



AGENDA

County Road Administration Board
 July 25-26, 2019
 CRAB Office - Olympia Washington

Thursday
1:00 PM

1 Call to Order

2 Chair's Report

- A. Board Reappointments
- B. Approve July 25-26, 2019 Agenda
- C. Approve Minutes of April 25-26, 2019 CRABoard Meeting
- D. Elect Chair, Vice Chair, and Second Vice Chair

Info	Enclosure
Action	Enclosure
Action	Enclosure
Action	

3 Certifications - Mike Clark

- A. Resolution 2019-005 - Certify the Master Road Log
- B. Resolution 2019-006 - Certify MVFT Allocation Factors

Action	Enclosure
Action	Enclosure

4 Rural Arterial Program - Randy Hart, P.E.

- A. Program Status Report
- B. Regional Meeting Update
- C. Project Request Actions Taken by CRAB Staff
- D. Resolution 2019-007 - Apportion RATA Funds to Regions
- E. Resolution 2019-008 - Establish Region Percentages for 2019-2021 Biennium

Info	Enclosure
Info	Enclosure
Info	Enclosure
Action	Enclosure
Action	Enclosure

5 Executive Director's Report - John Koster

- A. Budget Reports
- B. Activities and Updates

Info	Enclosure
Info	Enclosure

6 Deputy Director's Report - Walt Olsen, P.E.

- A. County Engineers/PWD Status
- B. County Visits Completed Since April 2019
- C. County Audits
- D. Activities

Info	Enclosure

RECESS 5:30 PM - Dinner at Tugboat Annie's

**Friday
8:30 AM**

7 Call to Order

8 Emergency Loan Program - Drew Woods, PE

Info	Enclosure
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9 Staff Reports

- A. Compliance & Data Analysis - Drew Woods, P.E.
- B. Engineering & Admin Support - Derek Pohle, P.E.
- C. Information Services - Eric Hagenlock
- D. Design Systems - Jim Ayres, PE

Info	Enclosure

10 Possible Executive Session

ADJOURN

Chair: _____

Attest: _____



June 5, 2019

John Koster
Executive Director
County Road Administration Board
2404 Chandler Court SW
Suite 240
Olympia, WA 98502-6067

Mr. Koster:

The Board of Directors of the Washington State Association of Counties (WSAC) appoints the following members to the County Road Administration Board:

- Mark Storey, Whitman County Engineer (20,000 – 125,000 pop, Engineer)
- Rob Coffman, Lincoln County Commissioner (20,000 pop. or less, Elected)
- Bob Koch, Franklin County Commissioner (20,000 – 125,000 pop., Elected)

If you have any questions, please contact WSAC Communications & Member Services Director, Derek Anderson, at (360) 489-3020 or danderson@wsac.org.

Sincerely,

Eric B. Johnson
Executive Director
Washington State Association of Counties

cc:

Mark Storey, Whitman County Engineer
Rob Coffman, Lincoln County Commissioner
Bob Koch, Franklin County Commissioner

Minutes
County Road Administration Board
April 25-26, 2019
CRAB Office – Olympia, Washington

Members Present: Brian Stacy, PE, Pierce County Engineer, Chair
Rob Coffman, Lincoln County Commissioner, Vice-Chair
Al French, Spokane County Commissioner
Bob Koch, Franklin County Commissioner
Kathy Lambert, King County Council Member
Grant Morgan, PE, Garfield County Engineer
Randy Ross, Grays Harbor County Commissioner
Mark Storey, PE, Whitman County Engineer

Member Absent: Lisa Janicki, Skagit County Commissioner, Second Vice-Chair

Staff Present: John Koster, Executive Director
Walt Olsen, PE, Deputy Director
Eric Hagenlock, Information Services Division Manager
Randy Hart, PE, Grant Programs Manager
Derek Pohle, PE, Engineering & Admin Support Specialist
Andrew Woods, PE, Compliance & Data Analysis Manager
Karen Pendleton, Executive Assistant
Rhonda Mayner, Secretary
**Jim Oyler, Web & Training Strategist
**Scott Campbell, IT Systems Security Manager
**Cameron Cole, GIS Administrator
**Jim Ayres, PE, Design Systems Manager

Guests: Bobby Jackson, Lewis County Commissioner
*Ahmad Qayoumi, PE, Clark County Engineer/PWD
*Susan Wilson, PE, Clark County Trans Programming Manager
*Chad Johnson, DES, CRAB Budget Analyst
**Jane Wall, WSACE Managing Director
**Paul Randall-Grutter, Skagit County Engineer

**Present April 25, 2019 only*

***Present April 26, 2019 only*

CALL TO ORDER

Chair Stacy called the meeting to order at 1:00 p.m. He requested that all electronic devices be silenced and that guests please sign in.

CHAIR'S REPORT

Approve April 25-26, 2019 Agenda

Commissioner Koch moved and Commissioner Ross seconded to approve the agenda as submitted. **Motion carried unanimously.**

Approve Minutes of January 24-25, 2019 CRABoard Meeting

Commissioner Ross moved and Councilmember Lambert seconded to approve the minutes of the January 24-25, 2019 CRABoard Meeting. **Motion carried unanimously.**

RURAL ARTERIAL PROGRAM

Program Status Report

Mr. Hart reviewed the Rural Arterial Program status report, noting that 1,082 of 1,181 projects have been completed. Anticipated revenue to the end of the 2017-19 biennium is \$608,454,648. RAP expenditures to date total \$580,841,211. RAP obligations remaining to active projects through the 2017-19 biennium total \$103,121,260. The RATA fund balance as of March 31 was \$19,361,771.

Project Request Actions Taken by Staff

Mr. Hart reported that Clark, Cowlitz, Grays Harbor, King and Skagit Counties were facing construction lapsing on April 18, 2019. All five were granted extensions to April 18, 2021.

Asotin County's Snake River Road project commenced construction two years ago by processing construction materials, but lapsing of all remaining construction phases was not tracked as the county did not enter commencement information into RAP Online. Mr. Koster sent a letter to the county dated January 23, 2019, extending the lapsing date to April 16, 2021. All remaining construction phases must commence by that date in order for the county to retain RATA funding.

Chelan County requested approval to reduce the proposed width for Wenatchee Heights Road from 31 feet to 30 feet. The original width proposed was to accommodate an uphill bike lane. The new proposed width creates a more balanced roadway section for both motorists and bicyclists. It also meets the standard width required for the road classification. CRAB staff found this did not significantly reduce the score and did not affect the project's ranking on the funding array. Mr. Koster sent the county a letter on March 14, 2019, with a contract amendment approving the change. The signed amendment was returned to CRAB on April 10, 2019.

Resolution 2019-002 - Apportion RATA Funds to Regions

Mr. Hart presented Resolution 2019-002 - Apportion RATA Funds to Regions, which authorizes the accrued amount of \$5,298,107 deposited to the RATA for January, February and March 2019 be apportioned to the regions by the established 2017-2019 biennium regional percentages after setting aside \$143,387 for administration.

Commissioner French moved and Councilmember Lambert seconded to approve Resolution 2019-002 - Apportion RATA Funds to Regions. **Motion carried unanimously.**

Linking RATA Reimbursements to Project Progress

Mr. Hart reported that historically, staff has programmed reimbursement of construction costs based on the county schedules listed in final prospectuses. Since these schedules

are optimistic, programmed reimbursements have typically been more than twice the available revenue.

The amount of obligation to projects each year has fluctuated between \$100 million and \$150 million, while available balance of RATA funds has fluctuated between \$15 million and \$40 million, and has remained under \$20 million for the last six years.

Maintaining these optimistic plans has often prevented counties from advancing older projects that could be delivered sooner, since there is no room in the short-term program for the additional payments. Designing and then shelving these projects, however, adds cost to the counties. The CRABoard has, therefore, advised staff to link project payments to progress certified by the county engineer.

CRABstaff has developed a feature in RAP Online that will initially set CN reimbursements to commence five years from the date of approval rather than following the plan listed in the prospectus. As projects commence to design, permitting, right of way, engineers' estimate and PS&E, their reimbursement schedules will automatically advance, conditioned on RATA funds available. Staff also plans to assign this scheduling framework to current projects that were approved in 2017 and later.

The list represents approximately one-third of all projects programmed for payment in the next two years. Any that show progress can advance, conditioned on CRABstaff review of funds available. There are 62 older projects not listed that will retain their current 2020 and 2021 reimbursement schedules, using \$56 million in RATA funds.

Mr. Hart noted that the advantages of linking reimbursements to project progress include encouraging more accurate, timely reporting; allowing projects to advance toward reimbursement in a timely and consistent manner; that counties still have the obligation to advertise for construction within six years of approval; CRAB will still allow a one-time, two-year extension for construction; with the allocation of new funds for the 2019-21 biennium, the total programmed amount to projects will be about \$165 million over the next seven years; CRAB will be better able to manage the RATA on a cash flow basis; and that RAP Online will advance the schedules automatically only after CRAB staff determines RATA funds are available.

Future and amended contracts will include the provision of "The schedule of construction reimbursements to the county will be based on project progress as certified by the county engineer within the County Road Administration Board's RAP Online project management application and RATA funds available."

Consideration of Available Funds for Allocation

Mr. Hart reported that per WAC 136-161-020 (6), "The county road administration board reviews the rank-ordered arrays in each region and, based upon the RATA funds projected to be allocable for the next project program period, selects and approves specific projects for RATA funding."

The CRABoard used an estimate of \$46,000,000 as the basis for its call for new projects in October 2018. County submittals and funding limits for the 2019-21 biennium are based on that amount. There are additional funds of \$5,260,775 turned back from the prior array and from prior projects that were recently withdrawn or underrun. Total available RATA funds are \$51,258,000, which multiplied by 90% equals \$46,132,200.

The CRABoard has advised staff to maintain a minimum balance of \$12,000,000 in the account. The anticipated balance by the end of the 2017-19 biennium is \$20,061,771. Further reimbursement to counties in the 2019-21 biennium, based on spending history, will lower this balance to about \$17,771,771.

Of the \$46,132,200 to be allocated to projects, \$12,174,438 would be added to current funded projects and \$33,957,762 would be allocated to new projects. An estimated additional \$5,125,800 can be allocated at the April 2020 CRABoard meeting. Per WAC 136-161-070 (4), the CRABoard can allocate no more than 90% of estimated revenue in the first year of the biennium and the remainder "at such time as deemed appropriate" by the board.

If funded, CRABstaff would schedule construction reimbursements for new projects in the 2023-25 biennium. This five year period is typical for project delivery times. Projects that progress faster can have access to RATA funds upon a clear demonstration of progress and the availability of funds.

The RATA balance has cycled between \$20 million and \$15 million before and after each construction season for the last six years. A steady balance is anticipated in the future. The account is gaining an additional \$4,844,000 in Connecting Washington funding in the 2019-21 biennium and Spokane County's Bigelow Gulch Projects are well into construction, anticipating \$9.5 million to be charged to RATA in that time frame.

Allocating to partially funded projects at this meeting will assure the program continues without interruptions and maintains the forecast of expenditures as presented. Any subset of projects could be delayed, if necessary, to maintain a \$12,000,000 balance.

The RAP is operating with a stable balance and has the ability to program construction reimbursements of new projects in 2024 and beyond.

Resolution 2019-003 – To Approve 2019-2021 RAP Projects and Allocate 90% of Estimated 2019-2021 RATA Revenue

Mr. Hart presented Resolution 2019-003 - To Approve 2019-2021 RAP Projects and Allocate 90% of Estimated 2019-2021 RATA Revenue, which allocates 90% of the estimated 2019-2021 fuel tax revenue and turned-back funds for a total of \$46,132,200 to the listed projects in the five regions.

Following questions and discussion, Commissioner Ross moved and Mr. Storey seconded to approve presented Resolution 2019-003 - To Approve 2019-2021 RAP

Projects and Allocate 90% of Estimated 2019-2021 RATA Revenue. **Motion carried unanimously.**

Clark County Request for Emergency Project Funds

Mr. Hart reported that Clark County has requested \$532,200 in emergency RATA funding for the repair of NW Pacific Highway, milepost 1.81 to 1.83. Federal funding is not available for this project, as the governor did not issue an emergency declaration for road impacts.

NW Pacific Highway is a major collector adjacent to Interstate 5 between the towns of Woodland and La Center, serving local residents along a five-mile route. It is also a freight alternate route to I-5 when needed. On February 12, 2019, a 30-inch culvert just west of the Wellman Road intersection experienced a major washout due to heavy rain runoff. County road crews driving through the area discovered much of the culvert destroyed, leaving a hole in the roadway. The county closed the road immediately and declared an emergency. The repairs provided a 13-foot corrugated metal pipe suitable for fish passage and included stabilizing the bank and replacing guardrail and pavement.

Staff has reviewed the project site and finds that the county declared an emergency; that the county has completed the necessary repairs; and that the request meets the requirements for RAP emergency funding.

Staff recommends approval of \$532,200 in RATA funding for repair of NW Pacific Highway Road at milepost 1.81–1.83. This funding, if approved by the CRABoard, will be deducted from the county's 2021-2023 funding limit on the array of RAP proposed projects.

Mr. Hart introduced Mr. Qayoumi and Ms. Miller, who supplied further information on the request.

Following discussion, Vice-Chair Coffman moved and Mr. Storey seconded to approve Clark County's request for up to \$532,200 in emergency funding for the repair of NW Pacific Highway, milepost 1.81 to 1.83. This amount will be deducted from the county's funding limit for the 2021-2023 biennium. **Motion passed unanimously.**

Chair Stacy called for a brief recess.

Vice-Chair Coffman presented two videos of the progress on Lincoln County's Porcupine Bay Road repairs. He noted that the road is scheduled to reopen on May 6, after two years of construction.

EXECUTIVE DIRECTOR'S REPORT

CRABoard Positions

Mr. Koster reported that on March 1, 2019 he sent a letter to WSAC President Scott Hutsell notifying him of the June 2019 expiration of the terms of Vice-Chair Coffman,

Commissioner Koch, and Mr. Storey. He noted that all three members are eligible for reappointment by WSAC.

WSACE Award Nominations

Koster reported that nomination forms for the WSACE Engineer of the Year and Project-Program Manager of the Year have been sent out. The application deadline is May 10, 2019. The awards will be given at the WSACE Conference in June.

Current Budget Status

Mr. Koster introduced Mr. Johnson, who reported that the fund balances are tracking as projected throughout the remainder of the biennium.

2019-2021 Budget Submittal

Mr. Johnson reported that the House and the Senate's proposed budgets are the same for all of CRAB's operating and capital funds. In regards to the new RAP emergency fund, the Senate proposal would take \$500,000 each from Fund 102 and Fund 186 to start the new program. The House proposal would use \$3,000,000 in new funds from the state transportation budget.

Updates

Mr. Koster reported that Mr. Clark was promoted to a WMS 2 management position. The agency organizational chart has been updated.

He announced that the agency's requested legislation adjusting population limits for the CRABoard positions has been signed by the Governor. Senate Bill 5923 establishing a separate RATA emergency fund will be signed by the Governor on April 26.

Mr. Koster noted the inclusion of the minutes of the last WA State Road Usage Charge Committee in his report for the Board's information.

He reported that a security fence has been installed in a portion of the parking lot in order to safeguard the agency's vehicles from periodic vandalism. The agency's proposed office move is still in negotiation with the building owners.

Mr. Koster turned the floor over to Mr. Olsen, who presented proposed WAC 136-250, Allocation of Emergency Loan Account (ELA) Funds to Emergency Projects. He noted that this WAC will cover emergency projects only. Emergent projects will remain in WAC 136-163. The work must be the result of a natural or man-made disaster, and the applying county must declare an emergency. The Board authorized for staff to proceed with drafting the WAC and presenting it for discussion at the Washington State Association of County Engineers Conference in June.

COMPLIANCE REPORT

At the January 2019 CRABoard meeting Mr. Woods reported that Yakima County was unable to meet the standard of good practice requiring all paved arterial and collector roads be rated for pavement condition. No action of the Board was requested, to allow

time for Yakima County to complete their corrective action plan. On January 22, 2019, Yakima County notified CRAB staff that the required pavement condition rating was completed. There is no further action required regarding this issue.

Mr. Woods reported that 33 counties submitted the required Certification of the 2019 Road Levy and Estimated Revenue Produced by the February 1 due date. The remaining six counties submitted their forms by February 12. The delay was primarily due to a delay receiving the appropriate levy numbers from the county assessor. All 39 counties submitted the required forms and are considered to be in reasonable compliance with the standard of good practice.

All 39 counties submitted the required Traffic Law Enforcement Certification, Certification of Expenses for Fish Passage Barrier Removal, Annual Construction Report, CAPP Report, Bridge Inspections, Annual Certification, Annual Certification for Maintenance Management, and County Ferry System Report to CRAB reasonably close to the April 1 deadline. Two minor issues were reported to CRAB and quickly addressed by the reporting counties.

Mr. Woods reported that Kittitas County is actively recruiting for a County Engineer. The Public Works Director is currently assuming those duties.

He noted that the Director of Highways and Local Programs has certified to CRAB that all 39 counties have current Bridge Inspection Certificates on file with the Department.

He reported that there were no new audit findings involving county road or ER&R funds from January 19, 2019 to April 19, 2019.

On March 28, 2019, the SAO issued a finding to Spokane County resulting from a fraud investigation report. The report found that \$1,384,407 was misappropriated over a period from January 24, 2007 to December 5, 2016 by a former employee of the Risk Management Department. The misappropriation did not directly involve county road or ER&R funds. CRAB staff is aware of the situation and the corrective action being taken by the county, and will continue to monitor the situation. Staff does not anticipate any action being required by the CRABoard.

Ferry County's FY 2016 – FY 2017 accountability audit resulted in a management letter dated February 4, 2019 regarding the stability of the county road fund. As of the end of February 2019, the road fund had a balance of \$380,000 and outstanding grant reimbursements of \$400,000 that a former employee failed to submit for reimbursement. Staff will continue to assist Ferry County with addressing the concerns outlined in the management letter.

Whitman County's FY 2017 accountability audit resulted in a management letter dated April 8, 2019 expressing concerns about fuel card purchases. Whitman County is currently amending their policies and procedures to address the SAO concerns.

Clallam County's FY 2017 accountability audit had a finding regarding their indirect cost distribution method. This finding was after receiving management letters for the same issue for FY 2015 and FY 2016. CRAB staff is working with the County to develop a corrective action plan; however, the retirement of the county's two top financial positions is impacting the timeline. The county continues to work on an indirect cost distribution plan, and hope to have it approved by the State Auditor's Office by mid-2019.

Mr. Woods certified that he has reviewed all of the compliance reporting with Mr. Olsen. Staff recommends issuance of a 2018 Certificate of Good Practice for all 39 counties.

Mr. Woods reported on his other activities and meetings.

Resolution 2019-004 – Certificates of Good Practice

Mr. Koster announced that as required by RCW 36.78.090 and RCW 36.78.100, and pursuant to WAC 136-04-010 through WAC 136-04-060, he is submitting to the County Road Administration Board a report of the review of the annual certifications submitted by the counties for the calendar year 2018. Each year, these certifications provide information to this agency which touches upon three main areas: Management and Administration; Document Submittal, which includes such items as road levy certification, road log updates, construction reports, etc.; and Operations. From receipt of this information, staff is able to determine the level of compliance with applicable laws and Standards of Good Practice achieved by the counties of the State of Washington, and it is upon demonstrated compliance with these laws and standards which continued receipt of the fuel tax distribution depends.

He concluded that all 39 counties have demonstrated reasonable and substantial compliance with all applicable laws and Standards of Good Practice.

Following questions and discussion, Commissioner French moved and Councilmember Lambert seconded to approve Resolution 2019-004, issuing Certificates of Good Practice to all 39 counties. **Motion carried unanimously.**

DEPUTY DIRECTOR'S REPORT

County Engineers/Public Works Directors

Mr. Olsen noted that on January 31, 2019 King County delegated certain developmental review duties of the County Road Engineer Rick Brater to Scott Smith, PE as allowed by King County Code 2.16.140.

On February 1, 2019, Cowlitz County appointed Susan Eugenis, PE, as the County Engineer after the termination of Brad Bastin, PE, effective February 1, 2019.

On February 5, 2019, Douglas County appointed Aaron Simmons, PE as County Engineer, effective February 5, 2019.

County Visits completed since January 2019

Mr. Olsen noted visits to Lewis, Douglas, Okanogan and Ferry Counties. Numerous contacts with County Engineers took place in other venues.

State Auditor's Report

The 1997 State Auditor Office (SAO) audit of CRAB concluded that the minutes of the Board meetings needed specific mention of SAO audits of the counties and of any findings that might relate to the statutory responsibilities of CRAB. The minutes also need to reflect any recommendations from the CRABoard to staff in response to the audits. This report details our staff procedures to satisfy the SAO.

CRAB has reviewed nine audit reports representing seven counties since the January 2019 board meeting. Two audits contained a total of three findings issued and one involved County Road Funds in some form. One audit had a prior finding involving County Road Funds. Any audit with a number in bold print under the "Co.Rd?" heading, revealed substantive findings involving County Road Funds.

2017 Audits

DDR 2019 Q1 Audit reports		3/26/19 10:28 AM						
Report #	Entity/Description	Report Type	Audit Period	Date Released	New?	Co. Rd?	Prev?	Status
1023254	Adams County	Accountability	01/01/2017 to 12/31/2017	3/11/2019				
1023305	Stevens County	Accountability	01/01/2016 to 12/31/2017	2/21/2019	1	NCR		
1019842	Ferry County	Financial and Federal	01/01/2016 to 12/31/2016	2/19/2019	2	1		
1023072	Ferry County	Accountability	01/01/2016 to 12/31/2017	2/14/2019				
1023175	Ferry County	Financial	01/01/2017 to 12/31/2017	2/14/2019			1	NC
1023209	Spokane County	Accountability	01/01/2017 to 12/31/2017	2/11/2019				
1023063	Pend Oreille County	Accountability	01/01/2017 to 12/31/2017	2/4/2019				
1022746	Franklin County	Accountability	01/01/2017 to 12/31/2017	1/31/2019			1	NCR
1023050	Asotin County	Accountability	01/01/2016 to 12/31/2017	1/24/2019				
NC	County Road-Not Corrected			TOTALS	3	1	2	
NCR	Non-County Road							
CR-FC	County Road-Fully Corrected							
CR-PC	County Road-Partially Corrected							

Activities

Mr. Olsen reviewed a list of his activities since the January 2019 CRABoard meeting, including attending the National Association of County Engineers Conference in Wichita, Kansas. He announced that Chair Stacy won the 2019 Urban County Engineer of the Year Award at that conference.

Mr. Olsen reported on his attendance at an Emergency Services presentation, where he learned of a mobile application called MSAR that is available for submitting federal disaster reports through the ER fund of FHWA. He will be meeting with the MSAR staff on May 1 to discuss the possibilities of its use by the counties.

Chair Stacy recessed the meeting at 3:46 p.m. The meeting will reconvene April 26, 2019 at 8:30 a.m.

**County Road Administration Board
Friday, April 20, 2018**

CALL TO ORDER

The meeting was reconvened by Chair Stacy at 8:30 a.m.

WSACE UPDATE

Ms. Wall noted that the WSACE will be increasing their dues for the first time in 11 years. The annual WSACE Conference will be June 18-20 at the Semiahmoo Resort in Whatcom County.

She reported on the status of bills in the legislature, and noted that it appears they will be able to finish their business by the end of the regular session Sunday and not need to go into special session. Both houses have agreed on an operations budget, and have generally agreed on a transportation budget.

STAFF REPORTS

Information Systems

Mr. Hagenlock reported on the status of the GIS-Mo project, noting that it has moved out of the planning stages and into development. Mr. Olsen was successful in getting a \$50,000 increase in the Washington Transportation Safety Commission grant.

Initial development should be completed in September, and then the project will move into training. Staff has engaged DTS for VUEWorks Program training development.

Phase 3, the VUEWorks Configuration Kickoff, will be at the CRAB offices May 7-8. Staff will be making several presentations at conferences in the coming months.

He reported on the WATECH Migration Project, noting that the decision has been made to move to the WaTech Private Cloud. The OCS Security Design Review is underway. WaTech network configuration is 50% complete, and requires approved OCS security design review to finish. The WaTech Private Cloud team is awaiting the Network team. If the process is not completed by the June 30 deadline, staff will request an extension.

The Virtualization of the SQL Server was completed in February.

A SQL Server upgrade will be purchased by June 30 to develop the upgrade/migration timeline for production environment.

Mr. Hagenlock reported that IT staff tasks for the proposed physical office move will include scheduling fiber installation to the new server room, testing and labeling all cabling between the new offices and server room, scheduling IT server equipment relocation and fiber cutover, and installing a VoIP phone system.

A vulnerability scan of the new website showed a decrease of site critical exploits from 65 to eight.

Devin Rue is interning from SPSCC to assist staff in developing a prototype Content Management System.

Mr. Hagenlock noted that Mike Clark coordinated a PowerBI presentation by Tim Dyeson from the HealthCare Authority on January 18 at CRAB. Mr. Clark and Kathy O'Shea attended the Washington State DOT Crash Data Improvement Program on February 5, and Mr. Clark attended a WSDOT Chipseal Roundtable on March 18.

The IT team continues to participate in monthly webinars to familiarize themselves with VUEWorks. Mr. Hagenlock, Mr. Clark, Mr. Oyler, Ms. O'Shea, Mr. Cole and Mr. Campbell attended a four-day Esri Roads & Highways training April 8–11 in the CRAB Training Room.

Mr. Hagenlock reported on ongoing system security updates, noting that staff is developing a Mobile Device Management (MDM) policy and procedures to comply with OCIO Policy 191. Windows critical updates have been performed and automated, and full server anti-virus sweeps are routinely conducted. Staff found and quarantined an email virus as detected by the Office of Cyber Security (OCS).

He reported that in the first quarter of 2019, staff conducted 12 person days of training, involving the staff of five counties. Regularly scheduled Mobility training is no longer be offered, but will be scheduled on an as-needed basis.

Also in the first quarter of 2019, 97 reported issues were resolved across 14 categories.

Mr. Hagenlock introduced Mr. Cole, who gave a brief demonstration of the Mobility replacement system.

Chair Stacy called for a brief recess.

Design Systems

Mr. Ayres noted two recent AutoCAD training sessions held in the CRAB. He reported that he has begun offering an online computer based training video/PDF, "*Civil 3D User Interface*", as a prerequisite to attend the Civil 3D fundamentals class.

He reported on upcoming support for the Counties UAS Program in Okanogan, Benton and Kitsap Counties. Other demonstrations are proposed in Grays Harbor, Jefferson, Cowlitz, Chelan, Skamania, Ferry and Stevens Counties.

He noted that the WSDOT Aviation Division invited CRAB to provide input into a new system that will help safely launch and monitor UAVs on a routine basis. Efforts like this are crucial to the national effort to leverage the available UAV technology in a responsible way. WSDOT is partnering with AiRXOS, a subsidiary of GE Aviation.

CRAB will be involved in the trial of a mobile app they are working on in conjunction with the FAA to expedite the use of drones by first responders. This system can help manage drone use within the state, and provide first responders and authorized users with a way to quickly launch a UAV while keeping the public informed.

CRAB's UAS program received a Request For Opinion on the DOT-FAA Proposed UAV Rules, and submitted staff's opinion regarding the FAA's NPRM, "*Operations Over People*", noting that CRAB is not a proponent.

CRAB has purchased a *DJI Matrice 210* Rotary UAV, which comes with one upward Gimbal and two downward, allowing the attachment of two sensors at a time focusing in one direction.

Engineering and Support Services

Mr. Pohle noted onsite visits to Mason and Cowlitz Counties, and noted 14 contacts with counties, ten with other agencies and nine with the public since the January CRABoard meeting.

He reported that one new audit issue, with compliance components initiating consultative contacts, involving the road fund or road departments, has been reviewed in the last quarter for Jefferson County.

Mr. Pohle noted that Commissioner Training was conducted on April 10 at WSAC, with 11 participants from nine counties. A three-day County Engineers Training will be held at CRAB May 15-17. There are 11 participants registered from seven counties. He has redesigned the training agenda and some content for that class.

He has updated the County Engineer Desk Reference, repairing broken web-links and updating selected link titles, along with updating CRAB website references due to the new website launch last December. He plans to post the update in May.

Mr. Pohle reported on his other activities since the January CRABoard meeting.

Chair Stacy adjourned the CRABoard meeting at 10:22 a.m.

Chair

Attest

RESOLUTION 2019-005

**CERTIFYING THE MASTER COUNTY ROAD LOG
AS OF JANUARY 1, 2019**

WHEREAS, Chapter 120, Laws of 1985, Regular Session, Section 1 (2) and WAC 136-60, as originally adopted by the County Road Administration Board on November 12, 1986, and last revised on January 16, 2003, provides for the maintenance and updating of the County Road Log; and

WHEREAS, CRAB staff provides estimated revenues for both the Motor Vehicle Fuel Tax and the County Arterial Preservation Program to the several counties upon adoption of the County Road Log by the CRABoard at their July meeting, so the counties can start their budget process in a timely manner.

WHEREAS, all 39 counties have submitted their County Road Log updates, which substantially reflect their road systems as of January 1, 2019; and

WHEREAS, CRAB staff has reviewed each county's update and finds them to be in substantial compliance with all statutory and administrative code requirements;

NOW, THEREFORE, BE IT RESOLVED that the master County Road Log for all counties reflecting the county road system as of January 1, 2019 be certified as the provisional official County Road Log, and

Adopted by the CRABoard on July 25, 2019 during its regular meeting held in Olympia, Washington.

Chairman

Attest

**Table F
COUNTY ROAD MILEAGE - 1/1/2019**

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	10.759	3.726	14.485	1,094.865	665.473	1,760.338	1,774.823	547.153	1,090.646	1,125.879
Asotin	59.524	20.515	80.039	167.083	152.325	319.408	399.447	100.250	202.757	231.620
Benton	126.206	51.774	177.980	393.670	290.070	683.740	861.720	296.550	593.100	252.298
Chelan	54.355	25.910	80.265	357.040	209.865	566.905	647.170	235.495	471.640	123.325
Clallam	83.470	15.090	98.560	270.080	120.290	390.370	488.930	135.380	270.760	2.960
Clark	423.208	142.440	565.648	279.160	270.940	550.100	1,115.748	413.380	886.765	12.800
Columbia				271.678	229.101	500.779	500.779	141.444	282.888	353.996
Cowlitz	46.320	25.570	71.890	259.612	195.690	455.302	527.192	221.260	442.570	6.560
Douglas	62.982	38.000	100.982	1,156.803	389.540	1,546.343	1,647.325	296.480	599.730	1,205.177
Ferry				477.110	232.320	709.430	709.430	177.625	355.628	507.905
Franklin	19.804	11.283	31.087	610.068	336.930	946.998	978.085	342.878	684.286	393.225
Garfield				234.047	213.026	447.073	447.073	126.175	252.350	315.001
Grant	62.628	30.874	93.502	1,536.767	871.447	2,408.214	2,501.716	830.742	1,669.002	1,021.273
Grays Harbor	32.905	19.433	52.338	264.705	244.231	508.936	561.274	259.048	518.057	35.565
Island	96.090	35.015	131.105	271.179	179.945	451.124	582.229	214.960	430.607	5.070
Jefferson	5.136		5.136	255.674	138.475	394.149	399.285	130.335	261.300	72.938
King	630.643	207.704	838.347	388.023	242.260	630.283	1,468.630	449.964	939.481	51.033
Kitsap	411.981	167.240	579.221	195.321	140.029	335.350	914.571	307.269	622.754	2.885
Kittitas	10.788	11.997	22.785	245.053	296.375	541.428	564.213	304.562	613.859	64.550
Klickitat				695.449	384.490	1,079.939	1,079.939	368.250	735.640	511.766
Lewis	35.552	22.440	57.992	717.977	266.135	984.112	1,042.104	286.542	573.800	41.717
Lincoln				1,338.228	658.520	1,996.748	1,996.748	386.724	773.448	1,537.678
Mason	27.742	9.556	37.298	316.320	263.457	579.777	617.075	263.420	526.520	44.782
Okanogan	7.132	2.802	9.934	834.902	490.618	1,325.520	1,335.454	418.601	837.202	656.229
Pacific				215.456	130.125	345.581	345.581	119.825	240.040	44.345
Pend Oreille				380.412	180.856	561.268	561.268	167.490	334.980	265.609
Pierce	636.681	430.165	1,066.846	249.390	250.770	500.160	1,567.006	680.935	1,442.130	13.020
San Juan				182.160	88.693	270.853	270.853	88.693	177.386	37.950
Skagit	71.759	36.850	108.609	372.677	319.890	692.567	801.176	356.740	714.370	39.748
Skamania				148.929	90.449	239.378	239.378	90.449	181.369	28.750
Snohomish	631.599	187.737	819.336	446.113	330.380	776.493	1,595.829	515.117	1,057.140	10.975
Spokane	292.689	127.516	420.205	1,445.468	663.100	2,108.568	2,528.773	719.326	1,472.469	1,130.003
Stevens				929.062	560.605	1,489.667	1,489.667	468.405	936.840	823.355
Thurston	336.893	112.148	449.041	349.923	232.165	582.088	1,031.129	344.313	702.163	21.552
Wahkiakum				56.489	81.819	138.308	138.308	78.311	156.622	12.654
Walla Walla	42.322	34.367	76.689	452.578	423.464	876.042	952.731	412.863	825.896	364.582
Whatcom	124.570	69.980	194.550	456.450	288.300	744.750	939.300	358.280	719.400	30.450
Whitman				1,281.891	613.991	1,895.882	1,895.882	424.308	848.616	1,449.766
Yakima	121.350	101.600	222.950	773.750	646.250	1,420.000	1,642.950	726.010	1,467.640	538.822
Statewide	4,465.088	1,941.732	6,406.820	20,371.562	12,382.409	32,753.971	39,160.791	12,805.552	25,911.851	13,387.813
Eastern	870.539	460.364	1,330.903	14,675.924	8,508.366	23,184.290	24,515.193	7,491.331	15,048.617	12,872.059
Western	3,594.549	1,481.368	5,075.917	5,695.638	3,874.043	9,569.681	14,645.598	5,314.221	10,863.234	515.754

Data from County Road Logs certified 1/1/2019 by the County Road Administration Board

RESOLUTION 2019-006

REGARDING ROADWAY CATEGORIES AND UNIT COSTS FOR THE 2020 AND 2021 COUNTY FUEL TAX DISTRIBUTION (Revenue forecast based upon 2019 Legislative action)

WHEREAS, RCW 46.68.124(2) makes the CRABoard responsible for (1) establishing a uniform system of roadway categories for both maintenance and construction, (2) establishing a single state-wide cost per mile for each roadway category, and (3) verifying and approving all changes, corrections, and deletions to the County Road Log; and

WHEREAS, the roadway categories established by the Secretary of Transportation in 1983 with the advice and assistance of the CRABoard and in cooperation with the Washington State Association of County Engineers were reaffirmed by the CRABoard for the 2002-2003 update on July 19, 2001, and are included here as Attachment A; and

WHEREAS, the roadway category mileages are derived from the County Road Log as maintained and approved by the CRABoard of each odd-numbered year; and

WHEREAS, each of the 39 counties have submitted updates to their County Road Log, and the CRABoard has certified the official County Road Log as of January 1, 2019 by Resolution 2019-005 Adopted July 25, 2019; and

WHEREAS, based on the updated county Road Log, staff has calculated the single statewide unit costs for both maintenance and reconstruction for each roadway category based on the costs contained within the Road Jurisdiction Study; Phase II, completed in 1988.

NOW, THEREFORE, BE IT RESOLVED that for purposes of determining each county's fuel tax distribution factor for calendar year 2020 and 2021:

1. that the roadway categories and associated unit costs as shown in Attachment A for computing maintenance and reconstruction costs within the statutory fuel tax allocation formula be used, and
2. that the roadway category mileages for each county derived from the County Road Log certified as of January 1, 2019 as shown in Attachment A shall be used for the computation of the fuel tax allocation factors.

Adopted by the CRABoard on July 25, 2019 during its regular meeting held in Olympia, Washington.

Chairman

Attest

**ESTIMATED 2020 REVENUES
MOTOR VEHICLE FUEL TAX**

June 2019 Revenue Forecast **\$155,723,714**
County Road Log Certified January 1, 2019

County	2020 Allocation	
	Percent	Revenue
Adams	2.9938	\$4,662,057
Asotin	1.0762	\$1,675,899
Benton	2.2748	\$3,542,403
Chelan	1.5598	\$2,428,978
Clallam	1.4418	\$2,245,225
Clark	4.3166	\$6,721,970
Columbia	1.0313	\$1,605,979
Cowlitz	1.5037	\$2,341,617
Douglas	2.6517	\$4,129,326
Ferry	1.2529	\$1,951,062
Franklin	2.0170	\$3,140,947
Garfield	0.9232	\$1,437,641
Grant	4.5914	\$7,149,899
Grays Harbor	1.6420	\$2,556,983
Island	1.5657	\$2,438,166
Jefferson	0.9959	\$1,550,852
King	7.7674	\$12,095,684
Kitsap	3.5388	\$5,510,751
Kittitas	1.3729	\$2,137,931
Klickitat	1.8913	\$2,945,203
Lewis	2.3312	\$3,630,231
Lincoln	3.0591	\$4,763,744
Mason	1.5587	\$2,427,266
Okanogan	2.3741	\$3,697,037
Pacific	0.9427	\$1,468,007
Pend Oreille	1.1562	\$1,800,478
Pierce	7.4944	\$11,670,558
San Juan	0.5846	\$910,361
Skagit	2.2164	\$3,451,460
Skamania	0.6352	\$989,157
Snohomish	6.3133	\$9,831,305
Spokane	5.9358	\$9,243,448
Stevens	2.6497	\$4,126,211
Thurston	3.5582	\$5,540,961
Wahkiakum	0.6228	\$969,847
Walla Walla	2.0538	\$3,198,254
Whatcom	2.9144	\$4,538,412
Whitman	3.0421	\$4,737,271
Yakima	4.1491	\$6,461,133
TOTAL	100.0000	\$155,723,714

Attachment A

CRABoard Resolution 2019-006 - July 25, 2019

**MAINTENANCE AND RECONSTRUCTION CATEGORIES AND UNIT COSTS
FOR 2020-2021 COUNTY FUEL TAX ALLOCATIONS**

Categories from 1983 Cost Factor Study, for Roadlog Certified 1/1/2019

Costs are in 1988 dollars, based on Road Jurisdiction Study cost factors

Maintenance and Reconstruction Cost Adjustments from WSDOT RF1906, Implicit Price Deflator - 1.492537%

MAINTENANCE PER CENTERLINE MILE

Maintenance Category	Rural/ Urban	Function Class	Surface Type	Traffic Volume	1988 Dollars	2019 Dollars
					Unit Cost (\$/Mile)	Unit Cost (\$/Mile)
M - 1	R	All	Unimproved	All	737	1,100
M - 2	R	All	Graded	All	1,546	2,307
M - 3	R	Access	Gravel	All	5,664	8,454
M - 4	R	Arterial	Gravel	All	7,753	11,572
M - 5	R	Access	BST	All	8,681	12,957
M - 6	R	Arterial	BST	All	10,492	15,660
M - 7	R	Access	Paved	All	11,399	17,013
M - 8	R	Arterial	Paved	All	14,406	21,501
M - 9	U	Access	BST & Less	All	9,581	14,300
M - 10	U	Arterial	BST & Less	All	21,570	32,194
M - 11	U	Access	Paved	All	12,933	19,303
M - 12	U	Arterial	Paved	< 5,000	28,989	43,267
M - 13	U	Arterial	Paved	5,000 +	51,103	76,273

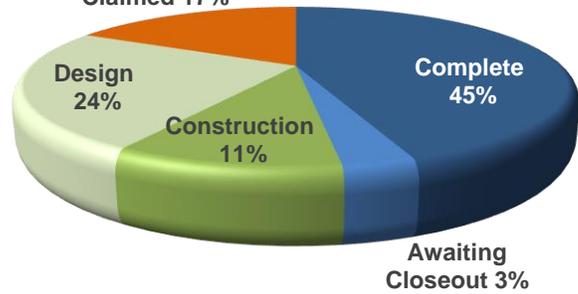
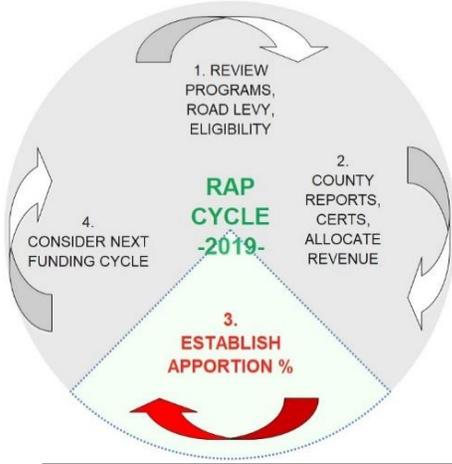
RECONSTRUCTION \ REPLACEMENT PER CENTERLINE MILE

Replacement Category	Rural/ Urban	Function Class	Surface Type	Traffic Volume	1988 Dollars	2019 Dollars
					Unit Cost (\$/Mile)	Unit Cost (\$/Mile)
R - 1	R	Access	Unpaved	All	239,766	357,860
R - 2	R	Access	BST	All	278,368	415,475
R - 3	R	Access	Paved	All	278,526	415,710
R - 4	R	Min Coll	BST & Less	All	402,577	600,861
R - 5	R	Min Coll	Paved	All	392,985	586,545
R - 6	R	Arterial	BST & Less	All	385,983	576,094
R - 7	R	Arterial	Paved	All	364,100	543,433
R - 8	U	Access	BST & Less	All	618,582	923,257
R - 9	U	Access	Paved	All	621,640	927,821
R - 10	U	Collector	BST & Less	All	667,000	995,522
R - 11	U	Collector	Paved	All	671,897	1,002,831
R - 12	U	Min Art	BST & Less	All	893,918	1,334,206
R - 13	U	Min Art	Paved	All	927,474	1,384,290
R - 14	U	Arterial	BST & Less	All	1,346,095	2,009,097
R - 15	U	Arterial	Paved	All	1,577,968	2,355,176

**These are costs per centerline mile for reconstruction of existing road to current standards
Does not include Right-of-way, multi-modal, and environmental mitigation costs**

RURAL ARTERIAL PROGRAM
July, 2019

Projects Funded 2007 - 2018



PROJECT STATUS:

Billing Phase	'83-'07	'07-'09	'09-'11	'11-'13	'13-'15	'15-'17	'17-'19	Current Biennium '19-'21	TOTAL
Completed	958	41	34	2	30	10	1		1076
Awaiting Closeout		2			3	3	1		9
Some RATA paid	1	1	6		16	30	38	1	93
No RATA Paid					1		3	42	46
TOTAL	959	44	40	2	50	43	43	43	1181

FUND STATUS:

Anticipated Revenue to end of '17 - '19 Biennium:

Fuel tax receipts and interest through June, 2017	562,159,348
Estimated fuel tax receipts, interest and CW Transfers July 2017 thru June 2019	46,295,300
Total estimated revenue	608,454,648

RAP Expenditures to date:

To Completed Projects	534,598,502
To Projects in Design or Under Construction	38,770,598
Administration	11,872,782
Total RATA spent	585,241,883

RAP Obligations:

RATA Balance on Active Projects	132,609,181
RATA \$ yet to allocate to Partially funded projects -	31,100,038
Requests for reimbursement - pending	2,597,984
Estimated remaining administration through 2017- 2019 biennium	0
Total RATA obligated	166,307,203

QTR 2 - 2019 RATA ACTIVITY:

MONTH	BEGINNING BALANCE	MVFT REVENUE	INTEREST + Cash Rcpts	PROJECT PAYMENTS	#	ADMIN CHARGES	ENDING BALANCE
April	\$19,361,771.42	1,946,917.49	\$29,133.85	(898,642.93)	33	(50,390.03)	\$20,388,789.80
May	\$20,388,789.80	\$1,475,249.09	\$31,304.85	(454,300.75)	20	(54,352.28)	\$21,386,690.71
June	\$21,386,690.71	\$2,209,492.72	\$34,458.18	(2,355,782.40)	36	(51,064.25)	\$21,223,794.96
TOTALS:		\$5,631,659.30	\$65,763.03	(3,708,726.08)	89	(155,806.56)	

County Road Administration Board – July 25, 2019
Regional RAP meetings update

Regional meetings were held in May and June 2019. Topics covered:

- Actions and funding of new projects by the CRABoard at its April meeting.
- Biennial funding estimates for RAP (46,000,000) and CAPP (38,500,000) which includes \$4.8M Connecting Washington funding for each.
- The rescheduling of payments for recently approved projects that were not showing progress, as well as new projects out to 2024.
- RAP will receive funds from licensing of electric vehicles ~ \$700K in September.
- Federal Lands Access Program funding. Commitment of estimated funds is currently programmed out to 2023, and overruns are appearing on a couple projects. Western Federal Lands (FHWA) has determined a possible call for new projects in 2020.
- Updates to RAP Online:
 - Require a standard road cross section template for 2R, 3R, RC type projects
 - Counties will list the current PCR on the preliminary RAP application.
 - Certifying progress will establish when reimbursements are scheduled.
 - County must update notifications of project phases when certifying 90% design and PS&E.
 - CRABoard will consider a call for projects in 2020 at its October 2019 meeting
- Potential WACs for Emergency Loan Program.
- The regions proposed no changes to their existing project evaluation processes. They reviewed 2R projects, potential augmentation of Fish Barrier rating criteria, and potential match for BRAC funded bridges.
- Mike Clark reiterated the need for accurate and up to date pavement ratings and road information. Update on GIS-Mo deployment. MVFT and CAPA estimates will be published after July CRABoard meeting.
- Drew Woods provided an overview of compliance issues as well as the basic requirements and restrictions of the new Emergency Load Program.

County Road Administration Board – July 25, 2019

Project Actions Taken by CRAB Staff

Wahkiakum County –Scope change: Elochoman Val Rd and Clear Creek Fish Passage

The county contacted CRAB via letter dated April 26, 2019 requesting milepost revision to this project from 6.10 – 6.60 to 6.10 – 6.70. The engineer explained that the work intended for the original project was incorrectly terminated at 6.60 and needs to be extended. After further discussions however, the county has elected to complete further design details to obtain a more accurate milepost terminus, and will request the scope change later. Staff took no action on this request.

Benton County – Hanks Road Scope Change.

Benton County, by its letter dated June 25, 2019, requested a reduction of the design speed for Hanks Road from 50 mph to 40 mph. The county stated that the original description of the terrain as flat (which stipulated a 50 mph design speed for the project) and was incorrect. The county noted that the correct terrain designation is rolling, which stipulates 40 mph design speed. This design speed is met by most of the existing vertical curves, but some will still need improvement. All other proposed improvements (safety, widening from 26 feet to 30 feet, protecting steep slopes with guardrail and resurfacing) will remain as originally submitted. (In further discussions, the county maintained that the estimated cost of the project will exceed the \$1,400,000 in RATA funding.) CRAB staff verified that the terrain is indeed rolling, and that a 40 mph design speed is appropriate for the project. The resulting reduction in vertical rating points (from 5.00 to 2.26) lowers the overall score of the project from 74.50 to 71.76. At that rating, the project retains its original position in the priority array. The CRAB director approved the proposed change in writing, attaching the appropriate amendment specifying the change.

**RESOLUTION 2019-007
APPORTION RATA FUNDS TO REGIONS**

WHEREAS RCW 36.79.030 establishes the Northeast, Northwest, Puget Sound, Southeast and Southwest Regions in Washington State for the purpose of apportioning Rural Arterial Trust Account (RATA) funds; and

WHEREAS RCW 36.79.040 specifies the manner in which RATA funds are to be apportioned to the five regions; and

WHEREAS the CRABoard established regional apportionment percentages for the 2017 - 2019 biennium at its meeting of August 10, 2017; and

WHEREAS RCW 36.79.050 states that the apportionment percentages shall be used once each calendar quarter by the board to apportion funds credited to the rural arterial trust account; and

WHEREAS RCW 36.79.020 authorizes expenditure of RATA funds for costs associated with program administration;

NOW THEREFORE, BE IT RESOLVED that the accrued amount of \$7,528,859 deposited to the RATA in **March, April, May and June, 2019** be apportioned to the regions by their 2017-2019 biennium percentages after setting aside \$155,807 for administration.

<u>REGION</u>	<u>DISTRIBUTION PERCENT</u>	<u>CURRENT APPORTION</u>	<u>BIENNIAL APPORTION (2017 - 2019)</u>	<u>PRIOR PROGRAM (1983 - 2017)</u>	<u>PROGRAM TO DATE</u>
ADMIN.		155,807	999,361	11,960,315	12,959,676
NORTHEAST	43.77%	3,227,185	19,250,856	235,574,412	254,825,268
NORTHWEST	10.90%	803,663	4,794,022	62,772,775	67,566,797
PUGET SOUND	6.81%	502,105	2,995,164	39,670,355	42,665,519
SOUTHEAST	23.63%	1,742,252	10,392,911	129,797,655	140,190,567
SOUTHWEST	<u>14.89%</u>	<u>1,097,848</u>	<u>6,548,898</u>	<u>82,383,836</u>	<u>88,932,733</u>
TOTAL	100.00%	7,528,859	44,981,211	562,159,348	607,140,559

Adopted by the CRABoard on July 25, 2019

Chair's Signature

ATTEST

RESOLUTION 2019-008

**TO ESTABLISH REGIONAL PERCENTAGES FOR THE
APPORTIONING OF RATA FUNDS DURING THE 2019-2021 BIENNIUM**

WHEREAS, RCW 36.79.030 establishes five regions within the state for the purpose of apportioning Rural Arterial Trust Account (RATA) funds; and,

WHEREAS, RCW 36.79.040 establishes the requirements for the apportioning of RATA funds; and,

WHEREAS, WAC 136-100-050 contains the computation of **rural land areas** based on the most recent census data (2010) from the Office of Financial Management as follows:

<u>Region</u>	<u>Rural Land Area (Square Miles)</u>	<u>Percent of Total</u>	
Northeast	26,648	41.58	
Northwest	7,798	12.17	
Puget Sound	4,756	7.42	
Southeast	14,641	22.85	
Southwest	<u>10,238</u>	<u>15.98</u>	
TOTAL	64,081	100.00	and,

WHEREAS, The **mileages of rural principal and minor arterials, and rural major and minor collectors** for each of the five regions, as shown in the County Road Log maintained by the CRABoard office as of July 25, 2019 as required by WAC 136-100-050 are as follows:

<u>Region</u>	<u>Road Mileage</u>	<u>Percent of Total</u>	
Northeast	5,536.34	44.71	
Northwest	1,275.62	10.30	
Puget Sound	823.41	6.65	
Southeast	2,972.03	24.01	
Southwest	<u>1,775.01</u>	<u>14.33</u>	
TOTAL	12,382.41	100.00	and,

WHEREAS, The computation of **apportionment percentages** for each of the five regions result in the following:

<u>Region</u>	<u>Final Apportionment Percentages</u>
Northeast	<u>43.67</u>
Northwest	<u>10.92</u>
Puget Sound	<u>6.91</u>
Southeast	<u>23.62</u>
Southwest	<u>14.88</u>
TOTAL	<u>100.00</u>

NOW, THEREFORE BE IT RESOLVED that the apportionment percentages shown above are hereby established for the five regions for use in the apportionment of RATA funds deposited during the **2019-2021** biennium.

Adopted by the CRABoard on July 25, 2019

Chair's Signature

ATTEST

CRAB Operating Amount and Percentage to Each Fund

RATA - 102	1,137,000
MVF - 108	2,803,000
CAPA - 186	1,677,000

CRAB Capital Amount and Percentage to Each Fund

RATA - 102	65,996,000
MVF - 108 - Skagit and Pierce Ferry	1,456,000
CAPA - 186	39,590,000

BI19 vs. BI21 Operating Funds

	BI19	BI21
RATA - 102	1,056,000	1,137,000
MVF - 108	2,791,000	2,803,000
CAPA - 186	1,592,000	1,677,000

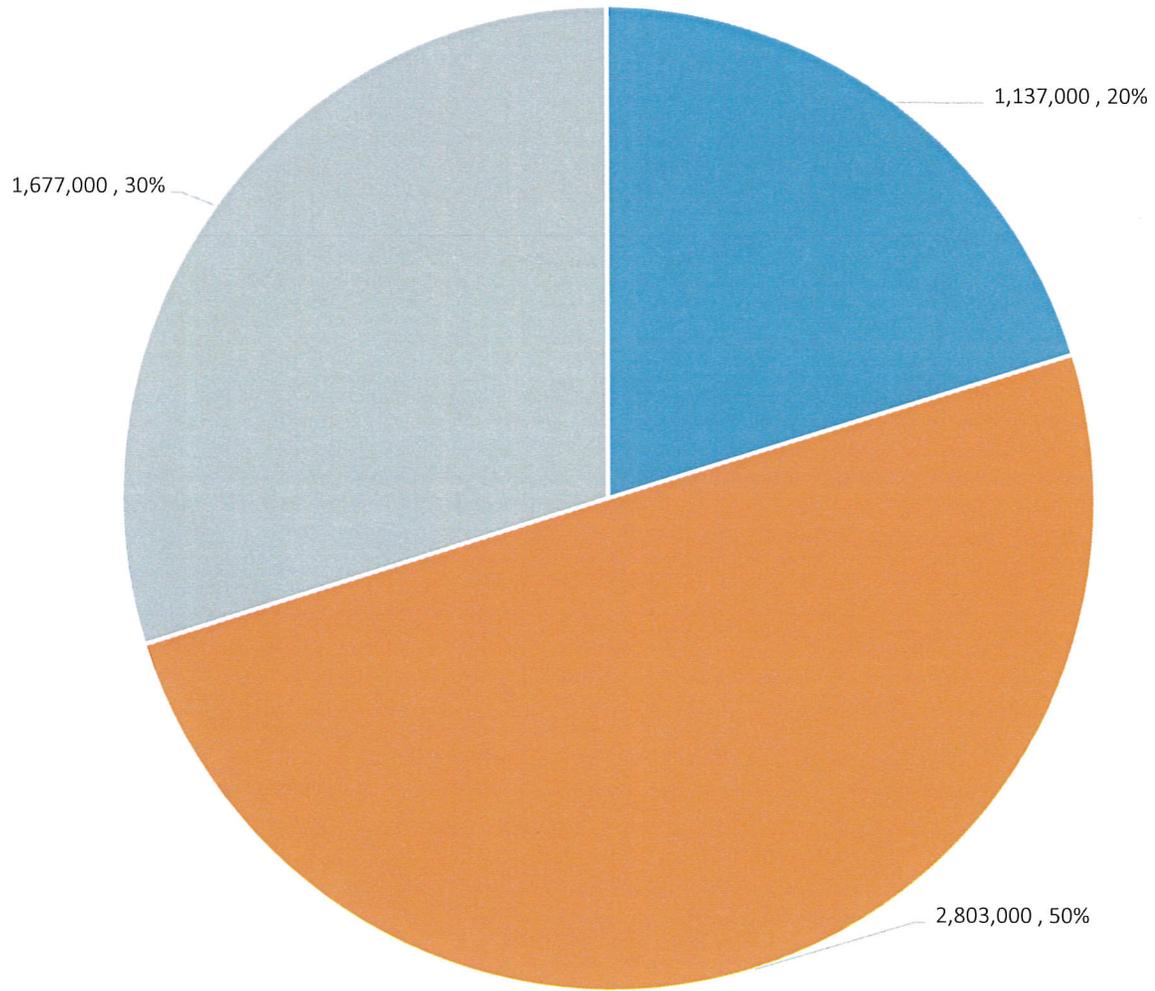
BI19 vs. BI21 Capital Funds

	BI19	BI21
RATA - 102	63,186,000	65,996,000
MVF - 108 - Skagit and Pierce Ferry	706,000	1,456,000
CAPA - 186	38,434,000	39,590,000

BI19 vs. BI21 Plan by Object (excluding Capital)

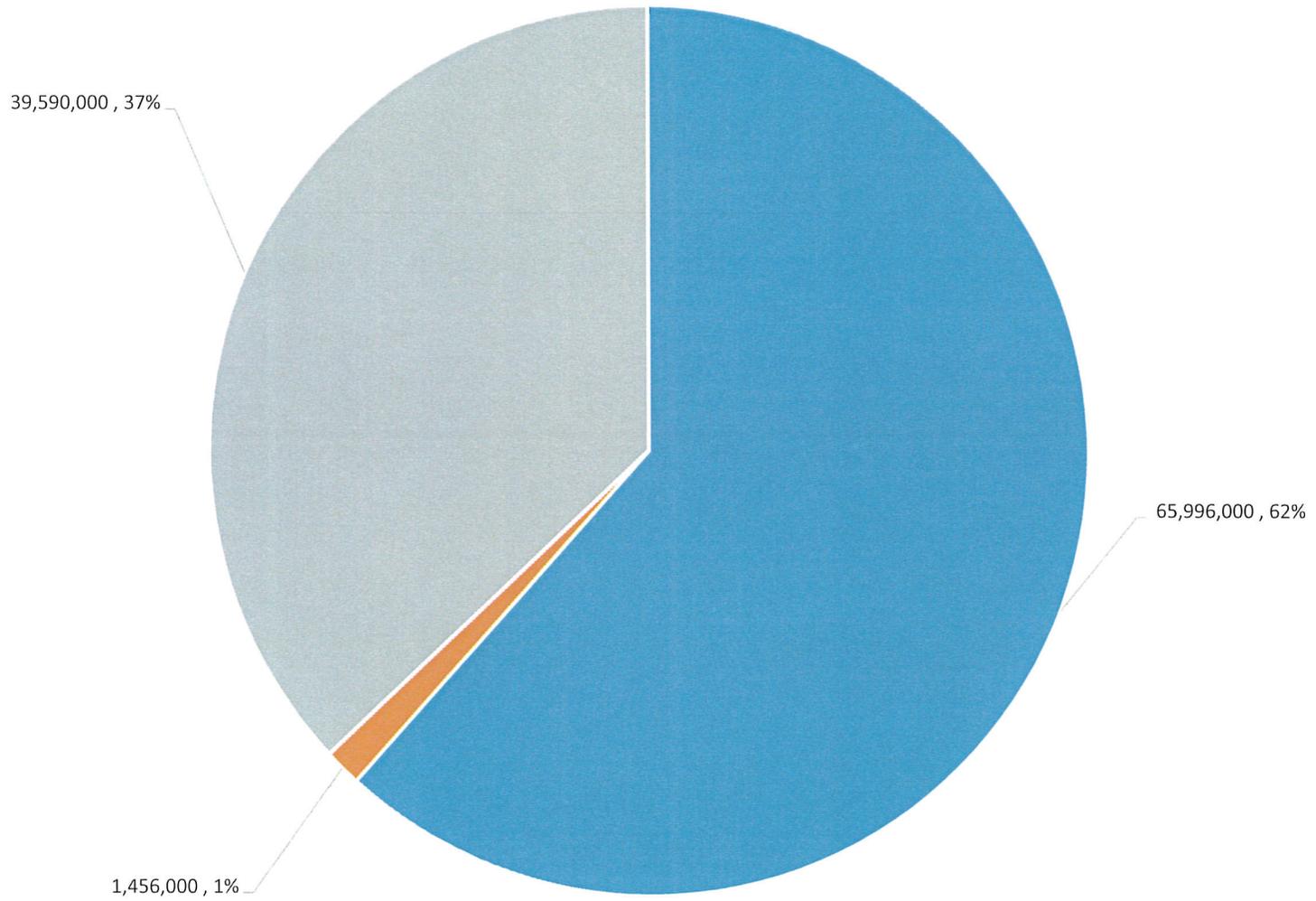
	BI19	BI21
Salaries and Benefits	3,953,000	3,960,000
Goods and Services	1,153,300	1,383,000
Travel	176,700	170,000
Equipment and Software	156,000	104,000

CRAB Operating Amount and Percentage to Each Fund



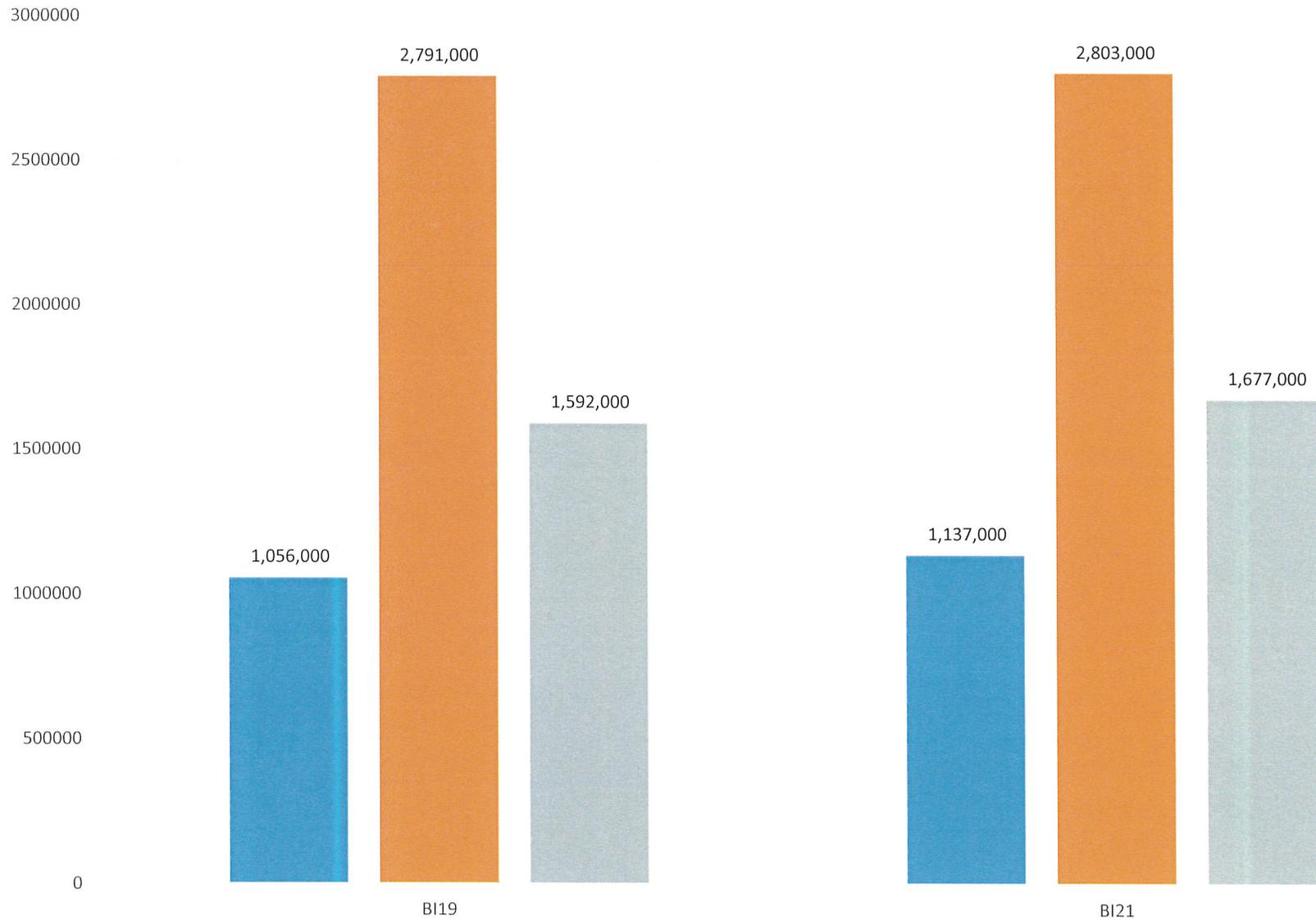
■ RATA - 102 ■ MVF - 108 ■ CAPA - 186

CRAB Capital Amount and Percentage to Each Fund



■ RATA - 102 ■ MVF - 108 - Skagit and Pierce Ferry ■ CAPA - 186

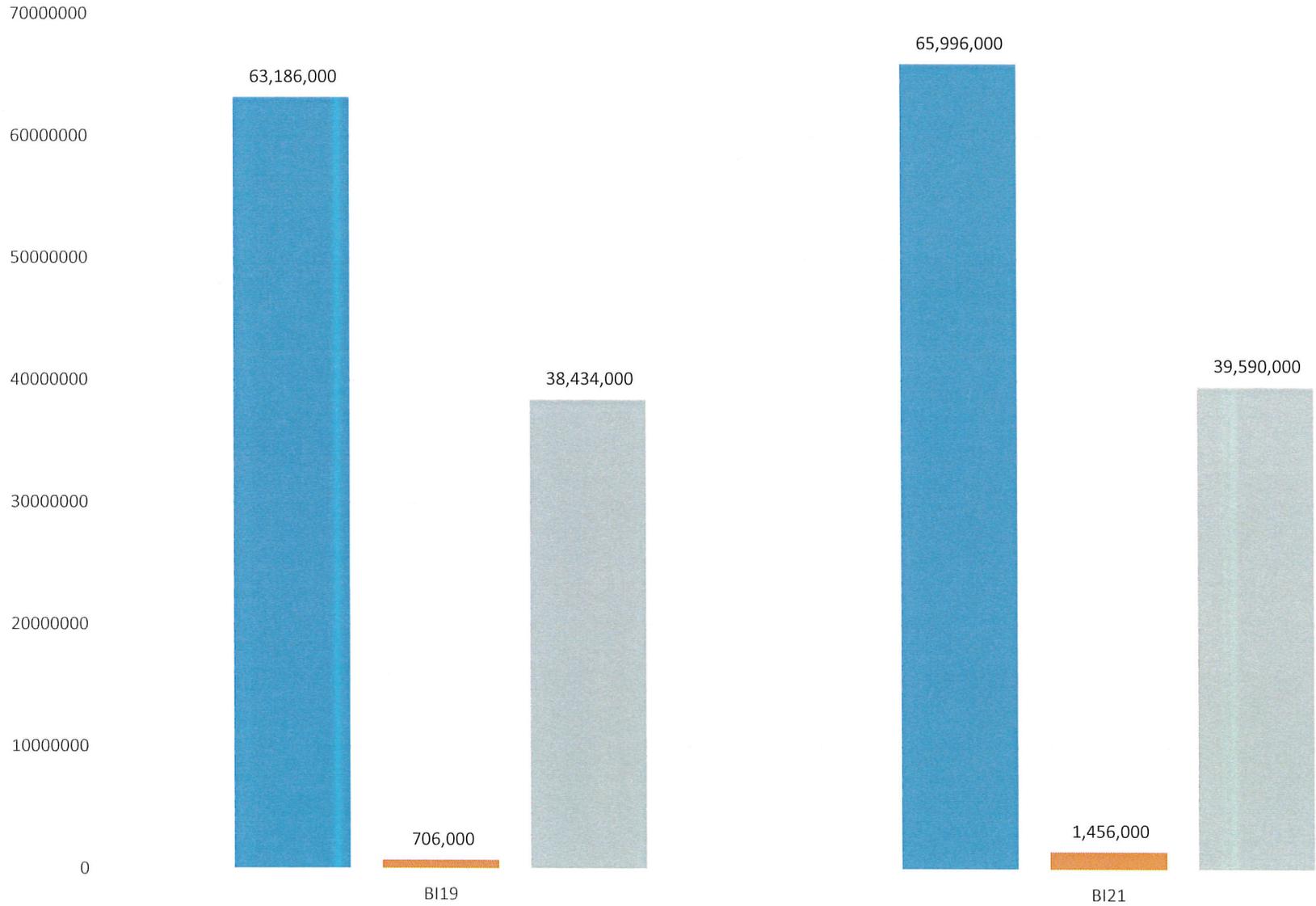
BI19 vs. BI21 Operating Funds



BI19 vs. BI21 Operating Funds

■ RATA - 102 ■ MVF - 108 ■ CAPA - 186

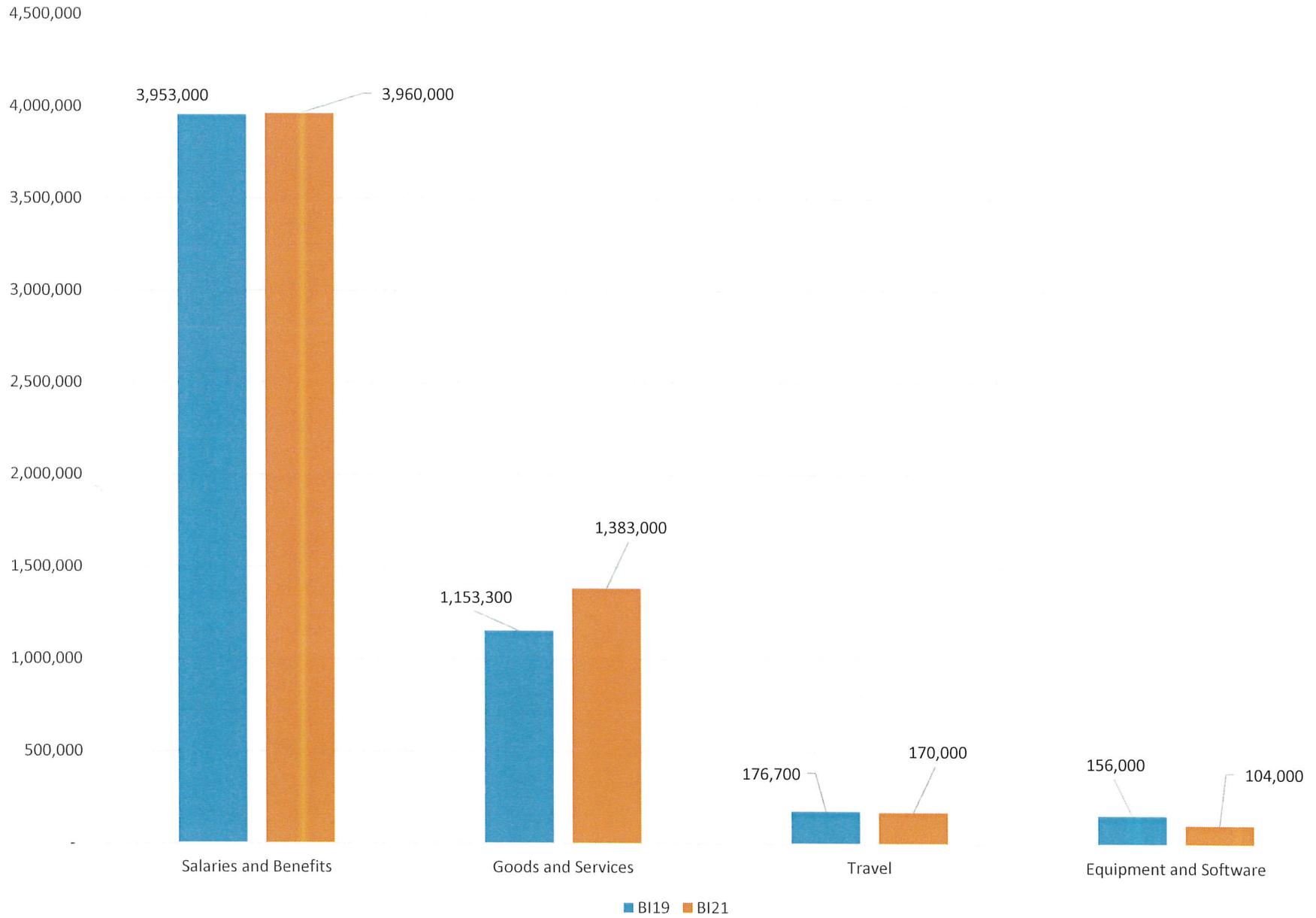
BI19 vs. BI21 Capital Funds



BI19 vs. BI21 Capital Funds

■ RATA - 102 ■ MVF - 108 - Skagit and Pierce Ferry ■ CAPA - 186

BI19 vs. BI21 Plan by Object (excluding Capital)





**WASHINGTON ROAD USAGE CHARGE
STEERING COMMITTEE MEETING
May 2, 2019 | Meeting Summary**

ATTENDEES

Steering Committee Members

Chair Joe Tortorelli, WSTC Commissioner

Rep. Jake Fey, Tacoma (D)

Rep. Ed Orcutt, Kalama (R)

Tom Hingson, Public Transportation

Doug Vaughn, WSDOT

David Burnett, Chehalis Tribe

Roy Jennings, WSTC

John Koster, Counties

Sharon Nelson, Consumer Representative

Mayor Mary Lou Pauly, Cities

Jason Richter, Office of the State Treasurer

Beau Perschbacher, Department of Licensing

Judy Clibborn, Public member

Hester Serebrin, WSTC

Ted Trepanier, INRIX

Frederick Wade, Department of Licensing

Tom Walrath, Trucking

Chris Herman, Ports

Neil Strege, Business

Brian Ziegler, Freight Infrastructure

Janet Ray, Motoring Public (AAA of Washington)

WSTC Staff

Reema Griffith, Executive Director

Paul Parker, Deputy Director

Carl See, Senior Financial Analyst

NOTE: Presentation materials are available on the Washington State Road Usage Charge website (<https://waroadusagecharge.org/about/steering-committee/>). What follows is a summary of the discussion that followed the presentations. Responses to questions and comments are in *italics*.

WELCOME & INTRODUCTIONS

Chair Tortorelli called the meeting to order and the Committee introduced themselves.

PUBLIC COMMENT PERIOD

No members of the public were present and wanting to comment.

RECAP OF DIRECTION PROVIDED BY STEERING COMMITTEE

Jeff Doyle of D'Artagnan Consulting presented slides showing the Steering Committee's consideration of issues relevant for their final Pilot Project report, including findings made to date by the Committee.

Jeff reported that final data analysis and survey results with cross-tabulations is nearing completion; the Committee will receive the information at the June 27, 2019 meeting.

Jeff walked through what the consulting team believes the Committee has decided to date (starts on Slide 8). Extensive discussion on the Committee's findings to date ensued.

Discussion

The wording of the Committee's finding and position on the potential use of RUC revenue for purposes different than how the gas tax is currently used does not capture what the majority of the Committee intended to say. Simplify the finding to a statement about what the legislature directed – a replacement for the gas tax – and how it can be accomplished. Leave discussion about structuring options in white papers. Be careful not to suggest other uses. There is no need to say that this is the legislature's prerogative; that is self-evident.

It was noted that there must be some form of replacement for the gas tax if the assumption is that it might someday go away, given that there is \$5.3 billion in outstanding gas tax bonds and potentially more to come.

The Committee questioned whether authority should be granted to WSTC to adjust RUC rates (after the legislature sets the initial rate). A question was asked how this would work when the legislature is trying to fund a package of projects. It was also noted that if there will be differential rates for policy reasons (for example, a low-income discount), it may not be appropriate for the WSTC to effectively set these policies. Members felt strongly that delegating rate adjustments to WSTC should not be a pilot finding, and that instead, the Committee should extend current practice under the gas tax (where the legislature makes all decisions on rate increases) to a future RUC system. This finding will be re-written to reflect the Committee's direction.

Concern was raised over a finding that current gas tax refund policies should remain in place under a RUC system. It was agreed that the Committee should signal that this may no longer be appropriate under a RUC system, even if the practice is continued for a transitional period of time.

There was much discussion about the potential effective dates for a RUC system, and how a transition might take place. Jeff said this is the primary topic for the very last Steering Committee meeting on September 10, once all other data, policy analysis and Committee discussion has shaped the direction of a potential RUC for Washington. The Committee continued to discuss whether and how a transition from the current gas tax to RUC might happen; many pointed out that starting with those vehicles that pay little or no gas tax currently may make sense. Concern was raised about how this will all be communicated with the public, since the basic messaging has been "one tax method will replace the other." The reality of the legal requirement to keep the gas tax in place for at least 10-25 years will affect how the system is explained to the public. Paying the gas tax and then receiving a credit for it against any RUC owed is a much more complicated message. A concern was expressed that the cost of collections for any replacement system must be analyzed and reported. Jeff replied that this would be done in the context of the business case evaluation, which won't happen until WSTC settles on its recommendation to the legislature on what a RUC system might look like.

The Committee asked that some of the findings be re-written to avoid double-negatives. Jeff said he would work over the lunch hour on revised findings and report back to the Steering Committee at the end of the day's meeting.

PRELIMINARY TECHNICAL DATA FROM THE LIVE PILOT TEST

Roshini Durand of D'Artagnan presented preliminary data from the pilot related to drivers' mileage and RUC mock charges incurred during the live test.

Discussion

How did the project team determine the MPG for the vehicles? Roshini said that for those who used plug-in devices, the precise MPG for that vehicle is calculated. For other mileage methods, the combined city/highway MPG rating assigned by EPA is used to calculate an implied MPG, which may slightly differ from actual on-road driving due to various factors. One Committee member reported that when he switched from one method that used the EPA rating to a plug-in device, his MPG actually increased. How common was this situation? Jeff said they would need drivers to proactively mention this in surveys or to the help desk to get an idea of how common.

In looking at the data, it was noted that even though rates were set to be revenue neutral on average, the pilot project actually collected more money in RUC by \$81. Roshini explained that this is likely because the vehicles participating in the pilot collectively had higher MPG than the par rate MPG assumed for the pilot test. A member noted that this means higher MPG vehicles are paying more than average or low vehicles; another member replied that this is the whole point of RUC, to ensure equal per-mile payments across all vehicle types. Finally, it was pointed out that because this average MPG was calculated back in 2014, it will need to be recalculated before a RUC goes forward, to update it for current fleet composition if the legislature's policy is to keep the rate at gross revenue neutrality.

PRELIMINARY RESULTS OF INTEROPERABILITY TEST WITH OTHER STATES

Travis Dunn of D'Artagnan Consulting presented some preliminary results of the interoperability test with others states.

Discussion

A question was asked about how tax proceeds would be handled in Washington, compared to Oregon. Travis reported that Washington and other states usually manage these situations through policy, and that Oregon's interpretation of their requirements is unique.

One issue not accounted for in the interoperability test was how to determine where gasoline was actually purchased, so that a RUC system wouldn't be giving credits to drivers for gas tax paid when they may not have even purchased the gasoline in Washington. It was noted that this issue remains unresolved (operationally).

RUC EVASION TABLE TOP EXERCISE

Matthew Dorfman of D'Artagnan Consulting presented the results of the tabletop exercise conducted to identify possible ways to evade RUC payment.

Discussion

Use of a picture to take picture?

Fraud detection on images was turned down a lot. Would need to be turned up in a real system. Submission of multiple suspect photos could incite an audit

RUC EXEMPTIONS IN A FUTURE PROGRAM

Travis Dunn of D'Artagnan Consulting presented how RUC exemptions might be carried forward in a future program.

Discussion

A question was asked why the need to talk about exempt vehicles, instead of exempt miles. Travis explained the rationale and that this all relates to how to carry forward gas tax exemption policies to RUC, wherever relevant.

One member noted that vehicles used off-road can currently buy tax free (dyed) fuel, and this might be hard to replicate for RUC.

Question: by exempt, do you mean exempt or refund? Or just not subject?

Yes, you could just not subject certain vehicles to the RUC. Statutes granting refunds are generally tied to the fuel tax, therefore no need to carry over into a RUC system.

Question: is fuel sold on military bases exempt from taxation?

No, that fuel is sold at retail and taxed.

COMMUNICATING WA RUC PILOT RESULTS AND NEXT STEPS

Ara Swanson of EnviroIssues presented an update on current and future communications activities.

Discussion

When you start going on these road shows, can we (SC) get a list of where you are going? We don't want to have anyone show up in our districts unannounced.

Yes.

RECENT LEGISLATIVE ACTIVITIES AND PROVISIONS THAT MIGHT AFFECT RUC

Reema Griffith, Executive Director of the WSTC discussed Commission budget provisions of interest to the Committee. Mathew Dorfman discussed national interest in a pilot.

Discussion

On the proviso and possible future research, a request was made to share the draft STSFA grant proposal (or at least the key aspects of it) at the next Steering Committee meeting.

It was requested that the STSFA grant proposal include exploration of impacts of RUC on rural communities, in addition to under-served communities.

Another idea was proposed: we may want to also weave in the importance of statewide deployment of broadband to ensure maximized connectivity to a RUC system that could use GPS as the mileage collector.

SURVEY RESULTS FROM DOL SUBAGENTS ON THEIR WA RUC EXPERIENCE

Steve Morello of D'Artagnan presented the results from surveys of the private vehicle licensing offices that participated in the pilot.

DOL IT SYSTEM CAPABILITIES AND NEEDS FOR SUPPORTING RUC

Matthew Dorfman of D'Artagnan presented several scenarios for how RUC might be deployed and the impacts on the Department of Licensing. This assessment was conducted with substantial input from Department of Licensing.

Discussion

Could we also get information on OreGo's costs?

Yes, it's worth trying if we can get support for this request from Washington State agencies.

EQUITY IMPLICATIONS OF RUC IN LIEU OF GAS TAX

Allegra Calder of BERK Consulting presented several definitions of equity in light of the most recent proviso along with some data on vehicle fuel efficiency, average age, and driver behavior.

Discussion

The gas tax has been so easy to collect and invisible but of course it's becoming insufficient. Yet, it's complex to implement any discounts/exemptions based on income. Utilities have used voucher systems.

This group (Steering Committee) is affluent and not that diverse. We don't know how the RUC program will impact disadvantaged groups of whom we are not members. The new legislative proviso clearly calls us to consider how the system will impact these groups.

It's very hard to integrate income data into the DOL system for purposes of determining eligibility for low-income rate discounts. And of course, this state doesn't have an income tax so the Department of Revenue doesn't have good income data.

It just doesn't seem like this is an area (transportation taxation) that we should start combining with income status. Very concerned with cost of collection. Don't have a single pickup in my fleet that gets over 20 mpg.

Lots of governments provide discounts on utilities or property taxes for low income folks. But it really complicates 100 years of history of equity on the gas tax. So, I'm torn.

We should ask people—we can't assume we know how they respond to equity.

Another aspect of equity is What's the cost of the road you're running on? Should you pay the same amount for driving on \$1M/mile vs \$10M/mile?

We've had lifeline rates in the utilities and telecommunications world – flat fees and metered rates and then technology solved some of this We implemented discounts based on eligibility for other programs, food stamps, children getting subsidized lunch. But road damage is road damage and I understand that. How to be fair is a big challenge.

We do need to hear from people who are directly impacted and there should be a process to do this.

Needs to have a broader approach to how we consider these things, especially with new technology, cost of collection. How does transportation as a service factor into this?

OUTLINE OF STEERING COMMITTEE WA RUC PILOT PROJECT REPORT

Jeff Doyle of D'Artagnan Consulting previewed the outline for the final report and the presented the revised language as discussed earlier in the meeting by the Committee. The Committee made some more changes. Jeff will implement these changes and share the final proposed language at the June 27 meeting.

ADJOURN

Chair Tortorelli adjourned the meeting at 2:50.



**WASHINGTON ROAD USAGE CHARGE
STEERING COMMITTEE MEETING
June 27, 2019 | Meeting Summary**

ATTENDEES

Steering Committee Members

Chair Joe Tortorelli, WSTC Commissioner
Judy Clibborn
Rep. Jake Fey
Chris Herman, Washington Public Ports Association
Roy Jennings, WSTC
Sen. Curtis King
John Koster, Counties
Rep. Ed Orcutt
Meg McCann, Department of Licensing
Janet Ray, AAA

Sen. Rebecca Saldana
Hester Serebrin, WSTC
Ted Trepanier, INRIX
Doug Vaughn, WSDOT
Tom Walrath, Trucking

WSTC Staff

Reema Griffith, Executive Director
Paul Parker, Deputy Director
Carl See, Senior Financial Analyst

NOTE: Presentation materials are available on the Washington State Road Usage Charge website (<https://waroadusagecharge.org/about/steering-committee/>). What follows is a summary of the discussion that followed the presentations. Responses to questions and comments are in *italics*.

WELCOME & INTRODUCTIONS

Chair Tortorelli called the meeting to order and the Committee introduced themselves.

PUBLIC COMMENT PERIOD

Craig Kenworthy, Executive Director of the Puget Sound Clean Air Agency urged members to include externalities that do not get captured when we talk about vehicle type – gas versus electric and alternative gases – climate change and greenhouse gases. Need to account for costs associated with these vehicles as we also think about raising revenue. Water quality is the other thing – pursuing a clean fuel/low carbon fuel standard this year for adoption later this year. We believe electric vehicle adoption is likely to accelerate under this standard. Our hydro power and other clean sources will create an incentive for electric vehicles.

RECAP OF DIRECTION PROVIDED BY STEERING COMMITTEE

Jeff Doyle of D'Artagnan Consulting summarized issues addressed to date. He also highlighted what will be shared in September – Transition Strategy, review and discussion of findings, discussion of technical or operational requirements, and review of draft report.

DRIVER REACTION TO THE WA RUC SYSTEM: RESULTS OF SURVEYS

Allegra Calder and Sherrie Hsu presented the results of Survey 3 with some comparisons to the earlier surveys and a discussion of the open-ended comments.

Discussion

Impressed with high response rate.

Will the report show demographic splits on the questions?

Yes, by vehicle type and reporting method. Responses by region and location (urban/rural/suburban) did not show any meaningful difference. We did not ask age, income, ethnicity for the surveys (we asked that information only for recruiting purposes).

The fact that there's not much disparity by location is surprising.

Yes, but recall there are a lot of "rural" participants in the Western half of the state.

UPDATE: FINAL DRIVING DATA FROM WA RUC LIVE TEST DRIVE

Roshini Durand of D'Artagnan presented on the final driving data showing the results by geographic region.

IMPACT OF RUC ON ELECTRIC VEHICLE OWNERSHIP

Jeff Doyle, D'Artagnan Consulting presented. The questions for the Steering Committee are: Does RUC represent a significant barrier to consumer adoption of PEVs in Washington? If so, what can be done? Would mitigation measure constitute acceptable public policy trade-offs?

Discussion

Are PEVs zero emission vehicles?

For ZEV states, plug in electric vehicles are zero emission vehicles and so are hydrogen electric vehicles.

When we look at trends we tend to use straight lines because it's safe and easy, but it seems highly likely that in 2050 you won't be able to buy a car that isn't electric. We are two battery cycles away. We need to consider that in our thinking.

We have charts later that show the cross over point where EVs become the same or less in terms of price.

Toyota said it won't make anything but EVs by 2040.

What do you think the impact will be when EVs have to pay their fair share? Is there a hiccup when they have to pay the 2.4 cents/mile.

We will walk through an exercise that looks at that.

I'm seeing a lot of electric automobiles coming out but not a lot of four-wheel drive vehicles and if you look around there are a lot of trucks and SUVs. People want more than sedans. I haven't explored an EV myself because I'm not hearing about all wheel drive. How will this affect sales?

We have a slide on this. 70% of all automotive sales are SUV, cross overs, and trucks so right now the availability of choice is a big issue.

Do we know that people do what they say they will do? Do they actually purchase an EV when they realize there is charging infrastructure?

We can't prove causation.

Are WA and DC non-ZEV states?

Yes.

If there was no requirement to provide more types of vehicles, what would happen? The fact that these states require it affects the ability of other states to get them. There is limited production capacity so the manufacturers go where the demand is. Would they go to other states or not make as many models if these requirements were not in place?

I don't know the answer to that. Maryland has all the models and a low adoption rate, but I can't say with certainty what would happen.

\$100 of that \$150 is in lieu of gas tax, the other \$50 is for the charging infrastructure so that shouldn't be included in the RUC calculations –we should only be considering the \$100.

To that point, some of those other states might be doing a similar thing – it would be helpful to look at the split in other states.

We'll look at that.

WA RUC COMMUNICATIONS UPDATE

Ara Swanson of EnviroIssues presented an update on current and future communications activities and shared a video highlighting participant experience that will be released in July.

Discussion

When you start going on these road shows, can we (SC) get a list of where you are going? We don't want to have anyone show up in our districts unannounced.

Yes.

Reema noted that there continue to be many requests for briefings from groups that want to know what happened with the pilot and what did we learn.

SURFACE TRANSPORTATION SYSTEM FUNDING ALTERNATIVES GRANT

Anthony Buckley of WSDOT discussed a possible national trial. Mileage Based User Fee Alliance (MBUFA) is still working with Congress to communicate what the states would like to see in a trial. MBUFA has emphasized that the federal government should leverage the work of the states that have undertaken pilots. Congress has been contemplating a 50,000 person trial that would be run by an insurance company. Hoping to use remaining money that was appropriated under the FAST Act.

Discussion

Why insurance companies?

Hoping to leverage the technology they have already developed to track driving behavior.

Is this only aimed at the federal tax?

Yes, only for the federal gas tax.

Reema Griffith, Executive Director of the WSTC discussed the Proviso from the State Budget. It was discussed last time, but clarification was needed. FHWA has not yet issued its notice of funding announcement and it's expected any day. The proviso directs the Commission "to include recommendations for necessary next steps to consider impacts to communities of color, low-income households, 38 vulnerable populations, and displaced communities." This will be included in the federal grant proposal and then we could do some deeper work.

Forward Drive is the proposal and includes: New Mobility and RUC; Equity analysis; Updated mileage reporting methods; detailed phase-in plan.

Discussion

Wasn't the original federal allocation \$97 million?

It was \$95 million over 5 years, there is \$40 M remaining – 2 years of \$20 M.

Our pilot hasn't examined how rural and urban poor would be affected so there might be a way to test this. It's not only income, but how people do their financial transactions to understand if this will work for everyone. Reporting and payment methods should also be explored. I've seen people buy \$5 of gas because that is all they can afford.

The proviso language was around the fact that as the rail infrastructure has come people are moving further out and some people are driving more. The answer may be that it's about the way the current gas tax impacts communities. We want some analysis of this. It might be that the RUC would be better for some households. We may also want to think about workforces, for example, janitorial work force could test something out.

There was a slide that showed income of participants, is there a way to look at the pilot results by income?

We collected income during recruitment but not in the survey, so we'd have to match up by common identifiers.

Could we follow up with those that we know are low-income and see what their thoughts on the RUC were.

INSTITUTIONAL ROLES IN IMPLEMENTING A FUTURE RUC SYSTEM

Paula Hammond of WSP and Travis Dunn of D'Artagnan presented several scenarios related to the state agencies that would be involved in a future RUC system.

Discussion

What is meant by calculation of the RUC – one time or ongoing?

This is about the invoice, not the per mile rate. Rate setting was not included as a function since it's a legislative function.

You mentioned the transition period, what did you expect for transitions?

Tried to look at it from an in-state perspective, internal coordination among agencies would be ongoing. The design for a RUC program is going to have a lot of involvement from all the agencies and the Commission having led this since 2011 has a lot of knowledge. The legislature has a lot of policy issues to resolve as this gets set up – solidify roles of agencies and determine reporting and accountability.

In any of the scenarios was there any research done on collection cost?

We will come back in September with an updated business case with updated cost estimates (and revenues).

USE OF PRIVATE SECTOR ACCOUNT MANAGERS IN A FUTURE RUC SYSTEM

Jim Whitty of D'Artagnan presented on the use of private sector account managers.

Discussion

If you start with a single entrant does that give them enough of a competitive advantage that someone would find it difficult to enter later?

A single provider creates the system, but an entrant must abide by already established rules. It would help as they would have worked through bugs in the system and created marketing materials, but as the market grows they would have to ramp up and others would enter the market as well. You could start with two as Oregon did but it's more complex to manage. It's probably a question of when you add the second one.

We've talked about this being phased in. so if it's phased in with limited participants that might argue for not having multiple providers since you are trying to test things and more providers would complicate things.

You pointed to the hole in the paper – we have the beginning and the final end state but it's the middle where there are unlimited possibilities. Does it have the flexibility to evolve itself to the final end state.

Do you know how Utah is doing it?

Utah's objective (stated by DOT) is for an open market but they are starting with a single provider. Recruiting one service provider with open standards. A single contract that will last for 5 years. The procurement will change depending on number of people in the program.

We are having difficulties with private provider transitioning our tolling to new vendors because there aren't that many vendors in the marketplace. But the State doesn't have a great track record of IT implementation – is there a third way to do this?

OreGO is operating adequately and other pilots have been successful so it could be that RUC reporting is less complicated than tolling.

If we think about a transition with a small share of the fleet we could try some things and there might be a way to mitigate the risks and learn from Oregon. There could be some steps taken to learn from tolling and Oregon.

DOL has had success with modernization efforts – example of Drive on time and on budget. Regardless of the number of cars at launch, we have to build the system and the technology will change quickly. Fewer cars won't change the cost of the build.

The system design could influence this - maybe it would start as only with odometer reading. It's how you are going to collect those miles, not just number of cars, and then what levers is the legislature going to

use. There are multiple dimensions which is more complex than many other state projects. The technology complexity is a reason maybe you think about having the private sector develop the technology.

Some of this will depend on how we do this. If DOL does this then you are at 6 million vehicles. If we go through two private sector companies collected the information and reporting to DOL then DOL is getting data from two sources not 6 million.

When we talked about this several meetings ago, we talked about benefits to the scale of operation, we had discussed what neighboring states are doing to make it a larger, more attractive market to vendors.

Getting back to national and multi-state discussions, all states are looking to leverage the work of each other so that everyone can learn. How the state sets up contracts with vendors really matters and we've learned that on tolling – the State needs the expertise to protect our interests as well.

SCENARIOS TO BE MODELED FOR RUC TRANSITION OPTIONS

Travis and Jeff walked through proposed scenarios.

Discussion

The additional EV charges – the \$50, and the \$75 were not analogous to the gas tax so we should only deal with the \$100 as the in lieu of gas tax.

I will change scenario 1b to cap at \$100 and then in 2025 we need to account for the fact that all revenue will then go to motor vehicle fund.

If there is a hope that we might do something in the next six years, this might not be the category of vehicles to do this with. EVs could feel like they are being singled out again.

One possibility to consider is that it could be a voluntary system in lieu of the fee. The challenge there is that if it's voluntary we don't have a good way to project who will opt in.

Bifurcating the dollars, if it was voluntary and I had to pay \$225 and had the option to do a per mile charge and I don't drive that much, I might go with the lowest price with no concern for how the money is split between the State's accounts.

I wouldn't mind modeling at \$225 but I also want to see it at \$100 because I do know the differences between the accounts and what they are paying for. We want to be fair to EV and all drivers.

This would give the opportunity for the State to explain what the money is going for in terms of building out the EV charging infrastructure.

I agree. My only thought is that I would just pay the \$100 rather than a RUC.

Sure, but some people will decide the RUC is a better deal if they don't drive that much.

What if we did all new car purchases?

Scenario 3 is a future model year and assume that RUC applies starting that year for new vehicles.

Sure, but I wouldn't include the EV and hybrids.

Is that a new registration or someone moving?

It's new vehicles.

If you go with gas powered cars you have to deal with the refunds.

You could do credits.

But it's supposed to be revenue neutral. This is probably too detailed and there are a lot of options.

We undertook this study to replace the gas tax that we know is declining and the current method is really easy. Have we considered the cost of collection and do we need to add to the rate to account for this?

If you had all vehicles switch suddenly and you wanted the net revenue to be neutral you would have to use a higher rate, but if you are just trying to make up for lost revenue then anything you collect is better than the current situation.

We are going to model the scenario that Rep Fey suggested with a future model year.

On the average 20.5 mpg, was that all gas tax revenues divided by all state miles.

Yes.

When we say revenue neutral what do we mean because we are seeing less revenue from the gas tax. In terms of what we need to maintain our current assets we are already \$1billion short. What are we looking for with this source? What year are we basing revenue neutral to?

That's a policy decision for the legislature – how do you want to set the revenue target? What you need? What you thought you were going to get? We can run different scenarios.

When we presented results 3 years ago we compared 30 years of RUC versus gas tax on all vehicles. The question to ask might be relative to base case (gas tax) how much additional revenue would you derive with these scenarios at the stated rate (never more than 2.4 c/mile).

The 2.4 cents is based on history and it's not enough so what should the number be? We are not generating enough revenue.

The thinking was to stop further erosion. Goal was to be revenue neutral at one point in time and then it would stay steady. The thinking was that those with lower fuel economy would be coming down while high efficiency would be coming up. Some of the people that complained about the \$100 were comparing to 40 mpg vehicles not the 22 mpg vehicles.

If they have to start paying per mile it might change their purchase decisions.

It's important that we look at the 2.4 cents for consistency. The other piece is that anything that clarifies the gap. The big chunk is paying for the gasoline. We will have more money to invest in infrastructure. Oil companies are not investing in the local communities. I think there are ways to message this.

To the point about increasing the amount for EVs from \$100 to a RUC where maybe they pay \$150. It might just change the payback period, and not the benefit. I've been irked with some of the reporting by our newspapers saying the incentive is being taken away because the incentive of not buying gas doesn't go away, it's only the tax portion. We need the facts to be reported.

UPDATED OUTLINE OF STEERING COMMITTEE WA RUC PILOT PROJECT REPORT

Jeff Doyle of D'Artagnan Consulting previewed the outline for the final report and noted that an early draft will be sent to the Committee before the September 10 meeting.

ADJOURN

Chair Tortorelli adjourned the meeting at 2:50.

July 2019 CRABoard Meeting **Deputy Director's Report**

A. County Engineer Changes since April 2019

There were no vacancies or changes in the County Engineer's positions during the last quarter.

B. County Visits completed since April 2019

- Lincoln County
- Kitsap County
- Pacific County
- Chelan County
- Douglas County
- Yakima County
- Klickitat County
- Benton County
- Franklin County
- Walla Walla County
- Columbia County
- Garfield County

There were numerous contacts with County Engineers in other venues.



King County

Department of Local Services
Road Services Division

July 23, 2019

Via email and mail: john.koster@crab.wa.gov

Washington State County Road Administration Board
John Koster, Executive Director
2404 Chandler CT SW, Suite 240
Olympia, WA 98502-6067

RE: King County Road Engineer

Dear Mr. Koster,

This letter is to notify the County Road Administration Board about a change in the King County, County Road Engineer. Effective immediately, the new county road engineer is JoAnn Kosai-Eng. Her Washington registration number is 34413, her start date is September 9, 2019, and her contact information is as follows:

JoAnn Kosai-Eng, County Road Engineer (CRE)
King County, Department of Local Services
Road Services Division
201 S. Jackson Street, KSC-LS-0313
Seattle, WA 98104
Telephone 206-477-2609
Joann.Kosai-Eng@kingcounty.gov

Attached is an organization chart showing her direct reports. Additionally, she has the legislatively authorized responsibilities of a county road engineer. She is appointed under my delegated authority. Please let me know if you have any questions.

Sincerely,

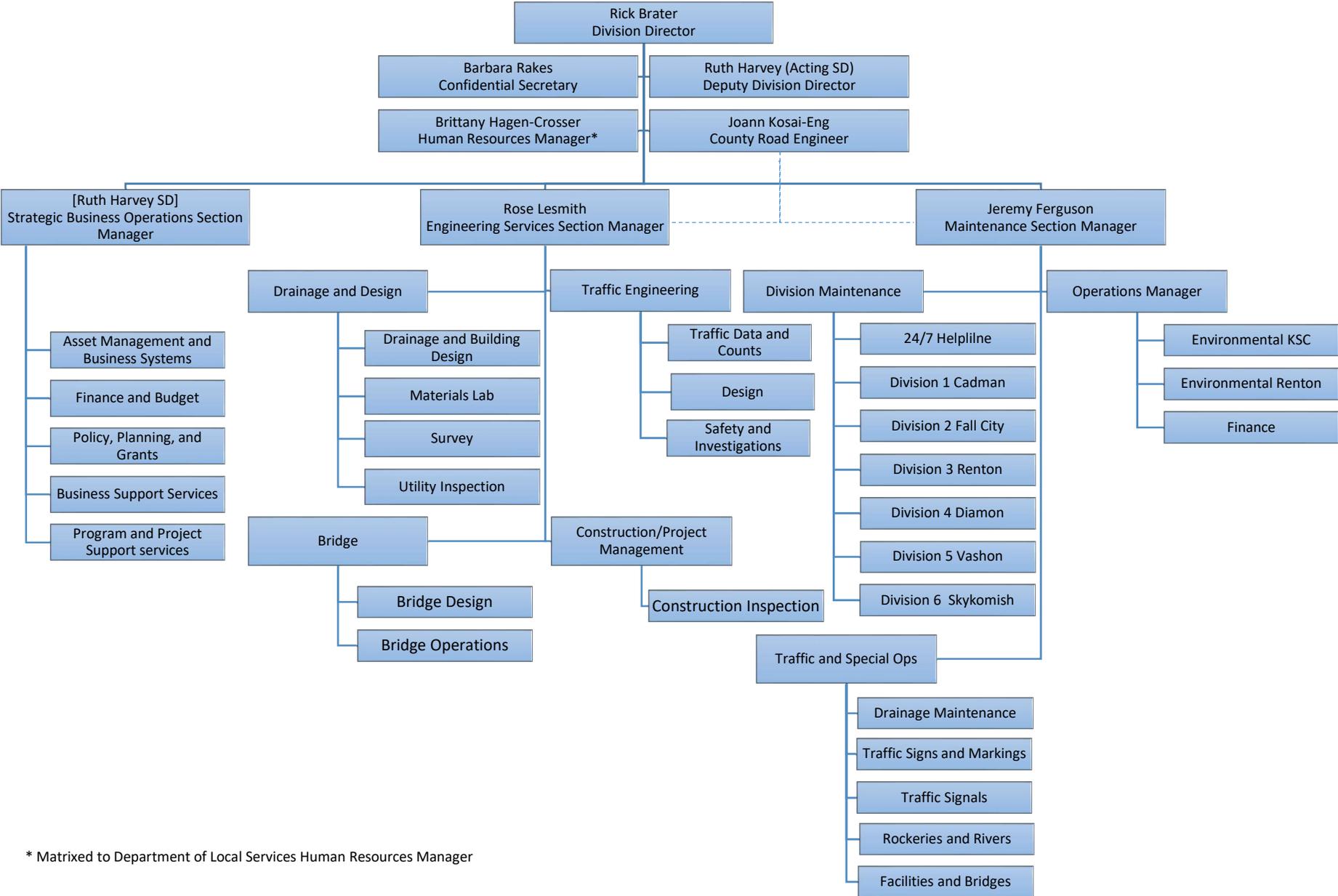
Rick Brater, Director
Road Services Division

Cc: JoAnn Kosai-Eng
John Taylor, Director, Department of Local Services

King County Roads Services Division

Department of Local Services

2019 Organization Chart



* Matrixed to Department of Local Services Human Resources Manager

C. County Audit Reports reviewed since April 2019

The 1997 State Auditor Office (SAO) audit of CRAB concluded that the minutes of the Board meetings needed specific mention of SAO audits of the counties and of any findings that might relate to the statutory responsibilities of CRAB. The minutes also need to reflect any recommendations from the CRABoard to staff in response to the audits. This report details our staff procedures to satisfy the SAO.

CRAB has reviewed 14 audit reports representing seven counties since the April 2019 board meeting. One audit contained one finding issued and one involved County Road Funds in some form. Any audit with a number under the “New?” or “Prev?” heading revealed findings. Status of those findings involving County Road Funds is also shown.

2017 - 2018 Audits

Report #	Entity/Description	Report Type	Audit Period	Date Released	New Find#	Co. Rd?	PrevFind#	Status
1024187	King County	CPA	01/01/2018 to 12/31/2018	7/8/2019				
1024189	King County	CPA	01/01/2018 to 12/31/2018	7/8/2019				
1024115	Thurston County	Accountability	01/01/2018 to 12/31/2018	7/5/2019				
1024135	Thurston County	Financial and Federal	01/01/2018 to 12/31/2018	7/5/2019				
1024218	Yakima County	Financial and Federal	01/01/2018 to 12/31/2018	7/5/2019				
1024192	Yakima County	CAFR	01/01/2018 to 12/31/2018	6/28/2019				
1024107	Thurston County	CAFR	01/01/2018 to 12/31/2018	6/27/2019				
1024206	Skagit County	CAFR	01/01/2018 to 12/31/2018	6/27/2019				
1024234	Pierce County	CAFR	01/01/2018 to 12/31/2018	6/27/2019				
1024173	King County	CAFR	01/01/2018 to 12/31/2018	6/26/2019				
1024083	Snohomish County	CAFR	01/01/2018 to 12/31/2018	6/20/2019				
1023719	Garfield County	Financial and Federal	01/01/2017 to 12/31/2017	5/9/2019	1	CR		PC
1023783	Pierce County	Attestation Engagements	01/01/2018 to 12/31/2018	4/30/2019				
1023633	King County	Accountability	07/01/2017 to 06/30/2018	4/22/2019				
NC	County Road-Not Corrected			TOTALS	1	0	0	
NCR	Non-County Road							
CR-FC	County Road-Fully Corrected							
CR-PC	County Road-Partially Corrected							

D. Other Activities and Visits since April 2019

25-26 April	CRABoard Meeting	CRAB Office
30 April	ELA/RAP WAC Rules Review Meeting	CRAB Office
May 1	GISMo FYI Video RFQ Release	CRAB Office
May 1	MSAR Review w/ FHWA	Olympia FHWA
2 May	GISMo Quick Review	CRAB Office
6 May	Ribbon Cutting Porcupine Bay Road	Davenport
9 May	GISMo Exec Steering Comm. Meeting	CRAB Office
10 May	VUEWorks Western Regional Meeting	Lacey
13 May	VUEWorks Power BI Demo	CRAB Office
16 May	GISMo Video Bids Opening	CRAB Office
21 May	GISMo Video Bid Interviews	CRAB Office
23 May	GISMo Video Bid Interviews	CRAB Office
29 May	Kitsap County Visit	Gig Harbor
3 June	Pacific County Visit	South Bend
11 June	OFM Meeting to Discuss Emergency Loan Program	CRAB Office
13 June	GISMo Exec Steering Comm. Meeting	CRAB Office
13 June	CRABStaff Meeting w/ Megan McPhaden	CRAB Office
13 June	GISMo Video Introduction Meeting	CRAB Office
18-20 June	WSACE Summer Conference	Blaine
21 June	GISMo Video Bid Interviews	CRAB Office
26 June	CRABoard Agenda Meeting	CRAB Office
2 July	GISMo Video Introduction Meeting	CRAB Office
9 July	Chelan County Visit	Wenatchee
9 July	Douglas County Visit	E. Wenatchee
15 July	Yakima County Visit	Yakima
15 July	Klickitat County Visit	Goldendale
16 July	Benton County Visit	Prosser
16 July	Franklin County Visit	Pasco
17 July	Walla Walla County Visit	Walla Walla
18 July	Columbia County Visit	Dayton
18 July	Garfield County Visit	Pomeroy
23 July	SACS Quarterly Meeting	CRAB Office

From: Drew Woods
To: ["Aaron Simmons"](#); ["Ahmad Qayoumi"](#); ["Bill Oakes"](#); ["Bob Breshears"](#); ["Bob Breshears"](#); ["Brian Stacy"](#); ["Chad Coles"](#); ["Charles Eaton"](#); ["Colin Huntemer"](#); ["Craig Erdman"](#); ["Diane Sheesley"](#); ["Don Ramsey"](#); ["Douglas McCormick"](#); ["Dustin Johnson"](#); ["Eric Pierson"](#); ["Gordon Kelsey"](#); ["Grant Morgan"](#); ["Jeff Tincher"](#); ["Joe Rutan"](#); ["Jon Brand"](#); ["Josh Thomson "](#); ["Mark Cook"](#); ["Mark Storey"](#); ["Matt Pietrusiewicz"](#); ["Matt Rasmussen"](#); ["Mike Collins"](#); ["Monte Reinders"](#); ["Paul Lacy"](#); ["Paul Randall-Grutter"](#); ["Rick Brater"](#); ["Rob Wilson"](#); ["Ross Tyler"](#); ["Scott Lindblom"](#); ["Scott Yaeger"](#); ["Susan Eugenis"](#); ["Tim Elsea"](#); ["Tim Fife"](#); ["Tony Garcia"](#); ["Wayne Cornwall"](#)
Cc: [John Koster](#); [Walt Olsen](#); [Derek Pohle](#); [Randy Hart](#)
Subject: Emergency Loan Program WAC
Date: Thursday, June 13, 2019 2:16:00 PM
Attachments: [Emergency Project Flowchart.pdf](#)
[WAC 136-250 -- 2019 Edits v1.pdf](#)
[WAC 136-163 -- 2019 Edits v1.pdf](#)
[ELP Prioritization.pdf](#)

Good Afternoon Everyone – Attached are several documents relating to the new Emergency Loan Program (ELP) that the legislature created in the last session. The goal of the ELP is to provide financial assistance to the counties during a disaster. We have been discussing the new program in general terms at the recent regional RAP meetings. Now we need to start getting into the specifics. We want input from the counties at the WSACE conference next week. Attached to the email are the following:

- Funding flowchart – This flowchart shows the proposed method for how temporary and permanent repairs can be funded by the ELP and/or RAP.
- WAC 136-163 – Proposed changes to WAC 136-163 that will eliminate emergency projects from RAP. Emergent projects will still be available as an option for permanent repairs on RAP eligible roads.
- WAC 136-250 – A new WAC chapter regarding the administration of the ELP.
- Prioritization Spreadsheet – This spreadsheet shows how counties will be ranked using the proposed method should CRAB receive multiple ELP requests from the same regional event. This spreadsheet will be updated whenever the MVFT distribution is recalculated.

The highlights for the ELP are:

- Must be a declared emergency at the county, state or federal level.
- Funds can be used on any road under the county's jurisdiction. This includes local access roads.
- Any county under 800,000 population as of April 1, 2019 may participate if they have a certificate of good practice and are eligible to participate in RAP.
- Initial funding (Executive Director level) is up to \$2,000,000 or 50% of available fund balance, whichever is less. A county may request additional funding from the CRABoard.
- In the event of a regional event, counties will be prioritized for funding using the average ranking of two of the three MVFT calculation fields – Annual road costs & Money needs.
- Payback will be required over a 24 month period with quarterly principle payments. If a county pays back a loan within 6 months, the loan will be interest free.
- Interest will be the monthly rate of return for the LGIP (Local Government Investment Pool managed by the state treasurer) not to exceed 3%.

Please review these documents and bring any thoughts or questions with you to the WSACE

conference next week. We will be asking for feedback/input during CRAB's time on the Wednesday agenda. If you cannot make the conference, feel free to contact me with your questions and comments.

Our schedule for adopting the WAC's is at the January 2020 CRABoard meeting. To meet that deadline, we will be presenting at the July CRABoard meeting a version that incorporates the attached documents and input from the counties. Until the CRABoard adopts rules for the ELP, we cannot make any loans. We want to have the program available in time for winter and spring of 2020 in case mother nature has some nastiness in store for you.

Drew Woods, P.E.
Compliance and Data Manager
County Road Administration Board
360-350-6083
509-382-2202 Mobile

Chapter 136-163 WAC

ALLOCATION OF RATA FUNDS TO EMERGENT ~~AND EMERGENCY~~ PROJECTS

WAC Sections

- 136-163-010 Purpose and authority.
136-163-020 ~~Definitions:~~ Project eligibility.
~~136-163-030 Limitations and conditions-Emergency projects.~~
~~136-163-040 Limitations and conditions-Emergent projects.~~
136-163-050 030 Limitations and conditions, ~~Emergency and emergent projects.~~
136-163-060 040 Action by the county road administration board.

136-163-010

Purpose and authority.

RCW 36.79.140 provides for the authorization of RATA rural arterial trust account funds for projects of an emergent nature. This chapter describes the manner in which counties may request RATA ~~funds~~ funding for such emergent projects and the manner in which the county road administration board will respond to such requests.

136-163-020

~~Definitions:~~ Project Eligibility.

~~For the purposes of this chapter, the term “emergent nature” as used in RCW 36.79.140 shall mean both “emergent” and “emergency” projects as follows:~~

- ~~(1) Emergency project: Work of either a temporary or permanent nature which restores roads and bridges to the pre-disaster condition and may include reconstruction to current design standards. This work is the result of a sudden natural or man-made event which results in the destruction or severe damage to RATA-eligible roadway sections or structures such that, in the consideration of public safety and use, the roadway sections or structures must be immediately closed or substantially restricted to normal traffic. Work of an emergency nature is also beyond the scope of work done by a county in repairing damages normally or reasonably expected from seasonal or other natural conditions, and is beyond what would be considered maintenance, regardless of how extensive the maintenance may be.~~
- ~~(2) Emergent project: RATA-eligible work necessitated by sudden and unanticipated development, growth, access needs, or legal decisions. This work is not the result of an emergency situation as previously defined. This work, in consideration of good transportation capital facilities management, will also require a county to commit resources beyond its current six-year transportation program and prior to the next six-year transportation program annual update as provided for in RCW 36.81.121.~~

Projects of an emergent nature may be funded through the rural arterial program as authorized by RCW 36.79. An emergent project is defined as a project whose need the county was unable to anticipate at the time the six-year program of the county was developed. Emergency work to temporarily restore a county road for the short-term use of the traveling public is not eligible for funding as an emergent project; however, a project to permanently repair a county road after an emergency may be considered for funding if the proposed project meets all other requirements of the rural arterial program.

To be eligible for emergent project approval, the project shall be evaluated by the county road administration board grant programs engineer, with the participation of the county engineer, on the same point system as all other projects within the region. The proposed emergent project must rank at or above the regional funding cut off line on the current array based upon one hundred percent of the current estimated regional allocation as determined by the county road administration board.

~~136-163-030~~

~~Limitations and conditions-Emergency projects.~~

~~—————To be eligible for emergency project approval, the county must declare an emergency as provided for in RCW 36.40.180. If there is not yet a state declaration of emergency, the county must also, in consultation with the state military department, emergency management division and the WSDOT, evaluate the probability of receiving a state declaration of emergency. A state declaration of emergency is required as a condition of receiving federal funding for road-related damages via the Emergency Relief Program or FEMA. If such federal funding has been approved or is likely to be approved, the county road administration board may provide up to one hundred percent of a county's required matching funds for such federal funding but only after the approval of the federal funds.~~

~~—————Should such federal funding not be forthcoming, or if the emergency is of such a scope and size that federal funding is clearly improbable, the county road administration board may provide up to eighty percent or ninety percent of the estimated eligible damages depending upon the regional limitations provided for in WAC 136-161-090, with the total project cost limited to the actual expenditures by the county.~~

~~136-163-040~~

~~Limitations and conditions-Emergent projects.~~

~~—————To be eligible for emergent project approval, the project shall be evaluated by the county road administration board grant programs engineer, with the participation of the county engineer, on the same point system as all other projects within the region. The proposed emergent project must rank at or above the regional funding cut off line on the current array based upon one hundred percent of the current estimated regional allocation as determined by the county road administration board.~~

~~136-163-050~~**030**

~~Limitations and conditions.~~**Emergency and emergent projects.**

All projects for which ~~RATA~~**rural arterial program** funding is being requested under this chapter are subject to the following:

(1) The requesting county has the sole burden of making a clear and conclusive showing that the project is ~~either emergent or emergency as described in WAC 136-163-020 through 136-163-040~~**this chapter; and,**

(2) The requesting county shall clearly demonstrate that the need for the project was unable to be anticipated at the time the current six-year transportation program was developed; and,

(3) The requesting county agrees to a reduction in the next funding period's maximum RATA eligibility to the county equal to the RATA that may be provided; however, should that region not have a maximum RATA eligibility for each county, the requesting county agrees to withdraw, amend or delay an existing approved project or portion thereof in an amount equal to the RATA that may be provided for the project.

| **136-163-~~060~~040**

Action by the county road administration board.

Counties may request consideration and action by the county road administration board at any time; however, the county road administration board will address all such requests at its next regular quarterly meeting. A county may request, and the county road administration board chair may convene, a special meeting to consider such a request as provided for in WAC 136-01-030.

Chapter 136-250 WAC

EMERGENCY LOAN PROGRAM (ELP)

WAC Sections

136-250-010	Purpose and authority
136-250-020	Definitions
136-250-030	Eligible work
136-250-040	County eligibility
136-250-050	Project type and submittal
136-250-060	Funding limits
136-250-070	Prioritization
136-250-080	Payback terms
136-250-090	Execution of a CRAB/County contract
136-250-100	Failure to meet requirements of this chapter or terms of the contract
136-250-110	Report to legislature

136-250-010

Purpose and authority.

RCW 36.78.070 provides that the county road administration board shall administer the emergency revolving loan program established by chapter 36.78 RCW. This chapter describes the manner in which the county road administration board will administer the provisions of the emergency revolving loan program.

136-250-020

Definitions.

For this chapter, the following definitions shall apply:

- (1) Board – County road administration board as defined in RCW 36.78
- (2) CRAB – County road administration board
- (3) DDIR – Detailed damage inspection report used by the federal highway administration as an application for emergency funding under their programs.
- (4) LGIP – Local government investment pool under the administration of the state treasurer
- (5) Permanent – Work that restores or improves a county road for the long-term use by the traveling public.
- (6) Temporary – Work that restores a county road for the short-term use by the traveling public. Temporary work typically results in restricted use and signing of deficiencies for the safety of the traveling public.

136-250-030

Eligible work.

Eligible work under this chapter is work of either a temporary or a permanent nature. Permanent work must restore the roadway to the pre-disaster condition and may include necessary improvements to bring the damaged roadway to current design standards. This work must be the result of a natural or man-made event that results in the closure or substantial restriction of use of the roadway by the traveling public. Work of an emergency nature is beyond the scope of work done by a county in repairing damage normally or reasonably expected from seasonal or other natural conditions.

This program may fund eligible work on any classification of road under the county's jurisdiction.

136-250-040

County eligibility.

Any county who is eligible to participate in the rural arterial program, has a current certificate of good practice and a total population under 800,000 as of April 1, 2019 is eligible to participate in this program.

136-250-050

Project type and submittal.

There are two project types eligible for funding under this program:

- (1) Site specific – Single location
- (2) County wide – Multiple sites within a single county

To request a loan through this program, the county shall submit the following:

- (1) A copy of the adopted emergency declaration; and,
- (2) A brief description of the project site(s) requested for funding; and,
- (3) An estimate of costs for work at each site(s); and,
- (4) Pictures of the damaged area(s); or,
- (5) A DDIR for each site may be submitted in lieu of requirements (1) thru (4) above.

136-250-060

Funding limits.

Project funding is limited to two million dollars or fifty percent of available fund balance, whichever value is less. If a county desires funding above these limits, the county's legislative authority may request additional funding at the next regularly scheduled board meeting.

136-250-070

Prioritization.

If CRAB receives multiple loan requests resulting from a single regional event, funding shall be prioritized. Prioritization will be made by averaging the county rankings for the following criteria:

(1) RCW 46.68.124(2) – Annual road costs. Counties ranked from lowest road cost factor to highest.

(2) RCW 46.68.124(3) – Money needs. Counties ranked from lowest money needs factor to highest.

The lower the average county ranking, the higher priority that county is for funding during a regional event.

136-250-080

Payback terms.

Any loan funded through this program shall have a term not to exceed twenty-four months with quarterly principal payments made to CRAB.

Interest on the amount of the loan shall be the monthly rate of return for the LGIP not to exceed three percent. Interest due will be calculated and invoiced to the county after receipt of the final principle payment.

If a county pays the county road administration board the principle amount of the loan within six months of the date of contract execution, no interest will be charged and the contract will be closed. Should a county not pay the loan in full within six months of the date of contract execution, interest will be calculated from the date of contract execution to the date of final payment. A county may pay off any loan received through this program before the end of the term to reduce the amount of interest owed.

136-250-090

Execution of CRAB/county contract.

The executive director of CRAB is authorized to execute a contract with any eligible county under this program with a not to exceed amount of two million dollars or fifty percent of available fund balance, whichever value is less. A county may request additional funding through this program at the next regularly scheduled board meeting.

Upon execution of a contract under this chapter, the executive director will advise board members of the contract details including county, number of project(s) and the loan amount.

136-250-100**Failure to meet requirements of this chapter or terms of the contract.**

Should a county fail to meet the requirements of this chapter or the terms of the contract, the matter will be before the board at their next regularly scheduled meeting. The county will be requested to be present for said meeting to provide an explanation for failing to meet the requirements of this chapter or terms of the contract. At said meeting, the board may take any action it deems necessary to ensure prompt compliance of the requirements of this chapter and the terms of the contract.

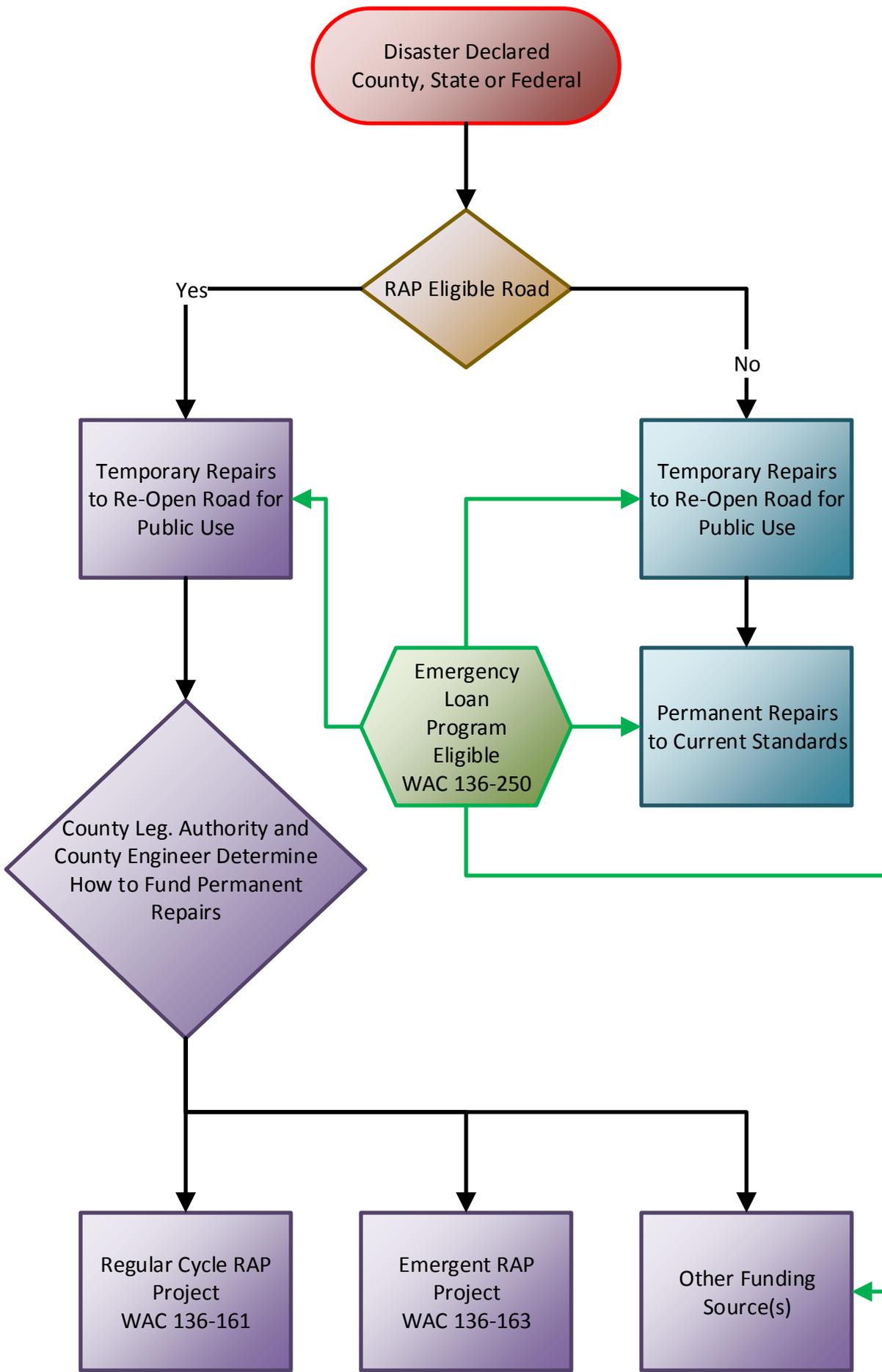
136-250-110**Report to legislature.**

Consistent with RCW 43.01.036, the board must submit a report to the legislature by December 1st of each even-numbered year identifying each project that received money from the CRAB emergency loan account, the amount of the loan, the expected repayment terms of the loan, the expected date of repayment, and the loan repayment status. Each project should be reported about until the loan is repaid.

	Needs	Needs Ranking	Costs	Costs Ranking	Average Ranking
<i>Wahkiakum</i>	<i>0.1987</i>	<i>3</i>	<i>0.1382</i>	<i>1</i>	<i>2</i>
<i>Skamania</i>	<i>0.1490</i>	<i>2</i>	<i>0.1666</i>	<i>2</i>	<i>2</i>
<i>San Juan</i>	<i>0.0379</i>	<i>1</i>	<i>0.1712</i>	<i>3</i>	<i>2</i>
<i>Pacific</i>	<i>0.2987</i>	<i>6</i>	<i>0.2601</i>	<i>4</i>	<i>5</i>
Jefferson	0.2741	4	0.2737	6	5
<i>Garfield</i>	<i>0.3924</i>	<i>9</i>	<i>0.2655</i>	<i>5</i>	<i>7</i>
<i>Asotin</i>	<i>0.4043</i>	<i>11</i>	<i>0.2901</i>	<i>7</i>	<i>9</i>
Cowlitz	0.2969	5	0.4401	13	9
Clallam	0.3789	8	0.3966	11	9.5
<i>Columbia</i>	<i>0.4448</i>	<i>12</i>	<i>0.3135</i>	<i>8</i>	<i>10</i>
<i>Pend Oreille</i>	<i>0.4665</i>	<i>13</i>	<i>0.3457</i>	<i>9</i>	<i>11</i>
Island	0.3230	7	0.4797	16	11.5
Mason	0.3930	10	0.4644	14	12
<i>Ferry</i>	<i>0.5561</i>	<i>16</i>	<i>0.3861</i>	<i>10</i>	<i>13</i>
Kittitas	0.4697	14	0.4299	12	13
Chelan	0.4821	15	0.4763	15	15
Grays Harbor	0.5724	17	0.5039	17	17
Benton	0.7809	22	0.6346	19	20.5
Skagit	0.6542	19	0.7491	22	20.5
Franklin	0.8783	25	0.6216	18	21.5
<i>Klickitat</i>	<i>0.8611</i>	<i>24</i>	<i>0.6400</i>	<i>20</i>	<i>22</i>
Lewis	0.8412	23	0.8025	24	23.5
Walla Walla	0.9003	27	0.6791	21	24
Whatcom	0.7530	21	0.9146	27	24
Kitsap	0.7185	20	1.0036	28	24
Okanogan	1.0892	28	0.7948	23	25.5
Clark	0.6234	18	1.1674	33	25.5
Stevens	1.2094	29	0.8883	25	27
Thurston	0.8991	26	1.0092	29	27.5
Douglas	1.2594	30	0.9145	26	28
<i>Adams</i>	<i>1.5983</i>	<i>33</i>	<i>1.0462</i>	<i>30</i>	<i>31.5</i>
Whitman	1.5936	32	1.0576	31	31.5
Yakima	1.5845	31	1.2982	34	32.5
<i>Lincoln</i>	<i>1.6592</i>	<i>34</i>	<i>1.0904</i>	<i>32</i>	<i>33</i>
Grant	2.2748	36	1.6170	35	35.5
Spokane	1.9686	35	1.8334	36	35.5

Counties in red italics font are under 30,000 in population

	Needs	Needs Ranking	Costs	Costs Ranking	Average Ranking	
Northwest Region	<i>1 San Juan</i>	<i>0.0379</i>	<i>1</i>	<i>0.1712</i>	<i>3</i>	<i>2</i>
	2 Jefferson	0.2741	4	0.2737	6	5
	3 Clallam	0.3789	8	0.3966	11	9.5
	4 Island	0.3230	7	0.4797	16	11.5
	5 Skagit	0.6542	19	0.7491	22	20.5
	6 Whatcom	0.7530	21	0.9146	27	24
	7 Kitsap	0.7185	20	1.0036	28	24
Northeast Region	<i>1 Pend Oreille</i>	<i>0.4665</i>	<i>13</i>	<i>0.3457</i>	<i>9</i>	<i>11</i>
	<i>2 Ferry</i>	<i>0.5561</i>	<i>16</i>	<i>0.3861</i>	<i>10</i>	<i>13</i>
	3 Chelan	0.4821	15	0.4763	15	15
	4 Okanogan	1.0892	28	0.7948	23	25.5
	5 Stevens	1.2094	29	0.8883	25	27
	6 Douglas	1.2594	30	0.9145	26	28
	<i>7 Adams</i>	<i>1.5983</i>	<i>33</i>	<i>1.0462</i>	<i>30</i>	<i>31.5</i>
	8 Whitman	1.5936	32	1.0576	31	31.5
	<i>9 Lincoln</i>	<i>1.6592</i>	<i>34</i>	<i>1.0904</i>	<i>32</i>	<i>33</i>
	10 Grant	2.2748	36	1.6170	35	35.5
	11 Spokane	1.9686	35	1.8334	36	35.5
Southeast Region	<i>1 Garfield</i>	<i>0.3924</i>	<i>9</i>	<i>0.2655</i>	<i>5</i>	<i>7</i>
	<i>2 Asotin</i>	<i>0.4043</i>	<i>11</i>	<i>0.2901</i>	<i>7</i>	<i>9</i>
	<i>3 Columbia</i>	<i>0.4448</i>	<i>12</i>	<i>0.3135</i>	<i>8</i>	<i>10</i>
	4 Kittitas	0.4697	14	0.4299	12	13
	5 Benton	0.7809	22	0.6346	19	20.5
	6 Franklin	0.8783	25	0.6216	18	21.5
	<i>7 Klickitat</i>	<i>0.8611</i>	<i>24</i>	<i>0.6400</i>	<i>20</i>	<i>22</i>
	8 Walla Walla	0.9003	27	0.6791	21	24
	9 Yakima	1.5845	31	1.2982	34	32.5
Southwest Region	<i>1 Wahkiakum</i>	<i>0.1987</i>	<i>3</i>	<i>0.1382</i>	<i>1</i>	<i>2</i>
	<i>2 Skamania</i>	<i>0.1490</i>	<i>2</i>	<i>0.1666</i>	<i>2</i>	<i>2</i>
	<i>3 Pacific</i>	<i>0.2987</i>	<i>6</i>	<i>0.2601</i>	<i>4</i>	<i>5</i>
	4 Cowlitz	0.2969	5	0.4401	13	9
	5 Mason	0.3930	10	0.4644	14	12
	6 Grays Harbor	0.5724	17	0.5039	17	17
	7 Lewis	0.8412	23	0.8025	24	23.5
	8 Clark	0.6234	18	1.1674	33	25.5
	9 Thurston	0.8991	26	1.0092	29	27.5



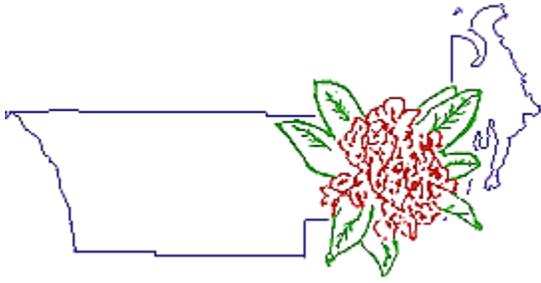
From: [Monte Reinders](#)
To: [Drew Woods](#)
Subject: RAP Emergency Program
Date: Tuesday, May 28, 2019 9:37:09 AM
Attachments: [CRAB ER Program Comments.docx](#)
[RAP ER History.pdf](#)

Hi Drew:

After the recent northwest regional RAP meeting (attended by our Assistant Public Works Director), I started to send you an email about our concerns related to the elimination of the RAP emergency/emergent program. It got a little long so I put it in a letter (attached). I'm just trying to provide our perspective on what this program means to a small county like ours. I realize there may be other information or perspectives on the issue. It seems like continuing to provide the Board with the flexibility to provide assistance to counties through RAP emergency funding would be good, perhaps with some changes that could address concerns about it being used too frequently or circumventing the competitive process. I would be happy to discuss this with you or other CRAB staff at any time including at the upcoming conference. Thank you.

Monte Reinders, P.E.
Jefferson County Public Works Director/County Engineer
623 Sheridan Street
Port Townsend, WA 98368
(360) 385-9242

Notice: This E-mail and your response may be considered a public record and may be subject to disclosure under Washington's Public Records Disclosure Act, Chapter 42.56 RCW.



Jefferson County Department of Public Works

623 Sheridan St.
Port Townsend, WA 98368
(360) 385-9160

Monte Reinders, P.E.
Public Works Director/ County Engineer

May 28, 2019

Washington State County Road Administration Board
2404 Chandler CT SW, Suite 240
Olympia, WA 98502-6067

Attn: Mr. Drew Woods, P.E.

RE: RAP Emergency Program

Drew:

I understand that our Assistant Public Works Director, Eric Kuzma, was able to briefly discuss the new Emergency Loan Program (ELP) with you at the last regional RAP meeting. It is our understanding that CRAB is currently proposing rules for the ELP. We also understand that the RAP emergency and emergent program authorized in WAC 136-163 will be eliminated and replaced with the new ELP. This is of concern to Jefferson County as we (and other counties) have successfully partnered with CRAB over the years through this program to rebuild roads following damage. I thought it would be helpful if we outlined our concerns and suggestions for CRAB's consideration as these changes are considered. These comments are only intended to provide the perspective of a small, rural county on this issue. I realize that we may not have the full range of perspectives related to this.

CRAB's records show that over the last 12 years, 12 counties have been funded through this program to repair 21 sites at a total cost of \$8.8 million (an average of \$421,000 per site and \$738,000 per year). The RATA program generates approximately \$20 million per year, and the emergency program, at an average of \$738,000 per year, appears to account for about 3.5% of spending. That does not seem unreasonable. Counties awarded emergency funds have that amount deducted from their future maximum RATA allocation which seems like a fair way of ensuring that counties are not circumventing the competitive process at the expense of others in their region. We believe that any concerns of this nature could be addressed by adjusting the WACs pertaining to the emergency program rather than completely eliminating the program. Some suggestions are provided later in this letter.

The RAP competitive grant program requires consideration of the following:

- Structural ability to support loaded trucks

- Ability to move traffic at reasonable speeds
- Adequacy of alignment and related geometry
- Accident and fatal accident experience
- Local significance

When a road or bridge is damaged (usually in a storm) it loses its structural ability to support loaded trucks, ability to move traffic at reasonable speeds, adequacy of alignment and related geometry are affected, accident rate and fatal accident experience may go up if repair is not performed, and the site clearly becomes highly significant at the local level. As such it is hard to see how it would not be a priority for RAP to participate in emergency road repairs.

The following is intended to provide further perspective on this issue.

- Per WAC 136-163-030, the existing emergency grant program is only used when no other source of emergency funding is available. It can provide 80% to 90% of the project funding (or some lesser amount as approved by the Board) or it can provide the match for a federal emergency grant from FEMA or FHWA.
- Rural minor collectors, which form the backbone of the county road system, are not eligible for FHWA-ER funds. FEMA declarations are relatively rare. Road damage can often be localized and not concurrent with a regional event that might instigate a FEMA declaration. For example, one of our Dosewallips Road landslides occurred after 30 inches fell in 30 days in that particular valley. No other areas in the region received that kind of precipitation or suffered damage. As a result, there was no FEMA declaration.
- On the Upper Hoh Rd (a rural major collector), which has typically been able to qualify for FHWA – ER funding and which has attracted significant federal money through FLAP as well, Jefferson County did not receive assistance from either source when a washout occurred in 2017 at milepost 8. FLAP does not have an emergency component, and since we were the only County with damage, the minimum state threshold was not met, and FHWA did not declare an event.
- When emergencies inevitably occur and no other funding source is available, counties may turn to CRAB for assistance through the only remaining funding source – the RAP emergency program. In Jefferson County, with a 6-Year TIP that averages only \$250,000 in local road money per year (after losing the “Secure Rural Schools” timber money, the value of which traditionally exceeded our MVFT amount), it is clear that a \$250,000 unplanned event can have a significant impact.
- Without access to RAP emergency grant money, a smaller county like ours will be forced to take the money to perform emergency repairs from some other county road activity. This will likely come out of the chip seal program which is about the only area a county can find significant money (in oil and rock supplies). In Jefferson County this will further cripple a program that has already been reduced to less than 5% of the road system per year (20-year cycle) due to budget constraints.

Jefferson County is strongly in favor keeping the RAP emergency program. There could be ways to adjust the WACs to address possible concerns with competitive distribution or to ensure that counties only use the program when absolutely necessary. Ideas include:

- To qualify, score the emergency project against the region's projects funded in the previous RAP round and require that it come in above the cutoff. At the same time, change the scoring so that a road missing a shoulder or lane gets 25 or 50 points respectively and of course additional points for major clear zone hazards if it is not repaired, or
- Require a county to "trade in" its next regular RAP project and use the funds to repay the prior emergency project, which would mean that a county would think twice about trading in a \$1,000,000 regular RAP project to fund a previous \$500,000 emergency project. The county would have to wait until the next round to reapply for the regular project they exchanged out, or
- If a county is awarded RAP emergency funds, its future RATA eligibility is reduced by perhaps double the amount they were awarded for the emergency instead of 1 to 1, or
- Require a county to push out a current project by 3 or 4 years depending on the size of the emergency award, or
- A county awarded RAP emergency funds is not even eligible in the next regular RAP round, which again forces a county to think really hard about its finances and priorities before applying for emergency money, or
- Offer the first \$200,000 of emergency funding as a grant and the remaining money at 50% loan and 50% grant with a 10-year payback term on the loan portion (or some other similar iteration).

These would all be possible ways to retain the RAP emergency program, which has proven to be a highly successful one for the counties, while ensuring that it is used appropriately.

The new Emergency Loan Program may help counties with short-term cash flow issues when emergencies occur, and the fact that the ELP can be used on local access roads as well as collectors is welcome news. With a payback term of 24 months, however, this program does not seem like it is designed to offset long-term financial impacts for a county when no other source of emergency funding is available, which is not an unusual circumstance.

Thank you for the opportunity to comment on this proposal. I hope we can discuss this further at the upcoming conference. Please contact me if you have any questions.

Sincerely,

Monte Reinders, P.E.
Public Works Director/County Engineer
Jefferson County

	County	Emergency	RAP-ER Award	Year Complete
1	Clark	NW Pacific Highway MP 1.81	\$ 532,000	2019
2	Lincoln	Porcupine Bay Rd.	\$ 638,000	2019
3	Jefferson	Upper Hoh Rd. MP 8.0	\$ 336,500	2018
4	Jefferson	Dosewallips Rd. MP 2.1	\$ 257,400	2018
5	Wahkiakum	Wahkiakum Ferry	\$ 1,250,000	2015
6	Jefferson	Dosewallips Rd. MP 3.25	\$ 93,600	2015
7	Thurston	Prather Way SW	\$ 724,500	2015
8	Jefferson	Upper Hoh Rd. MP 7.8	\$ 150,000	2013
9	Stevens	Arden Bridge	\$ 650,000	2013
10	Island	Glendale Rd.	\$ 638,079	2012
11	Jefferson	Dosewallips Rd. MP 2.71	\$ 161,152	2010
12	Wahkiakum	A.G. Hanson Bridge	\$ 96,525	2010
13	Grays Harbor	Porter Creek Bridge	\$ 225,000	2010
14	Franklin	R-170	\$ 853,618	2010
15	Mason	North Shore Rd.	\$ 178,028	2010
16	Mason	Capitalizaiton Adv. Event	\$ 271,422	2010
17	Wahkiakum	Elochoman Valley Rd.	\$ 90,530	2009
18	Asotin	Fishers Gulch Bridge	\$ 351,190	2009
19	Grays Harbor	Middle Satsop Rd.	\$ 269,045	2009
20	Wahkiakum	Ingalls Rd.	\$ 184,199	2008
21	Garfield	Mountain Rd.	\$ 900,000	2008
		Total:	\$ 8,850,788	
		Annual Avg.:	\$ 737,566	
		Award Avg.:	\$ 421,466	

COMPLIANCE & DATA ANALYSIS MANAGER'S REPORT
Prepared by Andrew Woods, PE

CRABoard Meeting – July 26, 2019

Reporting Period: April 20, 2019 thru July 19, 2019

COMPLIANCE

STANDARDS OF GOOD PRACTICE:

WAC 136-60 – Maintenance of County Road Logs

WAC 136-60-030 requires all counties to submit an updated road log, no later than May 1st of each year, for its complete road system with all data elements as of December 31st of the preceding year.

All 39 counties submitted the required forms and documentation by the May 1st deadline.

WAC 136-12 – Vacancy or Change in Position of County Engineer:

Update on Current Vacancies:

County	Effective Date	Original Six-Month Expiration	Six-Month Extension	Notes
Kittitas	April 30, 2018	October 30, 2018	April 30, 2019	Actively recruiting

County Audits – For Fiscal Year 2017

From April 19 to July 19, 2019, there were no new audit finding(s) involving county road or ER&R funds.

Unresolved Audit Finding(s):

-  Clallam County's FY 2017 accountability audit had a finding regarding their indirect cost distribution method. This finding was after receiving management letters for the same issue for FY 2015 and FY 2016. CRAB staff is working with the County to develop a corrective action plan; however, the retirement of the county's two top financial positions is impacting the timeline.

UPDATE: CRAB staff met with the Clallam County engineer, new chief financial officer and other county financial staff on July 18th to receive an update on the county's progress. They continue to work on developing their cost allocation plan and have a

well organized plan of action. The updated timeline is to have the cost allocation plan completed by September 30th so that departments know what amounts to budget for 2020.

CERTIFICATION

I certify that I have reviewed all of the above compliance reporting with the Deputy Director.

OTHER ACTIVITIES OF THE C&DA MANAGER

-  Regional RAP Meetings:
 - a. Puget Sound – Seattle May 22nd
 - b. Northwest – Mt. Vernon May 23rd
 - c. Southwest – June 6th
 - d. Southeast – Pasco June 11th
 - e. Northeast – Ephrata June 12th
-  NHI Bridge Inspection Refresher Re-Certification – Olympia May 7th – 9th
-  County Engineer Training – Olympia May 14th – 16th
-  Federal Lands Access Program PDC Meeting – Olympia June 4th
-  WSACE Annual Conference – June 18th – 20th
-  Clallam County – July 18th

ENGINEERING AND ADMINISTRATIVE SUPPORT SPECIALIST REPORT

Prepared by Derek Pohle, PE

CRABoard Meeting – July 25, 2019

Reporting Period: May 2019 thru July 2019

COUNTY VISITS

Pacific 6/3, Clallam 7/18

COUNTY CONTACTS/CONSULTING

Total Contacts: 40

Number of: Counties: 16 Other Agencies: 9 Public: 1

COUNTY AUDITS – For Fiscal Year 2017

No new audit issues, with compliance components initiating consultative contacts, involving the road fund or road departments, have been reviewed in the last quarter.

OFFICE OF THE COUNTY ENGINEER TRAINING

County Engineer's training, May 14-16, in Olympia.

Updating content of the training manual for upcoming December training.

COUNTY ENGINEER DESK REFERENCE

Issued May 2019 update to the Desk Reference.

OTHER ACTIVITIES OF THE EASS

- Worked on Emergency Loan Program proposed rules with Walt, Drew and Randy.
- Attend quarterly LGAC meeting, SAO.
- Program/Project manager Award deliberation/selection.
- Engineer of the Year Award deliberation/selection.
- WSACE Annual conference at Semiahmoo in Whatcom County.
- DNR – proposed new rule regarding monument preservation/county maint. ops.
- RAP, CAPP, CFCIP briefing to House and Senate Transportation staff.
- Updated County Purchasing Flowchart regarding recent statutory changes.

July 2019 CRABoard Meeting Information Services Update

A. Ongoing Projects

a. **GIS-Mo Project**

- i. VUEWorks Configuration Kickoff (Phase 3) for May 7th & 8th, 2019
- ii. FYI Video Production Kickoff
 1. Completed Script
 2. Completed Storyboard
 3. In production
- iii. Stakeholder Outreach
 1. Eastern/Western District Meetings presented by Walt Olsen
 2. VUEWorks NW Regional Meeting Lacey May 2019
 3. WAURISA Conference presentation May 22nd, 2019
 4. WSACE Conference presentation June 19th, 2019
 5. GIS-Mo Interoperability Workgroup Kickoff July 17th, 2019
- iv. End of WTSC Grant September 30th, 2019
- v. GIS-Mo tentative training schedule in Appendix A



b. **WATECH Migration Project**

- i. Moving to WaTech Private Cloud
 1. Working closely with WaTech to connect from current network to new network in order to migrate servers and commence testing

c. **SQL Server Upgrade**

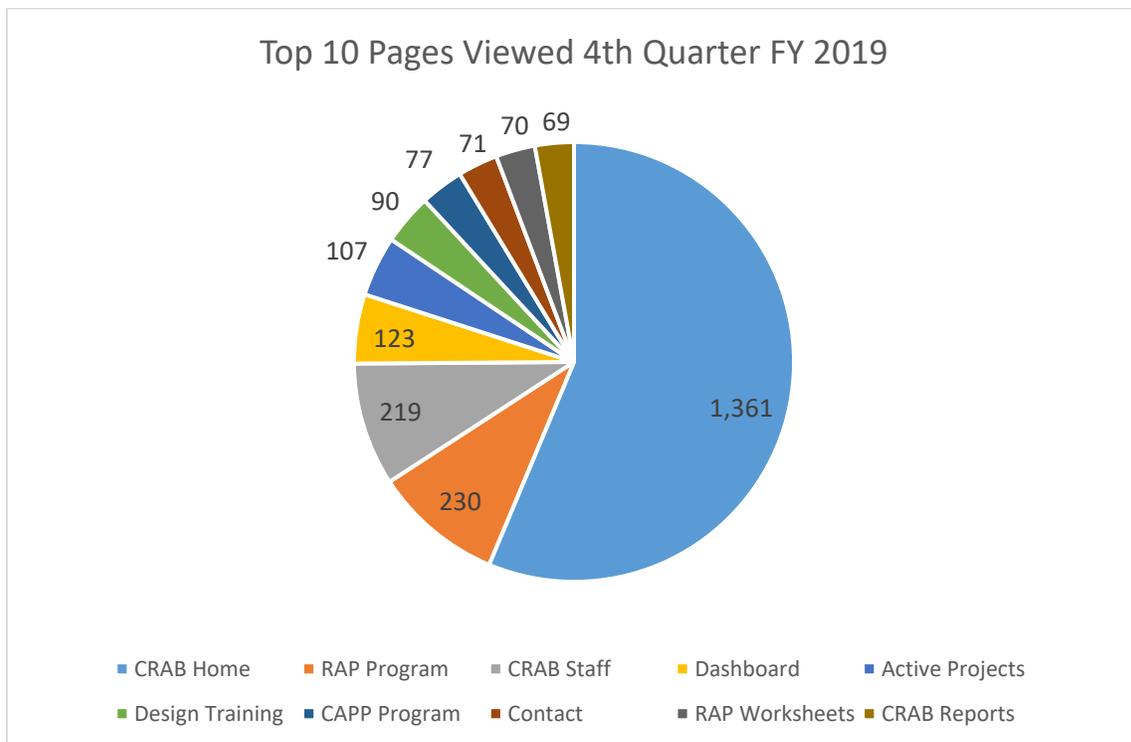
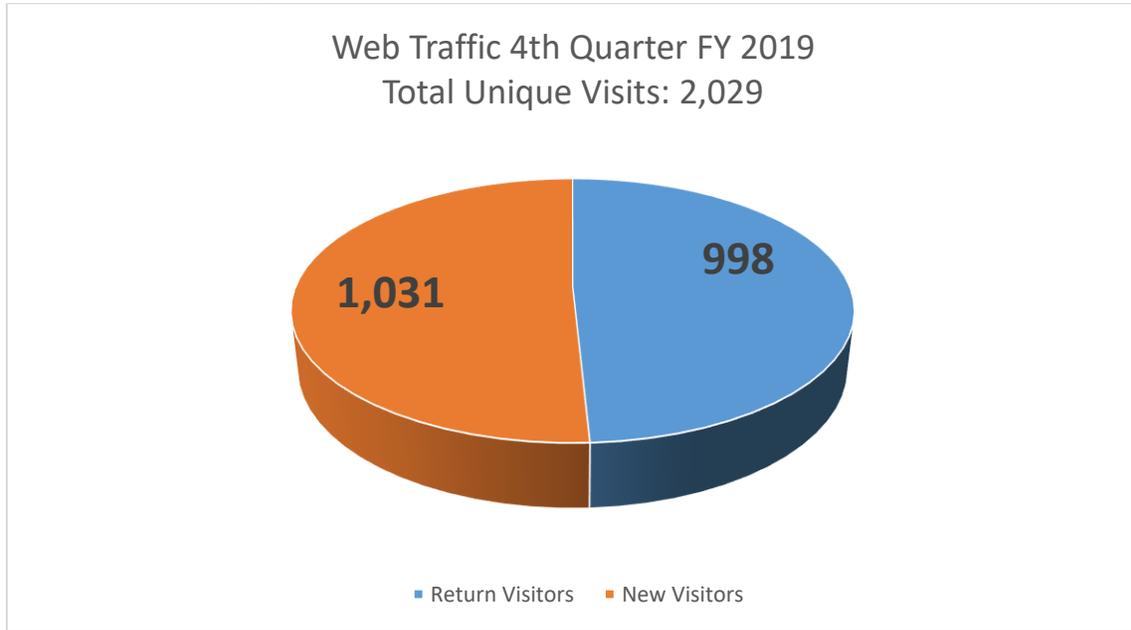
- i. SQL Server 2017 Purchased June 2019
- ii. Develop upgrade/migration timeline for production environment

d. **Physical Office Move**

- i. Schedule fiber installation to new server room
- ii. Test and label all cabling between offices and server room
- iii. Schedule IT server equipment relocation and fiber cutover
- iv. Install VoIP Phone System
 1. Equipment received
 2. PoE Switch configured with WaTech
 3. Awaiting cloud migration to complete

e. CRAB Website Enhancement Project

i. Site Analytics



ii. Content Management System (CMS)

1. Devin Rue completed internship and delivered CMS prototype June 23rd, 2019
2. Staff evaluation to begin July 2019

Additional Information Services Activities Update

a. Administrative

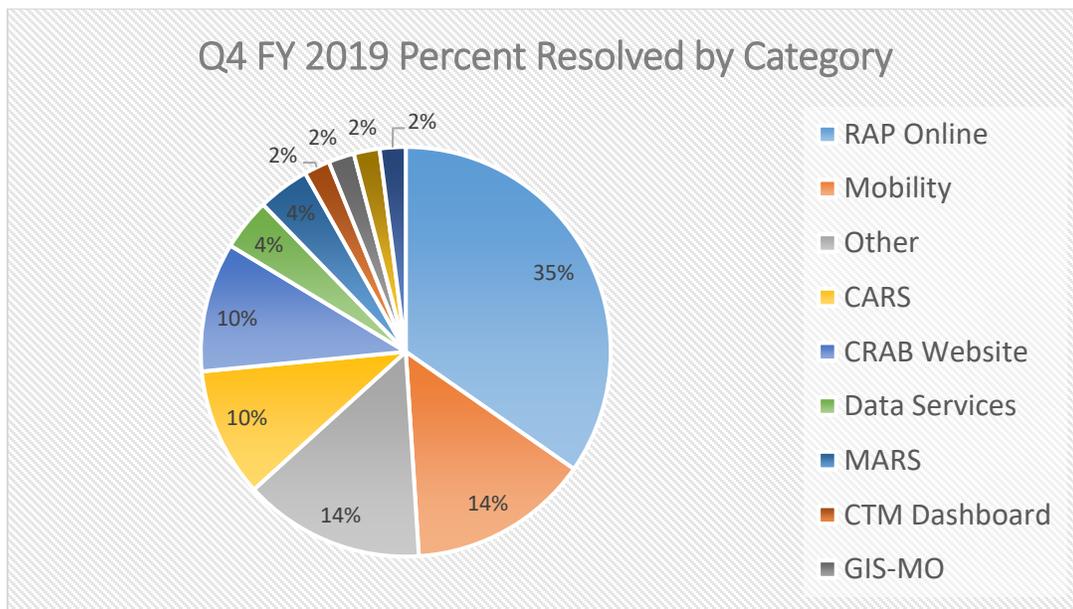
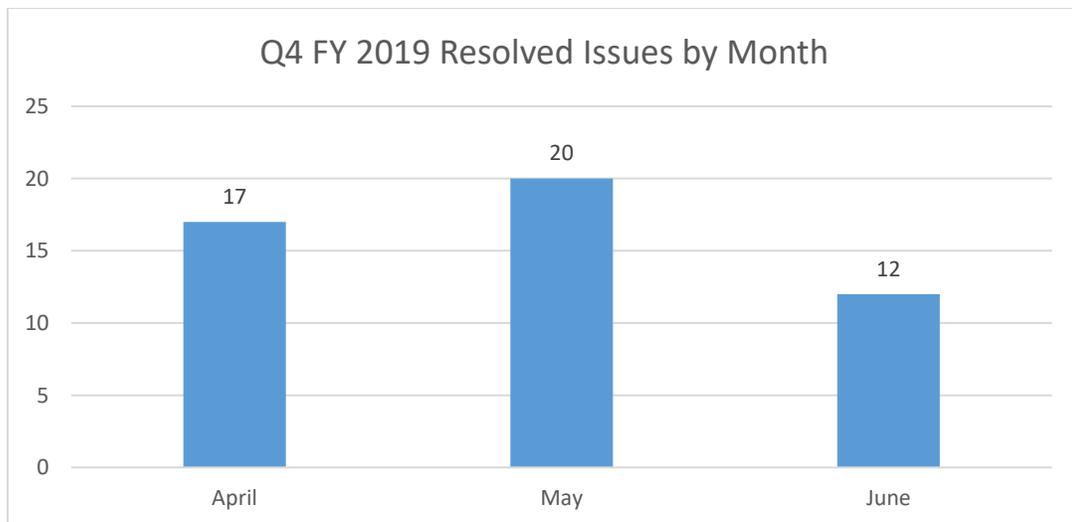
- i. IT Staff Professional Development
 - Eric & Cameron attended WSACE Conference June 18th – 20th, 2019

b. System Security Update

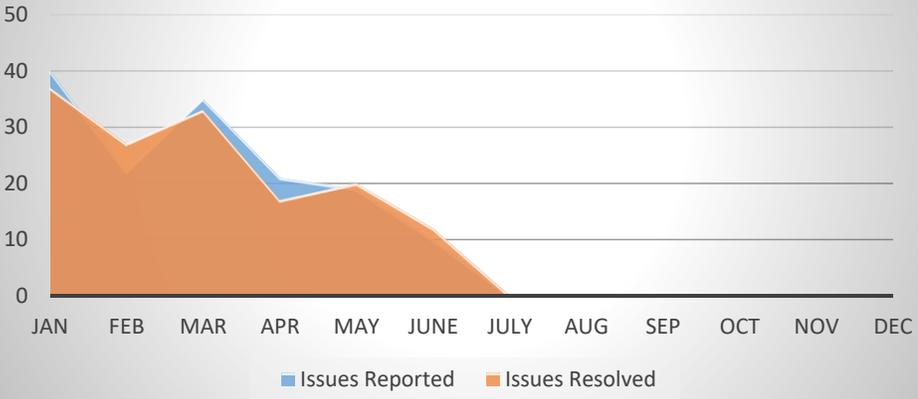
- i. Cisco Meraki MDM implemented in compliance with OCIO Policy 191
- ii. Windows critical updates performed and automated
- iii. Full server Anti-Virus sweeps
- iv. CRAB & FMSIB site penetration testing performed

c. CRAB Customer Training and Support

- i. CRAB Customer Training
 - No formal training for 4th Quarter FY 2019
- ii. CRAB Customer Support
 - 4th Quarter, FY2019 – 50 issues reported across 14 categories; 49 issues resolved across 11 categories.



2019 Issues Reported vs Issues Resolved



Preliminary GIS-Mo Training Schedule

November 2019						
S	M	T	W	TH	F	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 2019						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 2020						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 2020						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March 2020						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2020						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May 2020						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June 2020						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July 2020						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August 2020						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September 2020						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
27	28	29	30			

October 2020						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

GIS-Mo Training in Olympia

GIS-Mo Training in Eastern Washington - Locations TBA as confirmed

GIS- Mo Training for/at a specific County



Design Systems Program Report

Prepared by **Jim Ayres, P.E.**

CRABoard Meeting – July 25th - 26th 2019
Reporting Period: April 26, 2019 thru July 24th, 2019

County Visits Since April 2019:

Skamania
Klickitat
Franklin
Benton
Yakima
Kittitas
Pierce
Kitsap
Snohomish
Island
Jefferson
Mason
Pacific
Grays Harbor

(14 counties, 3 ferry trips, 1 toll bridge, and numerous pit stops)

Design Systems Training:

* Completed the new online training project “*Civil 3D User Interface*” This is a self-guided set of slides w/ datasets for counties to learn the interface prior to attending the AutoCAD Civil 3D Fundamentals for Surveyors & Engineers hands-on training class.

* Training Manual Update: New dataset added for Fish Bearing Culvert Design with WDFW Fish Barrier Removal Requirements. Workflow steps in the works.

* AutoCAD Civil3D site visits to show productive tips & tricks – July 16th – 19th, 2019

County Contacts and/or Consulting:

Total Contacts: 59 Counties: 24 Other Agencies: 2 Private/Vendors: 4

UAS Program Update:

UAS Public Safety Application.

CRAB UAS program has been beta testing a new drone app to assist the WSDOT Aviation Division. This new system that will help safely launch and monitor drones on a routine basis and expedite the use of drones by first responders. Currently in Phase 3.

FAA Proposed Drone Rule changes. UTM (Unmanned Traffic Management), and its red-headed stepchild Remote ID (RID), which is the “*topic of the hour around the world.*” Is scheduled for FAA final rulemaking and release by 2020.

In Closing, as you all are aware, this is my final program report. I have enjoyed all aspects of working for CRAB and I consider my 20 years spent here extremely rewarding and productive. Although I look forward to my new journey, I will very much miss being part of the team and CRAB.