



2015/2016 KING COUNTY EXECUTIVE PROPOSED BIENNIAL BUDGET

King County

In Brief:

- ♦ **There is a \$100 – 300 million annual funding gap to maintain our unincorporated county roads**
- ♦ **Road asset condition will continue to decline and risk of road failures will increase**
- ♦ **The County is transitioning from a model of proactive asset management to one in which it reactively responds to failure**

ROADS SERVICES DIVISION OVERVIEW

The King County Road Services Division (RSD) maintains, preserves, and operates roads, bridges and related infrastructure in unincorporated King County. The county's many bridges are an integral part of the road system, as are other components such as sidewalks and pathways, bike lanes, guardrails, drainage and water quality facilities, traffic control equipment, and traffic cameras.

The County road network enables travel between cities and other counties. County roads are necessary links for the movement of people, utilities and goods throughout the most urban and dense county in the state. These roads—built generations ago—are failing, and there is insufficient funding to maintain and replace them. Connectedness hinges not just on high-profile arterials, but on many miles of ordinary and unremarkable roads, culverts and bridges that travelers mostly take for granted.

Roads in the county's rural area are some of the oldest in the system, and are the most vulnerable to falling trees and debris, floods, and snow storms, as roads run alongside rivers and streams, through heavily wooded areas and at higher elevations.

CURRENT SITUATION—"A ROUGH ROAD AHEAD"

Events of the last decade have had profound impacts on the county road system, and the coming decade will solidify the recalibration of the division's business model in response to those impacts. Over the past twenty years annexations occurred consistent with the Growth Management Act and county policy. Several large geographic areas – with their associated tax base – left the county road system. The amount of funding lost versus the number of road miles transferred to other jurisdictions in annexations areas was often not proportional.

Starting in 2001, voter initiatives eliminated the local vehicle license fee and limited the amount of road levy funds that can be collected. These changes resulted in a significant decline in revenue, the return of grant funds due to lack of matching funds, and a lack of funding for capacity projects in the capital program. The financial impacts resulting from these initiatives continued to grow and compound in subsequent years.

In 2008 the housing and banking crisis sparked the Great Recession. The total unincorporated area assessed property value has fallen by more than 40 percent since 2009. While the tax base has shown some signs of recovering, it will be years before the tax base returns to pre-recession values in real terms. Aggravating these impacts, gas tax revenues for counties have (and are expected to continue to) trend downward as annual vehicle miles traveled decline and vehicles become ever more fuel-efficient. The end result is a tax base that does not support the cost of maintaining the existing and future road system network needs.

As depicted in figure 1, the 2014 Strategic Plan for Road Services (SPRS) update estimates that it would cost \$350 million annually—for a period of over ten years—to fully address the current backlog of road system needs, embark on an asset management program that produces the lowest life cycle costs and brings the system to a state of good repair, address the division's future maintenance facility needs, and systematically accomplish the road capacity, mobility and non-motorized needs identified in the Transportation Needs Report. Based upon information and forecasts provided by the Office of Economic and Financial Analysis (OEFA) and Washington State Department of Transportation (WSDOT), the division estimates that the average revenue for the next ten years is about \$100 million annually – about half of the \$200 million needed just to moderate the decline of the system and minimize risk. Under these financial constraints, the 2015/2016 budget focuses limited resources on delivering the most critical services. However, the reduced ability to care for infrastructure assets will lead to further deterioration of county roadways. Eventually the lack of preservation and maintenance will force speed and weight limitations, bridge and road closures, detours, and longer travel times.

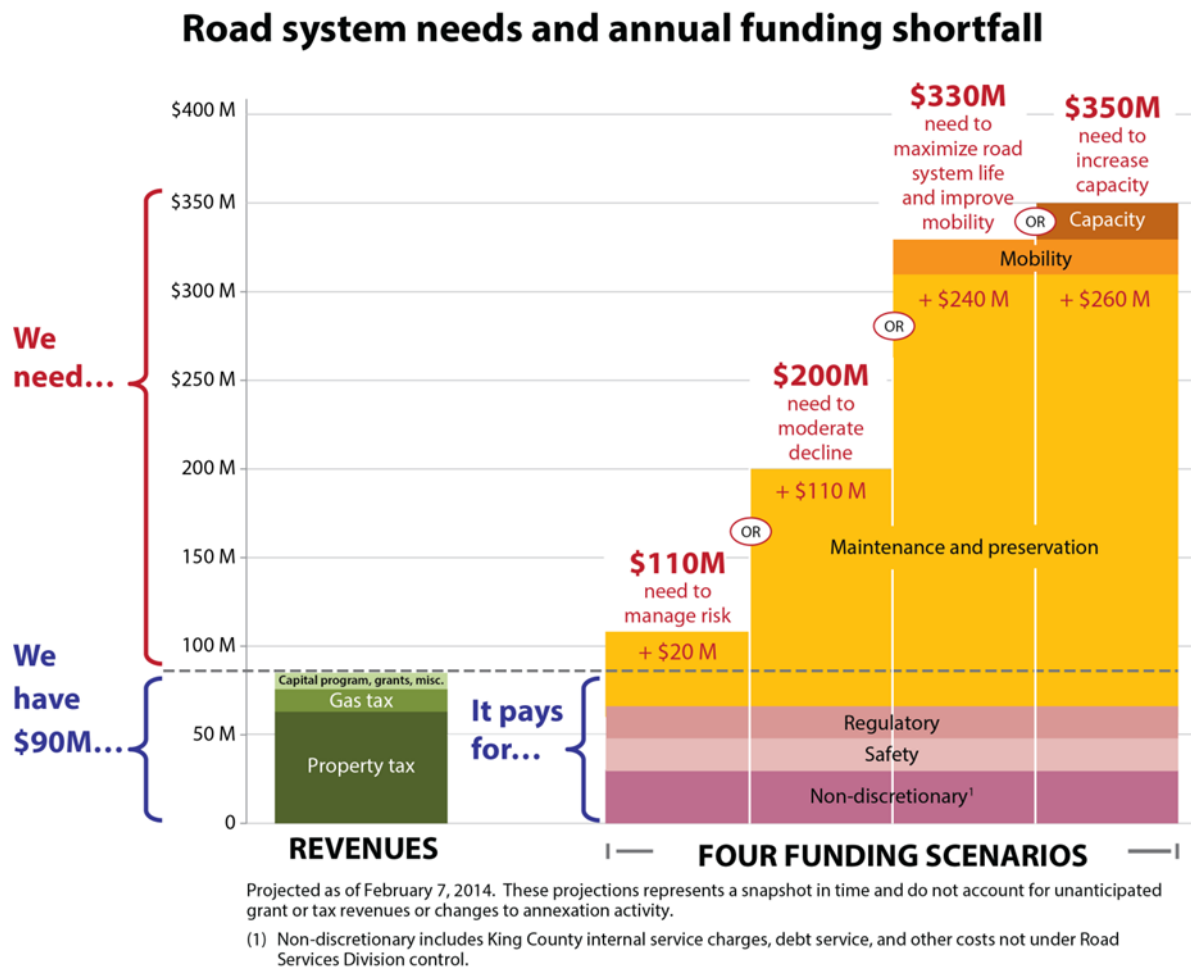


Figure 1

PLANNING FOR THE FUTURE

In 2010, the County Council adopted the SPRS, which responds to the dilemma of significantly constrained resources by setting clear priorities to guide the division as it manages the road system. The plan gives top priority to basic goals: complying with regulatory requirements, meeting core safety needs, and preserving and maintaining the existing road network. These are followed by the goals of enhancing mobility and increasing roadway capacity to support urban growth. The division is currently unable to fund mobility and capacity work. The SPRS was updated in 2014 to reflect increasingly constrained resources and growing risk.

Over the past two years the division has been working to better understand its customers, the products it delivers to them, and business processes that create those products. These products and the attributes customers expect to receive from them are shown in figure 2. This new approach has provided a systematic way to analyze and articulate what RSD does, why it does it, and how it does it. It provides a framework for evaluating costs and impacts on value provided to customers. That understanding has allowed the division to undertake the continuous improvement processes needed to identify and eliminate activities that are adding little or no value.



Figure 2

Critical safety work is the top priority for the 2015/2016 biennium, with insufficient funds for preservation or replacement of infrastructure, available revenues will be focused on reacting to higher risks associated with the deteriorating road system. The six-year Capital Improvement Program is significantly diminished. At the current funding level, the division anticipates the need to focus resources on unplanned failures and system deterioration.

The Road Services Division is finishing the reorganization it began in 2012, changing operations and procedures, and identifying additional efficiencies in both the approach to the work performed and the equipment and materials used. Work groups previously focused on capital improvements are the most significantly reduced. The division is also limiting commitments to provide engineering, project management, and general maintenance work for cities and other agencies in order to reach a more stable and sustainable staffing level, and to focus the agency on county roads and bridges.

DECLINING ASSET CONDITION AND INCREASING RISKS

Despite the best efforts of the division to maintain the road system, the structural funding challenges will continue to negatively impact the condition of the county's roads and bridges. Referring back to figure 1, \$110 million is required annually to "Manage risk in a declining system." Since RSD will have only \$100 million on average the division will be in the position of reacting to, rather than managing, risks to the road system. As outlined in the division's strategic plan, without significant increases in funding, 35 bridges could be closed in the next 25 years and over 70 miles of roadway are at risk of speed or load restriction or closure. In addition to the ongoing deterioration, which will occur faster in the coming years, the system will also be subject to more and greater failure events.

Failure events may be weather related (for example landslides, washouts, or flooding), or a result of inability to perform sufficient proactive maintenance, repairs, or replacements (for example, sink holes or pipe collapse associated with aged and deteriorated drainage assets). In the first half of 2014, the system experienced over \$7 million of landslides and other failures, a three-fold increase from the previous year. As of September 2014, two bridges are closed, one will be permanently removed due to lack of resources for repair/ replacement, and three roadways remain closed due to lack of funding for repair. Some examples of recent failures are shown in figure 3.



While RSD expects that there will be an increase in road system deterioration and more frequent road failures, it is difficult to predict which specific assets will fail or when. This unpredictability poses a unique challenge for the division as it prepares to address the risks ahead. To address this business environment, the division is shifting to a more reactive service model to prepare for the unpredictable nature of the risks. Additional funds have been allocated to respond to unanticipated failure events. In addition to flexible resources that can be used to respond to emergencies, this model requires an organization shift and a critical focus on key skill sets.

The resulting 2015/2016 staffing and organizational structure are designed to best meet the needs of a higher risk operating environment. The division will consist of the Director's Office and just three sections: Strategic Business Operations, Engineering Services, and Traffic and Road Maintenance. Overall the division is organized to retain key functions and skills sets that best meet the SPRS goals of safety and regulatory compliance, and to ensure that the proper resources are available to respond to unplanned failures and emergencies.
