



## 2015/2016 KING COUNTY EXECUTIVE PROPOSED BIENNIAL BUDGET

**King County**

### **In Brief:**

- ♦ **Expanding role as a leader in climate policy by investing more resources in external partnerships and climate-related planning and analysis**
- ♦ **Accelerating investment in energy / resource reduction initiatives by loaning funds to kick-start projects that will result in resources savings and pay for themselves over time**
- ♦ **Innovating in ways to reduce climate footprint in programs such as the carbon neutral program in the Department of Natural Resources and Parks**

Climate change is a paramount challenge of this generation, and has far reaching and fundamental consequences for the economy, environment, and public health and safety. Globally, July 2014 marked the 353<sup>rd</sup> consecutive month of above average temperatures. King County is already experiencing the impacts of climate change: warming temperatures, acidifying marine waters, rising seas, increasing flooding risk, decreasing mountain snowpack, and less water in streams in the summer.

King County has provided leadership in responding to climate change for many years. A key focus has been on reducing greenhouse gas (GHG) emissions from its own operations and collaborating with cities, businesses, and non-governmental organizations to reduce community GHG emissions. The County has also emphasized preparation for the diverse impacts climate change is having on the region and on County services. The County is conducting programs and projects to reduce the risk of floods, help farm and forest owners address climate change impacts, and plan for the effects of climate change on stormwater, public health and emergency management.

The County has made considerable progress in recent years. For example, County agencies reduced normalized energy use in government-owned facilities by 11.3 percent between 2007 and June of 2014, and in doing so reduced operational resource costs by approximately \$2.6 million annually. Staff from county departments are working collaboratively on environmental sustainability strategies. Priorities for joint work include sharing strategies and training to achieve resource efficiency and climate pollution

goals, updating targets for reducing resource use and climate pollution, creating cohesive strategies for environmental sustainability that are linked with economic development, streamlining environmental reporting and better linking it to performance measurement, removing barriers to resource efficiency investments, and creating a culture of continuous improvement in energy efficiency and resource use.

As a community, per capita GHG emissions in King County are declining. However, with population growth, total community-scale emissions continue to increase, and the County is not on track to meet its long term target of reducing countywide emissions 80 percent by 2050. King County's operations represent only around 2 percent of total emissions in King County. To make the deep reductions in GHG emissions necessary to prevent the most severe impacts of climate change, it will take action by cities, residents, and businesses. For that reason, the County's approach to climate change is evolving to place additional emphasis on convening, supporting, and leading community-scale actions.

In the first half of 2014, the County worked collaboratively with the King County Growth Planning Council and the Sound Cities Association to develop a shared, countywide target and measurement framework for reducing GHG emissions. Additionally, through the King County-Cities Climate Collaboration (K4C), a dozen cities representing three quarters of the county's population joined together to map out specific actions needed to meet this shared target.

King County government is in a unique position to play leadership roles at the community scale. The County provides services in a number of areas such as transit, land use planning, regional trail development, waste reduction and recycling, sustainable forestry and agriculture, green building, and renewable energy that can yield reductions in communitywide GHG emissions as well as other environmental, economic, and health benefits. And the County is well positioned to collaborate with others on solutions through venues like the K4C and the Sustainable Cities Roundtable. The County will continue to pursue partnerships with business, other governments, and agencies to leverage county investments in initiatives such as Metro Transit's Rapid Ride implementation, regional trail development, King County-Cities Climate Collaboration, installation of electric car charging stations, flood hazard reduction projects, and habitat restoration projects.

In addition to this ongoing work, there are several areas of new investment in the 2015/2016 Proposed Budget:

## **CLIMATE CHANGE AND AIR QUALITY INVESTMENTS**

The County will be investing more in climate work in 2015/2016, with increased emphasis on externally facing work and partnerships. In addition to funding an increase in mandatory Puget Sound Clean Air Agency (PSCAA) regulatory dues, there will be additional focus from both existing resources as well as external consulting support to address the following needs: (1) update the Strategic Climate Action Plan (SCAP) to respond to County Council direction, to quantify GHG benefits of county climate strategies,

prepare for local impacts, incorporate community review and to ensure accountability for implementation; (2) update the countywide GHG inventory; (3) implement joint actions to reduce GHG emissions with the King County-Cities Climate Collaboration; (4) develop more partnerships with the business community, and (5) support existing climate related memberships. The total budget proposal for 2015/2016 is \$0.8 million and it is allocated to agencies based on GHG emissions, with 51 percent to the Department of Natural Resources and Parks (DNRP), 41 percent to the Department of Transportation (DOT), 4 percent to the Facilities Management Division (FMD), and 4 percent to Fleet Administration.

## **FUND TO REDUCE ENERGY DEMAND**

The Fund to Reduce Energy Demand Program was established to provide King County agencies with a new tool to help meet long-term energy reduction and climate goals. The program provides loans to departments for projects that reduce energy or other resource use and cost. King County will borrow money to complete the projects, with the annual utility savings more than offsetting the cost of borrowing. Project loan periods are for 10 years. The projects moving forward for the proposed 2015/2016 Proposed Budget include eight energy and water efficiency projects across five County agencies for a total of \$2.2 million in loans for project investments of \$2.5 million. It is anticipated that approximately 20 percent of the total project costs will be covered by utility rebate support. Through this effort, more than 800 street lights owned by the Roads Division will be replaced with high efficiency light emitting diode models. Other projects include a water efficiency projects at the King County Correctional Facility and Maleng Regional Justice Center, an equipment upgrade at the West Point Treatment Plant, and numerous lighting upgrades at solid waste transfer stations and other facilities. Combined, the projects will result in almost 1,000 metric tons of carbon dioxide reduced each year and annual savings of over \$250,000. As part of the loan program work, the County has refined a life cycle cost analysis tool that helps county agencies determine when it makes good financial sense to make investments that will reduce resource use.

## **DNRP CARBON NEUTRAL PILOT**

In 2014, DNRP began a carbon neutral pilot. This effort is focused on the accounting of the Department's GHG emissions and carbon sinks (e.g. forest assets and renewable energy production), as well as providing a financial framework to accelerate investments in each DNRP division to reduce GHG emissions. Beginning in 2014, each division is setting aside funds based on a proportion of its energy consumption, to be invested in energy efficiency and other GHG reduction projects. In 2014, carbon reduction investments will total over \$450,000, and include various energy efficiency projects and a tree planting effort in the Water and Land Resources Division. This program will continue in the 2015/2016 budget. The results of this pilot effort will be closely tracked, for possible replication by other county agencies.

*“This testing will allow us to understand where these electric buses can best be used and what their performance will be like within our real-world operating environment,”*

*These answers, combined with ongoing federal support and growing interest, will be key in moving this technology into the mainstream.”*

Kevin Desmond  
Metro General Manager

## OTHER INVESTMENTS

All agencies that manage fleets and/or facilities are investing in ways to reduce their energy usage and climate impact:

- Fleet Administration is working with customers on ways to finance cleaner vehicles and fuels.
- Transit is embarking on a project to convert 78 Access vehicles from gasoline to Liquid Propane Gas (LPG), an effort that will both reduce emissions and save the division money. They are also planning on implementing a series of energy conservation and energy reduction projects including lighting changes, control system installation and refinement, variable frequency drives for motors, building commissioning, sub meters, and energy audits.
- The replacement of the trolley fleet will be completed next biennium. Newer more efficient trolleys will help conserve energy and preserve emission reductions and energy savings that would have been lost if Transit replaced the trolleys with conventional buses.
- Transit is also purchasing two battery powered, zero emission buses in a pilot program funded by the Federal Transit Administration. Transit will continue to replace older buses with hybrid-electric models, including 35- and 40-foot buses that allow the engine to completely cut off when there is no need for power. The new feature will reduce fuel costs by an additional 5 to 10 percent each year.
- The Marine Division is investing in cleaner fuels and resource savings with their new vessels coming online in 2015. The vessels will have Tier III marine diesel engines and utilize 10 percent bio-diesel blend to further reduce emissions.
- The Wastewater Treatment Division is undertaking a comprehensive approach to auditing the major systems and equipment at some of its largest treatment facilities, and has standardized the process of doing an energy analysis of all capital projects with over \$250,000 of energized equipment.
- The Department of Natural Resources and Parks is leveraging large capital projects at the Aquatics Center and Environmental Lab to complete “Investment Grade” resource audits that are highlighting unplanned resource efficiency opportunities in the facilities that can be effectively captured during the corresponding capital projects.