

CITY OF KIRKLAND

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MEMORANDUM

To: Planning Commission

From: Jeremy McMahan, Deputy Director, Planning and Building

David Barnes, Senior Planner Scott Guter, Senior Planner

Date: March 29, 2021

Subject: Sustainability Master Plan Overview

Recommendation

Receive a staff presentation on the adopted <u>Sustainability Master Plan</u> (SMP) and begin a discussion on implementation of its actions as part of the 2021-2022 Planning Work Program.

Background Discussion

In December 2020, the City adopted its first Sustainability Master Plan (see Attachment 1), which was included in the 2019-2020 City Work Program. The preliminary scoping process and feedback from Council helped inform the content and format of the plan. The creation of a SMP was discussed in the Environment Element of the City's Comprehensive Plan and was intended to identify best practices that allow Kirkland's many sustainability strategies to be implemented and measured and, if needed, adjusted to achieve a livable and sustainable community.

Livability has been defined as a quality of life standard that is attached to a place and can encompass everything from aesthetics to the basic needs of living such as clean water, air, healthy food, affordable housing, education, employment opportunities, and well-functioning infrastructure. Sustainability means meeting our present needs while ensuring that future generations can meet theirs. To become a more sustainable city, we need to consider the long term and wide-ranging impacts of our actions and to more effectively coordinate our policies and programs to adapt to new situations. The three key areas of sustainability are:

- Ecological Sustainability: Ensure that natural systems and built structures
 protect plants and animals, create a healthy environment, and promote energy
 efficiency.
- Economic Sustainability: Ensure a strong economy that can support our community while not compromising the environment in which we live.
- Social Sustainability: Ensure that we provide a sense of community to our

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residents and support basic health and human service needs.

Resilience, as an aspect of sustainability, relates to how a community can adapt to an ever-changing environment in a socially responsible manner.

Because sustainability is a major principle and governing value in the Comprehensive Plan, sustainability concerns and objectives are integrated into many major City policy and functional plans, including: The Urban Forestry Strategic Plan, Stormwater Master Plan, Transportation Master Plan, Natural Resource Management Plan, Surface Water Master Plan, and Climate Protection Action Plan. In addition, the City has successfully accomplished many sustainability-focused projects over the last several years, including: LEED certification of the Kirkland Justice Center, incorporation of high building performance building standards when properties are upzones (i.e. - Kirkland Urban, Kingsgate P&R, Residential Suites), several Solarize Kirkland campaigns, the transition of the City's fleet to more fuel efficient vehicles, the installation of solar panels on City facilities, and implementation of a robust transportation demand management program for City staff.

However, prior to adoption of the SMP, limited coordination had been undertaken of the City's many sustainability initiatives. Even though all City departments/divisions are engaged in robust sustainability efforts, ranging from ensuring that government facilities operate with reduced energy inputs (Facilities); promoting green infrastructure (Public Works); using integrated pest management techniques in open space areas (Parks and Community Services); using technology to ensure the City functions more efficiently and intelligently (IT); to undertaking planning efforts to accommodate a growing population near transit hubs (Planning & Building); such individual sustainability efforts sometimes operate in a vacuum. In addition, because there are so many disparate sustainability documents and programs, some are not utilized or implemented to their full potential.

Guiding Principles for Sustainability Master Plan

Based on the fact that the City already had many aspirational goals for sustainability, following are the key ideas and potential guiding principles that helped inform the development of the SMP. These were developed by staff based on feedback from the community and a review of the City's existing sustainability programs:

- The Master Plan should be informed by meaningful and broad-based public outreach that encompasses diverse members of the community, ranging from residents, to business owners, to environmental groups, and the development community.
- The Master Plan should encompass both government and community operations.
- Instead of creating new aspirational sustainability goals, the Master Plan should more effectively coordinate and integrate the ones we already have and seek to reduce redundancy in our various sustainability efforts.

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- The Master Plan should be a concise, graphically-oriented, usable document, that can be a useful handbook for both City staff and the community to guide our sustainability efforts.
- The Master Plan should include a strong implementation strategy/program so that the plan doesn't languish on a bookshelf.

Implementation of the Sustainability Master Plan

The implementation section of the SMP (see Attachment 1, pages 73-74) identifies potential actions from the focus areas of the plan that could be undertaken to help achieve the goals of the SMP. This format rates each of the actions in the plan using a sustainable decision-making matrix (see Attachment 1, pages 95-98) and provides a score for each action out of a potential 90 points. The implementation matrix (see Attachment 1, pages 75-92) also identifies the following information:

- Time frame to begin working on an action (0-2, 3-6 or 7-10 years)
- Lead City department
- Community partners
- If the action is considered a low, medium or high lift
- If the cost to implement is none, low, moderate or high
- Known impact to business/development (none, potential or direct)

Adoption of High Performance Building standards has been identified as a work item on the 2021-2022 Planning Work Program. This work item was established as one action that Planning staff could take to begin implementing the SMP.

Within the SMP there are three elements in the Building and Infrastructure focus area which are applicable to the creation of code amendments that could help establish High Performance Building standards for new and existing buildings and promote them both in and outside of buildings (see Attachment 1, page 19).

The first element is titled New Buildings and Infrastructure (see Attachment 1, pages 20-21) and, as the title suggests, it describes actions that could be considered to make new buildings such as single-family, duplex, multi-family and commercial more energy efficient - even going to the extent of incentivizing the construction of net-zero energy (NZE) structures. NZE buildings are energy efficient and produces as much energy as the building uses on an annual basis. The energy production is usually provided by solar panels on the structure or somewhere on the subject property.

The second element is titled Existing Buildings (see Attachment 1, page 22). This element describes the opportunity to make many of Kirkland's existing buildings more energy efficient. This is particularly relevant because 70% of the buildings constructed in Kirkland were built prior to 1986, which is when energy codes became more stringent.

The third element is titled Water Efficiency (see Attachment 1, page 23) and it talks about preserving our precious water supply. In addition to clean water for drinking,

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potable water is also used to flush toilets, for clothes washing, watering plants and other water features. It cannot be assumed we will always have ready access to clean drinking water, and this element seeks to ensure we maximize our water supply by using less of it. It does this by setting goals to reduce water used in buildings and outside of the buildings and prevent wastage. Reducing water use can be done in both new and existing buildings and is directly associated with high performance buildings.

Potential paths to pursuing higher performing buildings are numerous and there are many examples of cities that have pursued requirements, incentives, and a combination of both. Locally, the cities of Seattle and Shoreline have done a good job of incentivizing and in some instances requiring higher performing buildings as part of transit and light rail station area planning. Kirkland already has incentive programs such as expedited review for detached dwelling units, and there are other building types, such as multi-family, commercial and mixed use that could be designed and constructed in accordance with high performance building standards if additional incentives are provided. Kirkland also has regulatory programs, where green building standards and transportation management requirements are often imposed as part of upzoning properties as a means of mitigating impacts specific impacts associated with increased land use intensity.

Next Steps

Staff will return to a future Planning Commission meeting with a preliminary scope to begin working through some options for consideration in pursuing high performance building standards.

Questions for Planning Commission

- Do you have questions about the implementation process of the SMP or any other questions about this plan?
- Does the Commission have any suggested items to study in relation to high performance building standards or other considerations?

Attachments:

1. Sustainability Master Plan



SUSTAINABILITY MASTER PLAN

Adopted December 8, 2020



ADOPTED:

Resolution R-5457

Acknowledgments

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Puget Sound Energy

The City of Kirkland would like to thank and recognize the efforts of all community groups and community members who gave their time and energy to bring this plan to life.

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Sustainability Master Plan Themed Resident Engagement Report











EXECUTIVE SUMMARY

The primary purpose of the City of Kirkland's Sustainability Master Plan (SMP) can be found in the definition of the word "sustainability", which is about meeting the needs of the present without compromising the ability of future generations to meet their needs. The major needs of the community are cleaner air and water, healthier food to eat, expanding housing options that allow people of all economic means to live here, and furthering a more equitable and socially just city that is welcoming and inclusive of all people. The creation of the SMP is the fulfillment of a 2019-2020 Council work plan goal, which was derived from the Environment Element of Kirkland's Comprehensive Plan and builds on Kirkland's progressive environmental heritage.

Additionally, the SMP seeks to coordinate the many existing City master plans, policies, programs and actions that encompass environmental issues. The SMP helps the community articulate where we are now, where we should be, and establishes goals and implementable actions that put the City on a clear path to achieve sustainability for future generations to come.

A Plan Informed by the Community

Extensive outreach was performed in the community and with City staff to learn what we should be focused on to create a more sustainable Kirkland and the action steps that we could take to achieve this goal. Staff utilized the Themed Resident Engagement Kirkland (TREK) methodology and, with the assistance of the City Manager's Office, hosted two major events, conducted nine focus groups, and published an online survey. All

of these provided for robust public participation in the creation of the SMP.

The second major outreach event was a Sustainability Summit held as part of the City's annual City Hall for All event. Conducted in a similar style as the Sustainability Forum, this event focused on showing the community what staff had done with the information that was provided at the Sustainability Forum and small focus group outreach. Notably, staff was able to also share what actions the City already undertakes to further sustainability in Kirkland and the overall region. The City Hall for All event also included a Sustainability Fair in the Peter



Residents provided input on community environmental goals at the Sustainability Summit

Kirk Room, where community members could learn what actions they could take to reduce their impacts on the environment.

After these major outreach events, staff continued to work with a group of local community members that are also involved in environmental issues and in conjunction with groups such as the Sierra Club and People for Climate Action - Kirkland. This group of committed community members served as a sounding board for many good ideas generated by the community and contributed immensely to the development of this plan.

Sustainability Master Plan Key Recommendations

The plan is divided into eight focus areas. The following list of recommendations highlights the ideas that garnered the most support and excitement in the community:

The Energy Supply and Emissions

It is imperative that the energy the community uses is renewable and consistently gets cleaner until it is free from all pollutants. This can be achieved by sourcing electricity that is not produced by combustion of fossil fuels. On a global scale, this conversion should be done to the maximum extent possible by 2030 to avoid the worst impact from Climate Change as the world works towards achieving zero community greenhouse gas (GHG) emissions.

- Secure carbon-free electricity for the community
- Reduce vehicle miles traveled

Reduce the use of natural gas in buildings and convert existing systems to clean electric

Buildings and Infrastructure

Buildings and related infrastructure not only use a great deal of natural and human made materials, but their construction and operation are responsible for over one third of the community's GHG emissions. Since water is a precious and essential resource, we should ensure we don't use more than required as it is also being impacted by climate change.

- Incentivize construction of high-performing, low energy use zero-emission structures
- Retrofit existing buildings to reduce energy use
- Increase water efficiency in all buildings and infrastructure

Land Use and Transportation

Transportation alone accounts for about half of Kirkland's community greenhouse gas emissions. Efficient land use and transportation patterns can be optimized to use the land we have more efficiently, and to help the community improve air quality, reduce congestion by driving less, and utilize many cleaner transportation options such as biking, walking, transit use and carpooling.

- Employ Smart Growth principles in all City planning practices and codes
- Reduce the average amount each person drives by
 Grow the annual number of weekday transit riders 20% by 2030 and 50% by 2050
- Ensure that people of all ages and abilities can comfortably get around by walking or bicycling
 - by 10% each year

Matural Environment and Ecosystems

Air, water, land, plants and animals and the entire ecosystem that supports them are vital to human health and contribute immensely to the community's quality of life.

- Protect and enhance the water quality of Kirkland's streams, lakes and wetlands
- With the community's help, restore at least 500 acres of City-owned natural areas and open space park lands by 2035
- Eliminate the discretionary use of synthetic pesticides in parks by 2025
- Make sure that all residents can walk to a park or open space
- Meet the overall goal of citywide 40% tree canopy cover goal by 2026
- Manage Kirkland's urban forest resource for optimal health, climate resiliency and social equity

Sustainable Material Management

Reducing consumption and waste by reusing materials and fixing items instead of replacing or discarding them helps us transition to a system where everything is reused or recycled.

- Achieve zero waste by 2030
- Compost all food and yard waste

- Reuse material and recycle the rest
- Support product stewardship

Sustainable Governance

Responsible governance helps foster decisions that are good for the environment, social equity, and the economy.

- Integrate sustainability into every major decision the City makes
- Coordinate sustainability programs and policies across all City departments
- Ensure processes for public participation are fair, accessible, and inclusive
- · Build community resiliency
- · Maintain the City's responsible fiscal practices

Sustainable Business

Local businesses, both small and large, contribute extensively to the livelihood of the community and enhance Kirkland's sense of place. The city can assist businesses to become more sustainable and help rebuild the local economy through local and regional partnerships.

- Provide personalized environmental technical support to businesses
- Develop a diversified, equitable and resilient local green economy

Mealthy Community

Communities that have access to the necessities of life such as food, water, housing, jobs and opportunities are happier and healthier. It is important for all members of the community to feel they belong and that their city is equitable and socially just.

- Double the number of P-Patches or other community gardens by 2025, and again by 2030
- Reduce how much potable water each person in Kirkland uses by 10% by 2025 and 20% by 2030
- Help refugees and immigrants, people of color and economically struggling residents access the resources they need to thrive
- Build a community that helps young people become engaged, competent and responsible members of the community
- Make Kirkland a safe, inclusive, and welcoming place for all people
- Expand housing options for all income levels
- Provide more recreation facilities

Putting the Plan into Action

Many of the Sustainability Master Plan's goals have time horizons of approximately ten years and there are others that will take longer to achieve. It is therefore essential that the actions in this plan are carefully monitored and measured and progress updates are provided to the Council and the community annually. Minor updates may be need when technology and new legislation occur. A major update to the plan will occur every five years. The progress reports and updates to the Plan will help ensure that City operations and the community are working together in partnership towards a truly sustainable future for all.











INTRODUCTION TO PLAN

The Sustainability Master Plan is not the first plan that the City has created that addresses environmental issues in Kirkland. The Natural Resources Management Plan was adopted in 2002 and many other plans since then have touched on issues such as climate, stormwater, transportation and housing which are inextricably connected to sustainability. This plan is different from all the previously adopted City plans because it pulls together these broad areas into one plan.

Goals are organized by **focus areas**, which are broken down into manageable, bite-sized pieces called **elements**. The elements represent distinct, yet related pieces of the focus areas and establish goals and actions for each element. The goals are meant to be measurable so that the progress of each prioritized action can be demonstrated and documented. This allows the City and the community to be held accountable for the success of the goal achievement and the flexibility to change the actions, if the desired results are not reached. The elements, goals and actions in the focus area of the plan are not easy to achieve. They will take diligence, coordination and prioritization of funding and in many cases direct action from the community.

The **policy section** is meant to help push the boundaries of current City policies and demonstrate leadership among other cities and the region. They are bold, aspirational policies that can be considered for adoption as they are written. This section can serve to challenge our current policies and push the City and the community even closer to sustainability.

The **implementation section** of this plan is intended to help decision-makers prioritize the completion and funding of identified actions. The implementation matrix is a master matrix of all potential actions that could be implemented. They are optimized into focus areas and have been evaluated by City staff and provided an overall weighted score to help decision makers prioritize which actions to take first.

To integrate **sustainable decision-making** into the City's processes, the plan introduces a new tool called the sustainable decision-making matrix (SDMM). The SDMM is a weighted decision-making tool that helps all City departments make more informed decision on projects, programs, policies and actions in all City operations and is intended to institutionalize sustainability throughout the organization.











FOCUS AREAS

The eight focus areas organizing the City's environmental goals are broad in nature but represent some of the most important aspects of sustainability.

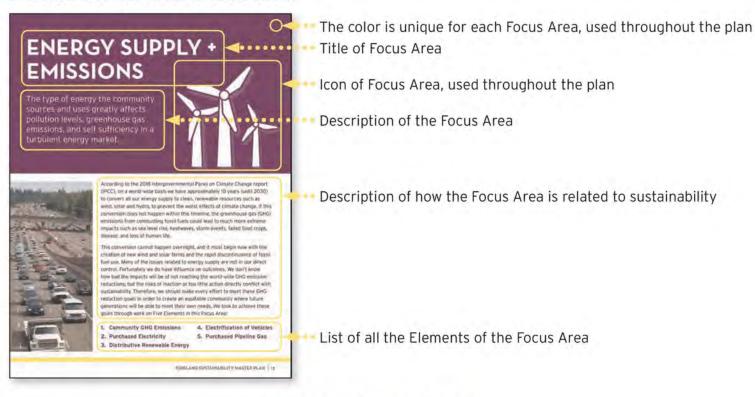
Each focus area is further broken down into elements that define specific goals. Each element is described, and its current status explained, which provides context to both the user and reader.

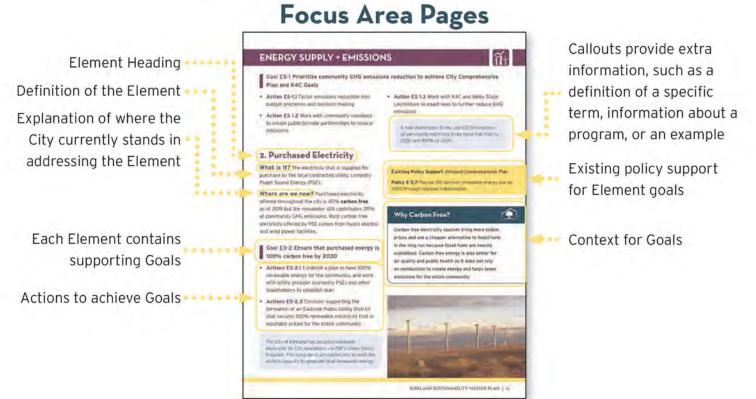
In addition, each element establishes measurable goals, and provides actions designed to achieve the goals. Policy citations show how the City's existing policies support this plan, and callouts of actions provide examples of what the City is currently doing to further the goals of the plan.

Guide to the Focus Area Chapters

This plan is designed to be intuitive to read and is meant to educate the reader not only on what the City plans on doing to address sustainability in the future, but also what the city has done in the past, and why it has chosen to address sustainability in these ways.

Focus Area Introduction





The type of energy the community sources and uses greatly affects pollution levels, greenhouse gas emissions, and self sufficiency in a turbulent energy market.





According to the 2018 Intergovernmental Panel on Climate Change report (IPCC), on a world-wide basis we have approximately 10 years (until 2030) to convert all our energy supply to clean, renewable resources such as wind, solar and hydro, to prevent the worst effects of climate change. If this conversion does not happen within this timeline, the greenhouse gas (GHG) emissions from combusting fossil fuels could lead to much more extreme impacts such as sea level rise, heatwaves, storm events, failed food crops, disease, and loss of human life.

This conversion cannot happen overnight, and it must begin now with the creation of new wind and solar farms and the rapid discontinuance of fossil fuel use. Many of the issues related to energy supply are not in our direct control. Fortunately we do have influence on outcomes. We don't know how bad the impacts will be of not reaching the world-wide GHG emission reductions; but the risks of inaction or too little action directly conflict with sustainability. Therefore, we should make every effort to meet these GHG reduction goals in order to create an equitable community where future generations will be able to meet their own needs. We look to achieve these goals through work on Five Elements in this Focus Area:

- 1. Community GHG Emissions
- 2. Purchased Electricity
- 3. Distributive Renewable Energy
- 4. Electrification of Vehicles
- 5. Purchased Pipeline Gas

ENERGY SUPPLY & EMISSIONS FOCUS AREA ELEMENTS

1. Community GHG Emissions

What is it? Community Greenhouse Gas (GHG)
Emissions are the result of combusting fossil fuels
such as gasoline, diesel, coal, and pipeline gas (also
known as natural gas). In order to reduce carbon
emissions to reach goal levels it will be important to
switch to carbon-free electricity, reduce use of gas in
our homes and businesses and reduce the use of gaspowered vehicles.

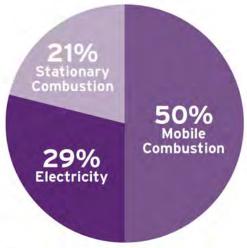


Figure 1. 2017 Kirkland community emissions breakdown by source

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-5.1: Achieve the City's greenhouse gas emission reductions as compared to a 2007 baseline:

- 25 percent by 2020
- 50 percent by 2030
- 80 percent by 2050

Where are we now? As of 2017, community GHG emissions were 640,900 MTCO2e (metric tons of carbon dioxide equivalent) a year, which represents a reduction of 22 percent from the 2007 baseline. These emissions are associated with three different sources as follows:

- 50% or 329,000 MTCO2e from Mobile Combustion: Emissions from vehicles traveling in and through Kirkland (gas and diesel).
- 21% or 138,000 MTCO2e from Stationary Combustion: Emissions from natural gas used for heat and other gas appliances.
- 29% or 188,000 MTCO2e from Electricity: Emissions from energy used for buildings and infrastructure such as streetlights, signals, and pump station.

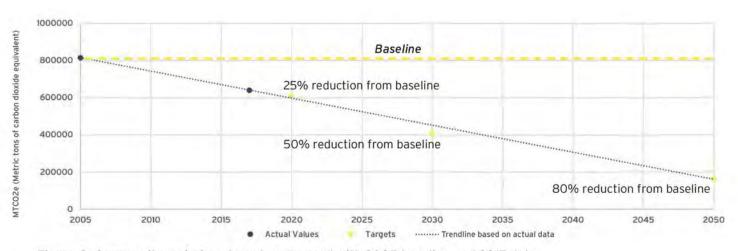


Figure 2. Community emissions targets compared with 2005 baseline and 2017 data.



Goal ES-1 Prioritize community GHG emissions reduction to achieve City Comprehensive Plan and K4C Goals

- Action ES-1.1 Factor emissions reduction into budget processes and decision making.
- Action ES 1.2 Work with community members to create public/private partnerships to reduce emissions.
- Action ES 1.3 Work with King County-Cities Climate Collaboration (K4C) and lobby State

2. Purchased Electricity

What is it? The electricity that is supplied for purchase by the local contracted utility, currently Puget Sound Energy (PSE).

Where are we now? Purchased electricity offered throughout the city is 40% carbon-free as of 2019 but still contributes 29% of community GHG emissions. Most carbon-free electricity offered by PSE comes from hydroelectric and wind power facilities. The City has secured renewable electricity for City operations via PSE's Green Direct Program.

Goal ES-2 Ensure that purchased energy is 100% carbon-free by 2030

Actions ES-2.1 Establish a plan to have 100% renewable energy for the community, and work with utility provider (currently PSE) and other stakeholders to establish plan.

Legislature to enact laws to further reduce GHG emissions.

- Action ES 1.4 Update Kirkland comprehensive plan climate goals regularly to be consistent with updated state and regional goals.
- Action ES 1.5 Support state or regional clean fuel standard.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-5.7: Pursue 100 percent renewable energy use by 2050 through regional collaboration

Why Carbon-Free?



Carbon-free electricity sources bring more stable prices and are a cheaper alternative to fossil fuels in the long run because fossil fuels are heavily subsidized. Carbonfree energy is better for air quality and public health as it does not rely on combustion to create energy and helps lower emissions for the entire community.

 Actions ES-2.2 In conjunction with K4C, ensure that PSE fulfills the State requirements in the Clean Energy Transformation Act. Through engagement with PSE's Clean Energy Implementation process, support projects that enable PSE's ability to meet CETA goals faster.





3. Distributive Renewable Energy

What is it? Solar panel systems that are designed to feed directly into the electrical energy grid.

Where are we now? There are currently no city programs to encourage community or individual solar installations. Kirkland's two Solarize Kirkland campaigns resulted in 291 customers with individual solar installations generating a total of 3 Megawatts (MW) of power each year. There are no community solar installations in the City of Kirkland.

Goal ES-3 Add an additional 10 MW of combined individual and community distributive solar by 2030

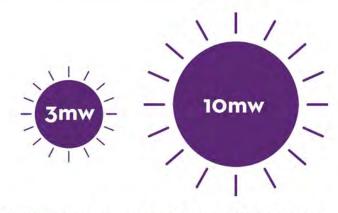
- **Action ES-3.1** In cooperation with environmental groups and solar installers, develop a marketing program to Kirkland residents and businesses to encourage installation of solar systems on or at their property.
- Action ES-3.2 Work with King County and other members of the K4C to establish a regionwide program for successful implementation of community solar. Program will include a focus on residents and those in low-and moderate-income housing.
- Action ES-3.3 Consider revisions to remove barriers and provide incentives for solar in land use regulations.
- Action ES-3.4 Support innovative financing mechanisms for distributed energy improvements.

- · Individual Solar Installations are owned by a single entity or business and installed on a private building
- Community Solar Installations are owned by members of the community and typically installed on a public building

Why Community Solar?



Not all homes are suitable for solar power, and renters may also be interested in choosing clean energy. Community solar installations allow people who cannot install their own arrays or who can not afford a full array to purchase a share in a larger solar array.



10MW of solar energy could power 1,000 homes







4. Electrification of Vehicles

What is it? Reduce use of fossil fuels and reduce GHG emissions from mobile combustion by providing the required infrastructure, and expanding use of electric vehicles and charging stations across the City, including at major activity centers.

Where are we now? Mobile combustion makes up 50% of Kirkland's annual Community GHG emissions with a total output of 329,000 MTCO2e as of 2017. There is no policy or code that requires public or private electric charging stations to be built with new private development, although the City has installed several electric vehicle chargers in the Central Business District.

Goal ES-4 Reduce GHG emissions from vehicles 25% by 2030

- Action ES-4.1 Support engagement and partnerships with utilities and organizations to develop regional pilots to incentivize the transition to electric vehicle ownership for all sectors, through development of infrastructure, education, grants and incentives.
- Action ES-4.2 Enact local code and programs to create incentives or require electric vehicle charging station retrofits in existing buildings or on development sites.
- Action ES-4.3 Require EV charging stations with all new developments or redevelopment projects at a minimum ratio of one EV charger for 10% of all required parking stalls, and require 20% of required parking stalls to be charger-ready for more EV chargers in the future.
- Action ES-4.4 Require all new residential (singlefamily, duplex and townhomes) with offstreet parking to provide one EV-ready electrical outlet

Washington State Code requires certain new construction to be built with electric charging station capability at a ratio of 10% of all required parking stalls.



Electric vehicle charging stations at the Marina Parking Lot in downtown Kirkland.

City of Seattle requires all new homes with off-street parking to be "charger-ready" - wired to support a Level 2 EV charger. Twenty percent of multifamily development parking spaces must be "EV-ready."

per unit and require all multi-family developments to provide EV-ready electrical outlets for 20% of required parking spaces. The electrical outlets shall provide at least one 208/240 volt branched circuit that is ready to connect to an electric vehicle.

- Action ES-4.5 Support state and regional requirements for electric delivery vehicles and Transportation Network Corporations (TNC's).
- Action ES-4.6 Develop a policy to establish a revenue source to support electrification of transportation, such as building additional charging stations at city facilities and parks.



5. Purchased Pipeline Gas

What is it? Pipeline gas (also known as natural gas) that is supplied for purchase by the local contracted utility, currently Puget Sound Energy (PSE). Many communities are targeting the reduction of pipeline gas to both reduce GHG emissions and to address safety concerns for human health from indoor exposure to pipeline gas, pipeline leaks and explosions, and environmental impacts associated with pipeline gas extraction.

Where are we now? Pipeline gas makes up 21% of Community GHG Emissions and contributes 138,000 MTCO2e annually. There are 23,000 individual gas customers within the City of Kirkland, and 95% of these customers are residential homes which use almost 75% of all pipeline gas in the city.

Goal ES-5 Reduce emissions of pipeline gas and other fossil fuels from all buildings by 20% by 2025 and 50% by 2030, as compared to a 2017 baseline

- Action ES-5.1 Establish a public/private partnership to educate gas account users about how to reduce gas usage.
- Action ES-5.2 Establish a public/private partnership or incentive program to convert existing gas heating systems and other appliances to energy-efficient electric systems.
- Action ES-5.3 Explore requiring or incentivizing all new construction to be built with only electric systems.

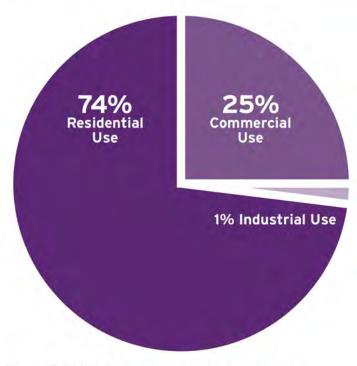
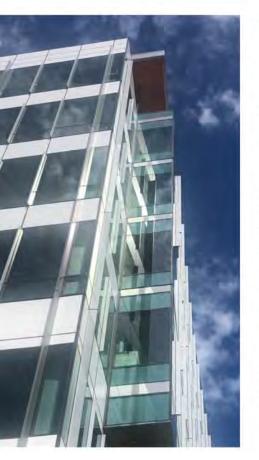


Figure 3. Kirkland pipeline gas usage by user type



All building types and infrastructure within the City have the potential to use much less energy and resources than current codes require if constructed with sustainable design or retrofitted





Existing and new buildings account for 50% of the energy used citywide and the GHG emissions from this source accounts for approximately 206,000 MTCO2e. The Washington State Energy Code regulates the energyefficiency of all new structures, but existing buildings that have been built under older codes represent a tremendous opportunity to not only reduce energy use and save users money, but also reduce related GHG emissions.

To achieve the City's ambitious reduction goals, the buildings that house people and business in Kirkland must be as efficient as possible to reduce the amount of renewable energy capacity that will need to be created to serve the community's energy needs. If existing demand for energy is not reduced, it will take longer to achieve emission reduction goals while lowerincome households will continue to be burdened by higher energy costs. We look to achieve these goals through work on **Three Elements** of this Focus Area:

- 1. New Construction + Development
- 2. Existing Buildings
- 3. Water Efficiency

BUILDINGS + INFRASTRUCTURE FOCUS AREA ELEMENTS



1. New Construction + Development

What is it? The design and construction of new development.

Where are we now? There is no requirement for Net Zero Energy or High-Performing Green Building design for new development. Kirkland's Green Building Program includes incentives for Single Family Development that meets certain criteria.

Over 300 energy efficient homes have been built in Kirkland through the City's Green Building Program since its inception in 2008.

There is no equivalent program for commercial or multifamily development but some large-scale projects may be required to provide an energy efficiency plan on a case-by-case basis. There are many programs to certify a building as a high-performing green building such as Leadership in Energy and Environmental Design (LEED), Built Green, Passive House and the International Living Future's Living Building Challenge.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-4.1: Expand City programs that promote sustainable building certifications and require them when appropriate

Policy E-4.6: Work with regional partners such as Regional Code Collaborative (RCC) to build on the Washington State Energy Code, leading the way to "netzero carbon" buildings through innovation in local codes, ordinances, and related partnerships



The Arete multifamily development includes Eco Flats that target Built Green and LEED Platinum standards.

A modern duplex in Kirkland.





Goal BI-1 Certify all new construction as High-Performing Green Buildings by 2025

- Action BI-1.1 Restructure City of Kirkland Priority Green Building program to incentivize net-zeroenergy buildings in single family, commercial and multi-family buildings.
- Action BI-1.2 Create public/private partnerships to encourage and educate builders to create energy-efficient structures.

High Performing Green Buildings are those which deliver a relatively higher level of energy-efficiency performance than that required by building codes or other regulations.

Goal BI-2 Increase the resilience of the built environment by requiring 50% of new construction to be Certified Net-Zero-Energy by 2025 and 100% of new construction to be certified Net-Zero-Energy by 2030

- Action BI-2.1 Continue to build market demand for net-zero-energy buildings through incentives, education, demonstration projects, partnerships and recognition.
- Action BI-2.2 Consider requirements and incentives for buildings in business districts to be built to high-performing building standards.
- Action BI-2.3 Encourage and incentivize buildings that are part of Council-approved Master Plans/Development Agreements/Planned Unit Developments to be high-performing green buildings that are charger-ready.

A **Net-Zero-Energy** building is a building with zero net energy consumption, meaning the total amount of energy used by the building on an annual basis is equal to the amount of renewable energy created on the site or by other renewable energy sources.

Why Net Zero Development?



The value of Net Zero development is multi-faceted. Net Zero buildings produce as much renewable energy as they consume and therefore do not increase pollution in the community, reducing health impacts. This kind of development is designed to very high energy efficiency standards, and costs less to operate. By incentivizing more net zero development we ensure future generations can be energy independent.



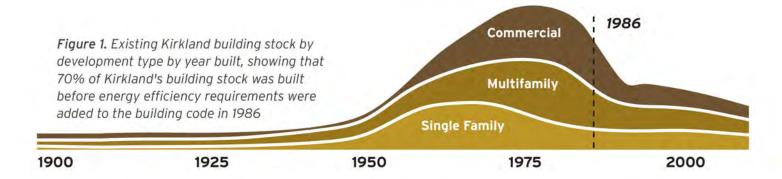
Kirkland's Google campus was built to be resource efficient, targeting LEED Platinum standards.



2. Existing Buildings

What is it? Any existing building such as a commercial building, residential structure or single-family home has great potential to become more energy efficient because energy code requirements are more stringent now than in the past.

Where are we now? 70% of the building stock in Kirkland was built before 1986. The Washington State Building Code began taking energy efficiency into consideration in 1986. These older buildings present a big opportunity to increase energy efficiency and reduce energy bills.



Goal BI-3 Achieve the K4C Goal to reduce energy use in all existing buildings by 25% by 2030 and 45% by 2050 compared to a 2017 baseline

- Action BI-3.1 Create an incentive program to share energy efficiency savings with building owners and tenants in multi-family housing.
- Action BI-3.2 Cooperate with K4C to adopt State required energy performance benchmarking and disclosure ordinances for an annual reporting program for commercial buildings; and explore options for multifamily buildings.
- Action BI-3.3 Work with K4C to implement C-PACER legislation approved by the State Legislature.

C-PACER or Commercial-Property Assessed Clean Energy Resilience legislation will provide owners with a means to access less expensive capital, over a longer term, with the opportunity for costs to be offset from energy savings.

- Action BI-3.4 Work with K4C to implement energy performance ratings for all homes at time of sale so that prospective buyers can make informed decisions about energy costs and carbon emissions.
- Action BI-3.5 Work with K4C, energy efficiency contractors and interested parties to establish a program to assist homeowners in identifying and selecting appropriate and cost-effective energy improvements.

The City of Portland requires those selling singlefamily homes to disclose a Home Energy Score with any listing or public posting about the house.



3. Water Efficiency

What is it? Increasing water efficiency means reducing water wastage by measuring the amount of water required for a purpose compared with the water actually used.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-4.7: Work with regional partners to pursue 100 percent use of a combination of reclaimed, harvested, grey and black water for the community's needs.

Where are we now? According to the United States Environmental Protection Agency (EPA), water use in buildings accounts for over 70% of water use on a national basis and the average household uses more than 300 gallons per day. Water efficiency measures such as low flow fixtures and certified appliances help demonstrate that it is possible to use existing water resources, rather than develop new and more expensive sources.

Goal BI-4 Reduce water use in buildings by 10% by 2025 and 20% by 2030 as compared to a 2019 baseline

- Action BI-4.1 Create an incentive program to promote EPA's Water Sense fixtures or Energy Star appliances in new and existing structures utilizing a new or existing public/private partnership.
- Action BI-4.2 Revise the City's Green Building program to require greater water efficiency than required by green building certifications such as LEED, Built Green and Passive House.
- Action BI-4.3 Revise the Kirkland Municipal Code to require greater water efficiency outside of existing structures, such as for landscaping, water features, and public infrastructure.





Right Top: drought-tolerant landscaping.

Right: Kirkland Urban, in downtown Kirkland, opened its first phase in 2019, including retail, office, and multi-family uses.



How people travel and land is developed







A key issue in sustainability is the relationship between land use and transportation, as many historic transportation-related investments have fostered sprawling, auto-dominated environments. The transportation sector is one of the largest contributors to anthropogenic U.S. greenhouse gas (GHG) emissions and pollution. Transportation accounted for the largest portion (28%) of total U.S. GHG emissions in 2016. In Kirkland, vehicles account for 50% of the community's GHG emissions. Between 1990 and 2016, GHG emissions in the transportation sector increased more in absolute terms than any other sector (electricity generation, industry, agriculture, residential, or commercial).

Reducing vehicle emissions and other pollutants enhances public health, especially for vulnerable community members. One way to accomplish this is to reduce both the number and length of trips people take in automobiles, particularly single-occupancy trips. We look to achieve these goals through work on Four Elements of this Focus Area:

- 1. Smart Compact Growth
- 2. Active Transportation
- 3. Public Transportation
- 4. Shared Mobility

LAND USE & TRANSPORTATION FOCUS AREA ELEMENTS



1. Smart Compact Growth

What is it? Smart growth is an approach to development that encourages a mix of building types and uses, diverse housing and transportation options, development within existing neighborhoods, and community engagement.

Where are we now? Kirkland first adopted Smart Growth Planning Polices in the late 1980s and early 1990s. The City currently uses two strategies .to implement Smart Compact Growth: 10-Minute Neighborhoods and Transit-Oriented Development.

Goal LT-1 Employ Smart Growth principles in all City planning practices

 Action LT-1.1 Engage in a Smart Growth policy and Smart Growth zoning code scrub.

Existing Policy Support: Kirkland Comprehensive Plan

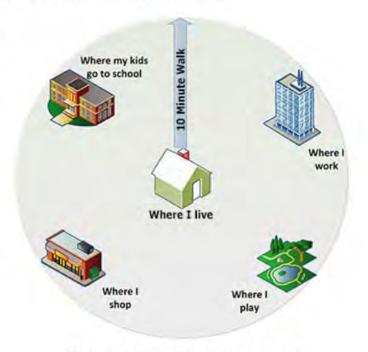
Policy LU-3.1: Create and maintain neighborhoods that allow residents and employees to walk or bicycle to places that meet their daily needs.

Walk Friendly Communities is a nationally recognized organization that rates walkability in cities based on a number of factors including planning polices, engineering, and education

10-minute Neighborhoods are walkable communities with two vital characteristics: Destinations and Accessibility. Basic needs are satisfied within a 10 minute walk, and the community can conveniently get to those destinations.

Goal LT-2 Increase access to existing 10-Minute Neighborhoods in Kirkland

- Action LT-2.1 Continue to work with multiple City departments to align new pedestrian connections with the 10-Minute Neighborhood concept.
- Action LT-2.2 Create public/private partnerships to educate the community on the benefits of 10-Minute Neighborhoods and smart growth.
- Action LT-2.3 Increase housing density along major transit corridors.
- Action LT-2.4 Support infill in neighborhoods encouraging a variety of needed businesses such as medical and professional offices.



Example of a 10-minute Neighborhood



Goal LT-3 Achieve the K4C goal of reducing driving per capita by 20% by 2030 and 50% by 2050, compared to 2017 levels

- Action LT-3.1 Partner with local businesses to subsidize programs to increase access to transit.
- Action LT-3.2 Create public-private partnerships and work with large employers to find creative transportation solutions for commuters.
- Action LT-3.3 For new development, increase bicycle parking requirements and require amenities for employees such as showers, lockers and secure storage.
- Action LT-3.4 Evaluate parking requirements to reduce parking minimums in areas well served by transit.
- Action LT-3.5 Remove parking minimums in 10minute neighborhoods.

Transit Oriented Development (TOD): a type of community development that includes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. TODs support the increased use of transit and reduce reliance on single-occupant vehicles.

Apartments at the South Kirkland Park and Ride make it easy for residents to take transit.





2. Active Transportation

What is it? Active Transportation refers to people walking and bicycling. Walking also includes using a wheelchair or other assistive device and bicycling includes using regular pedal bikes, electric assist bicycles (e-bikes), tricycles, or adaptive bicycles.

All types of walking or bicycling trips matter, including trips for recreation or to access another form of transportation, such as walking or bicycling to the bus.

Where are we now? As of 2020 the City of Kirkland is updating the Active Transportation Plan and is developing Safer Routes to School Action Plans. The City has also received a bronze rating from Walk Friendly Communities and from Bicycle Friendly Communities.

97% of school walk routes along major roads have sidewalks on at least one side of the street. Actions LT-4.4 and 4.5 are part of the implementation of the Safer Routes to Schools Action Plan.

Existing Plan Support: Kirkland Transportation Master Plan

Policy T-1.4: Prioritize, design and construct pedestrian facilities in a manner that supports the pedestrian goal and other goals in the TMP.

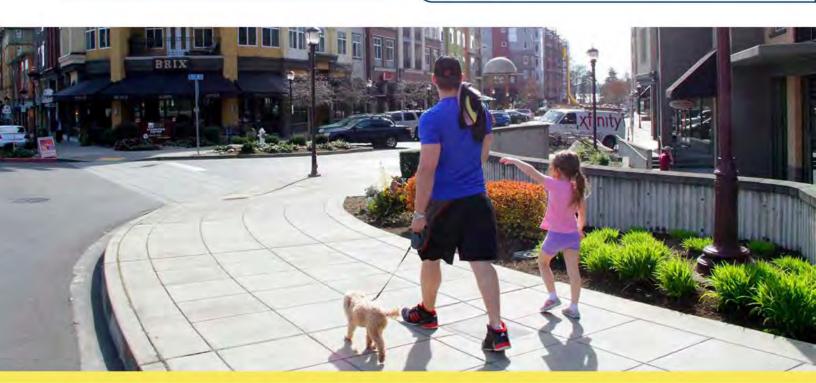
Policy T-2.4: Implement elements and programs that make cycling easier.

Active Transportation Plan



Kirkland maintains an Active Transportation Plan which guides the City in building new Pedestrian and Bicycle Infrastructure. Between 2009 and 2019 Kirkland added over 15,000 linear feet of new sidewalk. Almost 70% of the 2015 planned bike lane network is complete and the City has begun work on expanding the Neighborhood Greenways network.

The City prioritizes new infrastructure that separates active transportation from motor vehicles and is designed to feel comfortable for people of all ages and abilities.





Goal LT-4 Ensure that people of all ages and abilities can comfortably get to where they need to go by walking or bicycling

- Action LT-4.1 Coordinate with the Active
 Transportation Plan to align projects and priorities with the Sustainability Master Plan.
- Action LT-4.2 Strive to achieve a platinum status with Walk Friendly Communities or equivalent.
- Action LT-4.3 Strive to achieve a platinum status with Bicycle Friendly Communities or equivalent.
- Action LT-4.4 Coordinate with the school districts to increase the number of students who receive walk and bike education.
- Action LT-4.5 Increase the number of students walking and biking, through implementation of the Safer Routes to Schools Plan.
- Action LT-4.6 Make it safe and easy to travel between neighborhoods, schools, business districts, parks and green spaces through implementation of the Active Transportation Plan, when adopted.
- Action LT-4.7 Prioritize walk and bike access to high frequency transit service.
- Action LT-4.8 Update markings for all bicycle lanes that are not protected, consistent with current standards.
- Action LT-4.9 Complete the Greenway network by 2030.
- Action LT-4.10 Develop criteria for alternative sidewalk configurations for safer pedestrian travel when traditional sidewalks are infeasible.

Bike boxes at intersections to protect cyclists by allowing them to move to the front of the queue during the red light cycle, giving them time to make it through the green light and making them more visible to cars. **Neighborhood Greenways** are well-connected lowspeed, low-volume neighborhood roadways that prioritize pedestrian and bicycle travel with traffic calming treatments and improved arterial crossings.

Protected Bike Lanes are an exclusive bicycle facility within or adjacent to the roadway but separated from motor vehicle traffic by a physical barrier or change in elevation.

Getting to Platinum...



The City has been recognized by two national organizations for its efforts in creating a safe environment for pedestrians and bicyclists. The Bicycle Friendly Community Program recognizes places, through a Bronze to Diamond designation rating, that meet certain standards for bicycling improvements through engineering, education, enforcement, evaluation and encouragement. Walk Friendly Communities rates walkability in cities based on factors including planning polices, engineering, and education.





3. Public Transit

What is it? Taking Transit includes taking local or regional buses and light rail but also includes special needs transportation services such as paratransit services for people with physical mobility constraints. Existing Policy Support: Kirkland Transportation Master Plan

Policy T-3.1: Plan and construct an environment supportive of frequent and reliable transit service in Kirkland.

Where are we now? Average weekday transit boardings represent an indicator of trends in transit ridership on Metro buses. A good measure for public transit ridership in Kirkland would be to maintain the annual average weekday ridership growth and compare it with King County Metro ridership growth. From 2017 to 2020, Kirkland had an average of 14.7% growth in its annual weekday ridership.

Goal LT-5 Grow annual average weekday transit ridership by 10% each year

- Action LT-5.1 Promote public transit use by offering incentives and providing a comprehensive transportation demand management (TDM) program that utilizes a variety of modes, serves diverse populations, and covers many geographic areas (funding is needed to support these actions).
- Action LT-5.2 Explore public/private partnerships for first mile and last mile strategies including bike share, scooter share, and automated shuttles.
- Action LT-5.3 Work with regional transit agencies to provide equitable and inclusive access to fare payment options.
- Action LT-5.4 Work with transit agencies on honing and increasing service to Kirkland in accordance with Metro Connects and Kirkland Transit Implementation Plan.

Transportation's Health Impacts



As identified by Centers for Disease Control and Prevention (CDC), transportation and public health are linked in several areas including:

Air pollution and associated respiratory and heart diseases. Increased availability of public transit can help decrease traffic congestion and vehicle miles traveled in automobiles. This decrease helps lower air pollution known to cause health problems. Locating facilities like schools and active transportation routes away from the most heavily trafficked roads may also help reduce exposure to air pollution.

Environmental justice/social equity. Highways have historically been built through low-income areas of cities without consideration of the vulnerable populations living there. Addressing the potential health effects of a proposed transportation project, plan, or policy before it is built or implemented can ensure that the health of residents is not compromised. Creating safe biking and walking access to key destinations helps residents get where they need to go regardless of income, age or ability.



4. Shared Mobility

What is it? Refers to the shared use of a vehicle, bicycle, or other transportation mode. It is a transportation strategy that allows users to access transportation services on an as-needed basis.

Where are we now? There are several existing shared mobility programs in Kirkland such as community van and community ride. Also, the Kirkland Green Trip program offers ride-matching platform and other tools to find, plan, and schedule a shared ride. These programs are created in partnership with King County Metro.

Goal LT-6 Promote current shared mobility programs and services

Action LT-6.1 Encourage carpooling and using shared mobility by providing incentives and ridematching tools and services.

Kirkland Green Trip is a one-stop resource to plan the most sustainable trips to and from work, school, and home with the goal of reducing environmental impacts caused by traffic, helping those who live and work in Kirkland thrive and earn incentives.

Goal LT-7 Establish new shared mobility options

- Action LT-7.1 Create partnerships with regional transit agencies and explore new public-private partnerships.
- Action LT-7.2 Provide innovative transit solutions along the Cross Kirkland Corridor and the connections from I-405 to downtown Kirkland.

Kirkland Community Van is a rideshare pilot program in partnership with King County Metro to provide community members with a new way to share a ride when bus service

can't meet their needs.







All critical areas such as streams, wetlands and Lake Washington, areas like parks and open space, and existing natural resources including air quality, surface water quality, tree canopy, open space and ecosystem biodiversity





A healthy, functioning natural environment is essential to life. We rely on wetlands to receive our excess water and cleanse it. Streams provide a place for plants and animals to exist in an urban environment, and support salmon, whose presence informs us about our water quality. The urban forest provides shade, processes our carbon dioxide, sequesters our carbon and cleans the air. Our parks and open spaces provide beauty and are places for all of us to enjoy and relax. The natural environment and the many benefits it provides must be protected and enhanced to maintain a sustainable community.

We look to achieve these goals through work on Four Elements of this Focus Area:

- 1. Sustainable Urban Waterways
- 2. Conservation + Stewardship
- 3. Access to Parks + Open Space
- 4. Sustainable Urban Forestry



NATURAL ENV. + ECOSYSTEMS **FOCUS AREA ELEMENTS**

1. Sustainable Urban Waterways

What is it? Sustainable urban waterways are fishable, swimmable and encompassed within healthy watersheds. These characteristics are achieved by improved water quality, reduced peak flows and restored fish passage and fish habitat.

Where are we now? Kirkland is compliant with the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater permit, which controls the impact of pollutants on our creeks and lakes. The City also developed the Surface Water Master Plan that combines permit requirements and additional efforts to support salmon recovery, flood reduction, and watershed restoration.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-1.9: Using a watershed-based approach, both locally and regionally, apply best available science in formulating regulations, incentives, and programs to maintain and improve the quality of Kirkland's water resources.

Existing Policy Support: Surface Water Master Plan

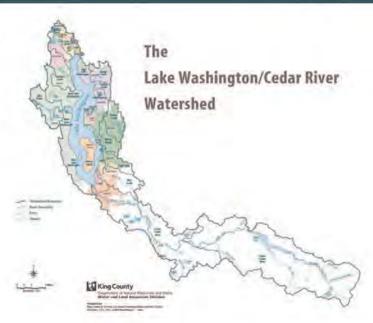
The Surface Water Master Plan outlines priorities and needs of surface water related work activities that take place in Kirkland.

A Watershed Perspective



A watershed is an area of land that drains to a particular water body. Most of Kirkland is within the Lake Washington watershed. That means Kirkland influences how clean and healthy Lake Washington is for humans and wildlife because rain carries pollution from wherever it falls. Other cities along the lake are also in the Lake Washington watershed, so it's vital to work together to protect the lake's water quality and watershed health. City of Kirkland actively partners with other agencies, including:

- Stormwater Action Monitoring (SAM)
- Stormwater Outreach for Regional Municipalities (STORM)
- King County Flood District
- King Conservation District
- The regional NPDES permit coordinators group
- Lake Washington Watershed Salmon Recovery Council





■ Goal EV-1 Protect and enhance the water quality of Kirkland's streams, lakes and wetlands

- Action EV-1.1 Continue NPDES permit compliance, including developing an interdisciplinary team to support the assessment of watersheds and prioritization of future protection or enhancement measures.
- Action EV-1.2 Proactively identify and reduce pollutants of concern in Kirkland's impaired streams and monitor progress.
- Action EV-1.3 Assess and prioritize watersheds and actions that will improve water quality. Build and apply a decision-making matrix for ecological and watershed activities. Incorporate public input into assessment and prioritization process. Ensure actions are equitably applied throughout the city.



Blue Heron finding refuge in a natural green space along Juanita Creek in Kirkland.

■ Goal EV-2 Protect and enhance Kirkland's watersheds and aquatic habitat conditions

- Action EV-2.1 Continue to fund projects to make culverts fish passable. Prioritize streams based on potential fish use, topography, flow, and habitat availability.
- Action EV-2.2 Develop action plans for stormwater retrofit and water quality management strategies. Ensure that actions are equitably applied throughout the city.
- Action EV-2.3 Actively involve the community in the protection of Kirkland's aquatic resources.
 Ensure that information and opportunities are accessible to the broader community.



A volunteer applies a marker to a storm drain, raising awareness that everything that goes down a storm drain flows untreated into Lake Washington.

Goal EV-3 Protect and maintain the City's surface water and stormwater infrastructure for optimal performance

- Action EV-3.1 Inspect and maintain public stormwater infrastructure including catch basins, pipes, ditches, and detention and retention facilities to protect water quality and prevent flooding.
- Action EV-3.2 Develop and implement a proactive approach to replace aging stormwater infrastructure that includes identification of critical system elements.



Goal EV-4 Reduce threats to public infrastructure or private property due to flooding

- Action EV-4.1 Evaluate stormwater infrastructure capacity through modeling and video inspection, and either clear observed debris and obstructions or develop projects to address capacity problems.
- Action EV-4.2 Construct flood reduction projects within 5 years of identification for problems that occur more frequently than every 10 years.
- Action EV-4.3 Review development proposals for both potential flood impacts to the project, and for downstream impacts from the project, and require mitigation of impacts as appropriate.

2. Conservation + Stewardship

What is it? Provide key ecosystem services and opportunities for residents to connect with nature throughout the City by restoring urban forests, creeks, wetlands, and other critical habitats.

Where are we now? As of 2019, more than 119 acres of City owned natural areas and open space park lands have been enrolled in a continuous cycle of restoration.

Existing Policy Support: Parks, Recreation & Open Space Plan

Policy 7.1: Natural Area Preservation. Preserve significant natural areas to meet outdoor recreation needs, provide opportunities for residents to connect with nature, and meet habitat protection needs.



Volunteers at a Green Kirkland Partnership event at Juanita Bay Park. Photo by Jim Hunt.

Current area in restoration 119 acres

2035 goal restoration area 500 acres

Over current total over 15 years



Goal EV-5 Engage the community in the restoration of at least 500 acres of City-owned natural areas and open space park lands by 2035

- Action EV-5.1 Recruit and train additional Stewards to lead volunteer habitat restoration events in parks and natural areas.
- Action EV-5.2 Grow the Green Kirkland Partnership volunteer force at a rate that meets or exceeds the rate of the City's annual population growth.
- Action EV-5.3 Contract a year-round Washington Conservation Corps (WCC) crew to work in critical areas (wetlands, streams, steep slopes) across all City parks, open spaces, and natural areas.

Goal EV-6 Eliminate the discretionary use (not required for the control of aggressive stinging insects or regulated noxious weeds) of synthetic pesticides in parks by 2025

- Action EV-6.1 Establish a cross-department Integrated Pest Management (IPM) team to review and update City IPM policies and practices, prioritize treatment locations, and ensure maintenance activities take place as needed in previously treated locations.
- Action EV-6.2 Utilize the ArcCollector application to map and track the treatment of noxious weeds requiring treatment across all City owned lands.

Integrated Pest Management uses a combination of strategies to deal with weeds and pests while minimizing risks to people, animals and the environment. Methods the City uses include physical removal, prevention, mechanical, and chemical.

Goal EV-7 Aspire to eliminate the use of synthetic pesticides on City properties

- Action EV-7.1 Explore designating all parks with playgrounds as synthetic pesticide-free parks. Consider using community groups to assist with maintenance.
- Action EV-7.2 Design City projects that eliminate the need for synthetic pesticides.
- Action EV-7.3 Design City public landscaping that requires less maintenance, water and pesticides.
- Action EV-7.4 Regularly evaluate alternative products to be used instead of synthetic pesticides.
- Action EV-7.5 Explore changes to maintenance standards to avoid use of synthetic pesticides.

Why Do Weeds Need to Be **Controlled in Public Spaces?**



- Effectively reduce populations of invasive, noxious weeds
- Create safe sightlines for people walking, biking, and driving
- Eliminate safety hazards in public walking, bicycling or play areas
- Restore, create, and protect environmentallyvaluable areas
- Protect sidewalks and streets from damage
- · Projects an image of the City as attractive and well-maintained



3. Access to Parks + Open Space

What is it? Kirkland's Parks, Recreation and Open Space Plan articulates a service level that specifies that Kirkland residents should live within a 1/4-mile radius of a neighborhood park. Additionally, parks and recreation organizations across the country are spearheading a national campaign to ensure all people live within a 10-minute walk to a park.

Where are we now? 75% of Kirkland residents are within a 1/4-mile radius of a neighborhood park. According to the Trust for Public Land, 92% of residents live within a 10-minute walk of a park.



Goal EV-8 Ensure that all residents have access to healthy parks and open space within a 10-minute walk

- Action EV-8.1 Proactively seek and acquire parkland to create new parks, prioritizing park development in areas where service level deficiencies exist (where households are more than 1/4-mile from a developed park), and in areas of the City experiencing population growth through residential and commercial development.
- Action EV-8.2 Achieve the Kirkland Parks, Recreation and Open Space Plan neighborhood park system goal which ensures every resident is within 1/4-mile or 10-minute walking distance of a park.

Existing Policy Support: Parks, Recreation & Open Space Plan

Policy 5.5: Universal Access & Inclusion. Strive to reduce barriers to participation and provide universal access to facilities and programs.

Strive to reduce barriers to participation and provide universal access to facilities and programs.

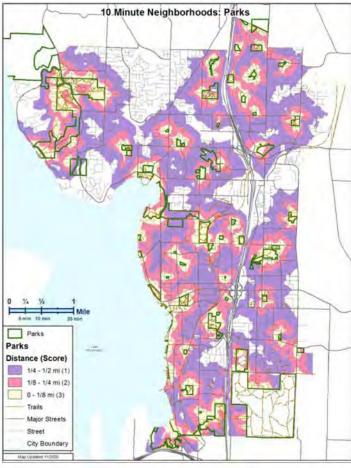


Figure 4. Distance to neighborhood Kirkland parks in 2020.

 Action EV-8.3 Work with GIS to create a dataset for privately-owned public parks and public plazas in the city.



Goal EV-9 Continually improve parks to meet the active and passive recreational needs of Kirkland residents by reducing barriers to participation and providing universal access to facilities and programs where possible

- Action EV-9.1 Conduct an accessibility and inclusivity review of parks, recreational facilities and programming, and open space plans with the update of all future Parks and Open Space Plans for the purpose of creating an action plan for needed improvements.
- Action EV-9.2 Integrate an accessibility and inclusivity capital project fund into the Parks and Community Services capital improvement program.
- Action EV-9.3 Update the Park, Recreation and Open Space Plan every six years.

Rendering of updates at Juanita Beach Park in 2020, with a new bathhouse and picnic areas, and a playground accessible for all abilities.

Walkway at Edith Moulton Park.

Why is Park Access Important for Sustainability?



Parks and green spaces are an important component of sustainability and should be accessible and usable by all members of the community. It is more equitable to distribute parks and green spaces throughout the City, ensuring all community members can walk to them in ten minutes or less.





4. Sustainable Urban Forest

What is it? A sustainable urban forest is more resilient to stressors when it consists of healthy trees with diverse age and species characteristics. Greater urban forest resiliency and biodiversity can be achieved through management efforts that include mature tree preservation, proper tree care and tree planting with species diversity objectives.

Where are we now? In 2018, citywide tree canopy cover was assessed at 38 percent. When compared to canopy cover in 2010, that's a 272-acre loss of canopy cover, mostly occurring in single family residential areas.

By joining 14 cities in a partnership with the King Conservation District, Kirkland acquired its most recent tree canopy cover assessment, including canopy data by census block. Kirkland also participated in a 2018 modeling project studying the impact of canopy cover on stormwater capacity as one of four pilot cities in the Puget Sound region.

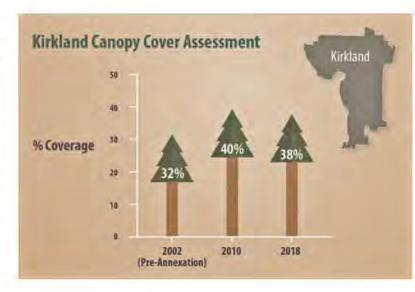
A 2018 field study showed that development activities pose challenges to retaining larger, mature trees. Trees in Kirkland's active parks were inventoried in 2015 to enable a more proactive management approach. Street trees on Kirkland collector and arterial streets were inventoried in 2017, providing data on approximately 32% of Kirkland's street trees.

Amendments to the City's tree ordinance to simplify the code and support Comprehensive Plan policies and Urban Forest Management Plan objectives are expected to be completed by mid-2021. Related enforcement codes were adopted in early 2020. The 2014-2109 Urban Forestry Work Plan identified tree planting objectives that have not been initiated, with the exception of a pilot tree give-away.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-2.1: Strive to achieve a healthy, resilient urban forest with an overall 40 percent tree canopy coverage.

Policy E-2.2: Implement the Urban Forestry Strategic Management Plan.



By earning Growth Awards for 10 consecutive years, Kirkland was recognized as a Sterling Tree City USA in 2018 and "regarded as a leader in community forestry" by the National Arbor Day Foundation.





Goal EV-10 Examine trends in canopy gain or loss, identify priorities for meeting the overall goal of citywide 40% tree canopy cover goal by 2026 and develop strategies to manage Kirkland's urban forest resource for optimal health, climate resiliency and social equity

- Action EV-10.1 Incorporate Actions EV-10.2 through EV-10.10 into the 2020-2026 Citywide Urban Forestry Six Year Work Plan.
- Action EV-10.2 Formally recognize and support internal cross-department collaborative planning to develop and implement sustainable urban forestry strategies for the broader community.
- Action EV-10.3 Ensure continued health and growth of public trees by improving the public tree maintenance program: provide adequate public tree maintenance resources and update and maintain the right-of-way tree inventory to manage for age and species diversity objectives.
- Action EV-10.4 Develop canopy enhancement strategies to mitigate public health impacts in areas that may be disproportionately affected by adverse environmental conditions which may directly, or indirectly, be associated with social disparities in income, homeownership, education, access to transportation and other services, public health outcomes, and other challenges.
- Action EV-10.5 Develop and implement tree planting programs in partnership with schools, regional agencies and nonprofits to increase tree canopy cover on private and public property, including rights-of-way, parks and natural areas.
- Action EV-10.6 Identify and prioritize climateresilient tree species for public and private tree planting programs.
- Action EV-10.7 Dedicate resources for an ongoing, robust and inclusive public education framework that engages the community, increases awareness of long-range goals and code

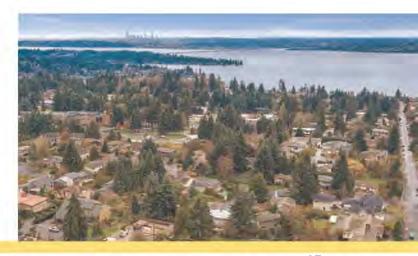
- requirements, promotes stewardship of the urban forest, communicates the value and benefits of trees, and garners public support for the planting and preservation of trees citywide
- Action EV-10.8 Evaluate pre-approved public works plans and look for opportunities for retention of right-of-way trees.

Why Are Trees Important?



Trees provide enormous environmental, economic, and social benefits, including:

- Improving air quality and producing oxygen
- Reducing the urban heat island effect
- Slope stability
- Controlling stormwater runoff and soil erosion, thereby protecting water quality
- Contributing to reductions in crime and increased property values
- Enhancing resident health and well-being
- Providing wildlife habitat and migration corridors
- Building climate resiliency for the community





- Action EV-10.9 Create comprehensive inventory of existing and newly-planted trees, including significant trees, in City spaces such as rights of way and parks. Create a city-wide tree planting program with set target areas and goals for canopy expansion in our City public spaces and residential areas.
- Action EV-10.10 Set commercial landscape design standards that use low-maintenance and waterwise plants.





A systemic, holistic approach to using and reusing materials more productively over their entire life cycles, beginning at design and production, through use and reuse, and at the end-of-life through recovery and recycling





Sustainable Materials Management considers the entire life cycle of how we use materials, and their end of life. The ultimate goal is to achieve zero waste of resources. Waste management goals have historically focused on recycling efforts but we now know that recycling alone is not the answer. Although many may think that switching to compostable or recyclable versions of single-use products will be better for the environment, research shows that not to be the case. Environmental impacts are lessened by avoiding unnecessary single-use items and prioritizing reusable options.

The City of Kirkland is an active participant in regional waste reduction and recycling efforts, and works to continually innovate and improve programs and offerings. This is done through a variety of recycling programs, like special recycling collection events for expanded polystyrene foam or free battery recycling drop offs, and education campaigns, like promoting participation in food scrap composting. The City aims to reduce the impacts of our residents' and business' waste on the environment. We look to achieve these goals through work on Three Elements of this Focus Area:

- 1. Waste Reduction
- 2. Recycling and Composting
- 3. Product Stewardship



SUSTAINABLE MATERIAL MGMT. **FOCUS AREA ELEMENTS**

1. Waste Reduction

What is it? Waste reduction is the practice of creating less waste through preventing waste generation and changing consumption patterns to avoid the resources needed for recycling or disposal.

How do we measure it? Waste generation is the total amount of materials disposed of as trash and materials recycled or composted whereas waste disposal is only the amount of material disposed of as trash. These numbers are significant because they indicate overall consumption patterns, more than just what percentage of material is recycled. Kirkland seeks to achieve the waste generation and waste disposal goals in the King County Comprehensive Solid Waste Management Plan. Kirkland and other King County cities collaborate on an overall plan to reduce and manage waste.

Where are we? As of 2018, Kirkland's waste generation rate per capita is 19.9 lbs/week. The waste disposal rate per capita is 8.9 lbs/week.

Existing Policy Support: Kirkland Comprehensive Plan

Policy PS-2.1: Coordinate with the City's solid waste and recycling collection contractors and King County Solid Waste Division to ensure that the existing level of service standards are maintained or improved and waste reduction and recycling goals and targets are in compliance with the Draft 2013 King County Comprehensive Solid Waste Management Plan (SWMP) update.

Managing Our Waste



The waste hierarchy prioritizes how we should handle our waste - preventing and reducing waste are the best choices, and throwing things away is the worst environmental choice.



Although recycling items instead of throwing them away allows the material to be turned into something else, recycling everything isn't the end goal for our waste. Reducing the amount of waste produced overall - whether trash, recycling, or compost - will make the most impact for the planet.

Reduce waste by preventing it in the first place, by choosing long-lasting products or skipping a purchase altogether, and by extending the life of possessions. Repairing items and reusing materials also promotes social equity and builds community.



Goal SM-1 Continue to achieve King County's Waste Generation rate target of less than 20.4 pounds per week per capita by 2030

- Action SM-1.1 Reduce consumer use of common single-use items - for example, by promoting use of reusable shopping and produce bags.
- Action SM-1.2 Lead by example by improving waste prevention and recycling in City operations, facilities, at sponsored events, and through the purchase of sustainable products.
- Action SM-1.3 Evaluate progress toward waste generation targets annually.
- Action SM-1.4 Set innovative rates to incentivize waste reduction, recycling and composting.

Kirkland banned single use plastic bags in 2016 and is currently looking at other policy options to reduce single use food service ware.

The City is currently working on internal purchasing policies, and recently committed to purchasing only compostable food service ware for internal events.

Goal SM-2 Achieve King County's waste disposal rate target of 5.1 pounds per week per capita by 2030

- Action SM-2.1 Support repair and reuse activities throughout Kirkland and King County.
- Action SM-2.2 Evaluate progress towards waste disposal targets annually.



Reuse events like repair cafes and costume swaps help residents keep items in use, and support the community by providing free options for members of the community in need.







Goal SM-3 Reduce single-use food service ware throughout City of Kirkland

- Action SM-3.1 Eliminate the use of expanded polystyrene foam food service ware in food service establishments.
- Action SM-3.2 Enact policy to support reduction of single-use food service ware, including straws and utensils.
- Action SM-3.3 Work directly with businesses to provide technical assistance and incentives to increase the use of durable products in food service.

2. Recycling + Composting

What is it? Recycling is the process of collecting and processing materials and turning them into usable and marketable new products. Composting is the diversion of organics such as yard waste, food scraps, and food-soiled paper to a controlled biological decomposition process that creates a beneficial soil amendment.

How do we measure it? Recycling diversion rates can include a variety of things, although they typically measure the amount of materials recycled or composted, instead of landfilled. King County reports City recycling diversion rates as the weight of the amount recycled and composted out of weight of total waste.

Where are we now? Kirkland's combined residential diversion in 2018 was 55.4% and only includes hauler-reported tonnage data from residential customers.

Many Kirkland residents and businesses participate in diverting food and yard waste from the garbage. It is not mandatory to compost food, but the City offers the service to all at no cost.

Reduce vs. Recycle



While it's helpful to recycle and compost a greater proportion of our waste, the total amount of waste we produce overall is also important to measure maybe even more important. For example, a family who increased the amount of material they throw away, recycle, and compost by the same proportion would recycle the same proportion of their waste, but generate a lot more waste in total.



18 pounds of waste 67% recycling rate



27 pounds of waste 67% recycling rate



Goal SM-4 Achieve a local and countywide 70% recycling diversion rate by 2030

- Action SM-4.1 Explore options to increase the efficiency and reduce the price of curbside and multi-family collection of bulky items, while diverting as many items as possible for reuse or recycling.
- Action SM-4.2 Expand recycling collection events for difficult-to-recycle items without product stewardship take-back programs.

Kirkland offers a number of events each year for hard to recycle items like Styrofoam™, mattresses, paint, and more!

- Action SM-4.3 Increase single-family food scrap recycling through a three-year educational carttagging program.
- Action SM-4.4 Update and enforce building code requirements to ensure adequate and conveniently-located space for garbage, recycling, and organics collection containers in multi-family, commercial, and mixed-use buildings.
- Action SM-4.5 Institute a construction and demolition program that requires structures to be deconstructed versus demolished to recover valuable building materials that can be reused or recycled.
- Action SM-4.6 Explore and consider a disposal ban policy for recycling, organics, or both such as in the City of Seattle.
- Action SM-4.7 Increase multi-family and commercial recycling.

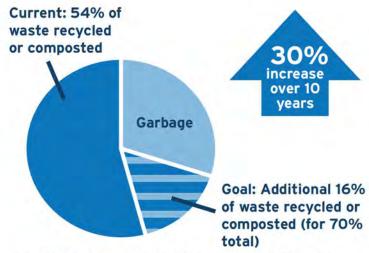


Figure 5. Current and goal percentage of Kirkland's waste stream that is recycled or composted (by weight) compared to all waste generated



Simple changes can have dramatic impacts on recycling, like switching from carts to dumpsters so there's enough room for residents to recycle their materials.



Goal SM-5 Increase the number of businesses composting food scraps to 150 by 2023

112 business within the City of Kirkland compost food scraps as of 2018.

- Action SM-5.1 Continue to develop infrastructure and increase regional and local educational outreach, incentives and promotion to increase recycling of food scraps and food-soiled paper. These efforts should target single-family and multi-family residential developments, as well as nonresidential buildings such as schools, institutions, and businesses.
- Action SM-5.2 Work with food producers, grocers, restaurants, and schools to prevent food waste and to increase food recovery through donation of surplus meals and staple food items to local food banks.



To provide more access to food scrap composting for multifamily residents, Kirkland has piloted two community food scrap drop-off containers, located at City Hall and North Kirkland Community Center.

Kirkland partnered with Lake Washington School District and King County Green Schools to pilot a school food share program to rescue uneaten food at some schools.

3. Product Stewardship

What is it? Product Stewardship is an environmental management strategy that means whoever designs, produces, sells, or uses a product takes responsibility for minimizing the product's environmental impact throughout all stages of the product's life cycle, including endof-life management. These programs can also be considered Extended Producer Responsibility programs, because they shift the responsibility of end of life from the consumer to the producer.

Where are we now? Product stewardship programs are typically statewide policies, so existing programs vary across the US. Kirkland cannot set up its own programs, but instead can play a role in supporting the creation of new programs. Currently, in Washington State, product stewardship programs exist for some hard-to-recycle items, including computers, televisions, fluorescent bulbs, and medicines. A new program for paint stewardship will begin in 2020.

Goal SM-6 Expand Statewide Program for Product Stewardship to include challenging-torecycle items like mattresses, batteries, and plastic packaging

Action SM-6.1 Support legislative efforts and remain active in groups like Northwest Product Stewardship Council (NWPSC).

Kirkland has representation on the Steering Committee of the NWPSC.

The cooperation and coordination with all levels of government to achieve effective, efficient, and responsive governance and a sustainable level of core services for the Kirkland community





A sustainable government ensures that Kirkland can continue providing key services and guiding the community towards the future it envisions This includes providing a sustainable level of core services that is funded from predictable revenue.

Trust in governance underpins the City's ability to support the community. Engaging all members of the community – especially those who have traditionally not been represented in public processes – ensures that the voices of all can be heard and incorporated into decision-making, and creates more equitable solutions.

Community resilience prepares Kirkland to continue providing needed services and adapt to changing circumstances, whether economic or related to natural or human-made hazards. The 2020 COVID-19 pandemic highlights the need for an adaptive local government.

We look to achieve these goals through work on Four Elements:

- 1. City Operations
- 2. Civic Engagement
- 3. Community Resilience
- 4. Financial Stewardship



SUSTAINABLE GOVERNANCE FOCUS AREA ELEMENTS

1. City Operations

What is it? City operations include all of the operations that make the City function on a daily basis. So many of the decisions the City makes have an effect on the environment, social equity and the economy. It is imperative that the City exhibit leadership to all residents and businesses by showing that good operational decisions can be made to enhance sustainability and livability in Kirkland.

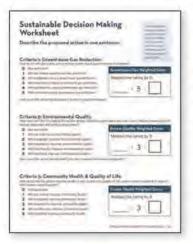
Existing Policy Support: Kirkland Comprehensive Plan

Policy E-4.5: Utilize life cycle cost analysis for public projects that benefit the built and natural environment.

Where are we now? The City makes its decisions in many different forms that consider the environment, equity, and the economy among other criteria. However, not all decisions comprehensively consider sustainability.

Goal SG-1 Integrate sustainability into every major decision the City makes

- Action SG-1.1 Utilize Sustainable Decision Making Matrix by all department decision-makers.
- Action SG-1.2 Memorialize in Staff Reports that all major decisions have considered sustainability and have utilized the Sustainable Decision Making Matrix.
- Action SG-1.3 Identify and use other tools and certifications such as a Carbon Counting Calculator and Institute for Sustainable Infrastructure (ISI) Envision certification that can be used for all City building and infrastructure projects to ensure low carbon methods and materials are being considered.
- Action SG-1.4 Identify and apply the Electronic Product Environment Assessment Tool (EPEAT) registry for decisions regarding electronic equipment purchases.
- Action SG-1.5 Adopt a policy for fleet purchases for fully electric and hybrid electric vehicles depending on technology availability and city needs; and actively seek grants to move toward an all-electric city fleet and supporting charging station infrastructure.



The Sustainable Decision Making Matrix is available as an Excel workbook or a printable worksheet in this report's "Sustainable Decision Making" section.

The Electronic Product Environment Assessment Tool (EPEAT) is a method for purchasers to evaluate the effect of a product on the environment. It assesses various lifecycle environmental aspects of a device and ranks products based on a set of environmental performance criteria.

- Action SG-1.6 Establish a grant-writing team to find and apply for grants to fund actions from the Sustainability Master Plan.
- Action SG-1.7 Apply for a Puget Sound Energy Resource Conservation Officer to optimize energy use and maximize efficiency at all City facilities.



- Action SG-1.8 Develop a plan in CIP for all city facilities to meet 25% energy reduction goal by 2030 and 45% by 2050.
- **Action SG-1.9** Develop water and energy efficiency standards for acquired facilities. If standards are not met, retrofit to achieve standards.
- Action SG-1.10 Explore reduction of or elimination of gas-powered landscaping equipment for City operations.
- Action SG-1.11 Explore creating an anti-idling policy for City-operated vehicles.

Goal SG-2 Coordinate sustainability programs and policies across all City departments

- Action SG-2.1 Appoint a sustainability manager with the authority to coordinate the implementation of the Sustainability Master Plan.
- Action SG-2.2 Implement a system to more closely coordinate sustainability-related activities across City departments and implement the Sustainability Master Plan.
- Action SG-2.3 Establish a protocol that allows eligible City staff with positions that don't require full-time in-person presence to work from home a minimum of two days per week.
- Action SG-2.4 Consider involving community members in advising City Council on implementation of this plan and recommendations for future revisions as conditions change.

Goal SG-3 Examine and refresh the City's purchasing policies, to focus on more environmentally-preferable purchasing

- Action SG-3.1 Implement new internal purchasing guidelines, with focus on reducing single-use items.
- Action SG-3.2 Explore specifying compost made from organic materials collected from City residents, businesses, and government to be used in City operations and projects.
- Action SG-3.3 Update purchasing policy to reflect best practices in environmental purchasing.



Bottle filling stations at City facilities help staff choose reusable. A water bottle purchasing policy could further help reduce the amount of single use water bottles purchased and used at City functions.



2. Civic Engagement

What is it? Civic Engagement is the active participation of community members in seeking to make a difference in the civic life of the community, including having the ability, agency, and opportunity to be involved in decision-making processes that affect them. Engagement activities range from volunteerism to information sharing, from consulting with the community on a policy decision to resident-led efforts, depending on the degree of community and City involvement and decisionmaking authority. An underlying principle of civic engagement is seeking to ensure that community members are involved in decisions that impact them.



Gun Safety and Community Safety Town Hall - June 2018

Where are we now? The City has successfully employed various techniques of public participation, ranging from town halls, community meetings, discussion forums, and online surveys. The City continues to cultivate community capacity in the form of knowledge, participation, and leadership through campaigns of themed resident engagement on timely topics and on-going collaboration with Kirkland's neighborhood associations. The City also supports a vibrant volunteer program and utilizes various boards and commissions to advise the City Council on policy.

Goal SG-4 Ensure processes for public participation are fair, accessible, and inclusive

- Action SG-4.1 Implement a system of civic engagement that more closely coordinates activities across various City departments to ensure that community members, particularly those most affected by an issue or those historically underrepresented in civic life, may participate in a meaningful way.
- Action SG-4.2 Develop a process to identify and dismantle unintended barriers to public participation by considering and responding to the diversity of our community, including the various cultural, ethnic, and historical experiences of community members.
- Action SG-4.3 Identify and empower trusted messengers in the community to serve as liaisons between the City and communities that have historically been underrepresented in civic life.
- Action SG-4.4 Perform a comprehensive City organizational equity assessment to identify gaps in diversity, equity, and inclusion in all areas of City policy, practice and procedure.
- Action SG-4.5 Provide opportunities for public input that do not require presence at a particular time or place.



Goal SG-5 Cultivate community members' knowledge of, participation in, and leadership for civic processes

Action SG-5.1 Explore opportunities for the City's involvement in efforts of collective impact to help achieve desired outcomes, including through partnering more closely with existing community groups. Support the establishment of new groups to expand active participation from underrepresented segments of the community, such as Black, Indigenous, people of color (BIPOC), immigrants, and renters.

Collective impact is the commitment of a group of actors from different sectors to a common agenda for solving a specific social problem.

 Action SG-5.2 Maintain and expand support for Kirkland neighborhood associations, including efforts at expanding active participation from underrepresented segments of the community, such as BIPOC, immigrants, and renters.

- **Action SG-5.3** Explore partnership programs to implement opportunities for civic education and leadership development for community leaders, with a specific emphasis on BIPOC individuals and immigrants.
- Action SG-5.4 Prioritize and implement a civic engagement course that provides education about local government and creates an entry point for emerging community leaders.
- Action SG-5.5 Consider involving community members (and Boards and Commissions) in advising City Council on implementation of this plan and recommendations for future revisions as conditions change.

3. Community Resilience

What is it? The sustained ability of a community to utilize available resources (energy, communication, transportation, food, etc.) to respond to, withstand, and recover from adverse situations.

Where are we now? Emergency Management maintains various plans, including the Hazard Mitigation plan, and City resources that are intended to direct and support building resiliency in the community. Emergency Management conducts public education and outreach activities as part of the "whole community" readiness concept and trains City staff to coordinate and support all phases of emergency and disaster management.





Goal SG-6 Improve community resiliency through community engagement and by strengthening essential City resources

- Action SG-6.1 Increase backup power capability at critical City facilities.
- Action SG-6.2 Educate residents and businesses on actions they can take to increase personal and physical earthquake resilience.
- Action SG-6.3 Identify options and actions to increase the stability of water storage facilities (towers and reservoirs) in the city and increase the reslience to shaking of water mains.

4. Financial Stewardship

What is it? The stewardship of public funds is one of the greatest responsibilities given to the officials and managers of the City of Kirkland. The establishment of and maintenance of wise fiscal policies enables City officials to protect public interests and ensure public trust. The City's Fiscal Policies represent long-standing principles, traditions, and best practices that have guided the City's management in the past and are intended to ensure that the City is financially able to meet its immediate and long-term objectives.

- Action SG-6.4 Continue mitigation projects intended to reduce the risk of erosion, landslide, and urban flooding.
- Action SG-6.5 Focus on efforts to address and mitigate climate change impacts, such as air quality issues, heat emergencies, and changes in temperature and precipitation.
- Action SG-6.6 Implement hazard mitigation strategies, as identified in the 2019 Hazard Mitigation Plan, through funding, resources, staff support, and collaborative relationships with partner agencies.

Where are we now? Kirkland is in the second year of the 2019-2020 biennium. City Management and Staff have presented the next biennium's budget and Capital Improvement Program (CIP) and Council may adopt the budget at the same time as the SMP.

As part of the budget development process, the City Council reviews Kirkland's Fiscal Policies and updates them to reflect best practices to ensure the City's financial sustainability.

Goal SG-7 Maintain the City's responsible fiscal practices while advancing on City sustainability goals

- Action SG-7.1 Use the Sustainable Decision Making Matrix that is provided in the Sustainable Decision Making section of this document as a tool for evaluating future investments in projects, programs or actions, such as the greening of the City's fleet or making City facilities more environmentally friendly. The intent is to view proposals through a "sustainability lens" along with financial and other criteria to get a more
- complete picture of the current and future impacts and benefits of each investment.
- Action SG-7.2 Evaluate the establishment and funding of a sustainability opportunity fund with the intent of using these funds as the City match portion of any potential grant applications in support of sustainability-oriented projects.

SUSTAINABLE BUSINESS

A healthy mix of local resilient businesses and services that have a positive impact on the environment and the community





Kirkland's business community, from the larger anchor businesses to the small independently-owned shops and restaurants, shapes Kirkland's character and livability. Having goods and services available locally means that Kirkland residents can meet their needs without traveling to another city (probably by car) and also supports community members as well as local government by keeping spending and tax revenue within the city.

Businesses also contribute to Kirkland's environmental impacts through the choices they make about how they operate and what they sell.

We look to achieve the goals to achieve a sustainable business community through work on the Three Elements of this Focus Area:

- 1. Green Business
- 2. Economic Diversity
- 3. Green Economy

SUSTAINABLE BUSINESS **FOCUS AREA ELEMENTS**



1. Green Business

What is it? Green businesses follow practices that limit their environmental impact and protect their employees. Businesses that operate sustainably reduce expenses, improve efficiency, keep employees healthy and engaged, comply with regulations, and do right by the planet.

Where are we now? The City of Kirkland offers a variety of resources to businesses to operate more sustainably. These resources include waste, recycling, and composting program assistance, free containers and posters, storm drain markers, pollution prevention visits, employee transportation assistance, and more. These resources can be accessed for assistance through the EnviroStars Green Business program and the Source Control Business Inspections Program.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-4.11: Promote and recognize green businesses in Kirkland.

Why Green Business is Important



Green businesses engage in practices that reduce their impacts on the environment, conserve resources, and protect their employees and customers. These practices can be beneficial to the environment as well as the business' bottom line by reducing costs and improving their image to customers. More than 70% of Puget Sound residents think it's important to buy from environmentally-minded businesses.

Goal SB-1 Engage with Kirkland businesses on environmental best practices

- Actions SB-1.1 Use the EnviroStars Green Business and Source Control Programs to assist Kirkland businesses in accessing resources to follow environmental best practices.
- Action SB-1.2 Conduct outreach to all non-homebased businesses, ensuring all have sufficient recycling capacity.
- Action SB-1.3 Provide hands-on technical assistance to potential pollution-generating businesses to manage business operations to reduce pollution entering the stormwater system.



SUSTAINABLE BUSINESS



2. Economic Diversity

What is it? Kirkland businesses providing a broad range of products and services as defined by the total economic output by business sector.

Where are we now? The City does not currently track economic diversity.

Goal SB-2 Foster economic diversity throughout the community

- Actions SB-2.1 Track and monitor the makeup of business and industries in Kirkland and set a diversification goal.
- Actions SB-2.2 Partner with the Greater Kirkland Chamber of Commerce & the Kirkland Downtown Association on promoting "Buy Local".
- Actions SB-2.3 Support policy that encourages mixed-use development and economic diversity.

Existing Policy Support: Kirkland Comprehensive Plan

Policy ED 1.2: Encourage a broad range of businesses that provide goods and services to the community.

Economic Diversity Supports the Community



When a large variety of businesses are located locally, residents and other local businesses can meet all or most of their needs for purchasing goods and services without traveling to another city. That makes it easier for people to walk, bike, or bus to meet most of purchasing needs, minimizing dependence on singleoccupancy-vehicle travel and reducing travel distances. This is especially beneficial for members of the community who are not able to drive. Shopping locally keeps more money in the community and also provides more funding for local government services.

Right: The City provides spill kits to businesses so they can be prepared to clean up any accidental spills and prevent pollution from reaching Lake Washington.

Far right: Eastside Community Aid Thrift Shop was one of the first Kirkland businesses to be recognized as an EnviroStars green business, at the highest level.





SUSTAINABLE BUSINESS

3. Green Economy

What is it? A green economy is resilient, socially just, and follows a circular framework that designs out waste through reuse, modular and repairable design, and making the most of materials. Taking a green approach to the economy is low carbon and resource-efficient. A green economy strengthens the community by providing living wage jobs, sourcing products locally, and developing green industries that don't harm environmental quality.

Where are we now? The City supports individual businesses through technical support programs, but does not have an overarching program for building a green economy. A similar model might be found in the City's partnership with Redmond and Bellevue on the Innovation Triangle. Businesses can access assistance through the City's economic development team.

Goal SB-3 Support and enhance the resilience of the Kirkland business community

- Action SB-3.1 Develop an economic resilience plan in partnership with Kirkland businesses that focuses on successful operations during uncertain economic times.
- Action SB-3.2 Formulate a green economic recovery plan in partnership with Kirkland businesses that focuses on clean, green industries and living wage jobs
- Action-SB 3.3 Support legislation that promotes a resilient business community in Kirkland and on the Eastside.
- Action SB-3.4 Promote home occupation businesses and telecommuting as a means to create more jobs and to reduce transportation impacts related to commuting.

Goal SB-4 Support the transition to an equitable, socially-just sustainable business community in Kirkland

- Action SB-4.1 Create a program to help restaurants, institutions, and schools procure food from local sources and farms.
- Action SB-4.2 Promote a training program to assist immigrant and Black, Indigenous, and People of Color (BIPOC) small business owners.
- Action SB-4.3 Develop public/private partnerships to create spaces and places for startups that focus on making and selling sustainable products.



A healthy community is equitable, socially just and one in which each person has a sense of belonging, support in their community, and access to opportunities that fulfill the basic needs of life





A healthy community must ensure that the entire community has equitable access to resources such as clean water and air, healthy attainable housing, nutritious food, living wage jobs, and a sense of being welcome, accepted and belonging. Improving access to services, representation in decisionmaking, and environmental conditions for historically marginalized community members, such as low income and Black, Indigenous, and People of Color (BIPOC), should be prioritized. Sustainable communities are socially just, share a common purpose, and are places where all people thrive and enjoy good health and create a high quality of life.

We look to achieve these goals through Six Elements of this Focus Area:

- 1. Sustainable Food System
- 2. Potable Water
- 3. **Human Services**
- 4. Welcoming + Inclusion
- Attainable Housing 5.
- Recreation and Wellness



HEALTHY COMMUNITY **FOCUS AREA ELEMENTS**

1. Sustainable Food System

What is it? A Sustainable Food System includes increasing opportunities for local food production, distribution and consumption. Composting and Reducing Food Waste Reduction is covered in Sustainable Materials Management.

Where are we now? There are three official P-Patches city-wide. Farmer's Markets occur twice a week during the summer.

Goal HC-1 Increase the number and geographic diversity of P-Patches or other types of community gardens by adding 5 more by 2025, and another 100% by 2030. Explore adding edible landscaping on city property including rights-of-way.

- Action HC-1.1 Develop a funding plan for development and operation of new P-Patches or other community gardens.
- Action HC-1.2 Develop partnerships to locate new P-Patches on private land, including rooftops.
- Action HC-1.3 Develop a strategy plan to prioritize the location of community garden opportunities in areas of the city with concentrations of multi-family developments.
- Action HC-1.4 Build educational and support programs in coordination with local partners such as King County Master Gardners and Seattle Tilth Alliance to teach residents how to grow food and reduce water and pesticide usage.

Existing Policy Support: Kirkland Comprehensive Plan

Policy E-6.1: Expand the local food production market by supporting urban and community farming, buying locally produced food and by participating in the Farm City Roundtable forum.



Volunteers working in the demonstration garden at McAuliffe Park. Photo by Tilth Alliance.



Kirkland's farmers markets offer a local opportunity for residents to buy locally-grown produce and locally-made products directly from vendors during the summer.



Goal HC-2 Increase Farmer's Markets operations from two days per week to seven days per week by 2030, and increase geographic diversity of locations

- Action HC-2.1 Develop Partnerships to assist in new Farmer's Market Operations.
- Action-HC 2.2 Amend the Kirkland Zoning Code to allow Farmer's Markets where excluded.

Goal HC-3 Increase opportunities for private development to grow more food

- Action HC-3.1 Amend Kirkland Zoning Code to require common open space to include food growing beds.
- Action HC-3.2 Amend the Kirkland Zoning Code to allow food growing in stream and wetland building buffer setback areas.
- Action HC-3.3 Develop a Food Action Plan that assures fresh, local food is available and accessible by the entire community.

2. Potable Water

What is it? The quantity of fresh drinking water. The city obtains its drinking water from three sources, Cascade Water Alliance, Northshore Utility District and Woodinville Water District.

Where are we now? In 2019 Kirkland used over 2.6 billion gallons of potable water, equal to 58 gallons per day per person.

Existing Policy Support: Kirkland Comprehensive Plan

Policy U-2.1: Work in coordination with other jurisdictions and purveyors in the region to ensure a reliable, economic and sustainable source of water and to address long-term regional water demand.

The average resident in Seattle uses only 39 gallons of water per person per day.

Goal HC-4 Reduce use of potable water on a per capita basis by 10% by 2025 and 20% by 2030 as compared to 2019

- Action HC-4.1 Increase efficiency of water fixtures through incentive programs, educational campaigns, legislation and public/private partnership in the community.
- Action HC-4.2 Establish a program or partnership to develop the following types of water supplies for community use: reclaimed water, harvested water and grey and black water.

Harvesting and reusing rainwater, grey water and even black water can reduce the pressure on existing drinking water sources.

Water and Sustainability



Water is not an infinite resource, 97% of the world's water is frozen, 2% is salt water and only 1% of the world's water is available as fresh, clean drinking water also known as potable water. It is predicted that climate change will impact how much water we have available in the future and that using water wisely now can help ensure that future water demands can be met.



- Action HC-4.3 Intensify water conservation efforts through public/private partnerships and outreach and education.
- Action HC-4.4 Research per-capita differences in water usages throughout the region and identify best practices to incorporate.
- Action HC-4.5 Consider rate structure impacts on per-capita differences in water usage throughout the region.
- Action HC-4.6 Create an education program for water use best practices addressing irrigation overuse and household consumption.



What is it? The City recognizes that each resident needs to have a sense of belonging, support in their community, and access to opportunities that fulfill the basic needs of life. Human Services represents those services and programs that seek to enhance the quality of life for all members of the community

Where are we now? The City addresses basic human services needs through regional facilitation and coordination and a grant program supporting the work of local nonprofit agencies; senior programming is offered at Peter Kirk Community Center and youth services include a Youth Council, Teen Traffic Court, a Youth Summit and a Mini-Grant Program.



Mayor Penny Sweet celebrates clean water with a young community member through the "We Need Water Because" awareness campaign.

Existing Policy Support: Kirkland Comprehensive Plan

Policy HS-2.1: Work to achieve a community where everyone is treated with respect and given equitable access to resources.

by supporting diversity and social equity, supporting the provision of services that are utilized by those considered more vulnerable or at risk, including youth, seniors, and those in need, and contributing to the social development of the community.



2018 Youth Summit



Goal HC-5 Ensure that refugees and immigrants, people of color and economically-struggling residents have access to the resources they need to thrive and experience Kirkland as a safe, inclusive and welcoming community

Action HC-5.1 Calculate and tabulate available community health data and conduct community outreach to inform grant program priorities and provide recommendations on resource and access needs.



School nutrition professionals distributing food with Kirkland fire and police officers during the COVID-19 pandemic.

Goal HC-6 Address the homelessness crisis in Kirkland and regionally. Ensure that unhoused residents are connected to life-safety services by coordinating the City's response to the homelessness crisis and providing ongoing case management support

Action HC-6.1 Connect unhoused residents to lifesafety services, ensure a coordinated response to the homelessness crisis and respond to residents and businesses experiencing the community effects of the current crisis.

 Action HC-6.2 Work regionally to secure ongoing operating funding for increased shelter and day center services for all populations experiencing homelessness on the Eastside.

Goal HC-7 Build a community in which families, neighbors, schools, and organizations all work together to help young people become engaged, competent and responsible members of the community

Action HC-7.1: Sign on as an Eastside Pathways partner, joining the Lake Washington School District, City of Redmond, the Bellevue School District, the City of Bellevue and many nonprofit organizations to work collectively to attain better outcomes for children, cradle to career.



Councilmember Toby Nixon and Former Mayor Amy Walen join volunteers at an Arbor Day celebration with Urban Forester Deb Powers.



4. Welcoming and Inclusive

What is it? Being welcoming and inclusive means demonstrating a recognition that our community is enriched with people from different countries, from a diversity of racial and ethnic groups and faith traditions, with various expressions of ability, and from various levels of socioeconomic status. This is done by supporting a culture and policy environment that allows for all segments of our population, whether long-term residents or newcomers, to feel valued and fully participate in strengthening the social, economic, and civic fabric of the community.



Community members attended "Finding Solutions: Creating an Inclusive and Safe Community" in November 2018

Existing Policy Support: Kirkland Comprehensive Plan

Policy CC-1.1: Support diversity in our population.

Policy CC-1.3: Support formal and informal community organizations.

Resolution R-5240: Declaring Kirkland as a Safe, Inclusive and Welcoming City for All People

Where are we now? The City has taken several actions to be a more welcoming and inclusive community, including a Proclamation of Kirkland being a safe, inclusive, and welcoming place for all people and a supporting Ordinance prohibiting City staff from inquiring about immigration status unless otherwise required by law.

The City has also directly funded organizations serving the immigrant community through its Human Services Grants, and it has signed on as a member city to the Welcoming America Network and Cities for Citizenship.

Goal HC-8 Enhance the city of Kirkland as a safe, inclusive, and welcoming place for all people

- Action HC-8.1 Require ongoing training on diversity, equity, and inclusion for City employees.
- Action HC-8.2 Explore partnership programs to implement community-wide opportunities for learning and dialogue around diversity, equity, and inclusion.
- Action HC-8.3 Encourage the strengthening of relationships between various groups and communities in Kirkland, including communities of color, immigrant and refugee communities, neighborhood associations, the business community, and the faith community.



Pride Flag over Kirkland City Hall during Pride Month 2020



Goal HC-9 Cultivate a welcoming and inclusive community for immigrants and refugees

- Action HC-9.1 Continue network membership in Welcoming America and Cities for Citizenship.
- Action HC-9.2 Seek Welcoming Certification from Welcoming America, including through regional partnerships with other agencies or organizations.
- **Action HC-9.3** Create partnership programs to strengthen relationships between the City and immigrant and refugee communities and to educate immigrants about their rights, responsibilities, and opportunities for naturalization.

Goal HC-10 Dismantle institutional and structural racism in Kirkland to increase social equity and environmental justice city-wide

- Action HC-10.1 Using Resolution R-5434 as a framework, identify, develop, and implement actions to help end interpersonal, institutional, and structural racism, increase social equity, and support environmental justice in Kirkland.
- Action HC-10.2 Prior to the 2024 Comprehensive Plan Update, expand the proposed Geographic Information System (GIS) community analysis to include a gap analysis of environmental justice inequities. This analysis should include the identification of where BIPOC and low-income housing communities are located in Kirkland that may have less access to community and environmental amenities and/or greater exposure to environmental pollution and hazards. If any such inequities are identified, the City shall develop a plan to prioritize and equitably direct resources to address these deficiencies as part of the 2024 Comprehensive Plan and other functional plan updates.

Welcoming America is a non-profit, non-partisan organization that connects leaders in community, government, and nonprofit to create policy, reinforce welcoming principles, and communicate the socioeconomic benefits of inclusion.



Park Lane, in downtown, was designed to be able to be closed to cars easily for public events like "Summer Sundays" that let people play and enjoy the street safely.

"Peace Has Come" mural being painted by artist Nathaniel in the Juanita neighborhood.

5. Attainable Housing

What is it? Preserving existing affordable housing stock while providing new housing options that include a diversity of housing types that are affordable to all that would like to live here.

Where are we now? The City has an affordable housing program and codes that help provide housing options for low income to moderate earners. It also is a founding member of A Regional Coalition for Housing (ARCH), a regional partnership of cities in East King County that share resources and strategies to increase the supply of affordable housing. Recently, the City has been addressing housing options geared toward moderate income earners through increasing housing choices in singlefamily neighborhoods. Changes include allowing up to two accessory dwelling units on one parcel with a single-family home and making it easier to build cottages, duplexes and triplexes that can blend into

Existing Policy Support: Kirkland Comprehensive Plan

Policy H-3.4 Preserve, maintain, and improve existing affordable housing through assistance to residents and housing providers.

Policy ED-1.5 Strive to maintain a balance of jobs and housing to enable residents to live near work.



Single family home with Accessory Dwelling Unit (ADU)

existing neighborhoods. The action items in this element work toward encouraging preservation of multifamily housing and incentivizing construction of more energy-efficient and sustainably-constructed housing which is essential to making the cost to rent or buy housing attainable to more moderate-income earners.

Goal HC-11 Expand housing options for all income levels

- Action HC-11.1 Establish a program to preserve existing multi-family housing stock.
- Action HC-11.2 Establish a program or create additional incentives to preserve older singlefamily housing stock in exchange for higher density and lot size flexibility.
- Action HC-11.3 Establish a public/private community solar program with a focus on existing multi-family housing stock.
- Action HC-11.4 Revise the City's Expedited Green Building program to include incentives related to creating attainable housing.

- Action HC-11.5 Establish a dialogue with housing developers who use the Evergreen Sustainability Standard to encourage them to go above and beyond minimum certification standards.
- Action HC-11.6 Monitor local and sub-regional job types and their wages and housing costs to ensure that the City's housing stock is affordable to employees of local businesses and traffic congestion is reduced.
- Action HC-11.7 Identify City-wide numerical affordable housing goals for affordable units built under inclusionary zoning rules, along with missing middle housing and ADUs, and track progress of meeting set goals.



6. Recreation and Wellness

What is it? Kirkland provides opportunities for residents to seek social, physical and emotional components of health and wellness through recreation programs, facilities and services. Regular physical activity, such as recreating at a park, leads to improved physical conditions, cardiovascular health, mood and ability to sleep. Being in nature and green space leads to lower rates of depression and anxiety. Robust parks and recreation space for active and passive use is a crucial component to achieving health and wellness individually and for the community.



Where are we now? Kirkland's Parks, Recreation and Open Space Plan (PROS) identifies a service level for the community that specifies the number and types of indoor and outdoor spaces that should be provided. Currently Kirkland has 25 baseball fields, 10 softball fields, 9 soccer and multi-purpose fields, 32 tennis courts, 3 pickleball courts, 1 skate park, 1 outdoor pool, 1 indoor pool and 2 community centers.

Goal HC-12 Strive to rebalance and/or acquire sports fields to achieve the specified service level. This service level shows an excess of baseball fields and a deficit of soccer/multipurpose fields.

Action HC-12.1 Complete an athletic field study that can identify a plan for system-wide field improvements or acquisitions that will increase the number of soccer/multi-purpose fields.

Goal HC-13 Pursue funding measures and/or partnerships that will allow for the expansion of recreation facilities.

- Action HC-13.1 Build one new skate park to achieve the recommended two skate park facilities.
- Action HC-13.2 Construct a recreation and aguatics center to achieve the recommended indoor pool and recreation space.
- Action HC-13.3 Explore public/private recreational partnerships.
- Action HC-13.4 Evaluate existing recreational programs and facilities to ensure equity for all populations and that they are serving the diverse needs in our community.

Recreation and Sustainability



Regular physical activity leads to improved physical condition, cardiovascular health, mood and ability to sleep. Participation in recreation programming provides learning opportunities, community engagement and social interaction. Being in green spaces has been shown to lower rates of depression and anxiety. These are components of the eight dimensions of wellness which is a foundational philosophy in the PROS Plan.



POLICY

What policies could City Council enact to further the goals of the Sustainability Master Plan and position Kirkland as a green leader?

Next Step Policies to Support Actions in Plan

Some near-term policies that City Council could adopt to aid in achieving the actions outlined in this plan include:

Energy Supply + Emissions

- Require electric vehicle charging station retrofits in existing buildings on development sites.
- Require EV charging stations with all new developments or redevelopment projects at a minimum ratio of one EV charger for 10% of all required parking stalls.
- Require or incentivize all new construction to be built with only electric systems.

Building + Infrastructure

- Cooperate with the K4C to adopt State-required energy performance benchmarking and disclosure ordinances for an annual reporting program for commercial buildings.
- Revise the Kirkland Zoning Code or Municipal Code to require greater water efficiency outside of existing structures, such as for landscaping, water features, and public infrastructure.

Land Use + Transportation

- Reduce parking minimums in areas well-served by transit.
- Increase housing density along major transit corridors.

🔁 Sustainable Materials Management

- Adopt a food service packaging reduction policy.
- Ban the use of disposable water bottles at City-sponsored events (except Emergency Management).
- Update building code requirements to ensure adequate and conveniently-located space for garbage, recycling, and organics collection containers in multi-family, commercial, and mixed-use buildings.
- Institute a construction and demolition program that requires structures to be deconstructed versus demolished to recover valuable building materials to be reused or recycled.

Healthy Community

- Amend the Kirkland Zoning Code to allow Farmer's Markets where excluded.
- Amend Kirkland Zoning Code to require common open space to include food growing beds.
- Amend the Kirkland Zoning Code to allow food growing in stream and wetland building buffer setback areas.

Top 10 Policy Ideas for Environmental Leadership

This plan establishes a framework for environmental improvements over the next ten years, and into the future. Beyond the actions identified in the focus area chapters, City leadership could adopt more visionary goals that would make Kirkland a true environmental leader in the state, nation, and world, such as these.

- 1. Make Kirkland a carbon-free city by 2040.
- 2. Prohibit the use and sale of hazardous yard and cleaning chemicals by the City, businesses and entire community.
- 3. Eliminate institutional racism and any form of injustice in City government and the community.
- 4. Eliminate use of all vehicles, machinery and processes that combust fossil fuels.
- Divest all City assets in fossil fuels and in any industry that is not socially-just and equitable in their business operations.
- 6. Build all new City buildings to **Living** Building Challenge standards by 2040, and petal certified or core certified by 2030 and to net zero energy by 2025.
- Create green business districts. 7.
- 8. Achieve Vision Zero of no roadway deaths by redesigning, rebuilding and adapting roadways into a City-wide network of "complete streets" with priority given to bikes and pedestrians, greenways, trails, and car-free streets.



Councilmember Jon Pascal, Senior Planner David Barnes, Deputy Mayor Jay Arnold, project engineer Anneke Davis, and Councilmember Toby Nixon at the LEED award ceremony for the Kirkland Justice Building.

- 9. **Remove all human-made fish barriers** from streams with potential to support salmon.
- 10. Establish an interdisciplinary Office of Sustainability, potentially in conjunction with an existing department.











IMPLEMENTATION

To help decision-makers prioritize the actions identified in the focus areas, all actions have been evaluated according to six key criteria: reducing greenhouse gas emissions, improving environmental quality, supporting community health and resilience, producing more equitable outcomes, reducing reliance on fossil fuels, and weighing the cost to complete against savings realized.

In addition to aligning with the six key criteria of the plan, cost/benefit information will accompany proposals to consider funding the specific elements of this plan. Recognizing that there are finite dollars available in the City's budget, the actions, policies and related plans will be prioritized and implemented as resources allow.

Staff will provide an annual progress report on this plan at a Council meeting and at a community sustainability summit.

The Sustainability Master Plan will be updated every five years, but could also be amended when technology, legislative and other changes happen that require adjustments/updates.

Action Rating Guide

Criteria Rating Guide

Actions were rated according to the following criteria by the project manager and subject matter experts.

Greenhouse Gas Reduction

How much could this action directly reduce greenhouse gas emissions in Kirkland?

- 0 Not applicable
- 1 Will not directly reduce Greenhouse Gas Emissions
- 2 Will marginally reduce Greenhouse Gas Emissions
- 3 Will moderately reduce Greenhouse Gas Emissions
- 4 Will significantly reduce Greenhouse Gas Emissions
- 5 Will extremely reduce Greenhouse Gas Emissions

Rating is weighted by 5.

Environmental Quality

How well could this action protect habitats, open space and tree cover; reduce consumption of natural resources; and restore ecosystems?

- 0 Not applicable
- 1 Will not directly improve environmental quality
- 2 Will marginally improve environmental quality
- 3 Will moderately improve environmental quality
- 4 Will significantly improve environmental quality
- 5 Will extremely improve environmental quality

Rating is weighted by 3.

Community Health - Quality of Life (QOL)

How much would this action benefit community health, quality of life, and increase Kirkland's resilience to natural and human-caused hazards?

- 0 Not applicable
- 1 Will not directly improve community health / QOL
- 2 Will marginally improve community health /QOL
- 3 Will moderately improve community health / QOL
- 4 Will significantly improve community health / QOL
- 5 Will extremely improve community health / QOL

Rating is weighted by 3.

Environmental Social Justice

How much could this action improve equitable environmental outcomes for historically disenfranchised communities (low income, BIPOC)?

- O Not applicable
- 1 Will not directly improve social justice & equity
- 2 Will marginally improve social justice & equity
- 3 Will moderately improve social justice & equity
- 4 Will significantly improve social justice & equity
- 5 Will extremely improve social justice & equity

Rating is weighted by 3.

Reduction of Energy Consumption

How much could this action directly reduce energy use, reduce energy costs and replace fossil fuelbased consumption with renewable energy sources?

- O Not applicable
- 1 Will not directly reduce energy consumption
- 2 Will marginally reduce energy consumption
- 3 Will moderately reduce energy consumption
- 4 Will significantly reduce energy consumption
- 5 Will extremely reduce energy consumption

Rating is weighted by 2.

Net Cost

What is the net cost (cost - savings) for the City to complete this action?

- O Cost is prohibitive
- 1 Cost is extremely expensive
- 2 Cost is highly expensive
- 3 Cost is moderately expensive
- 4 Cost is nominal
- 5 No cost to implement

Rating is weighted by 2.

Total Score



















The maximum weighted score is 90 points. For ease of comparison, a scale is used to illustrate the total weighted score of each action. The sliding scale is tinted based on which ten-point block it falls within.

Additional Action Information

Top actions identified by the community during the engagement process are indicated with a star icon.



While many actions require coordination across departments, staff identified the lead department(s) or division(s). Some actions are not under the purview of current department or division responsibilities, indicated by "unassigned."

Relative costs and staff level of effort were evaluated within, not between, focus areas. Business impacts may be positive or negative.

Energy Supply + Emissions Action Ratings

	Action		Total Score		Cr	iteria	Ratir	igs			Execut	ion		Impac	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
ES 1.1	Factor emissions reduction into all budget processes and decision making	60	60	4	2	3	3	4	4	0-2 years	• Finance		\$	Low	None
ES 1.2	Create public / private partnerships to reduce emissions	56	56	3	2	3	4	3	4	0-2 years	Unassigned	Private partners K4C	\$	Moderate	None
ES 1.3	Lobby State Legislature to enact laws to further reduce GHG emissions	63	63	4	2	3	4	4	4	ongoing	City Manager's Office	• K4C	\$	Low	Potential
ES-1.4	Update Kirkland comprehensive plan climate goals regularly to be consistent with updated state and regional goals	15	-69	1	0	0	0	0	5	Ongoing	Planning & Building	• K4C	\$	Low	None
ES-1.5	Support state or regional clean fuel standard	15	-6	1	0	0	0	0	5	Ongoing	Planning & Building	• K4C	\$	Low	None
ES 2.1	Establish a plan to have 100% renewable energy for the community	62	62	5	2	2	3	4	4	0-2 years	Planning & Building	Energy utility K4C People for Climate Action - Kirkland	\$	Moderate	Potential
ES 2.2	In conjunction with K4C, ensure that PSE fulfills the State requirements in the Clean Energy Transformation Act. Through engagement with PSE's Clean Energy Implementation process, support projects that enable PSE's ability to meet CETA goals faster.	27		1	1	2	t	1	4	O-2 years	• Planning & Building	Neighbor cities	\$\$	High	Potential
ES 3.1	Develop a marketing program to encourage installation of solar systems	50	50	3	2	3	2	3	4	0-2 years	Planning & Building	Environmental groups Solar installers	\$\$	Moderate	Potential
ES 3.2	Establish a region-wide program for successful implementation of community solar	56	56	3	2	3	4	3	4	3-6 years	Planning & Building	King County K4C members	\$\$	High	Potential
ES 3.3	Consider revisions to remove barriers and provide incentives for solar in land use regulations	31	31	1	1	2	1	2	5	0-2 years	Planning & Building	Energy Utilty	\$	Low	Potential
ES 3.4	Support innovative financing mechanisms for distributed energy improvements	22		1	0	0	1	2	5	0-2 years	Planning & Building	: Egergy Utility	\$	Low	None
ES 4.1	Develop regional pilots to incentivize the transition to electric vehicle ownership	53	53	3	3	3	2	3	4	3-6 years	Planning & Building	Energy utility Organizations	\$\$	High	Potential
ES 4.2		60	60	4	3	3	2	4	4	0-2 years	Planning & Building	Developers	\$\$	Low	Direct
ES 4.3	Require EV charging stations with all new developments or redevelopment projects	47	——47	3	2	2	2	3	4	0-2 years	Planning & Building	Regional Code Council	\$	Low	Direct

	Action		Total Score		Cr	iteria	Ratir	gs			Execu	tion		Impact	s
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
ES 4.4	Require all new residential with offstreet parking to provide one EV-ready electrical outlet per unit and require all multi- family developments to provide EV-ready electrical outlets for 20% of required parking spaces	42	—42	2	2	2	2	2	5	0-2 years	• Planning & Building	• K4C	\$	Low	Direct
ES 4.5	Support state and regional requirements for electric delivery vehicles and TNCs	15	- 15	1	0	0	0	0	5	0-2 years	Planning & Building	K4C Electric Utility	\$	Low	None
ES 4.6	Develop a policy to establish a revenue source toward support of electrification of transportation, such as building additional charging stations at city facilities and parks	42	-42	3	2	1	2	2	4	3-6 years	• Finance	Regional Code Collaboration	ss	Moderate	None
ES 5.1	Educate pipeline gas users how to reduce usage	42	42	2	2	2	2	3	4	0-2 years	Planning & Building	Private partners	\$	Low	None
ES 5.2	Establish incentive program to convert existing gas appliances to energy efficient electric	63	63	4	2	4	3	4	4	0-2 years	Planning & Building	Private partners	\$\$	Low	Direct
ES 5.3	Require or incentivize all new construction be built with only electric systems	63	63	4	2	4	3	4	4	3-6 years	Planning & Building	K4C Electric Utility	\$	Low	Direct

Building + Infrastructure Action Ratings

	Action		Total Score		Cr	iteria	Ratir	ngs			Execut	tion			Impacts	
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	New Staff Need?	Staff Level of Effort	Impact to Business / Development Community
BI 1.1	Incentivize net zero energy buildings through Priority Green Building program	60		4	3	3	2	4	4	0-2 years	Planning & Building Public Works	Regional Code Collaborative	\$		Moderate	Direct
BI 1.2	Encourage and educate developers to create energy efficient structures	50	50	3	2	3	2	3	4	0-2 years	• Planning & Building	Private partners Green building organizations	\$		Moderate	Potential
BI 2.1	Build market demand for net-zero energy buildings through incentives, education, demonstration projects, partnerships and recognition	50		3	2	3	2	3	4	0-2 years	Planning & Building	Private partners Green building organizations	\$		Moderate	Potential
BI 2.2	Consider requirement for buildings in business districts to be built to high performing building standards	37	37	2	2	2	Ť	2	4	0-2 years	Planning & Building	• K4C	\$		Low	Direct
BI 2.3	Encourage buildings as part of Council-approved Master Plans/ Development Agreements / Planned Unit Developments to be high performing green buildings, charger ready	30		2	1	+	0	2	5	0-2 yéars	• Planning & Building	K4C Regional Code Collaboration	\$		Low	Potential
BI 3.1	Create an incentive program to share energy efficiency savings in multi-family housing	66	66	4	3	3	4	4	4	3-6 years	Planning & Building	Building owners Property managers	\$\$		Moderate	Potential
ES 3.2	Cooperate with K4C to adopt energy performance benchmarking and disclosure ordinances for commercial buildings	60	-60	4	3	3	2	4	4	3- 6 years	Planning and Building	• к4с	\$\$		Low	Potential
BI 3,3	Implement C- PACER legislation	63	63	4	3	3	3	4	4	0-2 years	Planning & Building	• K4C	\$		Low	Direct
BI 3.4	Implement energy performance ratings for all homes at time of sale	60	-60	4	3	3	2	4	4	3-6 years	Planning & Building	K4C Realtors	\$		Med	Potential
BI 3.5	Establish a program to assist homeowners in selecting appropriate and cost effective energy solutions	60	60	4	3	3	2	4	4	0-2 years	• Planning & Building	K4C Energy efficiency contractors	\$		Low	Potential
BI 4.1	Create an incentive program for energy and water efficient appliances in new and existing structures	52	— 52	3	3	2	2	4	4	0-2 years	Public Works Utilities	Energy provider Water utilities Private partners	\$		Low	Direct
BI 4.2	Require greater water efficiency than industry green building certifications	43	43	2	3	2	2	2	4	3-6 years	• Planning & Building	Regional Code Collaborative	\$		Low	Direct
BI 4.3	Require greater water efficiency outside existing structures	43	—4 3	2	3	2	2	2	4	3-+6 years	Planning & Building	Regional Code Collaborative	\$		Low	Direct

Land Use + Transportation Action Ratings

	Action		Total Score		Cr	iteria	Ratir	igs			Execution			Impac	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
LT-1.1	Engage in a Smart Growth policy and Smart Growth zoning code scrub	60	60	4	2	3	3	4	4	ongoing	Planning		\$	Moderate	Potential
LT-2.1	Align new pedestrian connections with the 10-Minute Neighborhood concept	54	54	4	2	3	3	2	3	ongoing	Transportation		\$	Low	Direct
LT-2.2	Educate community on the benefits of 10-Minute Neighborhoods and smart growth	51	51	3	2	3	3	2	4	0-2 years	Planning	Private partners	\$	Moderate	Direct
LT-2.3	Increase housing density along major transit corridors	55	- 55	4	2	2	3	3	4	3-6 years	Planning		\$	Low	Direct
LT-2.4	Strategically adopt zoning code amendments that foster infill projects that meet local needs	36	36	2	1	2	1.	2	5	0-2 Years	Planning		\$	Low	Potential
LT 4.1	Align projects with Sustainability Master Plan	46	46	2	3	3	2	2	4	ongoing	Transportation		\$	Low	Potential
LT-4.2	Strive for platinum status with Walk Friendly Communities	54	54	3	2	4	3	3	3	7-10 years	Transportation		\$\$	Moderate	Direct
LT-4.3	Strive for platinum status with Bicycle Friendly Communities	54	54	3	2	4	3	3	3	3-6 years	Transportation		\$\$	Moderate	Direct
LT-4.4	Educate more students about walking and biking	53	53	3	2	3	3	3	4	ongoing	Transportation	School districts	\$	Low	Direct
LT-4.5	Increase the number of students walking, biking, carpooling and taking the bus to school	66	66	4	3	4	3	4	4	0-2 years	Transportation	School districts	\$	Moderate	Direct
LT-4.6	Make it safe and easy for children to walk, bike and take the bus to school and other destinations	59	59	4	3	4	2	4	2	ongoing	Transportation City Manager's Office	School districts	\$\$\$	High	Direct
LT-4.7	Prioritize walk and bike access to high frequency transit	75	75	5	3	5	4	5	2	ongoing	Transportation		\$\$\$	Moderate	Direct
LT-4.8	Update markings for all bicycle lanes that are not protected, consistent with current standards	27	27	1	1	2	1	2	2	Ongoing	Transportation		\$\$\$	High	None
LT-4.9	Complete the Greenway network by 2030	30	30	1	1	3	1	2	3	7-10 years	Tranportation		\$\$\$	High	None
LT-4.10	Develop criteria for alternative sidewalk configurations for safe pedestrian travel when traditional sidewalks are infeasible	32	32	1	1	3	1	2	4	0-2 years	Public Works Planning & Building		\$	Low	Potential

	Action		Total Score		Cr	iteria	Ratin	gs			Execution			Impac	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Ouality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
LT-5.1	Promote public transit use through incentives and a transportation demand management (TDM) program	63	63	4	2	3	4	4	4	ongoing	Transportation		\$	Moderate	Direct
LT-5.2	Improve transit access through first-last mile strategies	75	75	5	3	5	4	5	2	3-6 years	Transportation	Ride share services	\$\$\$	Moderate	Direct
LT-5.3	Work with regional transit agencies to provide an equitable and inclusive access to fare payment options	59	59	3	2	3	5	3	4	3-6 years	Transportation	Regional Transit Agencies	\$	Low	Potential
LT-6.1	Encourage carpooling and using shared mobility by providing incentives and ride-matching tools	63	63	4	2	3	4	4	4	ongoing	Transportation	Regional Transit Agencies	\$	Moderate	Direct
LT-7.1	Create partnerships with regional transit agencies and explore new public/private-partnerships	50	50	3	1	3	3	3	4	ongoing	Transportation	Regional Transit Agencies	\$	Low	Potential
LT-7.2	Innovate transit solutions along Cross Kirkland Corridor and connection from I-405 to downtown Kirkland	52	52	3	2	4	3	3	2	3-6 years	Transportation	Regional Transit Agencies	\$\$\$	Moderate	Direct

M Natural Environment + Ecosystems Action Ratings

	Action		Total Score		Cr	iteria	Ratir	igs			Execut	ion		Impact	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
EV-1.1	Continue NPDES permit compliance	41	41	0	4	4	3	0	4	ongoing	Surface Water	WA Ecology	\$	High	Direct
EV-1.2	Proactively identify and reduce pollutants of concern in Kirkland's impaired streams	40	—40	0	5	4	3	0	2	ongoing	Surface Water	King County	\$\$\$	Moderate	Potential
EV-1,3	Assess and prioritize watersheds and actions that will improve water quality	39	39	0	4	3	4	0	3	0-2 years	Surface Water		\$\$	Low	Potential
EV-2.1	Fund projects to make culverts fish passable	26	26	0	5	3	0	0	1	ongoing	Surface Water	Tribes WA Fish & Wildlife Army Corps	\$\$\$\$	Moderate	Potential
EV-2.2	Develop action plans for stormwater retrofit and water quality management strategies	42	42	0	5	3	4	0	3	0-2 years	Surface Water		\$\$	Moderate	Potential
EV-2.3	Actively involve the community in the protection of Kirkland's aquatic resources	45	— 45	0	5	4	4	0	3	ongoing	Surface Water	Environmental groups Community organizations	\$\$	Moderate	Potential
EV-3.1	Inspect and maintain public stormwater infrastructure	43	—43	0	4	5	2	0	5	ongoing	Surface Water		\$	Moderate	Potential
EV-3.2	Proactively replace aging stormwater infrastructure	37	37	0	3	5	3	0	2	0-2 years	Surface Water		\$\$\$	Moderate	Potential
EV-4.1	Evaluate stormwater infrastructure capacity and address capacity problems	40	40	0	3	5	2	0	5	ongoing	Surface Water		\$	Moderate	Potential
EV-4.2	Construct flood reduction projects for problems that occur more often than every 10 years	29		0	3	4	2	0	1	ongoing	Capital Improvement Program		\$\$\$\$	Moderate	Potential
EV-4.3	Review development proposals for potential flood and downstream impacts and require mitigation	32	32	0	3	4	1	0	4	ongoing	Surface Water	Developers	\$	Moderate	Direct
EV-5.1	Recruit and train additional Stewards to lead volunteer habitat restoration events in parks and natural areas	53	— 53	1	5	5	2	2	4	0-2 years	Parks & Comm. Service		\$	Moderate	Potential
EV-5.2	Grow the Green Kirkland Partnership volunteer force at a rate that meets or exceeds the City's population growth	53	53	1	5	5	2	2	4	0-2 years	Parks & Comm. Service	Forterra EarthCorps	\$	Moderate	Direct
EV-5.3	Contract a year-round Washington Conservation Corps crew to work in critical areas in all City parks and natural areas	56	56	2	5	5	2	2	3	0-2 years	Parks and Comm. Service	Department of Ecology	\$\$	Moderate	Potential

	Action		Total Score		C	riteria	Ratir	igs			Execut	ion		Impact	ts
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EV-6.1	Update City IPM policies and practices, prioritize treatment locations, and ensure maintenance occurs as needed	46	46	1	4	4	2	1	4	0-2 years	Parks & Comm. Service	King County Noxious Weed Control	\$	Moderate	Potential
EV-6.2	Utilize the ArcCollector application to map and track the treatment of noxious weeds requiring treatment	50	50	2	4	4	2	1	4	0-2 years	• GIS		\$	Moderate	Potential
EV-7.1	Explore designating all parks with playgrounds as synthetic pesticide-free parks	29	29	0	3	3	1	0	4	0-2 years	• Parks		\$	Low	None
EV-7.2	Design City projects that eliminate the need for synthetic pesticides	29	29	0	3	3	1	0	4	3-6 years	• CIP		\$	Low	None
EV 7.3	Design City public landscaping that requires less maintenance, water and pesticides	29	29	0	3	3	1	0	4	0-2 years	Parks Public Works		\$\$	Moderate	None
EV 7.4	Regularly evaluate alternative products instead of synthetic pesticides	31	31	0	3	3	1	0	5	Ongoing	Parks Public Works		\$	Low	None
EV-7.5	Explore changes to maintenance standards to avoid use of synthetic pesticides	27		0	3	3	1	0	3	Ongoing	Parks Public Works		\$	Low	None
EV-8.1	Proactively seek and acquire parkland to secure new parks	54	54	2	4	4	5	2	2	ongoing	• Parks		\$\$\$	High	Potential
EV 8.2	Achieve Intent of PROS Plan goal which ensures all community members are within 1/4 mile or 10-minute walk to a park	47	-47	2	2	4	3	0	5	0-2 years	• Parks		\$	Low	None
EV 8.3	Create GIS dataset for privately owned public parks and public plazas in the city	8	-0	0	0	0	0	0	4	3-6 years	• Parks		\$	Moderate	None
EV 9.1	Conduct an accessibility and inclusivity review of parks, recreational facilities and programming, and open space plans with the update of all future Parks and Open Space Plans	42	—42	0	2	5	5	0	3	3-6 years	• Parks		\$\$	Moderate	None
EV 9.2	Add an accessibility and inclusivity capital project fund to the Parks and Community Services capital improvement program	36	36	0	0	5	5	0	3	3-6 years	• Parks		\$\$	Moderate	None
EV 9.3	Update the Park, Recreation and Open Space Plan	43	43	1	3	4	3	1	3	0-2 years	• Parks		\$\$\$	High	None
EV-10.1	Update the 2020-2026 Urban Forestry Six Year Work Plan with Actions EV-10.2 through EV-10.10	49	— 49	1	4	4	4	0	4	0-2 years	Planning & Building		\$	Low	Potential
EV-10.2	Support internal cross department planning to develop and implement sustainable urban forestry strategies	47	47	0	4	-3	4	2	5	3-6 years	Planning & Building		\$	Low	Direct
EV-10.3	Pursue opportunities to improve the public tree maintenance program	56	56	Ť	3	5	5	3	3	3-6 years	Parks Public Works		\$\$\$	High	Direct

	Action		Total Score		Cr	iteria	Ratir	igs			Execu	tion		Impact	ts
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EV-10.4	Develop canopy enhancement strategies to mitigate public health impacts in areas that may be disproportionately affected by adverse environmental conditions	63	-63	1	4	5	5	3	5	3-6 years	• Planning & Building	WA Dept Natural Resources WA Dept of Health Private partners	\$	Moderate	
EV-10.5	Develop and implement tree planting programs to increase tree canopy cover on private and public property	61	61	2	4	4	3	5	5	3-6 years	• Planning & Building	Schools Regional agencies Nonprofits	\$\$	Moderate	Direct
EV-10.6	Identify and prioritize climate-resilient tree species for public/private tree planting programs	56	56	0	4	4	3	5	4	0-2 years	Planning & Building	UW Climate Impacts Group Allied professionals	\$	Low	Potential
EV-10.7	Dedicate resources for an ongoing, robust, inclusive public education and engagement framework around trees	56	56	0	5	5	4	2	5	0-2 years	Planning & Building	Community Private partners	\$	Moderate	Direct
EV-10.8	Evaluate pre-approved public works plans and look for opportunities for retention of right-of-way trees	35	35	2	2	2	1	İ	4	0-2 years	Planning & Building Public Works	Community Private partners	\$	Low	Potential
EV-10.9	Create comprehensive inventory of trees in City spaces and city-wide tree planting program with target areas and goals for canopy expansion in public spaces and residential areas.	52	——52	3	4	3	2	2	3	3-6 years	Planning & Building Parks Public Works		\$\$	Moderate	Potential
EV-10.10	Set commercial landscape design standards the use low- maintenance and waterwise plants	22		0	2	2	0	0	5	3-6 years	Planning & Building		\$	Low	Direct

Sustainable Materials Management Action Ratings

	Action		Total Score		Cr	iteria	Ratir	igs			Execu	tion		Impac	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
SM 1.1	Evaluate waste generation targets annually	26	26	1	1	1	1	1	5	0-2 years	Solid Waste		\$	Low	None
SM 1.2	Reduce consumer use of common single-use items	43	43	3	3	2	1	2	3	3-6 years	Solid Waste		\$	Moderate	Potential
SM 1.3	Improve waste prevention and recycling in City operations, facilities, and at sponsored events	35	35	2	2	2	1	1	4	3-6 years	Solid Waste		\$	Moderate	Potential
SM-1.4	Set innovative rates to incentivize waste reduction and recycling and composting	24	24	1	1	1	1	1	4	Ongoing	Solid Waste		\$	Low	Potential
SM 2.1	Support repair and reuse activities	38	38	3	1	2	2	1	3	0-2 years	Solid Waste	EcoConsumer	\$	Low	None
SM 2.2	Evaluate waste disposal progress annually	26	26	1	1	1	1	1	5	0-2 years	Solid Waste		\$	Low	None
SM 3.1	Eliminate the use of expanded polystyrene foam food service ware in food service establishments	44	-44	3	3	3	1	1	3	0-2 years	Solid Waste		\$\$	High	Direct
SM 3.2	Enact policy to reduce single-use food service ware	37	37	2	2	2	1	2	4	0-2 years	Solid Waste		\$	High	Direct
SM 3.3	Provide technical assistance and incentives to promote durable products at food service businesses	43	— 43	3	2	2	2	2	3	0-2 years	Solid Waste		\$\$	High	Direct
SM 4.1	Increase the efficiency and reduce the price of curbside and multifamily collection of bulky items	39	39	2	2	2	3	1	3	3-6 years	Solid Waste	Hauler	\$\$	Moderate	None
SM 4.2	Expand recycling events for difficult to recycle items without product stewardship take-back programs	44	-44	3	2	3	2	1	3	3-6 years	Solid Waste		\$	Moderate	None
SM 4.3	Increase single family food scrap recycling through a three- year educational cart tagging program	43	—43	4	2	2	1	t	3	3-6 years	Solid Waste	Hauler	\$	Moderate	None
SM 4.4	Update building code requirements for waste collection in multifamily, commercial, and mixed use	33	33	1	2	2	2	1.	4	7-10 years	Solid Waste		\$	Moderate	Direct
SM 4.5	Institute a construction and demolition program that requires structures to be deconstructed	48	48	4	2	3	1	1	4	7-10 years	Solid Waste Building		\$	Moderate	Direct
SM 4.6	Implement a disposal ban for recycling or organics	43	43	4	2	2	1	1	3	7-10 years	Solid Waste		\$\$	High	None
SM-4.7	Increase multi-family and commercial recycling	30	30	1	1	2	2	1	4	3-6 years	Solid Waste Planning & Builidng		\$	Low	None

	Action		Total Score		Cr	iteria	Ratir	gs			Execu	tion		Impac	ts
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SM 5.1	Develop infrastructure and increase outreach and incentives to increase recycling of organics	46	46	3	2	3	2	1	4	7-10 years	Solid Waste		\$	Moderate	Direct
SM 5.2	Increase food recovery through donation of surplus meals and staple food items to local food banks	50	50	3	1	4	4	1	3	7-10 years	Solid Waste	Food producers Food banks Schools	\$\$	High	Direct
SM 6.1	Support legislative efforts and remain active in groups	32	32	1	1	2	2	1	5	7-10 years	Solid Waste	Northwest Product Stewardship Council	\$	Low	Potential

Sustainable Governance Action Ratings

	Action		Total Score		C	riteria	Rati	ngs			Execu	tion		Impac	ts
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
SG-1.1	Customize and utilize Sustainable Decision Making Matrix by all department decision makers	58	58	3	3	3	3	3	5	0-2 years	City Manager's Office		\$	Moderate	Potential
SG-1.2	Memorialize in Staff Reports that all major decisions have considered sustainability	58	58	3	3	3	3	3	5	0-2 years	City Manager's Office		\$	Low	None
SG-1.3	Identify tools such as a Carbon Counting Calculator that can be used for all City building and development projects to ensure the use of low carbon methods and materials	44	-44	4	2	2	0	2	4	0-2 years	Facilities Capital Improvement Program		\$	Low	Potential
SG-1.4	Identify and apply the Epeat registry for decisions of electronic equipment purchases	27	—27	1	1	0	1	4	4	0-2 years	• IT		\$	Low	None
SG-1.5	Adopt a policy for fleet purchases for fully electric and hybrid electric vehicles depending on technology availability and city needs; and actively seek grants to move toward an all-electric City fleet and supporting charging station infrastructure	49	49	4	1	3	1	4	3	0-2 years	• Fleet		\$	Moderate	None
SG-1.6	Establish a grant-writing team to find and apply for grants to fund actions from the Sustainability Master Plan	30	 30	1	2	2	1	2	3	0-2 years	Planning & Building with other departments	Dept of Commerce King County	\$	Moderate	Potential
SG 1.7	Apply for a Puget Sound Energy Resource Conservation Officer to optimize energy use and maximize efficiency	36	36	2	1	2	1	4	3	0-2 years	Facilities	Puget Sound Energy	\$\$	Low	Potential
SG-1.8	Develop a plan in CIP for all city facilities to meet 25% energy reduction goal by 2030 and 45% by 2050	34	34	2	1	2	1	2	4	0-2 Years	Facilities	K4C Electric Utility	\$	Moderate	None
SG-1.9	Develop water and energy efficiency standards for acquired facilities. If standards are not met, retrofit to achieve standards	34	34	2	1	2	1	2	4	0-2 years	Facilities PSE	• к4с	\$	Low	None
SG-1.10	Explore reduction of or elimination of gas-powered landscaping equipment for City operations	37	37	2	1	3	1	3	3	Ongoing	Parks Public Works		\$\$	Moderat	None
SG-1.11	Explore creating an anti-idling policy for City vehicles	43	43	3	1	2	1	3	5	0-2 years	Facilities	• K4C	\$	Low	None

	Action		Total Score		С	riteria	Rati	ngs			Execu	tion		Impac	ts
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SG-2.1	Appoint a sustainability manager to coordinate implementation of the Sustainability Master Plan	49	49	3	3	2	3	3	2	3-6 years	City Manager's Office		\$\$	High	None
SG-2.2	Implement a system to more closely coordinate sustainability-related activities across City departments	31	—31	2	2	1	0	2	4	0-2 years	City Manager's Office		\$\$	Moderate	None
SG-2.3	Establish protocol that allows all potential city staff to work from home a minimum of two days per week	50	50	4	2	3	1	2	4	0-2 years	Human Resources		\$	Low	Potential
SG-3.1	Implement new internal purchasing guidelines, including focus on reducing single use items	21		2	1	0	0	0	4	0-2 years	Purchasing Solid Waste		\$	Low	None
SG-3.2	Explore specifying compost made from Kirkland's organic materials to be used in City operations and projects	25	25	2	3	0	0	0	3	0-2 years	Public Works		\$	Low	None
SG-3.3	Update purchasing policy to reflect best practices in environmental purchasing	31	31	3	1	1	0	1	4	0-2 years	Purchasing		\$	Low	None
SG-4.1	Implement a system of civic engagement that more closely coordinates activities across various City departments	26	26	0	0	3	3	0	4	0-2 years	City Manager's Office		\$-\$\$	Moderate	Potential
SG-4.2	Develop a process to identify and dismantle unintended barriers to public participation	27		0	0	3	4	0	3	0-2 years	City Manager's Office	Communities of color Immigrant and refugee communities Neighborhood Assoc. Businesses Faith community Community-based organizations	\$-\$\$	Moderate	Potential
SG-4.3	Identify and empower trusted messengers in the community to serve as liaisons between the City and communities that have historically been underrepresented	29	—29	o	0	3	4	o	4	0-2 years	• City Manager's Office	Communities of color Immigrant and refugee communities Faith community Community-based organizations	\$-\$\$	Moderate	Potential
SG-4.4	Perform a comprehensive city organizational equity assessment to identify gaps in diversity, equity, and inclusion in all areas of City policy, practice and procedur	34	34	1	1	2	4	1	3	0-2 years	City Manager's Office		\$\$- \$\$\$	Moderate	None
SG 4.5	Provide opportunities for public input that do not require presence at a particular time or place	40	40	2	1:	2	3	2	4	0-2 years	City Manager's Office		\$	Low	None

Action			Total Score		C	riteria	Rati	ngs			Execu	tion		Impac	ts
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SG-5.1	Explore opportunities for the City's involvement in efforts of collective impact to help achieve desired outcomes	23		0	0	2	3	0	4	0-2 years	• City Manager's Office	Communities of color Immigrant and refugee communities Neighborhood Assoc. Business community Faith community Community-based organizations	\$-\$\$	Moderate	Potential
SG-5.2	Maintain support for Kirkland neighborhood associations, including efforts to expand active participation from underrepresented segments of the community	23	—23	0	0	2	3	0	4	0-2 years	• City Manager's Office	Neighborhood Assoc. Communities of color Immigrant and refugee communities Faith community Community-based organizations	\$	Moderate	Potential
SG-5.3	Implement opportunities for civic education and leadership development for community leaders, with a specific emphasis on Black community members, people of color, and immigrants	30	30	0	0	3	5	0	3	0-2 years	• City Manager's Office	Neighborhood Assoc. Communities of Color Immigrant and refugee communities Faith community Community-based organizations	\$-\$\$	Moderate	Potential
SG-5.4	Prioritize and implement a civic engagement course that provides education about local government and creates an entry point for emerging community leaders	28		0	1	1	4	1	4	0-2 years	• City Manager's Office	Neighborhood Assoc. Communities of Color Immigrant and refugee communities	\$\$	Moderate	None
SG-5.5	Consider involving community members (and Boards and Commissions) in advising City Council on the implementation of this plan and recommendations for future revisions as conditions change	40	—4 0	2	2	2	2	2	4	0-2 years	Planning & Building	Community Groups	\$	Low	None
SG-6.1	Increase redundant / alternate power capability at critical City facilities	39	39	2	0	3	4	2	2	3-6 years	• Facilities		\$\$\$	Moderate	None
SG-6.2	Educate residents and businesses on actions they can take to increase personal and physical earthquake resilience	34	34	0	0	4	4	1	4	ongoing	Emergency Management	Neighborhood Assoc. Other public agencies Business community Nonprofit partners	\$	Low	Direct
SG-6.3	Identify options and actions to increase water reservoir stability and shake resilient water mains	28	28	0	3	3	2	0	2	3-6 years	Public Works	Water utilities	\$\$\$	Moderate	Potential

Action			Total Score		С	riteria	Rati	ngs			Execu	tion		Impac	ts
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SG-6.4	Continue mitigation projects intended to reduce the risk of erosion, landslide, and urban flooding	35	35	0	4	3	2	1	3	ongoing	Capital Improvement Program	Other public agencies Environmental groups	\$\$\$	Moderate	Potential
SG-6.5	Focus on efforts to address and mitigate climate change impacts	62	62	4	4	3	3	2	4	ongoing	Planning & Building	• K4C	\$\$	Moderate	Potential
SG-6.6	Implement hazard mitigation strategies through funding, resources, staff support and partner agencies	53	— 53	3	4	3	3	i	3	3-6 years	Emergency Management	Other public agencies Environmental groups Utilities Business Community Nonprofit partners	sss	Moderate	Potential
SG-7,1	Use the Sustainable Decision Making Matrix as a tool for evaluating future investments in projects, programs or actions	58	58	3	3	3	3	3	5	0-2 years	• Finance		\$	Moderate	None
SG-7.2	Evaluate establishing a sustainability opportunity fund for the City match portion of sustainability grants	44	-44	3	2	2	3	2	2	3-6 years	Finance	1	\$\$\$	Moderate	None

Sustainable Business Action Ratings

	Action		Total Score		Cr	iteria	Ratir	igs			Execu	tion		Impac	s
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
SB-1.1	Assist Kirkland businesses in accessing resources to follow environmental best practices	41	—41	2	3	2	2	2	3	Ongoing	Public Works Solid Waste	EnviroStars	\$\$	Low	Direct
SB-1.2	Conduct outreach to all non home-based businesses, ensuring all have sufficient recycling capacity	25	25	1	2	1	1	0	4	0-2 years	Solid Waste	• Hauler	\$	Low	Direct
SB-1.3	Provide hands-on technical assistance to potential pollution generating businesses to reduce pollution entering the stormwater system	31	31	0	3	2	2	1	4	Ongoing	Surface Water	King County Hazardous Waste	\$\$	Low	Direct
SB-2.1	Track and monitor the makeup of business industries in Kirkland and set a diversification goal	20		0	1	2	1	0	4	3-6 years	Economic Development	Washington State	\$	Low	Potential
SB-2.2	Partner with Chamber and Kirkland Downtown Alliance on promoting "Buy Local"	32	32	2	1	2	į.	1	4	0-2 years	Economic Development	Chamber of Commerce Kirkland Downtown Association	\$	Low	Direct
SB-2.3	Support policy that encourages mixed use development and economic diversity	42	—4 2	2	1	3	2	2	5	0-2 years	Economic Development Planning & Building		\$	Moderate	Direct
SB-3.1	Develop an economic resilience plan	23	23	0	0	3	2	1	3	3-6 years	City Manager's Office	Kirkland businesses	\$\$	Moderate	Direct
SB-3.2	Formulate a green economic recovery plan that focuses on clean, green industries and living wage jobs	46	46	2	2	3	3	3	3	0-2 years	City Manager's Office	Kirkland businesses	\$\$	Moderate	Direct
SB-3.3	Support legislation that promotes a resilient business community in Kirkland and on the Eastside	27	—27	ì	1	2	1	1	4	0-2 years	City Manager's Office		\$	Low	Potential
SB-3.4	Promote home occupation businesses	37	37	2	2	2	1	2	4	3-6 years	Planning & Building		\$	Low	Potential
SB-4.1	Create a program to help restaurants, institutions, schools procure food from local sources and farms	31	31	2	1	3	1	0	3	3-6 years	Economic Development	King Conservation District Local farmers Restaurants School districts	\$\$	Moderate	Direct
SB-4.2	Promote a training program to assist immigrant and minority-owned new small business owners	37	3 7	1	2	2	4	1.	3	3- 6 years	Economic Development		\$\$	Moderate	Direct
SB-4.3	Create spaces and places for startups that focus on making and selling sustainable products	30	30	1	2	2	1	1	4	3-6 years	Economic Development	Private partners	\$	Moderate	Direct

Healthy Community Action Ratings

Action			Total Score		Cr	iteria	Ratin	igs		4	Executi	on		Impact	s
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
HC 1.1	Develop a funding plan for development and operation of new P-Patches and community gardens	40	40	2	2	3	3	0	3	0-5 years	• Parks		\$\$	Moderate	None
HC 1.2	Develop Public/Private partnerships to locate new P-Patches on private land, including rooftops	46	46	2	2	3	3	2	4	3-6 years	Parks Planning	Private partners	\$\$	Moderate	None
HC 1.3	Develop a strategy plan to prioritize the location of community garden opportunities in areas of the city with concentrations of multi-family developments	46	—4 6	2	2	4	4	0	3	3-6 years	• Parks		\$\$	Moderate	None
HC-1.4	Build educational and support programs to teach residents how to grow food and reduce water and pesticide usage	25	25	0	2	2	ī	1	4	3-6 years	Parks Public Works Environmental Edudation	King County Master Gardeners Tilth Alliance	\$\$	Moderate	None
HC 2.1	Develop Public/Private Partnerships to assist in new Farmers Market Operations	36	36	2	0	3	3	0	4	3-6 years	• Parks	Private partners	\$\$	Moderate	None
HC-2.2	Amend Kirkland Zoning Code to allow Farmer's Markets where excluded	39	39	2	0	3	4	0	4	0-2 years	Planning		\$	Low	Potential
HC-3.1	Amend Kirkland Zoning Code to require common open space to include food growing beds	42	-42	2	2	3	3	0	4	0-2 years	Planning		\$	Low	None
HC-3.2	Amend the Kirkland Zoning Code to allow food growing in stream and wetland buffer setback areas	39	39	2	2	2	3	0	4	0-2 years	Planning		\$	Low	None
HC-3.3	Develop a Food Action Plan that assures fresh, local food is available and accessible by entire community	37	37	2	1	3	3	0	3	7-10 years	Planning City Manager's Office		\$\$\$	High	Potential
HC-4.1	Increase efficiency of water fixtures through incentive programs, education, legislation and partnerships	37	37	2	2	1	2	3	3	0-2 years	Planning & Building	Water utilities	\$\$	Moderate	Direct
HC-4.2	Develop water supplies for community use: reclaimed water, harvested water and grey and black water	36	36	2	2	3	1	2	2	3-6 years	Public Works	Wastewater utilities	\$\$\$	High	None
HC-4.3	Intensify water conservation effort through public/private partnerships and outreach and education	37	37	2	2	1	2	2	4	0-2 years	Public Works	Water utilities	\$	Low	None
HC-4.4	Research per-capita differences in water usages throughout the region and identify best practices to incorporate	21	_21	0	2	1	0	2	4	0-2 years	Utility Billing	Water Utilities	\$	Low	None
HC-4.5	Consider rate structure impacts on per-capita differences in water usage throughout the region	21	—21	0	2	Ţ	0	2	4	0-2 years	Utility Billing	Water Utilities	\$	Low	None

Action			Total Score		Cr	iteria	Ratin	igs			Executi	on		Impacts		
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community	
HC 4.6	Create education program for water-use best practices addressing irrigation overuse and household consumption	21	—21	0	2	1	0	2	4	0-2 years	Utility Billing	Water Utilities	\$	Low	None	
HC 5.1	Hire or contract a Community Engagement and Data Analyst for 1 year	31	31	0	0	3	4	2	3	0-2 years	Human Services		\$\$	Moderate	Potential	
HC 6.1	Hire or contract a homelessness and housing outreach specialist to connect unhoused residents to services and housing	60	60	3	3	4	4	3	3	0-2 years	Human Services		\$\$	Moderate	Direct	
HC 6,2	Secure funding for more shelter and day center services for all groups experiencing homelessness on the Eastside	34	34	0	2	3	3	2	3	0-2 years	Human Services	Other cities Private partners	\$\$\$	Low	Direct	
HC 7.1	Sign on as an Eastside Pathways partner to attain better outcomes for children, cradle to career	31	31	0	0	3	4	0	5	0-2 years	Human Services	Eastside Pathways Partner agencies	\$	Low	Potential	
HC 8.1	Require on-going training on diversity, equity, and inclusion for City employees	27		0	0	3	4	0	3	0-2 years	Human Resources		\$\$	Moderate	Potential	
HC 8.2	Explore partnership programs to implement community learning and dialogue around diversity, equity and inclusion	29	29	0	0	3	4	0	4	0-2 years	City Manager's Office	Communities of color Immigrant and refugee communities Neighborhood Assoc. Businesses Faith community	\$	Moderate	Potential	
HC 8.3	Encourage the strengthening of relationships between various groups and communities in Kirkland	45	——45	2	2	3	4	0	4	0-2 years	City Manager's Office	Communities of color Immigrant and refugee communities Neighborhood Assoc. Businesses Faith community	\$	Moderate	Potential	
HC 9.1	Continue network membership in Welcoming America and Cities for Citizenship	23	23	0	0	2	3	0	4	0-2 years	City Manager's Office		\$	Moderate	Potential	
HC 9.2	Seek Welcoming Certification from Welcoming America	27	—27	0	0	3	4	0	3	0-2 years	City Manager's Office	Community-based organizations Neighboring cities	\$	Moderate	Potential	
HC 9.3	Create partnership programs to strengthen relationships between the City and immigrant and refugee communities	29	29	0	0	3	4	0	4	0-2 years	City Manager's Office	Community-based organizations Neighboring cities	\$	Moderate	Potential	

	Action		Total Score		Cr	iteria	Ratir	ngs			Executi	on		Impact	S
Action ID	Action Summary (see plan for complete text)	Weighted Score	Weighted Score Out of Maximum 90-point Scale	Greenhouse Gas Reduction	Environmental Quality	Community Health- Quality of Life	Environmental Social Justice and Equity	Reduction of Energy Consumption	Net Cost	Time Frame	Lead Department or Division	Community Partners	Relative Cost	Staff Level of Effort	Impact to Business / Development Community
HC-10.1	Identify, develop, and implement actions to help end interpersonal, institutional, and structural racism, increase social equity, and support environmental justice in Kirkland	37	—37	1	1	2	5	1	3	0-2 years	City Manager's Office	Communities of color Immigrant and refugee communities Neighborhood Assoc. Businesses Faith community	\$\$\$	High	None
HC-10.2	Expand the proposed Geographic Information System (GIS) community analysis to include a gap analysis of environmental justice inequities	40	40	1	1	3	5	1	3	0-2 years	Planning & Building IT Department City Manager's Office		\$\$\$	Moderate	Potential
HC-11.1	Establish program to preserve multi-family housing stock	51	— 51	3	3	2	3	2	4	3-6 years	Planning & Building	ARCH King County	\$\$	Moderate	Potential
HC-11.2	Establish program or create additional incentives to preserve older single-family housing stock in exchange for higher density and lot size flexibility	48	48	3	2	2	3	2	4	0-2 years	Planning & Building		\$\$	Moderate	Potential
HC-11.3	Establish a public/private community solar program with a focus on existing multi-family housing stock	56	56	3	3	3	3	3	4	3-6 years	Planning & Building	Private partners, K4C	\$\$	Moderate	Potential
HC-11.4	Revise the City's Expedited Green Building program to include incentives related to creating attainable housing	50	50	3	2	2	3	3	4	0-2 years	Planning & Building	ARCH King County	\$	Low	Direct
HC- 11.5	Encourage developers who use the Evergreen Sustainability Standard to exceed minimums	40	40	2	2	2	2	2	4	0-2 years	Planning & Building	Housing developers	\$	Low	Potential
HC-11.6	Monitor local and sub-regional job types, wages and housing costs to ensure housing stock is affordable to employees of local businesses and congestion is reduced	24	—24	1	1	1	1	1	4	0-2 years	Planning & Building		\$	Medium	None
HC 11.7	Identify city-wide numerical affordable housing goals for affordable units built under inclusion-ary zoning rules and track progress of meeting set goals	31	31	0	0	3	4	1	4	0-2 years	Planning & Buidling	• ARCH	\$	Low	Potential
HC 12.1	Complete an athletic field study that can identify a plan for system wide field improvements or acquisitions	30	30	0	0	3	5	0	3	3-6 years	Parks & Comm. Services		\$	Medium	Potential
HC 13.1	Build an additional skate park	27		0	0	3	4	0	3	7-10 years	Parks & Comm. Services		\$\$	Medium	None
HC 13.2	Construct a recreation and aquatics center to achieve the recommended indoor pool and recreation space	32	 32	0	0	5	5	0	1	7-10 years	Parks & Comm. Services	Redmond Bellevue King County	\$\$\$\$	High	Potential
HC-13.3	Evaluate existing recreational programs and facilities to ensure equity for all populations and that they are serving the diverse needs in our community	29	29	0	0	3	4	0	4	0-2 years	Parks & Comm. Services		\$\$	Moderate	None
HC-13.4	Explore public/private recreational partnerships	22		0	0	3	1	0	5	0-2 years	Parks & Comm. Services		\$	Low	None

Targeted Timelines for Goals in Plan

2025



Goal ES-5 Reduce emissions of fossil fuels from all buildings by 20% by 2025 and 50% by 2030



Goal BI-2 Require 50% of new construction to be Certified Net Zero Energy by 2025 and 100% by 2030



Goal BI-4 Reduce water use in buildings by 10% by 2025 and 20% by 2030



Goal BI-1 Certify all new construction as High Performing Green Buildings



Goal SM-5 Increase the number of businesses composting food scraps to 150 by 2023



Goal EV-6 Eliminate the discretionary use of synthetic pesticides in parks by 2025



Goal EV-10 Identify priorities for meeting the overall goal of citywide 40% tree canopy cover goal by 2026



Goal HC-1 Increase P-Patches/ community gardens by adding 5 more by 2025, and another 100% by 2030



Goal HC-4 Reduce per capita use of potable water by 10% by 2025 and 20% by 2030

2030



Goal ES-2 Purchased energy is 100% carbon free



Goal ES-1 Reduce community emissions by 50%



Goal ES-3 Add 10 Megawatts (MW) of solar



Goal ES-4 Reduce GHG emissions from vehicles 25%



Goal BI-3 Reduce energy use in existing buildings by 25%

Goal SM-4 Achieve a recycling diversion rate of 70%



Goal LT-3 Reduce driving per capita by 20%



Goal SM-1 Achieve waste generation rate of 20.4 lbs/week per capita



Goal SM-2 Achieve waste disposal target of 5.1 lbs/week per capita

2035



Goal EV-5 Restore 500 acres of City-owned natural areas and open space park lands

2050



Goal ES-1 Reduce community emissions by 80%



Goal BI-3 Reduce energy use in existing buildings by 45%



Goal LT-3 Reduce driving per capita by 50%

SUSTAINABLE DECISION MAKING

To institutionalize consistent sustainable decisionmaking at the City, the Sustainable Decision Making Worksheet or Matrix should be used to evaluate alternatives, refine proposed actions to improve outcomes across other focus areas, and memorialize the evaluation process.

Sustainable Decision Making at the City

The City frequently makes complex decisions and there are many competing interests in arriving at a final decision. The Sustainable Decision Making Matrix (SDMM) is a weighted decision making tool that is aligned with the major focus areas of the Sustainability Master Plan. Therefore, when this tool is used, it can inform these decisions and help fulfill the goals of this plan.

Decision makers should use either the Excel version of the Sustainable Decision Making Matrix or the following Sustainable Decision Making Matrix worksheet (shown on the next page) to calculate the weighted score of a particular action (project, policy, program or code). The higher the weighted score, the more a particular action is aligned with this plan's goals.

After a score is completed by decision makers, it should be memorialized in a uniform way to communicate to City Council and the community that the SDMM has been used and considered to make the most sustainable decision possible. The Template Staff Report sample text below should be used and documented in all Council Staff reports and other applicable documents.

Template Staff Report Text

Insert action here (project, policy, program, code) A, B and C were evaluated by staff using the City's Sustainable Decision Making Matrix (SDMM). The scores for each Project, Alternative, action or decision were as follows (A=#, B=#, C=#) out of a total of 90 possible points.

The following alternatives were changed (if applicable) to more closely align with the criteria identified in the City's Sustainability Master Plan and then scored again using the SDMM. The Alternatives were then scored as follows (A=#, B=#, C=#).

Alternative (A, B or C), was chosen because it was the highest weighted score, and if applicable, it was (insert reason here) was also was factor in the decision made. Therefore, this decision to select (insert alternative) complies with the SDMM that was adopted as an integral part of the City's Sustainability Master Plan.

Sustainable Decision Making Worksheet

Describe the proposed action in one sentence:

The sustainable decision making worksheet will be used to evaluate City actions by how they align with the goals of the Sustainability Master Plan.

Criteria 1: Greenhouse Gas Reduction

How much will taking this action reduce green house gas emissions in Kirkland?

- Not applicable 0
- 1 Will not reduce greenhouse gas emissions
- 2 Will marginally reduce greenhouse gas emissions
- 3 Will moderately reduce greenhouse gas emissions
- Will significantly reduce greenhouse gas emissions
- Will extremely reduce greenhouse gas emissions

How could this action be adjusted to further reduce emissions?

Greenhouse G	as W	/eig	hted Score
Multiply the r	atino	g by	y 5:
x	5	=	

Criteria 2: Environmental Quality

How much will the City taking this action protect habitats, open space and tree cover; reduce consumption of natural resources; and restore ecosystems?

- O Not applicable
- 1 Will not improve environmental quality
- Will marginally improve environmental quality
- 3 Will moderately improve environmental quality
- Will significantly improve environmental quality
- Will extremely improve environmental quality

Enviro. Quality Weighted Score Multiply the rating by 3:

How could this action be adjusted to further improve environmental quality?

Criteria 3: Community Health & Quality of Life

How much will this action improve health in the community, quality of life, and increase resilience to natural and human-caused hazards?

- Not applicable
- 1 Will not reduce improve community health
- Will marginally improve community health
- Will moderately improve community health
- Will significantly improve community health
- Will extremely improve community health

Comm. Health Weighted Score Multiply the rating by 3:

How could this action be adjusted to further improve community health, quality of life, and resilience?

Criteria 4: Environmental Social Justice & Equity

How much will this action improve equitable environmental outcomes for historically disenfranchised communities (e.g. low income; Black, Indigenous, and People of Color (BIPOC))?

- O Not applicable
- 1 Will not improve environmental social justice
- 2 Will marginally improve environmental social justice
- 3 Will moderately improve environmental social justice
- 4 Will significantly improve environmental social justice
- 5 Will extremely improve environmental social justice

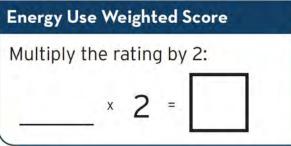
Social Justice	Weig	hte	d Sco	ore	
Multiply the ra	ating	g by	3:		
x	3	=			

How could this action be adjusted to further improve environmental social justice and equity?

Criteria 5: Reduction of Energy Consumption

How much will this action directly reduce energy consumption and energy costs and replace fossil fuel-based consumption with clean, renewable energy sources?

- O Not applicable
- 1 Will not reduce energy consumption
- 2 Will marginally reduce energy consumption
- **3** Will moderately reduce energy consumption
- 4 Will significantly reduce energy consumption
- 5 Will extremely reduce energy consumption



How could this action be adjusted to further reduce energy consumption?

Criteria 6: Cost

What will the net cost (cost - savings) be to the City to complete this action?

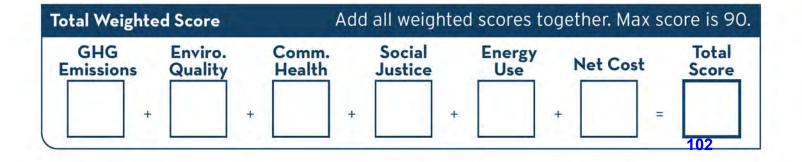
- O Cost is prohibitive
- 1 Cost is extremely expensive
- 2 Cost is highly expensive
- 3 Cost is moderately expensive
- 4 Cost is nominal
- 5 No cost to implement

Net Cost Weighted Score

Multiply the rating by 2:

____ x 2 =

What other financial routes could be used to reduce the cost?



Focus Areas in City Plans

This table identifies which Focus Areas are addressed in existing City of Kirkland Planning documents. In future revisions of these planning documents, efforts should be made to address additional Focus Areas..

	Th	川					\$	
	Energy Supply + Emissions	Building + Land Use	Land Use + Transportation	Natural Environment + Ecosystems	Sustainable Materials Management	Sustainable Governance	Sustainable Business	Healthy Community
Comprehensive Plan	/	~	V	V	<	/	~	~
Transportation Master Plan			V	V		~		V
Housing Strategic Plan								V
Parks, Recreation and Open Space Plan				V				V
Urban Forestry Strategic Plan				V				
Surface Water Master Plan				V		V		V
Active Transportation Plan			V					
Capital Facilities Plan			V	V		~		V
Transportation Implementation Plan			~			V		











COMMUNITY

The City cannot meet all the environmental goals in this plan without the support of the community. There are many opportunities for residents to get involved and take personal action, for businesses to adopt best environmental practices, for developers to lead in creating efficient homes and properties, and for organizations of all kinds to partner or lead environmental efforts.

Community Action

There are many definitions of community and one is that it is "a group of people living in the same place or having a particular characteristic in common." The common characteristic we share is that we care about the environment, social equity and justice, and having a strong, resilient economy. Regarding the Sustainability Master Plan's implementation, it relies not only on the City government, but all people that live in, work in and enjoy Kirkland to ensure its success.

Since there is limited funding and time to achieve the goals of the plan, it is essential that we all work together and determine what each of us can do to contribute to the overall sustainability of Kirkland and to the region. There are ways for all to help, regardless of income, age, or housing. These actions are merely a starting point to inspire the Kirkland community to join the City in reaching the goals of this plan.

Residents

Engage + Advocate

- Respond to City surveys to inform decision-making
- Attend City workshops to shape project design
- Speak during a public comment period at a Council meeting
- · Email Council members about environmental actions you'd like the City to prioritize
- Alert City staff to sidewalk and bike lane maintenance needs using the Our Kirkland app



Deputy Mayor Jay Arnold celebrates installation of solar panels at City Hall with a community advocate.



Councilmember Kelli Curtis and Urban Forester Deb Powers discuss sustainability in Kirkland with members of the public at the Sustainability Forum in June 2019.



Student group The Tomorrow Project partnered with the City's recycling team to pilot a public food scrap compost cart on Park Lane in 2019.

Volunteer + Participate

- · Volunteer with the Green Kirkland Partnership to restore Kirkland's natural areas
- Become a Green Steward to champion the restoration of a natural space near you
- Volunteer for local non-profit and faith-based organizations working on sustainability, environmental justice, and supporting a healthy community
- Join a community group or organization working on environmental goals
- Become a Soil and Water Steward and educate the community about protecting our ecosystem
- Participate in community reuse events
- Help plant raingardens in your neighborhood



Volunteers from a Kirkland business and other community members plant native plants at a newly-constructed raingarden along the Cross Kirkland Corridor in the Highlands neighborhood.



Volunteers of all ages are invited to join in - these youth volunteered to plant trees at an Arbor Day event, along with Councilmember Jon Pascal.



Community members donate costumes and accessories for the City's community Halloween costume swap, where any community member can come and create a unique costume for free from donated materials.

Personal Action

At Home

- Use a shower timer and/or low-flow showerhead to reduce water and energy use
- Sign up for green power from Puget Sound Energy
- Put aerators on all faucets to reduce water use
- Repair broken items instead of replacing them
- Compost all your food scraps in your gray cart

Get green living tips on the City's @KirklandEnviro Facebook and Twitter accounts or sign up for monthly green emails.



The City partnered with Puget Sound Energy to offer discounted energy efficient lighting options at a Lighting Fair at City Hall for All in 2019.

In Your Yard

- Welcome wildlife by planting a native garden
- Plant a tree
- Use less water by growing drought-tolerant plants
- Replace pesticides and plant killer with natural pest control methods to reduce chemical use
- Follow best watering practices to prevent waste
- Harvest rainwater to use less potable water in your garden
- Minimize fertilizer use to protect waterways from excessive nutrients

Learn how to use less pesticides in your garden, reduce your maintenance and watering needs by choosing plants that do well in our climate, and invite native wildlife and beneficial pollinators to your yard at naturalyardcare.org.



A demonstration raingarden at a Kirkland home.



A resident in the Forbes Creek Watershed installed native landscpaing at her home through the Yard Smart program.

In the Community

- Make trips by foot, bike, bus, and other ways without a car when possible
- Patronize local businesses
- Choose secondhand items and participate in community sharing and reuse groups
- Support green businesses that have gotten EnviroStars recognition

Kirkland Green Trip helps people who live and work in Kirkland find better ways to get around, and offers rewards for alternative commuting. Visit kirklandgreentrip.org.



Bike commuters at a Bike Everywhere Day station.

Invest in Green Infrastructure

- Install a solar array to supply clean energy
- When replacing natural gas appliances, consider switching to electric appliances
- · When remodeling, utilize a salvage team to minimize construction waste
- Build a raingarden that soaks up stormwater to prevent flooding and protect water quality
- Add an Accessory Dwelling Unit to help provide more housing options in our community

The City offers streamlined permitting for rooftop solar installations on private residences.



Solar panels installed at a Kirkland home during a Solarize Kirkland campaign.



A natural green shoreline installed at a waterfront Kirkland home provides more welcoming habitat for native wildlife.

Businesses

Follow Green Practices

Learn about and get help implementing environmental best practices that can save money and protect your staff's health through the EnviroStars green business program.

Support Staff in Reducing Trips

- Encourage your staff to use alternative modes of transportation besides driving alone
- · Provide transit passes or subsidies for staff
- Provide bike storage, lockers, and changing facilities to make it easier for staff to cycle
- Allow staff to telecommute or work flex schedules

Kirkland Green Trip helps businesses support their employees in reducing drive-alone commute trips. Visit kirklandgreentrip.org.



Pressure washing with an absorbent sock around the storm drain protects our water from pollution.

Implement Green Upgrades

Learn about rebates and programs available to help your business make green upgrades through the EnviroStars green business program.

The EnviroStars green business program provides free technical support for Washington businesses in their preferred language. Visit envirostars.org or contact info@envirostars.org.



Recognition is available for businesses that commit to following key environmental best practices.



Local business owner receiving EnviroStars recognition for running her Montessori school as a green business.

Developers

Developers serve an important role in Kirkland's sustainability, and can have a big impact on Kirkland's environmental impacts in the long term through both the type of developments built and the choices made at those properties, whether single-family dwellings, or multi-family, mixed-use or commercial properties. We welcome your support and leadership in building greener developments.

Organizations Partner

There are many opportunities to partner with the City to help the community achieve the goals of the Sustainability Master Plan. See the Implementation Guide for specific actions where the City is actively seeking community partners. We also welcome ideas for other partnerships.

Lead

We celebrate the environmental leadership of nonprofit and faith-based organizations in Kirkland.



A bi-monthly Orca to Go station at Kirkland City Hall helps make buying an Orca bus pass more accessible for the Kirkland community.



Pervious paving at a development in Kirkland.



Recycling staff partnered with the Kirkland Library to raise awareness about a free textile recycling program.



Tilth Alliance has partnered with the City to develop a demonstration garden at McAuliffe Park with the help of volunteers, showcasing natural gardening techniques.











Left top: Mayor Penny Sweet watches as kids learn about watersheds from the We Need Water Because program.

Left middle: Green Kirkland Day 2019 volunteers.

Left bottom: Councilmember Jon Pascal talks with kids on Walk to School Day.

Above top: a Kirkland business owner receives a spill kit to protect water quality from accidental spills. Photo by ECOSS.

Above bottom: Former Mayor Amy Walen discusses gun safety with a parent at the 2018 Parent School Walk Out.