing trees with reduced cost or free trees. Offer tree-awareness campaigns and classes to educate the community and develop tree planting demonstration programs.	Ο	\$\$\$	CPD, PR, SP	N/A	 Tree giveaways must also consider suitable care and watering over the first 5 years. May need to add incentive. Most of the available planting space is on private land. Consider the operational and emissions impact of clearing fallen leaves when considering the "right" types of trees planted on the Island (e.g., deciduous versus evergreen trees). Prioritize planting new trees in areas that limit obstruction to views, sunlight, and solar panels.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS1.2	City-led tree planting	Enhance City-led street tree planting in the right-of-way and assess long-term stewardship needs; promote street frontage plantings by businesses.	NT	\$\$	PW, CPD	N/A	 City has strong tree retention regulations in place. Focus on encouraging planting (and care) of street trees. Expand the volunteer tree planting program on private property to support action implementation.
NS2.1	Water-efficient landscape standards	Utilize educational campaigns to encourage drought-resistant and/ or native landscaping and design. Work with landscape companies to educate and incentivize drip irrigation and smart management technology. Develop demonstration programs.	MT	\$\$	SP, CPD	SPU	 Action builds on Green Building education program. Continue 2x/year rain barrel discounted sales. City could resume historic program providing free audits and subsidized design assistance but would need new resources to support. Evaluate requirements for drip irrigation for new tree plantings.
NS2.2	Water conservation incentives	Partner with regional water conservation groups, such as the Saving Water Partnership, to develop and advertise incentives and installation programs to retrofit inefficient water fixtures.	0	\$\$\$	SP, PW	Saving Water Partnership	 Continue to promote conservation campaigns. Renew focus at regional level.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS2.3	Green stormwater	water education and demonstration	LT	\$\$\$\$	SP, PW	KC, WADOE	• All new development must comply with State stormwater regulations and include low impact development (LID) where feasible.
	infrastructure						• Ensure that future storm intensity is considered in design phase (see UW Climate Impacts Group's tool).
NS2.4	NS2.4 Greywater reuse education	Develop campaigns to educate residents and businesses on the financial and environmental benefits of reusing rainwater and greywater. Provide technical assistance, advice, and assistance to residents.	MT	\$\$	PW, SP	SPU, KC	• Current Water System Plan contemplates future exploration of greywater reuse opportunities.
							 City should borrow from regional educational materials.
NS2.5	Monitoring and maintenance	Complete an assessment of all City open spaces to establish a baseline for monitoring and maintenance phase.	NT	¢ ¢	PW, PR	N/A	• This work has already been completed for some, but not all, of the City's open space areas.
N52.5	baseline for all City open spaces		NT	\$\$		IN/A	• Determine if existing protocol is sufficient for future assessment needs

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS2.6	Open space restoration	Using the baseline data from NS2.5, expand acreage of forested open space undergoing intensive restoration in order to reach a more stable monitoring and maintenance phase of management. Expand contiguous areas of open space in the monitoring and maintenance phase to improve habitat connectivity and limit boundary effects.	Ο	\$	PW, PR	N/A	 City has robust open space restoration program Levy-funded work in Pioneer Park begins in 2023. Focus on moving acreage to long-term maintenance phase
NS2.7	Private forest restoration	Engage private landowners (businesses, schools, churches, and residential properties) to participate in forest restoration programs. Develop programs and incentives to increase canopy cover, improve diversity of native species and forest structure, reduce invasive species, and add resilient, climate-adapted landscaping.	MT	\$\$	PW, SP	KCD	 Determine how to establish connections with agency incentive programs, such as King County Public Benefit Tax Incentive. Assess in-house expertise for creating educational materials.
NS2.8	10-Year Citywide Tree Canopy Assessment	Continue to perform an assessment of the citywide tree canopy every ten years. Use data and findings to modify strategies and actions related to increasing forest canopy and improving forest health.	MT	\$	PW	KCD	• Update to the Canopy Assessment is planned for 2028 through King Conservation District's Urban Forest Health Program.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
NS2.9	Carbon	Assess the carbon sequestration (the rate of carbon stored in plants, soil, and habitats) of existing public land in Mercer Island and explore	LT	\$\$	PW	K4C	• Engage consultants to perform baseline assessment and provide recommendations.
N32.3	sequestration	ways to increase sequestration levels through changes to land management practices.	LI	ΨΨ			 Balance current forest management goals with carbon sequestration actions.
CR1.1	Personal preparedness for wildfires	Partner with Puget Sound Clean Air Agency and other regional organizations to conduct outreach and education to prepare residents for wildfire emergencies. Opportunities include HVAC filter upgrades, DIY filter fans, use of masks, pet care, and other planning and safety tips.	MT	\$\$	SP, MIPD- Emerg	PSCAA	• Emphasize simple and low-cost actions.
CR1.2	Adaptation incentives	Support and advocate for State and Federal rebate and incentive programs to encourage the installation of low-emissions space- cooling devices on residential and commercial properties (e.g., cool roofs, green roofs, cool pavement, ceiling fans, air filters).	NT	\$\$\$\$\$	SP, CPD	Dept Commerce	 Highly contingent on funding.

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Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
				\$\$\$\$			 Mercer Island is not in a designated flood zone, but does see some localized urban flooding.
	Urban flood	Assess areas most at risk for local flooding and ensure emergency systems are prepared to address flooding emergencies.	NT			KCOEM, SPU,	• There is less stormwater flooding now than 20 years ago due to better conveyance systems, but rainstorms are expected to intensify.
CR1.3	management				PW, SP, CPD	WSDOE, K4C	 City already has significant restrictions around wetlands and watercourses, which include large buffers that restrict development.
							 Action could be included in next (2023 or 2024) Stormwater Plan Update.
CR2.1	Hazard Mitigation Plan update	Partner with King County on the next update to the Countywide Hazard Mitigation Plan (timeline estimated in 2025) to ensure climate impacts are included in plan update.	NT	\$\$\$	SP, MIPD- Emerg, CM, YFS, FD	КСОЕМ	 Engage early in next Hazard Mitigation Plan (2025) update. State grants available.

Action ID	Action Short Name	Action Description	Timeline	Cost Range	Lead Department	Outside Partners	Implementation Considerations
	Emergency management planning and response	Review and update City's emergency management plans to ensure readiness to respond to climate emergencies, such as providing community cooling centers and air shelters in case of extreme heat and wildfires. Ensure communication materials are developed and ready for quick deployment during climate emergencies.	0	\$\$\$	MIPD- Emerg, FD		• Work already in place or plans underway to partner with other entities.
CR2.2						KCOEM, PSCAA	 If additional community emergency shelters are housed in City facilities, significant HVAC upgrades would increase costs dramatically.
CR2.3	Electric grid	Encourage the State to implement requirements to improve the resiliency of the electric network,	NT	\$\$\$\$\$	CM	PSE, KC,	 Would have to be a regional or statewide solution; low cost if based mostly on advocacy/lobbying.
	resiliency	including the undergrounding of power lines.				K4C	 Very high cost to underground powerlines, but other resiliency measures might be cheaper.

Appendix B. Multi-Criteria Analysis

This memorandum describes the evaluation steps, criteria, and results for a **multi-criteria analysis (MCA)** conducted on **54 Climate Action Plan (CAP) actions**. The MCA assigns qualitative numerical scores to each evaluated action and criterion to arrive at an overall priority score for each action. Note that five natural system actions (**NS2.5**: *Monitoring and maintenance baseline for all City open spaces*; **NS2.6**: *Open space restoration*; **NS2.7**: *Private forest restoration*; **NS2.8**: *10-Year Citywide Tree Canopy Assessment*; **and NS2.9**: *Carbon sequestration*) were added after the MCA was completed. These actions were not included in the analysis. Other actions may have been edited or removed since completion of the MCA and adoption of the final plan.

Process

The MCA includes the following steps:

- 1. Identified and defined each criterion and assigned weights for scoring.
- 2. Developed qualitative score matrix to allow for a consistent action scoring process.
- 3. Assigned score for each action based on the criteria definitions, resources and analyses from peer city case studies, knowledge of City context, community feedback, and experience from Cascadia Consulting Group's work with other clients. Each criterion is evaluated on a 1 to 5 scale; the scoring is explained in more detail below.

CRITERIA

The CAP project team used the following criteria and weights to evaluate 54 actions.³⁰ Each criterion was evaluated on a 1 to 5 scale.

	Criterion	Weight	Definition	Scoring
\$	Cost	20%	Estimated overall cost to the City to implement action	1 = Lower cost ³¹ 5 = Higher cost
	Impact	40%	Estimated GHG emission reduction or climate resilience potential	1 = Lower impact 5 = Higher impact
	Implementation	20%	Estimated feasibility/practicality of implementation based on regulatory and technological constraints, amount of time required to implement, and efficiency in integrating into existing City planning efforts	 1 = Very difficult to implement (technology limitations, long time horizon to implement, etc.) 5 = Very easy to implement (few barriers/ challenges to implementation)
6	Community Support	20%	Community support for action (based on the % of respondents who indicated somewhat or strong support for the action in the random sample community survey and additional feedback provided to the City through other comment channels)	Baseline scoring: ³² 1 = <50% support on survey 2 = 50%-65% support on survey 3 = 65%-80% support on survey 4 = 80-95% support on survey 5 = 95%+ support on survey

³⁰ There is a total of 59 actions included in the CAP, however the MCA assessment was conducted for 54, as 5 actions in the Natural Systems sector were included (NS2.5 thru NS2.9) after the MCA assessment was completed.

³¹ Unlike the scoring for the other criteria, a low score for cost indicates a greater benefit, whereas a high score indicates weaker benefits. The methodology used to calculate priority score accounted for this inverse relationship.

³² One additional point was added if the action was identified as a community priority in other forms of engagement.

RESULTS

The following table presents the results of the MCA, organized by focus area and action ID. Blue shading indicates the top highest-scoring actions that resulted in a priority score of 3.5 or above.

The actions that received the **highest priority scores** were heat pump rebates & education (BE1.1), water-efficient landscape standards (NS2.1), contractor heat pump incentive & training program (BE1.3), and personal preparedness for wildfires (CR1.1). The actions that received the **lowest priority scores** were municipal renewable energy storage (CC2.7), municipal energy retrofits (CC2.5), and municipal fleet electrification (CC2.4). Since these are all municipal actions, they are smaller in scale/impact compared to communitywide actions.

Results from the MCA informed the CAP implementation plan, including the estimated cost range for each action as well as the timeframe for which it will be implemented.

Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Cross-Cutting & Municipal	CC1.1	Low carbon schools	2	1	3.75	5	2.95
Cross-Cutting & Municipal	CC1.2	Climate advocacy and partnerships	2	2	4.75	2	2.95
Cross-Cutting & Municipal	CC1.3	Climate outreach/education	3	2	4.75	4	3.15
Cross-Cutting & Municipal	CC2.1	CTR participation & incentives	2	2	4.5	2	2.9
Cross-Cutting & Municipal	CC2.2	Alternative commuting incentives	2	1	4	3	2.6
Cross-Cutting & Municipal	CC2.3	City green building guidelines	3	1	4.5	4	2.7
Cross-Cutting & Municipal	CC2.4	Municipal fleet electrification	5	2	3.5	4	2.5
Cross-Cutting & Municipal	CC2.5	Municipal energy retrofits	5	1	3	5	2.2
Cross-Cutting & Municipal	CC2.6	Environmentally Preferable Purchasing Policy	2	1	4.5	3	2.7
Cross-Cutting & Municipal	CC2.7	Municipal renewable energy storage	4	1	2.5	3	1.9
Cross-Cutting & Municipal	CC3.1	GHG tracking & reporting	3	1	5	4	2.8
Cross-Cutting & Municipal	CC3.2	Climate-informed City decision-making	2	2	4.75	3	3.15
Buildings & Energy	BE1.1	Heat pump rebates & education	4	5	4.25	5	4.25

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Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Buildings & Energy	BE1.2	Solar energy storage & grid resiliency	3	3	2.75	4	3.15
Buildings & Energy	BE1.3	Contractor heat pump incentive & training program	2	4	2.5	4	3.7
Buildings & Energy	BE1.4	Building code updates	3	3	4.5	2	3.1
Buildings & Energy	BE1.5	Furnace and water heater replacement "burn-out" program	2	5	1.75	2	3.55
Buildings & Energy	BE1.6	Solar panel expansion	2	3	3.5	4	3.5
Buildings & Energy	BE1.7	Green Power Program	2	3	4.25	4	3.65
Buildings & Energy	BE1.8	Electric panel upgrades	2	2	3.25	2	2.65
Buildings & Energy	BE2.1	Energy efficiency incentives and programs	5	4	4	5	3.6
Buildings & Energy	BE2.2	Green building campaigns	2	2	4.5	4	3.3
Buildings & Energy	BE2.3	Washington Clean Buildings Act promotion	2	3	4	2	3.2
Buildings & Energy	BE2.4	Point-of-sale green building requirements	3	3	2.5	2	2.7
Transportation	TR1.1	EV Charging Infrastructure Plan	5	4	2.75	4	3.15
Transportation	TR1.2	Electric school buses	2	2	2.75	3	2.75
Transportation	TR1.3	State EV resource advocacy	2	2	4.5	3	3.1
Transportation	TR1.4	EV charging incentives & rebates	3	4	4.25	3	3.65
Transportation	TR1.5	EV education & outreach	2	3	4.25	4	3.65
Transportation	TR1.6	Electric lawn & construction equipment	3	2	4	4	3
Transportation	TR2.1	Pedestrian and Bicycle Plan update	5	3	4.25	4	3.05
Transportation	TR2.2	Last-mile light rail connection	5	4	3.5	4	3.3
Transportation	TR2.3	Town Center Parking Study implementation	2	2	4.75	2	2.95
Transportation	TR3.1	Air travel alternatives	2	2	4	2	2.8

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Focus Area	Action ID	Action Short Name	Cost	Impact	Implementation	Community Support	Priority Score
Transportation	TR3.2	State and federal aviation industry advocacy	1	3	1.75	3	3.15
Transportation	TR3.3	Regional aviation coordination	1	4	1.75	3	3.55
Consumption & Disposal	CD1.1	Recycling space/access requirements	2	1	3.75	4	2.75
Consumption & Disposal	CD1.2	Mandatory composting/recycling	2	2	2.5	4	2.9
Consumption & Disposal	CD2.1	Community gardens	2	1	3.75	4	2.75
Consumption & Disposal	CD2.2	Local retail options	3	1	4.5	4	2.9
Consumption & Disposal	CD2.3	Repair/reuse programs	1	1	4.5	4	3.1
Consumption & Disposal	CD2.4	Low carbon building materials	2	1	3	4	2.6
Natural Systems	NS1.1	Tree planting incentive program	3	2	4.75	5	3.35
Natural Systems	NS1.2	City-led tree planting	2	2	4.5	3	3.1
Natural Systems	NS2.1	Water-efficient landscape standards	2	3	5	5	4
Natural Systems	NS2.2	Water conservation incentives	3	2	4.5	4	3.1
Natural Systems	NS2.3	Green stormwater infrastructure	5	2	4.25	4	2.65
Natural Systems	NS2.4	Greywater reuse education	2	2	4	5	3.4
Community Resilience	CR1.1	Personal preparedness for wildfires	2	3	4.5	4	3.7
Community Resilience	CR1.2	Adaptation incentives	5	4	3.25	4	3.25
Community Resilience	CR1.3	Urban flood management	4	3	5	3	3.2
Community Resilience	CR2.1	Hazard Mitigation Plan update	3	2	5	3	2.95
Community Resilience	CR2.2	Emergency management planning and response	3	4	3.75	2	3.35
Community Resilience	CR2.3	Electric grid resiliency	5	4	2.25	3	2.85

Appendix C. Crosswalk Table Summarizing MCA score and Implementation Factors

The table below sorts actions by recommended timeline for implementation and also includes the MCA score. For a detailed description of the implementation plan for each action see <u>"Appendix A. Implementation Matrix"</u>.

KEYS

Timeline

Ongoing (O)	Action is already underway and/or is part of existing City programs.
Near term (NT)	City will begin implementing action within the next 1-3 years.
Mid-term (MT)	City will begin implementing action within the next 4-6 years.
Long term (LT)	City will begin implementing action within the next 7-10 years, or more.

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Action may require a code change to implement



Indicates a near term action that may require substantial time to implement and thus should start right away.

MATRIX

Action ID	Action Short Name	Timeline	MCA Score
CC1.1	Low carbon schools	0	2.95
CC1.2	Climate advocacy and partnerships	0	2.95
CC1.3	Climate outreach/ education	0	3.15
CC2.2	Alternative commuting incentives	0	2.6
CC2.4	Municipal fleet electrification	0	2.5
CC3.1	GHG tracking & reporting	0	2.8
BE1.1	Heat pump rebates & education	0	4.25
BE1.3	Contractor incentive & training program	0	3.7
TR1.5	EV education & outreach	0	3.65

Action ID	Action Short Name	Timeline	MCA Score
CD2.4	Low carbon building materials 초	0	2.6
NS1.1	Tree planting incentive program	0	3.35
NS2.2	Water conservation incentives	0	3.1
NS2.6	Open space restoration	0	N/A
CR2.2	Emergency management planning and response	0	3.35
CD2.2	Local retail options	O/NT	2.9
CC2.1	CTR participation & incentives	NT	2.9
CC2.3	City green building policy	NT	2.7
CC2.5	Municipal energy retrofits	NT 🖍	2.2
CC3.2	Climate-informed City decision-making	NT	3.15
BE1.4	Building code updates 초	NT	3.1
BE1.2	Solar energy storage & grid resiliency	NT 💦	3.15
BE1.5	Furnace and water heater replacement "burn-out" program 💰	NT	3.55
BE1.7	Green Power Program	NT	3.65
BE2.1	Energy efficiency incentives and programs	NT	3.6
TR1.1	EV Charging Infrastructure Plan	NT	3.15
TR1.2	Electric school buses	NT	2.75
TR1.3	State EV resource advocacy	NT	3.1
TR1.4	EV charging incentives & rebates	NT	3.65
TR2.2	Last-mile light rail connection	NT	3.3
TR2.3	Town Center Parking Study implementation	NT	2.95
TR3.3	Regional aviation coordination	NT 💦	3.55
CD1.2	Mandatory composting/recycling 초	NT	2.9
CD2.1	Community gardens	NT	2.75
NS1.2	City-led tree planting	NT	3.1
NS2.5	Monitoring and maintenance baseline for all City open spaces	NT	N/A
CR1.2	Adaptation incentives	NT	3.25
CR1.3	Urban flood management	NT 🖍	3.2
CR2.1	Hazard Mitigation Plan update	NT	2.95
CR2.3	Electric grid resiliency	NT	2.85
BE1.6	Solar panel expansion 📩	MT	3.5
BE1.8	Electric panel upgrades 📥	MT	2.65

Action ID	Action Short Name	Timeline	MCA Score
BE2.2	Green building campaigns 초	MT	3.3
BE2.4	Point-of-sale green building requirements 초	MT	2.7
TR2.1	Pedestrian and Bicycle Plan update	MT	3.05
TR1.6	Electric lawn & construction equipment	MT	3
TR3.2	State and federal aviation industry advocacy	MT	3.15
CD1.1	Recycling space/access requirements 📤	MT	2.75
CD2.3	Repair/reuse programs	MT	3.1
NS2.1	Water-efficient landscape standards 초	MT	4
NS2.4	Greywater reuse education	MT	3.4
NS2.7	Private forest restoration	MT	N/A
NS2.8	10-Year Citywide Tree Canopy Assessment	MT	N/A
CR1.1	Personal preparedness for wildfires	MT	3.7
CC2.7	Municipal renewable energy storage	MT/LT	1.9
CC2.6	Environmentally Preferable Purchasing Policy	LT	2.7
BE2.3	Washington Clean Buildings Act promotion	LT 💦	3.2
TR3.1	Air travel alternatives	LT	2.8
NS2.3	Green stormwater infrastructure	LT	2.65
NS2.9	Carbon sequestration	LT	N/A

Appendix D. Survey Report

The section below outlines the full CAP community survey report published in November 2022. New CAP actions were added, and some action names and ID numbers shifted between the report's publication date and the CAP adoption date; final versions of the actions are found in the body of the CAP, starting on <u>page 26</u>.

CLIMATE ACTION PLAN (CAP) COMMUNITY SURVEY

Survey Summary

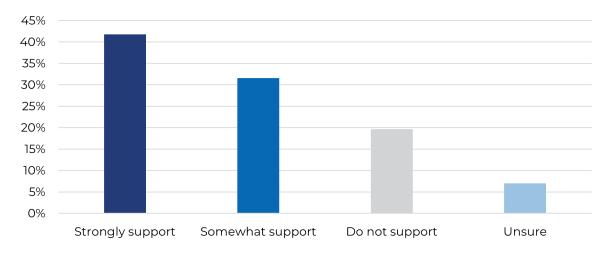
This report summarizes results from a survey administered to Mercer Island residents to gather feedback to inform the development of the city's Climate Action Plan (CAP). The survey focused on understanding **community priorities and concerns** related to climate change and climate action as well **as level of support for the proposed climate action strategies** in the CAP.

Findings are presented from two survey response groups, those that were included in a **random sample (RS)** survey group and those from the **general public (GP)**. Survey questions were the same for both groups. See <u>"Methodology"</u> below for more details on the difference between these two survey groups.

KEY FINDINGS

Across climate strategy categories, **the majority of survey respondents** (74% of random sample and 76% of general public respondents) **strongly or somewhat supported proposed strategies** (see *Figure 1*).

Figure 1. Average support level for all climate strategies across categories from the random sample survey. Both survey groups also expressed similar levels of support across all strategies. The ranking of all strategies from most to least supported for both groups is detailed in <u>"Appendix D2. Strategy rankings"</u>.



RANDOM SAMPLE (RS) SURVEY TRENDS

- By type of climate action: Over 50% of RS survey respondents **strongly supported "financial or other incentives"** as an important type of climate action. In contrast, only 15% indicated strong support for local advocacy (see <u>Figure 4</u>).
- By category: On average, RS respondents most supported climate strategies in the resource conservation and sustainable development category, with 58% of respondents on average indicating that they strongly support the proposed strategies. The next most supported category was Electric Vehicle (EV) strategies with 48% strong support, followed by infrastructure strategies with 41% strong support. On average, RS respondents least supported climate strategies in the "other" category, with 36% of respondents on average indicating that they strongly support the proposed strategies.
- By solution: The majority of random sample survey respondents (32%) rated **improved resiliency** to climate change impacts as the most important climate-related solution, followed by renewable energy sources.
- By strategy:
 - > High support:
 - When asked about level of support for specific climate strategies, "increasing recycling, compost, and reuse of goods and materials" received the highest level of support, with 94% of RS survey respondents indicating strong or some support.
 - Other strategies that received high levels of support include "promote water efficient landscaping and irrigation," "support/promote local retail," and "expand tree planting."

- > Low support:
 - The strategy "advocate for a state carbon tax" received the lowest level of support across strategies, with only 40% of RS survey respondents indicating strong or some support.
 - Other strategies that received lower levels of support include "promote air travel alternatives," "require all-electric new construction for single-family homes," and "allow higher density housing near light rail."

METHODOLOGY

The survey was mailed to a random sample of 2,500 households within the boundaries of the City of Mercer Island on September 25, 2022. The random sample of addresses was unique to this survey and not the same address list used in the Parks Recreation and Open Space (PROS) Plan surveys from early 2020–21. Reminder postcards were mailed to the 2,500 households on October 3, 2022.

An online version of the survey was also available and posted to the City's Let's Talk public engagement website: respondents had the option to reply via the mailed or online survey. Each respondent from the random sample survey group was given a unique ID number that they entered in order to submit an online survey or paper survey. Responses that matched these unique ID numbers were considered part of the random sample survey. All other responses were included in the general public survey. Only one survey response was allowed per household.

Information about the survey was provided on the City's website home page and on the *Let's Talk* Climate Action Plan webpage. It was also promoted via multiple social media postings, E-newsletters, and in the local newspaper. The survey was closed on 11/8/2022.

Overall, the RS survey had a 10% response rate with 264 responses (176 submitted via mail and 88 online). Receiving 264 responses allowed the City to achieve its desired 95% level of confidence with a +/-6% margin of error. The GP survey had 123 responses. In total, 387 survey responses were recorded. Findings for each survey group are presented separately below to compare responses between the two groups.

Although households were randomly chosen to receive the survey, respondents for the RS survey were not necessarily representative of all City residents in all demographic categories. The survey data was compared against known demographic data (e.g., age, household income, number of children in the household) to examine if differences existed between the different respondent subgroups. The survey summary on the following pages identifies variations in responses across questions if such variation existed and was significant between subgroups. See the summary of demographic information below in <u>""</u> and the full results in <u>"Appendix D1. Demographics"</u>.

DEMOGRAPHICS

The demographics of survey respondents were compared against the demographics of the entire Mercer Island population (see Table 1). Detailed information on the demographics of the survey respondents is included in *Appendix 1*.

Table 1. Demographic comparisons between RS survey respondents and Mercer Island's population where the difference is greater than 6%.

Demographic	% of RS Survey Respondents	% of M.I. Population	% Difference Between RS Respondents and M.I. Population
Age: 20–44	14%	31%	-17%
Age: 65 and older	46%	28%	19%
Race/Ethnicity: White or Caucasian	80%	72%	9%
Household Income: Less than \$50,000	6%	19%	-13%
Household Income: More than \$200,000	83%	41%	42%
Education: Some college/2-year degree	4%	16%	-12%
Education: Advanced degree	53%	38%	15%
Home Ownership: Rent	10%	33%	-24%
Home Ownership: Own	87%	67%	20%
Home Location: South of SE 68th	20%	14%	6%

Full Findings

PART 1: CLIMATE ACTION PRIORITIES

Part 1 of the survey asked three questions to gauge the community's priorities as they relate to climate action.

Climate-related threats that face Mercer Island

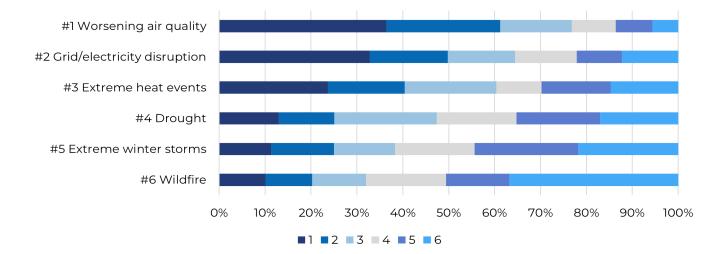
Respondents were asked to rank, in order of importance (1-6), the following climaterelated threats facing Mercer Island:

- Extreme heat events
- Worsening air quality
- Drought
- Wildfire
- Extreme winter storms
- Grid/electricity disruption

Results are shown graphically in *Figure 2* below.

Worsening air quality was ranked as the most important climate-related threat by 36% of RS respondents. This was followed by **grid/electricity disruption**, and **extreme heat events**. The remaining three categories were each ranked as the most important threat by less than 15% of respondents. GP respondents also considered worsening air quality to be the most important threat but ranked extreme heat events as more important than grid/electricity disruption.

Figure 2. Importance of climate threats in Mercer Island, ranked by respondents on a scale from 1–6, with 1 indicating higher importance, from the **random sample** survey.



Climate-related solutions

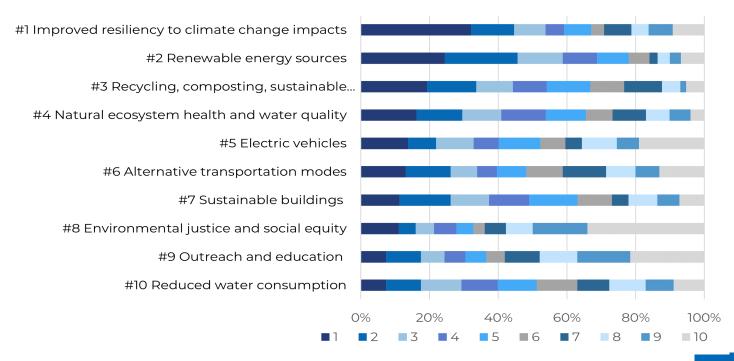
Respondents were asked to rank, in order of importance, the following climate-related solutions:

- Improved resiliency to climate change impacts (e.g., flooding, extreme heat, wildfire smoke)
- Electric vehicles, alternative transportation modes (e.g., bus, biking, walking)
- Sustainable buildings (e.g., more efficient heating/cooling)
- Renewable energy sources (e.g., solar)
- Recycling, composting, sustainable consumption, and zero waste (e.g., reuse, low-carbon materials)
- Reduced water consumption, natural ecosystem health, and surface and ground water quality
- Environmental justice and social equity (e.g., food insecurity, disproportionate exposure to pollutants)
- Outreach and education about sustainability issues.

Results are shown graphically in *Figure 3* below.

A third of RS respondents (32%) rated **improved resiliency to climate change impacts** as the most important climate-related solution, followed by **renewable energy sources** (25%), and **recycling, composting, sustainable consumption, and zero waste** (20%). GP respondents also ranked these categories as the most important but indicated that renewable energy sources were the most important climate solution.

Figure 3. Importance of climate solutions in Mercer Island, ranked by respondents on a scale from 1–10, with 1 indicating higher importance, from the **random sample** survey.



Types of climate action

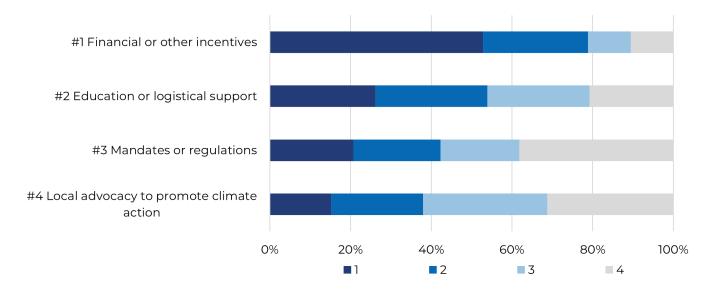
Respondents were asked to rank their level of support for the following four types of policy levers:

- Financial or other incentives (e.g., rebates to help cover the cost of home energy upgrades)
- Mandates or regulations (e.g., phasing out natural gas by requiring all-electric new buildings)
- Education or logistical support (e.g., outreach campaigns to homeowners to promote energy and water conservation)
- Local advocacy to promote climate action at the state and federal level (e.g., local campaigns to advance legislation aimed at reducing GHG emissions from the aviation sector).

Results are shown graphically in *Figure 4* below.

Financial or other incentives were given the highest level of support (53% of RS respondents indicated "strong support"). This was followed by **education and logistical support**, and **mandates or regulations**. **Local advocacy to promote climate action** was the least supported. GP results aligned with these findings for the most and least supported types of climate action, but GP respondents supported mandates or regulations more strongly than education and logistical support.

Figure 4. Level of support for climate action types in Mercer Island, ranked by respondents on a scale from 1–4, with 1 indicating higher support, from the **random sample** survey.



Respondents were then prompted, "If you do not support any of the types of climate action listed in Question 4, please tell us why." Feedback included the following responses and themes:

- Feelings that outreach and educational initiatives are not effective
- Concern that local climate action is a waste of taxpayers' money and that money should be spent elsewhere
- Skepticism that the CAP will produce any results
- Concern with mandating action (e.g., phasing out natural gas)
 - Mandates and regulations are difficult to support without showing specific results
- Belief that State climate action is sufficient and that local climate action should be deprioritized
- Desire for more information about the proposed actions

PART 2: FEEDBACK ON PROPOSED CLIMATE STRATEGIES

Part 2 of the survey asked participants to provide feedback on their level of support for draft CAP strategies in the following four categories:

- Infrastructure-related climate strategies
- Resource conservation/sustainable development strategies
- Strategies related to electric vehicle adoption
- Other strategies under consideration

Findings for each section are presented in both table and graph format below. To reduce the length of the survey, individual CAP actions were consolidated into higher level strategies. To see which CAP action(s) correspond to each survey strategy, see the "CAP Actions" column in the result tables below.

Infrastructure-related climate strategies

The survey asked respondents about their level of support for 13 different infrastructurerelated climate strategies. These strategies and the full infrastructure-related survey results are graphically represented in <u>Figure 5</u> and detailed in <u>Table 2</u> and <u>Table 3</u> below.

Figure 5. Level of support for infrastructure-related climate strategies from the *random sample* survey.

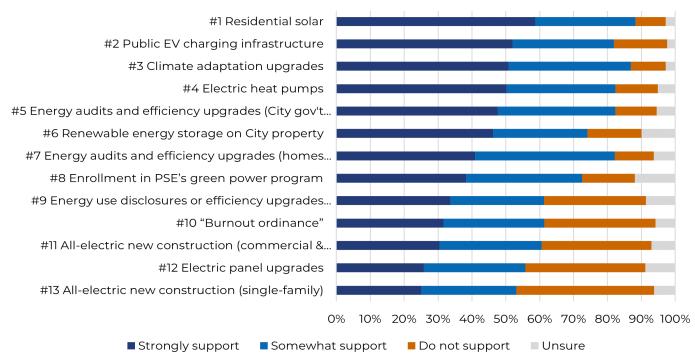


Table 2. Level of support for infrastructure-related climate strategies by **RS respondents** (ranked from most to least strongly supported)

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Encourage residential solar for appropriate sites	BE1.6; BE1.2	59%	29%	9%	0%
#2 Expand public EV charging infrastructure	TR1.5; TR1.7; TR1.8	52%	30%	16%	2%
#3 Promote climate adaptation upgrades (e.g., reflective or cool roofs, air filters, ceiling fans)	CR1.2	51%	36%	11%	1%
#4 Incentivize electric heat pumps for space heating and cooling	BE1.1	51%	32%	12%	2%

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#5 Conduct energy audits and efficiency upgrades for City government and school buildings	CC2.5	48%	34%	12%	4%
#6 Expand renewable energy storage on City property	CC2.7	46%	28%	16%	3%
#7 Incentivize energy audits and efficiency upgrades for homes and businesses	BE2.1; BE1.3	41%	41%	12%	8%
#8 Encourage increased enrollment in PSE's green power program	BE1.7	38%	35%	15%	6%
#9 Require commercial and multi- family building owners disclose energy use or implement efficiency upgrades prior to selling buildings	BE2.4; BE2.3	33%	28%	30%	5%
#10 Implement a "burnout ordinance" to transition to non-fossil energy (i.e., replace expired gas water heaters and oil/gas furnaces with electric equivalent)	BE1.5	32%	29%	33%	4%
#11 Require all-electric new construction for commercial and multi-family buildings	BE1.4	30%	31%	32%	6%
#12 Require electric panel upgrades that support building electrification when buildings are sold or rented to a new tenant	BE1.8	25%	30%	36%	5%
#13 Require all-electric new construction for single-family homes	BE1.4	25%	28%	41%	7%

Table 3. Level of support for infrastructure-related climate strategies by **GP respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Encourage residential solar for appropriate sites	BE1.6; BE1.2	60%	31%	9%	0%
#2 Promote climate adaptation upgrades (e.g., reflective or cool roofs, air filters, ceiling fans)	CR1.2	60%	25%	12%	2%
#3 Incentivize electric heat pumps for space heating and cooling	BE1.1	58%	30%	11%	1%

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#4 Expand public EV charging infrastructure	TR1.5; TR1.7; TR1.8	57%	26%	16%	2%
#5 Conduct energy audits and efficiency upgrades for City government and school buildings	CC2.5	56%	28%	12%	4%
#6 Incentivize energy audits and efficiency upgrades for homes and businesses	BE2.1; BE1.3	50%	33%	14%	3%
#7 Expand renewable energy storage on City property	CC2.7	45%	26%	21%	8%
#8 Encourage increased enrollment in PSE's green power program	BE1.7	44%	32%	18%	6%
#9 Require all-electric new construction for commercial and multi-family buildings	BE1.4	43%	28%	25%	5%
#10 Implement a "burnout ordinance" to transition to non-fossil energy (i.e., replace expired gas water heaters and oil/gas furnaces with electric equivalent)	BE1.5	42%	24%	30%	4%
#11 Require all-electric new construction for single-family homes	BE1.4	42%	20%	32%	6%
#12 Require commercial and multi- family building owners disclose energy use or implement efficiency upgrades prior to selling buildings	BE2.4; BE2.3	41%	28%	26%	5%
#13 Require electric panel upgrades that support building electrification when buildings are sold or rented to a new tenant	BE1.8	29%	31%	33%	7%

The survey asked respondents if they had any **additional feedback** on the proposed infrastructure-related climate strategies. Feedback included the following responses and themes:

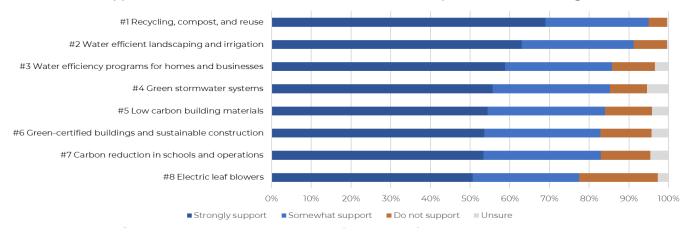
- Analyze consequences and conduct a cost-benefit analysis of each action
- Further clarify if the burnout ordinance would be subsidized based on income and consider exemptions (i.e., those on fixed incomes or using the income-based property tax breaks)
- Improve grid resiliency and capacity to keep up with increased EV and HVAC demands
- Implement microgrids across the Island and support/incentivize locally distributed battery storage and rooftop solar to decrease grid reliance

- Require and incentivize new residential and commercial construction to install solar panels (based on roof size)
- Install solar panels on all public buildings where feasible, and require electric panel upgrades upon sale in commercial and multifamily buildings
- Encourage EV adoption, promote use of mass transit, and develop an electric transportation system
- Service MI community center charging stations and develop EV charging stations in more locations
- Require EV charging stations in new apartment buildings
- Provide more bus routes across the Island as well as more lighted and covered bus stops along Island Crest Way
- Promote and incentivize reduction in use of energy and water
- Develop a PUD or join East King PUD
- Require underground utility infrastructure
- Concern for potential tax increases and financial burdens due to implementing proposed actions
- Concern for mandating actions and support for actions that are voluntary/incentives
- Desire to only require electric panel upgrades where required
- Mixed support for PSE and the Green Power Program

Resource conservation/sustainable development strategies

The survey asked respondents about their level of support for eight different strategies in this category. These strategies and the full resource conservation/sustainable development-related survey results are graphically represented in <u>Figure 6</u> and detailed in <u>Table 4</u> and <u>Table 5</u> below.

Figure 6. Level of support for resource conservation/sustainable development-related



Support for Resource Conservation & Sustainable Development Climate Strategies

Table 4. Level of support for resource conservation/sustainable development-related climate strategies by **RS respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Increase recycling, compost, and reuse of goods and materials	CD1.1; CD1.2; CD2.3	69%	26%	5%	0%
#2 Promote water efficient landscaping and irrigation	NS2.1; NS2.2	63%	28%	8%	0%
#3 Expand water efficiency programs for homes and businesses	NS2.2	59%	27%	10%	3%
#4 Expand/improve green stormwater systems (i.e., rain gardens)	NS2.3	56%	30%	9%	5%
#5 Expand use of low carbon building materials	CD2.4	55%	30%	12%	4%
#6 Reduce carbon in schools and business operations (e.g., cleaner fuels)	CC1.1	54%	29%	13%	4%
#7 Expand green-certified buildings that incorporate sustainable construction measures and practices	CC2.3; BE2.2	54%	30%	12%	5%
#8 Phase in electric leaf blowers (and eliminate gas blowers)	TR1.4	51%	27%	20%	3%

Table 5. Level of support for resource conservation/sustainable development-related climate strategies by **GP respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Increase recycling, compost, and reuse of goods and materials	CD1.1; CD1.2; CD2.3	70%	23%	6%	0%
#2 Phase in electric leaf blowers (and eliminate gas blowers)	TR1.4	63%	11%	23%	2%
#3 Promote water efficient landscaping and irrigation	NS2.1; NS2.2	63%	26%	10%	1%
#4 Reduce carbon in schools and business operations (e.g., cleaner fuels)	CC1.1	61%	17%	18%	4%
#5 Expand use of low carbon building materials	CD2.4	59%	23%	14%	3%
#6 Expand green-certified buildings that incorporate sustainable construction measures and practices	CC2.3; BE2.2	58%	23%	15%	4%
#7 Expand/improve green stormwater systems (i.e., rain gardens)	NS2.3	56%	34%	7%	3%
#8 Expand water efficiency programs for homes and businesses	NS2.2	54%	26%	15%	5%

The survey asked respondents if they had any **additional feedback** on the proposed resource conservation and sustainable development-related climate strategies. Feedback included the following responses and themes:

- Plant more trees and foliage, particularly in unused rights-of-way to reduce heat island effect
- Improve natural habitats (e.g., marshes and native trees) to retain rainwater
- Provide financial rebates for low-water residential landscaping
- Remove non-permeable surfaces and promote usage of green concrete
- Increase availability of local markets
- Strengthen environmentally preferable laws
- Encourage restaurants to offer more plant-based, low carbon meals
- Develop educational resources and communicate water availability to residents
- Conduct cost-benefit analysis of each action
- Recycle/renovate buildings before building a new green building

- Leverage state and national funding over City funding on CAP actions
- Provide safe pathways and comfortable bus stops with amenities to connect people to mass transit
- Increase storm resilience and implement plumbing codes that recycle greywater
- Prioritize reduction in consumption over reuse and recycling
- Concern that new construction will raise prices and exacerbate affordable housing crisis
- Opposition to mandates and support for voluntary actions
- Concern for the potential tax increases and costs to the school district due to implementing proposed actions
- Desire for property owners to get tax credits for their green landscaping
- Desire for Mercer Island to be an international leader in protecting the environment

Electric vehicle adoption strategies

The survey asked respondents about their level of support for three strategies in this category. These strategies and survey results are graphically represented in <u>Figure 7</u> below and detailed in <u>Table 6</u> and <u>Table 7</u>.

Figure 7. Level of support for electric vehicle adoption-related climate strategies from the *random sample* survey.

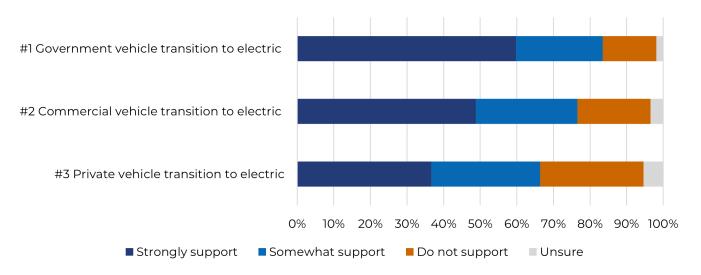


Table 6. Level of support for electric vehicle adoption-related climate strategies by **RS respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Transition government vehicles from internal combustion to electric	CC2.4	60%	24%	15%	2%
#2 Transition commercial vehicles from internal combustion to electric	TR1.1; TR1.3;	49%	28%	20%	3%
#3 Transition private vehicles from internal combustion to electric	TR1.6; TR1.2	37%	30%	28%	5%

Table 7. Level of support for electric vehicle adoption-related climate strategies by **GP respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Transition government vehicles from internal combustion to electric	CC2.4	65%	17%	17%	2%
#2 Transition commercial vehicles from internal combustion to electric	TR1.1; TR1.3;	56%	18%	22%	5%
#3 Transition private vehicles from internal combustion to electric	TR1.6; TR1.2	50%	23%	25%	2%

The survey asked respondents if they had any **additional feedback** on the proposed electric vehicle adoption-related climate strategies. Feedback included the following responses and themes:

- Consider whether keeping old vehicles is more environmentally friendly than replacing with an EV
- Partner with Mercer Island School District to transition school bus fleet to electric and budget for electric school buses
- Incentivize electric vehicle adoption and implement tax breaks/reliefs for EV owners
- Expand and improve EV charging and provide routine service and maintenance to ensure proper function
- Encourage business owners/gas stations to install fast chargers
- Provide charging stations and electric bikes at bus stops along Island Crest Way
- Consider ways to facilitate lower cost home charging solutions for residential constituents

- Ensure EV electricity supply does not run-on fossil fuels
- Require EV charging stations in new buildings
- Promote, facilitate, and increase safe and easy public transit, pedestrian, transit, and bike infrastructure, and encourage alternative transportation options
- Desire for the government to lead by example and demonstrate success with EV transition
- Concern about the range and the environmentally unfriendly lifecycle of EVs (production to end of life)
- Concern that some vehicles cannot be replaced with electric (e.g., fire, police, street sweepers, snowplows)
- Concern that conversion to electric vehicles may threaten energy grid resiliency

Other climate action strategies under consideration

The survey asked respondents about their level of support for 23 other climate strategies in this category. These strategies and survey results are graphically represented in <u>Figure</u> <u>8</u> and detailed in <u>Table 8</u> and <u>Table 9</u>.

Figure 8. Level of support for other climate strategies from the random sample survey.

#1 Support/promote local retail #2 Improve access to light rail station #3 Further restrict development in environmentally... #4 Expand tree planting #5 Increase light rail parking #6 Expand city parks and open spaces #7 Expand/improve bicycle and pedestrian... #8 Expand protection for trees #9 Educate residents on creation of do-it-yourself... #10 Expand community gardens #11 Assess vulnerability of City/community... #12 Advocate for improved aviation fuel cleanliness... #13 Revise City purchasing policies to prioritize... #14 Expand climate outreach and education #15 Track and report city greenhouse gas emissions #16 Support/encourage City employee commute... #17 Allow higher density housing near light rail #18 Support community heat shelters #19 Enforce time-limited parking in Town Center #20 Advocate for a state carbon tax #21 Expand/support City employee work from home... #22 Create telework hubs in libraries and City facilities #23 Promote air travel alternatives

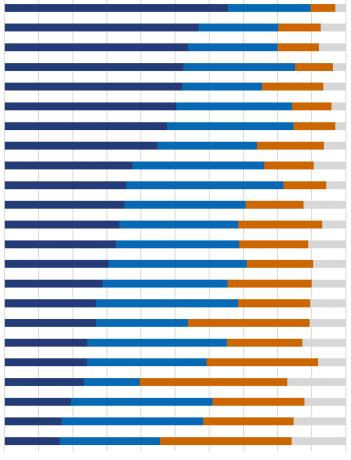


Table 8. Level of support for other climate strategies by **RS respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Support/promote local retail	CD2.2	66%	24%	7%	3%
#2 Improve access to light rail station ('first mile / last mile' solutions)	TR2.2	57%	23%	12%	7%
#3 Further restrict development in environmentally sensitive areas or flood-prone areas.	CR1.3	54%	26%	12%	8%
#4 Expand tree planting	NS1.1	52%	33%	11%	4%
#5 Increase light rail parking	TR2.2	52%	23%	18%	7%
#6 Expand city parks and open spaces	NS1.2	50%	34%	12%	4%
#7 Expand/improve bicycle and pedestrian infrastructure	TR2.4; TR2.5	48%	37%	12%	3%
#8 Expand protection for trees	NS1.3	45%	29%	20%	6%
#9 Educate residents on creation of do- it-yourself filter fans (to improve indoor air quality during wildfire events)	CR1.1	38%	39%	14%	9%
#10 Expand community gardens	CD2.1	36%	46%	13%	6%
#11 Assess vulnerability of City/ community infrastructure to climate- related impacts	CR2.2	35%	36%	17%	12%
#12 Advocate for improved aviation fuel cleanliness and aviation engine efficiency at state/federal level	TR3.2; TR3.3	34%	35%	25%	7%
#13 Revise City purchasing policies to prioritize sustainability	CC2.3; CC3.1; CC2.6	33%	36%	20%	11%
#14 Expand climate outreach and education	CC1.2; CC1.3	31%	40%	19%	10%
#15 Track and report city greenhouse gas emissions	CC3.2	29%	37%	25%	10%
#16 Support/encourage City employee commute alternatives to single occupancy vehicles (SOV)	CC2.2	27%	42%	21%	10%
#17 Allow higher density housing near light rail	TR2.3	27%	27%	36%	11%
#18 Support community heat shelters	CR2.1	24%	41%	22%	13%

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#19 Enforce time-limited parking in Town Center	TR2.6	24%	35%	33%	8%
#20 Advocate for a state carbon tax	CC1.2	23%	16%	43%	17%
#21 Expand/support City employee work from home policies	CC2.1	20%	41%	27%	12%
#22 Create telework hubs in libraries and City facilities	TR2.1	17%	41%	27%	15%
#23 Promote air travel alternatives	TR3.1	16%	29%	38%	16%

Table 9. Level of support for other climate strategies by **GP respondents** (ranked from most to least strongly supported). CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#1 Advocate for improved aviation fuel cleanliness and aviation engine efficiency at state/federal level	TR3.2; TR3.3	49%	20%	26%	6%
#2 Promote air travel alternatives	TR3.1	29%	22%	36%	13%
#3 Enforce time-limited parking in Town Center	TR2.6	31%	36%	18%	15%
#4 Expand/improve bicycle and pedestrian infrastructure	TR2.4; TR2.5	55%	30%	13%	2%
#5 Allow higher density housing near light rail	TR2.3	42%	18%	32%	8%
#6 Improve access to light rail station ('first mile / last mile' solutions)	TR2.2	64%	15%	14%	7%
#7 Increase light rail parking	TR2.2	48%	26%	23%	4%
#8 Create telework hubs in libraries and City facilities	TR2.1	22%	31%	27%	20%
#9 Expand protection for trees	NS1.3	63%	19%	15%	2%
#10 Expand city parks and open spaces	NS1.2	59%	25%	11%	5%
#11 Expand tree planting	NS1.1	74%	18%	6%	1%
#12 Assess vulnerability of City/ community infrastructure to climate- related impacts	CR2.2	47%	25%	19%	9%
#13 Support community heat shelters	CR2.1	45%	27%	21%	7%

Strategy	CAP Actions	Strongly support	Somewhat support	Do not support	Unsure
#14 Further restrict development in environmentally sensitive areas or flood-prone areas.	CR1.3	61%	20%	14%	5%
#15 Educate residents on creation of do-it-yourself filter fans (to improve indoor air quality during wildfire events)	CR1.1	37%	41%	18%	4%
#16 Support/promote local retail	CD2.2	67%	25%	6%	2%
#17 Expand community gardens	CD2.1	53%	30%	14%	4%
#18 Track and report city greenhouse gas emissions	CC3.2	42%	27%	22%	9%
#19 Revise City purchasing policies to prioritize sustainability	CC2.3; CC3.1; CC2.6	50%	22%	22%	6%
#20 Support/encourage City employee commute alternatives to single occupancy vehicles (SOV)	CC2.2	46%	30%	14%	10%
#21 Expand/support City employee work from home policies	CC2.1	40%	29%	20%	10%
#22 Expand climate outreach and education	CC1.2; CC1.3	42%	37%	18%	3%
#23 Advocate for a state carbon tax	CC1.2	40%	17%	33%	10%

The survey asked respondents if they had any **additional feedback** on the other proposed climate strategies. Feedback included the following responses and themes:

- Invest the time and resources to report on annual GHG emissions
- Communicate the power of collective community participation with residents and provide comprehensive education and outreach
- Restrict Light Rail parking to Mercer Island residents
- Implement a Parking Management Program to allow sharing of critical public parking
- Expand parking for the ghost train and expand "park and ride" capacity and implement a parking fee when time exceeds a certain limit
- Reduce our energy use (e.g., limit building size)
- Allocate more funds to the Natural Resources Program to promote forest health
- Add a "free store" to the Mercer Island Thrift Shop and Farmers' Market
- Consider climate impacts for any policy the City lobbies at state level (e.g., housing, transportation)

- Develop bike networks through downtown and connections along Island
- Enhance infrastructure for commuters along Island Crest Way that is accessible and less than one mile from any home on the Island
- Expand tree planting on public rights-of-way and private property to decrease urban heat island
- Bring more retail/restaurants to the town center
- Mixed feelings on housing density—some feel high density housing should be limited, others feel high density housing is needed, particularly around the Light Rail station
- Mixed feelings about federal advocacy; some feel the City should not advocate on federal or international issues (e.g., aviation fuel) while others are in favor of advocating for a federal state carbon tax
- Desire for all of Mercer Island (except freeway and garages near public transit) to be a no-car zone

Appendix D1. Demographics

Part 3 of the survey asked respondents to answer a variety of demographic questions to better understand the makeup of respondents. The following tables and figures show comparisons between survey respondents and the entire Mercer Island population across demographics such as age group, race/ethnicity, education level, and home ownership. Percentages may not add up to 100% due to rounding.

AGE GROUP

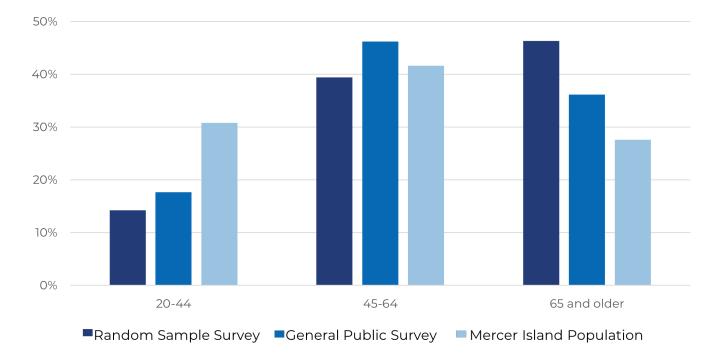


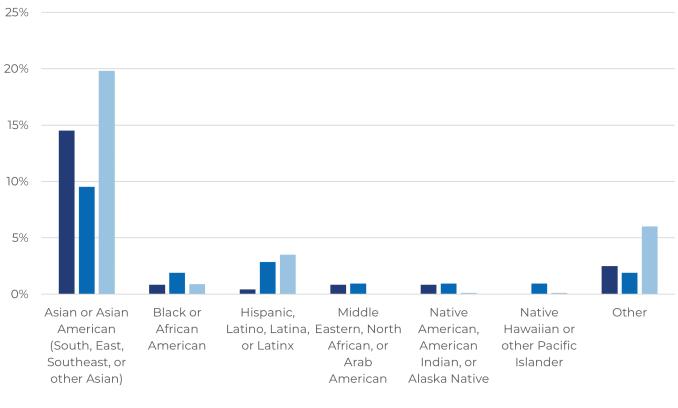
Figure 9. Age groups of respondents by survey type (random sample and general public) compared with age groups of the Mercer Island population.

Table 10. Age groups of respondents by survey type (random sample and general public) compared with age groups of the Mercer Island population.

	Survey Respo	ndents	M.I. Po	M.I. Population	
Age Group	RS	GP	Full	Over Age 20	
Under 20	0%	0%	25.5%	-	
20–44	14%	18%	23%	30.8%	
45–64	40%	46%	31.1%	41.6%	
65 and older	46%	36%	20.6%	27.6%	

RACE/ETHNICITY

Figure 10. Race/ethnicity of respondents by survey type (random sample and general public) compared with race/ethnicity of the Mercer Island population, excluding "White or Caucasian" to better view the results of smaller groups.



Random Sample Survey
General Public Survey
Mercer Island Population

Figure 11. Race/ethnicity of respondents who selected "White or Caucasian" by survey type (random sample and general public) compared with race/ethnicity of the White or Caucasian Mercer Island population.

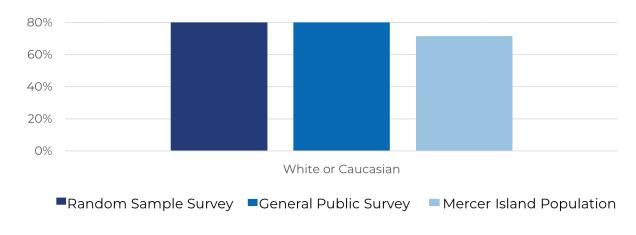
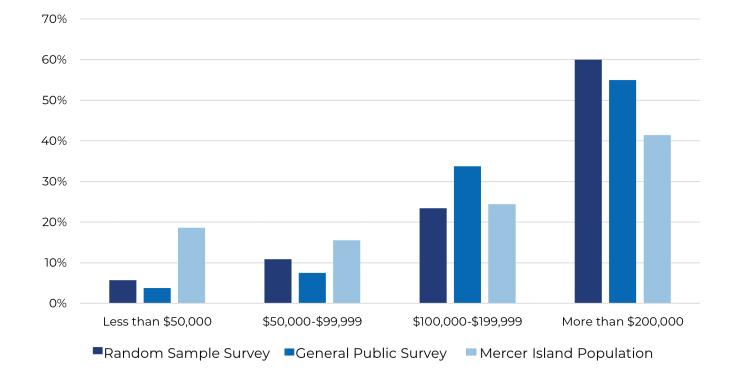


Table 11. Race/ethnicity of respondents by survey type (random sample and general public) compared with race/ethnicity of the Mercer Island population.

Race/Ethnicity	Survey Re	spondents	M.I. Population
	RS	GP	
Asian or Asian American (South, East, Southeast, or other Asian)	15%	10%	19.8%
Black or African American	1%	2%	0.9%
Hispanic, Latino, Latina, or Latinx	0.4%	3%	3.5%
Middle Eastern, North African, or Arab American	1%	1%	-
Native American, American Indian, or Alaska Native	1%	1%	O.1%
Native Hawaiian or other Pacific Islander	0%	1%	O.1%
White or Caucasian	80%	81%	71.5%
Other	2%	2%	6%33

HOUSEHOLD INCOME

Figure 12. Household income of respondents by survey type (random sample and general public) compared with household income of the Mercer Island population.



³³ This includes "two or more races."

Table 12. Household income of respondents by survey type (random sample and general public) compared with household income of the Mercer Island population.

Lieuzoheld Incomo	Survey Re	spondents	MI Deputation
Household Income	RS	GP	M.I. Population
Less than \$50,000	6%	4%	18.6%
\$50,000-\$99,999	11%	8%	15.5%
\$100,000-\$199,999	23%	34%	24.4%
\$200,000-\$499,999	41%	36%	
\$500,000-\$999,999	10%	15%	41.4%
More than \$1 million	9%	4%	

EDUCATION

Figure 13. Education level of respondents by survey type (random sample and general public) compared with education level of the Mercer Island population.

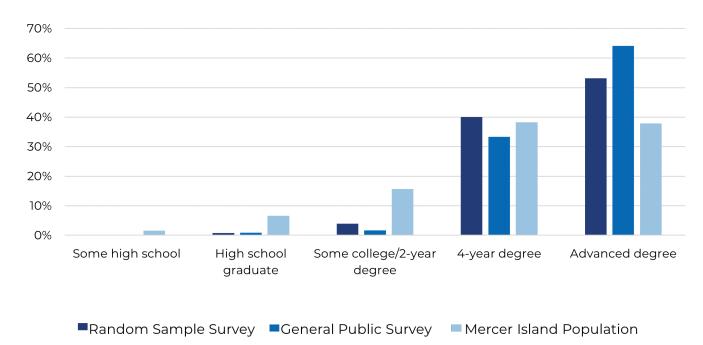


Table 13. Education level of respondents by survey type (random sample and general public) compared with education level of the Mercer Island population.

Highest Level of Education	Survey Re	spondents	M.I. Population
Highest Level of Education	RS	GP	M.I. Population
Some high school	0%	0%	1.6%

Highest Level of Education	Survey Re	spondents	M.I. Population	
Highest Level of Education	RS	GP		
High school graduate	1%	1%	6.6%	
Some college/2-year degree	4%	2%	15.7%	
4-year degree	40%	33%	38.3%	
Advanced degree	53%	64%	37.9%	
Other	2%	0%	N/A	

HOME OWNERSHIP

Figure 14. Home ownership of respondents by survey type (random sample and general public) compared with home ownership of the Mercer Island population.

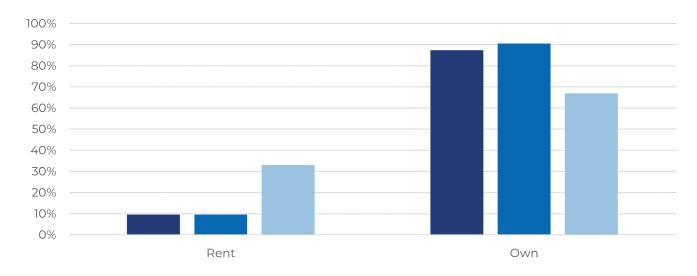


Table 14. Home ownership of respondents by survey type (random sample and general public) compared with home ownership of the Mercer Island population.

lleme Ownership	Survey Re	spondents	MI Deputation
Home Ownership	RS	GP	M.I. Population
Rent	10%	10%	33.1%
Own	87%	90%	66.9%
Other	3%	0%	-

HOME LOCATION

Figure 15. Home location of respondents by survey type (random sample and general public) compared with home location of the Mercer Island population.

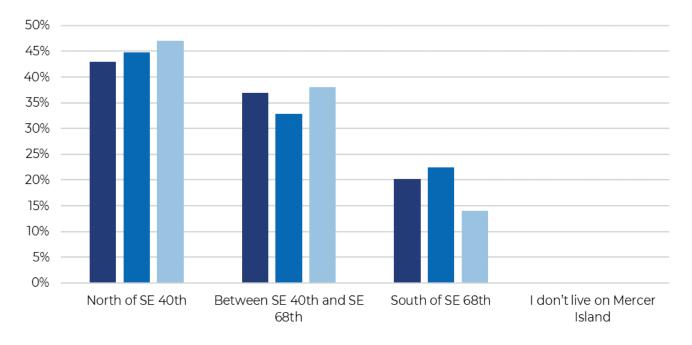


Table 15. Home location of respondents by survey type (random sample and general public) compared with home location of the Mercer Island population.

Home Location	Survey Re	spondents	M.I. Population	
	RS	GP		
North of SE 40th	43%	45%	47%	
Between SE 40th and SE 68th	37%	33%	38%	
South of SE 68th	20%	22%	14%	
I don't live on Mercer Island	0%	0%	-	

CHILDREN IN HOUSEHOLD

Figure 16. Number of children in households of respondents by survey type (random sample and general public) compared with number of children in households of the Mercer Island population.

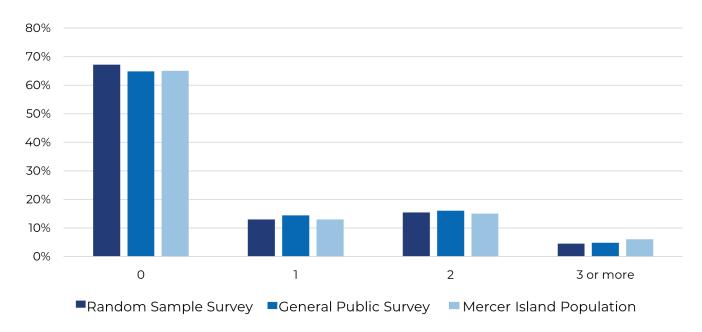


Table 15. Number of children in households of respondents by survey type (random sample and general public) compared with number of children in households of the Mercer Island population.

Children in Household	Survey Re	spondents	MI Deputation
Children in Household	RS	GP	M.I. Population
0	67%	65%	65%
1	13%	14%	13%
2	15%	16%	15%
3 or more	4%	5%	6%

YEARS ON MERCER ISLAND

Table 16. Years lived on Mercer Island by survey type (random sample and general public).

Years on Mercer Island	Survey Respondents		
rears on mercer Island	RS	GP	
Less than I year	3%	2%	
1–5 years	8%	10%	
5–10 years	10%	10%	
More than 10 years	79%	78%	

LANGUAGES

Table 17. Languages spoken at home on Mercer Island by survey type (random sample and general public).

	Survey Respondents	
Language	RS	GP
English	88%	94%
Spanish	2%	2%
Chinese – Mandarin	2%	3%
Chinese – Cantonese	1%	0%
Japanese	0%	0%
Korean	1%	0%
Hindi	0%	1%
Vietnamese	0%	0%
Russian	1%	0%
Other (please specify)	5%	0%

Appendix D2. Strategy rankings

Table 18. Ranking of all survey strategies from most to least supported based on the percent of random sample survey respondents who indicated some support or strong support for the strategy. CAP action IDs may have shifted between survey publication and CAP adoption.

Strategy	Action IDs	% of RS respondents who support or strongly support	% of GP respondents who support or strongly support
Increase recycling, compost, and reuse of goods and materials	CD1.1; CD1.2; CD2.3	94%	93%
Promote water efficient landscaping and irrigation	NS2.1; NS2.2	92%	87%
Support/promote local retail	CD2.2	90%	93%
Expand tree planting	NS1.1	86%	92%
Expand water efficiency programs for homes and businesses	NS2.2	86%	79%
Promote climate adaptation upgrades (e.g., reflective or cool roofs, air filters, ceiling fans)	CR1.2	85%	83%
Encourage residential solar for appropriate sites	BE1.6; BE1.2	85%	91%
Expand/improve bicycle and pedestrian infrastructure	TR2.4; TR2.5	85%	84%
Expand city parks and open spaces	NS1.2	84%	83%
Expand use of low carbon building materials	CD2.4	84%	82%
Expand/improve green stormwater systems (i.e., rain gardens)	NS2.3	84%	88%
Transition government vehicles from internal combustion to electric	CC2.4	84%	82%
Expand community gardens	CD2.1	83%	82%
Incentivize electric heat pumps for space heating and cooling	BE1.1	82%	88%
Expand green-certified buildings that incorporate sustainable construction measures and practices	CC2.3; BE2.2	82%	79%

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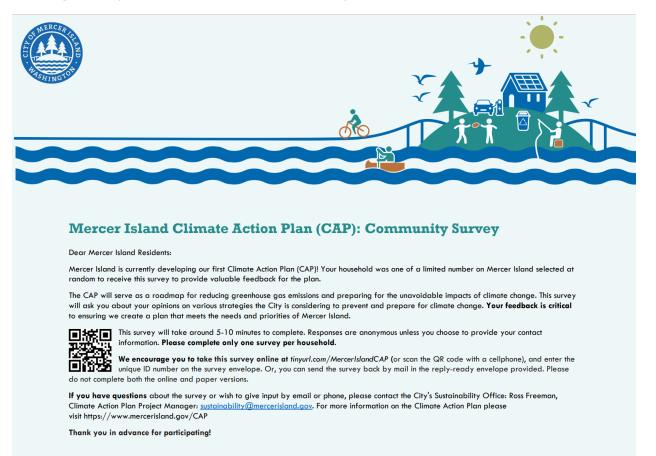
Strategy	Action IDs	% of RS respondents who support or strongly support	% of GP respondents who support or strongly support
Conduct energy audits and efficiency upgrades for City government and school buildings	CC2.5	82%	83%
Reduce carbon in schools and business operations (e.g., cleaner fuels)	CC1.1	82%	77%
Expand public EV charging infrastructure	TR1.5; TR1.7; TR1.8	82%	82%
Incentivize energy audits and efficiency upgrades for homes and businesses	BE2.1; BE1.3	81%	83%
Improve access to light rail station ('first mile / last mile' solutions)	TR2.2	80%	78%
Further restrict development in environmentally sensitive areas or flood-prone areas.	CR1.3	79%	79%
Phase in electric leaf blowers (and eliminate gas blowers)	TR1.4	77%	75%
Transition commercial vehicles from internal combustion to electric	TR1.1; TR1.3	77%	73%
Expand protection for trees	NS1.3	75%	83%
Educate residents on creation of do-it-yourself filter fans (to improve indoor air quality during wildfire events)	CR1.1	75%	78%
Increase light rail parking	TR2.2	75%	72%
Expand renewable energy storage on City property	CC2.7	73%	71%
Expand climate outreach and education	CC1.2; CC1.3	72%	78%
Encourage increased enrollment in PSE's green power program	BE1.7	72%	75%
Assess vulnerability of City/ community infrastructure to climate-related impacts	CR2.2	70%	71%
Revise City purchasing policies to prioritize sustainability	CC2.3; CC3.1; CC2.6	70%	72%

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Strategy	Action IDs	% of RS respondents who support or strongly support	% of GP respondents who support or strongly support
Advocate for improved aviation fuel cleanliness and aviation engine efficiency at state/federal level	TR3.2; TR3.3	69%	68%
Support/encourage City employee commute alternatives to single occupancy vehicles (SOV)	CC2.2	68%	75%
Transition private vehicles from internal combustion to electric	TR1.6; TR1.2	66%	73%
Track and report city greenhouse gas emissions	CC3.2	65%	68%
Support community heat shelters	CR2.1	65%	71%
Implement a "burnout ordinance" to transition to non-fossil energy (i.e., replace expired gas water heaters and oil/gas furnaces with electric equivalent)	BE1.5	61%	66%
Require all-electric new construction for commercial and multi-family buildings	BE1.4	61%	71%
Require commercial and multi- family building owners disclose energy use or implement efficiency upgrades prior to selling buildings	BE2.4; BE2.3	61%	69%
Expand/support City employee work from home policies	CC2.1	60%	68%
Enforce time-limited parking in Town Center	TR2.6	59%	65%
Create telework hubs in libraries and City facilities	TR2.1	57%	52%
Require electric panel upgrades that support building electrification when buildings are sold or rented to a new tenant	BE1.8	57%	60%
Allow higher density housing near light rail	TR2.3	55%	60%
Require all-electric new construction for single-family homes	BE1.4	53%	61%
Promote air travel alternatives	TR3.1	47%	52%
Advocate for a state carbon tax	CC1.2	40%	57%

Appendix D3. Survey Instrument

The following survey was sent to 2,500 randomly selected Mercer Island addresses.





Mercer Island Climate Action Plan (CAP): Community Survey

Q1 Please enter the unique code printed on the survey envelope



Part 1. Climate Action Priorities

The following optional questions ask about your priorities related to climate action generally. If you do not wish to rank your climate priorities and solutions, leave questions 2 and 3 blank.

Q2 Please rank each of the following **climate-related threats facing Mercer Island in order of importance** to you, 1 being most important, 6 being least important.

	1	2	3	4	5	6
Extreme heat events						
Worsening air quality						
Drought						
Wildfire						
Extreme winter storms						
Grid/electricity disruption						

Q3 Please rank each of the following **climate-related solutions in order of importance** to you, 1 being most important, 10 being least important.

	1	2	3	4	5	6	7	8	9	10
Improved resiliency to climate change impacts (e.g., flooding, extreme heat, wildfire smoke)										
Electric vehicles										
Alternative transportation modes (e.g., bus, biking, walking)										
Sustainable buildings (e.g., more efficient heating/cooling)										
Renewable energy sources (e.g., solar)										
Recycling, composting, sustainable consumption, and zero waste (e.g., reuse, low-carbon materials)										
Reduced water consumption										
Natural ecosystem health, and surface and ground water quality										
Environmental justice and social equity (e.g., food insecurity, disproportionate exposure to pollutants)										
Outreach and education about sustainability issues										

Survey page | of 7

Q? Do you have any additional feedback on the resource conservation/sustainable development strategies?

Q10 Please indicate your level of support for each of the following strategies:

(Please check only one box per row)

	Strongly support	Somewhat support	Do not support	Unsure
 on commercial vehicles from combustion to electric				
on government vehicles from combustion to electric				
on private vehicles from internal ion to electric				
 				•

Q11 Do you have any additional feedback on the strategies related to electric vehicle adoption?

Other climate action strategies under consideration

Q12 Please indicate your level of support for each of the following strategies: (Please check only <u>one</u> box per row)

	Strongly support	Somewhat support	Do not support	Unsure
Increase light rail parking				
Improve access to light rail station ("first mile / last mile" solutions)				
Expand/improve bicycle and pedestrian infrastructure				
Enforce time-limited parking in Town Center				
Create telework hubs in libraries and City facilities				
Support/promote local retail				
Expand community gardens				
Expand protection for trees				
Expand tree planting				
Expand city parks and open spaces				
Further restrict development in environmentally sensitive areas or flood -prone areas.				
Educate residents on creation of do-it- yourself filter fans (to improve indoor air quality during wildfire events)				
		Survey page 4 of 7		

Support community heat shelters		
Assess vulnerability of City/community infrastructure to climate-related impacts		
Expand climate outreach and education		
Expand/support City employee work from home policies		
Revise City purchasing policies to prioritize sustainability		
Support/encourage City employee commute alternatives to single occupancy vehicles (SOV)		
Track and report city/community greenhouse gas emissions		
Allow higher density housing near light rail		
Advocate for a state carbon tax		
Promote air travel alternatives		
Advocate for improved aviation fuel cleanliness and aviation engine efficiency at state/federal level		

Q13 Do you have any additional feedback related to the other strategies under consideration?

Part 3. Demographic Information

The following questions help us understand the profile of survey participants and supports our effort to make this process as comprehensive and inclusive as possible. **These questions are optional.**

Q14 How many years have you lived on Mercer Island?

Less than 1 year
1 - 5 years

5 - 10 years
More than 10 years

Survey page 5 of 7

1

	SE 40th St SE 68th St			
	A - North of SE 40	th	C - South	of SE 68th
	B - Between SE 40	th and SE 68th	I don't live	e in Mercer Island
014		- hama2		
019	Do you rent or own you Own Rent If other, please specify:		N/A - I an housing Other	m currently unhoused or in temporary
017)A/h == t is used as a set of the			
	What is your age? 19 or younger 20 - 44 years 45 - 64 years		65 or ove	
Q18	Which of the following l	best represents	your race/ethnicity? Select all that a	pply.
	Asian or Asian Ame South Asian Asian or Asian Ame East Asian Asian or Asian Ame Southeast Asian Asian or Asian Ame Other If other, please	erican - erican -	 Black or African American Hispanic, Latino, Latina, or Latinx Middle Eastern, North African, or Arab American Native American, American Indian, or Alaska Native 	Native Hawaiian or other Pacific Islander White or Caucasian I prefer not to say Other
	specify:			

Q15 Using this map, in which section of Mercer Island do you live?

Survey page 6 of 7

Appendix D4. Survey Postcard

The following postcard was sent the 2,500 randomly selected addresses to remind them to take the Mercer Island CAP survey.



Appendix D. Survey Report

Appendix D6. Open-Ended Responses (VERBATIM)

If you do not support any of the types of climate actions listed in Question 4, please tell us why (n=47)

- We need to do *all* of them.
- I support those actions but believe that outreach and educational initiatives are not effective.
- Please do not waste our hard earned money trying to fix irrational issues.
- I think it is a waste of money for the impact it would have on the overall goal of reducing emissions
- I do not support mandates nor the presently proposed legislations. Not enough space allowed here!
- Mandating the phase out of natural gas causes more problems than it solves. We need more solutions
- We are more concerned about air pollution from tire rubber particles from I-90 that gets on our deck
- I support them but they're not nearly enough. We need to take action to lower our use of power!
- City of Mercer Island resources are better spent elsewhere.
- The consequences of examples have not been thought through. Very WEAK examples. Disappointing!!
- Anthropogenic climate change is small and unstoppable., spend money on alt. energy research/adaption
- I support all of them, don't want to rank
- They don't solve the problem. The problem our community faces is over reliance on transportation.
- All of these options will lead to more government involvement in people's lives and higher taxes
- I don't support any of your ideas. Traffic is a big issue. Employers should have 3 days in office, 2
- Local advocacy is unimportant: Climate change action is already good at the state level.
- No interest in supporting your agenda. Please just run the city. Leave political agenda at door
- Cities should not be in the business of climate action
- We don't have enough other sources of heating/cooling to just stop using gas
- costly and unlikely to produce results

Q4	Please rank your level of support for the following types of climate action, 1 being high support, 4 being
	lowest support. Please leave this question blank if you do not support any of these climate actions.

	1	2	3	4
Financial or other incentives (e.g., rebates to help cover the cost of home energy upgrades)				
Mandates or regulations (e.g., phasing out natural gas by requiring all-electric new buildings)				
Education or logistical support (e.g., outreach campaigns to homeowners to promote energy and water conservation)				
Local advocacy to promote climate action at the state and federal level (e.g., local campaigns to advance legislation aimed at reducing GHG emissions from the aviation sector).				

Q5 If you do not support any of the types of climate action listed in Question 4 please tell us why:

Part 2. Feedback on proposed climate strategies

In the following questions, we would like your feedback on potential strategies to reduce carbon emissions and prepare our community for current and future climate impacts.

Infrastructure-related climate strategies

Q6 Please indicate your level of support for each of the following strategies:

(Please check only one box per row)

	Strongly support	Somewhat support	Do not support	Unsure
Require all-electric new construction for commercial and multi-family buildings				
Require all-electric new construction for single-family homes				
Implement a "burnout ordinance" to transition to non-fossil energy (i.e., replace expired gas water heaters and oil/gas furnaces with electric equivalent)				
Require electric panel upgrades that support building electrification when buildings are sold or rented to a new tenant				
Incentivize electric heat pumps for space heating and cooling				
		Survey page 2 of 7		

Encourage residential solar for appropriate sites		
Expand public EV charging infrastructure		
Encourage increased enrollment in PSE's green power program		
Incentivize energy audits and efficiency upgrades for homes and businesses		
Require commercial and multi-family building owners disclose energy use or implement efficiency upgrades prior to selling buildings		
Conduct energy audits and efficiency upgrades for City government and school buildings		
Expand renewable energy storage on City property		
Promote climate adaptation upgrades (e.g., reflective or cool roofs, air filters, ceiling fans)		

Q7 Do you have any additional feedback on the infrastructure-related climate strategies?

Resource conservation/sustainable development strategies

Q8 Please indicate your level of support for each of the following strategies:

(Please check only <u>one</u> box per row)

	Strongly support	Somewhat support	Do not support	Unsure
Phase in electric leaf blowers (and eliminate gas blowers)				
Increase recycling, compost, and reuse of goods and materials				
Expand use of low carbon building materials				
Promote water efficient landscaping and irrigation				
Expand water efficiency programs for homes and businesses				
Expand/improve green stormwater systems (i.e., rain gardens)				
Reduce carbon in schools and business operations (e.g., cleaner fuels)				
Expand green-certified buildings that incorporate sustainable construction measures and practices				
		Survey page 3 of 7		

- Adapt to climate change, don't try to change climate change. No cost / benefit analysis
- Mandates only if financial support to convert over. local advocacy has to be strong and effective
- No nuclear option. 100% co2 free and we have the technology
- City has enough to focus on, don't waste time and money on this, partner with state, pse etc. on this
- Educate, advocate and regulate the little that the very little MI can affect.
- Please focus on running the city properly rather than saving the world
- High dependence models (e.g. electric homes) with frequent power events in winter is just laughable
- Please focus on something more manageable....like running our city properly.
- lack of any cost benefit analyses
- Requiring all-electric new building requires the grid be much more reliable than I have experienced
- It is a waste of local taxpayer funds to advocate at state and federal level.
- MI doesn't need to spend money on state level advocacy for climate change.
- In regards to the survey code-I discarded the outer envelope before reading the survey and noting it
- We need to support more developing countries to reduce pollution
- State/Federal campaigns would be fruitless. All options here too little too late.
- Nothing Al Gore predicted came true. SCAM stop stealing our money. why does climate activism cost \$\$?
- None of these items make one bit of difference based on policies in other parts of the world
- Climate Action should be a choice. As we learn more about renewables there are serious detriments
- Each action presupposes an actionable problem. A Vastly over-imagined problem. Crisis shilling.
- The devil is in the details. More information is needed about the proposed actions.
- Mandates and regulations are difficult to align on without showing specific results
- This project is performative at best, and is a waste of MI taxpayer money.
- Only allowed 100 characters... This ranked choice survey is fundamentally flawed.
- Finances. Please save money. Times are tight right now. My priority is keeping my house and food.
- Here's a simple step: prohibit the use of gas powered leaf blowers on Mercer Island.

- Batteries are not easy to recycle and long term provide huge issues to our environment
- Flow the real science!!

Do you have any additional feedback on the infrastructure-related climate strategies? (n=59)

- These ideas are waste of time if you do not analyze consequences of given action. Why not discus?
- The IPCC's RCP 8.5 is unrealistic. Read the back pages, the models are chaotic and non-linear.
- I believe that promoting innovation through financial incentives is a better than draconian edicts.
- I'm curious if the burnout ordinance would be subsidized based on income
- We need to do what solves the problem. Reduce our reliance on transportation.
- To my own shock I can't afford a heat pump. It's beyond my financial reach as a low-income senior.
- Improving grid resiliency is critical due to increased EV and HVAC demands.
- Too many electrical outages here. We need gas as an alternative
- Exempt certain owners (those on fixed incomes or using the income-based property tax breaks)
- Micro grids. Rooftop solar on every public building. Microgrids. Microgrids. Screw PSE. Microgrids/
- Research feasibility for implementation of renewable energy-based microgrids at key locations on MI.
- Require new construction (residential & commercial) to install solar panels (# based on roof size).
- We also need to encourage both EV adoption, and especially promote/facilitate use of mass transit
- Implementation of these strategies will raise energy bills by a factor 3
- No, these things are all a waste of time and won't make a dent.
- Please just run the city properly. Stop wasting taxpayer money.
- I doubt that PSE's Green Power program effectively reduces GHGs; I fear it does more harm than good.
- I strongly support most of these. While I'm enrolled in PSE green power, I really want a P.U.D.
- I strongly support public utility over PSE.
- budget for financial support to convert old polluting energy sources & BAN ALL

ROUNDUP USE island wide

- only strongly support and support options visible on survey
- Prevention is better than cure i.e. addressing root causes of climate change are most important
- We should be using very minimal City funds for this. No financial incentives.
- Provide lighted covered bus stops along ICW. 98% of residents are less than a mile from ICW.
- PSE is a for-profit private investor-owned corporation. Seriously assess joining East King PUD.
- Point out how even small changes can reap big rewards with whole communities participation.
- Don't financially burden residents.
- More bus routes
- MI community center charging stations need to be serviced. There is lack of Tesla charging as well.
- Stop trying to find ways to spend our tax dollars
- I do not support anything that has the word "require" in it. Stop imposing your politics on my life
- Each needs to have a cost-benefit analysis performed
- On island electric transportation system providing an alternative to using their car.
- Require electric panel upgrades upon sale or new tenant, start with commercial and multifamily.
- Expanding solar generation should come with supporting local distributed battery or other storage
- Electric transit (school buses, Mercer Way circulator), ban gasoline leaf blowers & lawn mowers
- In "Only require electric panel upgrades" add the phrase "where required to" and remove "that"
- Most important thing we can do is stop burning fossil fuels. GOAL: remove ALL gas meters
- What are the energy storage solutions? Batteries? Except for hydro, there are no good solutions
- Require underground utility infrastructure.
- 100 characters? You kidding?
- All of these programs are surprisingly weak
- Replacing functional units with new electric units is moronic. Just like printing and

1

	nk you! Ik you for taking the time to comp	lete this survey - please m	ail it back in the reply-ready envelope!
	unsubscribe at any time). Email address:		
Q23		-	nt Climate Action Plan development, please ou to a listserv on this topic (you can
	1		3 or more
Q22	How many children under age 18 liv	e in your household?	2
000			
	\$100,000 - \$199,999 \$200,000 - \$499,999		l prefer not to say
	\$50,000 - \$99,999		More than \$1 million
	Less than \$50,000		\$500,000 - \$999,999
Q21	What is your household income?		
	If other, please specify:		
	4-year degree		
	Some college/2-year degree		Other
	High school graduate		I prefer not to say
Q20	What is the highest level of educatio		Advanced degree
020	\A/h at is the highest local of advant		
	If other, please specify:		
	Korean		
	Japanese		Other
	Chinese - Cantonese		I prefer not to say
	Spanish Chinese - Mandarin		Vietnamese Russian
	English	H	Hindi

mailing a flyer

- Plant more trees
- Commercial or multifamily buildings are not sold without energy cost disclosures.
- focus on more important things other than imagined climate impact which can't be proved as man-caused
- Educate rather than mandate
- As WA generates almost all electricity with hydro we are dramatically ahead of the rest of the US.
- Creating EV charging stations will take many years and often they use FF to charge the vehicles!?
- Please step away from the Green-washing to sooth manufactured green hysteria.
- Promote and incentivize reduction in use of energy and water
- Any "mandate" of individual homes will push out retired and income restricted owners and need funded
- Make sure our electrical grid and delivery has capacity for the increased electrical use!
- I believe education and financial incentives are the better approach for residential development.
- Solar panels on all public buildings where feasible (i.e. construction will support it, enough sun)
- Support and encourage: Yes. Require: No.
- Implement one child policy or have a committee determine who should be allowed to populate earth.
- No more taxes.
- I do not favor requiring upgrades to sell buildings. I think that would be bad for the island.

Do you have any additional feedback related to the resource conservation/ sustainable development strategies? (n=48)

- We need to do all of these things in order to reach our 2030 50% GHG reduction commitment.
- These things need to happen NOW: 10/20/30 years is too long. We are reaching point of no return.
- I think property owners should get tax credits for their green landscaping. Trees are good.
- What are costs and who pays? What is advantage vs cost?
- Stop the Climate Change /Industrial Complex Green Fraud



- We're super all of this, MI should be an international leader in protecting the environment
- Provide financial rebates for low-water residential landscaping & removal of nonpermeable surfaces,
- Make it possible for residents to shop, dine out and be entertained locally.
- We simply must make the laws stronger, to override personal preferences!
- Encourage restaurants to offer more plant-based, low carbon meals
- City land isn't sacred. Don't let the "save our parks" lobby stop the fight against climate change.
- Is there a water conservation problem on MI? That should be communicated if so.
- Green concrete. Incentivize solar on all new construction.
- Promote more people living in the Island's huge houses, e.g. by converting some to duplexes
- phase out gas lawnmowers
- Yes, what about the costs involved with your suggested ideas? You are not taking into consideration
- Recycle buildings. A new, green building still uses more carbon then renovating an old one.
- Budget for electric school buses
- Strongly support walking and bike path improvements, along reasonable commute routes and in neighborhood
- Please consider additional steps.
- Roundup should be banned for use on the entire island (entire world for that matter), cancer causing
- not all options visible on screen
- More EV charging stations in more locations. Universal EV charge card (so many different vendors)
- Very minimal City funding should be spent on this since it's happening at state and national levels
- Connect people to mass transit by providing safe pathways and comfortable bus stops with amenities
- Ban gas-powered leaf blowers and landscape equipment. The time is now. Low hanging fruit! Let's go!
- Remember to let the public know what does increase global warming and must be eliminated/reduced.
- Cost-benefit analysis of each is required.

- Heat island effect in neighborhoods. Too hot to walk. Use unused right of way for public trees.
- Incentivize rooftop solar + battery storage to decrease grid reliance & amp; increase storm resilience
- My support would change depending on actual solutions proposed
- Your number one goal should be reduction. Re-use is OK, recycling should be a last resort.
- What are low carbon building solutions? Wood? Some products are not recycled for a reason
- Implement some plumbing codes that let you recycle clean water while you wait for it to get hot
- protect environment don't fleece taxpayers. many things more important than environment.
- Don't make the cost of new construction more expensive. We already have an affordable housing crisis.
- We should plant more trees and foliage in open areas; Trees and plants absorb carbon and create O2
- Please step away from the Green-washing to sooth manufactured green hysteria.
- Improve natural habitats like marshes and native trees to retain rainwater
- Education and outreach of the public is key to success!
- What does "expand" mean. I oppose most mandates and am concerned about costs to the school dist./ci
- require EV charging stations in new apartment buildings
- Again, encourage/educate, but do not require.
- Make new/resold houses more expensive to preserve the wealth of those who already have theirs.
- No more taxes.
- Phase out gas leaf blowers very soon. Phase out gas mowers too.
- Do not make gardeners suffer and get rid of gas blowers. They are more efficient
- Carbon emission reduction, not water conservation, is the #1 issue to me.

Do you have any additional feedback on the strategies related to electric vehicle adoption? (n=67)

- State law already requires all new vehicles be EV by 2035. So why ask us now if we support it?
- Sometimes keeping old vehicles is better for climate than trashing them and replacing with electric.
- Same as previous comment. Until it's mandated, it won't happen.

- Help MISD transition school bus fleets to electric
- I think Electric Vehicles alone would solve Global Climate Change.
- Without greater real alt Energy sources, conversion to elec. will threaten the grid.
- Electric vehicles require more electric power generation. Nuclear power is the most efficient means
- Nice if we encourage people to rely on private vehicles less: bike infrastructure, shared vehicles
- Incentivize electric vehicle adoption.
- What's the overall plan? Costs of implementation?
- Rely on free markets capitalism and democracy to initiate change
- City vehicle transitions only if compatible with loads, work performed, & prior charging station \$
- Reduce reliance on all forms of transportation, electric as well as fossil fuel.
- Fast chargers needed for parking lots where stay is less than 30 mins.
- Electric car batteries create their own problems and you can go further on gas than battery
- Encourage business owners/gas stations to install fast chargers.
- I will not buy an all electric vehicle, only a hybrid. The recent I90 closure left many EVs dead
- Would rather mandate private EV than replace a bunch of new ICE government vehicles
- Consider ways to facilitate lower cost home charging solutions for residential constituents.
- I can't say which TYPE of vehicle to focus on without understanding HOW transitions would be made
- Provide more public charging sites
- Also critical to promote and facilitate the use of mass transit e.g. bike lanes/shuttles to rail
- Reduce use of vehicles by making walking, bus and cycling safer & more convenient; disincentive cars
- Need to ensure the grid and charging infrastructure can support
- Only vehicles that are used occasionally can be transitioned to electricity
- They are coming out with electric and hydrogen powered trucks which is fine.
- Take carbon TCO into account. Driving a new Tesla has a bigger carbon footprint than does an old VW.
- We should increase more options for efficient, easy, safe public transportation.

- Government must demonstrate success with transition to EVs before mandating to individuals.
- Must expand charging systems at the same time
- Ensure that the electric supply to charge vehicles is truly green and not from GHG emitting sources.
- City should be moving now to replace ICE vehicles with EVs.
- Duh!
- all options not visible
- Need many more public EV charging stations. With maintenance of current ones (often broken)
- Provide charging stations for cars and electric bikes at the bus stops on ICW. Secure bike locks
- Don't have vehicles go to waste; no early transitions, as that is more wasteful than not.
- Get aligned w/Mercer Island School District, support / partner for electrification of bus fleet!
- The suggestion are so apparent as to be tiresome, in fact insulting. Those who do not see are hiding
- need the appropriate amount of charging stations
- 3% vehicles are electric, CA govt just pleaded w/electric car owners to ration, grid scale probs
- cost-benefit analysis is required
- What jurisdiction does the city have to implement these changes?
- New energy efficiency requirements for buildings will allow energy for vehicles. Seattle proving it.
- Until electric vehicles have the range of gas I would only encourage adoption for local use vehicles
- Education to allay unwarranted range anxiety; more EV chargers; tax break for EV owners
- Constraints to transition of private vehicle from IC to EV are external to MI local community
- Not sure how you would transition private vehicles to electric
- 79% of all energy used in the US comes from fossil fuels (DOE). Where is the energy going to come???
- The problem with E-Cars today is that their construction is still very environmentally unfriendly

- Some vehicles cannot be replaced with electric. Fire, police, street sweepers, snow plows
- batteries have terrible impact on environment. Tell the truth. +we don't have enough power on grid
- This will happen organically. There is no need for the city to worry about this.
- EV is not environmentally friendly when fully analyzed for raw material inputs + outsourcing emission
- Ev should be a choice. EV more expensive that gasoline cars. EV batteries environmentally unfriendly
- EV's are not "cleaner" (life cycle.) Hybrids add efficiencies. EV=expensive toy. Battery expense
- Increase availability of EV chargers on the island, advocate for tax rebates/relief for EVs
- Incentives for private homes. Mandates again hit the pocketbook
- Need to have better (faster) charging stations. Mitigate or balance need for lithium for batteries.
- Options to single vehicle transport are key, including support for remote work and local economy.
- What does "transition" mean? What is the additional cost including charging.
- require EV charging stations in new buildings
- Let citizens and businesses decide for themselves.
- Force everyone to buy \$100,000 vehicles then only us rich people will be on the roads.
- No more taxes.
- How these batteries are made and how they will have to get rid of some day is just as bad 4 environment
- This critical. To reduce carbon emissions, we have to stop burning gasoline in cars

Do you have any additional feedback related to the other strategies under consideration? (n=54)

- Invest the time and resources to report GHG emissions annually. Stop telling us it cannot be done.
- Given the political climate, federal advocacy is not an efficient use of local resources.
- Light rail parking on M.I. should be restricted to Island residents.
- We are an island full of trees and nature. Climate change should be the lowest of our priorities.
- No more high density housing on MI, period. No more light rail parking -increases off

island traffic

- Reduce our energy use for example by limiting building size. Mercer Island needs to be a leader.
- Electric public transportation is the most sustainable and there should be more options on island
- Costs/consequences/other alternatives and a comprehensive proposal???
- Look at the geological record, climate change is unstoppable. Please do not waste our tax dollars.
- Allocate more \$ to Natural Resources Program to promote forest health, env. ed., & planting budgets
- Implement a Parking Management Program to allow sharing of critical public parking.
- Yes: Add, to our wonderful existing Thrift Shop, a "Free Store" perhaps with the Farmers' Market
- City government should not prioritize advocating on federal issues, e.g., aviation fuel.
- Significantly more density should be permitted within 1/3+ mi. of the MI light rail station!!
- First/last mile solutions should only be done if they get lots of use. NO UBER VOUCHERS
- We should advocate for FEDERAL carbon tax to reduce bad side-effects of 1-state taxes
- We do not need to continue to support the climate industry. Let economics take its course
- How many of the City employees are taking public transit?
- Trees on my property are a PITA; elsewhere, fine. Clean fuel is oxymoron. Education has high ROI.
- City should consider climate impacts for any policy they lobby at state level (housing, transport.)
- Continue to strongly oppose KC dumping passengers from their buses at the light rail station.
- Keep/add to bike network thru downtown and connections along island
- Higher density in all the island; Aviation educ/advocacy OK but MI should focus on what it can do
- Should we institute a MI resident preference for P&R parking, a la boat launch?
- Resident stickers for light rail parking?
- all options not visible
- Enhance infrastructure for commuters along ICW accessible less than 1 mile from

any home on the Isla

- All within reason, please
- Put focus on things within reach. We dilute ability to succeed by trying to promote too many things.
- Get real.
- Air travel? Aviation efficiency? We don't have an airport on the island. Have you lost your minds
- Your job is to run a city. Your job is not to impose a political agenda on the city's residents.
- Expand tree planting on public rights of way. We need trees next to the streets. It's hot.
- light rail parking reserved for Island residents; only electric 1st/last mile vans
- don't support MI spend to advocate matters requiring national & international action
- We need more sidewalks so pedestrians feel safe walking to bus stops and businesses
- Trees are a real danger to people and homes on MI. Pioneer Park has too many dead trees risk tragedy
- The city needs to focus on its core functions and only after exceling in them start thinking on this
- Ideally all of Mercer Island (except freeway + garages near Link) would be a no-car zone.
- Expand parking for the ghost train! The buses are empty why are we even building a train?
- Plant more native vegetation on public and private places
- liberal green policies are the real existential threat. Do the opposite of everything Seattle does.
- Just educate folks on alternatives that are available. Most people don't know about any of this.
- The City should provide choices not mandates. Individuals should be allowed freedom to choose path
- Please be aware jets are cutting the east turn- adding noise and pollution already high at I-90.
- "sustainable" is purposefully (and transparently) vague for political unicorn chasing power.
- Bring more retail/restaurants to town center and advertise on bike path.
- Expand "park and ride" capacity and charge for parking beyond certain hours e.g. 4 or 6 hours.

- We must increase housing density to help address the housing affordability crisis.
- I oppose any zoning changes for this unknown CAP. That was never part of this plan.
- require retail parking lots to allow walk off to other businesses in area
- Please stick to running the city well and stay out of state/federal politics.
- How many City employees live on Mercer Island?
- No more taxes