15866 ATTACHMENT B

**Section 1 >> Reducing Greenhouse Gas Emissions**

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| **PRIORITY ACTIONS** |
| PRIORITY ACTION  | 2017 STATUS |  2020 STATUS |
| **Assess cost-effectiveness of select County operations commitments in the 2015 Strategic Climate Action Plan (SCAP).** Building on the pilot cost-effectiveness assessment carried out to inform the 2015 SCAP, King County will pilot a cost-effectiveness assessment for at least 12 “County operations” commitments. This information will be provided as part of the first annual report on implementation of the 2015 SCAP and will inform future climate action planning. | King County completed an assessment of the cost-effectiveness of select County operations and included relevant information in the 2015 SCAP Annual Report. A 2016 review of this work by the King County Auditor’s Office concluded that “King County has made progress toward this recommendation by conducting cost-effectiveness analysis for multiple county operations.” | See 2017 Status Update. |
| **Develop and implement an operational cost of carbon.** In the absence of state and federal action to put a price on greenhouse gas (GHG) emissions, it is difficult to integrate the environmental and economic costs associated with different decisions as they relate to GHG emissions. To address this gap in the near term, King County’s Office of Performance, Strategy and Budget will collaborate with King County agencies to develop and propose an internal cost of carbon by the end of 2017. This cost of carbon will be used in life-cycle assessments and decision-making related to County operations, including for purchase of clean vehicles and alternative fuels, for facility construction and resource efficiency projects, and for related technology investments. King County will also pursue using the cost of carbon to inform broader County planning and decision-making. | The King County Executive developed three innovative cost of carbon programs, and also recommended continued implementation of an existing program. Implementation of an operational cost of carbon includes: Expanded application of a carbon shadow price to life cycle cost analyses developed for Capital Improvement Program projects, evaluation of major fuel and vehicle purchasing decisions, and cost-benefit evaluation of priority climate change actions in the 2020 SCAP update. Establishing an internal carbon fee for Fleet fuel use to incentivize behaviorial changes that result in lowered carbon emissions. This recommendation is subject to Council approval through the 2019–2020 budget process.Establishing a carbon fee for Facilities Management Division tenants, with funds to be reinvested in measures and projects that reduce energy use and carbon emissions. This recommendation is subject to recommendation and Council approval through the 2019–2020 budget process.Continuing the Department of Natural Resources and Parks (DNRP) Carbon Neutral Accelerator Program. DNRP established an energy use set-aside to fund projects that will result in over $4 million in energy savings and 55,000 in metric tons of carbon dioxide equivalent avoided. | In addition to the progress reported in the *2017 Status*, in January 2018, Executive Constantine approved a proposal to implement a consistent, countywide shadow price of carbon and establish internal carbon reduction fees on vehicle and building emissions. This was a priority action in the 2015 SCAP. A shadow price of carbon sets a price per unit of carbon for use in decision-making and alternative analysis without charging an actual fee.King County uses the State of Washington’s social cost of carbon, which is adjusted annually. Fleet Services has incorporated the shadow cost of carbon into life cycle cost analyses when adding new technologies to the fleet. In the 2019/2020 biennium, Fleet Services also established an internal carbon fee based on the incremental vehicle emissions that exceeded the 2015 SCAP goal. The funds collected were used to plant trees in support of the County’s 1 Million Trees initiative. |

**goal area 1: TRANSPORTATION AND LAND USE**

**PERFORMANCE MEASURES**

**County Services Goal:** King County will reduce the need for driving and facilitate the use of sustainable transportation choices such as public transit, alternative technology vehicles, ridesharing, walking, and bicycling.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Annual passenger boardings on Metro Transit services. | 1. Consistent with the Puget Sound Regional Council transportation plan projections that boardings on transit services in the region will double by 2040, Metro will strive to achieve 127 million passenger boardings a year by 2015.
 | * Although 2017 Metro ridership fell short of the 2015 SCAP target, total transit ridership in the region grew 2.5 percent—the second fastest pace among the 40 largest metropolitan areas in the United States.
 | * King County transit ridership, including both Metro Transit and Sound Transit, increased by 9% or nearly 14 million passenger boardings between 2015 and 2019. In 2019, total County ridership was 169.5 million.
* In 2019, Metro Transit ridership was 128.3 million boardings, including all services, short of the 2015 SCAP target of 142 million boardings by 2020.
* The 2020 SCAP recommends a new target that includes annual passenger boardings on both King County Metro Transit and Sound Transit.

*See also 2020 SCAP Performance Measure GHG 3* |
| **Measure 2:** Percentage of King County commuters using transportation modes including driving alone, transit, water taxi, biking, and walking as measured by the Washington State Commute Trip Reduction (CTR) survey. | 1. Achieve a six percent increase in non-drive-alone travel for Commute Trip Reduction-affected worksites by 2020 (compared to the 2007 baseline), as measured by the sum of activity among all jurisdictions in King County.
 | * For the second consecutive year, King County surpassed its 2020 target. Non-drive-alone rates increased 3.7 percent above the target because more people took transit, walked, and telecommuted and fewer people drove alone.
 | * For 2019/2020, King County surpassed the 2020 target set in the 2015 SCAP. Non-drive alone travel for CTR worksites in King County was at 57.9%, up from 42.9% in 2007/2008, an increase of 15%.
 |
| **Measure 3:** Percentage of new countywide residential construction inside the Urban Growth Area (UGA). | 1. Maintain at least 97 percent of new residential construction within the UGA.
 | * Although construction in rural areas has increased moderately since 2012, more than 98 percent of residential growth continues to be focused within urban areas.
 | * In 2018, 98.5% of residential growth was focused in urban areas, limiting sprawl and transportation related emissions.
* The 2015 SCAP target was exceed each year 2015-2018 and the 2020 SCAP proposes strengthening this performance measure.

*See also 2020 SCAP Performance Measure GHG 5* *See also 2020 SCAP Appendix page 297* |
| **Measure 4:** Number of regional trail miles constructed or in the final stages of engineering design. | 1. Construct 15 miles of additional regional trails by 2020.
 | * King County added 1.5 new trail miles in south King County. Eastside trails and mobility connections in Tukwila were also under construction, improving non-motorized mobility options for all.
 | From 2015 to 2019, King County added 8.3 miles to the Regional Trail System.New completed trail segments included:* Eastrail (Eastside Rail Corridor) interim segments at Wilburton and Lakefront in Bellevue and Renton;
* South Sammamish A Segment of the East Lake Sammamish Trail was completed to paved master planned status in Sammamish; and
* Lake to Sound Trail, Segment A was completed in SeaTac and Burien.

*See also 2020 SCAP Performance Measure GHG 6*  |

**County Operations Goal:** King County will increase the efficiency of its vehicle fleets and minimize their greenhouse gas emissions.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Energy use by county vehicles.  | 1. In its vehicle operations (excluding Metro Transit fleet vehicles), King County will reduce normalized net energy use by at least 10 percent by 2020 compared to a 2014 baseline.
 | * While total fuel energy use in non-Metro fleets increased because of greater service levels, fleet vehicle energy use declined as employees reduced their number of trips and drove more efficient vehicles for their jobs.
 | * Net energy use in 2019 was roughly equivalent to the baseline in 2014.
* GHG emissions for King County’s fleets increased by 3.2 percent from 2014 through 2019.

*See also 2020 SCAP Performance Measure GHG 9* |
| 1. In Metro’s vehicle operations, King County will reduce normalized energy use by at least 10 percent by 2020 compared to a 2014 baseline.
 | * Normalized fuel energy use declined 1.5 percent from the previous year because of increased boardings, use of more efficient vehicles, and a sustained commitment to reduce vehicle energy use.
 | * Normalized net energy usage for Metro’s operations in 2019 increased 0.5 percent from the 2014 baseline and 1.8 percent from 2018.
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| 1. Across all vehicle operations, King County will increase the usage of alternative fuels in its fleets by 10 percent by 2025, compared to a 2014 baseline.
 | * Alternative fuel use more than doubled compared to 2014 because of significant increases in the use of electricity and other lower carbon fuels such as propane and biodiesel.
 | * In 2019, 7.5 percent of the County’s vehicle fuel use was categorized as “alternative fuel”, nearly tripling the alternative fuel percentage from 2014.
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**2017 PRIORITY ACTIONS**

**County Services:** Transportation Choices, Land Use, and Community Design

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Grow transit service without increasing greenhouse gas (GHG)** **emissions.** Metro Transit will strive to grow transit service through 2020 without increasing operational GHG emissions via advancements in fleet fuel efficiency and the transition to an all-electric or hybrid bus fleet by 2018. | * In 2016, Metro Transit put three 40-foot Proterra battery buses into service on two eastside routes. Each zero-emission battery electric bus increases alternative fuel use and reduces approximately 65 tons of carbon dioxide each year.
* In 2017, Metro prepared for the delivery of eight additional 40-foot Proterra battery-electric buses in early 2018.
* Planning continued for 2018 battery bus testing in South King County. Metro will test up to 10 40- and 60-foot buses from three manufacturers to determine which technology best meets Metro’s service needs and to inform future battery bus procurements.
* Metro continued planning for additional charging infrastructure at Bellevue Base and Eastgate Park and Ride to support a growing fleet of fast-charge buses to be installed in 2018.
* Metro completed deployment of 174 new zero-emission trolley buses that use regenerative braking to reduce energy consumption.
 | * From 2017 to 2019, Metro Transit service hours increased by 10%.
* In 2020, Metro retired its last diesel bus.
* In 2019, Metro completed a performance test of B10 (10% biodiesel blend) at Ryerson base.
* In 2017, Metro had a total of 11 40-foot Proterra battery-electric buses in service on two eastside routes.
* In 2019, additional fast-charging infrastructure was installed at Eastgate Park and Ride.
 |
| **Revise transit service to be more productive and attractive.** Consistent with the Metro Transit Strategic Plan for Public Transportation, Metro Transit will place high priority on transit service to employment and residential centers while also ensuring social equity and geographic value. | * In 2016, Metro’s Strategic Plan and Service Guidelines were adopted by the King County Council and the METRO CONNECTS Long Range Plan was transmitted to Council and reviewed by the Regional Transit Committee.
* In 2017, METRO CONNECTS was adopted and Metro launched the Development Program to engage policymakers, jurisdictions, Metro staff, and the public on strategies to enact the METRO CONNECTS vision. Metro established the 2017 System Evaluation Report to track implementation progress of the Service Guidelines and METRO CONNECTS long-range vision.
 | * In 2019, King County Metro convened a Mobility Equity Cabinet to develop the King County Metro Mobility Framework, which envisions an integrated, innovative, equitable, and sustainable future. It includes guiding principles and recommended actions to significantly reduce GHG emissions while advancing equitable outcomes by providing mobility where needs are greatest, improving access to public transit to encourage individuals to use transit over single-occupancy vehicles, and ensuring equitable and affordable fares. The report was released in October 2019 and adopted by the King County Council in March 2020. It will guide updates to Metro’s Strategic Plan for Public Transportation, Service Guidelines, and long-range plan, METRO CONNECTS, as well as the development of Metro’s budget and strategic planning practices.
* In 2020, Metro delivered the Renton Kent Auburn Area Mobility Project (RKAAMP) an upgraded, integrated mobility network to 26,000 daily transit riders as part of the Fall 2020 Service Change. This transit project set a new and higher standard of practice for developing changes and substantially advanced the practices of how transit is developed with and for underrepresented communities including black, indigenous and people of color. It was the first major service redesign in this area in over 15 years and was an example of local government putting funds and effort in places that align with the values and needs of community.
* In 2020, Metro delivered the Northeast Mobility Plan, a community led process to expand transit service, improve mobility options and strengthen connections to important destinations. The Eastside has seen significant growth in the cities and business districts (e.g. Kirkland, Bothell, etc.) creating a need for many new trips between these growing centers. To address these growing travel needs, Metro is changing the local routes to provide more direct service between centers and adding service earlier and later on weekends.

*See also 2020 SCAP Priority Action GHG 2.2.2.* |
| **Implement the Community Mobility Contract Program.** Metro Transit will implement the new Community Mobility Contract Program in the City of Seattle and continue to promote this program with other jurisdictions. The City of Seattle was the first jurisdiction to enter into a Community Mobility Contract and has contracted for 223,000 hours of additional transit service in 2015. This program is available to any jurisdiction within King County interested in purchasing additional transit service from Metro Transit. | * Metro continued implementing new service funded by Seattle’s Community Mobility Contract. As of fall 2017, approximately 260,000 hours of service were being funded by Seattle through this contract. Metro was also working to extend the mobility contract for three more years to allow for continuation of this service in alignment with Seattle’s Transportation Benefit District funding, which extends through 2020.
 | * Metro continued implementing service funded by Seattle’s Community Mobility Contract. In 2019, the City of Seattle funded approximately 350,000 hours. The current agreement, which expired at the end of 2020, was extended through June, 2021. In November 2020, a new transit funding measure was passed in Seattle. The new measure will generate less revenue than the current measure it replaces, but it does ensure City of Seattle funding for transit service will continue for another six years.

*See also 2020 SCAP Priority Action GHG 2.1.1.* |
| **Expand community partnerships to encourage use of alternative modes.** Metro Transit will partner with local jurisdictions to implement education and incentive programs to encourage the use of non-drive-alone travel. Upcoming efforts will focus on the Alaskan Way Viaduct corridor, South Lake Union, downtown Seattle, the I-405 corridor, and other activity centers throughout King County. | **Community Partnerships*** In 2016, Metro partnered with Sound Transit, Community Transit, the Washington State Department of Transportation (WSDOT), and jurisdictions in East King County to promote trip reduction (“In Motion” and “Just One Trip” campaigns), with a goal of reducing 880,000 drive-alone trips.
* Metro partnered with the Seattle Youth Climate Action group to create educational videos and to better understand challenges youth face to ride transit.
* In 2017, Metro continued the Just One Trip campaign; 15,000-plus people reported they reduced 1.2 million drive-alone trips and increased transit use on the Alaskan Way Viaduct and I-90 corridor.
* Metro implemented the Mt. Baker and Beacon Hill In Motion project, where 1,350 participants pledged to drive less (16.5 percent participation) and 25 percent of these participants spoke Spanish or Chinese because of strong outreach to the limited English speaking population. Reported drive-alone trips decreased by 9 percent, with a corresponding increase in transit and carpool, in particular.
* Metro established a partnership with Public Health–Seattle & King County to enhance transportation options for limited English speaking population, low-income, and developmentally disabled residents.
* ORCA card distribution programs for residential communities were implemented and a high school program was developed by Metro.

**Rideshare Operations*** King County partnered with Metro teams, other transit agencies, jurisdictions, employers, and construction projects on regional and statewide efforts (Just One Trip, Community Connections, Transportation Choices, Wheel Options, Sound Transit P&R closures, and others) to expand awareness and provide public education about shared commute trips and how to get the most out of park-and-rides as well as to provide vanpool-specific offers and customized promotional ideas.
 | * In 2018, King County Metro brought its long-standing In Motion program to Kent Valley and South Bellevue. This program reaches out to residents, students, and employees to invite them to try out alternatives to driving alone and shifted over 5,000 drive-alone trips to another option.
* In April 2019, Metro launched Via to Transit, a pilot project aimed at making it more convenient for customers to connect with the region’s growing high-capacity fixed-route transit system.
* In Fall 2019, Metro hosted an In Motion program in the City of Tukwila, informing and incentivizing community members to ride transit and new mobility services like Via to Transit.
* In 2020, Metro hosted two Just One Trip campaigns in North East (spring) and South (fall) King County. The campaign area promoted non drive-alone modes to more than 400,000 households while distributing more than 15,000 ORCA cards to community members in multiple languages.

 **Rideshare Operations*** KCM and statewide partners invited residents to Craft Your Commute (2018) and Be a Commute Super Hero (2019) as part of the annual WSRO October Wheel Options campaigns. This campaign is run predominantly on RideshareOnline.com and is the premiere ridematching tool for King County commuters and the only commute trip reduction and integrated ride calendaring platform available cost-free to commuters, jurisdictions and employers in King County and throughout the state. RSO is administered and managed by KC Metro’s Contracted Services Mobility Ops team in partnership with WSDOT. Wheel Options 2018 & 2019 was predominantly planned and implemented by Metro staff.

*See also 2020 SCAP Appendix pages 296 and 297*  |
| **Expand access to the transit system.** * Metro Transit will complete at least two projects improving bicycle access to the transit system, such as high-capacity bicycle parking at the Redmond Transit Center parking garage and expanded bicycle parking at some RapidRide stations.
* The County continues to increase transit ridership by working with local jurisdictions to identify and develop partnerships for projects that improve non-motorized access to the transit system.
* Metro Transit will also examine methods of more effectively managing existing park-and-rides and the potential for shared use parking to increase access to transit services.
 | **Bike & Walk Access to Transit*** In 2016, Metro installed 16 on-demand bike lockers at Burien (eight) and Shoreline (eight) transit centers. Metro conducted preliminary design for a 40-bike cage at the Redmond Transit Center and bike parking at the International District Station to increase access to bus, commuter train, light rail, and streetcar service.
* Metro collaborated with five cities to fund new non-motorized connections to transit. Metro approved such projects in Redmond, Federal Way, and Seattle using an existing WSDOT grant.
* In 2017, Metro awarded $3.7 million in grant funds for biking and walking improvements to transit corridors to five cities and to the King County Road Services Division.
* Metro identified bike parking improvements for up to 15 transit facilities to complete by 2020.

**Parking Management*** In 2016, Metro implemented TripPool as a first-mile solution to connect people to transit and increase parking stall passenger capacity.
* In 2017, Metro completed restriping at Bear Creek Park and Ride to increase the number of stalls for transit customers.
* Metro launched the multi-family park-and-ride program, in partnership with Diamond Parking, to provide transit customers with paid parking options near transit services.
* Metro launched carpool permit parking programs at 15 park-and-ride lots (including five state-owned lots, by
* special permission from WSDOT).
* Rideshare operations continue to promote public commuter vans to provide first-/last-mile solutions for commuters to reach transit centers, park-and-rides, and their worksites. Rideshare managed more than 1,600 commuter vans in 2017; just under 100 of these provided service as vanshares for more than 500 commuters in getting those last few miles to work from busy transit hubs. Rideshare continues to increase education and awareness of this service and, in 2017, partnered with, and provided assistance and consultation to, other public regional commuter van services interested in launching similar services.
 | * Since 2017, Metro has been partnering with jurisdictions to design and build safe and convenient bike and walk connections to transit services. Projects have been completed in Federal Way, Redmond, Seattle and Skyway, and are underway in Tukwila, Bellevue and White Center. These projects added or improved sidewalks, pedestrian crossings and bike facilities to help people reach services safely.
* More Safe Routes to Transit projects are planned to target areas with priority populations, including Renton, Kent and Auburn to support a major service restructure; Skyway; and Des Moines (in conjunction with Sound Transit). Through 2019, Metro has passed-through about $2.8M in grants and local funds for such projects, with up to $2.9M planned in 2020-21.
* Metro has also incorporated access improvements in RapidRide projects, thus far including plans for RapidRide G, H, I and J lines.

**Parking Management** * Mobility Operations (formerly Rideshare Operations) continues to operate first/last mile transit connections via Vanshares. Commuters use these shared vans to get to and from transit hubs and P&Rs to connect with other transit modes or their worksite. The Vanpool Program continues to have close to 100 vans providing this service, taking 500+ commuters those last miles to or from work. Mobility Ops continues to implement education and outreach efforts for this first/last mile solution and collaborate with other transit agencies such as Sound Transit to get the most out of each parking space by encouraging commuters to share the ride to and from busy transit hubs and P&Rs in a shared van.
 |
| **Expand Alternative Services program.** Metro Transit will work with jurisdictions throughout the county to plan and implement Alternative Services. Alternative Services include vanpools and Dial-a-Ride Transit, along with new products, such as community shuttles, community vans and flexible ridesharing. These services will be offered in areas not well suited to fixed-route transit and will be designed to meet the needs and characteristics of each community. Priorities for implementation include those areas affected by service reductions in Fall 2014, as well as the rural areas of southeast King County and Vashon Island. | **Alternative Service Planning*** In 2016, Metro launched alternative services solutions in Bothell-Woodinville, Vashon Island, Kirkland/Kenmore, Shoreline/Lake Forest Park, and Sammamish.
* In 2017, Metro continued planning for the TripPool pilot in southeast King County/Auburn.
* Metro continued planning for the TripPool implementation and launch in Kenmore- and Bothell-Woodinville.

**Alternative Service Expansion*** In 2017, Metro continued its Mercer Island and Burien community shuttle programs. Service is exceeding target per/day ridership, and 2017 service was expanded to the Preston park-and-ride and Snoqualmie.
* Metro launched community van pilots in Bothell-Woodinville and on Vashon Island and the SchoolPool pilot in Kenmore.
* Metro expanded the TripPool pilot on Mercer Island to two vans with two drivers.
* Metro launched Trailhead Direct service, which provides seasonal transit service to trailheads in the Issaquah Alps.
 | From 2018 to 2019, Metro piloted its Ride2 Program to research and test on-demand, feeder-to-fixed route shuttles in Eastgate and West Seattle. Metro also launched on-demand, point-to-point “Community Ride” services in Normandy Park Lake Forest Park-Shoreline, Sammamish, and the Juanita area. Volunteer driven, flexible use, by reservation van programs, “Community Vans,” started in Kenmore-Kirkland and Lake Forest Park-Shoreline. In 2018, King County Metro and Parks launched a two-year pilot project, in partnership with REI Co-op and Clif Bar & Company. The program has been a booming success in both increasing access to outdoor recreation opportunities, and in reducing single-occupancy vehicle trips. In the second season of the program, passengers boarded Trailhead Direct for more than 17,500 hikes, a 75 percent increase over its first year.**Alternative Services/Community Connections Expansion**:* In 2019, Metro continued its Burien and Mercer Island and Snoqualmie shuttles and added Des Moines community shuttle program in 2018.
* TripPool pilot ended in fall 2019.
* Metro added three new two year community van pilots in Kenmore-Kirkland, Sammamish, and Shoreline-Lake Forest Park.
* Metro launched a community ride in Sammamish in 2019, and Juanita in 2020.
* Metro sustained Trailhead Direct Service in 2018-2019, and expanded it to include seasonal transit service to trailheads at Mailbox Peak and Mt. Si in 2018, and Cougar Mountain in 2019. All service was suspended, in 2020 due to COVID-19.
* Crossroads Connect, a new on-demand service in Bellevue was added in 2020.
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| **Promote and expand RideshareOnline.** Metro Transit will continue to manage RideshareOnline and promote it as a tool to expand carpool and vanpool opportunities throughout King County. This effort will have an impact on reducing single occupancy vehicle travel and eliminating GHG emissions. | * Rideshare Operations partnered with Pierce and Community Transit on three regional promotions funded by a Congestion Mitigation and Air Quality (CMAQ) grant.
* Rideshare Operations hosted regional campaigns and the statewide October Wheel Options campaign via the RideshareOnline.com platform, and supported Transportation Choices in their statewide Ride Transit campaign efforts.
* In 2017, commuters in the region made more than 13,600 ride matches through the RidesahreOnline.com platform and more than 20,000 new registrations in the Wheel Options network.
 | * KCM partnered with WSDOT and statewide partners to test and implement RideshareOnline.com (RSO) enhancements throughout the 2018/2019 biennium. Improvements to elevate customer experience included providing a customized and sortable ‘Vanpools to’ feature and an effortless rideshare match widget. In just one click commuters enter their origin and destination for a pop-up list of available vanpools and carpools in their area.
* In 2019, commuters in the region found 22,800 opportunities for ride matches through the RidesahreOnline.com platform and approximately 12,000 new registrations in the Wheel Options network.
 |
| **Expand and maintain regional trails.** The Department of Natural Resources and Parks will continue to develop and manage an interconnected network of regional trails and routes connecting trails to urban centers, transit, and employment. | * Significant trail work occurred in 2016 and 2017, including completing segments of East Lake Sammamish Trail (ELST) in Sammamish and the Lake-to-Sound Trail in Burien/SeaTac.
* Currently, ELST South Sammamish Segment B permitting is underway; the Eastside Rail Corridor Interim Trail and Tukwila Mobility Connection are nearing completion; and King County is on track with 15 new trail miles constructed or in design by 2020.

  | From 2015 to 2019, King County added 8.3 miles to the Regional Trail System. New completed trail segments included:* Eastrail (Eastside Rail Corridor) interim segments at Wilburton and Lakefront in Bellevue and Renton;
* South Sammamish A Segment of the East Lake Sammamish Trail was completed to paved master planned status in Sammamish; and
* Lake to Sound Trail, Segment A was completed in SeaTac and Burien.
 |
| **Address GHG goals in Metro Transit’s long-range plan.** A comprehensive update to Metro Transit’s long range public transportation plan will be completed in fall 2016 and will evaluate energy use and emissions per passenger mile traveled for different service options. This planning effort will also evaluate fleet mix by propulsion type and associated infrastructure needs to meet priorities identified in the Strategic Climate Action Plan to minimize greenhouse gas emissions even as transit expands to meet the projected growth and mobility needs of the county. | * METRO CONNECTS, which was adopted by the King County Council in January 2017, supports SCAP goals to reduce energy use in operations, increase the use of alternative fuels, and achieve Metro’s vision of a zero-emission fleet.
 | * METRO CONNECTS will be updated in 2021, guided by the Mobility Framework adopted by Council in 2020 and more strongly emphasize climate and align with the SCAP, as applicable.

*See also 2020 SCAP Priority Action GHG 2.2.2.* |
| **Maintain the Urban Growth Area (UGA).** The County will continue to maintain the UGA and to direct growth into developed areas where facilities and services can be efficiently provided and where travel distances are reduced. | * Almost all new residential growth continues to be focused within urban areas, limiting sprawl and reducing transportation-related pollution.
* New construction in rural areas has increased moderately since 2012, but remains below 2 percent of countywide new construction.
 | Almost all new residential growth continues to be focused within urban areas, limiting sprawl and reducing transportation-related pollution.*See also 2020 SCAP Performance Measure GHG 5* *See also 2020 SCAP Appendix page 297* |
| **Promote transit-oriented development.** The County will participate in continuing efforts related to the regional Growing Transit Communities initiative, prioritizing investments in affordable housing and eligible community development projects near high-capacity transit, including high-capacity bus routes, bus rapid transit and light rail. Future light rail lines will be completed by 2023 serving east King County, north King County, and south King County. | * King County issued a request for proposal for the Northgate mixed-use project. A developer will be selected in 2018, with construction likely to begin in 2019.
* King County began a comprehensive transit-oriented development approach for county agencies.
 | * Metro developed an Equitable Transit-Oriented Communities Policy to be used by Metro to provide a structural foundation to grow the TOD practice at Metro. Metro’s updated policies (Metro Connects, Strategic Plan, Service Guidelines) will also more explicitly call out the importance of equitable transit oriented communities to a transit network that contributes to key outcomes like addressing climate change.
* In 2018, King County Metro Transit released a developer solicitation for transit-oriented development at the Northgate transit center, in partnership with funders at the Department of Community and Health Services and the City of Seattle. The development will include at least 200 units of affordable housing to households making at or below 60 percent of the area median income at no cost to the developer. Construction is expected to begin in 2022.
* Metro is working on pre-development activities to support future TOD projects in Kenmore in coordination with Sound Transit and the City of Kenmore, in Shoreline and in Burien.
* In addition, Metro is working to develop a TOD tool as a part of the Rapid Ride I-Line project to aid in consideration of both existing land use, market and regulatory support for transit-oriented development.
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**County Operations:** Alternative Vehicles, Fuels and Technologies, Fleet Efficiencies

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Deploy low-greenhouse-gas emission fleet technologies at Metro Transit.** * The trolley fleet will be updated with more energy-efficient vehicles with regenerative braking and the ability to travel “off-wire” for limited distances.
* Launch a zero-emission, all-electric, battery-powered bus pilot – with fast-charge stations in 2016.
* Launch liquid petroleum gas (propane)-fueled Access vans in 2015–2016.
* Rideshare Operations is evaluating the potential to acquire the Chrysler plug-in hybrid minivan (due for release in 2016), which could drastically cut fuel use and greenhouse gas emissions for the commuter van fleet.
* Fleet Administration and the Department of Natural Resources and Parks are also seeking and implementing new low-greenhouse-gas technologies.
 | **Metro Transit Buses*** In 2016, Metro put three 40-foot Proterra battery buses into service on two eastside routes (226 and 241).
* In 2017, Metro prepared to take delivery of eight additional 40-foot Proterra battery-electric buses in early 2018.
* Planning continued for 2018 battery bus testing in South King County. Metro will test up to a total of 10 40- and 60-foot buses from three manufacturers to determine which technology best meets Metro’s service needs and to inform future battery bus procurements.
* Metro continued planning for additional charging infrastructure at Bellevue Base and Eastgate Park and Ride to support the growing fleet of fast-charge buses to be installed in 2018.
* Metro completed deployment of 174 new zero-emission trolley buses that use regenerative braking to reduce energy consumption.
* At the end of 2017, over 80 percent of Metro’s bus fleet was either hybrid, all electric, or battery powered.
 | Highlights of recent progress include:* Metro is conducting a study of the feasibility and strategic approach for transitioning its non-fixed route bus fleets to zero emissions.
* Metro is upgrading vehicle chargers at sites throughout King County, including at Metro park-and-rides, and other County facilities.
* The Facilities Management Division is conducting an electric vehicle infrastructure analysis and implementation study for County facilities that supports the fleet electrification goals, which will outline the infrastructure development, financial investment, financing options, policy changes, and technical resources needed to support fleet electrification in County buildings
* Metro’s Mobility Services is piloting ten plug-in hybrid Chrysler Pacificas in their Rideshare fleet.

Metro Transit Buses* In 2020, Metro completed performance testing of 10 40- and 60-foot buses from three manufacturers.
* In 2020, Metro ordered 40 extended range Battery Electric Buses (BEBs). These buses are expected to have a range of ~130+ miles per charge. The 40 buses will be split between 20 40-foot buses and 20 60-foot buses.
* Metro is planning for the future purchase of additional battery buses and construction of associated vehicle charging infrastructure.

*See also 2020 SCAP Appendix page 298* |
| **Metro Transit Non-Revenue Vehicles*** Metro added five all-electric Nissan LEAFs and charging stations into non-revenue service and continues to explore cost-effective opportunities to incorporate zero-emission vehicles into service at bus bases and maintenance facilities.
 | * Metro is conducting a study to assess the feasibility and inform a strategic approach for transitioning its non-fixed route bus fleets including NRVs, to zero emissions
* Metro’s NRV fleet includes 18 Nissan LEAFs and 12 additional LEAFs are on order for 2021 delivery.
* Metro is planning to install Level 2 chargers and 1 DC Fast Charger at several of Metro’s operational facilities to support light duty EVs. Charger installation is planned for locations such as the NRV Repair Shop and Atlantic/Central, North and East Bases. Future charger installation phases will include additional facilities.
 |
| **Metro Transit Accessible Services*** Metro continued Access investment in alternative fuels and, at the end of 2017, operated 64 propane-powered vans.
* In 2017, propane made up 30 percent of all Access fuel use, an increase of 10 percent from the previous year.
 | * Metro is conducting a study to assess the feasibility and inform a strategic approach for transitioning its non-fixed route bus fleets including Access paratransit, to zero emissions.
* Metro added additional propane vehicles in 2018 and 2020, resulting in an active propane vehicle fleet of 91 at the end of 2020.
* In 2020, propane fuel use made up about 35% of the total percent of all Access fuel use.
 |
| **Metro Transit Rideshare Operations*** In 2017, Rideshare Operations placed an order to pilot 10 Chrysler Pacifica Plug-In Hybrid minivans in VanPool service in 2018.
* In 2017, Rideshare Operations placed an order to nearly double its electric vehicle fleet—from 25 to 45 vehicles.
* In 2017, Rideshare Operations ordered 20 longer-range Nissan LEAFs for use in the metropool program in 2018.
* Upon arrival of new 2018 models, the current metropool fleet of 25 LEAFs will be retained to provide short-range commuter groups a zero-emission option.
 | **Metro Transit Rideshare Operations*** Metro’s Mobility Services piloted ten plug-in hybrid Chrysler Pacificas in their Rideshare fleet between the summer of 2019 and March 2020. (The pilot was suspended due to the Covid work from home mandates)
* Initial assessment identified positive feedback from participants.
* In 2019, Metro operated 27 LEAFs in its Metropool Program, including Vanshare. In 2019, MetroPool vehicles traveled 176,465 miles, saving 9343 gallons gasoline and 220,000 lbs. of GHGs.
* Metro is conducting a study to assess the feasibility and inform a strategic approach for transitioning its non-fixed route bus fleets including Rideshare, to zero emissions.
 |
| **County Operations Fleet Vehicles*** The collaborating County fleets exceeded the Express Lane Electric Vehicle pledge and renewed their commitment for the 2017 to 2018 budget year. The new pledge states that 20 percent of all subcompact administrative vehicles purchased between January 1, 2017, and December 31, 2018, will be zero-emission vehicles.
* In 2017, the Fleet Administration Division continued its electric vehicle battery testing collaboration with Idaho National Laboratory (INL).
* The vendor contract for acquisition and implementation of the Fleet Administration Division’s Automatic Vehicle Location (AVL) was completed. Approximately 1,600 county vehicles will be equipped with AVL software by the end of 2018, which will significantly improve route planning efforts and support fuel-efficient use of fleet vehicles.
 | **County Operations Fleet Vehicles*** We met the EV pledge for 2017/2018.
* The electric vehicle battery testing project came to an end because of lack a of INL funding to support the data analysis on their end.
* The vendor contract for acquisition and implementation of the Fleet Administration Division’s Automatic Vehicle Location (AVL) has been completed. Currently there are 2,233 total vehicles are equipped with AVL Software, with an additional 330 vehicles to be equipped by the end of 2021. This will complete Phase 1 of the program. Phases 2 & 3 to be completed in 2022 will include AVL installation in an additional 250 motorized equipment
 |
| **Pursue adoption of a clean fuels executive order to include a cost** **of carbon.** Department of Transportation and Department of Natural Resources and Parks staff will continue to work with the Executive’s Office to formally adopt a clean fuels policy and to collaborate to integrate a cost of carbon into decision making about clean fuels. A draft clean fuels executive order was developed in 2014 to guide fleet managers in making procurement decisions for clean vehicles and alternative fuels in alignment with County goals to reduce greenhouse gas emissions, and directs fleet managers to include a cost of carbon in life-cycle cost analyses. | * King County established a countywide carbon-pricing team to explore opportunities and develop recommendations for implementing an operational cost of carbon within King County.
* At the end of 2017, the countywide team proposed carbon-pricing implementation recommendations to the King County Executive
* A review of existing executive orders and policies was conducted in 2016, and outdated policies were rescinded in 2017.
* The Fleet Administration Division’s standing order for the delivery of 5 percent biodiesel resulted in the use of 54,000 gallons of B5, which was delivered to the Renton facility in 2017.
 | * In 2020, the King County Council adopted Ordinance 19052 to accelerate the adoption of electric vehicles. The ordinance established the following ambitious goals for fleet electrification. This ordinance reflects a major focus on electrification reflected in 2020 SCAP actions.
* The ordinance established the following goals for King County fleet electrification: a 100 percent zero-emission revenue bus fleet by 2035; a 67 percent zero-emission ADA paratransit fleet by 2030; a 100 percent zero-emission rideshare fleet by 2030; installation of 125 chargers at King County-owned park-and-rides by 2030; 50 percent of light-duty County fleet vehicles to electric by 2025 and 100 percent by 2030; 50 percent of medium-duty vehicles are transitioned to electric by 2028 and 100 percent by 2033; 50 percent of heavy-duty vehicles are transitioned to electric by 2038 and 100 percent by 2043; and installation of 150 chargers by 2030 in County facilities.

*See also 2020 SCAP Priority Actions GHG 2.12.1 and 2.12.2.* |
| **Use alternative fuels in the County’s new ferry vessels.** The Department of Transportation will implement the use of B-10 (10 percent biodiesel) in two new passenger ferries being delivered in 2015. The Marine Division worked with its fuel supplier to implement the necessary blending equipment at its Harbor Island marine fuel pier. | * In 2017, the Marine Division increased the amount of biodiesel used in its water taxi fleet from a 10 percent blend to a 20 percent blend.
* At the end of 2017, almost 15 percent of the total amount of fuel consumed by the Marine Division was low-carbon biodiesel—well above the 2025 alternative fuel target.
 | * In 2019, 98% of fuel consumed by Marine Division was B20 (a 20% biodiesel blend). In 2020 just over 95% of fuel consumed by the Marine Division was B20.
 |
| **Continue green fleet operational strategies and initiatives.** King County’s fleets will continue to implement strategies, such as anti-idling, eco-driving, car sharing and vehicle right-sizing, and will phase in more-efficient, lower-emissions hybrid and electric vehicles as funding and technologies allow. Fleet Administration developed an EcoDriver training module for SkillSoft to be rolled out in summer 2015. | * In 2017, the Fleet Administration Division purchased seven off-road, low-speed electric vehicles; rightsizing efforts resulted in seven vehicles being downsized to smaller engines and 10 vehicles being replaced with hybrids.
* In 2016, King County Fleet was recognized as the 11th best Government Green Fleet in North America, placed in the top 50 Leading Fleets in North America (Government Fleet magazine), and earned an Outstanding Case Study certificate for its propane vehicles’ submissions from the Sustainable Purchasing Leadership Council.
* In 2017, King County Fleet was recognized as one of the top 30 Green Fleets in North America and as a Notable Fleet by Government Fleet magazine, and received the Clean Cities Western Region’s Sustainable Fleets award at the Green Transportation Summit.
 | * The Fleet Services Division partnered with Transit Non-Revenue Vehicles, the King County International Airport, and the Solid Waste Division to implement an Automatic Vehicle Location (AVL) System for non-revenue vehicles. This initiative equipped King County’s non-revenue vehicles with hardware devices and deployed a web-based platform to view real-time and historical vehicle data. The AVL System has automated data collection to drive decisions on issues such as right-sizing the fleet, minimizing fuel consumption and greenhouse gas emissions, and leaner management of field operations.
* Using this innovative technology will help County agencies optimize routing and dispatch, improve response times, facilitate data-driven capital and operating decisions, and expedite sharing of accurate real time service information (such as snow plowing) with the public.
 |
| **Consider options for the sale and reinvestment of environmental attributes.** Metro Transit is exploring options to monetize the use and savings of fuel resources to operate our fleets, such as selling credits from the use of renewable or low-carbon fuels, or reduced emissions from our transit fleet. Metro Transit will explore options to reinvest funds in operations or services that continue to reduce climate impacts. At the state level, King County will advocate for a statewide cap-and-trade program that credits the transit system for implementing low-carbon fuels and zero-emissions technologies. | * U.S. Environmental Protection Agency (EPA) approval of transit Renewable Identification Numbers (RINs) has been delayed. It is not clear when or if the EPA will adopt rules allowing the sale of transit RINs.
 | * No further action has taken place at the U.S. EPA to support the sale of RINs at the federal level.
* Metro Transit and partners are actively engaged in supporting and evaluating options for a regional or state level clean fuels standard to support fleet electrification.
 |

**goal area 2: BUILDINGS AND FACILITIES ENERGY**

**PERFORMANCE MEASURES**

**County Services Goal:** King County will encourage and assist residents and businesses with energy-efficiency and renewable-energy projects, in collaboration with energy utilities and other partners.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Countywide energy use in existing buildings | 1. Reduce energy use in all existing buildings to 25 percent below 2012 levels by 2030.
 | Countywide energy use trended higher in 2017 compared to 2016. Regional economic and population growth and colder weather were the primary drivers for the higher consumption figures. Additional focus on efficiency programs will be needed to reach goal. | Energy use continues to trend higher, as population and economic growth through early 2020 contributed to increases in energy use and building square footage. New, coordinated programs and significant investments are needed to change the trajectory of energy use. Recent statewide legislation, the Clean Buildings Act, will help improve efficiency for buildings over 50,000 sf. *See also 2020 SCAP Performance Measure GHG 10* |
| **Measure 2:** Increase solar energy generation by residents and businesses. | 1. Increase countywide use of renewable electricity to 20 percent above 2012 levels by 2030 (*articulated in 2017 SCAP Biennial Report to be 90% renewable electricity*); phase out coal-fired electricity source by 2025; limit construction of new natural gas-based electricity power plants; support increasing development of renewable energy sources.
 | * Total renewable electricity sources, including hydropower, comprised 63 percent in 2016.
* In 2016, Puget Sound Energy (PSE) reported a slight decrease in hydropower generation and a slight increase in wind, coal, and natural gas generation. Seattle City Light continues to rely predominately on hydropower, with a small percentage of wind and nuclear.
* Customer-installed solar panel generation capacity registered with PSE and Seattle City Light increased 21 percent from 2016.
 | In 2018, King County’s electricity supply was 64.4% renewable, a slight increase from 63% in 2017. With 136MW of wind power from the Green Direct program coming on line, and the passage of the Clean Energy Transformation Act, we are poised to reach 90% in 2030. Distributed generation, primarily solar, increased 58% in two years, reaching 57MW in 2019, up from 36MW in 2017. With easier permitting and consumer education, King County gained Silver SolSmart status in recognition of its efforts to support renewable energy development in the County. *See also 2020 SCAP Performance Measure GHG 12* |

**County Operations Goal:** King County will reduce energy use in its facilities and operations and will produce and consume more renewable energy.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Normalized energy use at County facilities, measured in millions of British Thermal Units (MMBTU).  | 1. King County will reduce normalized energy use in County-owned facilities by at least five percent by 2020 and 10 percent by 2025, as compared to a baseline year of 2014.
 | * As of 2017, King County government has reduced its energy use by 6.1 percent compared to the 2014 baseline. Because of steady progress, King County increased its 2020 government facility energy reduction goal from 5 percent to 7.5 percent

 (baseline 2014).  | Through 2019, the County is on track to meet its accelerated target of 7.5% reduction in normalized facility energy use in impacted facilities with a 7.2% reduction as measured against the 2014 baseline outlined in the 2015 SCAP.As of 2020, these measures are resulting in a financial savings of over $4.1 million per year.A key benchmark forperformance under the 2015 SCAP was the reduction of energy use in existing countyfacilities, which is targeting a 7.5 percent reduction by the end of 2020. This 2020 SCAPincreases the 2025 goal that was set in the 2015 SCAP from a reduction of 10 percent to12.5 percent compared to the 2014 baseline.*See also 2020 SCAP Performance Measure GHG 13* |
| **Measure 2:** Building energy performance, as measured by the Energy Star Portfolio Manager. | 1. By December 31 of 2020, all\* King County government buildings over 20,000 square feet shall be Energy Star certified.

*(\* the 2015 SCAP includes the following note “Excluding Transit bases, Wastewater Treatment Division facilities, and facilities for which there is not an Energy Star category”)* | * LED lighting and efficient mechanical system investments are helping King County make progress toward this target.
* Approximately 12 King County facilities will apply for certification by 2020.
 | As of the end of 2019, the Chinook Building and King Street Center are eligible for or have achieved Energy Star Certification by performing better than at least 75 percent of similar buildings nationwide. Nine county owned buildings that are Energy Star eligible have not been certified. Many of these buildings have achieved significant energy use reductions in recent years. Because most of County facilities aren’t traditional buildings for which there is an Energy Star category, the Energy Star guidance was dropped as a recommendation from the 2020 SCAP.  |
| **Measure 3:** Amount of renewable and greenhouse gas-neutral energy produced and consumed as part of government operations. | 1. **Renewable Energy** **Production:** Produce renewable energy equal to 100 percent of total County government net energy requirements by 2017 and each year thereafter, excluding the public transit fleet.
 | * In 2017, King County produced the equivalent of 102.5 percent of the energy consumed by government operations, excluding public transit.
 | In 2019, King County produced approximately 104% of the non-Metro fleet energy consumption equivalent.*See also 2020 SCAP Performance Measure GHG 17* |
| 1. **Renewable Energy** **Consumption:** King County government shall consume renewable energy equal to 70 percent of government operation facility energy consumption by 2020 and 85 percent by 2025.
 | * In 2017, 60.6 percent of King County’s building energy use came from renewable resources.
* The King County Council approved the “Green Direct” contract with PSE that will supply wind-generated electricity for substantially all facilities in PSE territory starting in 2019. The sourcing of wind power in 2019 will enable the County to meet the 2020 target and make progress toward the 2025 goal.
 | In 2019, 66.4% of the energy consumed in King County’s buildings and facilities was from renewable energy sources.Green Direct started operations on November 7, 2020. With the enrollment of 133 King County facilities being supplied with 100% renewable energy in the PSE service territory.*See also 2020 SCAP Performance Measure GHG 15* |
| 1. **Greenhouse Gas (GHG) Neutral Electricity:** By 2025, King County shall ensure all electricity supplied for its government operations is GHG neutral.
 | * Seventy-five percent of the electricity consumed by the County in 2017 was greenhouse gas neutral.
 | As of mid-2020, 100% of the County’s operational electricity use is GHG neutral.*See also 2020 SCAP Performance Measure GHG 18* |

**Priority Actions**

**County Services:** Utility Partnerships

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Build utility and other external partnerships.*** Work with local utilities, non-profit organizations, and private partners to leverage and support existing programs, create new programs, build partnerships, and enhance marketing efforts that increase residential and commercial resource efficiency and renewable energy production activity for existing buildings.
* Partner with local utilities and other stakeholders on a countywide commitment to renewable energy resources, including meeting electricity needs while phasing out fossil fuels.
 | * King County continues to lead advocacy actions at the state level. Joined by city partners, the County testified and submitted written comments to the Utilities and Transportation Commission in support of accelerated timelines for closure of coal-fired plants, replacing the load with renewable energy and providing training and economic development resources for communities impacted by closure of the plants.
 | Although installed residential and commercial solar capacity has grown every year since 2015, increasing to 57 MW and meeting the goals of the 2015 SCAP Countywide Buildings and Facility Energy Measure 2, it remains a very small percentage of the overall electricity mix. However, interest in solar energy is strong among King County residents. King County is in early conversations with utilities to develop medium- to utility-scale systems on County land or facilities. King County continues to advocate at the state level for policies that will create a stable regulatory environment, spurring equitable access to solar in the County, , and creating or retaining family wage jobs that are supported by the industry. In 2019, King County received Silver Sol Smart community designation from the Department of Energy, reflecting simplification of codes and processes to speed up permitting and reduce the time and paperwork need to develop a solar system installation. Executive Constantine and other elected officials strongly supported the 2019 Clean Energy Transformation Act, which mandates 100% clean sources of electricity by 2045, and other bills that protect clean air and advance a clean energy economy. In the 2019 session, the Executive and elected officials from the K4C testified in person at nine hearings, made phone calls to individual state legislators, and signed a joint letter of support for the Clean Energy Transformation Act. The strong representation of local elected leaders had a significant impact on the passage of the CETA and other bills.*See the 2020 SCAP Appendix details on “Advocated for Clean Electricity Programs and Policies”.* |
| **Support stronger commercial energy codes.** Work with the Regional Code Collaboration (RCC), the City of Seattle Department of Planning and Development, and King County Climate Cities Collaboration (K4C) cities to support stronger state residential and commercial energy codes. Work with the K4C cities to enact commercial energy codes that get the county on track to net zero energy buildings by 2030. | * King County is preparing for the next statewide commercial energy code revision cycle in 2019.
 |  King County and other members of the K4C have been active in supporting stronger national and state energy codes that set the foundation for efficient local codes.Analysis conducted by the WA State Building Code Council demonstrated that the 2009, 2012, and 2015 Washington State Energy Codes all achieved their incremental targets set by RCW 19.27A.160. This analysis has not yet been completed for the 2018 Washington State Energy Code.*See also 2020 SCAP Performance Measure GHG 19.* |
| **Expand community efficiency and renewable energy efforts.** The County will expand and build relationships with utilities and other community partners to develop marketing, technical assistance, and financial tools to help citizens and businesses implement resource efficiency projects and generate renewable energy. The County should establish a dedicated position to support community efficiency and renewable energy efforts outlined in this goal area. | * In 2016, King County hired an Energy Partnerships Specialist to strengthen relationships with utilities and other partners. The specialist is developing programs to bring efficiency to county residents and businesses.
 |  The Energy Policy and Partnership Specialist (now the Executive’s Director of Climate and Energy Initiative’s), in addition to other members of the climate team, have built and maintain relationships with a broad spectrum of stakeholders, including utilities, not for profits organizations, and community/grass root organizations. The climate team has increased outreach through newsletters and community convenings (virtual in 2020). This work provides a strong foundation for continuation of the work in 2020. *See also 2020 SCAP Priority Actions GHG 3.10.1, 3.5.1, 3.5.2, 3.2.1, 3.2.2.*  |
| **Expand resource efficiency programs for low-income residents.** Work through the Department of Community and Human Services and other local housing repair programs to expand the installation of energy- and water-efficient fixtures and equipment that help reduce utility bills for low-income customers. Work with the Washington State Housing Finance Commission to ensure that low-to-moderate income residents in King County are offered programs to make energy- and water-efficiency improvements to their homes. | * King County is working with utilities, retailers, and business and community groups to develop programs that make it easy for residents to save money and energy by converting to LED lighting in their homes.
 | Funding supporting the LED replacement program was reallocated to the King County Council required Climate Action Toolkit, which includes multiple actions to expand and support efficiency programs for residents. Much of this work is ongoing, and complementary to priority actions in the 2020 SCAP to better understand current barriers and opportunities to increase efficiency and renewable energy access by all residents. *See also 2020 SCAP Priority Actions GHG 3.10.1 and SRFC Focus Area 7 “Energy Justice and Utilities”.* |
| **Broaden the EnviroStars program.** The County will support broadening the EnviroStars program to become a Regional Green Business program that provides support for and recognizes businesses that have made strides in sustainability such as energy efficiency, purchasing green power, and addressing climate change. | * EnviroStars launched a robust new platform in November 2017 that highlights partner businesses and provides a central portal to find incentives and programs.
 | EnviroStars continues to provide support for businesses in King County who seek to operate sustainably.EnviroStars is a one-stop shop for Washington businesses to access environmental assistance and gain recognition for being green.Through the program, businesses can receive free technical assistance, connect with rebates and resources, and follow a clear path to sustainability. |
| **Reduce the costs of resource efficiency and renewable energy.** Engage with utilities, renewable energy providers, and state elected officials to renew solar production incentives. Work with financial institutions and other external stakeholders to develop loans, legislative action, and financial tools that reduce the costs of implementing resource efficiency and renewable energy projects, such as developing a King County-supported loan program that will be available for King County cities to complete resource efficiency projects in their facilities. | * In 2017, King County and other stakeholders successfully advocated the state legislature to extend solar energy production incentives until 2021, providing consistency to consumers.
* King County developed a loan program for cities to fund efficiency and renewable projects. The King County Council approved the program in February 2018.
 | This work is ongoing and reflected in two priority actions in the 2020 SCAP. One priority action is to develop a Commercial Property Assessed Clean Energy + Resiliency program that provides an innovative financing tool for commercial and multifamily facilities. This program will be transmitted to the Council for consideration in mid-2021. The other priority action is to review the financing/grant landscape to better understand barriers to and opportunities for access to efficiency and renewable energy. King County continues to advocate at the state and with utilities to reduce the cost of renewable energy and increase access.  |
| **Create a building energy disclosure ordinance framework.** In coordination with the K4C cities, set a preferred framework for building energy disclosure ordinances in the county’s unincorporated areas and incorporated cities, similar to the City of Seattle’s energy disclosure ordinance. This framework shall include marketing to align facilities with information about utility incentives and other resources to improve energy performance. | * The King County-Cities Climate Collaboration (K4C) workgroup developed a recommendation for K4C cities to benchmark government facilities and support the development of a voluntary commercial business energy disclosure effort.
* The County has benchmarked and reported results for 47 buildings and continues to monitor their performance.
 |  In 2019, the Washington State Clean Buildings Act was passed. This law requires facilities over 50,000 to disclose and improve energy performance. In light of this statewide framework and requirements for building energy disclosure, King County and K4C partners need to assess and determine what priority future work on this topic should be. *See also 2020 SCAP Priority Action GHG 3.2.3 to require residential point of sale energy disclosure.*  |

**County Operations:** County Facilities, Renewable and Greenhouse-Gas-Neutral Energy Consumption

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Benchmark County energy performance.** By the end of 2016, King County will benchmark and publish energy performance and greenhouse gas emissions of its government facilities.  | * A website has been developed that details the energy use of all county facilities over 20,000 square feet in size.
 |  Since the creation of the website, County government energy performance efforts have been focused on results-driven actions. Other energy reduction and carbon tracking efforts are capturing the impacts of County energy performance. |
| **Maximize energy efficiency in new King County facility projects.** All King County government capital projects with energy-consuming equipment shall meet the equivalent energy performance of the city with the most stringent energy code in the county. Minimize energy use in buildings during capital projects through the consistent implementation of Green Building and Sustainable Development policy, Ordinance 17709.  | * An energy code compliance guidance document has been developed for capital project managers to use to track project progress toward the most stringent (Seattle) code.
 | To make investments in energy reduction actions, agencies can apply for financial resources. These resources include agency operating and capital budgets, along with the County’s Fund to Reduce Energy Demand (FRED), an internal loan program through which the county issues bonds to fund projects. FRED loans fund projects that have paybacks of 10 years or less, with annual loan payments covered by utility bill savings. As of 2020, the FRED program has been expanded by the County to allow loans of up to 20 years. Longer-term loans support further progress toward County energy goals by investing in cost effective projects with longer service lives and longer paybacks, such as solar panel installations and mechanical system upgrades. Between 2015 and 2020, over $9.6 million was invested in projects through the County’s internal FRED program. |
| **Greenhouse-gas-neutral electricity for government operations.** By 2025, ensure the electricity consumed by King County government’s operations is 100 percent greenhouse-gas neutral. | * In 2017, 75 percent of the electricity consumed by King County operations was greenhouse gas neutral.
 | As of mid-2020, 100% of the County’s operational electricity use is GHG neutral.*See also 2020 SCAP Performance Measure GHG 17.* |

**goal area 3: GREEN BUILDING**

**PERFORMANCE MEASURES**

**County Services Goal:** Reduce energy and greenhouse gas emissions associated
with new construction and renovations in commercial and residential buildings built
in King County.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Percentage of new single and multi-family residential homes in all King County certified by local green building standards. | 1. By 2020, 75 percent of new developments achieve: Built Green 3 Star or better, Living Building Challenge, high-level Evergreen Sustainable Development Standard, LEED Silver, or equivalent green building certification or development code.
2. By 2030, 100 percent of new developments achieve Built Green Emerald Star, LEED Platinum, Living Building Challenge, or equivalent green building certification or development code that achieves net zero greenhouse gas emissions, consistent with the King County-Cities Climate Collaboration (K4C) Pathway to achieve net zero greenhouse gas emissions in new buildings by 2030.
 | * In 2017, 33 percent of new single- and multi-family homes received a residential green building certification. Project certification typically occurs two years after permitting.
* In 2015, there were 2531 single-family and 15,888 multi-family unit permits issued countywide, for a total of 18,419 net units. In 2017, 1,596 units were certified under Built Green, 4360 units under LEED for Homes, and 152 units under the Evergreen Sustainable Development Standard, for a total of 6,108 units.
 | In 2019, 44% of new dwelling units permitted within King County achieved green building certification.*See also 2020 SCAP Performance Measure GHG 20.* |

**County Operations Goal:** King County-owned buildings and infrastructure will be built, maintained, and operated consistent with the highest green building and sustainable
development practices.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Percentage of King County-owned capital projects achieving a Platinum level certification using the LEED or Sustainable Infrastructure Scorecard green building rating systems.  | 3. By 2020, 100 percent of King County projects achieve Platinum certification or better.4. By 2030, 100 percent of King County projects achieve certifications that demonstrate a net zero greenhouse gas emissions footprint for new facilities and infrastructure. | * In 2016, 67 percent of reported projects achieved LEED or Sustainable Infrastructure Scorecard Platinum ratings, an increase of 17 percent over 2015.
* In 2017, 73 percent of reported projects achieved LEED or Sustainable Infrastructure Scorecard Platinum ratings, an increase of 23 percent over 2015.
 | In 2019, 82% of completed projects achieved Platinum level using the King County Sustainable Infrastructure Scorecard or LEED rating system.*See also 2020 SCAP Performance Measure GHG 22.* |
| **Measure 2:** Average percentage of construction and demolition materials diverted from landfills from County capital projects. | 5. Eighty percent construction and demolition materials diversion rate by 2016; 85 percent by 2025; zero waste of resources with economic value by 2030. | * In 2016, reported projects diverted 29,011 tons of materials, with an average construction and demolition materials diversion rate of 77 percent.
* In 2017, reported projects diverted 41,856 tons of materials, with an average construction and demolition materials diversion rate of 87 percent.
 | For the completed projects in 2018 that had C& D material diversion (some County projects did not have C&D materials to divert), the average C&D diversion rate was 84% diversion and a total of 123,000 tons, and, in 2019, the average diversion rate was 87%.*See also 2020 SCAP Performance Measure GHG 23.* |

**Priority Actions**

**County Services:** Education, Partnerships, Development of Codes and Certification Programs

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Engage with unincorporated customers.** The Department of Permitting and Environmental Review (DPER) will develop an ongoing, free educational program promoting green building and sustainable practices, offering resources to new construction and remodeling customers in unincorporated King County.  | * In 2017, DPER convened four free educational programs for the community. Three of the programs were with community groups and addressed rain gardens, water-saving devices, and the Loop® biosolids program. The fourth program, designed for contractors, focused on the new construction and demolition waste diversion ordinance.
 | The King County Permitting Division provides a Green Building Handbook and a Solar Smart handout. Both resources encourage unincorporated area customers to make green building decisions which will help to save energy and reduce costs. The Solar Smart handout also provides comprehensive information on how and where to apply for federal, state, and Puget Sound Energy incentives when installing a solar energy system in unincorporated King County. This resource also highlights common codes to be aware of and how to apply for a permit with the Permitting Division, when necessary. This document helped King County achieve the SolSmart Silver Designation in 2019 in recognition of a jurisdiction that has removed barriers to the installation of solar. |
| **Partner through the Regional Code Collaboration.** In partnership with cities and counties across Puget Sound, lead and participate in the Regional Code Collaboration to create stronger and more consistent development codes for green building, solar readiness, water efficiency, construction, and demolition, and low-impact development, and in support of the Living Building Challenge, Living Communities Challenge, and EcoDistricts**.**   | * King County convened a Living Building Challenge and high-performance building code subcommittee. The subcommittee supported the City of Shoreline in the development of a new green building ordinance (template).
* King County partnered with city recycling coordinators and building departments to update the County’s multi-family recycling code. Set for adoption in 2018, the code is also a model for cities in the county.
 | The Solid Waste Division’s GreenTools Program provides support and resources to jurisdictions within King County through the Regional Code Collaboration (RCC), resulting in the ability for all jurisdictions to engage in conversations and actions associated with green building when they may not otherwise have the capacity to do so. The RCC facilitates peer-to-peer discussions, code development, trainings, tool development, and technical support. These efforts continue to strengthen regional relationships, allowing jurisdictions to work on solutions to common green building challenges. The RCC has been successful at developing codes promoting green building that are available for any jurisdiction to adopt, including strong 2015 Energy Code amendments, multifamily recycling, increased use of salvaged lumber, and a Living Building Challenge Demonstration Ordinance.*See also 2020 SCAP Priority Action GHG 4.2.1.* |
| **Quantify the greenhouse gas impacts of commercial and residential rating systems.** King County will create research opportunities with community partners to quantify the greenhouse gas emissions reduction benefits of building to various green building standards, including Built Green, LEED, Envision, King County’s Sustainability Infrastructure Scorecard, and Evergreen Sustainable Development Standards. King County will also develop an education and outreach strategy for sharing the results of this work with the community. | * King County conducted a stakeholder engagement process with experts from certification organizations to identify literature associated with quantifying GHG emissions that encourages the installation of solar energy systems. The second and third code packages are currently under development.
* The County completed a literature review and identified gaps in research that would allow for certification systems to quantify emission reductions.
* The County completed a study and is currently in the process of reconvening stakeholder groups for feedback and development of an outreach plan.
 | The King County GreenTools program commissioned research (completed by Cascadia Consulting Group, Hammerschlag and Co., and the New Buildings Institute) that reviewed and summarized existing literature on the GHG impacts of local green building certification programs. A report was completed in the spring of 2018 and results shared with stakeholders and partners. The report documented that, on average, certification green buildings perform better than non-certified buildings; however, it is difficult to precisely measure the energy and GHG impacts of green building certification programs and results vary both between and within studies, making it difficult to assign an expected value to energy or GHG emissions reductions. |
| **Propose strong green building codes where King County has jurisdiction.** By the end of 2017, for unincorporated areas, the Department of Permitting and Environmental Review will prepare proposed code updates, informed by Regional Code Collaboration recommendations, for solar readiness, construction and demolition, and energy efficiency, and prepare a demonstration ordinance for Living Building Challenge certification, with appropriate tailoring for the kinds of new development and major redevelopment occurring in unincorporated King County. Pending King County Council approval, the Department of Permitting and Environmental Review will implement these updated codes. | * Energy, Zoning, Building, and Residential Code updates recommended by the Regional Code Collaboration related to solar readiness, construction and demolition, and energy efficiency have been prepared.
* King County did not meet the target to complete a Living Building Challenge demonstration ordinance by the end of 2017. Work to meet the target is underway in 2018.
 | King County was successful in researching and developing codes such as solar readiness, energy efficiency, a demonstration ordinance for Living Building Challenge certification called for through the 2015 SCAP but was unable to complete this process due to lack of resources. In 2020, King County hired one FTE to help complete the tasks of both the 2015 and 2020 SCAP. |
| **Update construction and demolition recycling requirements.** Pending King County Council approval of a proposed construction and demolition ordinance, projects in unincorporated King County will be required to meet construction and demolition diversion performance requirements by the end of 2017. Proposed requirements include the submission of a materials diversion report, material going from job sites to designated facilities, and job sites having a minimum of two bins on-site (one for recyclable materials and one for non-recyclable waste). | * County officials presented to the Master Builders Association’s Residential Builders Council on the draft construction and demolition permitting ordinance language for unincorporated King County.
* County officials met with staff of eight King County cities to discuss construction and demolition permitting ordinance language for their cities.
* The County continued coordination with Seattle on fine-tuning and standardizing processes and forms related to construction and demolition permitting ordinances.
 | The King County Solid Waste Division provided education on a 2016 C&D Ordinance which required the designation of C&D processing facilities and transfer stations and banned readily recyclable C&D materials from the landfill. King County Permitting Division will transmit to the King County Council codes associated with C&D material diversion per 2020 SCAP GHG 4.3.3. |
| **Redevelop system for managing construction and demolition waste.** Propose an ordinance that promotes recycling of construction and demolition materials, while ensuring waste is managed in an environmentally sound manner. The legislation will continue the current practice of contracting with private-sector facilities for managing construction and demolition debris generated within the service area and implement bans on readily recyclable materials. | * Thirteen locations are now designated as receiving facilities for construction and demolition waste and materials.
* In 2017, new recycling requirements were negotiated with the operators of the construction and demolition transfer stations to comply with the ban on disposal of readily recyclable materials.
 |  The redeveloped system for managing construction and demolition waste that was put in place in 2015 continues strong. King County does not accept construction and demolition waste at its transfer stations or Cedar Hills Regional landfill, except for incidental amounts. King County Code (KCC 10.30), requires that construction and demolition waste must be taken to a designated privately-operated construction and demolition debris recycling and/ or transfer facility. These facilities are banned from landfilling certain materials including clean wood, cardboard, metal, gypsum scrap, and asphalt paving, bricks and concrete. As markets develop, King County will consider banning other construction and demolition materials. There are 12 King County Designated C&D facilities in the system with regular stakeholder engagement, active enforcement of material bans, and coordination with regional construction and demolition management agencies. |
| **Develop pre-approved code packages.** The Department of Permitting and Environmental Review will identify, research and develop three pre-approved packages of green building techniques and sustainable materials that make it easier for unincorporated area customers, who are mostly residential and small commercial property owners, to pursue energy efficiency, building, and exterior/site work. These packages will improve customer convenience, reduce customer costs, speed permit processing and can help diversify and broaden the use of green building techniques among residents. One pre-approved package will be ready for use starting in 2016, one in 2017 and one in 2018; DPER will track use of pre-approved packages on an annual basis. | * DPER has developed one code package focusing on energy efficiency that encourages the installation of solar energy systems. The second and third code packages are currently under development.
 | Additional pre-approved code packages beyond what is listed in the 2017 status update were not completed as originally identified in the 2015 SCAP. However, a “Solar Smart” guide was developed that directs applicants to federal, state and local incentives for the installation of solar PV and is viewed as meeting the intent of the original idea of a pre-approved code package. |

**County Operations:** Green Building and Sustainable Development Standards

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Implement the King County Green Building ordinance.** Require all County capital projects to meet a Platinum level using the LEED rating system, King County’s Sustainable Infrastructure Scorecard, or an approved alternative rating system.  | * In 2016, 80 completed King County projects (67 percent of the total) met the County’s Green Building Ordinance Platinum certification or standard target.
* In 2017, 103 completed King County projects (73 percent of the total) met the County’s Green Building Ordinance Platinum certification or standard target.
 | In 2019, 82% of completed projects achieved Platinum level using the King County Sustainable Infrastructure Scorecard or LEED rating system.*See also 2020 SCAP Performance Measure GHG 22.* |
| **Incorporate sustainability in operations and maintenance.** By 2017, King County will incorporate new green operations and maintenance practices in each division’s line of business by implementing King County’s Green Operations and Maintenance Guidelines Handbook. | * The Facilities Management Division (FMD) created a work plan for reviewing and integrating sustainability practices into the operations and maintenance of FMD-owned and -managed facilities; building systems were prioritized based on their greatest impact
 | Metro Transit has integrated chapters in their operations practices related to energy and water efficiency.FMD has been standardizing sustainable products used in its facilities.As of 2021, the Solid Waste Division GreenTools program is working with the County’s internal Green Building Team to update the existing Green Operations and Maintenance Guidelines Manual. *See also 2020 SCAP Priority Action GHG 4.7.2.* |
| **Reduce County water use.** King County will establish a water use baseline and reduction target for County facilities and operations that are currently monitored for water usage by the end of 2015 and will obtain comprehensive water data and set reduction targets for County accounts and facilities not currently monitored by the end of 2020. To meet these water use reduction targets, each King County division will develop water conservation plans, including considering use of non-potable water supplies, by the end of 2017. | * Comprehensive water data from multiple utilities are not available for all County facilities. This action item will require additional resources and attention to support data tracking and additional work toward the water use reduction goals.
 | As of 2020, the majority of Facilities Management Division buildings have low-flow faucets.The 2020 SCAP recommends new County operations water use reduction targets. *See also 2020 SCAP Priority Action GHG 4.11.1 and Performance Measure GHG 25.*  |
| **Research and develop green leasing recommendations.** The County will research private and public sector models for “green leasing” incentives, standards, and requirements and make recommendations for provisions that could be tailored for application to leases for long-term tenants of King County-owned properties and facilities. The intent of these provisions is to improve energy efficiency, reduce greenhouse gas emissions, and reduce water use by tenants of County-owned buildings and property. | * King County reconvened the green leasing team to continue to develop recommendations and a template for green leasing.
 | Recommendations on green leasing will be included in an update to the County’s Green Building Ordinance anticipated to be transmitted to Council in Q2 2021.*See also 2020 SCAP Priority Action GHG 4.7.4.*  |
| **Develop Net Zero Energy and Living Building Challenge projects.** By 2020, King County will identify and will make substantial progress in the design, construction or certification process for at least 10 new County construction or retrofit projects that will achieve Net Zero Energy or Living Building Challenge certification. | * King County held a leadership training on Zero Energy/Living Building Challenge certification for department management.
* The County identified nine potential County projects for Zero Energy/Living Building Challenge certification.
* King County partnered with the International Living Future Institute and the Bullitt Foundation to conduct Zero Energy/Living Building Challenge feasibility assessments for six projects.
* The County registered three projects for Zero Energy or Living Building Challenge certification.
 | As of early 2020, the County currently has 11 projects officially registered for ZE/LBC certification from five different divisions. The Parks Division’s North Utility Maintenance Shop was the County’s first project to achieve Zero Energy Certification in 2019. ZE and LBC are administered by the International Living Future Institute, located in Seattle, and are the world’s most progressive green building rating system. At the time of the 2015 SCAP, ZE and LBC were the only third-party verified green building certifications that had a carbon neutral performance metric. Other jurisdictions are seeing King County as an example in the building industry, particularly for applying carbon neutral performance measures to public works and infrastructure type projects. King County’s project portfolio includes several different divisions and lines of business, which can further influence parks, transit, wastewater, solid waste, affordable housing, and airport industries.*See also 2020 SCAP Page 124 and Priority Action GHG 4.13.1.*  |
| **Research tools to increase net positive and Living Building Challenge projects.** Local buildings built to the highest green building levels such as Net Zero and Living Building project are rare. The Regional Code Collaboration will research cost barriers and incentive opportunities to increase the number of projects that perform to these highest standards. As part of its leadership of the Regional Code Collaboration, King County will work with K4C and other cities on their adoption of codes allowing these kinds of projects. | * King County partnered with the Regional Code Collaboration and K4C to develop tools and educational curricula for permit review teams and building and site inspectors (tools and training materials to be completed in the fourth quarter of 2018).
* King County partnered with the International Living Future Institute to conduct feasibility studies of nine County-owned or funded projects. Each study includes an assessment report for strategic guidance in achieving Living Building Challenge certification.
 | King County partnered through the Regional Code Collaboration to develop a Living Building Challenge Demonstration Ordinance and supported Shoreline in their adoption of this ordinance.The RCC & K4C have mobilized to provide support for WA State codes and legislation striving toward the increased development of net positive and Living buildings |

**goal area 4: CONSUMPTION AND MATERIALS MANAGEMENT**

**PERFORMANCE MEASURES**

**County Services Goal:** King County will encourage and support behaviors, purchasing, and waste management strategies that minimize the life-cycle impacts of consumption and materials by the community.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Recycling rates in King County’s solid waste service area (all cities in King County except Seattle and Milton). | 1. By 2020, 70 percent recycling rate of materials collected in King County.
 | * The 2015 countywide recycling rate was 54 percent.
* King County is not on target to meet a 70 percent recycling rate by 2020 given the current programs and policies available.
* In 2018, China instituted import restrictions on recyclables, which could impact maintaining existing recycling rates.
* The Draft 2019 Comprehensive Solid Waste Management Plan maintains a 70 percent countywide recycling target, but not by 2020. The 70 percent target is viewed as an interim target as the region seeks zero waste of resources by 2030.
 | In 2017, King County’s countywide recycling rate (excluding Seattle and Milton) was 55%, and recent recycling rates have remained flat. As stated in its 2019 Comprehensive Solid Waste Management Plan, King County has a goal to reach a 70% recycling rate for materials collected in its solid waste service area, but with no specific target date.In 2019, 316,308 tons of recyclable materials were collected by private hauling companies at the curb, and the single and multi-family recycling rate in unincorporated King County increased from 43.9 percent in 2013 to 50.5 percent in 2019, a 15 percent increase. The region had committed to reach a 70 percent recycling rate by 2020, but this has not been met due to the length of time it took to develop the Comprehensive Solid Waste Management Plan.*See also 2020 SCAP Priority Action GHG 5.3.1* |
| 1. By 2030, zero waste of resources that have economic value for reuse or recycling.
 | * In 2017, a comprehensive residential waste generation study of garbage, recycling, and organics was completed.
* Results of the study will be used to measure and track residential readily recyclable, limited recyclable, and not recyclable materials, and the progress made toward zero waste of resources by 2030.
 | Seventy percent of material disposed of at the Cedar Hills Regional Landfill in 2019 was readily recyclable or reusable.*See also 2020 SCAP Performance Measure GHG 27*  |
| **Measure 2:** Tons recycled at King County solid waste transfer stations. | 1. By 2020, recycle 60,000 tons of materials including yard and wood waste, metal, cardboard, and paper.
 | * In 2017, 32,000 tons of material were recycled at King County transfer stations, representing a 25 percent increase over 2016 and a 30,4000 MTCO2e (metric tons of carbon dioxide equivalent) greenhouse gas (GHG) reduction.

This is attributed to the opening of the Factoria transfer station, a large increase in yard waste collection, and ongoing resource recovery and improved customer engagement efforts at Shoreline, Bow Lake, Enumclaw, and Vashon transfer stations. A mattress recycling pilot was initiated at Bow Lake, but planned expansion systemwide has been delayed because of limited private-sector processing capacity and the need for a dedicated King County Council-approved mattress handling fee. | In 2019, 33,921 tons of materials were recycled, an 87% increase since 2015. The 2015 SCAP contained a target of 60,000 tons diverted by 2020, but this has been changed to 2025. This is to reflect the construction schedule of the new South County Recycling and Transfer Station, expansion of recycling services at existing stations, and further development and expansion of recycling pilot projects at stations.*See also 2020 SCAP Performance Measure GHG 29* |

**County Operations Goal:** King County will minimize operational resource use, maximize reuse and recycling, and choose products and services with low environmental impacts.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Total amount of copy paper purchased. | 1. Compared to 2010 levels, reduce copy paper usage by 20 percent by 2013, 30 percent by 2016, and by at least 35 percent by 2020. | * In 2017, King County reduced its use of copy paper by 24 percent compared to the 2010 level.
* The reduction rate has slowed down and has even slightly decreased from 25 percent last year.
* Reduction in the use of copy paper cut costs by 24 percent below the 2010 expenditure baseline, saving the County approximately $178,000 in 2017.
 | The 2015 SCAP target goal of a 35% reduction by 2020 was reached in 2019. In 2020, the county reduced its paper consumption by 66%, which resulted in a 59% cost savings.  |
| **Measure 2:** Server Virtualization. | 2. Convert 70 percent of individual servers to standard virtual environments by the end of 2015. | * King County has converted 75 percent of its physical servers to virtual servers, despite inheriting additional physical servers because of reorganization efforts from 2015 to 2017.
 | In 2020, server virtualization reached 90% and all of the county’s backups are in the cloud. This milestone exceeds the corresponding measure in the 2015 SCAP by 20%.  |
| **Measure 3:** Landfill gas collection efficiency at the Cedar Hills Regional Landfill. | 3. Increase landfill gas collection efficiency at Cedar Hills to at least 98 percent by 2020. | * Estimated landfill gas collection efficiency at Cedar Hills was 98 percent in 2017. The Solid Waste Division (SWD) completed stage 3 closure at the site, which added landfill gas collection on side slopes, increasing the overall amount of gas collected at the landfill.
 | Based on US EPA standards for collection efficiency based on the acreage and type of different landfill cover systems (Final Cover, Intermediate Cover, and Daily Cover types) in place at Cedar Hills over recent years, the overall estimated landfill collection efficiency has remained consistently at 95%. |

**2017 PRIORITY ACTIONS**

**County Services:** Waste Prevention, Reuse, Recycling, and Transfer Stations

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Encourage collection polices in unincorporated areas.** SWD will explore garbage collection frequency, including the cost of organics collection for all customers, and requirements for separation of garbage, recyclables and organics.  | * SWD pursued collection policy changes in consultation with haulers, the Washington Utilities and Trade Commission, advisory committees, and the King County Council.
 | King County’s 2019 Comprehensive Solid Waste Management Plan was adopted in 2019.With this plan, the County and its 37 partner cities embarked on shared goals to increase regional recycling, expand services and modernize facilities, and identify options for waste disposal after the Cedar Hills Regional Landfill reaches capacity. |
| **Reduce GHG impacts from food production and consumption. The County will implement initiatives to:** * Develop a toolkit for food businesses to increase efficiencies and reduce food waste.
* Raise public awareness and purchase of “imperfect food” and tasty fruits and vegetables that haven’t met specifications for supermarket sale.
* Examine food waste recycling processing options such as anaerobic digestion and composting.
 | * SWD completed a Commercial Food Waste Characterization Study to identify business sectors with the highest potential for food waste diversion. Results indicated that the largest organics waste generators in the county are restaurants. This information will help inform next steps for SWD to implement commercial food waste projects.
* To encourage food waste prevention at home, SWD extended its popular Food: Too Good To Waste outreach program to Spanish-speaking audiences via tabling at Latino grocery stores and distribution of outreach materials in Spanish. More than 8,000 public contacts have been made through English and Spanish Food: Too Good To Waste community outreach.
* A grant to examine the potential for small-scale anaerobic digestion technology was provided to Impact Bioenergy to demonstrate the diversion of small business organics from the solid waste system and conversion of that resource into renewable energy and liquid soil amendment for application on agricultural land.
 | Due in part to the high GHG emissions impact and waste of natural resources from food production, the County’s Food: Too Good to Waste program has developed effective food waste prevention messaging, strategies and award-winning online outreach for residential audiences. In addition, the program has developed outreach materials in four languages besides English. King County has awarded eight commercial food waste grants for projects that aim to reduce edible and/or non-edible food waste generated by the commercial sector (non-residential) within King County (excluding Seattle). Food rescue has been a major focus of several of these grant projects.*See also 2020 SCAP Appendix page 305.* |
| **Update and expand recycling grant programs.** SWD will develop new criteria for fund disbursement to cities for efforts that support Zero Waste of Resources 2030 initiatives through the existing $1 million Waste Reduction and Recycling Grant and create a new competitive Zero Waste of Resources grant program targeting non-profits, community groups, and others with creative waste prevention, reuse and recycling strategies. | * SWD continued its commercial food waste grant program and awarded four new grants in 2017 for projects that aim to reduce food waste generated by the commercial sector within King County.
* More than 100 tons of food waste were diverted from the King County Regional Landfill by composting or food rescue through SWD commercial food waste grants.
* Cedar Grove was contracted to conduct a project to increase food waste recycling by restaurants and two farmers markets in King County, with a focus on diverse communities. Cedar Grove is working with 17 restaurants that are new to food waste composting whose owners are people of color, foreign-born, and/or whose primary language is not English.
 | • SWD continued its commercial food waste grant program and awarded 2 new grants in 2019 & 2020 for projects that aim to reduce food waste generated by the commercial sector within King County.* SWD will continue to consider, in line with 2019 Comprehensive Solid Waste Management plan, the role of grant programs. The role of future grant programs to help deliver the Zero Waste of Resources goal is bring taken forward in the Zero Waste Task Force.
 |
| **Expand recycling infrastructure.** King County will continue modernization of its 1960s-era network of transfer stations, which will improve recycling opportunities for all residents and businesses. | * The Factoria Recycling and Transfer Station was completed in the fall of 2017.
* Planning for the South County Recycling and Transfer Station continued. Opening of the facility is planned for 2022.
 | The Solid Waste Division provides recycling collection at its transfer stations and collects various types of recyclable materials from self-haul customers with cardboard, metal, yard waste, and wood accounting for roughly 90 percent of recyclable tons collected. Newer stations can collect more types of recyclable materials. The most recent station to be completed, the Factoria Recycling and Transfer Station, opened in late 2017. |
| **Increased recycling of key materials at transfer stations.** To achieve recycling goals, the SWD will explore requiring self-haul customers to recycle specified materials at transfer stations that provide recycling collection. | * The Waste Acceptance Policy was amended in 2017, requiring self-haul separation of wood, metal, cardboard, and yard waste at stations that have these recycling services available.
* Much of 2017 was spent preparing staff and the public for the new recycling rules that were implemented on January 1, 2018.
 | To cut waste and reduce the amount of recyclable materials in the landfill, the King County Sort It Out program was implemented in 2018. The program asks self-haul transfer station and drop box customers to place selected materials in designated areas at facilities that accept those materials for recycling. The program doubled the growth in transfer station recycling tons in 2018 over 2017. |
| **Explore incentive-based disposal tip fee.** SWD will explore development of an incentive-based tip fee disposal policy that rewards jurisdictions that are on track to reach the 70 percent recycling rate that would begin in 2020. | * This policy was not explored further in the development of the Draft 2018 Comprehensive Solid Waste Management Plan.
 |  *See 2017 Status update.* |

**County Operations:** Green Building and Sustainable Development Standards

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Reduce landfill gas emissions. King County will pursue several initiatives to improve collection efficiencies and reduce landfill gas emissions, including:*** Install a biocover of compost, mulch, and green waste over the surface of the Cedar Hills Regional Landfill. This will increase oxidation of landfill gas, which reduces carbon dioxide and methane emissions.
* Enhance the landfill gas collection system, which makes the conversion of landfill gas to renewable energy more efficient.
* Evaluate closed landfills to identify more landfill gas capture and treatment methods, such as improving the Cedar Falls Bioberm treatment system and replacing the Enumclaw landfill flare.
 | * SWD received funding for additional valve replacements at the Cedar Hills Landfill and added staff to manage infrastructure improvements.
 | For Cedar Falls and Enumclaw closed landfills:* A blower has been installed to improve landfill gas control at Cedar Falls closed landfill and the landfill gas is being treated at a bioberm.
* A bioberm treatment system has been installed at Enumclaw closed landfill and passive landfill gas collection is currently being evaluated. If landfill gas migration occurs to groundwater or offsite, then the blower and flare will be turned back on. Otherwise passive collection with biofiltration will continue until termination of post-closure.
* A new contract has been awarded to assess the landfill gas control and treatment improvement outcomes for both closed landfills, Cedar Falls and Enumclaw.
 |
| **Update King County’s Environmental** **Purchasing Policy.** The County will update its Environmentally Preferable Product Procurement Ordinance (K.C.C. 18.20) by 2017 to include greenhouse gas emissions as a criterion in purchasing decisions and will support King County-Cities Climate Collaboration (K4C) member cities’ sustainable procurement efforts. | * The draft of the Environmental Purchasing Policy is complete and was transmitted to the King County Council in 2018.
* The draft and implementation plan included stakeholder input from various departments and divisions, the Climate Leadership Team, and the Operations Cabinet, and support from Department of Executive Services leadership.
* Implementation and outreach will occur after the policy is adopted.
 | The Sustainable Purchasing Policy was adopted by ordinance (#18750) in June 2018 and the Executive Policy was adopted in November 2018. The Sustainable Purchasing Guide was posted online to help county agencies with implementation of the policy. It is also available as a resource to other jurisdictions.Green contracts that meet the policy are identified and posted in the guide and on the website.Training was conducted in 2018 and 2019 and further implementation and outreach is ongoing. |
| **Buy 100 percent recycled content copy paper.** Based on lessons learned over the last three years of implementation, King County will ensure by 2017 that the default option for office copy paper is 100 percent recycled content paper.  | * In 2017, 97 percent of all white copy paper purchases by the County were for 100 percent recycled content paper.
* This rate represents a significant increase from the 2016 compliance rate of 60 percent.
* The County saved $26,000 in 2017 by establishing a 100 percent recycled content-only contract in November 2016.
 | This goal was met in 2017 and continues to have good compliance. In 2020, there was 96% compliance. |
| **Target concrete use in construction.** The specification and use of alternative cement materials (i.e. fly ash and slag) lowers the embodied energy of concrete and offsets almost one ton of carbon emissions for every ton of Portland cement replaced. Beginning in 2016, King County will start tracking current use of cement and low-greenhouse gas cement alternatives to develop best practices/guidance on how and when to use alternatives, and by 2017 commit to set targets for use of low-greenhouse gas cement alternatives.  | * King County implemented a tracking mechanism for concrete and cement alternatives that are collected annually through green building reporting.
* Cement substitutions of 20 percent are typically specified for most concrete mixes—a common industry standard. Using a cement mix made with 20 percent cement substitutes reduces the GHG impacts of concrete use in construction projects.
 | Due to newly developed implementation tools and the growing adoption of Environmental Product Declarations for concrete within the market, this measure is being folded into the 2020 SCAP update in the GHG 5.8.1 Specifying low-embodied carbon building materials in King County capital projects. Requiring Environmental Product Declarations for high embodied carbon building materials and setting GHG reduction targets in the future will help us to reduce more embodied carbon than setting a prescriptive cement alternative percentage.A publicly available platform that tracks the embodied carbon of concrete, Embodied Carbon in Construction Calculator (EC3) pilot project led by the Wastewater Treatment Division identified materials of focus to track starting with concrete.*See also 2020 SCAP Performance Measure GHG 5.8.1* |
| **Purchases of desktop work stations.** King County’s Department of Information Technology will provide county departments with energy usage data for different types of workstations (e.g., tablet, laptop, desktop) to inform purchasing decisions, and departments will choose the most energy-efficient options to meet the business needs of programs and employees. | * King County continued its standard of deploying laptops instead of desktops, increasing their percentage of use from 35 percent to 49 percent in 2017.
* King County saved an estimated $33,000 in energy costs in 2017 by increasing laptop use and decreasing desktop use.
 | In 2020, KCIT continued focus on delivering laptops as the standard PC and increased the percentage of laptops from 72% to 78% of employees. The estimated annual energy cost savings from laptop utilization was approximately $69,000. |
| **Server virtualization.** King County is in the process of moving backups to the “cloud” and piloting other uses where different services, such as servers, storage, and applications, are delivered to computers and devices through the Internet. As the County sees results from pilot projects, it will develop a target for transition of these functions to the cloud by 2020. | King County has virtualized 75 percent of its servers by:* Converting to a cloud-based backup system
* Migrating on-premises software to the cloud
* Adopting a cloud-first strategy for new services

The County has reduced its remaining physical hardware footprint by 57 percent and has reduced energy costs by 15 percent through energy-efficient hardware replacements. | In 2020, server virtualization reached 90% and all of the county’s backups are in the cloud. This milestone exceeds the corresponding measure in the 2015 SCAP by 20%. The county’s latest cloud strategy is “Cloud first when and where it makes sense”. As we learn more about cloud workloads and the costs compared to on-premise options, many are coming to an understanding that the future will be a hybrid of cloud / on-premise footprint.  |

**goal area 5: FORESTS AND AGRICULTURE**

**PERFORMANCE MEASURES**

**County Services Goal:** King County will protect and support healthy, productive farms and privately owned forests that maximize biological carbon storage, promote public health, and are resilient to changing climate conditions.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Privately owned rural acreage that has stewardship plans or is enrolled in Open Space (RCW 84.34) and Forest Land- (RCW 84.33) designated current use taxation incentive programs. | 1. 500 additional acres per year of privately owned rural land that has stewardship plans or is enrolled in current use taxation incentive programs.
 | * In 2017, King County and the King Conservation District completed 110 stewardship plans, covering 2,339 acres of farm and forestland.
* In 2016, 53 parcels and a total of 684 acres were enrolled in the Public Benefit Rating System (PBRS), which is an open space protection program, or in designated Forestland and Farm and Agriculture land programs administered by the Department of Assessments.
* In 2017, 89 parcels and a total of 798 acres were enrolled in PBRS as open space.
 | Approximately 235,500 acres of privately-owned forest land and 30,000 acres of farmland have been enrolled in one of the County’s open space taxation programs. The King County Public Benefit Rating System (PBRS) and Current Use Taxation (CUT) programs provide significant tax savings incentives to landowners who chose to protect farmland, forestland and other important classes of open space. |
| **Measure 2:** Privately owned forest lands permanently conserved through easements that remove the development rights. | 1. Permanently protect and conserve all remaining unprotected high-priority forest, agriculture, and open-space land within 30 years.
 | * In 2016, 493 acres of open space were permanently protected, 118 acres of which were predominantly forestland.
* In 2017, 1,107 acres of open space were permanently protected, 456 acres of which were predominantly forestland.
* In both 2016 and 2017, the total acreage protected fell below 2,000 acres per year, which is what King County anticipates will be needed to meet the 30-year Land Conservation Initiative (LCI) goal.
* The LCI has established a goal of protecting 65,000 acres within 30 years and calls for new debt policies to accelerate land conservation. Additional financial and staff resources are needed to protect over 2,000 acres per year through acquisition and current use taxation programs.
 | Between 2016 and 2019, inclusive, King County protected more than 2,200 acres of forest and natural areas through fee or easement acquisitions. This past rate was about half of the new target proposed in the 2020 SCAP, but recent changes in the structure to finance Land Conservation Initiative (LCI) should accelerate the rate of land protection.*See also 2020 SCAP Performance Measure GHG 31* |
| **Measure 3:** Additional acres of agricultural land in food production. | Through the Local Food Economy Initiative, King County set a target of adding 400 net new acres in food production per year through 2024. | In 2016 and 2017, King County documented 462 acres of farmland newly returned to food production, with about a quarter of that acreage restored through the Agricultural Drainage Assistance Program. Because the County is unable to accurately track annual changes in individual parcel land use, it completed a countywide agricultural land use survey in 2017. That survey indicated that there were nearly 5,000 additional acres in food production than were present in 2013. Although the 4,000-acre goal of new food-producing land was exceeded, the County is not yet able to determine how much of the acreage was truly new acreage in production versus lands that were missed during the 2013 survey. Thus, the County and partners remain committed to restoring 400 acres of land to food production annually. To meet that goal, in 2017, King County and partners launched the “Working Farmland Partnership,” which will focus on returning “farmable but unfarmed” lands to commercial food production and support farmers hoping to launch or expand their farming businesses. | The 2015 SCAP included a goal, initially proposed by Local Food Initiative (LFI), to increase King County acreage dedicated to food production by an average of 400 acres per year. Because small-scale annual changes in land use are often difficult to track, the Water and Land Resources Division conducted a comprehensive agricultural land use survey in 2017. A total of 48,200 acres were classified as agricultural land, of which 25,100 acres were actively farmed for food production. The 2017 food production estimate represented an increase of 3,100 acres compared to 2013, and most of that increase was attributable to fallow/idle farmland being returned to production.*See also 2020 SCAP Appendix page 308* |
| **Measure 4:** Number of farms in the 100-year floodplain with raised agricultural structures and farm pads for protection of animals and equipment during flood events. | 4. King County currently anticipates completing five or more projects per year to elevate agricultural structures or support the construction of farm pads. | * In 2015 and 2016, two home elevations and one farm pad were constructed. In 2017, two additional home elevations were completed. The program continues to offer services to interested at-risk property owners. The pace of completion is driven by property owner interest and is subject to Flood District approval of funding.
 | 2017: A total of 6 elevations were completed (four more than the two previously reported).2018: 2 elevations were completed2019: 2 elevations were completed2020: 1 elevation was completed |

**County Operations Goal:** King County will manage and restore its parks and other natural lands in ways that maximize biological carbon storage and increase resilience to changing climate conditions.

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| MEASURE | TARGET | 2017 STATUS |  2020 STATUS |
| **Measure 1:** Percentage of forested sites larger than 200 acres managed by the Parks Division that have Forest Stewardship Plans. | 1. 100 percent by 2025. | * By the end of 2017, half (16 of 32) of the needed Forest Stewardship Plans had been completed.
* Although King County anticipates completing all targeted plans by 2025, to do so will require additional staff focus and financial resources.
* Public engagement and outreach are an integral part of the plan approval process. As the King County Parks Division moves its work to sites that have a greater urban interface, public outreach efforts will increase.
 | Forest Stewardship Plans have been drafted for 31 forested sites, with roughly half needing technical review in order to be finalized. *See also 2020 SCAP Performance Measure GHG 34* |
| **Measure 2:** Number of native trees planted by King County and public and private partners. | 2. Plant 1 million native trees between 2015 and 2020. | * In both 2016 and 2017, King County and partners significantly increased the rate of tree planting.
* In 2016, approximately 117,698 trees were planted (more than double the 2015 total).
* In 2017, approximately 156,971 trees were planted.
* King County anticipates planting over 540,000 trees by 2020.
* King County and partners planted nearly 330,000 trees between 2015 and 2017.
* In 2018, efforts will be expanded to ensure more accurate reporting of the number of trees planted by partners, and the County will work with partners to find the resources they need to increase their rate of tree planting.
 | As part of the 1 Million Trees effort identified in the 2015 SCAP, King County and its partners combined to plant more than 1.2 million trees (with King County and partners each planting approximately half of that total). Between 2015 and 2020, King County significantly increased the number of trees it planted.*See also 2020 SCAP Performance Measure GHG 35* |

2017 PRIORITY ACTIONS

**County Services:** Protect Agriculture and Forest Lands, Sustainable Agriculture
and Forestry Practices

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| PRIORITY ACTION | 2017 STATUS |  2020 STATUS |
| **Protect open space.** Develop a plan to permanently conserve remaining high-priority but unprotected farm, forest, and other open space throughout King County within 30 years. Building on a history of protecting forest and farm lands, including permanent protection of more than 200,000 acres of forest land and 14,000 acres of farmland, King County will develop a 30-year plan to permanently preserve the remaining high-priority unprotected conservation lands throughout the county, including agriculture land, forestland, and other open space lands, such as land protected for habitat or land for regional trails. This land is currently unprotected and at risk of future development or conversion to other land uses, a risk that is expected to increase with future population growth. Protecting this land will have significant climate benefits, through carbon sequestration, focusing development and reducing sprawl, and helping to reduce local climate change impacts, such as flooding. | * The vision of LCI is to protect remaining high conservation value lands and secure the County’s regional trail network within 30 years.
* The Advisory Group met nine times in 2016 and 2017 and issued a Phase 1 Report that provided feedback on the initial work and recommended additional planning and research needed during 2017. The Advisory Group met six additional times in late 2017, and issued a final report to the Executive and King County Council in December 2017.
* The LCI, which is a regional collaboration between King County, cities, businesses, farmers, and environmental groups, has created a strategy to preserve approximately 65,000 acres of the most important natural lands and urban green spaces remaining in the county.
* To reach the 65,000-acre goal within 30 years, significant additional resources will be needed for land protection and program management.
 | With new financial tools in place in 2019, King County tripled the amount of open spaceconservation funding awarded annually through the Conservation Futures Tax program and King County Parks Levy. From 2016 and 2019, King County protected more than 3,100 acres across all land categories through fees and easements (total does not include lands protected by cities in the County). |
| **ReTree King County.** As part of a new initiative called ReTree King County, King County and partners such as city, state, and federal agencies; tribes; nonprofit organizations; businesses; and the public will collectively plant at least 1 million new native trees between 2015 and 2020. Restoration projects that plant native trees and shrubs on previously cleared, non-agricultural land have multiple benefits, including wildlife habitat, reduced stream temperatures due to increased shade, and increased carbon sequestration. To maximize these multiple benefits, plantings along river and stream corridors will be prioritized for the next five years. In addition to collaborating on tree planting, by 2020, King County will also work with multiple partners to develop a detailed 30-year plan for maximizing the percent of tree cover in both urban and rural King County while accommodating population and economic growth and meeting goals and needs for local food production and working forests. The plan will include methods to track progress, monitor tree survival, achieve multiple benefits, and coordinate extensive public outreach and engagement on the initiative. | * King County and partners have significantly expanded their tree planting efforts and the number of trees planted countywide since 2015. Additionally, there has been an increased focus on collaboration to ensure that all of the work being done by the County’s partners is fully

captured in the reporting. However, it will be challenging to meet the 1 Million Trees goal by 2020 without additional staff and funding resources for both King County and its partners.* Most of the trees planted by King County were associated with riparian habitat and river restoration projects. The Department of Natural Resources and Parks has developed an ambitious timeline to implement several of the stewardship plans that call for restoring natural structure and composition to upland forests beginning in 2018.
* King County staff have initiated work with cities and county nongovernmental organizations to develop the 30-year plan to ReTree King County. Many cities are already working on forest canopy restoration initiatives and, beginning in 2018, King County will coordinate a collaborative partnership to ensure that those initiatives are integral components of the countywide plan.
 | * The 2015 SCAP called for planting one million new native trees with partners by 2020 as a “down payment” on the 30-Year Forest Plan. Restoration projects that plant native trees and shrubs on previously cleared, non-agricultural land have multiple benefits, including wildlife habitat, reduced stream temperatures due to increased shade, and increased carbon sequestration. King County significantly expanded tree planting efforts since 2015, and combined with partners to plant more than 1.2 million trees (King County and

partners each planted approximately half of that total).* By the end of 2020, King County will complete a 30-Year Forest Plan to maximize forest health and tree cover in both urban and rural King County. This plan will accommodate population and economic growth and meet the goals and needs for local food production and working forests. County staff initiated work with cities, community-based organizations, and other partners to develop the plan. The plan includes methods to track progress, monitor tree survival, achieve multiple benefits, and coordinate extensive public outreach and engagement on the initiative.
 |
| **Streamline support for forests and agriculture.** King County will coordinate with federal, state and local agencies and university researchers to implement “one-stop shopping” for forestry and agricultural assistance and incentives to streamline and simplify technical assistance and regulatory processes. For agriculture, this will focus on assistance with production, marketing and business planning, which will make it easier for farmers to spend more time growing food rather than navigating the complex regulatory environment. | * King County and partners continued to update and refine FarmKingCounty.org, the “one-stop-shop” Web portal for agriculture and farming resources in King County. In 2017, nearly 3,000 unique users visited the website.
* In 2016, King County launched the FarmKingCounty technical support team, which is composed of a broad spectrum of partners invested in the agricultural economy of King County. Two of the initial goals of this team are to ensure that the benefits of FarmKingCounty.org are enhanced and that agriculture-related workshops and training are more targeted and not duplicative.
* In 2017, King County, PCC Farmland Trust, SnoValley Tilth, and Tilth Alliance launched the Working Farmland Partnership with financial support from the King Conservation District. This partnership will greatly enhance opportunities to return idle land to agricultural production and improve access to farmland for farmers looking to establish or expand their farming businesses.
 | The Water and Land Resources Division’s Forestry Program works closely with KCD and WSU Forestry Extension to promote healthy forests and forest stewardship through forest stewardship planning courses and workshops and on-site forest management assistance to non-industrial private forest landowners. The Forestry Program also workswith KCD, fire districts and local communities to reduce the risk of wildfire and to ensure communities are prepared to respond should they be threatened by wildfire. The County also offers property tax incentives to encourage private forest landowners to preserveand enhance management of their forestlands and assists landowners to take advantage of the Transfer of Development Rights program. |
| **Expand the local food economy.** King County and its public and private partners will expand the local food economy by implementing the recommendations of the Executive’s Local Food Initiative Kitchen Cabinet. These recommendations include agriculture support and incentives to increase the number of acres in food production by 4,000 acres by 2024, to increase the variety of crops grown in King County, to increase farm productivity, to expand the distribution system for locally produced food, and to expand access to locally produced food.  | * In 2017, the Snoqualmie Valley Watershed Improvement District provided irrigation water to six farms that do not hold water rights, enabling those farms to grow higher value food crops.The King Conservation District awards Regional Food System Grants for projects that contribute to the economic viability of local farmers, encourage new farmers, expand acreage in food production, improve food access, and increase demand for and purchase of King County farm products. In 2016 and 2017, the King Conservation District awarded over $1.3 million in Regional Food System Grants to support 20 different

 projects and programs.* In 2016, King County documented 290 acres of farmland that was returned to food production and 172 acres that were again farmed for food in 2017. Although those numbers fall short of the target of 400 net new acres in food production each year, a 2017 agricultural land use survey indicated that nearly 5,000 additional acres of land in King County were being farmed for food than were being farmed in 2013.
* The Farmland Preservation Program continues to successfully conserve some of the County’s most important farmlands. In 2016 and 2017, 304 acres and 282 acres, respectively, were preserved by acquiring conservation easements.
 | Launched in 2014, King County’s Local Food Initiative (LFI) is taking bold steps to support the local food economy, including to (1) better connect local farms to consumers,(2) increase access to healthy, affordable foods in underserved areas, (3) support farmersand protect farmland, and (4) create a sustainable farm-to-plate pipeline more resilientto the effects of climate change. The Food System Data Center maintains current metricsabout individual LFI measures.The Water and Land Resources Division’s Agriculture Program works with King Conservation District (KCD), Washington State University (WSU) Extension, and other partners to provide technical assistance, support for farm plan development, and cost sharing to support sustainable farming practices and to promote local food production.King County manages a comprehensive website (“one stop shop”) for business, farmland access, production, marketing and food safety. During the Covid-19 crisis, the County expanded the website to include information from agency and NGO partners related to available financial resources, health directives, expanded market opportunities, and options for consumers. The County also offers property tax incentives that support privately owned farms. |
| **Develop framework to provide greater certainty for irrigation while protecting instream flows for fish.** Water laws in Washington State, as with all western water law, are built on the concept of the allocation of water rights based on seniority of use. Many farmers irrigate their crops during summer months, and climate change is likely to result in increased irrigation needs due to warmer summers and increased incidence of droughts. However, some farmers have no or tenuous legal rights to the irrigation water they use. As irrigation needs increase, there is the potential that farmers may be prevented from irrigating if legal rights are not established. King County will support development of a framework in the Snoqualmie Valley to assist with the management of agriculture water rights and supplies and agricultural drainage. | * The Watershed Improvement District has refined its mechanism for temporarily transferring water rights from landowners who have available water to farmers who need water for irrigation. In 2017, six farms received irrigation water through the Watershed Improvement District.
* King County has negotiated an internal temporary water rights transfer from King County Parks to the Water and Land Resources Division (WLRD) so that there will be adequate irrigation water available to all farmers leasing land on the County’s Sammamish River Farm beginning in 2018.
 | The Washington Water Trust, Washington State University Extension (WSU), and King County Wastewater Treatment Division (WTD) kicked off a study in 2020 to assess the viability of recycled water as a safe and sustainable water supply for irrigation of food and other crops. The study will assess plant and soil health of food crops irrigated with recycled water in comparison to food crops irrigated with Sammamish river water. The project includes a significant outreach effort to share results and discuss the broader issue of irrigation supply with stakeholders within the local food supply chain including producers; restauranteurs and grocers, and consumers.  |
| **Research the benefits of commercial compost on crops.** The Solid Waste Division is collaborating with Washington State University to demonstrate the benefits of commercial compost on crops in King County agricultural areas. Potential benefits include increased carbon sequestration in soils, increased water holding capacity, resistance to erosion, decreased use of synthetic fertilizers, and increased productivity. These benefits would contribute to increased agriculture resilience to the changing climate conditions predicted in King County. The project is working with six farms in King County over a three-year period, and is conducting a cost-benefit analysis that will include farmers’ ability to pay for compost and the composters’ ability to sell compost. | * In 2017, Cedar Grove Composting launched Sound Sustainable Farms in the Sammamish River Valley, which is a large-scale pilot project to demonstrate the benefits of compost application to commercially managed agricultural lands and to create a closed-loop system between producers and restaurants. The farm grew dozens of different crops, thanks, in part, to compost made from waste created by several restaurants in the Seattle area. Cedar Grove is considering an expansion of the farm in 2018 as well as establishing a second site within another agricultural valley in the county.
 | In 2019 King County Solid Waste Division and King County Water and Land Resources Division partnered on a project to provide compost to farmers on King County owned farm land to help better understand farmer preferences and knowledge of using compost. In 2020, working with the Black Farmers Collective and soil health expertise from WSU, compost was provided alongside training and technical support. By understanding the technical and attitudinal barriers to agricultural compost use, the County hopes to be able to unlock future compost demand while also underlining the environmental and economic benefits of compost use for the farmers. This project is expected to recruit a further 10 farmers into the project during 2021. |

**Section 2 >> Preparing for Climate Change Impacts**

*See also 2020 SCAP Appendix page 310-315.*

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| **Science and Research** |
| **PRIORITY ACTION**  | **2017 STATUS** |  **2020 STATUS** |
| **Assess climate impacts on rainfall patterns.** The Water and Land Resources Division (WLRD), in cooperation with the Wastewater Treatment Division (WTD) and partially supported by a grant from the Washington State Department of Ecology, will implement a study in collaboration with the University of Washington (UW) to assess climate change impacts on local rainfall patterns. | * Draft regional climate model runs for extreme precipitation were completed by UW in 2017. Results were bias-corrected at the individual rain-gauge level in King County, Snohomish County, and the City of Seattle.
* A peer-review journal article based on the modeling was submitted for publication.
 | * Results from downscaling global and regional climate models for King County found that projected changes in heavy rainfall varied depending on intensity, duration, and location. The study specifically looked at changes in the magnitude of extreme rainfall events for the 2080s (2070-2099), relative to the 1980s (1970-1999).
* Peak one-hour rainfall intensities are projected to increase considerably for the water year, averaging +31% (2-year storm), +39% (10-year storm); +45% (25-year storm) and +58% (100-year storm) across twelve models using the high greenhouse gas scenario (RCP 8.5).
* When comparing one-hour peak events from the full range of recurrence events (e.g. 1-year through 100-year storms) for the water year, the projected changes varied from -15% to +243% across twelve models for the high greenhouse gas scenario.
 |
| **Building on results from the research on changes in local rainfall patterns, King County will update stormwater design requirements.** WLRD will apply the research findings to stormwater facility design and sizing requirements. Results of this research will be incorporated into future updates of the King County Surface Water Design Manual (SWDM). | * WLRD built and calibrated a watershed model for part of the Bear Creek Watershed to evaluate climate change impacts on stormwater runoff in the watershed (early 2018). Additional creek modeling and stormwater sizing assessments will be conducted by summer 2018. Assessment results will inform the development of technical guidance regarding stormwater design methodologies.
 | * Results of stormwater facility design and sizing requirements pointed to the need for additional work before developing new SWDM regulations. This included analyzing a more robust data set and using that data to develop a better supported methodology.
* Next steps include developing a methodology that will be vetted and allow us to project impacts to critical infrastructure and effectiveness of stormwater current design standards in King County (a 2020 SCAP action).
* King County WLRD has added a senior engineer position to assist in executing the recommendations previously mentioned.
* Addressing climate change impacts on stormwater management is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.4, 2.2.5, 2.2.14, 2.2.15, and 5.1.3.*
 |
| **Building on results from the research on changes in local rainfall patterns, King County will assess impacts on wastewater conveyance and treatment.** WTD will use the results of the research to assess potential impacts on wastewater conveyance and treatment. Results will be incorporated into future updates of the Regional Wastewater Services Plan and the King County Combined Sewer Overflow Control Plan. | * Precipitation data for one of two climate scenarios being produced by UW were converted to a 15-minute time step for approximately 30 rain gauges in the County and analyzed for a variety of volumes and intensities.
* More analysis of the rainfall changes and sub-basin modeling is planned for 2018 and 2019.
 | * Precipitation forecasts from two global climate models and two greenhouse gas scenarios were analyzed such that historical rainfall at 17 Seattle rain gauges could be adjusted to represent climate conditions for the 2080s (2070-2099).
* WTD’s hydrologic and hydraulic models were next run to estimate the impacts that the two climate scenarios would have on combined sewer overflow (CSO) control volumes, peak overflow rates, and overflow volumes.
* This work showed that ten new CSO projects would need to be constructed beyond what is currently in the County’s CSO Long Term Control Plan to meet existing regulations in the projected climate of the 2080s.
* The work also found that the combined total size of CSO facilities would need to be about 40–54% larger for the climate of the 2080s relative to today. Facilities would need to handle an extra 58–78 million gallons in a large storm, in addition to handling the 250 MG required under current climate.
* Addressing climate change impacts on combined sewer overflows is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.3, 2.2.3*
 |
| **Assess climate impacts on flood sizes and frequencies.** WLRD will build on local rainfall research to model river flows under climate change conditions. This effort will quantify likely impacts of climate change on flood sizes and frequencies in King County rivers. Results from this study will be incorporated into future updates of the King County Flood Hazard Mitigation Plan. | * Modeled changes in extreme precipitation from one (of two) UW regional climate model scenarios were used to assess projected changes in flood flows for the Snoqualmie and Green rivers. Analyses of the second regional climate model scenario and a final project report are due in 2018.
* Resources are needed to model additional climate scenarios for the Snoqualmie and Green rivers, and to extend the analysis to the Tolt, White, Cedar, and Sammamish rivers.
 | * The final Phase 1 project report describing the results of modeling the effect of two regional climate model scenarios on flooding in the Snoqualmie and Green rivers was completed in 2018.
* Phase 2 of the project evaluated the effect of an additional 11 regional climate model scenarios on flooding in the Snoqualmie and Green rivers. A final report was completed in November 2020.
* Results from Phase 1 and 2 suggest that flood flow frequency in unregulated rivers (S. Fork Skykomish, Snoqualmie, and the Green River above Howard Hanson Dam) will increase over this century. Additional research is needed to evaluate the ability of the Howard Hanson Dam to manage flood risk associated with potentially higher flows
* A third project phase to extend flood modeling to the Cedar and White rivers and evaluate further refinements to the modeling system is currently under consideration.
* Addressing climate change impacts on flood hazard mitigation and flood risk is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.1, 2.2.1, 4.2.12, 5.1.1 (see also sea level rise actions)*
 |
| **Assess climate impacts on population growth rates.** The Department of Natural Resources and Parks and the Executive’s Office will coordinate with Washington State, the Puget Sound Regional Council, local researchers, and other local jurisdictions to evaluate potential increases in population growth beyond current projections due to increased migration resulting from climate change and potential implications for regional infrastructure and services. | * King County partnered with Portland State University, UW, and other institutions to host a 2016 symposium exploring the potential for climate change-driven migration to the Northwest and its implications for long-range planning.
* The symposium concluded that the potential cannot be ruled out. King County is continuing to track research on this issue and is considering if, when, and how to account for the potential in long-range planning.
 | * See 2017 status update
* King County is continuing to monitor how research on this issue is advancing by participating in regional and national discussions related to this topic as those opportunities arise.
 |
| **Survey and engage stakeholders on health and climate change.** Public Health–Seattle & King County will develop and implement a stakeholder engagement strategy to gauge perceptions of climate impacts on public health. | * Public Health completed interviews, focus groups, and surveys with County staff and community partners to assess knowledge of climate change and health, and Public Health’s priorities, roles, responsibilities, and opportunities for addressing health impacts.
* Insights gained from the engagement work provided a

foundation for developing the Climate Change and HealthBlueprint (available summer 2018). | * See 2017 status update
* Climate change and public health is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 3.1.2, 4.2.14*
 |
| **Assess food-water-energy dynamic.** In collaboration with universities and local governments, the County will research, assess, and characterize the United Nation’s food-water-energy dynamic and the regional climate impacts and risks at Pacific Northwest regional scale. | WLRD qualitatively assessed the linkages between food,energy, water, and climate change impacts in King County. Recommendations for the County include:* Continue prioritizing programs that support farmers, nonrenewable energy, water efficiency, and preparing for climate impacts related to warming temperatures and declining snowpack; and
* Increase collaboration and dialogue between nexus stakeholders.
 | * See 2017 status update
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| **PLANNING AND IMPLEMENTATION** |
| **PRIORITY ACTION**  | **2017 STATUS** |  **2020 STATUS** |
| **Expand use of recycled water.** The Wastewater Treatment Division will further develop and expand its recycled water program in the Sammamish River valley and near the South Treatment Plant to reduce reliance on Puget Sound for the discharge of treated effluent and provide a water source for agricultural irrigation and groundwater recharge. | * King County is currently serving two of the three largest irrigators in the Sammamish Valley.
* As a result of the Recycled Water Program’s partnership

with the Salmon Safe certification program, Willows Run golf course in Redmond (a recycled water user) was certified as a Salmon Safe golf course in 2016.* The Buttonwood Tree Farm was added as a new recycled water customer in 2017.
 | * King County Wastewater Treatment Division (WTD) added one irrigation customer in 2019 that hauls recycled water to irrigate farmland in the Sammamish Valley.
* WTD has been working with local drinking water systems to coordinate on adding new recycled water customers by developing agreements with the water systems.
* WTD, the Washington Water Trust, and Washington State University Extension kicked off a study in 2020 to assess the viability of recycled water as a safe and sustainable water supply for irrigation of food crops. The project includes a significant outreach effort to share results and discuss the broader issue of irrigation supply with stakeholders within the local food supply chain including producers; grocers and restauranteurs; and consumers.
* Expanding the use of recycled water is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Action 4.2.2*
 |
| **Water Supply.** Review research by the Water Supply Forum, Seattle Public Utilities, and other water suppliers, and universities on how regional climate change impacts will impact local water supply. King County will use this information to report to the Council by June 2017 on how new information on local water supply will impact how King County implements its responsibilities under the Growth Management Act, such as its review of Water Comprehensive Plans. The report to Council will address how recycled water can be used to address water supply concerns. | * WLRD completed a report that reviewed climate change impacts on water supplies in King County, summarized water utilities’ efforts to prepare for climate change impacts, and made recommendations for King County to help ensure adequate supplies in the future. The County will continue to track research and preparedness efforts related to water supply.
 | * See 2017 status update
* King County is continuing to monitor how utilities are preparing for climate change via ongoing engagement with utilities and participation in local and regional meetings, workshops, and conferences where this is discussed.
 |
| **Preserve road safety and maintenance.** The Road Services Division will focus on immediate operational safety and emergency response needs. To the extent feasible under available funding and/or as required by permitting agencies, it will incorporate information about changes in future flooding, storm sizes and frequencies, and landslide risks into roads maintenance and preservation programs and projects for unincorporated King County. | * The King County Road Services Division (Road Services) is continuing to focus on immediate operational safety and emergency response needs. Roads is also part of the County’s inter-departmental sea level rise assessment team. Through this effort, Roads Services is identifying assets that may be affected by sea level rise.
 | * King County Road Services Division (Roads) is continuing to focus on immediate operational safety and emergency response needs.
* Roads completed a preliminary characterization of the impacts of projected sea level rise to road alignments proximate to the Vashon Maury shoreline. Roads continues to monitor unincorporated roads that are prone to flooding and slides, mobilizing emergency responses and as funding is available, implementing capital projects to achieve longer-term preservation outcomes for unincorporated King County roads.
* Climate change and road safety is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.11, 2.2.11*
 |
| **Conduct hazard mapping.** The Water and Land Resources Division will complete the update to King County’s landslide hazard mapping along major river corridors. When funding is available, also conduct an update to King County’s landslide hazard mapping elsewhere in King County. | * A landslide hazard map, report, Web map viewer, and landslide data inventory for river corridors were completed in 2016. A landslide hazard map permit screening tool for most of unincorporated King County was also completed. Multiple community landslide hazard workshops were held to raise awareness of landslide hazards and County planning resources.
 | * See 2017 status update
* Climate change and landslide risk management is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 2.2.10, 4.2.13*
 |
| **Plan for the impact of rising sea levels on coastal zones.** The Water and Land Resources Division will prepare a comprehensive strategy to reduce risks to Puget Sound shoreline homes and businesses at increasing risk of flooding and coastal erosion due to sea level rise. | * In 2017, King County launched an inter-departmental effort to assess how sea level rise may affect County-owned assets and develop preparedness strategies for those assets.
* The County is actively participating in the National

Oceanic and Atmospheric Administration-fundedWashington Coastal Resilience Grant project and pursuing sea level rise modeling with the U.S.Geological Survey. | * In 2018, King County assembled an inter-departmental team to review King County land use codes and policies, and their protectiveness against sea level rise. This review led to the recommendation for, and King County Council adoption of, a new Sea Level Rise Risk Area for Vashon and Maury Island (July 2020).
* The inter-departmental sea level rise assessment of King County-owned assets has been completed after delays related to staffing changes and COVID; a summary of assessment results is in review. The assessment found that exposure to sea level rise is limited for most divisions. For divisions with higher exposure and/or more sensitive assets, determining which adaptive actions to implement will depend on how quickly sea level rises and the cost of adaptative measures, among other factors.
* Planned sea level rise modeling with the U.S. Geological Survey was scoped but put on hold in 2019 due to budget adjustments. That work is planned for 2021-2023 (a 2020 SCAP action).
* Planning for sea level rise is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.1, 1.2.2, 1.2.3, 2.2.1, 2.2.2, 2.2.4, 2.2.13, 4.2.1, 5.1.1, 5.1.2*
 |
| **Plan for salmon recovery.** The Water and Land Resources Division will seek grant funding to assess climate change impacts on salmon recovery plans and to ensure the plans are resilient in the face of climate change. | * King County staff prepared issue papers summarizing climate change impacts on salmon and potential preparedness actions for Water Resources Inventory Areas (WRIAs) 7, 8, and 9.
* The issue papers have raised the priority of some actions,

while also pointing to additional areas where recovery activities may help increase salmon resilience to climate change.* A climate change issue paper for WRIA 10 will be completed in 2018.
 | * The WRIA 10 climate change issue paper was completed and shared with the watershed’s Technical Advisory Group.
* Climate change and salmon recovery is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 1.2.5, 1.2.6, 2.2.6, 2.2.7, 4.2.2, 4.2.3, 4.2.4*
 |
| **Expand and fund public health preparedness and responses.** Public Health will seek new funding to implement a comprehensive public health and climate change program. | * Leveraging grant funding and technical support from the Public Health Institute and the Kresge Foundation, Public Health began work on a Climate Change and Health Blueprint to guide Public Health’s work on climate change, health, and equity.
* The Blueprint, available in summer 2018, was developed

in consultation with King County Climate Program staff and climate justice partners.* Resources are needed to implement the Blueprint and

support Public Health preparedness efforts. | * Resources are still needed to implement the Blueprint and support Public Health preparedness efforts. Constraints include insufficient staffing and program funding. Constraints in program areas with a role in reducing health impacts, i.e., asthma, disease surveillance, etc., also limit the ability to move aggressively on Blueprint actions.
* Public Health continues to do what it can to keep climate work moving forward given those constraints. This includes developing and distributing public information materials about managing the health effects of summer heat events and wildfire smoke, and distributing box fan/air filter kits to vulnerable populations during the 2020 wildfire smoke event.
* Climate change and public health is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 3.1.2, 4.2.14*
 |
| **Evaluate emergency preparedness mitigation strategies.** The Office of Emergency Management (OEM) will require that each planning partner assess whether the emergency preparedness mitigation actions and strategies identified for their jurisdictions should be modified or updated due to projected climate change impacts. | * OEM updated the County’s hazard mitigation catalog to include preparedness actions related to sea level rise, severe weather, wildfire, and other hazards caused or exacerbated by climate change. Additional integration into county hazard mitigation planning will occur in 2018 to 2020 as part of OEM’s update of the Regional Hazard Mitigation Plan.
 | * As part of updating the 2020 King County Regional Hazard Mitigation Plan, OEM took several steps to incorporate climate change in the County’s plan and to encourage local jurisdictions to account for climate change in their hazard mitigation actions. This included the following:
	+ Incorporating information on how climate change affects natural hazards in the plan’s regional risk profiles (e.g., flooding, severe weather, wildfire).
	+ Incorporating climate change into the criteria used to prioritize strategies and projects.
	+ Including actions that increase resilience, including development of a King County Wildfire Risk Reduction Strategy and increased training on how to further integrate climate change information into planning, projects, and emergency management (also 2020 SCAP actions).
* Climate change and hazard mitigation is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 4.2.7, 5.1.4, 5.1.7*
 |
| **Provide emergency preparedness climate education.** OEM will integrate information about climate change in ongoing campaigns that provide public education about emergency preparedness. | * OEM updated community presentation materials and Web content to include information on how climate change exacerbates various hazards in King County. OEM will continue to look for opportunities to integrate this information into other materials as the opportunity arises.
 | * See 2017 status update
* Climate change and hazard mitigation is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions noted above.*
 |
| **Conduct a heat wave emergency response drill.** OEM will conduct an emergency response drill to evaluate preparedness for a major heat wave. | * Work on this priority action is planned for 2019.
 | * OEM held a wildfire, heat, and smoke seminar in August 2020 with emergency response managers. The event included discussion on responding to a heat and wildfire smoke scenario during the COVID pandemic. The exercise identified needs related to guidance on simultaneously balancing heat, wildfire smoke, and COVID concerns; communications; and wildfire response (e.g., Bambi buckets, helicopters for water drops).
* Climate change and hazard mitigation is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions noted above.*
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| **PARTNERSHIPS** |
| **PRIORITY ACTION**  | **2017 STATUS** |  **2020 STATUS** |
| **Plan for low stream flows.** WLRD and WTD will work with water purveyors and the U.S. Army Corps of Engineers to help ensure minimum river flows for fish and agriculture during low-flow seasons and work with water purveyors and farmers to expand water conservation efforts and use of reclaimed water. | * King County actively participates in regional forums focused on streamflow management, including discussions hosted by the U.S. Army Corps of Engineers (Green River), the Cedar River Instream Flow Commission, and the Regional Water Suppliers’ Forum.
* Ongoing efforts to expand recycled water use and County-funded research on climate change impacts on streamflow also increase the County’s capacity to support planning for low flows.
 | * King County continues to actively participate in forums and meetings described in the 2017 status update.
* King County is also actively participating in efforts led by Ecology’s Watershed Restoration and Enhancement Committee to identify ways to offset potential impacts on instream flows associated with new permit-exempt domestic water use.
* Ongoing efforts to expand recycled water use and County-funded research on climate change impacts on streamflow also increase the County’s capacity to support planning for low flows.
* Climate change impacts on low streamflows is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 2.2.6, 2.2.7, 4.2.2, 4.2.3*
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| **Work regionally to prepare for climate impacts.** King County will actively partner with the Puget Sound Regional Council, neighboring counties and cities in Central Puget Sound, non-profit organizations, and businesses to scope and establish a Central Puget Sound Climate Preparedness Partnership. | * King County is partnering with local and tribal governments and regional agencies in the Puget Sound region to ensure that the region’s communities, economy, and environment are resilient to climate change impacts via establishment of the Puget Sound Climate Preparedness Collaborative.
* Collaborative activities, including regional convenings, are being planned for 2018.
 | * In 2018 the Puget Sound Climate Preparedness Collaborative hosted three convenings on climate change and stormwater management, sea level rise and shoreline planning, and climate change and the potential for wildfire in western Washington. Additionally, the Collaborative hosted a three-part webinar series in 2020 focused on how wildfire and wildfire smoke management has changed since 2018 as a result of the California fires and repeated Puget Sound wildfire smoke events.
* Grant funding for the Collaborative ended in 2020, ending support for a part-time program manager. Due to the economic impacts of COVID, the Steering Committee has decided not to pursue a member dues approach to funding Collaborative activities and staffing. King County is working with other Steering Committee members to align Collaborative activities with available staff resources, and to pursue grants to support program activities going forward.
* Building strong regional partnerships via the Collaborative is an ongoing SCAP focus for 2020-25. *See 2020 SCAP Preparedness Section Priority Actions 4.1.1, 4.1.2*
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**Section 3 >> Climate Equity & Community Engagement**

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| **PRIORITY ACTIONS** |
| **PRIORITY ACTION**  | **2017 STATUS** |  **2020 STATUS** |
| **Build cross-sector alliances.** Building off the success of models of regional collaboration like King County-Cities Climate Collaboration (K4C) and the Safe Energy Leadership Alliance (SELA), the County will deepen engagement with businesses, Tribes, educational institutions, and philanthropic and community organizations to develop climate solutions with co-benefits for public health, mobility, employment, and the economy. This will involve strengthening engagement with a broad representation of King County residents, including limited English proficiency populations and others who most likely bear the negative impacts of a changing climate. The County should establish a dedicated position to support its climate-related engagement, serving as a central point of contact coordinating climate communications, outreach, and engagement among County agencies; collaborating on resources; and enhancing King County’s overall effectiveness in communicating climate solutions. | In addition to continued work with K4C and SELA, King County hired a new Climate Engagement & Community Partnerships Specialist in 2016 to lead community engagement, climate equity, and communications work for the Strategic Climate Action Plan (SCAP) and development of the 2020 update. As a result, new partnerships have been formed with immigrant, refugee, and frontline community organizations. The County also hired a new Climate Preparedness Specialist in 2017 who has taken a leadership role in launching the regional Puget Sound Climate Preparedness Collaborative. Collectively, their work is expanding, diversifying, and strengthening alliances with cross-sector partners. | External partnerships and alliances are foundational to the County’s climate work. Although not representative of all County’s climate partnerships, the following three collaborative efforts are particularly important fordeveloping and advancing SCAP priorities:King County-Cities Climate Collaboration (K4C).The K4C is a partnership between the County, sixteen cities, and the Port of Seattle to coordinate and enhance local government climate and sustainability efforts. Through focused, coordinated action, K4C is committed to maximizing the impact of individual and sharedefforts. In 2019, K4C partners updated shared actions to reduce GHG emissions and accelerate progress toward a clean and sustainable future. This update to the K4C’s Joint County-City Climate Commitments reflected changes in the regulatory landscape, technical developments, and updated emissions information. Puget Sound Climate Preparedness Collaborative.Established in October 2017, this partnership seeks to enhance coordination and improve climate change preparedness outcomes in the Puget Sound region. Climate Equity Community Task Force. The 2020 SCAP built a framework for community-driven climate policy-making and convened the Climate Equity Community Task Force (CECTF). The SRFC framework was developed through a community-driven process where leaders of frontline communities, as part of the CECTF, established the goals and identified the priority areas for climate action based on climate justice values and community needs. |
| **Strengthen internal agency collaboration on communications and engagement.** King County will establish regular dialogue across its departments’ communications and outreach staff to better coordinate climate-related communications and engagement and to leverage resources. | The Climate Engagement & Community Partnerships Specialist is leading work to support and coordinate climate-related communications and community engagement. In 2017, for example, King County’s climate change infographic was updated in collaboration with all agencies, and in 2018, it will be transcreated and translated into multiple languages in partnership with community-based organizations.  | The Climate Engagement & Community Partnerships Specialist continues to lead work to support and coordinate climate-related communications and community engagement. Some examples are included below.Partnered with community-based organizations on transcreation projects that developed and translated climate materials in Spanish, Samoan, Chinese, and Arabic (2018-2019)Coordination and collaboration with Public Health – Seattle & King County on climate change and health communications materials. Partnering with Public Health to distribute climate materials including the Stay Safe in the Heat and Climate Changes Health comics available in multiple languages.Established a public-facing climate action newsletter. Coordination with King County agencies and community organizations on topics included in the newsletters – reaching over 3,500 community members. |
| **Integrate climate change in the Equity and Social Justice Strategic Plan.**The County will integrate climate change considerations into the Equity and Social Justice Strategic Plan and planning process, which will help drive engagement on climate change issues and shape future decision-making on climate strategies. | Important climate change actions were integrated into King County’s Equity and Social Justice Strategic Plan 2016–2022. For example, the plan includes the following actions to advance environmental justice:* Increase diversity and inclusion in climate/environment governance processes, partnerships, program development, and contracted services.
* Drive equity considerations into long-term improvements to built and natural environments, systems, and policy.
* Ensure that programs supporting investments in energy efficiency and renewable energy are widely available, and prioritize climate change preparedness efforts that enhance resiliency for those most vulnerable to—and at risk of—climate change impacts
 | See 2017 Status Update. |
| **Establish partnerships between K4C and the private sector.** As part of K4C’s 2016 shared work program, the County will work with K4C city partners to develop and pursue partnerships with businesses and non-profits to advance alternative transportation and building energy priorities. | K4C has grown its partnerships to include businesses and nonprofits. Examples of contributors in 2016 and 2017 include: Puget Sound Energy, Smart Buildings Center, Climate Solutions, Bullitt Foundation, Island Press Publishing, Salmon Safe Program, Port of Seattle, Sound Transit, Scope 5 - Corporate Sustainability Reporting, and ICLEI-Local Governments for Sustainability.  | Through 2020, the K4C continued to develop strong partnerships with businesses and the not for profit sector. In 2019, the K4C partnered with the Energy Efficient Code Coalition and the New Buildings Institute to engage on national codes, and with the NW Energy Coalition and the Regional Code Collaboration for strong state energy code advocacy. The 2020 development of the Climate Action Toolkit and stakeholder outreach strengthened relationships with advocacy partners and helped build relationships with energy efficiency and solar energy businesses. The K4C was foundational in partnering with Puget Sound Energy to develop the Green Direct renewable electricity program. King County and PSE partnered with cities, government institutions and major commercial customers to develop the program. Private sector Green Direct partners include Costco, REI, and Target. The development of the renewable resources included private sector partners Southern Power, Weyerhaeuser and Avangrid Renewables. |