



January 1, 2016

The Honorable Curtis King
Washington State Senator
Chair, Senate Transportation Committee

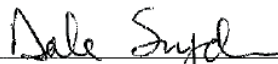
The Honorable Judy Clibborn
Washington State Representative
Chair, House Transportation Committee

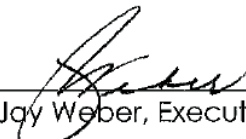
Dear Senator King and Representative Clibborn:

In accordance with the requirement of law, the Washington State County Road Administration Board presents to the legislature this report of the activities of the agency for the year 2015. CRAB staff continues to promote the integration of engineering, information technology, and grants administration among the counties of the state. We believe this report will accurately indicate to you, and to the people of the State of Washington, the effectiveness of that effort.

The Board and its staff remain steadfast in their commitment to achieving your legislative mandates to provide statutory oversight of the state's thirty-nine county road departments, and in so doing, to provide to you the assurance that these counties' operations remain accountable in their stewardship of public assets and public trust.

Respectfully submitted,


Dale Snyder, Chairman


Jay Weber, Executive Director

County Road Administration Board

<u>CRABoard Members</u>	<u>Term Expires</u>
Chairman Dale Snyder, Douglas County Commissioner	2016
Vice-Chairman Brian Stacy, P.E., Pierce County Engineer	2018
Second Vice-Chair Andrew Woods, P.E., Columbia County Engineer	2017
Rob Coffman, Lincoln County Commissioner	2016
Mark Storey, P.E., Whitman County Engineer	2016
Bill Schulte, Lewis County Commissioner	2017
Todd Mielke, Spokane County Commissioner	2017
Kathy Lambert, King County Council Member	2018
Lisa Janicki, Skagit County Commissioner	2018

County Road Administration Board Staff

Executive Director	Jay Weber
Executive Assistant Administration	Karen Pendleton Toni Cox, Engineering Technician Rhonda Mayner, Secretary
Deputy Director Engineering	Walter Olsen, P.E. Jeff Monsen, P.E., Intergovernmental Policy Manager Randy Hart, P.E., Grant Programs Manager Don Zimmer, Road Systems Inventory Manager Bob Moorhead, P.E., Maintenance Manager Derek Pohle, P.E., Compliance & Data Manager
Assistant Director Technology	Steven Hillesland Bob Davis, IT Systems Manager Jim Ayres, P.E., Design Systems Engineer Jim Oyler, Support Specialist Kathy O'Shea, Database Development Specialist Eric Hagenlock, Applications Specialist

Table of Contents

From the Executive Director	1
Engineering Services	3-6
Information Services	7-11
Grant Programs	12-15
2014/2015 Grant Program Projects.....	16-26
Tables.....	27
A: County Bridge Data.....	28
County Bridge Condition at a Glance	29
B: Actual County Road Related Revenues.....	30
C: Actual County Road Related Expenditures	31
D: Anticipated County Road Fund Revenues.....	32
E: Anticipated County Road Fund Expenditures.....	33
F: County Road Levy Summary	34
G: County Road Mileage	35
H: County Arterial Preservation Program	36
I: County Freight and Goods System	37
J: County Forces Summary	38
County Ferry System	39-48

From the Executive Director

The County Road Administration Board marked its fiftieth year of service in 2015 by welcoming back former board members and agency staff, as we joined the Washington State Association of County Engineers for their summer conference in Leavenworth. It was a time of renewing of acquaintances, reminiscing, and also a time of looking forward. There were people present for this meeting, during which CRAB unveiled its newly acquired Unmanned Ariel Vehicle for inspection, who remarked of how they could remember CRAB's annual reports when they would roll wet from the mimeograph machine. Yes, times change.

Since the time CRAB's first board members took their seats, CRAB has been given the responsibility for custody of the road log; calculation of the counties' portion of the fuel tax; administration of grants programs for construction and maintenance; county ferry capital construction; and information technology assistance and support to county road departments. All these have been added to CRAB's original mission of oversight to insure that road departments in all thirty-nine counties remain compliant with state statutes and rules.

Each one of these responsibilities is important and none of them would be possible in today's environment without instant and secure communications, largely by way of the internet. CRAB is blessed with an able staff of IT professionals who support the functions of this agency while keeping our communications network with the counties secure, consistently functioning, and up-to-date. The training which CRAB provides on a myriad of software programs continues to be extremely cost effective, and is by any measure or scale, world class.

Change has also come to how county roads are constructed and maintained as opposed to how this was all done fifty years ago. The equipment is greatly different and the work environment, with its newer permit requirements and changes to construction standards, bears little resemblance to the world of 1965. CRAB engineering services remains abreast of these changes, and through the hundreds of hours of training it offers to the counties, assists large and small counties alike to maintain currency in these changing times . . . and to anticipate and prepare for the changes which are certainly to come.

CRAB's first fifty years closed with all counties of the state in possession of Certificates of Good Practice, indicating substantial compliance with all laws and rules pertaining to county road departments; the photos and graphs of the following pages will demonstrate the effectiveness of CRAB's grant programs; and taken together, these bode well for the counties' ability to meet the challenges of the next fifty years.

Engineering Services

As the County Road Administration Board celebrates its 50th anniversary as a state regulatory agency, the Engineering Services Division has grown from a single individual performing oversight to a diverse mix of specialists who provide quality training and assistance across a wide spectrum of subject matter. In no place is this diversity more evident than in the complexity and intricacy of the duties of the 39 County Engineers statewide. Each year, CRAB recognizes engineers and staff who have made significant contributions to the engineering community and their county.

At the June 2015 Washington State Association of County Engineers annual conference, the engineers of the year and project managers of the year awards were presented by Jay Weber, Executive Director of the County Road Administration Board. Congratulations to this year's winners for their outstanding service and excellent project delivery to their communities.



Heath Henderson, Clark County Engineer/PWD, received the Urban Engineer of the Year Award.



Mike Collins, Pacific County Engineer, received the Rural Engineer of the Year Award.



Matt Zybas, Snohomish County, received Program Manager of the Year Award



Brandon Hicks and Matt Unzelman, Thurston County, co-received the Project Manager of the Year Award.

Much of the Engineering Services division efforts in 2015 were directed toward the development of a new Standard of Good Practice that provides guidance for the use of County Road Fund for Traffic Law Enforcement. This is a subject that has received increased scrutiny from the Office of the State Auditor in recent years and has generated much discussion amongst the engineering and law enforcement communities. While a proposed WAC was given a hearing at the October CRABoard meeting, a decision was deferred until a review committee of law enforcement, CRABoard members and CRAB staff could fully evaluate the effects of the rule.

Another area of endeavor for Engineering Services staff, led primarily by Maintenance Manager Bob Moorhead, has been an update to the 1997 “County Gravel Road in Washington State” report prepared by CRAB at the direction of the Legislature. This report developed a scope of work to convert all county gravel Freight & Goods Transportation System (FGTS) routes and all county gravel urban streets to hard surfaced roads. Estimated costs and various potential sources of new revenue to address the issue were identified, but in the nineteen years since the report was presented, no direct legislative action has been taken.

In March of 2014, an outline for a potential “Gravel Roads Work Plan” was developed by CRAB Staff, with the intended purpose of identifying a range of estimated costs to maintain the county FGTS gravel roads and potential funding sources that may be available to perform that maintenance on an on-going basis. Drawing from existing data in CRAB Mobility, a county-by-county inventory of gravel FGTS routes on arterials and local access routes was compiled, and data collection on county maintenance practices has been ongoing. The final report will be released after the April 2016 CRABoard meeting.

The National Association of County Engineers will hold their national conference in Tacoma in 2016 and CRAB Staff has been very active in the planning and preparation for this event. CRAB will be sharing the expertise of our staff members with the entire Association, bringing the state and local perspective to the sessions that are presented at our conference.

The primary responsibility of the Engineering Services Division is the maintenance and updating of summary reports, guidance materials, and model documents, and the provision of training to County Engineers and their staffs. Through a combination of county visits and CRAB sponsored training held in Olympia and around the state, the Engineering Services Division, under the direction of Deputy Director Walt Olsen, has brought 800 hours of informative training to the members of Washington State Association of Counties and Washington State Association of County Engineers in 2015.

For many years, CRAB has provided County Engineers and other county Public Works staff a variety of information resources. One of these information resources is the County Engineers’ and Public Works Directors’ Manual which contains guidance on a variety of technical and administrative issues affecting county engineering functions. In addition to providing this Manual as a hardcopy reference document, a major re-design of the Manual was released November 2010, which takes advantage of current internet technology through

inclusion of over 1,500 internet “hotlinks” embedded within the document’s text. While the revised Manual may contain less written detail on many topics, and is only half the number of pages from the previous version, the total number of topics covered has actually expanded. When the document is open as an electronic file on a computer connected to the internet, the embedded “hotlinks” significantly expand the amount of information immediately available to the user. In order to ensure current information is provided, five updates have been released, including the most recent in November 2014.

CRAB continues the County Engineer/Public Works Director training sessions this year and conducted two 3-day training sessions on May 12-14 and December 8-10, 2015, at the CRAB office, totaling 450 training contact person-hours. This training is constantly being revised to reflect the ever-changing climate of engineering, social, political, and environmental concerns. These intense sessions review the duties and responsibilities of the counties and the County Engineer. Another aspect of this training has been developed to allow modules of this training package be provided directly to a county or gathering of multiple counties at their site, and customized for their specific needs. Five of these customized sessions were conducted during 2015, in Skamania, Skagit, Clark, San Juan and Whatcom Counties, totaling 340 training contact person-hours. CRAB also delivered a condensed three-hour training at the 2015 WSAC County Leaders Conference in November in Stevenson. This was the second session and was well attended by twenty-eight commissioners, county engineers, and senior staff representing fourteen counties. Comments were very positive and CRAB looks forward to future opportunities to continue this forum.

The Engineering Services staff, most of whom hold Professional Engineer licenses, is comprised of Compliance and Data Analysis Manager Derek Pohle, Intergovernmental Policy Manager Jeff Monsen, Grant Programs Manager Randy Hart, Maintenance Manager Bob Moorhead, and Road Systems Inventory Manager Don Zimmer and is directly responsible for the following functions:

- The administration of the Rural Arterial Program, the County Arterial Preservation Program, and the County Ferry Capital Improvement Program;
- The maintenance of the County Road Log and the computations and updates to the distribution of the counties’ share of the motor vehicle fuel tax;
- The management of the reports and other information necessary for recommendations related to the Annual Certificate of Good Practice for each county;
- The guidance and research on statutory and regulatory issues affecting county road and public works departments;
- The comprehensive and in depth training for County Commissioners, County Engineers, and their staff:

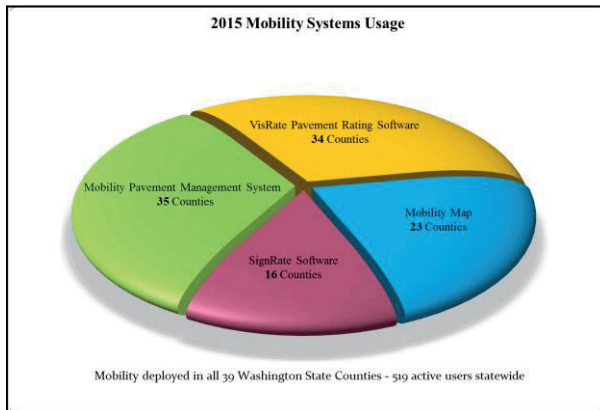
-
- The assistance in representation of county engineer interests on a variety of state-level committees and task forces;
 - The design and traffic engineering assistance to counties, as requested, including consultant selection assistance;
 - The liaison services on behalf of county engineers with various state agencies, especially the State Auditor's Office and Local Programs Division of WSDOT.

CRAB acts as a clearinghouse for information requests, questions, and the exchange of ideas. With an emphasis on good communication, Engineering Services staff has worked with state transportation officials, resource agencies personnel, and public works departments as they strive to meet the transportation needs of their counties.

Information Services

The Information Services Division at CRAB is a team of IT professionals dedicated to programs and initiatives, both at CRAB and in our counties, which protect and improve the public's investment in our transportation infrastructure. Three primary goals of the IT team are: the continued smooth and efficient operation of this agency; ensuring that Washington's counties continue to effectively apply current and emerging technology; and assisting our counties in their compliance with the WAC rules of this agency. The first goal is accomplished by providing a progressive, stable and secure computing environment for agency staff. The second and third goals are accomplished by developing and providing software, training, support and consulting services specific to the needs of county road departments in Washington State. CRAB IT products and systems leverage latest technologies such as virtualization, cloud computing, remote desktop services, web services and text-to-speech to enhance the computing experience of the staff of this agency and our counties. In 2015 the Information Services team again made significant, unique and creative contributions to the initiatives of CRAB staff and to the design and management efforts of Washington counties. The following paragraphs illustrate some of the benefits and efficiencies provided by CRAB Information Services this past year.

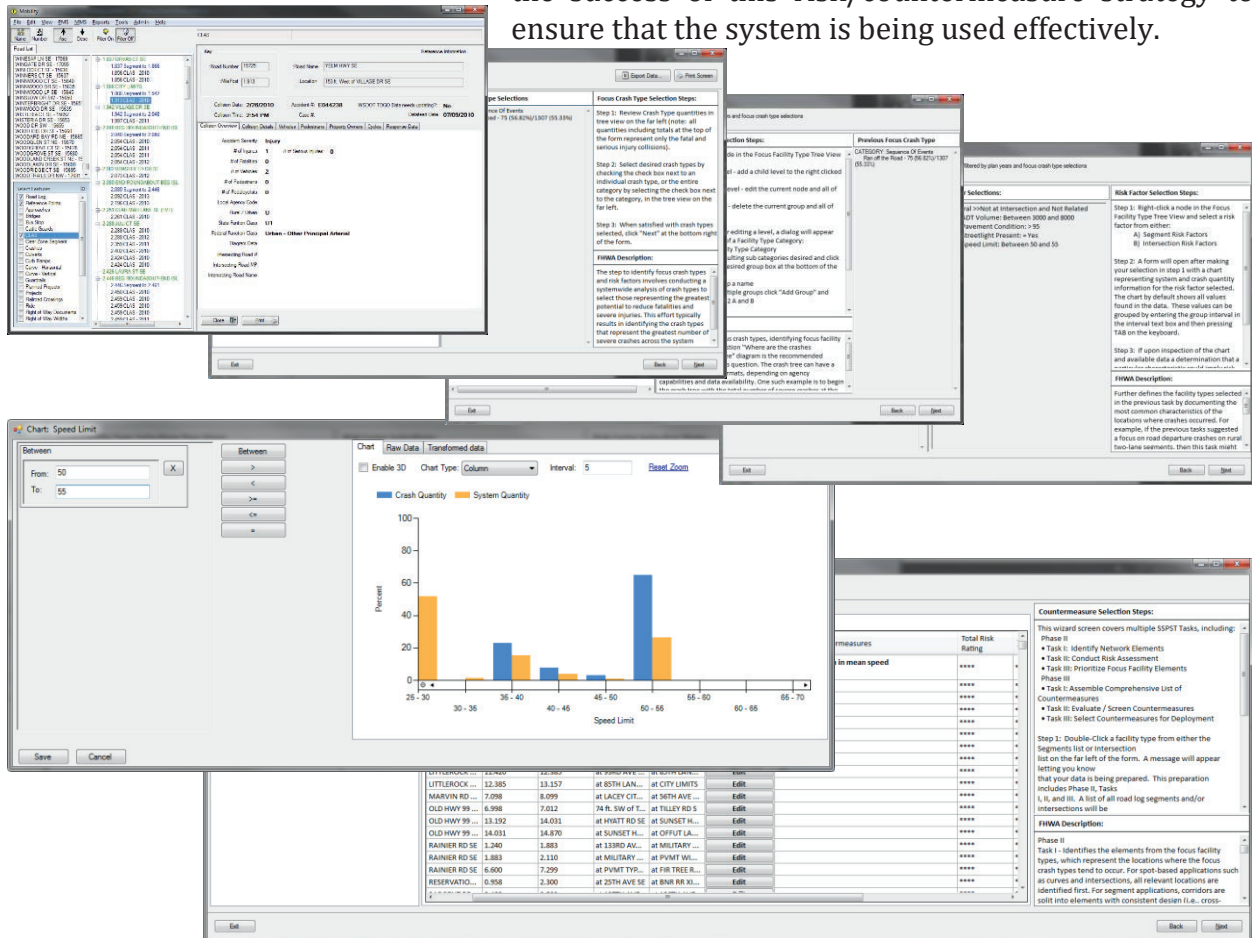
The flagship product developed by CRAB Information Services is **Mobility**®, a comprehensive transportation asset management system which enhances a county's ability to make quality decisions through consistent, equitable, and defensible management plans and operations. The systematic application of sound business logic, embedded in **Mobility**, ensures accountability in county road departments and assists county personnel in their



compliance with reporting requirements to CRAB, the State Legislature, and federal entities. **Mobility** is a prime example of the economy-of-scale for which CRAB is well known, in that it saves the counties from individually spending millions of dollars on management systems that are neither as responsive to, nor as specific to their needs as **Mobility**. Beyond the twenty-plus asset modules that inventory the county road system and its pertinent features (such as signs and guardrails) **Mobility** includes expert

systems such as a Safety Management System (SMS) and a Pavement Management System (PMS).

The *Mobility* SMS was the standout innovation added to *Mobility* in 2015. The bulk of the SMS in *Mobility* is based on the Systemic Safety Project Selection Tool (SSPST) developed as a result of a research product of the FHWA and funded with the help of a grant from the Washington Traffic Safety Commission. SSPST is a leap forward in selecting safety projects. Traditionally road safety projects are selected at or near “black spots”, or areas where severe or fatal collisions have occurred, a decidedly reactionary method. Recent research has shown that devoting a good share of safety money to proactive low-cost methods can help to effectively reduce and eliminate severe and fatal collisions. SSPST is a system wide, or systemic, evaluation of inherent risks in a road system for which appropriate countermeasures can be determined. For example, run off the road collisions are common on rural two lane roads. SSPST enables the evaluation of the risks of curves, fixed objects, side slopes and more to identify countermeasures as simple as low-cost rumble strips that would be an effective deterrent to collisions in specific locations. SSPST will also evaluate the success of this risk/countermeasure strategy to ensure that the system is being used effectively.

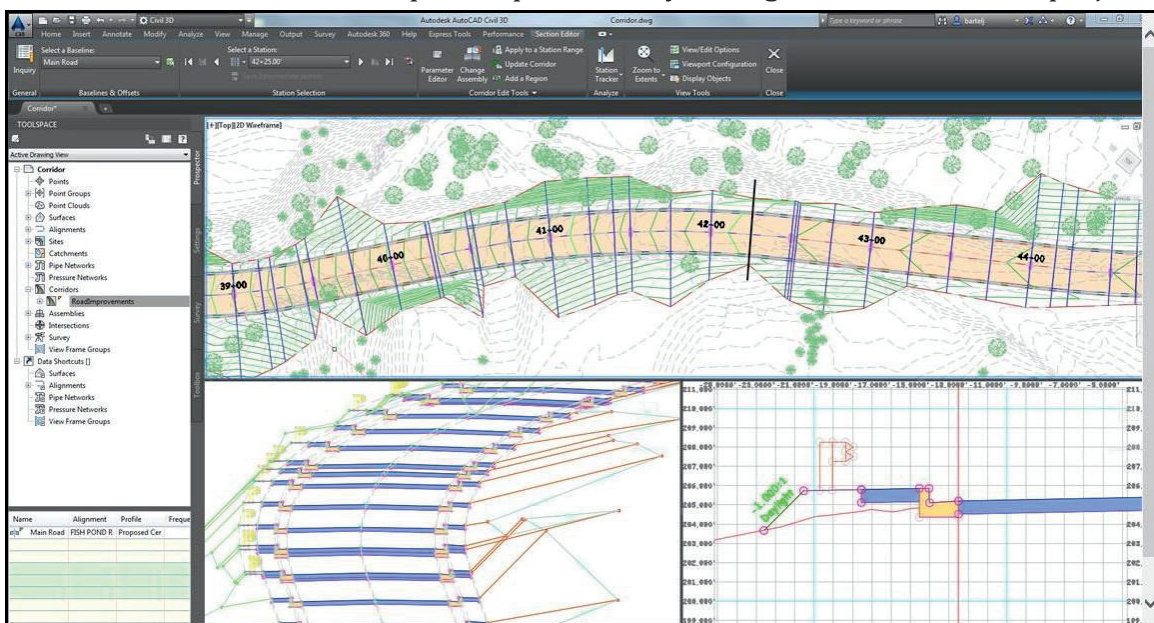


As the graphic here suggests, the SSPST process is a very complex statistical analysis tool involving numerous crash types, facility characteristics, risk factors, countermeasures, network assessments and prioritization. With the help of traffic engineering professionals from 15 counties, this agency and others, CRAB IT staff were able to make SSPST fairly

straight forward and intuitive. The SSPST in *Mobility* gives Washington counties a decided edge in safety management and in qualifying for safety funding.

The *Mobility* PMS is a methodology for maintaining road surfaces by systematically analyzing pavement life cycles and pavement ratings to determine the correct timing and type of pavement preservation that will be most cost effective and prevent major road deterioration. The CRAB Pavement Management System includes an application named *VisRate* which enables counties to easily collect road condition data in the field and rapidly share it with office staff for reporting and analysis in the *Mobility* PMS. It is not unusual for *VisRate* to reduce the time to collect a year's worth of pavement ratings from all summer down to as little as a few weeks.

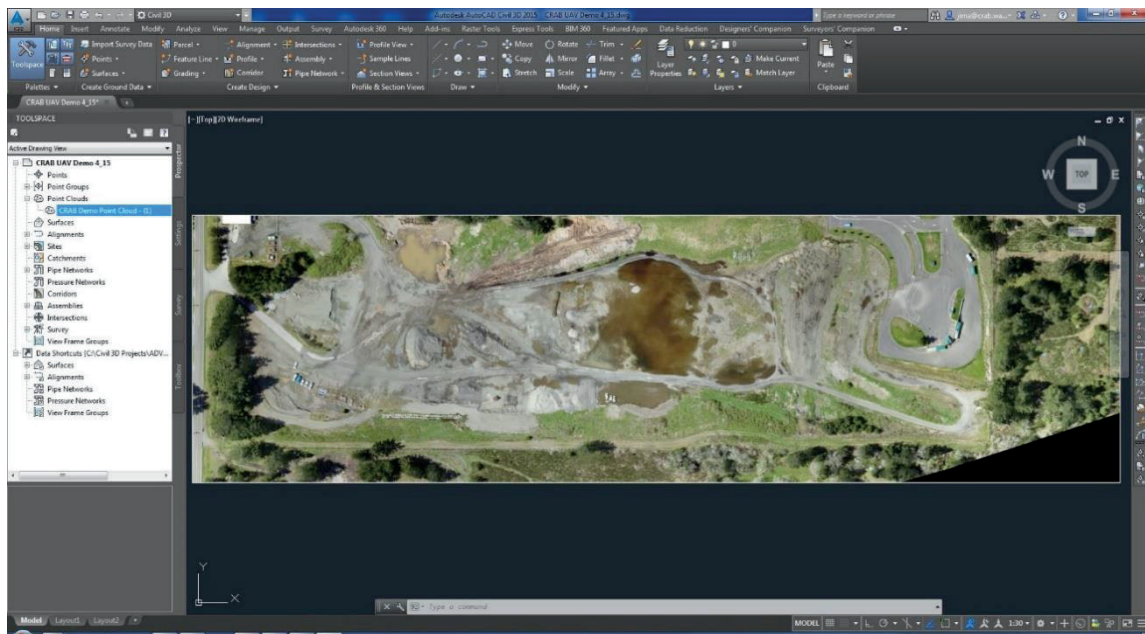
The CRAB Design Systems Program has consistently provided Washington county personnel with state-of-the-art engineering road design software including support and training since 1985. This program has enabled county design staff to effectively collect, develop and manipulate the geometric information necessary for site design and construction planning which has contained costs and improved productivity throughout the life of road projects. In



addition to improved design and project savings, the savings to counties for user licensing, support, and training in design software by CRAB is hundreds of thousands of dollars each year. Because of CRAB support, our county designers maintain a sophistication and competence which enables multiple forms of analysis of surface models in 3D that allows a more realistic geometric representation of the project area, volumes involved and quantities to be moved, and promotes a better design. Training classes are continuously provided to county design staff at CRAB or in their county for a savings of at least \$1295 per student. Other savings and increased competence are accomplished through a county's use of the Design Systems Program website, the Design Forum, and the annual Road Design Conference.

A critical initiative of the Design Systems Program in 2015 was the beginning of an investigation into the use of Unmanned Aerial Vehicles (UAVs) by the road design staff in Washington counties. A UAV, sometimes called a drone, is a type of aircraft which has no onboard crew or passengers and includes both remotely piloted and autonomous aerial vehicles. Previously UAVs were only known to be used by the military and hobbyists but today they are being adapted to many other high-tech uses such as engineering design.

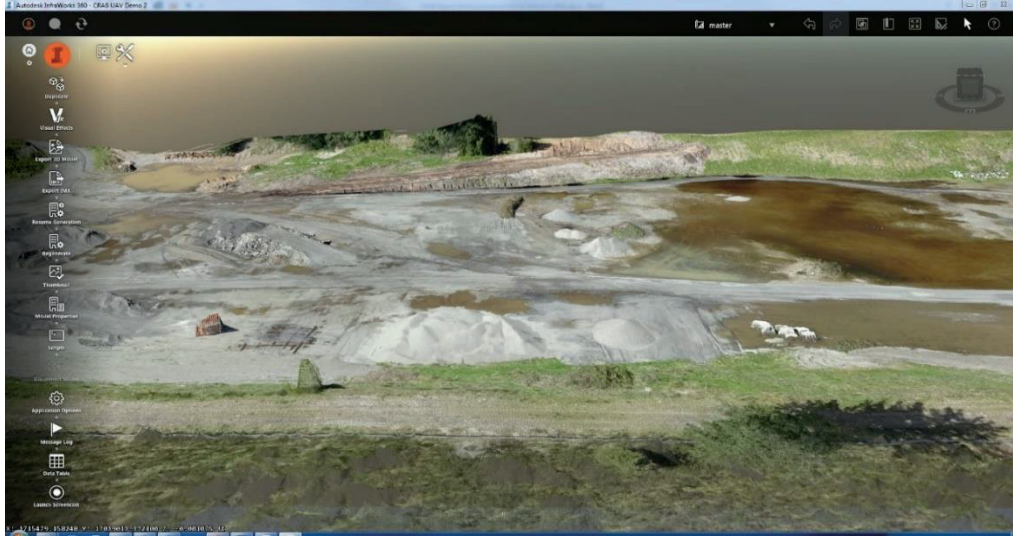
CRAB has a history of evaluating emerging technology such as GPS, data collectors, handheld devices and LiDAR for their possible use by county engineering or survey departments rather than having each county make that costly evaluation individually. CRAB staff researched both FAA requirements and current developments of UAVs and found numerous applications of value to survey and engineering such as mapping, photogrammetry (including the generation of ortho-images, mosaics, and digital terrain models), preliminary site mapping, land management, remote sensing and much more. The potential of these systems seems almost unlimited. CRAB staff then evaluated the systems that were appropriate to county use and negotiated a reduced price purchase of a UAV for “educational” demonstration to counties.



CRAB is now flying the UAV, demonstrating it to county staff, importing photos and data into design software and holding training classes on its use. The above screenshot which appears to display a single aerial photo is in reality thousands of photos stitched together representing millions of points with accuracy comparable to precision GPS.

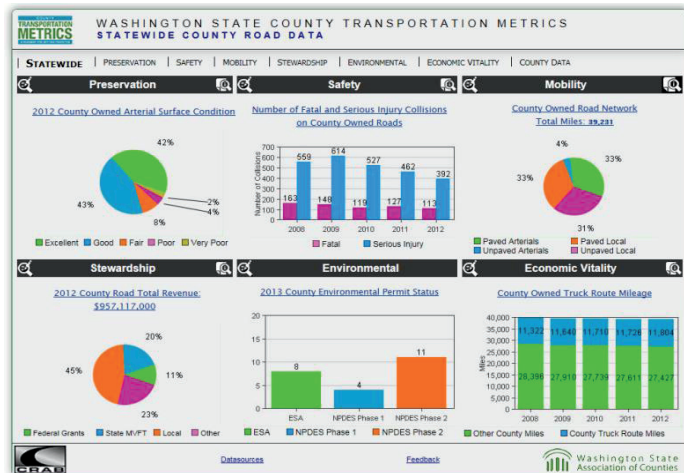
UAV data can be seamlessly shared with a variety of design software which allows engineers to take advantage of accelerated design processes that produce data-rich 3D models for high-end visualizations.

While the UAV will not replace traditional surveying or engineering, UAV photogrammetry is unmatched in terms of efficiency for surfaces above a few acres, providing equivalent accuracy and being faster, safer and less expensive. In addition, using the UAV surveying method not only produces a digital terrain model but also a geo-referenced and highly



detailed ortho-mosaic important to project site documentation and visualization. Given favorable FAA conditions this technology looks to play a large part in the survey, mapping and design efforts of many Washington counties.

The CRAB website effectively responds to citizens and government, informing and educating users in the initiatives of CRAB and the Counties with content such as the CTM Dashboard shown here. County personnel can find assistance for the effective operation and management of their road systems and assistance in compliance with law and regulation, along with schedules and forms necessary to that compliance. Citizens can find great detail on their county's road system, its road department, that department's funding, operations, construction and maintenance. Legislators can observe the breadth and detail of the accountability ensured by CRAB, as well as the good road work being done in their district. Please take time to visit this site at <http://www.crab.wa.gov> where you can learn much more about CRAB and the counties. After touring the general site, you may want to spend some time perusing a wealth of active road project information under the **Grant Programs** tab or the massive amount of information under the **Reference** tab in the **Library** section.



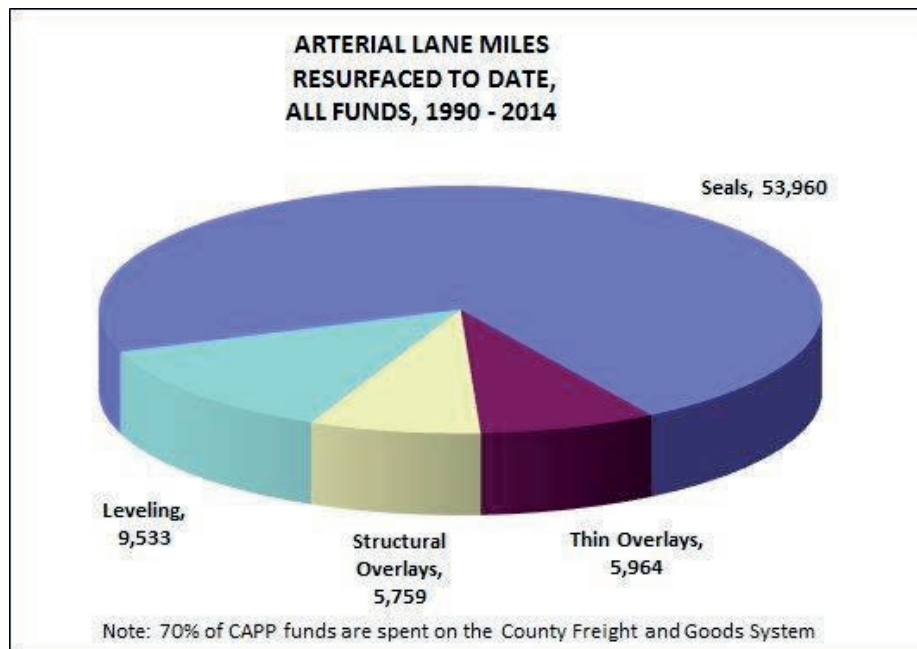
Grant Programs

County Arterial Preservation Program (CAPP) and Rural Arterial Program (RAP)

In 2014, the County Road Administration Board managed a total of \$39.5 million in road and bridge funding given to Washington State counties to assist their efforts to maintain, rebuild and enhance their transportation systems statewide. The funds were delivered to the counties via the RAP program (\$19 Million), which is a competitive process that encourages counties to address the greatest overall deficiencies on the highest priority arterial roads, and the CAPP program, which funds needed arterial pavement preservation and helps counties to keep long term surface rehabilitation costs at a minimum.

County Arterial Preservation Program (CAPP)

The Washington State counties used three statewide funding sources within the CAPP to address their pavement preservation needs in 2014: The County Arterial Preservation Account (CAPA), the Transportation Partnership Account (TPA) and the Highway Safety Account (HSA). While the CAPA and TPA funds are generated through statewide fuel tax receipts, the HSA is license fees that are collected by the Department of Licensing. The total expended in 2014 by counties from these three funding sources was \$20.9 million (see table H). Adding county funds, the total expended on pavement preservation was \$65.3 million. These funds all work together to reduce the need for higher cost pavement reconstruction in the future, statewide. The chart below shows the total miles of resurfacing work the counties have accomplished since the program began in 1990.



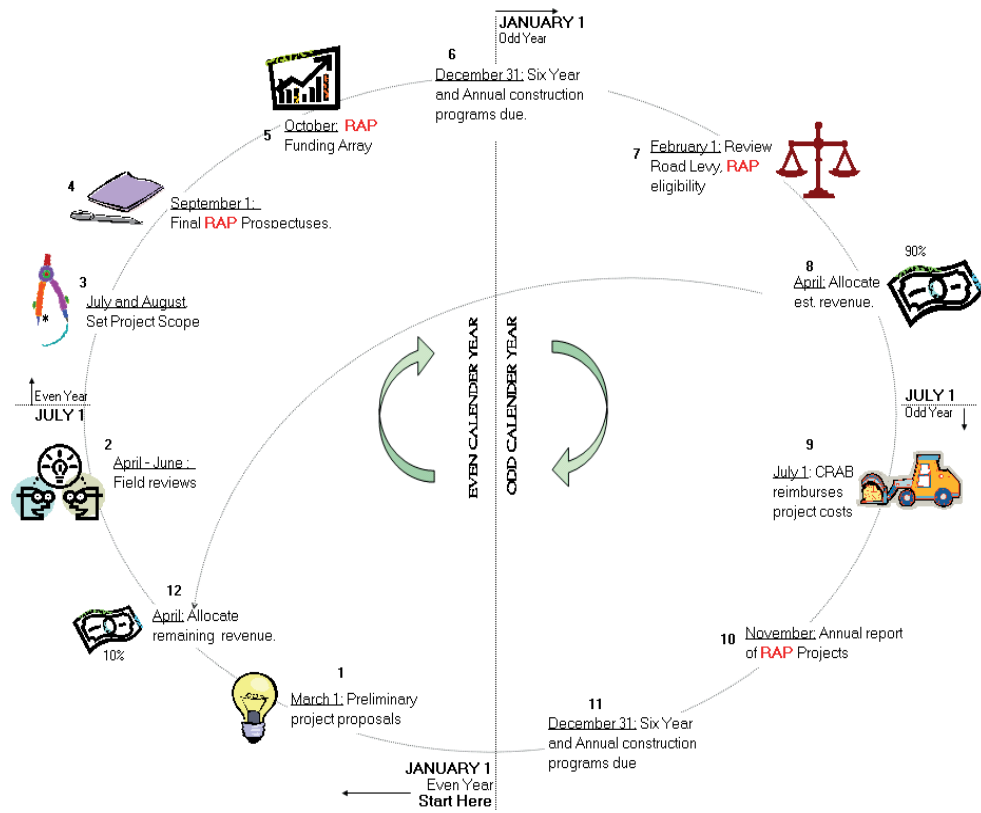
Rural Arterial Program (RAP)

The 12,400 miles of county rural arterial roads in Washington State serve as vital links for commodities making their way to markets, communities, and ports, and as commuter routes to and from work. They also are often the final point of access to recreation areas. These impacts of growth and freight haul expose specific roads that have become too weak, narrow, steep and crooked to be safe. Fortunately, the RAP addresses these same width, alignment, safety and structural deficiencies. The counties used \$19 million of these funds in 2014 (see table C) to fix these conditions, improving haul and traffic capacity and safety.

RURAL ARTERIAL PROGRAM EXPENDITURES BY COUNTY AND LEGISLATIVE DISTRICT IN 2014

COUNTY	LEG DIST	RATA \$'S RECEIVED	COUNTY	LEG DIST	RATA \$'S RECEIVED
Adams	09	2,076,351	Lincoln	07	400,623
Asotin	09	64,501	Mason	35	40,427
Benton	16	1,182,132	Okanogan	07	8,149
Chelan	04	62,362	Okanogan	12	1,459,875
Clallam	24	298,711	Pend Oreille	07	2,254
Clark	18	84,903	San Juan	40	52,472
Columbia	16	1,237,187	Skagit	40	4,490
Cowlitz	19	779,259	Skamania	05	59,820
Douglas	12	449,434	Skamania	15	18,963
Ferry	07	1,171,897	Snohomish	39	574,250
Franklin	09	184,510	Stevens	07	1,723,787
Garfield	09	56,451	Thurston	20	482,819
Grant	13	1,304,604	Thurston	22	700,000
Grays Harbor	19	14,934	Thurston	35	52,000
Island	10	62,120	Wahkiakum	19	855,813
Jefferson	24	173,760	Walla Walla	16	103,890
King	45	18,579	Whatcom	42	1,304,915
Kittitas	13	14,710	Whitman	09	629,911
Klickitat	15	42,882	Yakima	14	171,368
Lewis	18	837,950			
Lewis	20	225,824			
			TOTAL		18,988,887

RURAL ARTERIAL PROGRAM BIENNIUM CYCLE



History of RATA Funds per County:

<u>REGION</u> <u>COUNTY</u>	<u>TOTAL RATA</u> <u>APPROVED</u>	<u>TOTAL RATA</u> <u>SPENT</u>	<u>%</u> <u>SPENT</u>
NE Adams	20,378,084	17,718,775	87%
NE Chelan	24,887,900	19,462,671	78%
NE Douglas	25,709,635	21,575,512	84%
NE Ferry	21,123,530	14,854,287	70%
NE Grant	29,261,768	24,464,856	84%
NE Lincoln	26,265,720	21,822,256	83%
NE Okanogan	18,877,082	15,141,896	80%
NE Pend Oreille	16,027,378	12,783,120	80%
NE Spokane	31,466,191	21,076,768	67%
NE Stevens	27,838,885	23,897,078	86%
NE Whitman	24,589,612	20,980,063	85%
NE REGION TOTALS	\$ 266,425,785	\$ 213,777,282	
NW Clallam	10,145,085	8,555,397	84%
NW Island	15,067,621	11,061,928	73%
NW Jefferson	6,499,840	4,485,256	69%
NW Kitsap	11,505,520	8,171,366	71%
NW San Juan	8,332,508	6,115,732	73%
NW Skagit	9,338,733	5,997,484	64%
NW Whatcom	11,932,182	11,872,001	99%
NW REGION TOTALS	\$ 72,821,489	\$ 56,259,166	
PS King	15,334,725	10,300,483	67%
PS Pierce	15,302,266	10,073,350	66%
PS Snohomish	13,710,591	11,498,167	84%
PS REGION TOTALS	\$ 44,347,582	\$ 31,872,000	
SE Asotin	14,128,911	9,759,913	69%
SE Benton	19,022,553	14,466,568	76%
SE Columbia	14,613,271	9,046,645	62%
SE Franklin	12,728,886	12,429,370	98%
SE Garfield	13,764,743	11,904,210	86%
SE Kittitas	16,198,270	13,339,876	82%
SE Klickitat	20,153,853	16,630,531	83%
SE Walla Walla	17,153,590	15,228,769	89%
SE Yakima	22,887,791	18,259,937	80%
SE REGION TOTALS	\$ 150,651,868	\$ 121,065,818	
SW Clark	11,713,718	9,343,308	80%
SW Cowlitz	13,478,406	11,273,901	84%
SW Grays Harbor	14,623,668	13,343,661	91%
SW Lewis	11,140,905	7,726,386	69%
SW Mason	11,880,425	8,925,784	75%
SW Pacific	11,335,933	8,733,017	77%
SW Skamania	2,631,468	2,369,073	90%
SW Thurston	15,129,268	12,157,055	80%
SW Wahkiakum	7,291,126	4,621,931	63%
SW REGION TOTALS	\$ 99,224,917	\$ 78,494,117	
STATEWIDE TOTAL	\$ 633,471,641	\$ 501,468,383	79%

2014/2015 Grant Program Projects

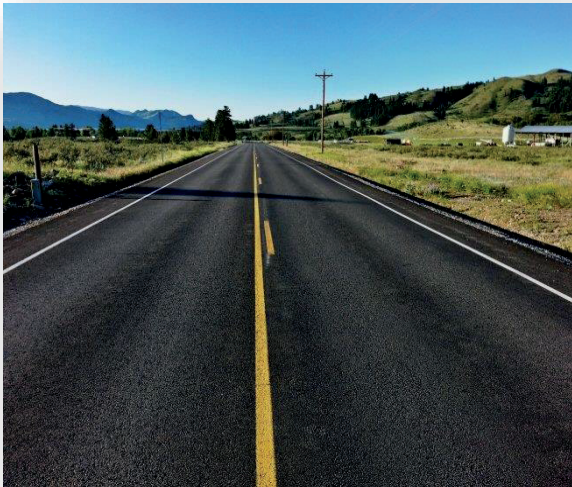
Okanogan County Rebuilds Deficient Twin Lakes Road



Twin Lakes Road provides access to many homes, Sun Mountain Resort, and the only public school in the Methow Valley.



The old road was deteriorated, narrow, and had insufficient drainage, all of which were remedied by this project. The county solved the structural issues by first removing all deficient base materials, then rebuilding with good material.



Horizontal geometry was optimized, the structural section was reconstructed, drainage features were upgraded, and shoulders and guardrail were added for safety.

The result has been a much safer road with greater ability to handle current traffic and freight.

Contractor: HLT Construction, Inc.
RAP Funds: \$1,544,000
County Funds: \$127,337
Federal Funds: \$256,822

Whatcom County Quickly Resurfaces Hannegan Road with RAP Funds



Hannegan Road is a high volume rural major collector that functions primarily as a north/south arterial for Whatcom County. This pavement rehabilitation project addressed structural conditions such as severe cracking, raveling, rutting and settlement throughout the limits of the project on this high volume freight and goods roadway.



Prior to overlay, the existing surface was milled in order to maintain the original road elevation in flood plain areas.

Using 2R program RATA funds, over 4 miles of Hannegan Road was resurfaced with Hot Mix Asphalt - ½ inch thick. In addition, severe pavement settlement at two bridge approaches was corrected using light weight fill. Public feedback was positive.

Contractor: Granite Construction Co.

RAP Funds: \$1,439,819

County Funds: \$159,980

Deficient Gardena Bridge replaced by Walla Walla County



Touchet Gardena Road is a major collector and the main route into the southwest corner of Walla Walla County and Oregon. The road serves a large agricultural area and is a very important farm-to-market road. It is also a Touchet School Bus route. Without the bridge there would be a 12-mile detour. The road was narrow with a structurally deficient, posted bridge which was considered scour critical. Two fatalities near the bridge had also occurred in previous years.



New girders being placed on the new bridge abutments



The old two-span concrete bridge was replaced with a single span bridge and the road widened. The town of Touchet and local residents are very appreciative as safety is much improved, costs to move agricultural goods have decreased, and the new bridge is fully capable to bear the loads of heavy freight.

Contractor:	Apollo, Inc.
RAP Funds:	\$490,815
Federal Funds:	\$2,190,775
County Funds:	\$470,786

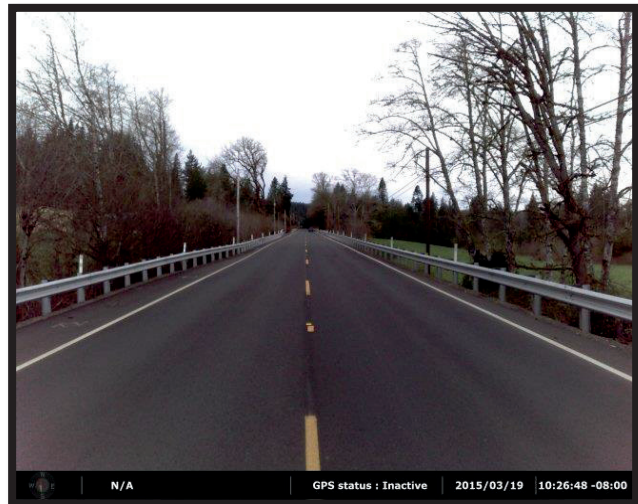
Cowlitz County uses Enhanced 2R Approach to Provide Safety on West Side Highway



West Side Highway is Cowlitz County's main north-south collector west of I-5 and the Cowlitz River, which connects to SR 411 in Castle Rock and SR 506 in Lewis County. SR 411 continues south to State Route 432 and I-5 in south Longview. West Side Highway is a significant truck route, classified as T3 (>300,000 tons annually). Wheel path ruts ran the entire length of the project causing additional structural deterioration of the pavement due to poor roadway drainage with storm water ponding in the ruts.

The gravel shoulders were minimal or non-existent. Errant vehicles had little room to avoid oncoming vehicles that crossed the center stripe, and would often run off the road. Numerous accidents resulted along this section of West Side Highway.

The existing pavement was ground to remove the ruts and overlaid with hot mix asphalt, restoring the roadway's structural integrity. Restoring the original crown improved the roadway drainage and safety features along the corridor. In addition, 6-foot wide paved shoulders were constructed on both sides of the road where feasible (avoiding impacts to landslides, creeks, wetlands, and private property). Guardrail was installed where warranted.



During the work, the construction staff and County inspectors received positive feedback from much of the traveling public. They were very happy to see that the ruts were gone and the road widened, making the drive safer and more comfortable.

Contractors:	Advanced Excavating Specialists & Nutter Corporation
RAP Funds:	\$600,000
County Funds:	\$1,951,879

Grays Harbor County uses RAP Funds to Address Sharp Curves and Safety on Wishkah Road

Wishkah Road is a major collector that plays an important role in moving timber from the forests in north Grays Harbor County to wood products mills in the area and to the Port of Grays Harbor. The route also serves as a detour around Highway 101 for traffic seeking access to the north end of the county and Olympic National Park recreation areas.



The project section had two substandard horizontal curves and vertical curves. Residents in the project area also endured limited sight distance when entering the road from their private driveways. The RAP project realigned Wishkah Road, bringing it up to horizontal safety standards in the project area. Sight distances were also greatly improved at the locations of residential access.

Contractor:	Quigg Bros., Inc.
RAP Funds:	\$1,080,000
County Funds:	\$511,520

Lincoln County Rehabilitates Old Coulee Road with RAP Funding



This portion of the Old Coulee road was part of the state highway system prior to SR 174 being constructed. It was the main route between Wilbur and Coulee Dam. It currently functions as a farm-to-market route and a collector between Almira and Coulee Dam. The failing roadway had deteriorated to the point that a rehabilitation project was needed. The subgrade was failing, the existing pavement was spalling and cracking, and the shoulders were failing. The ride was extremely bumpy, forcing drivers to slow down.

The improvement project was constructed by county forces over a two-year period. The first year consisted of replacing and/or upgrading the drainage facilities, safety enhancing the subgrade by adding 3:1 side slopes, placing the base course and adding a thin layer of top course rock through the winter. The following year, the rest of the crushed rock was placed and a bituminous surface treatment was applied. The traveling public and local residents have enjoyed the new roadway improvements.



RAP Funds: \$1,010,198
County Funds: \$112,244

Snohomish County uses RAP Funds to Address One-Lane Jordan Road Bridge and its Approaches

Bridge #42 was originally built in 1914, over Jim Creek on the Jordan Road, approximately 3.5 miles southeast of Arlington, between the City of Arlington and the City of Granite Falls. This old bridge was too narrow for modern automobiles or two-way traffic.



These conditions made the bridge a low-rated 'functionally obsolete' with severe horizontal and vertical sight distance issues on both the bridge and the approaches. The bridge had been restricted to one lane and stop controlled since 1999.



Travel along the road was improved with the construction of a new, two-lane bridge and new road alignment, which corrected sight distance challenges. County Forces performed environmental mitigations with new plantings along the site, at an additional cost of \$100,000.

Contractor: Interwest Construction
RATA Funds: \$3,001,420
County Funds: \$947,991

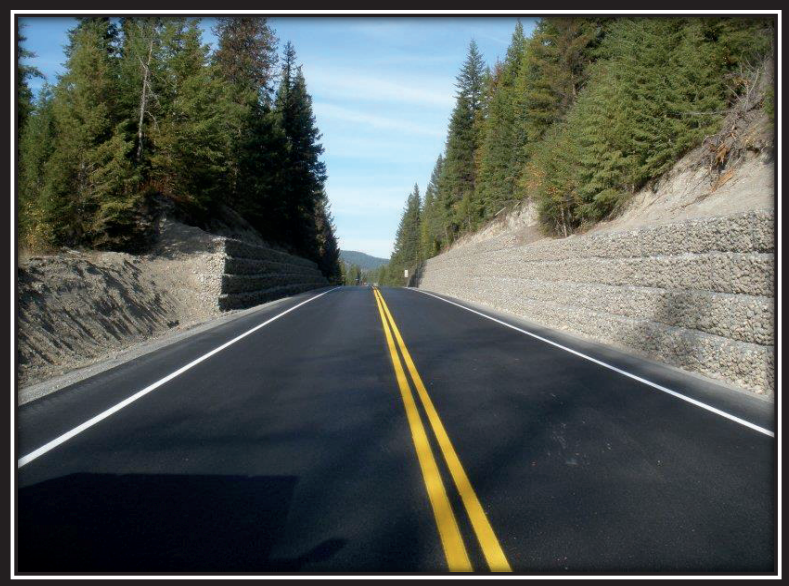
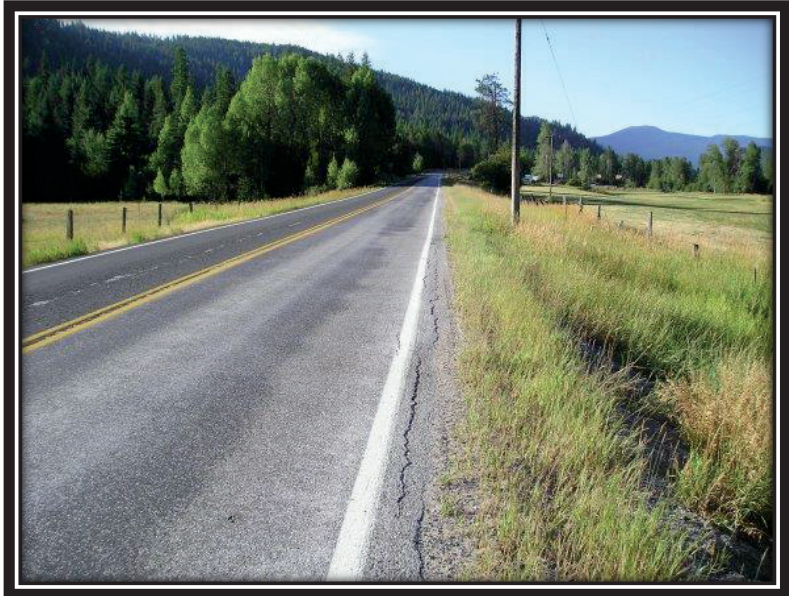


Aladdin Road in Stevens County Gains Structural and Safety Enhancements with RAP Funding

Aladdin Road connects the northeast section of Stevens County to the City of Colville and southern Stevens County. It is classified as a Major Collector roadway and has experienced continually increasing traffic volumes. The Freight and Good classification is T-3 (minimum 300,000 tons annually).

The surface and subsurface of this section of Aladdin Road was very poor as evident in extensive alligator cracking, shoulder sags and widespread patching. The road was narrow as well. The RAP funded project widened the road from 24 feet to 28 feet. A sharp vertical crest curve was improved to current design standards. Cement treated base was mixed into the subgrade and several "soft spots" were fixed. Guardrail was added where needed and signing was upgraded.

Contractor: Knife River, Inc.
RAP Funds: \$1,694,700
County Funds: \$563,550



Whitman County Rebuilds Heavily Travelled Colfax Airport Road



Colfax Airport Road is the main route connecting the Colfax Airport to SR 26 and the South side of Colfax. This road is therefore used as a bypass of Colfax by a large portion of travelers making the trip from west of Colfax to community's south of Colfax and vice versa. The road supports the commerce of the airport and surrounding businesses, and is a connection to Almota Road and south to the Snake River and Almota.

Existing structure and alignment conditions warranted that the route be improved to safety, geometric, and structural standards. A reconstruction project was bid, awarded, and constructed with the needed improvements. The result has been reduced maintenance costs and many positive comments from local road users.

The new roadway provides safety and structural support for continued heavy traffic.



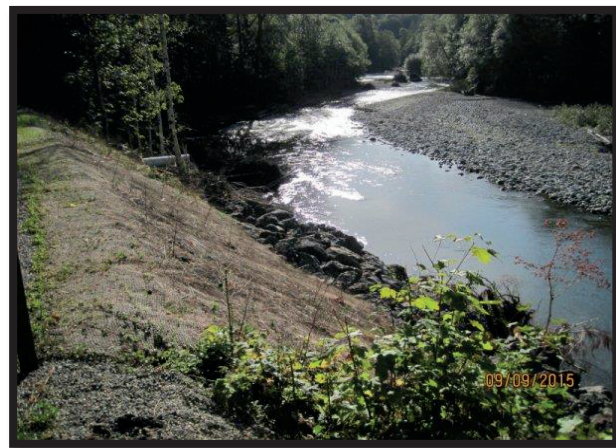
Contractor: M.A. DeAtley Const., Inc.
RAP Funds: \$2,902,242
Federal Funds: \$310,846

Jefferson County's Dosewallips Road gets Emergency RAP Repair Assistance

Dosewallips Road is a rural minor collector that provides access to residents, businesses, and Olympic National Forest and National Park. On December 10-11, 2014, high flows in the Dosewallips River partially washed-out the Dosewallips Road at MP 3.15-3.30 reducing the road to a single lane. Jefferson County declared an emergency on December 11, 2014.



The emergency repair work consisted of debris removal, temporary traffic control and traffic bypass, placement of heavy loose riprap to rebuild slide areas, repair of a damaged culvert, erosion control, replanting and repaving.



Emergency RATA funding in the amount of \$93,600 was approved by the CRABoard at its April 16, 2015 meeting. These funds, along with local funding, covered the cost to restore the road to its original condition with better drainage and additional rip-rap reinforcement.

Contractor:	Bruch & Bruch Construction, Inc.
RAP Funds:	\$93,600
County Funds:	\$18,369

Long Overdue Replacement of Wahkiakum Ferry Comes Through RAP and Federal Funds

The first ferry was brought to Puget Island in Wahkiakum County in June 1925. By 1960, the County taxpayers voted to take over the ferry service when the private enterprise ceased operations.



By 1970, the Washington State Legislature determined a State interest in the interstate crossing and began to share in some of the cost of operation of the ferry service. The County owns and maintains the ferry ramp bridge at the end of SR 409, and owns and maintains the ferry, which is a vital interstate transportation connection on the lower Columbia River. The previous ferry – ‘Wahkiakum’, constructed in the early 1960's, began to suffer reduced



thickness of the hull's steel plating. Limited size capacity meant that during peak travel periods, some vehicles had to wait for a second run. The boat was not ADA compliant and presented limitations for some vehicle types needing cross-state access when local State highways were closed and traffic was detoured to the ferry route. The new ferry, ‘Oscar B’, nearly doubles the vehicle capacity of the Wahkiakum, is ADA compliant, and meets modern Coast Guard standards of construction. It can handle all legal

highway loads. The public is pleased with the appearance of the new ferry, thankful that they can all fit on the deck, and can expect to cross on the next ferry departure.

The ferry channel and berthing area were re-aligned and dredged via an agreement with the US Army Corps of Engineers. Modifications to the landing pile configuration to accommodate the larger vessel were made, and a source of potable water to the vessel was added under a separate contract. Improvements to the ramp at Westport, Oregon, were made by partners in Clatsop County to accommodate the larger vessel.

Contractor:	Ice Floe, LLC, Nichols Bros.
RAP funds:	\$1,250,000
Federal funds:	\$4,457,855

Tables

A: County Bridge Data	28
County Bridge Condition at a Glance.....	29
B: Actual County Road Related Revenues.....	30
C: Actual County Road Related Expenditures	31
D: Anticipated County Road Fund Revenues.....	32
E: Anticipated County Road Fund Expenditures.....	33
F: County Road Levy Summary	34
G: County Road Mileage.....	35
H: County Arterial Preservation Program	36
I: County Freight and Goods System	37
J: County Forces Summary	38

Table A

COUNTY BRIDGE DATA - NOVEMBER 2015

Washington State Bridge Inventory System

Bridges 20 Feet or Greater in Length on Federal Aid (FAR) and Non Federal Aid (NFAR) Routes
Posting Consideration Based on HS-20 Design Load, less than 28 Tons at Operating Rating

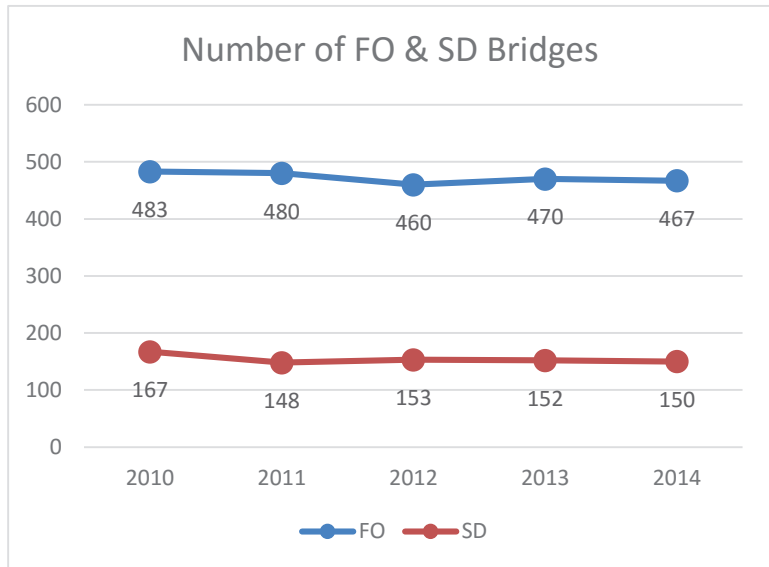
COUNTY	County Owned Bridges	Bridges Posted or May Consider Posting				Bridges With Posting Not Required				Deficient Bridges**
		FAR	Square Feet	NFAR	Square Feet	FAR	Square Feet	NFAR	Square Feet	
ADAMS	113	1	4,060	4	5,013	67	123,302	41	36,006	16
ASOTIN	18	0	0	0	0	13	129,858	5	9,814	2
BENTON	50	2	1,853	1	1,484	22	68,279	25	25,349	8
CHELAN	50	2	14,584	0	0	27	111,774	21	46,252	12
CLALLAM	29	0	0	3	7,436	11	64,202	15	58,290	9
CLARK	54	0	0	2	2,950	24	86,990	28	47,292	16
COLUMBIA	62	3	5,762	2	2,059	30	52,749	27	39,299	9
COWLITZ	62	2	7,889	5	24,688	26	117,522	29	59,350	13
DOUGLAS	20	2	4,520	0	0	12	47,953	6	4,113	0
FERRY	22	0	0	3	4,835	7	10,292	13	18,534	7
FRANKLIN	85	1	794	2	1,404	40	69,300	42	57,024	6
GARFIELD	32	1	1,695	0	0	19	17,117	12	12,538	5
GRANT	193	2	1,597	6	7,817	100	244,617	85	115,155	11
GRAYS HARBOR	160	8	34,102	2	2,424	76	351,053	74	140,495	24
ISLAND	0	0	0	0	0	0	0	0	0	0
JEFFERSON	31	1	1,078	0	0	11	18,075	19	59,810	4
KING	129	5	16,757	7	14,569	75	428,932	42	102,231	52
KITSAP	33	0	0	2	2,793	19	49,283	12	16,056	3
KITTITAS	111	1	864	1	627	27	78,369	82	136,745	6
KLICKITAT	57	0	0	6	9,185	14	41,221	37	74,070	14
LEWIS	196	4	4,356	2	2,324	66	216,527	124	217,076	26
LINCOLN	122	2	2,441	7	4,283	42	62,798	71	98,935	14
MASON	52	0	0	3	45,288	10	41,428	39	61,594	13
OKANOGAN	50	0	0	2	2,448	12	50,376	36	65,090	6
PACIFIC	60	4	9,876	14	37,129	5	17,808	37	93,479	13
PEND OREILLE	27	2	61,539	1	462	12	44,651	12	12,600	6
PIERCE	101	6	54,967	0	0	62	239,288	33	50,112	42
SAN JUAN	4	0	0	1	1,274	1	600	2	1,682	2
SKAGIT	106	1	28,368	1	1,352	43	171,255	61	121,425	22
SKAMANIA	25	0	0	1	1,980	5	30,218	19	55,471	6
SNOHOMISH	164	8	11,891	6	10,160	89	480,662	61	174,017	45
SPOKANE	102	5	7,651	6	6,267	47	223,072	44	105,828	23
STEVENS	49	1	4,685	0	0	10	30,479	38	67,165	7
THURSTON	95	0	0	2	1,596	51	201,118	42	96,862	20
WAHKIAKUM	20	0	0	1	2,419	12	35,789	7	12,494	1
WALLA WALLA	103	2	3,270	0	0	38	119,495	63	121,291	10
WHATCOM	135	2	8,400	12	22,406	33	118,044	88	130,671	29
WHITMAN	250	8	17,685	9	7,448	116	223,224	117	149,291	56
YAKIMA	305	5	22,748	7	8,640	161	396,390	132	207,706	45
TOTAL	3,277	81	333,432	121	242,760	1,435	4,814,110	1,641	2,901,212	603
Total Replacement Cost* (\$ Million):			\$217		\$158		\$3,129		\$1,886	

*At \$650 per Square Foot

** Deficient Bridges are listed as Structurally Deficient (SD) or Functionally Obsolete (FO).

County Bridge Condition at a Glance

All County NBI Bridges as of December 11 th , 2015		
Year	Deficiency Code	Count
2010	FO	483
2010	SD	167
2011	FO	480
2011	SD	148
2012	FO	460
2012	SD	153
2013	FO	470
2013	SD	152
2014	FO	467
2014	SD	150



All County NBI Bridges as of December 11 th , 2015	
Year	Average Sufficiency Rating
2010	80.81
2011	81.25
2012	81.79
2013	81.96
2014	81.92

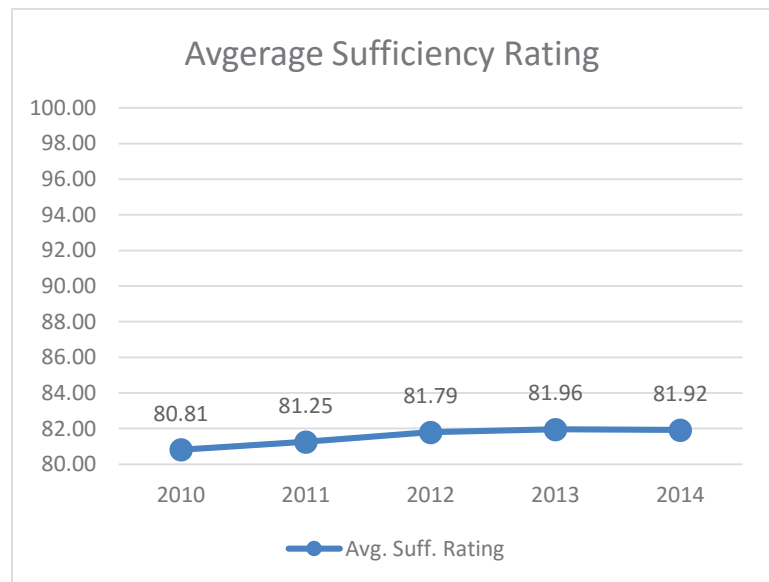


Table B

ACTUAL COUNTY ROAD RELATED REVENUES

2014

(thousands of dollars)

COUNTY	MOTOR VEHICLE FUEL TAX					TAXES				MISC				TOTAL	
	COUNTY		TIB	RAP	CAPP	MVFT	PROP-ERTY	FOREST HARVEST	OTHER TAXES	TOTAL TAXES	FED GRANTS	FED LANDS	REIMB		OTHER
	REGULAR	TOTAL													
ADAMS	4,049	0	2,044	861	6,954	1,535	0	2	1,537	1,941	0	0	73	10,505	
ASOTIN	1,600	0	125	161	1,886	1,007	2	3	1,012	1,465	37	99	19	4,518	
BENTON	3,086	0	1,153	471	4,710	5,404	0	79	5,483	679	0	295	972	12,139	
CHELAN	2,190	289	62	381	2,922	7,105	83	52	7,240	1,306	737	0	663	12,868	
CLALLAM	1,861	0	299	208	2,368	6,846	0	13	6,859	4,472	428	0	2,690	16,817	
CLARK	6,396	1,457	124	740	8,717	31,931	0	14	31,945	5,979	2	0	15,487	62,130	
COLUMBIA	1,437	0	0	226	1,663	896	0	4	900	676	0	0	1,421	4,660	
COWLITZ	2,209	0	778	332	3,319	8,685	805	87	9,577	1,989	94	0	1,142	16,121	
DOUGLAS	5,622	305	449	469	6,845	4,806	0	35	4,841	321	0	0	1,246	13,253	
FERRY	1,708	0	1,172	282	3,162	801	47	1	849	924	488	0	1,500	6,923	
FRANKLIN	2,865	0	184	553	3,602	3,102	0	34	3,136	1,542	0	0	830	9,110	
GARFIELD	1,276	0	56	196	1,528	678	0	4	682	527	60	0	62	2,859	
GRANT	6,279	0	1,305	1,319	8,903	8,565	0	1,870	10,435	7	268	160	59	19,832	
GRAYS HARBOR	2,261	0	15	409	2,685	4,954	0	179	5,133	3,800	178	0	3,398	15,194	
ISLAND	2,192	0	0	407	2,599	8,153	0	2	8,155	3,963	0	14	6,110	20,841	
JEFFERSON	1,356	0	174	207	1,737	3,423	246	7	3,676	1,743	429	0	703	8,288	
KING	12,838	500	96	0	13,434	69,953	328	41	70,322	7,480	152	19,882	37,672	148,942	
KITSAP	5,048	0	0	492	5,540	23,825	72	54	23,951	1,463	0	127	1,145	32,226	
KITTITAS	1,948	0	122	486	2,556	4,744	0	14	4,758	814	347	189	694	9,358	
Klickitat	2,602	0	35	568	3,205	4,214	220	14	4,448	2,319	20	6	1,717	11,715	
LEWIS	3,141	0	1,265	453	4,859	9,870	1,606	15	11,491	1,569	58	0	2,715	20,692	
LINCOLN	4,184	128	401	610	5,323	1,378	0	12	1,390	1,165	4	0	422	8,304	
MASON	2,192	0	31	418	2,641	8,244	386	26	8,656	1,668	181	0	2,335	15,481	
OKANOGAN	3,244	0	1,485	661	5,390	3,751	30	17	3,798	1,479	761	0	582	12,010	
PACIFIC	1,276	0	0	190	1,466	2,988	864	7	3,859	904	0	0	524	6,753	
PEND OREILLE	1,602	0	2	266	1,870	1,646	216	1	1,863	214	503	0	659	5,109	
PIERCE	10,246	2,136	353	1,101	13,836	51,442	257	3,664	55,363	2,637	105	1,941	17,239	91,121	
SAN JUAN	890	0	52	138	1,080	3,613	2	5	3,620	977	0	0	2,794	8,471	
SKAGIT	3,134	0	5	565	3,704	11,272	370	49	11,691	4,097	278	4	3,840	23,614	
SKAMANIA	802	0	79	108	989	1,553	292	5	1,850	791	2	0	54	3,686	
SNOHOMISH	9,188	0	53	809	10,050	56,482	479	541	57,502	11,076	0	0	18,222	96,850	
SPOKANE	9,042	296	0	1,182	10,520	19,442	50	29	19,521	2,726	7	0	3,301	36,075	
STEVENS	3,690	0	1,724	742	6,156	5,038	326	6	5,370	98	196	0	392	12,212	
THURSTON	4,905	334	924	1,277	7,440	17,390	223	18	17,631	7,013	0	0	3,527	35,611	
WAHKIAKUM	813	0	0	125	938	332	181	1	514	4,158	2	0	765	6,377	
WALLA WALLA	2,894	0	104	656	3,654	4,931	0	68	4,999	607	3	0	949	10,212	
WHATCOM	3,906	0	461	569	4,936	17,520	144	39	17,703	6,872	469	115	4,128	34,223	
WHITMAN	4,177	0	655	664	5,496	2,183	0	40	2,223	3,512	0	0	160	11,391	
YAKIMA	5,765	0	1,033	1,162	7,960	10,607	23	32	10,662	6,248	690	0	1,535	27,095	
TOTALS	143,914	5,445	16,820	20,464	186,643	430,309	7,252	7,084	444,645	101,221	6,499	22,832	141,746	903,586	

% OF TOTAL 15.9% 0.6% 1.9% 2.3% 20.7% 47.6% 0.8% 0.8% 49.2% 11.2% 0.7% 2.5% 15.7%

Source: County Reports to D.O.T. Secretary of Transportation

Table C

ACTUAL COUNTY ROAD RELATED EXPENDITURES

Including RAP and CAPP

2014

(thousands of dollars)

COUNTY	CONST	MAINT	ADMIN & OPER	FACIL	FERRY	REIMB	BOND WARRANT RETT	TRAFFIC POLICING **	OTHER ***	TOTAL INCLUDES RAP & CAPP	RAP	CAPP ****
ADAMS	3,995	4,049	1,247	0	0	66	0	0	0	9,357	2,076	861
ASOTIN	1,339	2,005	718	0	0	0	0	0	0	4,062	65	161
BENTON	2,917	5,632	1,630	0	0	270	209	0 *	0	10,658	1,182	471
CHELAN	3,819	7,403	2,241	74	0	106	0	0	566	14,209	62	381
CLALLAM	6,137	4,536	2,578	0	0	58	0	500	92	13,901	299	208
CLARK	26,257	16,939	16,140	13	0	0	0	0 *	1,967	61,316	85	731
COLUMBIA	2,063	2,108	421	28	0	0	133	0	9	4,762	1,237	214
COWLITZ	3,006	7,644	2,656	737	0	0	71	0	75	14,189	779	354
DOUGLAS	2,412	5,886	2,552	0	0	288	561	0	145	11,844	449	469
FERRY	2,188	2,494	817	200	0	30	0	0 *	666	6,395	1,172	123
FRANKLIN	1,690	4,539	1,090	0	0	175	254	475	64	8,287	185	594
GARFIELD	627	1,771	303	0	0	52	0	0	40	2,793	56	196
GRANT	5,472	12,174	1,635	1,877	0	84	2	187	100	21,531	1,305	1,319
GRAYS HARBOR	3,017	7,699	1,534	9	0	109	0	0	34	12,402	15	409
ISLAND	6,655	5,152	2,930	0	0	542	0	0	2,509	17,788	62	341
JEFFERSON	1,805	4,008	1,406	376	0	1	34	0 *	568	8,198	174	207
KING	32,532	52,218	14,082	739	0	10,881	7,286	2,500	24,261	144,499	19	759
KITSAP	5,854	13,354	9,583	113	0	903	49	0 *	355	30,211	0	492
KITTTITAS	1,042	5,251	1,313	374	0	0	0	0 *	55	8,035	15	500
KLUCKITAT	5,520	5,517	983	38	0	68	0	0	51	12,177	43	568
LEWIS	9,962	11,538	3,852	387	0	0	0	0 *	591	26,330	1,064	453
LINCOLN	1,324	5,384	1,165	4	0	100	0	0 *	160	8,137	401	610
MASON	1,922	5,882	2,584	55	0	0	17	0 *	2,166	12,626	40	1,003
OKANOGAN	3,175	6,760	2,045	0	0	0	346	79	17	12,422	1,468	661
PACIFIC	1,604	4,557	693	15	0	1	0	390	352	7,612	0	363
PEND OREILLE	521	3,018	811	24	0	297	0	0	240	4,911	2	203
PIERCE	10,967	32,068	26,885	1,688	4,795	96	89	2,625	21,686	100,899	0	1,101
SAN JUAN	1,743	3,515	1,201	26	0	0	0	0 *	591	7,076	52	138
SKAGIT	1,091	13,880	4,913	13	2,483	646	0	0	180	23,206	4	565
SKAMANIA	978	2,162	574	5	0	3	0	0 *	1	3,723	79	0
SNOHOMISH	28,734	25,544	23,125	119	0	8,335	733	0	9,979	96,569	574	809
SPOKANE	4,820	20,385	8,873	79	0	325	776	59 *	0	35,317	0	1,170
STEVENS	2,960	6,814	902	0	0	35	0	0	0	10,711	1,724	558
THURSTON	9,201	11,253	7,540	1,986	0	0	0	0	3,785	33,765	1,235	552
WAHIAKUM	4,634	941	318	0	829	22	0	0	13	6,757	856	127
WALLA WALLA	2,439	5,042	1,740	0	0	311	0	0	0	9,532	104	656
WHATCOM	9,348	12,286	4,328	0	2,454	477	0	0 *	3,427	32,320	1,305	569
WHITMAN	4,690	5,613	1,004	0	0	0	0	81	157	11,545	630	664
YAKIMA	12,089	8,444	2,809	5	0	221	945	0	16	24,529	171	1,303
TOTALS	230,549	355,465	161,221	8,984	10,561	24,502	11,505	6,896	74,918	884,601	18,989	20,865

% OF TOTAL 26.1% 40.2% 18.2% 1.0% 1.2% 2.8% 1.3% 0.8% 8.5%

Construction expenditure amounts do not include State ad & award Federal Aid participation

Source: County Reports to D.O.T. Secretary of Transportation

* Traffic Policing funds paid from diverted road levy

** Road Fund portion only

*** "Other" includes operations and transfers

**** includes \$5 Million Highway Safety Account Funds

Table D

**ANTICIPATED COUNTY ROAD FUND REVENUES
2015 BUDGETS**

(thousands of dollars)

COUNTY	BEGIN FUND BAL	MOTOR VEHICLE FUEL TAX					TAXES			MISC				TOTAL
		COUNTY REGULAR	TIB	RAP	CAPP	OTHER MVFT	PROP- ERTY	FOREST HARVEST	OTHER TAXES	FED GRANTS	FED LANDS	REIMB	OTHER	
ADAMS	3,000	4,100	0	999	879	0	1,621	0	8	885	0	14	68	11,574
ASOTIN	694	1,610	0	0	163	0	1,010	0	18	550	0	0	0	4,045
BENTON	4,500	3,089	0	2,138	478	0	6,013	0	110	26	0	0	2,089	18,443
CHELAN	5,545	2,203	0	180	387	17	7,210	40	13	1,618	520	0	3,653	21,386
CLALLAM	13,987	1,841	0	813	144	277	6,987	278	12	1,028	0	0	1,369	26,736
CLARK	30,989	6,325	3,500	100	738	0	32,209	0	220	14,091	2	0	10,159	98,333
COLUMBIA	660	1,350	0	2,392	218	0	1,121	0	0	1,646	2	0	234	7,623
COWLITZ	8,600	2,211	0	676	359	0	7,979	700	85	4,004	0	600	838	26,052
DOUGLAS	2,235	3,300	116	710	350	0	5,033	0	550	4,050	0	0	399	16,743
FERRY	900	1,709	0	850	286	0	805	30	1	2,300	15	0	265	7,161
FRANKLIN	1,600	2,867	0	0	554	0	3,104	0	23	627	91	0	290	9,156
GARFIELD	778	1,250	0	1,474	199	0	762	0	4	364	93	20	20	4,964
GRANT	5,760	6,283	0	1,095	1,341	0	8,700	0	141	1,360	2,561	25	1,784	29,050
GRAYS HARBOR	1,156	2,263	0	340	415	0	5,533	0	830	4,110	151	0	1,800	16,598
ISLAND	317	2,039	0	44	890	4,307	8,411	0	2	1,439	0	0	563	18,012
JEFFERSON	3,714	1,352	0	1,252	210	0	4,206	100	5	1,662	0	0	1,901	14,402
KING	33,249	11,723	0	0	764	0	80,568	350	35	6,000	155	7,905	23,194	163,943
KITSAP	30,966	5,053	4,000	1,294	496	0	26,635	75	31	3,813	0	3,240	6,829	82,432
KITTITAS	14,231	1,852	0	1,239	468	4,625	3,895	0	11	3,744	315	175	225	30,780
KLICKITAT	3,176	2,550	0	1,350	575	0	4,000	50	0	2,150	5	20	1,602	15,478
LEWIS	9,874	3,144	0	1,120	459	440	10,190	1,200	10	4,581	1,000	0	1,660	33,678
LINCOLN	500	4,168	0	1,128	619	32	1,313	0	10	835	0	0	411	9,016
MASON	3,231	2,100	0	194	400	0	7,982	275	20	3,366	2	0	1,322	18,892
OKANOGAN	4,000	3,264	0	29	673	0	4,353	0	60	2,591	753	0	135	15,858
PACIFIC	3,276	1,277	0	1,444	193	0	3,121	500	7	980	3	3	294	11,098
PEND OREILLE	1,000	1,575	0	853	270	362	1,954	75	1	2,335	435	0	492	9,352
PIERCE	27,286	10,135	234	1,872	1,047	303	52,261	215	41	10,014	455	2,692	17,206	123,761
SAN JUAN	1,751	880	0	450	140	2,400	4,448	2	5	1,938	0	0	78	12,092
SKAGIT	2,845	3,041	0	930	1,430	0	13,647	300	50	1,950	300	885	4,090	29,468
SKAMANIA	1,297	794	0	440	254	0	1,686	200	25	5,898	1	63	936	11,594
SNOHOMISH	7,255	9,122	0	0	750	104	57,110	0	750	4,318	0	0	24,913	104,322
SPOKANE	6,055	9,046	1,605	2,579	1,186	502	20,024	0	45	8,879	5	0	1,446	51,372
STEVENS	6,000	3,600	0	2,186	700	0	5,155	325	13	3,000	200	40	28	21,247
THURSTON	6,608	4,853	986	230	557	0	17,522	0	221	726	101	0	3,078	34,882
WAHIAKUM	1,260	814	0	428	126	500	195	100	0	616	2	19	1,551	5,611
WALLA WALLA	3,700	2,775	2,561	1,462	600	0	4,900	0	69	6,559	0	0	294	22,920
WHATCOM	26,839	3,903	0	0	574	140	17,462	200	38	0	465	110	4,731	54,462
WHITMAN	6,600	4,025	0	2,400	550	0	2,114	0	30	3,100	0	71	8	18,898
YAKIMA	5,720	5,692	1,757	1,784	1,162	0	11,147	0	0	4,761	590	0	2,540	35,153
TOTAL	291,154	139,178	14,759	36,475	21,604	14,009	452,386	5,015	3,494	121,914	8,222	15,882	122,495	1,246,587

% OF TOTAL 23.4% 11.2% 1.2% 2.9% 1.7% 1.1% 36.3% 0.4% 0.3% 9.8% 0.7% 1.3% 9.8%

Table E

**ANTICIPATED COUNTY ROAD FUND EXPENDITURES
2015 BUDGETS**

(thousands of dollars)

COUNTY	CONST	MAINT	ADMIN & OPER	FACIL	FERRY	REIMB	BOND WARR RETT	TRAFFIC POLICING	OTHER	TOTAL	END FUND BAL	GRAND TOTAL
ADAMS	2,073	5,390	1,171	0	0	63	0	0	83	8,780	2,794	11,574
ASOTIN	320	2,254	587	0	0	0	0	0	0	3,161	884	4,045
BENTON	6,780	6,560	1,984	0	0	168	211	600	16	16,319	2,124	18,443
CHELAN	6,872	7,472	1,792	208	0	51	0	0	320	16,715	4,671	21,386
CLALLAM	5,182	6,701	2,657	14	0	199	0	510	132	15,395	11,341	26,736
CLARK	44,535	20,410	14,749	38	0	0	0	2	3,552	83,286	15,047	98,333
COLUMBIA	4,421	2,008	582	15	0	0	130	0	15	7,171	452	7,623
COWLITZ	7,231	8,420	2,675	626	0	457	0	0	395	19,804	6,248	26,052
DOUGLAS	5,582	6,133	2,807	94	0	54	559	0	100	15,329	1,414	16,743
FERRY	3,197	2,883	421	0	0	213	0	0	70	6,784	377	7,161
FRANKLIN	1,089	4,898	1,442	0	0	51	255	473	78	8,286	870	9,156
GARFIELD	2,135	1,505	289	35	0	20	0	0	150	4,134	830	4,964
GRANT	8,742	12,194	1,847	417	0	106	2	270	866	24,444	4,606	29,050
GRAYS HARBOR	6,120	8,555	1,700	0	0	150	0	0	9	16,534	64	16,598
ISLAND	4,737	7,970	2,889	0	0	165	0	0	2,251	18,012	0	18,012
JEFFERSON	5,343	4,567	1,424	0	0	1	33	720	0	12,088	2,314	14,402
KING	6,000	60,292	23,096	0	0	6,999	9,307	6,000	23,400	135,094	28,849	163,943
KITSAP	18,237	12,729	11,596	0	0	0	51	2,659	9,504	54,776	27,656	82,432
KITTITAS	13,027	7,830	1,541	40	0	182	0	0	500	23,120	7,660	30,780
KLICKITAT	7,200	5,475	900	546	0	20	1	0	99	14,241	1,237	15,478
LEWIS	9,846	12,142	4,723	349	0	0	0	0	143	27,203	6,475	33,678
LINCOLN	2,014	5,055	1,076	0	0	100	0	0	13	8,258	758	9,016
MASON	5,065	6,463	2,660	355	0	0	1,015	0	1,290	16,848	2,044	18,892
OKANOGAN	3,021	6,761	2,255	10	0	30	349	0	7	12,433	3,425	15,858
PACIFIC	3,286	5,219	663	0	0	20	0	280	0	9,468	1,630	11,098
PEND OREILLE	3,820	3,314	917	291	0	299	0	100	14	8,755	597	9,352
PIERCE	11,607	41,467	28,006	31	1,395	1,517	3,619	0	13,463	101,105	22,656	123,761
SAN JUAN	3,518	3,824	1,488	15	0	0	0	650	517	10,012	2,080	12,092
SKAGIT	6,315	12,901	5,073	113	2,532	0	0	1,350	0	28,284	1,184	29,468
SKAMANIA	7,607	1,913	595	0	0	0	0	200	0	10,315	1,279	11,594
SNOHOMISH	31,279	28,484	25,992	415	0	7,807	733	0	9,612	104,322	0	104,322
SPOKANE	18,191	18,744	6,910	5	0	0	618	73	504	45,045	6,327	51,372
STEVENS	6,069	8,662	1,255	726	0	35	0	0	0	16,747	4,500	21,247
THURSTON	3,010	15,991	10,816	0	0	0	0	0	143	29,960	4,922	34,882
WAHKIAKUM	3,389	926	275	0	992	15	0	0	14	5,611	0	5,611
WALLA WALLA	11,490	5,480	2,098	0	0	260	0	0	0	19,328	3,592	22,920
WHATCOM	9,182	14,117	7,847	10	145	542	0	806	4,734	37,383	17,079	54,462
WHITMAN	9,391	6,943	1,765	0	0	0	0	102	0	18,201	697	18,898
YAKIMA	19,331	9,998	2,527	0	0	0	1,241	300	230	33,627	1,526	35,153
TOTAL	326,254	402,650	183,090	4,353	5,064	19,524	18,124	15,095	72,224	1,046,378	200,209	1,246,587

% OF TOTAL 26.2% 32.3% 14.7% 0.3% 0.4% 1.6% 1.5% 1.2% 5.8% 83.9% 16.1%

Table F

COUNTY ROAD LEVY SUMMARY

As shown in 2015 Budgets

(thousands of dollars)

COUNTY	Unincorp Valuation	County Road Maximum Property Tax Levy (2.25)	County Road Property Tax Revenue Planned	Operating Transfer	Payment for Services	(RCW 36.33.220)		Revenue Remaining in Road Fund	Levy Shift from Road to Current Exp. (RCW 84.52.043)
						Diversion from Road To Current Expense	County Road Property Tax Exp. for Other Purposes		
						Traffic Policing expense paid by:			
ADAMS	1,250,533	2,814	1,621					1,621	0
ASOTIN	1,090,831	2,454	1,036					1,036	600
BENTON	3,812,563	8,578	6,073			559		5,514	0
CHELAN	5,343,558	12,023	7,218	240				6,978	400
CLALLAM	4,653,034	10,469	6,920		500			6,420	0
CLARK	20,275,188	45,619	36,990			4,533		32,457	0
COLUMBIA	556,609	1,252	1,121				Divert - Current Expense 75	1,046	0
COWLITZ	4,967,863	11,178	7,984					7,984	3,161
DOUGLAS	2,873,427	6,465	5,133					5,133	0
FERRY	569,902	1,282	1,282			474		808	0
FRANKLIN	2,232,009	5,022	3,146		473			2,673	0
GARFIELD	536,781	1,208	762					762	0
GRANT	4,582,979	10,312	8,789		270			8,519	0
GRAYS HARBOR	2,522,899	5,677	5,636		600			5,036	0
ISLAND	10,089,529	22,701	8,438		725			7,713	0
JEFFERSON	3,287,867	7,398	4,199			720		3,479	0
KING	36,080,918	81,182	81,182	6,363				74,819	0
KITSAP	16,467,194	37,051	26,798			2,690		24,108	0
KITTITAS	4,123,047	9,277	3,895			200		3,695	1,000
KLICKITAT	2,828,713	6,365	4,311					4,311	0
LEWIS	4,940,345	11,116	11,116			1,310		9,806	17
LINCOLN	1,105,934	2,488	1,925			500		1,425	0
MASON	6,241,179	14,043	9,500			1,500		8,000	0
OKANOGAN	2,869,807	6,457	4,407					4,407	0
PACIFIC	1,682,476	3,786	3,053		300			2,753	0
PEND OREILLE	1,208,891	2,720	1,892		100			1,792	0
PIERCE	32,911,862	74,052	65,452	2,625			Divert - Traffic and Courts 12,794 *	50,034	0
SAN JUAN	5,773,666	12,991	4,279			650		3,629	50
SKAGIT	7,266,814	16,350	12,938			1,350		11,588	0
SKAMANIA	1,117,241	2,514	1,512			200		1,312	186
SNOHOMISH	36,440,565	81,991	58,833	4,204				54,628	0
SPOKANE	12,726,773	28,635	21,393			1,200		20,193	6,100
STEVENS	3,072,192	6,912	5,155					5,155	347
THURSTON	13,317,058	29,963	21,062			3,250		17,812	0
WAHIAKUM	351,615	791	151					151	400
WALLA WALLA	2,481,692	5,584	5,101					5,101	0
WHATCOM	11,789,333	26,526	18,562			807		17,755	0
WHITMAN	1,508,973	3,395	2,405		102			2,303	0
YAKIMA	6,424,962	14,456	11,452		300			11,152	2,400
TOTALS	281,376,822	633,098	482,723	13,432	3,370	19,942	12,869	433,111	14,661

* Increased by voter approval (RCW 84.55.050)

Table G

COUNTY ROAD MILEAGE - 1/1/15

COUNTY	URBAN ROADS			RURAL ROADS			SYSTEM CENTERLINE TOTAL	PAVED ARTERIAL C/L MILES	PAVED ARTERIAL LANE-MILES	UNPAVED C/L MILES
	ACCESS	ARTERIAL	TOTAL	ACCESS	ARTERIAL	TOTAL				
ADAMS	10.66	4.26	14.92	1,094.85	665.68	1,760.53	1,775.45	547.45	1,092.00	1,126.00
ASOTIN	59.90	20.57	80.47	166.45	152.33	318.77	399.25	100.30	203.25	231.96
BENTON	124.25	52.44	176.69	390.70	290.32	681.02	857.71	297.27	594.53	254.69
CHELAN	57.46	30.03	87.49	357.97	210.21	568.18	655.66	239.95	480.68	123.44
CLALLAM	82.98	16.55	99.53	271.83	115.18	387.01	486.54	131.73	262.68	2.96
CLARK	409.98	149.56	559.54	280.56	273.21	553.77	1,113.31	422.77	911.34	11.87
COLUMBIA	0.00	0.00	0.00	271.68	230.39	502.06	502.06	142.63	285.26	354.10
COWLITZ	46.32	24.14	70.46	259.51	197.17	456.68	527.14	221.31	442.67	6.87
DOUGLAS	61.04	37.65	98.69	1,139.61	400.31	1,539.92	1,638.60	296.49	599.41	1,198.67
FERRY	0.00	0.00	0.00	505.02	232.32	737.34	737.34	177.63	355.63	535.82
FRANKLIN	21.52	13.77	35.29	609.82	336.93	946.75	982.04	345.22	688.97	395.12
GARFIELD	0.00	0.00	0.00	234.08	213.03	447.10	447.10	123.58	247.15	317.78
GRANT	63.29	32.16	95.45	1,535.46	875.01	2,410.47	2,505.92	830.13	1,668.10	1,046.81
GRAYS HARBOR	33.69	22.28	55.97	266.16	242.67	508.83	564.79	259.66	519.27	39.39
ISLAND	96.13	35.02	131.15	272.10	179.93	452.03	583.18	214.94	430.61	5.07
JEFFERSON	5.14	0.00	5.14	254.86	138.48	393.33	398.47	130.34	261.30	73.61
KING	651.02	210.85	861.86	386.80	244.83	631.63	1,493.49	455.67	951.88	51.29
KITSAP	413.43	166.55	579.99	195.28	140.10	335.37	915.36	306.65	620.04	9.26
KITTITAS	9.98	12.86	22.83	243.64	296.38	540.02	562.85	305.17	611.07	65.67
KLICKITAT	0.00	0.00	0.00	699.83	384.85	1,084.68	1,084.68	364.86	729.71	522.80
LEWIS	36.16	22.75	58.90	718.24	266.46	984.71	1,043.61	284.99	570.70	44.62
LINCOLN	0.00	0.00	0.00	1,338.81	658.43	1,997.24	1,997.24	384.74	769.48	1,541.29
MASON	27.64	9.85	37.50	316.34	263.13	579.46	616.96	263.36	526.91	47.10
OKANOGAN	7.13	2.80	9.93	838.15	490.34	1,328.50	1,338.43	418.33	836.65	664.10
PACIFIC	0.00	0.00	0.00	219.26	130.12	349.37	349.37	119.83	240.04	47.85
PEND OREILLE	0.00	0.00	0.00	388.29	180.86	569.15	569.15	167.49	334.98	269.34
PIERCE	629.26	419.41	1,048.67	251.12	250.45	501.57	1,550.24	669.86	1,412.64	18.37
SAN JUAN	0.00	0.00	0.00	183.60	87.05	270.65	270.65	87.05	174.09	46.78
SKAGIT	71.38	36.92	108.30	373.56	319.11	692.67	800.97	356.03	713.04	40.16
SKAMANIA	0.00	0.00	0.00	149.19	90.45	239.64	239.64	90.45	181.32	28.80
SNOHOMISH	622.72	186.36	809.08	454.65	311.72	766.37	1,575.45	495.01	1,016.87	10.22
SPOKANE	285.91	126.25	412.16	1,450.72	664.39	2,115.11	2,527.27	717.48	1,475.28	1,147.94
STEVENS	0.00	0.00	0.00	928.38	560.61	1,488.99	1,488.99	468.41	936.84	824.25
THURSTON	347.86	108.64	456.50	351.96	231.73	583.69	1,040.19	340.38	697.14	23.11
WAHKIAKUM	0.00	0.00	0.00	57.14	81.82	138.96	138.96	78.31	156.62	12.88
WALLA WALLA	44.65	36.11	80.76	455.22	423.68	878.89	959.66	414.59	830.02	368.51
WHATCOM	125.45	69.98	195.43	455.75	288.30	744.05	939.48	358.28	719.40	31.05
WHITMAN	0.00	0.00	0.00	1,284.35	614.51	1,898.86	1,898.86	418.35	836.70	1,461.37
YAKIMA	121.00	101.85	222.85	779.76	642.81	1,422.57	1,645.42	722.77	1,464.05	542.26
STATEWIDE	4,465.94	1,949.59	6,415.54	20,430.69	12,375.22	32,805.91	39,221.45	12,769.42	25,848.33	13,543.14
EASTERN	866.79	470.74	1,337.53	14,712.79	8,523.35	23,236.14	24,573.67	7,482.83	15,039.76	12,991.89
WESTERN	3,599.15	1,478.85	5,078.00	5,717.91	3,851.87	9,569.77	14,647.78	5,286.59	10,808.57	551.24

County Road Log Data certified 1/1/2015 by the County Road Administration Board

Table H

**COUNTY ARTERIAL PRESERVATION PROGRAM
2014 ACCOMPLISHMENT SUMMARY**

COUNTY	1/1/13 Eligible Arterial System C/Line (miles)	Total CAPP ** Rec'd (\$1,000)	Total CAPP ** Expended (\$1,000)	Total Eligible Expenses (\$1,000)	CAPP** Contri- bution (%)	2014 Arterial Prep/ Repair (\$1,000)	2014 Arterial Sealcoat C/Line (miles)	2014 Arterial Overlay C/Line (miles)	2014 Total Resurf. C/Line (miles)	2014 Percent System Resurf'd
ADAMS	544.38	860.8	860.8	889.0	96.8	142.4	32.1	0.0	32.1	5.9
ASOTIN	100.35	161.2	161.2	167.0	96.5	0.0	8.9	0.0	8.9	8.9
BENTON	297.21	471.0	471.0	676.0	69.7	0.0	22.9	0.0	22.9	7.7
CHELAN	240.37	380.8	380.8	1,811.8	21.0	698.6	30.5	0.0	30.5	12.7
CLALLAM	131.58	208.0	208.0	323.0	64.4	323.0	0.0	0.0	0.0	0.0
CLARK	427.90	731.3	731.3	7,839.0	9.3	1,310.1	34.9	15.0	49.9	11.7
COLUMBIA	142.66	226.0	214.2	214.2	100.0	68.6	0.0	0.0	0.0	0.0
COWLITZ	223.32	354.1	354.1	1,314.1	26.9	657.3	21.0	0.0	21.0	9.4
DOUGLAS	177.63	469.3	469.3	1,913.5	24.5	582.1	33.0	0.0	33.0	18.6
FERRY	177.63	281.8	122.7	122.7	100.0	46.2	9.1	0.0	9.1	5.1
FRANKLIN	349.26	553.1	593.6 *	680.5	87.2	129.5	18.7	0.0	18.7	5.4
GARFIELD	123.58	195.9	195.9	438.4	44.7	36.2	17.1	0.0	17.1	13.8
GRANT	827.36	1319.2	1319.2	3,965.0	33.3	794.7	76.2	7.5	83.6	10.1
GRAYS HARBOR	258.24	409.4	409.4	1,382.3	29.6	1,053.7	13.3	0.0	13.3	5.2
ISLAND	214.02	341.1	341.1	2,395.5	14.2	255.2	10.6	7.1	17.7	8.3
JEFFERSON	130.34	207.1	207.1	1,096.6	18.9	126.2	14.0	2.4	16.4	12.6
KING	457.65	758.8	758.8	2,132.0	35.6	890.0	0.0	3.2	3.2	0.7
KITSAP	306.60	492.5	492.5	1,028.0	47.9	562.4	0.0	6.9	6.9	2.2
KITTITAS	306.15	1265.7	500.0	780.8	64.0	97.3	43.4	0.0	43.4	14.2
KLICKITAT	358.98	568.2	568.2	969.4	58.6	0.0	34.4	0.0	34.4	9.6
LEWIS	285.01	453.0	453.0	2,594.3	17.5	962.4	28.0	3.8	31.8	11.2
LINCOLN	384.80	610.1	610.1	1,853.7	32.9	249.6	25.1	5.4	30.5	7.9
MASON	263.55	418.0	1003.4 *	2,128.9	47.1	265.5	35.1	6.7	41.8	15.8
OKANOGAN	418.33	661.3	661.3	1,051.3	62.9	454.0	30.0	0.0	30.0	7.2
PACIFIC	119.85	937.7	362.7	1,265.5	28.7	667.5	3.2	3.4	6.6	5.5
PEND OREILLE	167.49	265.6	203.5	203.5	100.0	166.2	4.7	0.0	4.7	2.8
PIERCE	669.78	1101.2	1101.2	5,381.0	20.5	695.2	109.6	5.3	114.9	17.2
SAN JUAN	87.05	138.0	138.0	213.2	64.7	0.0	5.0	0.0	5.0	5.8
SKAGIT	355.80	564.9	564.9	1,973.3	28.6	688.9	37.7	1.0	38.8	10.9
SKAMANIA	90.45	142.9	0.0	41.2	0.0	24.4	0.0	0.2	0.2	0.2
SNOHOMISH	494.61	808.7	808.7	2,297.8	35.2	340.4	16.0	5.4	21.4	4.3
SPOKANE	717.20	1169.9	1169.9	3,708.1	31.5	2,192.6	85.2	0.0	85.2	11.9
STEVENS	468.41	742.4	557.8	625.4	89.2	208.9	20.0	0.0	20.0	4.3
THURSTON	341.10	552.1	552.1	1,913.3	28.9	1.3	40.5	0.0	40.5	11.9
WAHKIAKUM	78.87	125.1	127.1 *	128.8	98.7	69.0	2.2	0.0	2.2	2.8
WALLA WALLA	414.62	656.1	656.1	1,286.9	51.0	354.3	34.1	0.0	34.1	8.2
WHATCOM	357.60	569.5	569.5	2,180.6	26.1	1,164.4	29.7	0.8	30.5	8.5
WHITMAN	418.54	663.8	663.8	5,028.9	13.2	454.9	57.1	14.2	71.4	17.1
YAKIMA	722.75	1161.8	1302.7 *	1,399.3	93.1	30.1	29.2	2.4	31.6	4.4
TOTAL	12,651.0	21,997.5	20,865.1	65,413.8	31.9%	16,763.1	1,012.4	90.7	1,103.1	8.2

* Expended amounts higher than received are from carry forward amounts of prior years.

** Includes \$5,000,000 statewide Highway Safety Account (HSA) contribution for County Arterial Preservation.

AVERAGE 8.2

Table I

COUNTY FREIGHT AND GOODS SYSTEM - 1/1/2015

COUNTY	Freight and Goods System - Truck Route Class					Total FGTS	Total Adequate	% Adequate
	T-1	T-2	T-3	T-4	T-5			
ADAMS		0.53	119.07	185.40	321.55	626.55	233.67	37.3%
ASOTIN		0.15	22.95	19.98	0.00	43.08	37.62	87.3%
BENTON			117.95	120.82	89.87	328.64	98.64	30.0%
CHELAN			47.56	88.94	41.15	177.65	58.25	32.8%
CLALLAM			34.93	98.44	9.99	143.36	0.53	0.4%
CLARK	0.22	10.44	135.92	160.01		306.59	253.78	82.8%
COLUMBIA			10.30	49.10	146.81	206.21	11.20	5.4%
COWLITZ			77.72	57.12	3.00	137.84	110.12	79.9%
DOUGLAS			6.89	85.56	171.15	263.60	15.31	5.8%
FERRY			109.25	115.71		224.96	27.31	12.1%
FRANKLIN			111.39	154.05	252.51	517.95	246.07	47.5%
GARFIELD				10.13	125.75	135.88	113.03	83.2%
GRANT		10.19	269.43	261.83	305.92	847.38	57.69	6.8%
GRAYS HARBOR			212.66	7.13		219.79	192.51	87.6%
ISLAND			14.05	29.41	0.20	43.66	43.63	99.9%
JEFFERSON			39.63	33.01	65.75	138.39	108.05	78.1%
KING	5.13	21.51	253.97	106.28		386.90	357.99	92.5%
KITSAP		2.14	198.59	107.48		308.21	219.34	71.2%
KITTITAS		7.38	194.54	98.49	8.19	308.61	209.75	68.0%
KLICKITAT			174.68	111.37		286.05	7.63	2.7%
LEWIS			122.15	238.67	47.24	408.06	224.20	54.9%
LINCOLN			131.90	281.72	363.90	777.52	446.47	57.4%
MASON			68.53	51.75	1.70	121.98	4.03	3.3%
OKANOGAN			100.43	116.46	181.68	398.58	5.43	1.4%
PACIFIC				135.41		135.41	26.89	19.9%
PEND OREILLE			38.39	125.40	62.21	226.00	0.49	0.2%
PIERCE	5.85	52.10	312.39	28.80	7.70	406.84	142.38	35.0%
SAN JUAN			23.92	64.57		88.49	58.36	65.9%
SKAGIT		0.64	132.37	102.73		235.73	110.52	46.9%
SKAMANIA			22.66	58.73		81.38	80.96	99.5%
SNOHOMISH	4.31	9.47	327.10	108.90	60.70	510.47	319.40	62.6%
SPOKANE	5.69	29.13	450.46	106.90	109.28	701.46	398.80	56.9%
STEVENS			83.21	172.77	79.31	335.29	12.82	3.8%
THURSTON	2.93	9.31	230.78	90.88	4.13	338.03	28.85	8.5%
WAHIAKUM			12.88	16.90	8.14	37.92	26.69	70.4%
WALLA WALLA		2.15	81.98	288.51	5.39	378.03	26.32	7.0%
WHATCOM			107.40	91.99		199.39	70.40	35.3%
WHITMAN			2.76	37.97	248.72	289.45	36.04	12.5%
YAKIMA		8.45	384.78	133.95	65.56	592.74	586.05	98.9%
TOTAL	24.13	163.59	4,785.57	4,153.27	2,787.50	11,914.05	5,007.22	42.0%

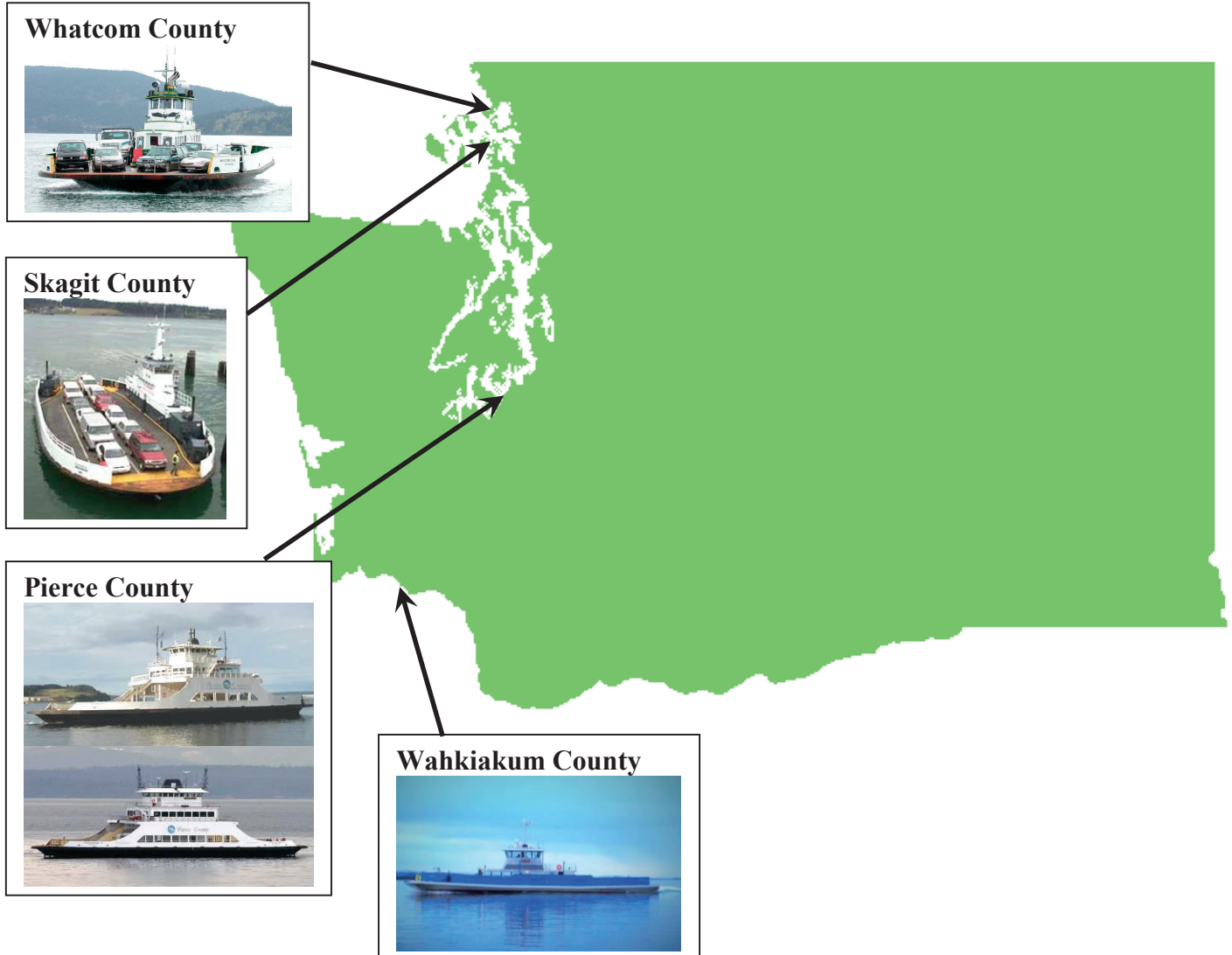
County Road Log Data Certified 1/1/2015 by the County Road Administration Board

Table J

2014 COUNTY FORCES SUMMARY

COUNTY	2014 County Forces Limit	2014 Proposed County Forces Construction Expenditure	2014 Actual County Forces Construction Expenditure	% Expended of County Forces Limit
ADAMS	822,362	40,000	61,123	7.4%
ASOTIN	808,954	75,000	0	0.0%
BENTON	1,787,637	0	9,750	0.5%
CHELAN	1,269,344	220,000	27,363	2.2%
CLALLAM	1,266,714	84,000	42,041	3.3%
CLARK	3,395,873	134,000	216,812	6.4%
COLUMBIA	807,998	0	0	0.0%
COWLITZ	1,270,820	40,000	72,091	5.7%
DOUGLAS	1,281,223	390,000	27,747	2.2%
FERRY	809,641	25,000	0	0.0%
FRANKLIN	1,274,488	117,000	83,145	6.5%
GARFIELD	807,135	256,500	0	0.0%
GRANT	1,304,285	1,016	708,211	54.3%
GRAYS HARBOR	1,270,674	200,000	7,589	0.6%
ISLAND	1,167,785	343,703	47,921	4.1%
JEFFERSON	1,262,229	25,000	0	0.0%
KING	3,532,393	45,000	0	0.0%
KITSAP	1,812,946	925,000	182,290	10.1%
KITTITAS	1,266,810	0	0	0.0%
KLICKITAT	814,746	720,000	247,111	30.3%
LEWIS	1,279,120	1,200,000	595,572	46.6%
LINCOLN	823,106	509,000	325,630	39.6%
MASON	1,269,521	95,000	17,992	1.4%
OKANOGAN	1,278,953	0	0	0.0%
PACIFIC	807,598	225,000	486,687	60.3%
PEND OREILLE	809,090	345,715	338,449	41.8%
PIERCE	3,497,267	250,000	8,531	0.2%
SAN JUAN	805,006	410,000	189,471	23.5%
SKAGIT	1,278,426	23,750	85,004	6.6%
SKAMANIA	804,784	0	0	0.0%
SNOHOMISH	3,457,639	3,483,000	2,675,128	77.4%
SPOKANE	3,456,307	0	8,897	0.3%
STEVENS	1,282,316	380,000	585,518	45.7%
THURSTON	1,810,004	0	1,167	0.1%
WAHKIAKUM	804,666	112,000	0	0.0%
WALLA WALLA	1,275,390	270,000	293,002	23.0%
WHATCOM	1,798,221	775,000	0	0.0%
WHITMAN	1,286,344	275,000	230,329	17.9%
YAKIMA	1,820,502	0	100,267	5.5%
TOTAL	57,678,317	11,994,684	7,674,838	13.3%

COUNTY FERRY SYSTEMS



The topography of Washington State brings challenges to the transportation system. Besides the usual array of highway bridges, tunnels, and mountain passes, vehicle and passenger ferries are an integral part of the state transportation system. In addition to various public and private auto and passenger-only ferries in the State of Washington, four counties operate auto ferries as part of their local transportation network:

- Pierce County operates two ferries on Puget Sound connecting Anderson and Ketron Islands with the mainland at Steilacoom.
- Skagit County operates one ferry on Puget Sound connecting Guemes Island with Fidalgo Island at Anacortes.
- Wahkiakum County operates one ferry on the Columbia River, connecting Puget Island (near Cathlamet) with Westport (Clatsop County), Oregon.
- Whatcom County operates one ferry on Puget Sound connecting Lummi Island with the mainland at Gooseberry Point, west of Bellingham.

PIERCE COUNTY ANDERSON & KETRON ISLAND FERRIES

The M/V Christine Anderson and M/V Steilacoom II provide service between the town of Steilacoom and Anderson and Ketron Islands. The ferries provide the only link to the mainland for the two islands' permanent and part-time residents. The boats begin/end the day at Steilacoom, with normal operating hours from 5:45 A.M. to 8:30 P.M., extending to 11:00 P.M. Friday through Sunday evenings. One round-trip takes approximately 60 minutes (serving Anderson only) and 75 minutes (serving both Anderson and Ketron).

Christine Anderson



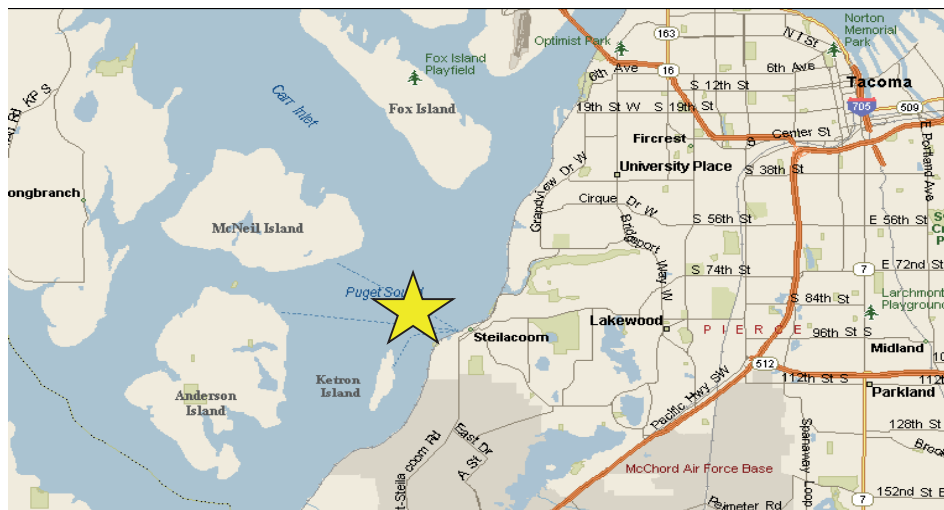
Steilacoom II



Vessel Built:	<u>1994</u>	<u>2006</u>
Vessel Vehicle Capacity:	54	54
Vessel Passenger Capacity:	250	300
Length of Route:		3.5 miles (Steilacoom-Anderson)
Crew Size:		4

2014:

Scheduled Runs (one-way):	9,176
Vessel Miles Travelled:	37,139 miles
One-Way-Trip vehicles carried:	204,226
One-Way-Trip drivers & passengers carried:	382,690
Maintenance and Operation Costs:	\$4,089,892



SKAGIT COUNTY - GUEMES ISLAND FERRY

The M/V Guemes provides service between the city of Anacortes and Guemes Island. The ferry provides the only link to the mainland for the island's permanent and part-time residents. The boat begins/ends the day at Anacortes, with normal operating hours from 6:30 A.M. to 10:30 P.M., extending to 12:30 A.M. Saturday and Sunday mornings. One round-trip takes approximately 30 minutes.



Vessel Built:	1979
Vessel Vehicle Capacity:	22
Vessel Passenger Capacity:	99
Length of Route:	0.7 mile
Crew Size:	3

2014:	
Scheduled Runs (one-way):	17,680
Vessel Miles Travelled:	12,376 miles
One-Way-Trip vehicles carried:	173,145
One-Way-Trip drivers & passengers:	368,856
Maintenance and Operation Costs:	\$2,504,800



WAHKIAKUM COUNTY PUGET ISLAND, WASHINGTON – WESTPORT, OREGON FERRY

The M/V Oscar B provides the only interstate connection across the Columbia River between the Astoria-Megler Bridge (43 miles to the west) and the Longview Bridge (26 miles to the east). In addition to connecting SR 4 in Washington with US 30 in Oregon, it serves as a detour route during closures of SR 4 and US 30. The boat begins/ends the day at Puget Island (connected by bridge to the town of Cathlamet), with normal operating hours from 5:00 A.M. to 10:30 P.M. One round-trip takes a minimum of 30 minutes. During 2015, the M/V Oscar B replaced the M/V Wahkiakum, which was a 12 vehicle vessel built in 1962.



Vessel Built:	2015
Vessel Vehicle Capacity:	23
Vessel Passenger Capacity:	100
Length of Route:	1.5 miles
Crew Size:	2

2014:	
Scheduled Runs (one-way):	13,140
Vessel Miles Travelled:	19,710 miles
One-Way-Trip vehicles carried:	47,450
One-Way-Trip drivers & passengers carried:	79,081
Maintenance and Operation Costs:	\$848,988



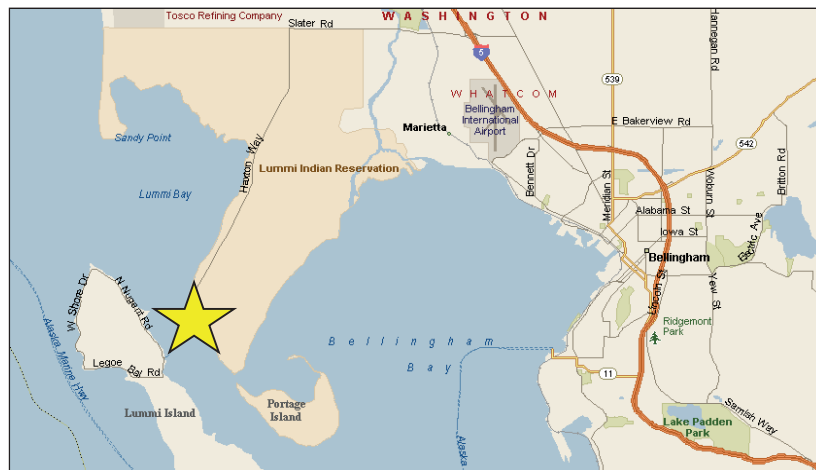
WHATCOM COUNTY - LUMMI ISLAND FERRY

The M/V Whatcom Chief provides service between Gooseberry Point and Lummi Island (Gooseberry Point is located on the Lummi Indian Reservation). The ferry provides the only link to the mainland for the island's permanent and part-time residents. The boat begins/ends the day at Lummi Island, with normal operating hours from 5:40 A.M. to 12:30 A.M. One round-trip takes a minimum of 20 minutes.



Vessel Built:	1962
Vessel Vehicle Capacity:	20
Vessel Passenger Capacity:	103
Length of Route:	0.9 mile
Crew Size:	3

2014:		
Scheduled Runs (one-way):	24,776	
Vessel Miles Travelled:	22,298 miles	
One-Way-Trip vehicles carried:	223,180	
One-Way-Trip drivers & passengers carried:	353,596	
Maintenance and Operation Costs:	\$ 2,332,562	



County Road Relationship

The operation of auto ferries by counties is considered to be a component of the county road system. The docks and transfer spans are classified as bridges for funding eligibility purposes. The ferries themselves are considered extensions of the adjoining county roads. Supporting facilities such as parking lots, vehicle holding lanes, and passenger waiting areas, are considered an integral part of the ferry system and, therefore, ancillary facilities to the county road system.

Pierce County also has been successful in qualifying its ferry system as a transit system under Federal Transit Authority rules, in cooperation with Pierce County Transit.

The following table demonstrates the size of each county's roadway system and the comparative magnitude of both ferry and overall road related expenditures.

Calendar Year 2014							
County	Total County Road Centerline Miles	Number of County Bridges	Length of Ferry Route (miles)	Ferry Docks Included in County Bridge Inventory	(from county financial reports)		
					Total County Road Related Expenditures	Total County Ferry Related O&M Expenditures	County Ferry O&M Expenditures as a Percent of Total Road Related Expenditures
Pierce	1557	102	3.5	3	\$100,899,000	\$4,089,892	4.1%
Skagit	801	105	0.7	2	\$23,206,000	\$2,504,800	10.8%
Wahkiakum	139	20	1.5	1	\$6,757,000	\$848,988	12.6%
Whatcom	940	136	0.9	2	\$32,320,000	\$2,332,562	7.2%

With the high cost of operations and its drain on local resources it might be argued that counties should simply discontinue the service and allow a private entity to provide the service at no public cost. In fact, many years ago a number of ferries in the state were private operations. In many cases it became necessary for public entities to step in to ensure public transportation services were continued, much like any other road or bridge that provides the only access to public and private properties.

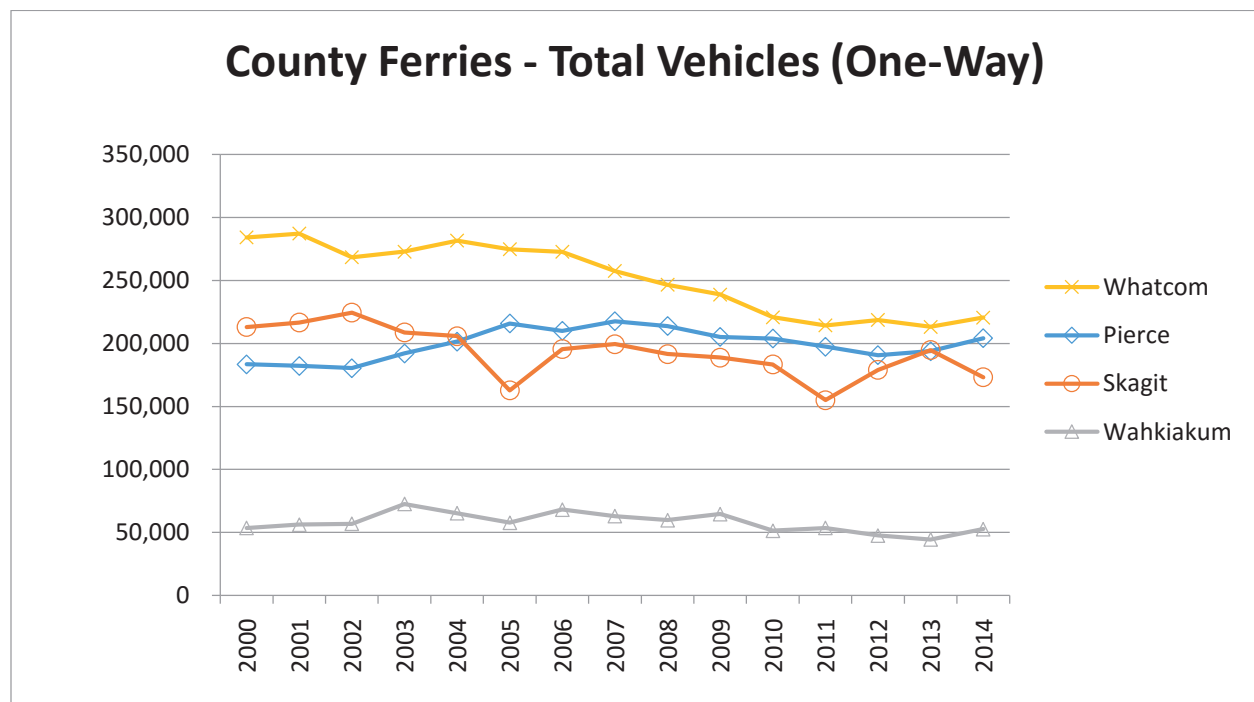
Due to the high cost of operation, all four ferry systems generate supplemental revenue through user fees (fares). As discussed in more detail later in this report the charging of fares provides substantial financial support, although local financial subsidy is still required especially during years of major maintenance activities.

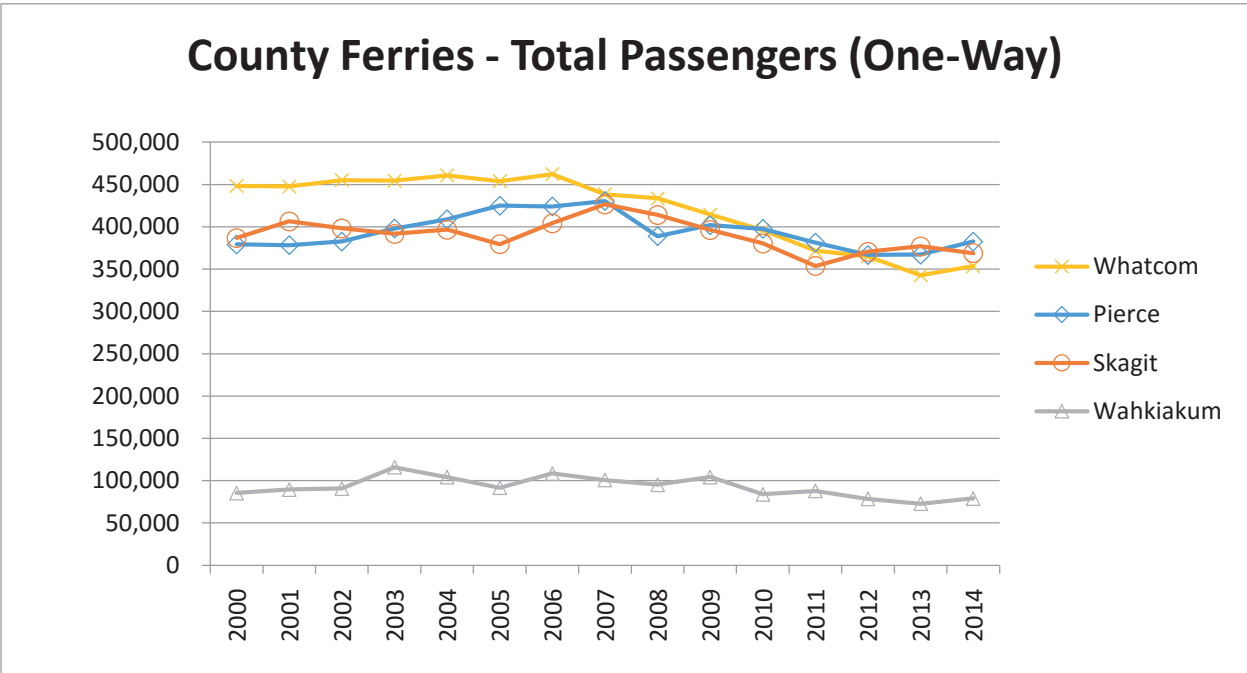
County Ferry System Use

With the current population and demographic similarities between the islands served by Pierce, Skagit, and Whatcom counties, it is not surprising that both the vehicle and passenger utilization is also very similar for these three ferry systems. Due to the more remote location and existing roadway alternatives, it is also not surprising that the Wahkiakum system carries substantially fewer riders than the other three counties. Regardless of the magnitude of ridership numbers, all four county ferries continue to provide a critical link in their local transportation system.

The relationship between demand (demographics / land supply / available on-island services) and ferry service provided (schedule / car deck space / parking / passenger space) is very dynamic. The application of a supply/demand model is also highly influenced by a third factor: cost of both providing and using the ferry service. Fare structures ultimately have a major influence over both short-term and long-term ridership levels.

The following two graphs present ridership information, comparing the four county ferry systems.





Operation and Maintenance Costs

Operation and Maintenance Costs (O&M) are routinely divided into “fixed” and “variable” costs. The variable costs are primarily fuel and the amount expended on a given year for repair/maintenance of the boat and associated docks and facilities. It is not uncommon for many repair/maintenance costs to be considered fixed costs due to their predictable and repetitive nature.

With the formal establishment of an operating schedule, the most significant fixed cost is associated with staffing, whether county employees or contracted operation. Under Coast Guard regulations (operational safety standards), there is a minimum crew size required on each vessel at all times of operation, subject to the vessel’s overall size and user capacity.

For all four of these ferry systems the annual O&M costs are the primary factor used to determine the appropriate fare structure for users to cover a portion of the system costs.

Even though not included in this O&M financial analysis, when a capital expenditure occurs local governments may account for a depreciation expense as well. While depreciation of capital expenditures will affect the literal calculation of operating costs for an individual ferry system, it is neither included nor allowed in the required financial reporting of ferry O&M at the state level. From a local policy standpoint, depreciation may or may not be included in local fare setting policies.

Operation and Maintenance Revenues

The three categories of O&M revenue include Farebox, Operating Subsidy, and Other Local Funds.

Farebox - The total of all user fees charged for ferry services.

As suggested in the “County Ferry System Use” section, the impact of various fare setting policies can highly influence an operational supply/demand evaluation. Each of the counties expends a great deal of organizational time in reviewing and planning for cost recovery through the farebox. It is by far the one revenue source that the ferry user community is most interested in.

At times the established fares may include a surcharge in addition to the normal fare. Surcharges are commonly applied to address a specific capital or operational financial need having both a defined magnitude and predicted life.

Operating Subsidy - Special revenue directed to the counties specifically due to the unique nature and costs of operating a ferry as a part of their road system.

For Wahkiakum County, due to the fact that this ferry service is primarily an extension of a state highway, the operating subsidy is a direct WSDOT budgeted expenditure item. The basis for this subsidy is specifically outlined in RCW 47.56.720. The dollar amount is adjusted periodically as appropriate.

Prior to 2015, the other three counties (Pierce, Skagit, and Whatcom) were receiving an equitable share of \$500,000 on an annual basis, as described in RCW 47.56.725. During the 2015 Legislative Session, this amount was increased to \$900,000 plus an annual inflation factor. The distribution among these three counties is based on the relative magnitude of financial shortfall (operating deficit) of each in a given year. The “deficit” is the difference between total O&M costs and the combination of farebox revenue and certain local funds.

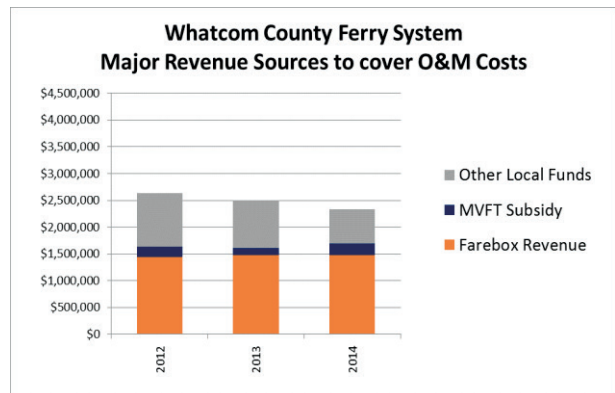
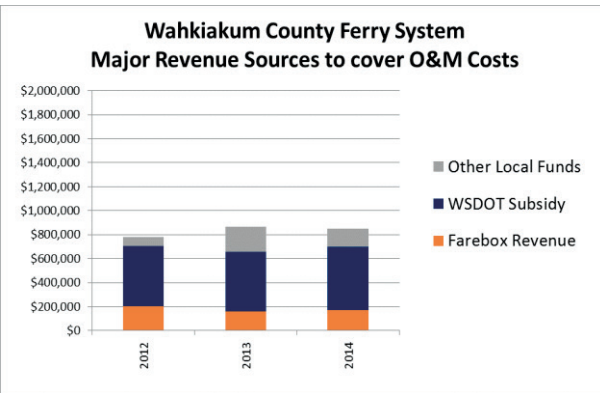
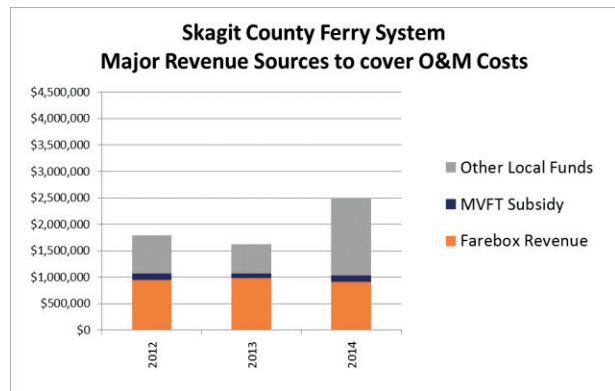
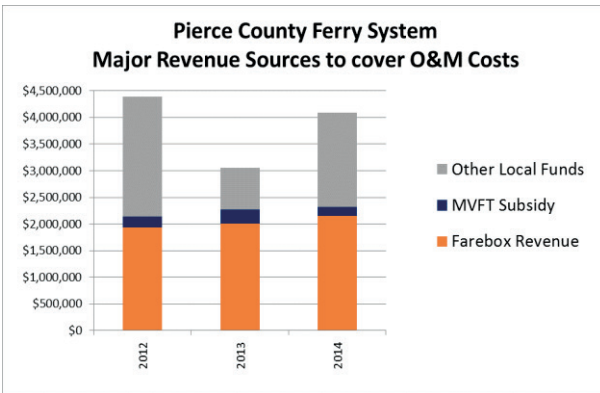
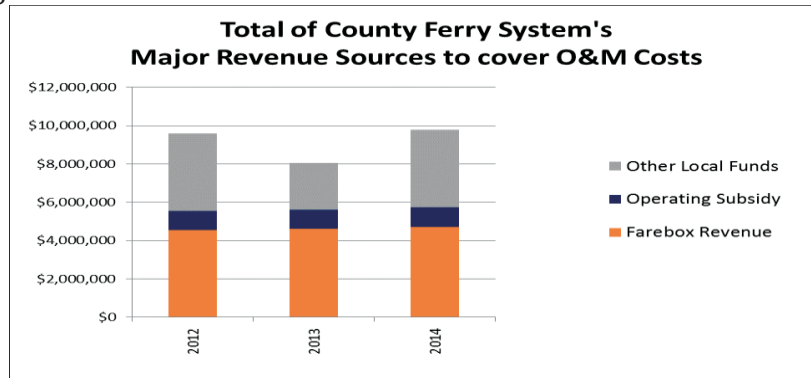
Other Local Funds - Represents the balance of revenue needs in order to offset all O&M costs.

The source of other local funds are a county Road Fund and its various revenue sources. The two most significant sources include the counties’ share of general distribution of Fuel Tax and the local Road Levy (property tax).

In the case of Pierce, Skagit, and Whatcom County’s, a part of their Fuel Tax general distribution is a calculated amount that is “attributable to the county ferry”, as noted in RCW 47.56.725 (3). This calculated amount of Fuel Tax is considered a part of “Other Local Funds” because it is only an administrative calculation without any requirement of dedicated use or purpose other than a local county road purpose.

An additional potential local revenue source is through formation of a Ferry District, as provided for in RCW 36.54. At this time, none of the four counties has formed a Ferry District, opting instead to focus on the farebox and other local revenues.

The following charts represent the magnitude of operating costs and the relative significance of the three major revenue sources for the four counties.



Of particular note overall:

- O&M costs are highly variable on a given year, with 100% of the variability addressed through use of “other local funds”
- Vessel and land use limitations discourage growth in the number of users and, therefore, the need to increase fares over time
- The general decline in the number of users (see previous graphs) can be attributed to the same economic influences affecting overall mobility, along with the moderate increase seen in the past couple of years