



**King County**

## Department of Transportation

### Road Services Division

# Response to King County Council Proviso Regarding New Organizational Structure and Staffing Plan for the Road Services Division

October 19, 2010

(Attachment A)

**King County Department of Transportation  
Road Services Division  
Proviso Response  
Ordinance 16717 Section 126 Proviso 1**

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## **Proviso Language**

The purpose of this report is to respond to proviso P1 in Ordinance 16717 Section 126. Ordinance 16717 is the 2010 King County Adopted Budget ordinance and Section 126 appropriates funds to the King County Department of Transportation's Road Services Division (RSD) for the biennial budget covering 2010 and 2011. Proviso P1 states:

*Of this appropriation, \$1,400,000 may not be expended or encumbered until the executive has submitted a report, for council acceptance by motion, outlining a new organizational structure and staffing plan for the road services division. The report is due to the council on or before May 1, 2010. The council intends that this report be prepared in coordination with Phase 2 of the Roads Operational Master Plan, but be submitted before the Phase 2 report is due to the council.*

*As part of its comprehensive review of the organizational structure, this report shall include, but not be limited to, analysis of the organizational structure's: (1) reliance on and commitment to performance-based decision making, and the actionable performance measures to be used; (2) consistency with best practices for layers of management, span of control, and ratios of professional to administrative/support staff, and streamlined operational processes; (3) centralization of finance, administrative and other functions; (4) combination of like disciplines into single units; (5) potential efficiencies resulting from the more timely implementation of, and reliance on new technology; and (6) comparison to peer agencies.*

*The report and motion required to be submitted by this proviso must be filed in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all council members and to the committee coordinator for the physical environment committee or its successor.*

## Executive Summary

This report discusses historical, current and forward looking organizational information in response to the proviso. It is informed by and aligned with the recently completed Strategic Plan for Road Services (SPRS) delivered to Council with this report and the Executive's mid-biennial supplemental budget proposal. Change drivers discussed in this report and Council action on the SPRS will influence the future direction of RSD and its resulting organizational configuration.

The report addresses the six areas of analysis prescribed in the proviso:

- (1) Reliance on and commitment to performance-based decision making, and the actionable performance measures to be used;
  - This report and the SPRS document describe a foundational change in the way the county will manage its road and bridge assets. This asset management approach will rely heavily on information technology and asset data to identify, prioritize, and select investment choices. See section on "Performance Based Decision Making" and Exhibit C.
- (2) Consistency with best practices for layers of management, span of control, and ratios of professional to administrative/support staff, and streamlined operational processes;
- (3) Centralization of finance, administrative and other functions;
- (4) Combination of like disciplines into single units;
  - There are numerous examples of past actions cited in the "Recent Staffing and Organizational Efficiencies," proposed actions in the "Staffing and Organizational Changes Proposed in the Executive's Mid-Biennial Update" section, and impacts of the future state in the "Future Staffing Level and Organizational Direction" section. Analysis of existing staffing levels of support for the programs or activities supported by RSD and potential future staffing/organizational impacts are depicted in Exhibits A and E.
- (5) Potential efficiencies resulting from the more timely implementation of, and reliance on new technology;
  - The report details actions taken by RSD to move to a data driven, asset management approach. This will be accomplished by implementing a comprehensive asset management approach relying on GIS inventory information articulating detailed and complete asset condition information by location, which will provide the data necessary to implement the new Roads Comprehensive Asset and Maintenance Management (RCAMM) system. When fully implemented, the asset management approach utilizing modern technology will increase efficiency in the identification, inventorying, monitoring maintenance and preservation of the county's road network assets. It will allow the county to make data driven decisions in the selection and prioritization of investments to strive for least life cycle cost and maximize asset life within available funding.

(6) comparison to peer agencies.

- See the "Comparison to Peer Agencies" section for an independent analysis of overhead costs of four peer county agencies conducted by the County Road Administration Board (CRAB).

Staffing and organizational structure decisions proposed in the Executive's Mid-Biennial Budget Update for 2011 are consistent with the principles articulated in the SPRS. Declining revenues stemming from loss of property tax and sales tax revenues, less grant funding, loss of tax base due to annexations mean significant budget reductions in 2011. At the same time, the quality and nature of services provided reflects a focus on the rural nature of the County's road system and a commitment to public safety and customer service. For example, this means RSD will focus its service and efforts on road and bridge maintenance, snow removal and pothole repair. SPRS priorities, and the makeup and condition of the underlying asset inventory all contributed to staffing and organization changes included in the mid-biennial supplemental proposal.

This change in focus and decline in revenues means there are no longer any urban capacity projects in the CIP pipeline. The staffing reductions proposed in the Executive's Mid-Biennial Budget Update reflect the fact that RSD will need to reduce staff that have been traditionally supporting urban capacity projects. An example is the traffic forecast modeling work that is used to guide the development of capacity projects. Since this is a planning function that happens either before or in the early stages of a project, these positions are the first to be reduced. The 2012/2013 biennial budget will contain further capacity related reductions as the last capacity project in the CIP is completed.

The 2012-2013 biennial business planning and budget development process will be guided by the policy framework provided by SPRS. The resulting staffing and organizational configuration will be aligned with the resulting service levels, priorities, and financial realities as determined by the SPRS process. As part of the process, RSD will focus on increasing organizational efficiencies as recommended in the budget proviso to maximize service delivery and program efficiency.

## **Background**

SPRS describes RSD's mission to "*Maintain, preserve, and improve the unincorporated King County road and bridge system for the safe and efficient movement of people, goods and services, and quickly respond to storms, floods and other emergencies.*" RSD accomplishes this mission by delivering to the public a large array of services or programs. RSD has identified 65 services/programs it provides to the residents of King County.<sup>1</sup>

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<sup>1</sup> See Exhibit A for a complete list of programs/services provided by RSD

These services/programs are managed by five organizations or sections within RSD:<sup>2</sup>

1. Administration Section
2. Engineering Services Section
3. Road Maintenance Section
4. Traffic Engineering Section
5. Capital Improvement Program and Planning Section.

### *RSD Management Practices*

RSD has completed an inventory of activities by section that allows management to measure the level of effort across programs. Exhibit A captures the current (2010) and proposed (2011) organizational structure and facilitates analysis of layers of management, span of control, and ratios of professional to administrative/support staff at the section level. This report articulates the process RSD used to arrive at the proposed organizational structure represented by the Executive's mid-biennium update.

Depending on council action as they move to adoption of the SPRS Report, future investment decisions and resulting organizational outcomes may result in a different organizational configuration for RSD.

The following overview briefly describes and provides context on the broad scope and wide range of programs and services provided to the public by RSD staff by these sections and their nearly 600 employees.<sup>3</sup>

### *Administration Section*

The Administration Section (AS) includes the Division Director and County Road Engineer. This section is responsible for division management, development and implementation of King County Road Design and Construction Standards, coordination of finance, human resources (serving the Road, Airport, Fleet and Marine Divisions), intergovernmental coordination and contract services, property management, customer service and communications, and budget and technology.

### *Engineering Services Section*

The Engineering Services Section (ESS) is responsible for the delivery of the RSD Capital Improvement Program (CIP), which includes design and construction of unincorporated area roadways, drainage systems, and bridges. These services are also provided to non-profit agencies and suburban cities, the Washington State Department of Transportation, and the City of Seattle (for bridge inspection) on a contract basis. The ESS provides project management;

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<sup>2</sup> See Exhibit B for RSD organizational chart

<sup>3</sup> See Exhibit A for a complete cross tabulation of services/programs, by section, in work units (positions)

civil engineering; road and drainage design and project management; bridge and structural engineering; construction management and inspection; environmental regulatory compliance and construction oversight; environmental mitigation monitoring, permitting, environmental studies, and design; geotechnical engineering, road construction material testing, and documentation; and land surveying and mapping in support of the RSD CIP. The ESS also manages the RSD's engineering maps and records and the road vacation, road improvement district, and road log/maintenance bond programs.

#### *Road Maintenance Section*

The Road Maintenance Section (RMS) is responsible for the ongoing maintenance, repair, and smaller-scale preservation construction projects on over 1,745 centerline miles of roadway and associated infrastructure assets. Field crews perform critical maintenance on river levees, drainage systems, pavement, bridges, sidewalks, and perform vegetation management, and other activities for county residents and county customers.

RMS provides 24-hour intake and dispatch and first line, on-the-ground response during emergencies to protect the public by providing safe roadways during snow storms, flooding, wind storms, earthquakes, and other natural disasters. In addition to the roads in unincorporated King County, RSD repairs river levees and storm water facilities during emergency and storm response situations, and assists contract cities.

The RMS is responsible for regulatory and environmental compliance for all field operations, the road storm water system, and 25 geographically dispersed maintenance shops and material storage sites. Section staff provides on-site engineering design, review, and oversight of maintenance projects regarding roads, drainage, and building repairs. They also provide quick emergency field evaluation of road failures and Federal Emergency Management Agency (FEMA) design coordination on emergency repairs and mitigation projects to protect the public.

The RMS provides services to ten contract cities, the RSD CIP, other King County departments, and other government agencies. The revenue-backed Utility Inspection and public Regional Storm Water Disposal programs are also managed by RMS.

#### *Traffic Engineering Section*

The Traffic Engineering Section (TES) provides traffic operations, traffic engineering, traffic data collection, project management of traffic Intelligent Transportation Systems and other CIP projects, traffic impact studies, signal systems operations, and maintenance of all traffic control devices including signals, signs, and pavement markings in unincorporated King County and for contract cities. The TES also fabricates street signs.

The TES responds to over 1,000 citizen concerns and requests on an annual basis. These issues include traffic, pedestrian, and other non-motorized user safety concerns in neighborhoods and on county arterials, as well as those raised during citizen and community group meetings. The TES also manages the King County School Safety Program that serves 16 school districts –



encompassing over 80 schools and 50,000 students – and administers a Neighborhood Traffic Safety Program to help provide safer neighborhoods countywide by providing traffic evaluation, education, and enforcement.

The Traffic Accident Record Management and High Accident Location/High Accident Roadway Segment programs are also managed by the section to focus remedial safety actions where they are needed most. The TES also provides all traffic count data for CIP projects for the RSD, as well as traffic review for new developments in unincorporated King County. The section also designs, constructs, and maintains the county's Intelligent Transportation System to facilitate efficient traffic flow and safety, which is operated through the RSD Traffic Control Center.

#### *Capital Improvement Program and Planning Section*

The Capital Improvement Program and Planning Section (CIPPS) is responsible for long-range transportation planning and capital improvement programming of the roads and bridges in unincorporated King County. The CIPPS incorporates prioritization, programming, and development of funding plans for RSD capital improvement projects with ongoing tracking, oversight, and reporting of project scopes budgets and schedules. This also includes administration and oversight of consultant and construction contracts and an aggressive RSD grant program.

The section also coordinates the RSD's performance measures and accountability efforts, mobilizes Adopt-A-Road Program volunteers to leverage public resources, and helps the public obtain timely information on RSD plans and capital improvement projects.

Transportation planning functions include travel demand forecasting, development of the county's legally mandated long-term transportation facilities plan, functional classification of roadways, concurrency and mitigation payment system management, non-motorized use (i.e., pedestrian, bicycle, and equestrian) planning, corridor studies and other transportation analysis, and road-related policy development for King County.

#### **Performance Based Decision Making**

On July 26, 2010, the Council adopted the King County Strategic Plan (KCSP) "Working Together for One King County," the cornerstone of a new results focused culture of performance at King County. The plan identifies the need for greater transparency and accountability and commits to building a "*comprehensive, accountable performance management system*" that will integrate performance management into budget and resource allocation decisions.

The Strategic Plan for Road Services (SPRS) marks a transitional moment in RSD migration toward increased sophistication in the use of data to drive investment and resource decisions as required in the KCSP.

RSD uses a wide range of data detailing asset condition, traffic characteristics, accident information, and other factors in combination with internal expertise to drive project selection, prioritization, and program delivery. The county has benefited from RSD's use of data to drive investment decisions.

In an era of eroding transportation revenues, RSD has maintained target pavement and bridge ratings and safety investments targeted for locations with high risk scores and has demonstrably improved vehicular and pedestrian safety. Its excellent construction contract management performance and thoughtful approach to the integration of accessibility improvements into the annual paving program leverage precious finances while increasing access for all county residents. Citizens have high standards and expectations for RSD response to repair requests that RSD has consistently matched over the last ten years. RSD use of information technology (such as websites, intelligent transportation systems, and traffic cameras) has enhanced communication, improved access to services and their ease of use, and ensured widespread sharing of information (i.e. road closures, emergency notifications).<sup>4</sup>

However, while RSD has done an admirable job focusing on the road surface and bridges, the SPRS process has identified significant risk to the county associated with other elements of the roadway prism.<sup>5</sup> Failing road subsurface sections, deteriorating drainage systems, and a growing backlog of needs paint a grim picture of a large and growing unfunded liability. SPRS recommends more precision in the identification of the county's road and bridge asset inventory and condition of each element in that inventory. This will be accomplished by implementing a comprehensive asset management approach relying on GIS inventory information articulating detailed and complete asset condition information by location which will provide the data necessary to implement the new Roads Comprehensive Asset and Maintenance Management (RCAMM) system. When fully implemented, the asset management approach utilizing modern technology will increase efficiency in the identification, inventorying, monitoring maintenance and preservation of the county's road network assets. It will allow the county to make data driven decisions in the selection and prioritization of investments to strive for least life cycle cost and maximize asset life within available funding.

SPRS includes a draft list of performance indicators and performance measures that will be used to measure progress and define investment strategies in the future. They will complement the existing use of measures by RSD.

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<sup>4</sup> See Exhibit C for performance data

<sup>5</sup> See Exhibit D for a graphic of the roadway prism

## **Factors that Influence Road's Staffing and Organizational Structure**

Financial plan and workload demand factors can change dramatically from year to year, requiring staffing changes. Organizational changes occur each year as the agency adapts to these factors by adjusting its staffing levels and organizational structure. Examples of these factors include changes in regulations, law or code, revenue levels, grant opportunities and unexpected storm or earthquake events. As RSD continues to transition to the post-annexation service area and staffing levels adjust, or as the management structure is changed, opportunities to improve efficiency through different organizational configurations and reporting relationships are and will continue to be implemented.

The first priority is to identify the appropriate staffing levels to effectively accomplish the necessary work of the agency, which is a dynamic, ongoing process.

Through the annual budgeting process, RSD addresses the appropriate level of staffing necessary to accomplish its work within the funding constraints of the financial plan. Staff levels can either increase or decrease in any given year depending on a variety of variables such as:

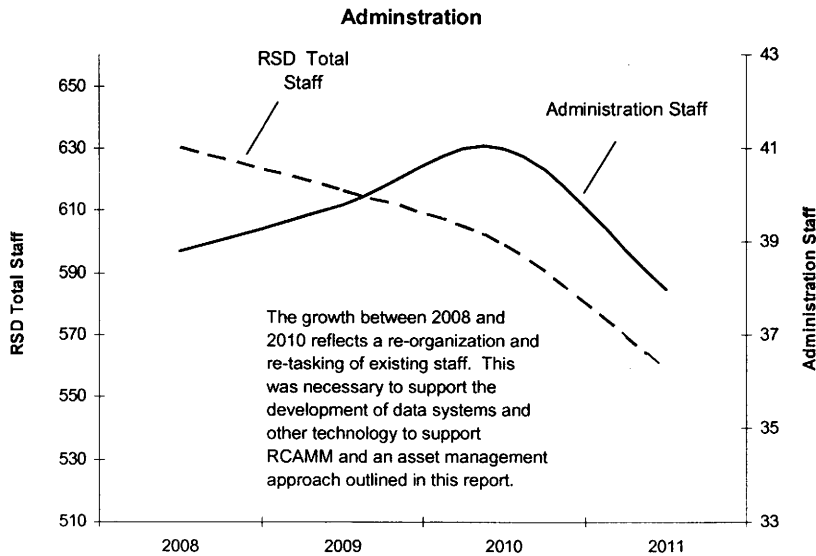
- Shrinking/Diminishing service areas and workloads due to annexations or incorporations, as well as new roads added to the system as a result of new development
- Fewer or no workload demands from contract cities, other jurisdictions, and other King County agencies such as the Water and Land Resources Division
- Declining revenue projections (i.e. gas tax sales or assessed valuation)
- Less grant funding availability (i.e. storm grants, new federal stimulus funding, or South Park Bridge partnerships/federal Transportation Investment Generating Economic Recovery grants)
- Changes in mandatory requirements (i.e. Endangered Species Act, National Pollutant Discharge Elimination System, rate increases)
- Focus on providing service to a rural County instead of urban areas. Changing policy directions (i.e. Sheriff Transfer amounts, Levy Diversion, Transportation Benefit District implementation).

## **Recent Staffing and Organizational Efficiencies**

In recent years, streamlining of organizational structures and changes in reporting relationships and business practices have occurred as part of the RSD's ongoing efficiencies, and need to be responsive to external pressures, and adjust to financial realities. The following is a sampling of organizational actions that allowed RSD to manage staffing levels and skills to workload and budget conditions.

*Administration Section*

During the period 2008-2011, the Administration section has decreased staffing by 0.8 positions or 2 percent. During the same period, total RSD staffing was reduced by 71 positions or 11 percent. The graph below depicts the changes year-over-year and compares changes in Administrative staffing to total RSD staffing changes for the period 2008-2011. The 2011 changes are described in detail beginning on page 16.



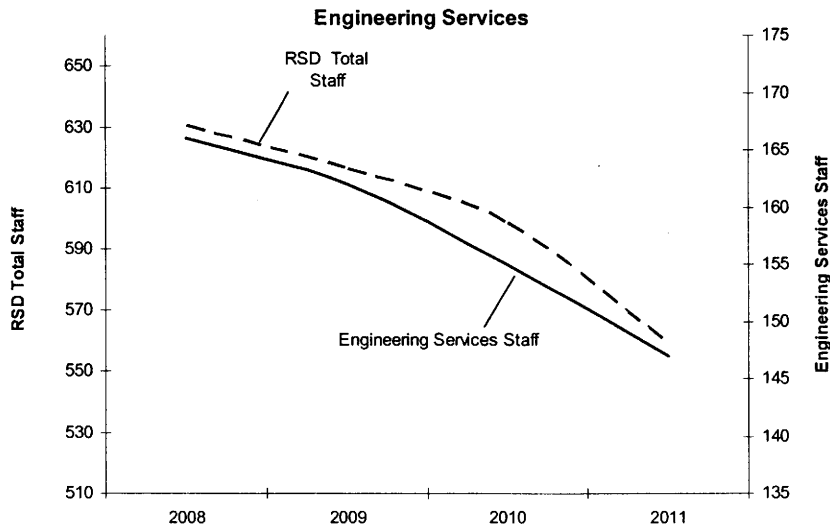
In order to support RSD’s priority commitment to undertake a comprehensive asset management approach, a prerequisite is to populate and maintain an accurate inventory of all the road system assets and to maintain descriptive attribute and condition data on these assets. This asset data will be managed in the Roads Enterprise GIS (REGIS) database, which will store the information necessary to implement the RCAMM system.

To ensure road asset inventory and condition data is accurate, up-to-date, and collected efficiently and cost effectively, the Budget and Technology Management Office (BTMO) is also reviewing and recommending actions to ensure that ongoing asset data and data collection practices meet RSD requirements and are sustainable.

In 2010, the RSD reorganized the BTMO to provide the necessary level of dedicated staff with the appropriate skill sets to support these priority information technology (IT) efforts required to implement a system to provide data for an asset management approach. FTEs from each of the other four sections were re-tasked and together with existing BTMO staff, contracted services from the King County GIS Center and the King County Office of Information Resource Management, matrixed staff from King County Department of Transportation IT, and two term-limited temporary employees, RSD will be able to effectively develop, integrate, and maintain the REGIS database and enterprise asset management system.

*Engineering Services Section*

During the period 2008-2011, the ESS has reduced 19 positions or 11 percent of staff. During the same period, total RSD staffing was reduced by 71 positions or 11 percent. The graph below depicts the changes year-over-year and compares changes in ESS staffing to total RSD staffing changes for the period 2008-2011. The 2011 changes are described in detail beginning on page 16.

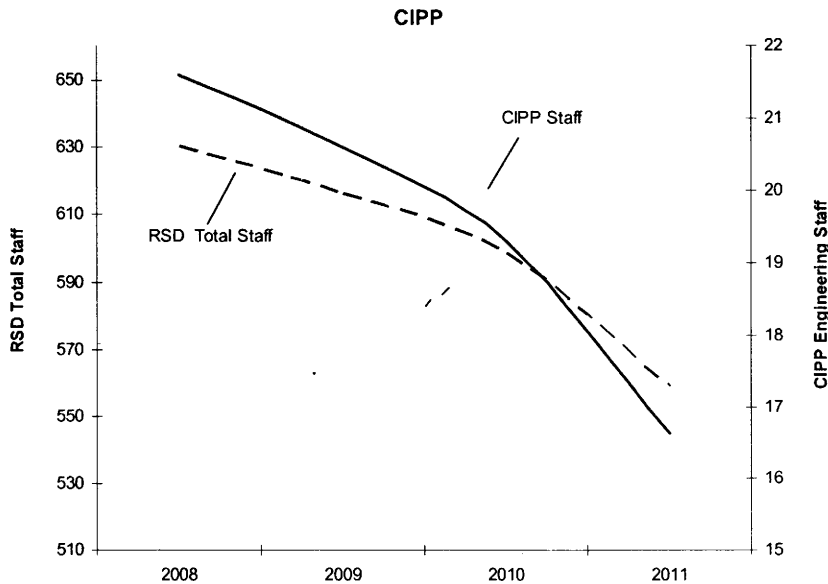


In 2004, the design and project management team structure in the ESS work units was reorganized to a streamlined reporting structure where all the teams report to one supervising engineer rather than multiple managing engineers. This more efficient design and project management model ensures uniform practices for the design and delivery of RSD capital projects. This reorganization reduced management layers and increased span of control combining two units into one and eliminating one management FTE.

In addition to the consolidation of like disciplines into single section units, a proactive approach has been used to align staffing levels to future workload projections. Prudent vacancy management has resulted in the elimination of approximately 25 positions from the ESS since 2004.

### Capital Improvement Program and Planning Section

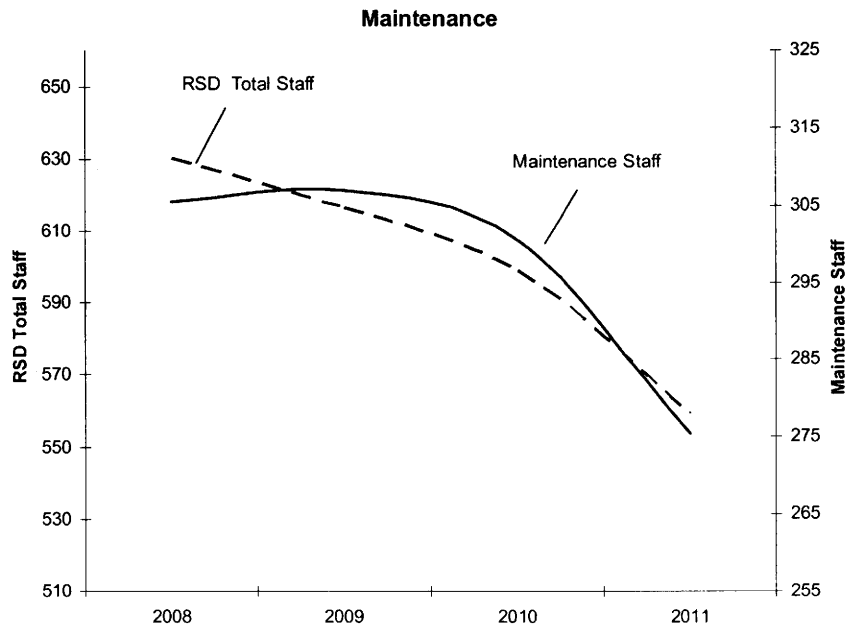
During the period 2008-2011, the CIPP section has reduced 5 positions or 23 percent of staff. During the same period, total RSD staffing was reduced by 71 positions or 11 percent. The graph below depicts the changes year-over-year and compares changes in CIP staffing to total RSD staffing changes for the period 2008-2011. The significant reductions incurred over this time reflect the shift in workload and staff support required as RSD adjusted to a reduced CIP and a de-emphasis on capacity and improvement projects and related planning activities. It should be noted that at this time, there are no capacity projects in the CIP pipeline that would require the traditional planning or modeling work typically seen in capacity and improvement projects. The 2011 changes are described in detail beginning on page 16.



The CIPP section was created in 2000 by merging the RSD CIP Management Unit with planning staff that had been part of the former Transportation Planning Division. At that time, there were 27 positions in the newly-formed section, including three loaned out to the King County Executive's Office of Regional Policy and Planning (now defunct). Over the past decade, as the nature of the work changed and the RSD CIP moved away from funding large scale capacity projects, the section has been through a series of reorganizations/realignments resulting in the 2011 proposed staffing level of 14.6 positions in the section, a 46 percent reduction from the original staffing level when the section was created in 2000.

### Road Maintenance Section

During the period 2008-2011, the RMS has reduced 30 positions or 10 percent of staff. During the same period, total RSD staffing was reduced by 71 positions or 11 percent. The graph below depicts the changes year-over-year and compares changes in RMS staffing to total RSD staffing changes for the period 2008-2011. The 2011 changes are described in detail beginning on page 16.



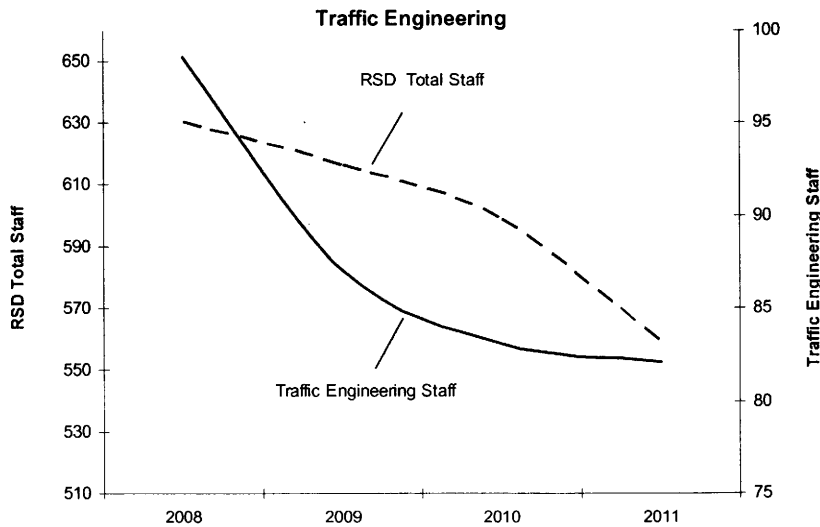
Recent reorganization efforts in the RMS include the streamlining of the customer service group, which includes staff who answer the 24/7 Road Helpline. In response to increased demand, RMS placed more emphasis on managing customer service. The Customer Service and Information Unit was streamlined, eliminating one layer of supervision and creating more effective reporting relationships. The commissioned officer responsible for road use investigations and coordinating the public safety response now reports to the Unit Supervisor. In addition, one of the customer service positions was given a lead role, enabling the unit supervisor to focus on system needs, such as overseeing the service request intake function, disseminating and evaluating call data, and providing language interpreters for callers.

The section also implemented a reorganization of the utility inspection group reporting relationship to improve accountability and coordination.

Other efficiencies resulting in the reduction of management layers and increased span of control included combining the Bridges Special Operations Unit and the Facilities Unit into one unit that performs both functions. The North Drainage Unit and South Drainage Unit were also combined into one. In both cases the number of supervisors and crew chiefs were reduced.

### Traffic Engineering Section

During the period 2008-2011, the TES has reduced 16.5 positions or 17 percent of staff. During the same period, total RSD staffing was reduced by 71 positions or 11 percent. The graph below depicts the changes year-over-year and compares changes in TES staffing to total RSD staffing changes for the period 2008-2011. The 2011 changes are described in detail beginning on page 16.



As described in the ESS, aggressive vacancy management is a valuable tool that provides great flexibility in managing staffing levels and accommodating changes to RSD's needs for different engineering and other specialized qualifications as the program changes over time.

An Engineer II position became vacant in 2006. After reviewing the workload and anticipating future CIP and annexation requirements, RSD decided the most essential workload was in the area of program analysis in Traffic Maintenance. The position was reclassified to a Project/Program Manager III and relocated from its former downtown Seattle location to the Renton maintenance complex. This position has supported a data driven approach to budgeting and inventory management facilitating better resource allocation for both county road needs and customer city needs.

In 2007, the lead position in the sign fabrication shop became vacant. The position was repurposed to the BTMO and reclassified as a GIS Specialist to support the high priority REGIS and RCAMM technology efforts in support of the RSD's transition to an asset management approach as described in the Administration Section discussion.



## **Staffing and Organizational Changes Proposed in the Executive's Mid-Biennial Update**

### *Current Situation*

The Executive's mid-biennium update transmitted to Council with the SPRS report and this proviso report, reflects additional organizational changes in response to new revenue realities demonstrating RSD continuous efforts to align staffing levels and organizational configurations with budget conditions and service needs. A total of 39 positions will be eliminated in the Executive Proposed mid-biennium update and the 2010 omnibus corrections ordinance, with proportional cuts among front line, administration, and supervisory positions. An additional nine positions funded by one-time, revenue backed services will be eliminated in 2012.

In the 2010-2011 biennium, RSD continues to address difficult fiscal challenges in balancing its financial plan; funding has declined and costs have continued to increase. The RSD has identified \$10.4 million in ongoing continuous operating budget reductions and \$4.8 million in annual CIP contribution reductions from the 2010-2011 adopted budgets. These reductions were required to balance the financial plan that was adversely impacted by two voter-approved annexations, reduced property tax assessed valuation/new construction projections, continued decline in gas tax revenue, central rate increases, and an unanticipated deficit fund balance at 2009 year-end resulting from storm response and repair costs. A total of \$11.6 million in reductions are offset by \$1.2 million in one-time and revenue-backed budget increases proposed for 2011. Forty-two positions have been identified for elimination in 2011 in addition to the 6.5 positions eliminated in 2010 omnibus. This is offset by nine positions added to support one-time revenue-backed services that will eventually be eliminated in 2012. Three ongoing maintenance positions are also added beginning in 2011 to address first tier emergency snow and flood response and to address backlogged deferred maintenance.

Following is a description of the change drivers that influence staffing level decision-making each year and the actions RSD has taken to identify appropriate staffing levels in the current biennium.

### *Staff Changes Due to Road Service Area Inventory Changes*

The RSD Maintenance and Traffic Engineering sections are most directly impacted by annexations/incorporations or developer activity in the unincorporated area of the county. In 2011, 13 positions and \$2.2 million will be eliminated as a result of two recently approved annexations in Kent and Kirkland. These annexation amounts will be annualized by further reducing an additional \$1.4 million and 9.3 additional positions in 2012. The net financial impact of these two annexations, as well as other financial factors, required additional 2011 budget and staff reductions to balance the financial plan beyond these direct service reductions.

Anticipating a decrease in signal maintenance workload due to the Juanita/Finn Hill/Kirkland annexation, the TES is reorganizing the signal maintenance program in the 2011 budget to provide improved efficiency and streamlined management. The signal program has been organized into two groups--a Signal Maintenance group and an Electronic Maintenance group,

each headed by a Supervisor II. Eliminating one Supervisor II position, as a part of the 13 eliminated positions, increases efficiency by improving communications within the group and providing opportunities for cross-training of signal technicians.

#### *Staff Changes Due to CIP Project Workloads*

Capital improvement projects fund the workload for most of the staff in the ESS, some TES safety program engineers and field technicians, and some of the special operations field crews in the RMS. CIP project funding varies from year to year depending on project prioritization decisions, in the context of available funding. CIP project funding, in turn, is dependent on prior year's carryover, state and federal grant funding availability, and Road Fund contribution availability. In 2011, 13 RMS field crew positions, one surveyor, two FTE engineers, and four term-limited temporary engineer positions in ESS, funded by the 2010 CIP are eliminated as a result of CIP project budget reductions. The RMS field crew reductions were programmed for sidewalk and pathway construction project work in the urban service area in 2010. CIP funding in 2011 focused scarce resources primarily on asset preservation in the rural service area reflecting the SPRS recommendation.

RSD will restructure the CIPPS into the Office of Strategic Asset Management, Monitoring and Reporting within the Administrative Section in 2011. This new office will be repurposed to provide:

- Division-wide strategic asset management planning and coordination
- CIP planning, programming, and administration
- Division-wide strategic and business planning and performance measurement
- King County Comprehensive Plan transportation policy development and planning, travel demand forecasting, transportation concurrency management, mitigation payment system administration, Transportation Needs Reporting, and cultural resources regulatory compliance.
- Customer satisfaction and response, Web communications, Adopt-A-Road Program coordination and response to public disclosure requests.

This office will combine existing staff within the Administration Section and the CIP and Planning Section resulting in a net reduction of 5.66 FTEs from the two sections. Reductions include a supervisory position, two program management administrative positions and 2.66 planning positions that perform traffic data modeling.

With the potential Levy Diversion proposed as a condition of the proposed sales tax increase, the RSD CIP could be reduced by an additional \$9.5 million each year from 2011 to 2013. This reduction would result in project deferrals and lost grant opportunities in the absence of matching funds. An additional 40 positions responsible for project engineering, project management, and construction would be eliminated in 2011 if the referendum is passed by the voters. This would be in addition to the 39 net positions already identified for elimination division-wide in 2011.

### *Staff Changes Due to Funding Availability from Sources Outside the Road Fund*

Funding sources including grants and revenues from other agencies, suburban cities, and non-profit agencies that contract for services with RSD on a reimbursable basis must also be considered when developing budget and staffing plans and projections. These revenues are updated each year as a result of changes in grant availability and demand for services. New grants have been programmed in the 2011 operating budget supporting services to improve road drainage system water quality, construct pedestrian safety sidewalks on behalf of the City of Renton, and design and construct high risk traffic safety improvements in rural areas. FEMA storm grants have also been awarded to complete repairs on deferred storm damage from the January 2009 storm event. These grants will enable county road workers to complete repairs to David Powell Road by appropriating one-time funding for six positions in the 2011 budget.

As part of a \$3.3 million grant secured by RSD that will fund high risk traffic safety improvements in rural areas, three positions are funded through 2013 to manage this program of safety projects. Three positions that would have been eliminated in the Traffic Engineering Section as a result of reductions in work demands from the city contract CIPP will be re-tasked to accomplish this important safety program in 2011.

Three positions that would have been eliminated in the RMS as a result of reductions in work demands from the city contract program in 2011 are offset by demand for increased services from the King County Water and Land Resources Division.

Businesses that perform work in the road right-of-way, including communications companies and energy utilities, rely on RMS utility inspection services to inspect their work and ensure permit compliance. These businesses pay an hourly fee that reimburses the costs of providing these services. In 2011, one utility inspection engineer will be eliminated as a result of decreased overall demand for inspection services resulting from the depressed economic climate and recent annexation activity.

### *Staff Changes Due To Revenue Adjustments and Changing Priorities*

Along with staffing decisions based on outside funding availability and changing workloads due to service area inventory changes and CIP project staffing needs, budget and staffing choices also reflect reductions made in response to overall funding availability and as a reflection of shifting priorities, efficiency gains, or redistributing workload.

Several changes are proposed to the RMS in 2011. The first is the elimination of the one vacant unit supervisor position in the Special Operations group. Elimination of this position will result in a staffing reorganization and consolidation of work currently underway in the Special Operations group. The proposed reorganization of Special Operations consists of reducing five planning units to four and eliminating the current Vegetation/Mowing Unit. The functions of this unit will be dispersed to the remaining planning units, with mowing functions going to the Asphalt/Paving Unit and noxious weed control, hydro-seeding, and hazard tree removal going to the Drainage Unit. This reorganization also includes the reduction of one drainage crew. An

..... additional proposed change for 2011 is the reduction of one Senior Engineer position from the Utility Inspection Unit, as described above in *Staff Changes Due to Funding Availability*. This results in the retention of a single supervisor and the elimination of an intermediate level supervisor for this work unit, reducing layers of management and aligning staff and organization with projected workload.

In 2011, \$3.1 million in additional programmatic reductions and six positions have been identified beyond those previously mentioned in order to balance the financial plan and retain funding in both the operating and CIP budgets for the highest priority safety and preservation needs. Reductions include elimination of the Department of Adult and Juvenile Detention non-felon roadside vegetation maintenance crew and the roadside litter pickup program (one position), elimination of a water quality engineer in the RMS, elimination of the summer engineering intern program and one analyst responsible for property management in the ESS, and a 50 percent reduction of the annual capital outlay budget division-wide.

### **Comparison to Peer Agencies**

In 2010, 87 percent of RSD positions are employed to provide programs or services associated with asset preservation, safety and regulatory compliance, or reimbursable services.<sup>6</sup> Of this total, 18 percent of staff is focused on providing these same services to customers outside of RSD on a reimbursable basis. The remaining 13 percent of RSD staff in 2010 are employed to provide administrative overhead functions including division and section management, public communications, administrative support, budgeting and accounting, payroll, human resources, and policy, program, and strategic analysis.

The County Road Administration Board (CRAB) was created by the Legislature in 1965 to provide statutory oversight of Washington's 39 county road departments. Their mission is to preserve and enhance the transportation infrastructure of Washington counties by providing standards of good practice, fair administration of funding programs, visionary leadership, and integrated, progressive, and professional technical services. CRAB provides comparative information on the 39 county road departments, including overhead rates.

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<sup>6</sup>See Exhibit A for detailed breakdown of staff

CRAB's most recent comparison of 2008 overhead expenditure rates of four other comparable county road agencies in Washington, shows that RSD's overhead expenditure rate of 14 percent was the lowest rate and was 22 percent below the average of the five counties. RSD's overhead expenditures averaged 13 percent between 2004 and 2009.

*CRAB Comparison of 2008 Overhead Expenditure Rates for  
Five Comparable County Road Agencies*

<i>County Road Agency</i>	<i>Administrative Overhead Expenditures*</i>	<i>Percent of Rural Arterials</i>
Clark County	22%	58%
Pierce County	20%	37%
Kitsap County	19%	53%
Snohomish County	16%	60%
<b>King County</b>	<b>14%</b>	<b>50%</b>
<i>Average</i>	18%	52%

\* Expenditure and overhead data are from a report provided by the CRAB from data provided to them by each individual county.

*Historical Overhead Expenditure Rates*

<i>Year</i>	<i>Total RSD Expenditures*</i>	<i>Total Administrative Overhead</i>	<i>Administrative Overhead Percentage</i>
2004	\$127,123,011	\$18,586,744	15%
2005	\$137,199,066	\$15,746,562	11%
2006	\$134,167,929	\$17,776,160	13%
2007	\$147,431,162	\$18,657,878	13%
2008	\$147,399,765	\$20,432,508	14%
2009	\$152,460,724	\$18,998,793	12%
<b>Average (2004-2009)</b>	<b>\$140,963,610</b>	<b>\$18,366,441</b>	<b>13%</b>

In 2011, four administrative overhead positions are proposed to be eliminated. These reductions keep the RSD's administrative overhead staffing (as a percentage of total staffing) constant with the 2010 rate of 12.5 percent.

## **Future Staffing Level and Organizational Direction**

As RSD continues to transition and as staffing levels and staffing mixes evolve in line with changes in the size and the nature and level of services required in the future, reorganizations and reporting relationships will continuously be identified and implemented to achieve service delivery efficiencies.

The RSD's future workload and staffing is largely a function of funding availability and the road system assets it must manage. The RSD road asset inventory will be reduced as urban areas are annexed into cities, but not as significantly as one might think. While there will be reductions in some asset categories, in other categories the inventory will remain considerable. For example after annexation, the RSD will retain responsibility for the following percentages of assets:

- 90 percent of bridges
- 73 percent of arterial mile pavement
- 87 percent of open drainage ditches
- 85 percent of gravel shoulders
- 80 percent of guardrail
- 57 percent of local access road pavement
- 32 percent of signals
- 45 percent of pipes
- 39 percent of storm water catch basins

Conversely, a greater proportion of the RSD's urban types of inventory, such as local access roads, traffic signals, drainage pipes, and storm water catch basins, will be transferred to cities. The following graphs, taken from the SPRS, report display the effects of annexation on the infrastructure inventory.

The amount of work and associated costs of maintaining and preserving assets in different inventory types varies considerably.

Fig. 4

**Effects of annexation on bridge inventory**

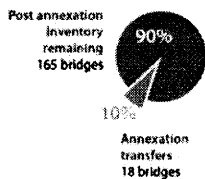


Fig. 5

**Effects of annexation on arterial roads**

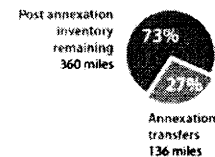


Fig. 6

**Effects of annexation on drainage inventory: open ditches**

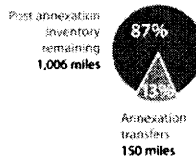


Fig. 7

**Effects of annexation on gravel shoulder inventory**

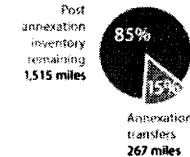


Fig. 8

**Effects of annexation on guardrail inventory**

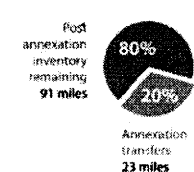


Fig. 9

**Effects of annexation on local access roads**

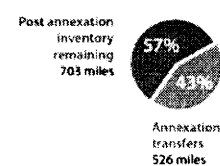


Fig. 10

**Effects of annexation on traffic signal inventory**

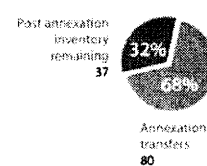


Fig. 11

**Effects of annexation on drainage inventory: pipe**

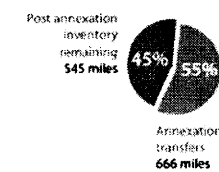
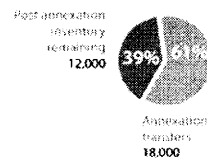


Fig. 12

**Effects of annexation on drainage inventory: catch basins**



Post-annexation, SPRS identifies priorities for maintaining and preserving the mix of remaining assets as follows:

- meet regulatory requirements and standards
- meet core safety needs
- preserve the existing roadway facilities network in the post-annexation service area

This framework will influence the future configuration and staffing levels of RSD.

The RSD applied the SPRS findings in a review of their current set of programs or services to assess the impact of annexations on the current organizational model. This assessment, although preliminary in nature, was used to estimate the potential staffing impacts by program or service. Impacts of annexation to the 65 programs were rated as likely, potential, or unlikely to have impacts to RSD's staffing and organizational structure.

The tables in Exhibit E summarize this review for each of the RSD's programs and services. The projection should be considered preliminary and subjective and is included to inform initial discussions of a general direction rather than provide a specific road map for future resourcing decisions.

### **Likely Staffing/Organizational Impact**

Those programs that now serve primarily urban populations such as the neighborhood, pedestrian and school traffic safety programs, signal design and engineering, development review on traffic impacts, traffic modeling, concurrency and MPS planning, and non-motorized planning will likely see workload reductions as the service area changes from urban to rural.

Some RSD maintenance and special operations programs will continue to provide services but with a reduced workload as a result of annexations. As the capital program shifts away from larger capacity and other more urban improvements and moves toward a higher volume of rural safety and preservation investments, we would expect to see some workload reductions in civil design, roads project management, bridge project management and environmental studies and design.

### **Potential Staffing/Organizational Impact**

Falling between those programs that are unlikely to experience much change in their workload and those with a greater likelihood for change based on the urban to rural shift and the changing mix of assets in the post-annexation service area are those that will experience some change as the RSD's overall service area and workload gradually declines. As field operations and the CIP change, RSD will review the engineering support levels necessary to properly sustain the changing workloads. Administrative functions will also be reviewed to ensure an appropriate level and organizational structure is sustained to support the RSD's complex workload.

### **Unlikely Staffing/Organizational Impact**

Those programs and services where staffing is not expected to change tend to be those that meet regulatory requirements and standards, core safety needs, and address asset preservation for those rural assets that are projected to remain in the post-annexation service area.

Regulatory programs would include programs such as National Pollution Discharge Elimination System (NPDES) compliance and other environmental compliance programs, particularly as relates to water quality related work in the rural area, cultural resources regulatory compliance, and the road vacations and boundaries program, as examples.

Some examples of safety-oriented functions include traffic safety investigations, signs and markings operations, and high accident location engineering. Bridge operations, inspections and design programs are also not likely to experience material levels of staff changes as is also true



for road maintenance operations in areas that will not experience annexation activity including Skykomish and Vashon Island.

This preceding view of staffing level directions for the future is largely based upon an assessment of the anticipated changing complexion of the RSD's post-annexation service area. Additional considerations beyond the size and asset mix in the area served will also need to be considered in future staffing and organizational decisions. Difficulties associated with managing this service area, including the age and condition of the roadways, their susceptibility to flooding and the backlog of deferred asset maintenance, will impact future staffing level decisions. The further consideration that these aging roadways will be at risk of failure because RSD does not have sufficient funds or staff to perform all needed safety, maintenance and preservation work – and further deferral of this work will lead to higher repair and replacement costs in the future also needs to be weighed as RSD defines future staffing and organizational needs.

Ultimately the goal as conditions change is to continuously refine the staffing levels necessary and the organizational structures most suitable to operate a safe well maintained and efficiently operated road system.

**EXHIBIT A**

**Roads 2010 and 2011 Programs and Services Staffing Allocation**

Org	Program /Service Descriptions	2010 Staff	2011 Staff	Management, Public Contact and Administrative Support						Asset Preservation, Safety and Regulatory Compliance						Discrete	Reimb.
				Directs Division or Manages Section	Public Communications & Admin Support	Policy, Program and Strategic Analysis	Budgeting	Accounting	Payroll and Human Resources	Regulatory Compliance	Immediate Safety and Emergency Response	Maint/Traffic /Bridge Operations	Preservation and Other CIP Work	Preservation Asset Data Support			
ROADS DIVISION-WIDE	Division Director	2	2	1	1												
ROADS DIVISION-WIDE	County Road Engineer	3	3	1	1	1											
ROADS FINANCE	Finance and Accounting	12	12				12										
PROGRAM ADMINISTRATION	Roads, Marine Fleet, and Airport Human Resources	7	7						5.25							1.75	
PROGRAM ADMINISTRATION	Intergovernmental Coordination and Property Management	2	2			2											
PROGRAM ADMINISTRATION	Division Public Communications and Relations	5	2		2												
BUSINESS SYSTEMS	Budget and IT Business Systems Management and Development	10	10				0.6	0.3						9.1			
ADJUSTABLE RESOURCES																	
CIP AND PLANNING	CIP and Planning Section Management	1	1	1													
CIP AND PLANNING	Concurrency, Mitigation Payment System (MPS), Transportation Needs Report (TNR), and Comprehensive Plan Updates	3	5								5						
CIP AND PLANNING	Data Modeling	4.6	1												1		
CIP AND PLANNING	Non-motorized Planning	1	1												1		
CIP AND PLANNING	Partnerships and Performance Measures	3	4		4												
CIP AND PLANNING	Cultural Resources Regulatory Compliance	1	1												1		
CIP AND PLANNING	Roads CIP Programming and Contracts	4.7	2.7			0.4	0.5	1.8									
CIP AND PLANNING	Grants Administration	1	1			0.3	0.3	0.4									
CIP AND PLANNING SECTION TOTAL																	

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**Roads 2010 and 2011 Programs and Services Staffing Allocation**

Org	Program /Service Descriptions	2010 Staff	2011 Staff	Management, Public Contact and Administrative Support						Asset Preservation, Safety and Regulatory Compliance						Discrete	Reimbursable or Fee Based Programs and Services
				Directs Division or Manages Section	Public Communications & Admin Support	Policy, Program and Strategic Analysis	Budgeting	Accounting	Payroll and Human Resources	Regulatory Compliance	Immediate Safety and Emergency Response	Main/Traffic /Bridge Operations	Preservation and Other CIP Work	Preservation Asset Data Support			
ENG SERVICES ADMIN	Engineering Services Section Management	3	3	1	2												
ENG SERVICES ADMIN	ES Budget, HR/Payroll and Fiscal Support and Analysis	4	3			0.6	1	1.4									
CONSTRUCTION MANAGEMENT	Road Construction Project Engineering	6.25	6.25									6.3					
CONSTRUCTION MANAGEMENT	Road Construction Contract Administration	8.75	8.75									8.0	0.3			0.5	
CONSTRUCTION MANAGEMENT	Pavement Management Engineering	7.25	6.25							1.3		1	3.8			0.2	
CONSTRUCTION MANAGEMENT	Road Construction Inspection	16.75	15.75									13.0	0.8			2.0	
PROJECT MANAGEMENT and Design (PM&D)	Roads Civil Design & CADD Services	15.5	14.5							2.1		10.6	1			0.8	
PROJECT MANAGEMENT and Design (PM&D)	Roads Project Management	9.5	9.5							0.9		8.1				0.5	
BRIDGE AND STRUCTURES	Bridge Project Management	7.5	7.5									1.1	5.9			0.5	
BRIDGE AND STRUCTURES	Bridge & Structures Design	4	4									2	1.8			0.2	
BRIDGE AND STRUCTURES	Bridge Operations & Inspections	7.5	7.5									4	3			0.5	
SURVEY	Field Survey	15.25	14.25		1							5.5	6.0			1.8	
MATERIALS LAB	Materials Laboratory and Field Services	14.25	13.25		1							4.0	5.7			2.6	
ENVIRONMENTAL	Environmental Mitigation Monitoring	4.5	3.5									3.5					
ENVIRONMENTAL	Environmental - Regulatory Compliance	9	9									8				1.0	
ENVIRONMENTAL	Environmental Studies and Designs	6.5	5.5									1.7	2.5			1.3	
ROAD SERVICES Unit	Maintenance Bond & Road Log	5.25	5.25									4			1.25		
ROAD SERVICES Unit	Maps & Records Management	8.25	8.25									7.25	1				
ROAD SERVICES Unit	Road Improvement District Program	1	1									1					
ROAD SERVICES Unit	Road Vacations & Boundaries	1	1									1					

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**Roads 2010 and 2011 Programs and Services Staffing Allocation**

Org	Program/Service Descriptions	2010 Staff	2011 Staff	Management, Public Contact and Administrative Support						Asset Preservation, Safety and Regulatory Compliance						Discrete	Reimbursable or Fee Based Programs and Services
				Directs Division or Manages Section	Public Communications & Admin Support	Policy, Program and Strategic Analysis	Budgeting	Accounting	Payroll and Human Resources	Regulatory Compliance	Immediate Safety and Emergency Response	Main/Traffic /Bridge Operations	Preservation and Other CIP Work	Preservation Asset Data Support			
MAINTENANCE ADMINISTRATION	Road Maintenance Management and Field Superintendents	5	5	2	1							0.5	1.5				
MAINTENANCE ADMINISTRATION	Section Budget, Payroll, Fiscal and Strategic Support and Analysis	8.5	8.5			1.7	0.8	4	2								
MAINTENANCE ADMINISTRATION	Section Human Resource and PAO Legal Support	1.75	1.75						1.75								
MAINTENANCE OPERATIONS	2477 Citizen Action Requests & Referrals	4.5	4.5		3							1.5					
MAINTENANCE OPERATIONS	Division 1 (North) Road Maintenance	20.5	19.5								2.9	2.9	5.7	2.7			5.3
MAINTENANCE OPERATIONS	Division 2 (North East) Road Maintenance	28.5	25.5								3.9	3.9	7.4	3.4			6.9
MAINTENANCE OPERATIONS	Division 2 (Ski/komish) Road Maintenance	4	4								0.6	0.6	1.2	0.6			1.1
MAINTENANCE OPERATIONS	Division 3 (South - Southwest) Road Maintenance	22.5	19.5								2.9	2.9	5.7	2.7			5.3
MAINTENANCE OPERATIONS	Division 3 (Vashon) Road Maintenance	7	7								1.1	1.1	2.0	1.0			1.9
MAINTENANCE OPERATIONS	Division 4 (South East) Road Maintenance	31.5	30.5								4.5	4.5	8.7	4.4			8.4
MAINTENANCE OPERATIONS	Special Ops. Unit 7 (Rivers & Stormwater)	27	26.5								4.3	4.3	8.3	3.9			7.7
MAINTENANCE OPERATIONS	Special Ops. Unit 8 (Drainage)	24	29								4.4	4.4	8.5	3.9			7.8
MAINTENANCE OPERATIONS	Special Ops. Unit 9 (Asphalt / Paving)	19	22								3.3	3.3	6.5	3.0			5.9
MAINTENANCE OPERATIONS	Special Ops. Unit 10 (Bridges / Facilities)	32.1	26								3.9	3.9	7.6	3.6			7.0
MAINTENANCE OPERATIONS	Special Ops. Unit 11 (Vegetation / Mowing)	16.5	0								0	0.0	0.0	0.0			0.0
RMS ENGINEERING / ENVIRONMENTAL	Pesticide Compliance (Maintenance Shops and Material Storage Sites)	3.5	3.5								3.5						
RMS ENGINEERING / ENVIRONMENTAL	Roads Maintenance On-Site Property & Drainage Engineering	10.5	10.5								0.5	0.5	7	0.5	0.5		1.5
RMS ENGINEERING / ENVIRONMENTAL	Regional Roads Maintenance Endangered Species Act (ESA) Program	3.25	3.25								3.25						
RMS ENGINEERING / ENVIRONMENTAL	National Pollution Discharge Elimination System (NPDES) Compliance Program Construction Oversight and Other Environmental Permitting	8	7								6	1					
RMS ENGINEERING / ENVIRONMENTAL	Special Use Permits, Claims, Investigations and Enforcements	3.5	3.5									2.25			0.25		1
RMS ENGINEERING / ENVIRONMENTAL	Field Data Collection and Mapping	8	8			0.25						1.25			6.5		
UTILITY INSPECTION	Utility Inspection - Permit Compliance	9.5	8.5														8.5

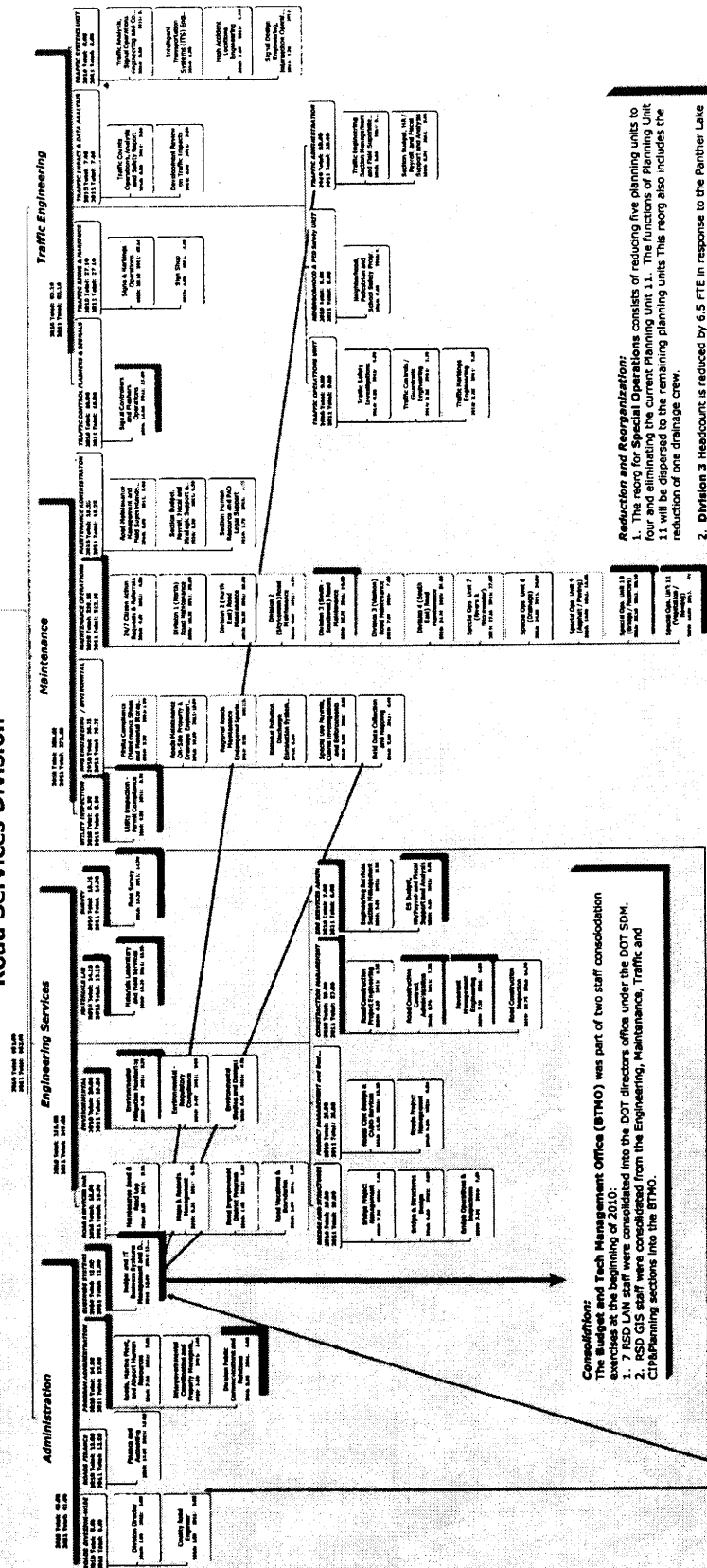
**EXHIBIT A**

**Roads 2010 and 2011 Programs and Services Staffing Allocation**

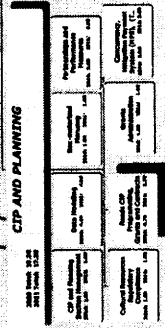
Orig	Program/Service Descriptions	2010 Staff	2011 Staff	Management, Public Contact and Administrative Support						Asset Preservation, Safety and Regulatory Compliance						Discrete	Reimb		
				Directs Division or Manages Section	Public Communications & Admin Support	Policy, Program and Strategic Analysis	Budgeting	Accounting	Payroll and Human Resources	Regulatory Compliance	Immediate Safety and Emergency Response	Main/Traffic /Bridge Operations	Preservation and Other CIP Work	Preservation Asset Data Support					
TRAFFIC ADMINISTRATION	Traffic Engineering Section Management and Field Superintendent	5	5	2	2			1											
TRAFFIC ADMINISTRATION	Section Budget, HR / Payroll, and Fiscal Support and Analysis	5	5			1.6	0.5	1.1	0.6						1				
NEIGHBORHOOD & PED SAFETY UNIT	Neighborhood, Pedestrian and School Safety Programs and Engineering	6	6									1.8	1	0.6		2	0.6		
TRAFFIC OPERATIONS UNIT	Traffic Safety Investigations	4.5	4.5									2	2		0.5				
TRAFFIC OPERATIONS UNIT	Traffic Controls / Guardrails Engineering	2.25	2.25									0.2		0.4		1.0	0.6		
TRAFFIC OPERATIONS UNIT	Traffic Markings Engineering	2.25	2.25									0.6	0.6	0.4			0.6		
TRAFFIC SYSTEMS UNIT	Traffic Analysis, Signal Operations Engineering and Control Center Operations	3.5	3.5													2.8	0.7		
TRAFFIC SYSTEMS UNIT	Intelligent Transportation Systems (ITS) Engineering Design, Project Management and Regional Coordination	1.1	1.1														0.6		
TRAFFIC SYSTEMS UNIT	High Accident Locations Engineering	1.1	1.1										0.6						
TRAFFIC SYSTEMS UNIT	Signal Design Engineering, Intersection Operations Review, and Signal Priority Analysis	2.3	2.3										0.5	1	0.3			0.5	
TRAFFIC IMPACT & DATA ANALYSIS	Traffic Counts Operations, Analysis and Safety Report	3.5	3.5									0.5	0.5			2.0			
TRAFFIC IMPACT & DATA ANALYSIS	Development Review on Traffic Impacts	3.5	3.5									1				2.1	0.4		
TRAFFIC SIGNS & MARKINGS	Signs & Markings Operations	23.1	23.1											8.4	0.6		14.1		
TRAFFIC SIGNS & MARKINGS	Sign Shop	4	4											2.5			1.5		
TRAFFIC CONTROL FLASHERS & SIGNALS	Signal Controllers and Flashers Operations	16	15											6.6	0.6		7.8		
		599	559	8	18	7.25	3.3	21.6	11.2	97.4	41.8	97.0	106.6	26.3	12.5	108.7			
Total 2011 Staff Allocation		100%	100%	1.4%	3.2%	1.3%	0.6%	3.9%	2.0%	17.4%	7.5%	17.3%	19.1%	4.7%	2.2%	19.6%			
Percent of Staff Allocated				70.3						64.0%				16.1		20.6%			
Rollup of 2011 Staff Allocation																			
Rollup Percentage of 2011 Staff Allocation																			

# Exhibit B

## Road Services Division



**Consolidation:**  
 The Budget and Tech Management Office (BTMO) was part of two staff consolidation exercises at the beginning of 2010:  
 1. BTMO staff were consolidated into the DOT directors' offices under the DOT SDM.  
 2. PSD GIS staff were consolidated from the Engineering, Maintenance, Traffic and CIP/Planning sections into the BTMO.



**Reduction and Consolidation:**  
 In 2011 the CIP and Planning Section cuts two positions including a supervisor. This slightly smaller group will be come a unit under the Administration Section rather than an independent Section.

**Reduction and Reorganization:**

- The reorg for Special Operations consists of reducing five planning units to four and eliminating the current Planning Unit 11. The functions of Planning Unit 11 will be dispersed to the remaining planning units. This reorg also includes the reduction of one drainage crew.
- Division 3 Headcount is reduced by 6.5 FTE in response to the Panther Lake Announcements.

## Exhibit C

### Performance Measures

#### How do we know this plan is making a difference?

Road Services tracks over 40 performance measures for use in internal program management, management decision support, and public communications and reporting. These include basic output measures such as number of miles of pavement overlay constructed or bridges replaced, outcome measures such as percent of structurally deficient bridges, customer service measures such as average number of days to complete requests for pothole repair, and high level community indicators (that the division has only partial influence over) such as vehicle-related fatality rate on unincorporated roads. To date, Road Services has been reporting performance measures in a variety of venues, including annual business plans, on the county's King County AIMS High: Annual Indicators and Measures website and scorecard, and at internal briefings with senior county management and the King County Executive.

The Strategic Plan for Road Services identified five "What we deliver" goals that articulate what the division will focus on for at least the next five years and sets out a number of strategies that will move the division towards accomplishment of those goals. For the purposes of strategic plan implementation, Road Services will use the set of performance measures outlined below to specifically measure progress towards these five goals. The measures will be reported on an annual basis in the agency's business plan and other suitable reporting forums or publications.

#### Goal 1: Meet regulatory requirements and standards

##### Performance measure: Regulatory compliance index

This is a new measurement need identified during the strategic planning process. Among the variety of performance measures currently tracked by Road Services, there is currently no measure specifically focused on the meeting of federal, state and local regulatory requirements and standards. Since the division has broad array of regulatory requirements, selecting one or two measures to represent the performance in this area is challenging. Instead, Road Services will develop a new Regulatory Compliance Index to use as an indicator of performance.

The index will be based on a rating framework that:

1. Utilizes both qualitative and quantitative assessment information
2. Provides for a range of possible ratings to differentiate between degrees of compliance
3. Establishes rating criteria that take into consideration the consequences and impacts of meeting compliance thresholds both to the public and the agency

The index will incorporate data from the division's most critical, measurable, and resource intensive regulatory compliance categories. Potential information to include may relate to:

- National Pollution Discharge Elimination System (NPDES) requirements

## Exhibit C

- National Bridge Inspection Standards requirements
- Certification Acceptance (CA) qualification requirements for FHWA projects
- County Road Administration Board standards of good practice
- Regional road maintenance program Endangered Species Act 4(D) requirements
- King County Surface Water Design Manual requirements
- Compliance with MUTCD marking and sign requirements

### Goal 2: Meet core safety needs

#### **Performance measures:** Collision, injury and fatality rates for motorists, bicyclists and pedestrians

Road Services extensively analyzes collision data for the unincorporated road system, produces a detailed annual safety report, and uses this data to identify safety related improvements. The collision and fatality rates that Road Services has previously reported as performance measures remain well suited to continue to provide a broad metric related to the agency's efforts to meet core safety needs on the road network. The existing measures will be enhanced by adding injury rates and by reporting all data for bicyclists and pedestrians as well as motorists.

### Goal 3: Maintain and preserve the existing roadway facilities network

#### **Performance measures:** Pavement, bridge, drainage and road shoulder infrastructure condition ratings

Road Services inspects its entire pavement and bridge inventories on regular cycles using nationally accepted inspection and condition rating methodology. The resulting ratings form the basis for several existing division performance measures and the standard rating methodologies allow for comparisons with other jurisdictions. The current performance measures related to bridge condition, pavement condition are well suited to continue to provide a broad performance metric related to the efforts to preserve the existing roadway facilities network. These measures include: pavement miles meeting a condition standard of "fair" (40 PCS) or better, average sufficiency rating for bridges, and number/percent of bridges structurally deficient, functionally obsolete and load-limited.

Additional measures for drainage system structural integrity/capacity and gravel shoulder condition will be reported in the future. Since data for drainage facilities and road shoulders is not as complete and robust as for pavement and bridges, random sampling techniques instead of full inventory assessment are currently used to assess these types of infrastructure. Road Services will continue to use a sampling methodology until data availability can be enhanced. The division is in the process of expanding inventory and condition data availability through a multi-year Roads Asset and Maintenance Management System (RCAMM) project.



## Exhibit C

**Goal 4: Enhance mobility (movement of people and goods) by facilitating more efficient use of the existing road system**

**Performance measure: Travel time trends and reliability on key road corridors**

The King County Benchmarks Program, coordinated by the Office of Strategic Planning and Performance Management, reports on average commute trip time on various interstate route segments, but not on unincorporated King County roads. This new measure will report travel time information for unincorporated area corridors. Consistent and predictable travel times are important to the traveling public. According to the WSDOT 2009 Annual Congestion Report, "Reliability is an important statistic for travel times, because it allows road users to plan for consistency in their travels." The National Cooperative Highway Research Program also suggests travel time reliability as a potential mobility measure in its literature on performance measures and asset management<sup>1</sup>.

Road Services will develop a new measure of the reliability of travel time along several important unincorporated county corridors in a manner consistent with the national Highway Capacity Manual and WSDOT methodology. Road Services will use three complementary technologies, including permanent traffic count stations, automated license plate recognition technology, and annual probe vehicle travel time studies to report annual travel time trends.

Permanent traffic count stations provide real time data about travel speeds at several count locations in rural incorporated King County. A new grant-funded project incorporating automated license plate recognition technology will allow the division to report annually on daily and hourly travel time trends along the Avondale Road corridor in northeast King County; the corridor will be a useful, representative proxy for understanding mobility trends in the rural, unincorporated areas.

Annual probe vehicle travel time studies are performed as part of the Transportation Concurrency Management Program. These studies provide travel time data on all principal and minor arterials in the unincorporated area and are useful to understand year to year trends. The data from these can also be used in optimizing traffic signal coordination and targeted traffic operational improvements.

**Goal 5: Address roadway capacity when necessary to support growth targets in the urban areas**

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<sup>1</sup> NCHRP Report 51, Performance Measures and Targets for Transportation Asset Management, 2006

## Exhibit C

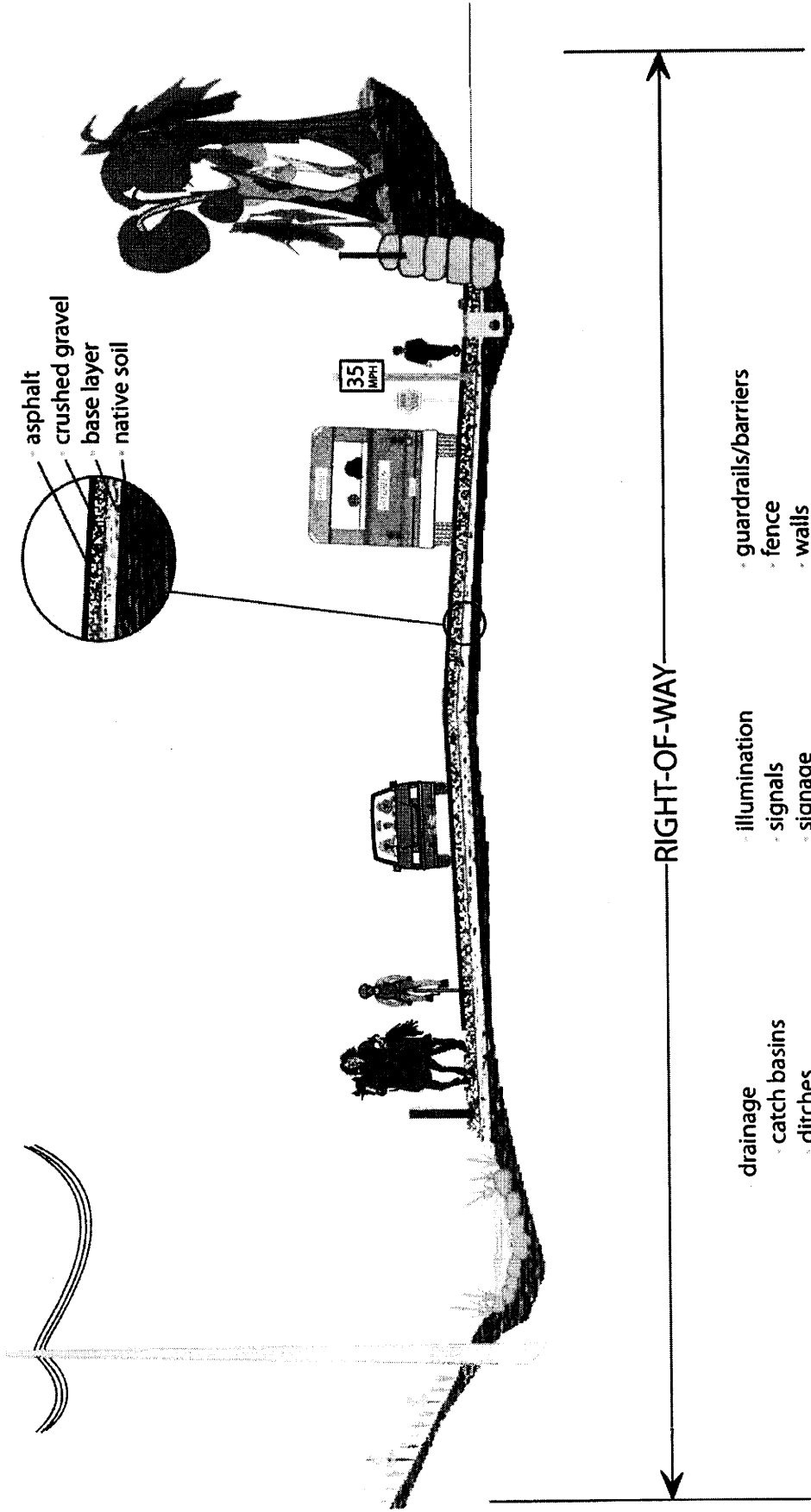
### **Performance measure: Volume to capacity (V/C) ratio on urban connector arterials**

The King County Benchmarks Program currently reports volume-to-capacity (V/C) ratios for three major transportation routes (state routes and interstate highways) to illustrate congestion in King County. This new measure will provide similar information for unincorporated area urban connector arterials, which are corridors that travel through the rural area and serve to connect urban areas. V/C compares roadway demand (vehicle volumes) with roadway supply (carrying capacity). Volume refers to the number of vehicles using a roadway at peak commute times, while capacity is its ability to support that volume based on its design and number of lanes.

Road Services proposes annual tracking of the volume to capacity ratio on urban connector arterials as an indicator of how these corridors are performing as growth occurs in urban areas. The corridors recommended for monitoring are Novelty Hill Road, Woodinville-Duval Road, and Issaquah-Hobart Road.

# Exhibit D

# RURAL



- drainage
  - catch basins
  - ditches
  - pipes
  - water quality/water quantity
  - rain gardens
  - swales
  - ponds
- illumination
  - signals
  - signage
  - pavement
  - pavement markers
  - trails
  - shoulders
- guardrails/barriers
  - fence
  - walls
  - utility vaults
  - utility poles
  - mailboxes
  - landscaping

# Exhibit E

## Projected Potential Programs and Services Staffing or Organizational Changes in the Post Annexation Service Area

Section	Org	Program /Service Descriptions	2010 Staff	Unlikely staffing/organizational impact on program or service staffing	Potential staffing/organizational impact on program or service staffing	Likely staffing/organizational impact on program or service staffing
ADMIN	ROADS DIVISION-WIDE	Division Director	2	X		
CIP&P	CIP AND PLANNING	CIP and Planning Section Management	1	X		
CIP&P	CIP AND PLANNING	Cultural Resources Regulatory Compliance	1	X		
CIP&P	CIP AND PLANNING	Grants Administration	1	X		
ES	BRIDGE AND STRUCTURES	Bridge & Structures Design	4	X		
ES	BRIDGE AND STRUCTURES	Bridge Operations & Inspections	7.5	X		
ES	ROAD SERVICES Unit	Road Vacations & Boundaries	1	X		
Maint	RMS ENGINEERING / ENVIRONMENTAL	National Pollution Discharge Elimination System (NPDES) Compliance Program, Construction Oversight and Other Environmental Permitting	8	X - NPDES	X - Other Env.	
Maint	MAINTENANCE ADMINISTRATOR	Section Human Resource and PAO Legal Support	1.75	X		
Maint	MAINTENANCE OPERATIONS	24/7 Citizen Action Requests & Referrals	4.5	X		
Maint	MAINTENANCE OPERATIONS	Division 2 (Skykomish) Road Maintenance	4	X		
Maint	MAINTENANCE OPERATIONS	Division 3 (Vashon) Road Maintenance	7	X		
Maint	RMS ENGINEERING / ENVIRONMENTAL	Regional Roads Maintenance Endangered Species Act (ESA) Program	3.25	X		
Maint	RMS ENGINEERING / ENVIRONMENTAL	Special Use Permits, Claims Investigations and Enforcements	3.5	X		
Maint	RMS ENGINEERING / ENVIRONMENTAL	Field Data Collection and Mapping	8	X		
Traffic	TRAFFIC ADMINISTRATION	Traffic Engineering Section Management and Field Superintendent	5	X		
Traffic	TRAFFIC OPERATIONS UNIT	Traffic Safety Investigations	4.5	X		
Traffic	TRAFFIC OPERATIONS UNIT	Traffic Markings Engineering	2.25	X		
Traffic	TRAFFIC SYSTEMS UNIT	High Accident Locations Engineering	1.1	X		
Traffic	TRAFFIC SIGNS & MARKINGS	Signs & Markings Operations	23.1	X		
Traffic	TRAFFIC SIGNS & MARKINGS	Sign Shop	4	X		
ADMIN	ROADS DIVISION-WIDE	County Road Engineer	3		X	
ADMIN	ROADS FINANCE	Finance and Accounting	12		X	
ADMIN	PROGRAM ADMINISTRATION	Roads, Marine Fleet, and Airport Human Resources	7		X	
ADMIN	PROGRAM ADMINISTRATION	Intergovernmental Coordination and Property Management	2		X	
ADMIN	PROGRAM ADMINISTRATION	Division Public Communications and Relations	5		X	
ADMIN	BUSINESS SYSTEMS	Budget and IT Business Systems Management and Development	12		X	
CIP&P	CIP AND PLANNING	Partnerships and Performance Measures	3		X	
CIP&P	CIP AND PLANNING	Roads CIP Programming, Grants and Contracts	4.7		X	
ES	ENG SERVICES ADMIN	Engineering Services Section Management	3		X	
ES	ROAD SERVICES Unit	Maintenance Bond & Road Log	5.25		X	
ES	ENG SERVICES ADMIN	ES Budget, HR/Payroll and Fiscal Support and Analysis	4		X	
ES	CONSTRUCTION MANAGEMENT	Road Construction Project Engineering	6.25		X	
ES	CONSTRUCTION MANAGEMENT	Road Construction Contract Administration	8.75		X	
ES	CONSTRUCTION MANAGEMENT	Pavement Management Engineering	7.25		X	
ES	CONSTRUCTION MANAGEMENT	Road Construction Inspection	16.75		X	
ES	SURVEY	Field Survey	15.25		X	
ES	MATERIALS LAB	Materials Laboratory and Field Services	14.25		X	
ES	ENVIRONMENTAL	Environmental Mitigation Monitoring	4.5		X	

# Exhibit E

## Projected Potential Programs and Services Staffing or Organizational Changes in the Post Annexation Service Area

Section	Org	Program /Service Descriptions	2010 Staff	Unlikely staffing/organizational impact on program or service staffing	Potential staffing/organizational impact on program or service staffing	Likely staffing/organizational impact on program or service staffing
ES	ENVIRONMENTAL	Environmental - Regulatory Compliance	9		X	
ES	ROAD SERVICES Unit	Maps & Records Management	8.25		X	
ES	ROAD SERVICES Unit	Road Improvement District Program	1		X	
Maint	MAINTENANCE ADMINSTRATON	Road Maintenance Management and Field Superintendents	5		X	
Maint	MAINTENANCE ADMINSTRATON	Section Budget, Payroll, Fiscal and Strategic Support and Analysis	8.5		X	
Maint	MAINTENANCE OPERATIONS	Division 2 (North East) Road Maintenance	28.5		X	
Maint	MAINTENANCE OPERATIONS	Division 4 (South East) Road Maintenance	31.5		X	
Maint	MAINTENANCE OPERATIONS	Special Ops. Unit 7 (Rivers & Stormwater)	27		X	
Maint	RMS ENGINEERING / ENVIRONMENTAL	Pile Site Compliance (Maintenance Shops and Material Storage Sites)	3.5		X	
Maint	RMS ENGINEERING / ENVIRONMENTAL	Roads Maintenance On-Site Property & Drainage Engineering	10.5		X	
Maint	UTILITY INSPECTION	Utility Inspection - Permit Compliance	9.5		X	
Traffic	TRAFFIC ADMINISTRATION	Section Budget, HR / Payroll, and Fiscal Support and Analysis	5		X	
Traffic	TRAFFIC SYSTEMS UNIT	Intelligent Transportation Systems (ITS) Engineering Design, Project Management and Regional Coordination	1.1		X	
Traffic	TRAFFIC CONTROL FLASHERS & SIGNALS	Signal Controllers and Flashers Operations	16		X	
Traffic	TRAFFIC IMPACT & DATA ANALYSIS	Traffic Counts Operations, Analysis and Safety Report	3.5		X	
CIP&P	CIP AND PLANNING	Data Modeling	4.6			X
CIP&P	CIP AND PLANNING	Non-motorized Planning	1			X
CIP&P	CIP AND PLANNING	Concurrency, Mitigation Payment System (MPS), Transportation Needs Report (TNR), and Comprehensive Plan Updates	3			X
ES	PROJECT MANAGEMENT and Design (PM&D)	Roads Civil Design & CADD Services	15.5			X
ES	PROJECT MANAGEMENT and Design (PM&D)	Roads Project Management	9.5			X
ES	BRIDGE AND STRUCTURES	Bridge Project Management	7.5			X
ES	ENVIRONMENTAL	Environmental Studies and Designs	6.5			X
Maint	MAINTENANCE OPERATIONS	Division 3 (South - Southwest) Road Maintenance	22.5			X
Maint	MAINTENANCE OPERATIONS	Division 1 (North) Road Maintenance	20.5			X
Maint	MAINTENANCE OPERATIONS	Special Ops. Unit 8 (Drainage)	24			X
Maint	MAINTENANCE OPERATIONS	Special Ops. Unit 9 (Asphalt / Paving)	19			X
Maint	MAINTENANCE OPERATIONS	Special Ops. Unit 10 (Bridge / Facilities)	32.1			X
Maint	MAINTENANCE OPERATIONS	Special Ops. Unit 11 (Vegetation / Mowing) Reorged in 2011	18.5			X
Traffic	NEIGHBORHOOD & PED Safety UNIT	Neighborhood, Pedestrian and School Safety Programs and Engineering	6			X
Traffic	TRAFFIC OPERATIONS UNIT	Traffic Controls / Guardrails Engineering	2.25			X
Traffic	TRAFFIC SYSTEMS UNIT	Traffic Analysis, Signal Operations Engineering and Control Center Operations	3.5			X
Traffic	TRAFFIC SYSTEMS UNIT	Signal Design Engineering, Intersection Operations Review, and Signal Priority Analysis	2.3			X
Traffic	TRAFFIC IMPACT & DATA ANALYSIS	Development Review on Traffic Impacts	3.5			X

Additional considerations beyond the size and asset mix in the area served will also need to be considered in future staffing and organizational decisions. Difficulties associated with managing this service area, including the age and condition of the roadways, their susceptibility to flooding and the backlog of deferred asset maintenance, will impact future staffing level decisions. The further consideration that these aging roadways will be at risk of failure because RSD does not have sufficient funds or staff to perform all needed safety, maintenance and preservation work – and further deferral of this work will lead to higher repair and replacement costs in the future also needs to be weighed as RSD defines future staffing and organizational needs.