



August 30, 2018

Office of Financial Management
Budget Office

The County Road Administration is pleased to submit their 2019-21 Biennial Budget request.

If you have questions, please contact either myself or Karen Pendleton at 360.753.5989.

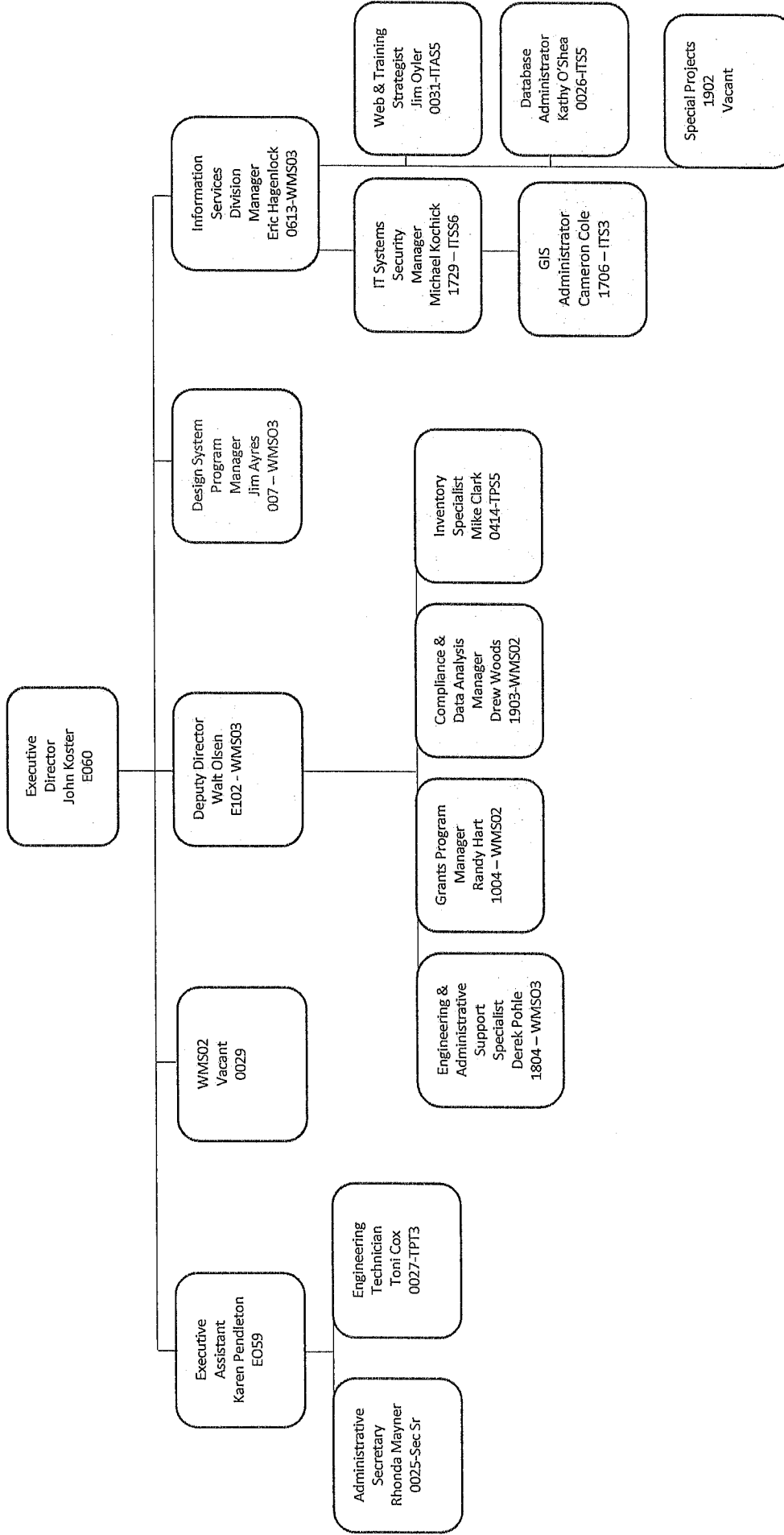
Sincerely,

A handwritten signature in black ink that reads "John M. Koster". The signature is written in a cursive, flowing style.

John Koster
Executive Director

COUNTY ROAD ADMINISTRATION BOARD

6 County Commissioners / Council Members & 3 County Engineers



(10)

(11)

(12)

STRATEGIC PLAN
COUNTY ROAD ADMINISTRATION BOARD
FY 2019-21

MISSION STATEMENT:

The mission of the County Road Administration Board is to preserve and enhance the transportation infrastructure of Washington counties by providing standards of good practice, fair administration of funding programs, visionary leadership, and integrated, progressive, and professional technical services.

LISTING OF STATUTORY AUTHORITY REFERENCES:

RCW 36.78.010 through 36.78.121
RCW 36.79.010 through 36.79.901
RCW 46.68.090(5)
WAC 136-01 through 136-400

MAJOR STRATEGIES:

To accomplish its mission, the County Road Administration Board (CRAB) strives to develop highly professional county road department staff that perform their jobs in accordance with the Standards of Good Practice as efficiently and effectively as possible. That goal is accomplished through a combination of appropriate regulation; broad professional and technical support and training; statewide data and management; development; and financial assistance. Specifically, CRAB will provide:

FUNCTIONAL AREA:

1. **STATUTORY OVERSIGHT**

To provide fair and equitable rules, guidelines, procedures and processes to counties, along with simple reporting mechanisms to insure accountability and professional management of road departments statewide. This is accomplished through:

- Standards of Good Practice and Annual Certification
- Road log and Gas Tax Updates
- On-site performance audits

2. GRANTS MANAGEMENT

To administer assigned state grant programs to assist counties in the improvement and preservation of their arterial road systems. This is accomplished through rule-making specific to the statutory requirements of:

- The County Arterial Preservation Program
- The Rural Arterial Program

3. MANAGEMENT AND PROFESSIONAL SERVICES

To provide assistance and support to the counties in the areas of professional engineering, program development, and road department management. This is accomplished through:

- Engineering mentoring support and training
- Management support, training and data development
- Maintenance practices support

4. INFORMATION TECHNOLOGY AND TECHNICAL SERVICES

To provide, develop, and support a full range of information tools and services including transportation software, data collection, training, and mentoring for all aspects of transportation-related public works issues. This is accomplished through:

- Acquisition and development of transportation-related information technology (IT) resources
- Training and support of county public works personnel in their implementation of available IT tools

5. GENERAL ADMINISTRATION

To promote efficient internal operations to insure maximum staff availability for providing direct services to counties.

GOALS AND OBJECTIVES

1. **GOAL:** To establish and monitor an annual certification process to insure that the county road departments comply with legislative directives and adopted standards of good practice.

OBJECTIVES:

- To annually review the compliance of all counties with the adopted standards of good practice.
- To annually update and maintain a current and complete inventory of all county roads.
- To biannually conduct an in-depth on-site performance audit of each county.

2. **GOAL:** To provide funding to counties to assist them in preserving and improving their county road systems.

OBJECTIVES:

- To resurface county arterials on an optimum time schedule, as determined by use of a Pavement Management System, in order to minimize long-term costs.
- To construct and improve county rural arterials and collectors to improve safety and to enable them to support increasing freight and goods traffic.
- To rehabilitate or replace existing county bridges and other structures to preserve operational and structural integrity.

3. **GOAL:** To provide assistance and support to county road departments and their county legislative authorities on issues relating to county roads in order to enhance the safe and efficient movement of people and goods over those roads.

OBJECTIVES:

- To provide quality training to county engineers, public works directors, and other county Public Works staff to enable them to perform their duties more efficiently and effectively.
- To provide timely, accurate information to county road departments and county legislative authorities on issues relating to county roads.
- To increase the awareness of the role of the county road system in the overall statewide transportation system.

4. **GOAL:** To assist counties in developing uniform and efficient transportation-related information technology (IT) resources by providing, developing and supporting a full range of information tools and services for all aspects of transportation-related public works operations.

OBJECTIVES:

- To ensure effective use of IT tools through development or procurement of, and support and training for, appropriate applications and software.
- To maintain a high level of professionalism in the use of information technology in county road departments through training and support.
- To enhance the effectiveness of county personnel in their projects and initiatives through information technology consultation.
- To promote cooperative communication, information exchange, and IT uniformity through conferences, workshops, and website activities.

PERFORMANCE MEASURES

- 1A1 Number of counties earning Certificates of Good Practice based on review of compliance with the CRAB Standards of Good Practice.
- 1A3 The percentage of county owned bridges that are in fair or better condition.
- 1A4 Number and rate of traffic fatalities that occur on county roads per year.
- 1A5 Number and rate of traffic related injuries that occur on county roads per year.
- 2A1 Percent of county road arterials in fair or better condition.
- 3A1 & 4A1
Number of person-days of training/consulting provided to county personnel by CRAB staff.

APPRAISAL OF EXTERNAL ENVIRONMENT

CRAB and the counties are faced with growing transportation and environmental needs that are gravely under-funded. Public expectations, along with the demands of foreign trade, economic development, and population growth, drive transportation professionals to search for better ways to fulfill their responsibilities. Fuel tax revenues, upon which county road departments depend for much of their operation, have been relatively flat for several years. Should the economy deteriorate, those revenues could easily diminish, increasing the demands upon CRAB to provide professional and technical services to help stretch the revenues that remain. Besides the state fuel tax, counties rely upon federal fuel taxes and the local property tax. Those sources are also highly dependent upon a strong economy to produce revenues adequate to finance the transportation needs of a growing population. In addition to flat revenue trends, recent environmental permitting and mitigation concerns have seriously eroded the buying power of the existing revenues.

TRENDS IN CUSTOMER CHARACTERISTICS

Although county engineering departments are not growing in number, the demands being placed upon them are increasing due to the growth of the State's population. Further, ever increasing legislative mandates strain both CRAB and the county engineering departments' resources. In addition, staff turnover presents challenges to maintain both expertise and continuity throughout most departments. Those realities present CRAB with the challenge to provide products and support that will enable the counties to manage their infrastructure intelligently and efficiently, using technical and management systems as well as extensive training programs. The need to provide broad management and technical support, in addition to regulation and financial aid, has been increasing for the past several years. The benefits to the public from providing such support are visible and significant.

DISCUSSION OF MAJOR PARTNERS

As transportation systems become more complex and interconnected, the interdependence of the partners providing both the infrastructure and services increases. In addition to Washington's thirty-nine county road departments, CRAB's major partners include the Washington State Department of Transportation (WSDOT), Freight Mobility Strategic Investment Board (FMSIB), the Transportation Improvement Board (TIB), FHWA, transit agencies, and cities throughout the state. From the standpoint of coordinated service delivery, the major partners are the WSDOT Local Programs and the TIB. Each of the three partners focuses on specific aspects of local government transportation service delivery and, by working together, counties and cities are provided the best support in the nation. The ultimate goal of the agency's commitment to focused support and coordinated services is to provide a superior local component to the state's transportation network.

RISKS, OBSTACLES, AND OPPORTUNITES THAT THE AGENCY FACES

The greatest risk and obstacle faced by CRAB is the looming infrastructure funding crisis. Counties cannot continue to operate at current levels, nor can they be expected to maintain the professional, efficient and highly accountable programs they have developed. That dilemma places a burden on CRAB as well, with both direct financial consequences from inflationary impacts as well as the desire to carry out regulatory oversight on agencies becoming increasingly unable to comply.

The provision of fair regulation and superb support requires a high level of both institutional and individual commitment. The relationship between CRAB and the counties has evolved over more than fifty years and has produced many remarkable improvements. Never has the need to continue that relationship been more critical than now, given Washington's rapid growth, demographic changes, and increasingly complex transportation needs. In conjunction with its sister agencies, WSDOT, FSMIB and TIB, CRAB is committed to helping to develop a coordinated transportation network equal to the demands of the future. As is often the case, risks and obstacles also provide an organization's greatest opportunities. The transportation challenges faced by the state as a whole and counties as subdivisions of the state, present challenges to providing service that are professionally invigorating. Collectively and individually, the Board and staff of CRAB are excited and optimistic at the prospect of assisting counties in particular, and all of the transportation providers in general, to provide the public with a surface transportation system second to none.

PERFORMANCE MEASURE DESCRIPTIONS

Agency: 406 County Road Administration Board
Program: --- Agency Level
Active Strategy: Yes
Strategy Code: 100 Establish and Monitor Certification Process
Active Performance Measure: Yes
OFM Measure: All
Biennium: 2019-21

Strategy/Goal: 100 To establish and monitor an annual certification process to insure that county road department directives and adopted standards of good practice.

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
1A1	Output		Number	Yes	Yes
	Short Description: Certificates of Good Practice Issued				
	Full Description: Number of counties earning Certificates of Good Practice based on review of compliance with the CRAB Standards of Good Practice.				

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
1A3	Outcome		Percent	Yes	Yes
	Short Description: County Owned Bridges				
	Full Description: The percentage of county owned bridges that are in fair or better condition.				

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
1A4	Outcome		Number	Yes	Yes
	Short Description: Traffic Fatalities				
	Full Description: Number and rate of traffic fatalities that occur on county roads per year.				

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
1A5	Outcome		Number	Yes	Yes
	Short Description: Traffic Injuries				
	Full Description: Number and rate of traffic related injuries that occur on county roads per year.				

Strategy/Goal: 200 To provide funding to counties to assist them in preserving and improving their county road systems.

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
2A1	Outcome		Number	Yes	Yes

Short Description: Statewide Average Arterial PSC

Full Description: Percent of county road arterials in fair or better condition.

Strategy/Goal: 300 To provide assistance and support to county road departments and their county legislative authorities on issues relating to county roads in order to enhance the safe and efficient movement of people and goods over those roads.

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
3A1	Output		Number	Yes	Yes

Short Description: Personal Contact with County Personnel

Full Description: Number of person-days of training/consulting provided to county personnel by CRAB staff.

Strategy/Goal: 400 To assist counties in developing uniform and efficient transportation-related information technology (IT) resources by providing, developing, and supporting a full range of information tools and services for all aspects of transportation-related public works operations.

<u>PM Code</u>	<u>PM Type</u>	<u>Long Term Preferred Level</u>	<u>Unit</u>	<u>OFM Measure</u>	<u>Active</u>
4A1	Output		Number	Yes	Yes

Short Description: Effective Use of CRAB Provided or Developed Systems.

Full Description: Number of person-days of training/consulting provided to county personnel by CRAB staff.

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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

406 - County Road Administration Board

A001 Technical Assistance and Management Oversight

The County Road Administration Board (CRAB) maintains the statewide inventory of county roads used as the basis for grant program eligibility and fuel tax calculations, and prepares the calculations for the annual fuel tax allocation for each county. The Board sets standards of operation for all county road agencies and enforces these standards through a system of annual reporting and site visits. It also provides technical and administrative assistance to counties, including information technology services and training. (Rural Arterial Account-State, Motor Vehicle Account-State, County Arterial Account-State)

Program 010 - CRAB Operating

Account	FY 2020	FY 2021	Biennial Total
FTE	8.7	8.7	8.7
108 Motor Vehicle Account			
108-1 State	\$1,280	\$1,387	\$2,667

Program 01C - CRAB Capital

Account	FY 2020	FY 2021	Biennial Total
108 Motor Vehicle Account			
108-1 State	\$728	\$728	\$1,456

Statewide Result Area: Prosperous Economy

Statewide Strategy: Effective transportation system governance and management

Expected Results

ACT001 - Agency Activity Inventory

County Road Administration Board

Appropriation Period: 2019-21 Activity Version: BI - 19-21 Agency Budget Request Sort By: Activity

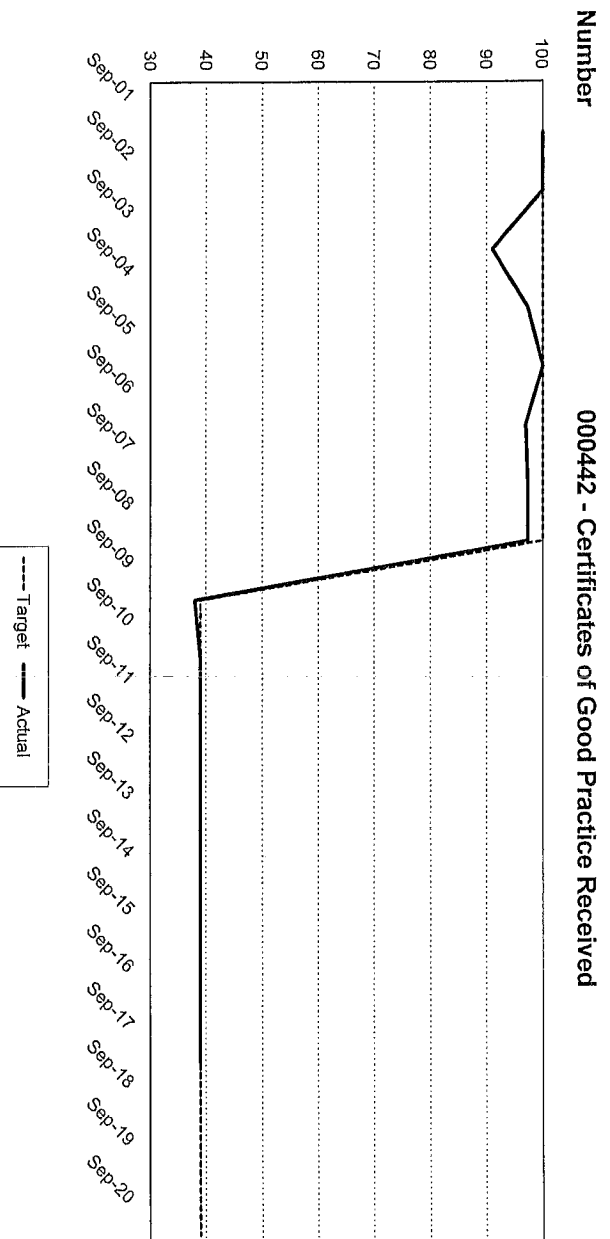
The result of regulation, research, and oversight has been, and should continue to be, accountability among the counties and from them to the Legislature and the public; credibility of reported data through centralized reporting; and effective, efficient, professional administration of county road resources and a centralized location of data from thirty-nine counties; an achieved economy of scale realized across thirty-nine road departments.

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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000442 Number of counties earning Certificates of Good Practice based on review of compliance with the CRAB Standards of Good Practice.			
Biennium	Period	Actual	Target
2019-21	Q8		39
	Q7		
	Q6		
	Q5		
	Q4		39
	Q3		
	Q2		
	Q1		
2017-19	Q8		39
	Q7		
	Q6		
	Q5		
	Q4	39	39
	Q3		
	Q2		
	Q1		
2015-17	Q8	39	39
	Q7		
	Q6		
	Q5		
	Q4	39	39
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity



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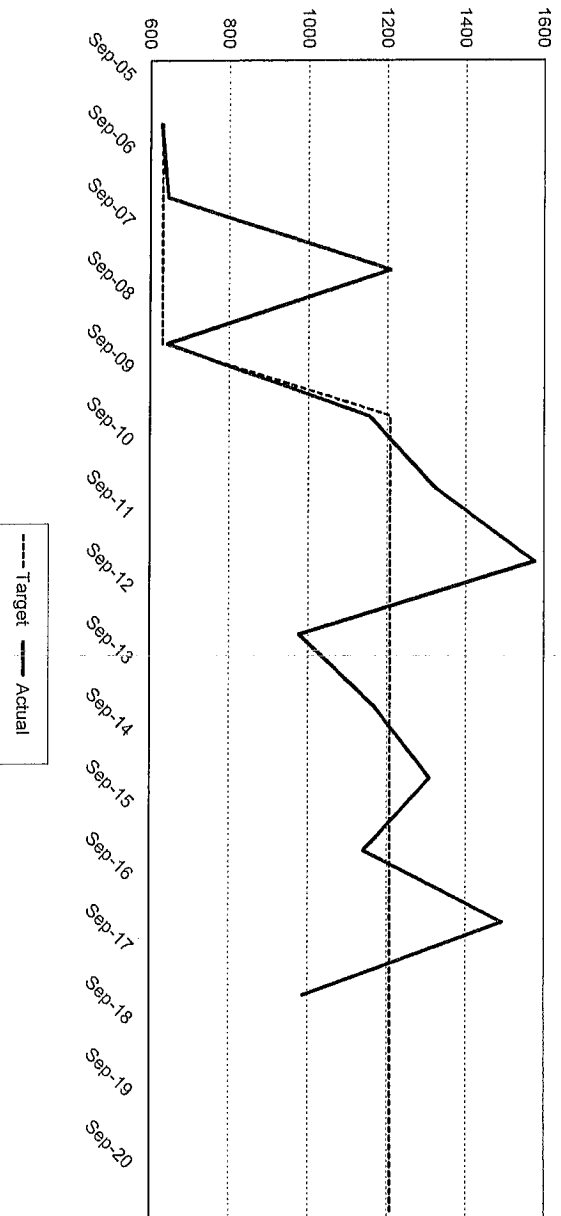
Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000671 Number of person-days of training/consulting provided to county personnel by CRAB staff on County Engineer duties and responsibilities, Engineering Design Systems and Transportation Management Systems (Mobility).		Period	Actual	Target
2019-21		Q8		1,207
		Q7		
		Q6		
		Q5		
		Q4		1,207
		Q3		
		Q2		
		Q1		
2017-19		Q8		1,207
		Q7		
		Q6		
		Q5		
		Q4	987	1,207
		Q3		
		Q2		
		Q1		
2015-17		Q8	1,493	1,207
		Q7		
		Q6		
		Q5		
		Q4	1,140	1,207
		Q3		
		Q2		
		Q1		

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

Performance Measure Status: Draft

Number 000671 - Number of person-days of training/consulting provided to county personnel by CRAB

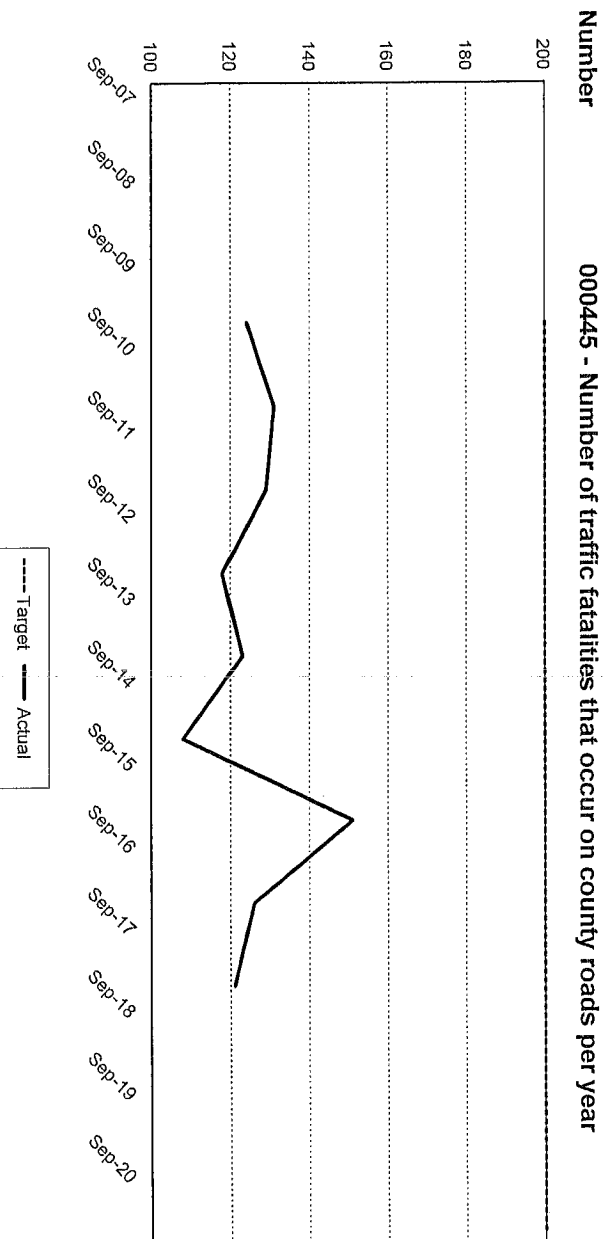


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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000445 Number of traffic fatalities that occur on county roads per year			
Biennium	Period	Actual	Target
2019-21	Q8		200
	Q7		
	Q6		
	Q5		
	Q4		200
	Q3		
	Q2		
	Q1		
2017-19	Q8		200
	Q7		
	Q6		
	Q5		
	Q4	121	200
	Q3		
	Q2		
	Q1		
2015-17	Q8	126	200
	Q7		
	Q6		
	Q5		
	Q4	151	200
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

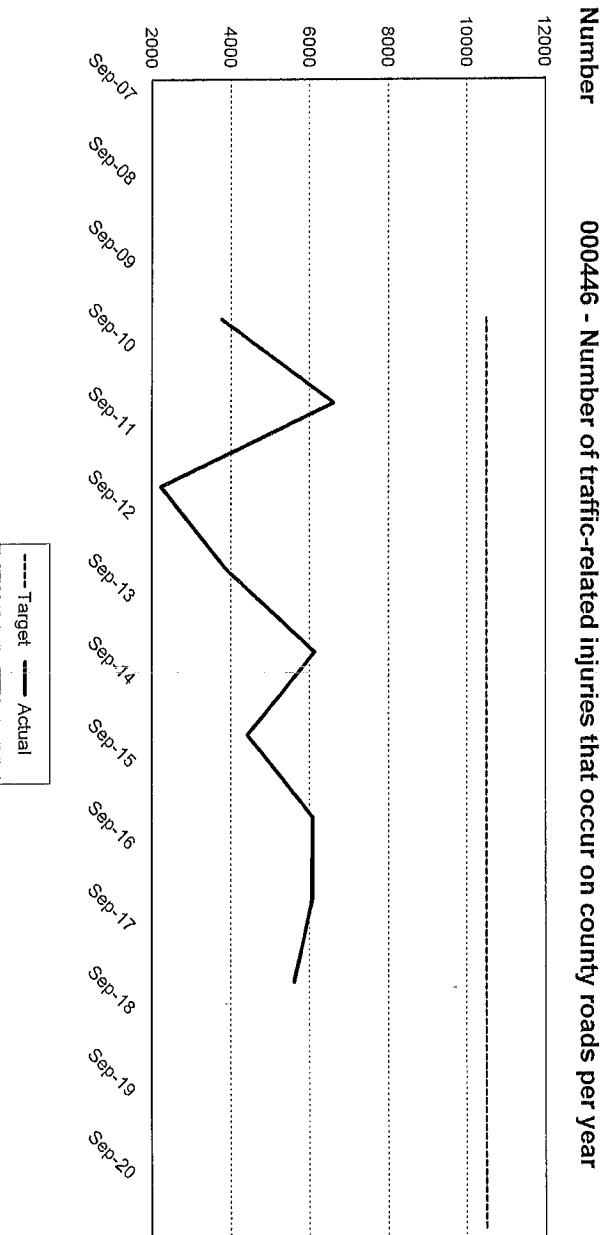


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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000446 Number of traffic-related injuries that occur on county roads per year			
Biennium	Period	Actual	Target
2019-21	Q8		10,500
	Q7		
	Q6		
	Q5		
	Q4		10,500
	Q3		
	Q2		
	Q1		
2017-19	Q8		10,500
	Q7		
	Q6		
	Q5		
	Q4	5,600	10,500
	Q3		
	Q2		
	Q1		
2015-17	Q8	6,067	10,500
	Q7		
	Q6		
	Q5		
	Q4	6,078	10,500
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity



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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

A002 Rural Arterial Program

Rural Arterial Account monies are distributed to the counties in the form of project grants to improve rural arterial and collector roads and to provide transportation engineering assistance. Counties compete regionally for these construction dollars by submitting projects which are then rated by CRAB staff against objective criteria established for each region.

Program 010 - CRAB Operating

Account	FY 2020	FY 2021	Biennial Total
FTE	4.0	4.0	4.0
102 Rural Arterial Trust Account			
102-1 State	\$537	\$541	\$1,078

Program 01C - CRAB Capital

Account	FY 2020	FY 2021	Biennial Total
102 Rural Arterial Trust Account			
102-1 State	\$32,998	\$32,998	\$65,996

Statewide Result Area: **Prosperous Economy**

Statewide Strategy: **Preserve and maintain state, regional and local transportation systems**

Expected Results

The Rural Arterial Program successfully targets freight and safety issues on a regional basis. Competition within regions should ensure that only priority projects are constructed. CRAB staff remain in close communication with each county to make sure the program continues to be both responsive to individual counties' needs and effective in dealing with county freight and safety issues.

ACT001 - Agency Activity Inventory

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

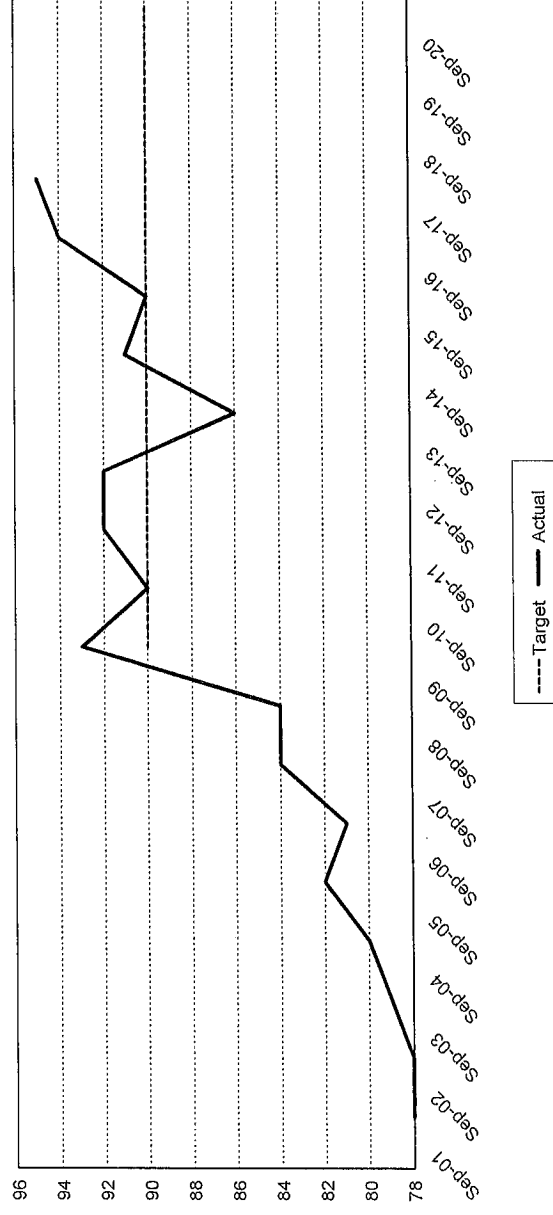
County Road Administration Board

000543 Percent of county owned arterials in fair or better condition.			
Biennium	Period	Actual	Target
2019-21	Q8		90%
	Q7		
	Q6		
	Q5		
	Q4		90%
	Q3		
	Q2		
	Q1		
2017-19	Q8		90%
	Q7		
	Q6		
	Q5		
	Q4	95%	90%
	Q3		
	Q2		
	Q1		
2015-17	Q8	94%	90%
	Q7		
	Q6		
	Q5		
	Q4	90%	90%
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

Percent 000543 - Percentage of county road arterials in fair or better condition



ACT001 - Agency Activity Inventory

County Road Administration Board

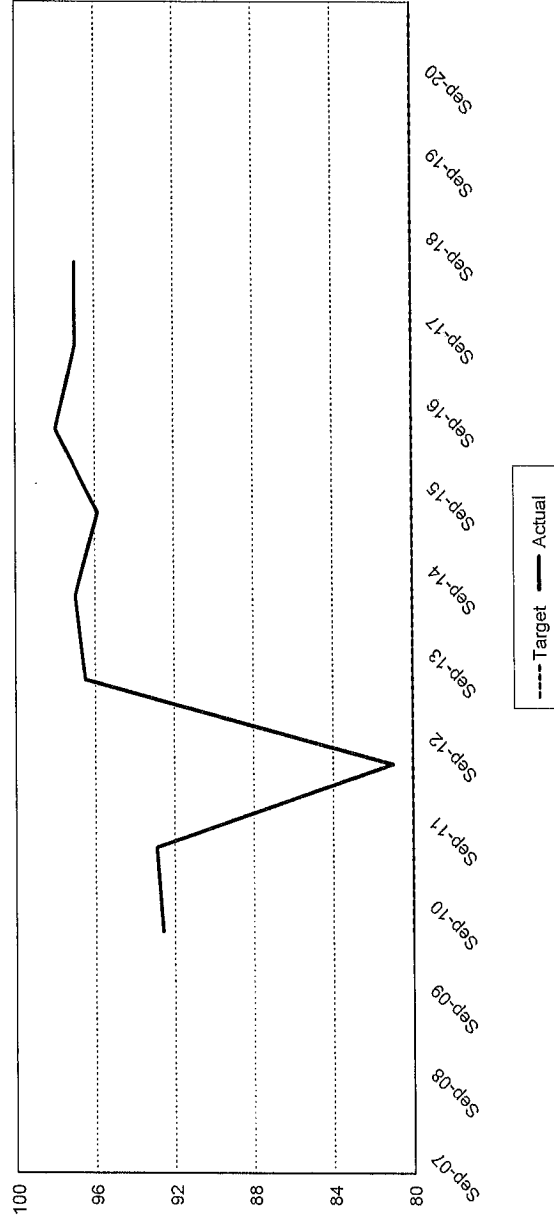
Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000444 Percentage of county-owned bridges that are in fair or better condition.			
Biennium	Period	Actual	Target
2019-21	Q8		80%
	Q7		
	Q6		
	Q5		
	Q4		80%
	Q3		
	Q2		
	Q1		
2017-19	Q8		80%
	Q7		
	Q6		
	Q5		
	Q4	97%	80%
	Q3		
	Q2		
	Q1		
2015-17	Q8	97%	80%
	Q7		
	Q6		
	Q5		
	Q4	98%	80%
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

Percent 000444 - Percentage of county-owned bridges that are in fair or better condition



ACT001 - Agency Activity Inventory

County Road Administration Board

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

A003 County Arterial Preservation Program

Grants are awarded based upon each county's total arterial lane miles as certified by the county road log at CRAB. To remain eligible for this program, each county must certify to CRAB's satisfaction that a pavement management system is in use which meets or exceeds the board's standards.

Program 010 - CRAB Operating				
Account	FY 2020	FY 2021	Biennial Total	
FTE	4.5	4.5	4.5	
186 County Arterial Preservation Acct				
186-1 State	\$816	\$802	\$1,618	
Program 01C - CRAB Capital				
Account	FY 2020	FY 2021	Biennial Total	
186 County Arterial Preservation Acct				
186-1 State	\$19,795	\$19,795	\$39,590	

Statewide Result Area: Prosperous Economy

Statewide Strategy: Preserve and maintain state, regional and local transportation systems

Expected Results

CAPA provides a regular and dedicated resource for the purpose of county arterial preservation. By calculating the distribution on the basis of a certified road log, the result should be an accurate and current assessment of individual county arterial preservation need, as well as an equitable distribution among the counties. The requirement of pavement management systems within each county continues to ensure that every county is a part of a statewide stewardship effort to maintain the existing infrastructure investment.

ACT001 - Agency Activity Inventory

County Road Administration Board

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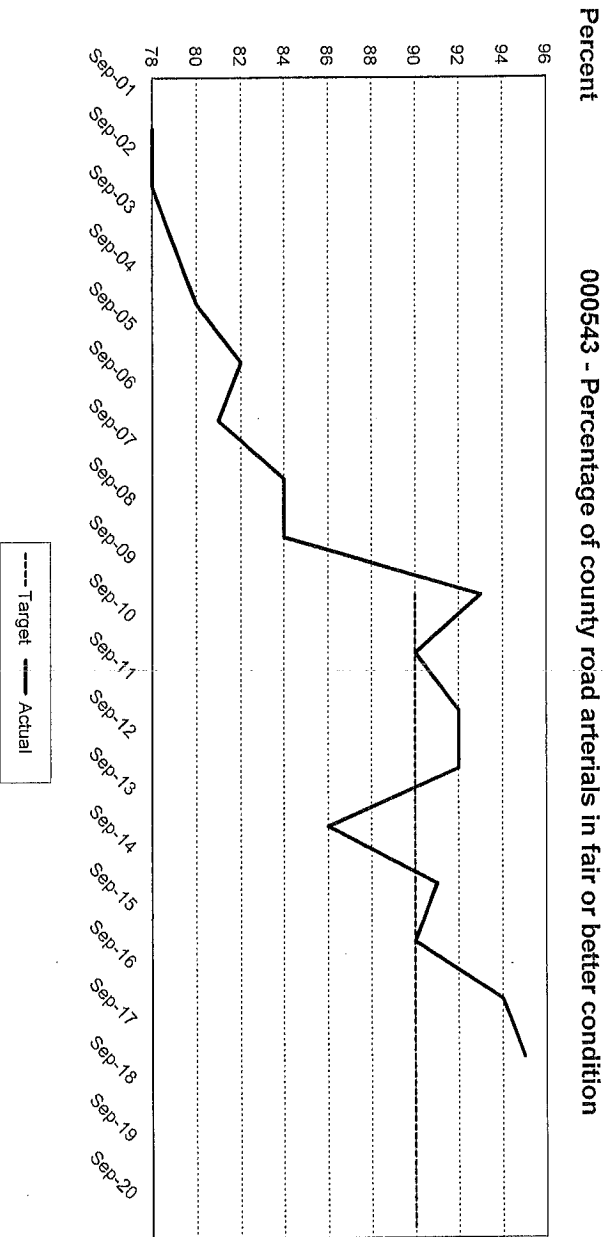
Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

000543 Percent of county owned arterials in fair or better condition.			
Biennium	Period	Actual	Target
2019-21	Q8		90%
	Q7		
	Q6		
	Q5		
	Q4		90%
	Q3		
	Q2		
	Q1		
2017-19	Q8		90%
	Q7		
	Q6		
	Q5		
	Q4	95%	90%
	Q3		
	Q2		
	Q1		
2015-17	Q8	94%	90%
	Q7		
	Q6		
	Q5		
	Q4	90%	90%
	Q3		
	Q2		
	Q1		
Performance Measure Status: Draft			

ACT001 - Agency Activity Inventory

County Road Administration Board

Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity



ACT001 - Agency Activity Inventory

County Road Administration Board

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Appropriation Period: 2019-21 Activity Version: B1 - 19-21 Agency Budget Request Sort By: Activity

Grand Total

	FY 2020	FY 2021	Biennial Total
FTE's	17.2	17.2	17.2
GFS	\$0	\$0	\$0
Other	\$56,154	\$56,251	\$112,405
Total	\$56,154	\$56,251	\$112,405



Performance Measure Incremental Estimates

Agency: 406 County Road Administration Board

Session: 2019-21 Regular

Activity:

010	CB	T0PL	Current Biennium Base	No measures linked to activity
010	CB	T0PL	Current Biennium Base	No measures linked to decision package
010	CL	8R	Retirement Buyout Costs	No measures linked to activity
010	CL	8R	Retirement Buyout Costs	No measures linked to decision package
010	ML	9Z	Recast to Activity	No measures linked to activity
010	ML	9Z	Recast to Activity	No measures linked to decision package
010	PL	AQ	IT System Centralization WAttech	No measures linked to activity
010	PL	AQ	IT System Centralization WAttech	No measures linked to decision package
01C	CB	T0PL	Current Biennium Base	No measures linked to activity
01C	CB	T0PL	Current Biennium Base	No measures linked to decision package
01C	ML	AL	County Ferry Capital Improvement	No measures linked to activity
01C	ML	AL	County Ferry Capital Improvement	No measures linked to decision package
01C	ML	AM	Rural Arterial Trust Capital	No measures linked to activity
01C	ML	AM	Rural Arterial Trust Capital	No measures linked to decision package
01C	ML	AN	County Arterial Preservation	No measures linked to activity
01C	ML	AN	County Arterial Preservation	No measures linked to decision package
01C	ML	AP	County Ferry Capital Imp Skagit	No measures linked to activity
01C	ML	AP	County Ferry Capital Imp Skagit	No measures linked to decision package

Activity: A001 Technical Assistance and Management Oversight

010	ML	9Z	Recast to Activity	No measures linked to decision package
010	PL	AQ	IT System Centralization WAttech	No measures linked to decision package
01C	ML	AL	County Ferry Capital Improvement	No measures linked to decision package
01C	ML	AP	County Ferry Capital Imp Skagit	No measures linked to decision package

Activity: A002 Rural Arterial Program

010	ML	9Z	Recast to Activity	No measures linked to decision package
01C	ML	AM	Rural Arterial Trust Capital	No measures linked to decision package

Performance Measure Incremental Estimates

Agency: 406 County Road Administration Board

Session: 2019-21 Regular

Activity: A003 County Arterial Preservation Program

010 ML 9Z Recast to Activity
01C ML AN County Arterial Preservation

No measures linked to decision package
No measures linked to decision package

Activity Inventory Indirect Cost Allocation Approach

Agency: 406 - CRAB

Date: 8/29/2018

Allocation Method Description: Based on dollars received in the budget, all activities are separated by fund (102, 108, 186)

Activity	% Allocation Received	Dollars Allocated FY1	Dollars Allocated FY2	Total Allocated
Activity 1	0.51	25130	25130	50260
Activity 2	0.20	9756	9756	19513
Activity 3	0.29	14708	14708	29417
Total	1	49594.31	49594.31	99188.62

Agencies must provide OFM with information about the cost allocation approach indicating 1) total amount of indirect costs, 2) brief description of allocation method, allocation percentage for each activity, and dollar amount allocated to each activity by fiscal year.

Indirect costs are administrative costs that are linked to two or more activities, are closely related to and tend to vary with activity level, but usually cannot be practically or economically direct-charged. These costs should be assigned to activities through cost allocation and included in the total cost of the activity. Examples included, Rent, Postage, Software, and other admin costs that are closely related to activity levels and size.

Overhead costs usually support the entire organization, are not directly attributable to specific activities, and tend to be relatively fixed and not readily effected by fluctuations in activity levels. These costs are captured in the Administrator activity and include agency director, Core accounting, budgeting, personnel, communications etc.



Agency DP Priority (PL)

(Lists only the agency Policy Level budget decision packages, in priority order)

Agency: 406 County Road Administration Board

Session: 2019-21 Regular

PL-AQ

IT System Centralization WAtch

Working Capital Reserve

Agency: 406 County Road Administration Board
 Session: 2019-21 Regular
 Version: B1 19-21 Agency Budget Request

Dollars in Thousands

FUND ADMINISTRATOR AGENCY ONLY		RECOMMENDED ENDING FUND BALANCE	
FUND	FUND TITLE	2017-19 Current Biennium	2019-21 Ensuing Biennium
102	Rural Arterial Trust Account	950	950
186	County Arterial Preservation Acct	200	200



Recommendation Summary

Agency: 406 County Road Administration Board

Version: B1 19-21 Agency Budget Request

Dollars in Thousands

	Annual Average FTEs	General Fund State	Other Funds	Total Funds
2017-19 Current Biennium Total	.0	0	0	0
Total Carry Forward Level	0.0	0	0	0
Percent Change from Current Biennium	.0%	.0%	.0%	.0%
Maintenance – Other Changes				
ML 9Z Recast to Activity	0.0	0	0	0
ML AL County Ferry Capital Improvement	0.0	0	0	0
ML AM Rural Arterial Trust Capital	0.0	0	0	0
ML AN County Arterial Preservation	0.0	0	0	0
ML AP County Ferry Capital Imp Skagit	0.0	0	0	0
Maintenance – Other Total	0.0	0	0	0
Total Maintenance Level	0.0	0	0	0
Percent Change from Current Biennium	.0%	.0%	.0%	.0%
Policy – Other Changes				
PL AQ IT System Centralization WAtch	0.0	0	0	0
Policy – Other Total	0.0	0	0	0
Subtotal - Policy Level Changes	0.0	0	0	0
2019-21 Total Proposed Budget	0.0	0	0	0
Percent Change from Current Biennium	.0%	.0%	.0%	.0%

Recommendation Summary

Agency: 406 County Road Administration Board

Version: B1 19-21 Agency Budget Request

Dollars in Thousands

	Annual Average FTEs	General Fund State	Other Funds	Total Funds
Program: 010 CRAB Operating				
CB T0PL Current Biennium Base	17.5	0	5,369	5,369
2017-19 Current Biennium Total	17.5	0	5,369	5,369
CL 8R Retirement Buyout Costs	(0.3)	0	(132)	(132)
CL 91J CTS Central Services Correction	0.0	0	1	1
CL 91R OFM Central Services Correction	0.0	0	1	1
CL 91U OFM Human Resource Svcs Correction	0.0	0	1	1
CL 92J CTS Central Services	0.0	0	(2)	(2)
CL 92K DES Central Services	0.0	0	1	1
CL 92R OFM Central Services	0.0	0	(2)	(2)
CL GCS Central Services Carryforward Adj	0.0	0	2	2
CL GL9 Non-Rep General Wage Increase	0.0	0	94	94
CL GLU PERS & TRS Plan 1 Benefit Increase	0.0	0	1	1
CL GZF Paid Family Leave--Employer Premium	0.0	0	2	2
CL GZH DES Rate Compensation Changes	0.0	0	3	3
Total Carry Forward Level	17.2	0	5,339	5,339
Percent Change from Current Biennium	(1.7)%	.0%	(.6)%	(.6)%
Maintenance – Other Changes				
ML 9Z Recast to Activity	0.0	0	0	0
Maintenance – Other Total	0.0	0	0	0
Total Maintenance Level	17.2	0	5,339	5,339
Percent Change from Current Biennium	(1.7)%	.0%	(.6)%	(.6)%
Policy – Other Changes				
PL AQ IT System Centralization WAtch	0.0	0	24	24
Policy – Other Total	0.0	0	24	24
Subtotal - Policy Level Changes	0.0	0	24	24
2019-21 Total Proposed Budget	17.2	0	5,363	5,363
Percent Change from Current Biennium	(1.7)%	.0%	(.1)%	(.1)%

Recommendation Summary

Agency: 406 County Road Administration Board

Version: B1 19-21 Agency Budget Request

Dollars in Thousands

	Annual Average FTEs	General Fund State	Other Funds	Total Funds
Program: 01C CRAB Capital				
CB T0PL Current Biennium Base	0.0	0	102,326	102,326
2017-19 Current Biennium Total	.0	0	102,326	102,326
CL AH Increase Authority	0.0	0	(8,000)	(8,000)
CL AL County Ferry Capital Improvement	0.0	0	(706)	(706)
CL AM Rural Arterial Trust Capital	0.0	0	(42,303)	(42,303)
CL AN County Arterial Preservation	0.0	0	(30,590)	(30,590)
CL CWA Connecting Washington Investments	0.0	0	(9,688)	(9,688)
CL GRP Capital Reappropriation	0.0	0	(11,039)	(11,039)
Total Carry Forward Level	0.0	0	0	0
Percent Change from Current Biennium	.0%	.0%	(100.0)%	(100.0)%
Maintenance – Other Changes				
ML 9Z Recast to Activity	0.0	0	0	0
ML AL County Ferry Capital Improvement	0.0	0	706	706
ML AM Rural Arterial Trust Capital	0.0	0	65,996	65,996
ML AN County Arterial Preservation	0.0	0	39,590	39,590
ML AP County Ferry Capital Imp Skagit	0.0	0	750	750
Maintenance – Other Total	0.0	0	107,042	107,042
Total Maintenance Level	0.0	0	107,042	107,042
Percent Change from Current Biennium	.0%	.0%	4.6%	4.6%
	0.0	0	0	0
Subtotal - Policy Level Changes	0.0	0	0	0
2019-21 Total Proposed Budget	0.0	0	107,042	107,042
Percent Change from Current Biennium	.0%	.0%	4.6%	4.6%

Decision Package Bundle



Agency: County Road Administration Board
Decision Package Code-Title: 9Z - Recast to Activity
Budget Session: 2019-21 R
Budget Level: Maintenance Level
Contact Info: Chad Johnson
 (360) 407-8130
chad.johnson@des.wa.gov

Agency Recommendation Summary

No Recommendation Summary has been provided.

Program Recommendation Summary

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 102 - 1	\$0	\$0	\$0	\$0
Fund 108 - 1	\$0	\$0	\$0	\$0
Fund 186 - 1	\$0	\$0	\$0	\$0
Total Expenditures	\$0	\$0	\$0	\$0
Biennial Totals		\$0		\$0
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0

Package Description

No Description has been provided.

Assumptions and Calculations

Expansion or alteration of a current program or service: No answer was provided.

Detailed assumptions and calculations: No answer was provided.

Workforce Assumptions: No answer was provided.

Strategic and Performance Outcomes

Strategic framework: No answer was provided.

Performance outcomes: No answer was provided.

Other Collateral Connections

Intergovernmental: No answer was provided.

Stakeholder response: No answer was provided.

Legal or administrative mandates: No answer was provided.

Changes from current law: No answer was provided.

State workforce impacts: No answer was provided.

State facilities impacts: No answer was provided.

Puget Sound recovery: No answer was provided.

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? No



Agency: County Road Administration Board
 Decision Package Code-Title: AQ - IT System Centralization WAtch
 Budget Session: 2019-21 R
 Budget Level: Policy Level
 Contact Info: Karen Pendleton
 (360) 753-5989
karen@crab.wa.gov

Agency Recommendation Summary

This decision package provides funding for the County Road Administration Board to pay for services to WaTech, compliant with Office of the Chief Information Officer policy 184.

Program Recommendation Summary

• 010 - CRAB Operating

This decision package provides funding for the County Road Administration Board to pay for services to WaTech, compliant with Office of the Chief Information Officer policy 184.

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 108 - 1	\$12	\$12	\$12	\$12
Total Expenditures	\$12	\$12	\$12	\$12
Biennial Totals		\$24		\$24
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. E	\$12	\$12	\$12	\$12

Package Description

The funding requested in this decision package is to offset WATECH Data Center costs required to be in compliance with OCIO policy 184, and mitigate their impact to the Agency IT resources.

What is your proposed solution?

Move physical equipment to "half-rack" at WATECH Data Center

What are you purchasing and how does it solve the problem?

\$1,000/month for renting "half-rack" at WATECH Data Center

What alternatives did you explore and why was this option chosen?

We initially tried to pursue the "half-rack" option with a \$750 monthly cost, but due to the KW usage for the equipment, being placed at WaTech it placed CRAB into the full rack range, with a \$1,000.00 monthly charge.

We also explored moving services to WaTech cloud. Cost for cloud services included per processor, RAM and storage costs that would have exceeded the \$1,000.00 a month rack rental and require the migration of our systems into the state run Active Directory.

Assumptions and Calculations

Expansion or alteration of a current program or service:

This is not an expansion or alteration of a current program or service, this is to continue our agency IT needs while satisfying the OCIO's requirement to utilize state data centers.

Detailed assumptions and calculations:

Watech has quoted the agency \$1,000 per month as the charge for a half rack in the data center.

Workforce Assumptions:

No FTE assumptions

Strategic and Performance Outcomes

Strategic framework:

In compliance with OCIO policy 184 targeted at centralizing state data center, the \$1,000/month rent for a *half-rack* in the WATECH Data Center is the most cost effective strategy for a small Agency.

CRAB expects to maintain the 99.9% uptime of Agency IT services/resources offered to internal and external stakeholders.

Performance outcomes:

None

Other Collateral Connections

Intergovernmental:

N/A

Stakeholder response:

N/A

Legal or administrative mandates:

N/A

Changes from current law:

N/A

State workforce impacts:

N/A

State facilities impacts:

N/A

Puget Sound recovery:

N/A

Reference Documents

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? Yes

- 19-21 IT Addendum WAtch Move.docx



Agency: County Road Administration Board
 Decision Package Code-Title: AL - County Ferry Capital Improvement
 Budget Session: 2019-21 R
 Budget Level: Maintenance Level
 Contact Info: Karen Pendleton
 (360) 753-5989
karen@crab.wa.gov

Agency Recommendation Summary

The reestablishment of the Capital Program to continue funding the County Ferry Capital Improvement Program (Account 108- 1). The County Road Administration Board is responsible for the County Ferry Capital Improvement Program (CFCIP). RCW 47.56.725(4)

Program Recommendation Summary

• 01C - CRAB Capital

The County Road Administration Board is responsible for the County Ferry Capital Improvement Program (CFCIP). RCW 47.56.725(4)

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 108 - 1	\$353	\$353	\$353	\$353
Total Expenditures	\$353	\$353	\$353	\$353
Biennial Totals		\$706		\$706
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. N	\$353	\$353	\$353	\$353

Package Description

In order for CRAB to consider a project for funding under the county Ferry Capital Improvement Program, the project shall include at least one of the following alternatives:

- Purchase of new vessel(s);
- Major vessel refurbishment (e.g., engines, structural steel, controls) that substantially extends the life of the vessel;
- Facility refurbishment/replacement (e.g., complete replacement, major rebuilding or re-decking of a dock) that substantially extends the life of the facility;
- Installation of items that substantially improve ferry facilities or operations;
- Construction of infrastructure that provides new or additional access or increases the capacity of terminal facilities; and/or
- Emergency repairs to correct damage to vessels or facilities caused by accidents or natural phenomena.

The current CFCIP repays construction loan contract on behalf of Pierce County for the purchase of the Steilacoom 2.

RCW 47.56.725(4) requires CRAB to administer this grant program.

CRAB administers this program to guarantee fairness in the award process.

Questions: Contact Derek Pohle or Karen Pendleton at 360.753.5989

Assumptions and Calculations

Expansion or alteration of a current program or service:

No this is not an expansion or alteration of a current program or service, this is a continuation of funding for the capital program.

Detailed assumptions and calculations:

CFCIP revenues are derived from a direct appropriation by the Legislature of the counties portion of the Motor Vehicle Fuel Tax.

The expenditure calculations and assumptions are:

Budget 17-19 = \$705,800 (Pierce County Steilacoom 2)

Budget 19-21 = \$705,800 (Pierce County Steilacoom 2)

Budget 19-21 = \$750,000 (Skagit County M/V Guemes)

Workforce Assumptions:

There are no workforce impacts

Strategic and Performance Outcomes

Strategic framework:

This package will meet the requirements in RCW and will honor construction loan contracts on behalf of Pierce County.

Performance outcomes:

Nothing affected

Other Collateral Connections

Intergovernmental:

Washington's 39 Counties. Funding of this program comes off the top of the counties' MVFT before distribution to the counties.

Stakeholder response:

N/A

Legal or administrative mandates:

N/A

Changes from current law:

N/A

State workforce impacts:

N/A

State facilities impacts:

N/A

Puget Sound recovery:

N/A

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? No



Agency: County Road Administration Board
 Decision Package Code-Title: AM - Rural Arterial Trust Capital
 Budget Session: 2019-21 R
 Budget Level: Maintenance Level
 Contact Info: Karen Pendleton
 (360) 753-5989
karen@crab.wa.gov

Agency Recommendation Summary

The re-establishment of the Capital Program to continue funding the Rural Arterial Trust Account (102- 1). The Rural Arterial Trust Account was established to programmatically address construction and reconstruction needs that exist within the federally designated rural areas of Washington's counties. It is a statutorily recognized portion of the counties' share of the motor vehicle fuel tax distribution.

Program Recommendation Summary

• 01C - CRAB Capital

The re-establishment of the Capital Program to continue funding the Rural Arterial Trust Account (102- 1). The Rural Arterial Trust Account was established to programmatically address construction and reconstruction needs that exist within the federally designated rural areas of Washington's counties. It is a statutorily recognized portion of the counties' share of the motor vehicle fuel tax distribution.

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 102 - 1	\$32,998	\$32,998	\$33,319	\$33,319
Total Expenditures	\$32,998	\$32,998	\$33,319	\$33,319
Biennial Totals		\$65,996		\$66,638
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. N	\$32,998	\$32,998	\$33,319	\$33,319

Package Description

This program provides competitive grant funding across five construction regions of the state. The competitive aspect of the program assures only highest priority projects achieve funding statewide, while requiring counties to compete only within their regions for funding.

Rural Arterial Trust Account projects are an extremely important portion of the counties' construction program and budgets. At the same time, eligibility requirements insure counties remain in substantial compliance with all laws and rules regarding the administration of county road funds.

The counties' rural freight system needs continue to outpace the revenue available to address those needs. This competitive grant program ensures the construction of only the highest priority routes within each region. In short, it targets dollars to the greatest need in the shortest possible time.

Package funding will continue a highly efficient, cost effective method of dealing with freight route construction needs within the counties' jurisdiction. Eligibility of the program will also continue to require the highest professional standards in the administration of county road fund dollars, regardless of source.

Questions: Contact Randy Hart or Karen Pendleton at 360.753.5989.

Assumptions and Calculations

Expansion or alteration of a current program or service:

This is not an expansion or alteration of a current program or service, it is a continuation of capital funding.

Detailed assumptions and calculations:

The revenue calculations and assumptions are based upon the RATA statutory percentage of the Motor Vehicle Fuel Tax as projected by

the forecasting council, plus the unspent RATA balance carried forward, less administrative costs withheld for CRAB by the legislature.

Workforce Assumptions:

There are no FTE impacts

Strategic and Performance Outcomes

Strategic framework:

The agency has made a commitment to assist the counties in the improvement and preservation of their arterial road systems and ensure that the grants are used for their intended purposes.

Performance outcomes:

None

Other Collateral Connections

Intergovernmental:

Washington State's 39 Counties

Stakeholder response:

N/A

Legal or administrative mandates:

N/A

Changes from current law:

N/A

State workforce impacts:

N/A

State facilities impacts:

N/A

Puget Sound recovery:

N/A

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? No



Agency: County Road Administration Board
 Decision Package Code-Title: AP - County Ferry Capital Imp Skagit
 Budget Session: 2019-21 R
 Budget Level: Maintenance Level
 Contact Info: Karen Pendleton
 (360) 753-5989
karen@crab.wa.gov

Agency Recommendation Summary

The establishment of the Capital Program to fund the County Ferry Capital Improvement Program (Account 108- 1) for Skagit County

Program Recommendation Summary

• 01C - CRAB Capital

The County Road Administration Board is responsible for the County Ferry Capital Improvement Program (CFCIP). RCW 47.56.725(4)

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 108 - 1	\$375	\$375	\$375	\$375
Total Expenditures	\$375	\$375	\$375	\$375
Biennial Totals		\$750		\$750
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. N	\$375	\$375	\$375	\$375

Package Description

In order for CRAB to consider a project for funding under the county Ferry Capital Improvement Program, the project shall include at least one of the following alternatives:

Purchase of new vessel(s);

- Major vessel refurbishment (e.g., engines, structural steel, controls) that substantially extends the life of the vessel;
- Facility refurbishment/replacement (e.g., complete replacement, major rebuilding or re-decking of a dock) that substantially extends the life of the facility;
- Installation of items that substantially improve ferry facilities or operations;
- Construction of infrastructure that provides new or additional access or increases the capacity of terminal facilities; and/or
- Emergency repairs to correct damage to vessels or facilities caused by accidents or natural phenomena.

This request is submitted on behalf of Skagit County for the purchase of an All-Electric Ferry Replacement for services between Anacortes and Guemes Island.

This request is for up to \$7.5 million, to be taken off the top of the counties' share of the Motor Vehicle Fuel Tax and distributed to Skagit County in 20 annual installments of \$375,000, beginning July 1, 2019.

RCW 47.56.725(4) requires CRAB to administer this grant program.

CRAB administers this program to guarantee fairness in the award process.

Questions: Contact Derek Pohle or Karen Pendleton at 360.753.5989

Assumptions and Calculations

Expansion or alteration of a current program or service:

This is not an expansion or alteration of a current program or service.

Detailed assumptions and calculations:

CFCIP revenues are derived from a direct appropriation by the Legislature of the counties portion of the Motor Vehicle Fuel Tax.

The expenditure calculations and assumptions are:

Budget 17-19 = \$705,800 (Pierce County Steilacoom 2)

Budget 19-21 = \$705,800 (Pierce County Steilacoom 2)

Budget 19-21 = \$750,000 (Skagit County M/V Guemes)

Workforce Assumptions:

There are no workforce assumptions

Strategic and Performance Outcomes

Strategic framework:

This package will meet the requirements in RCW and will honor project development and design expenses, construction contracts, and loan and/or bond repayments on behalf of Skagit County.

Performance outcomes:

None

Other Collateral Connections

Intergovernmental:

Washington State's 39 Counties. Funding of this program comes off the top of the counties' MVFT before distribution to the counties.

Stakeholder response:

N/A

Legal or administrative mandates:

N/A

Changes from current law:

N/A

State workforce impacts:

N/A

State facilities impacts:

N/A

Puget Sound recovery:

N/A

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? No



Agency: County Road Administration Board
 Decision Package Code-Title: AN - County Arterial Preservation
 Budget Session: 2019-21 R
 Budget Level: Maintenance Level
 Contact Info: Karen Pendleton
 (360) 753-5989
karen@crab.wa.gov

Agency Recommendation Summary

The re-establishment of the Capital Program to continue funding the County Arterial Preservation Program (Account 186-1). The County Road Administration Board is responsible, by statute, for administration of this portion of the counties' share of the motor vehicle fuel tax, and for certification that each county receiving these funds has in place, and uses, a pavement preservation program as required by the Standards of Good Practice.

Program Recommendation Summary

• 01C - CRAB Capital

The re-establishment of the Capital Program to continue funding the County Arterial Preservation Program (Account 186-1). The County Road Administration Board is responsible, by statute, for administration of this portion of the counties' share of the motor vehicle fuel tax, and for certification that each county receiving these funds has in place, and uses, a pavement preservation program as required by the Standards of Good Practice.

Fiscal Summary

Dollars in Thousands

Operating Expenditures	FY 2020	FY 2021	FY 2022	FY 2023
Fund 186 - 1	\$19,795	\$19,795	\$20,042	\$20,042
Total Expenditures	\$19,795	\$19,795	\$20,042	\$20,042
Biennial Totals		\$39,590		\$40,084
Staffing	FY 2020	FY 2021	FY 2022	FY 2023
FTEs	0	0	0	0
Average Annual		0.0		0.0
Object of Expenditure	FY 2020	FY 2021	FY 2022	FY 2023
Obj. N	\$19,795	\$19,795	\$20,042	\$20,042

Package Description

The distribution of CAPP Funds are a critical element in the counties' efforts to maintain and preserve the county arterial system.

CRAB continues to expect optimum results in pavement preservation with a pavement rating of all thirty-nine counties to be at or near that of the state highway system.

Timely application of preservation activities to any roadway surface assures maximum life and cost effective use of construction dollars. CAPP distribution and rules of eligibility to access this grant program certifies a consistent, programmatic approach to arterial preservation statewide.

CRAB expects to continue the practice of formulaic distribution of CAPP dollars to the counties based upon need, as measured by arterial lane mile totals in each county.

The program annually purchases preservation work elements of resurfacing of existing paved roadway widths upon eligible road miles.

In the last two construction years, for which there are audited figures, CAPP funded 2,212 miles of seal coats and 199 miles of overlays. While unit costs may vary over the 19-21 biennium, a similar effort is expected.

In the last biennium, CAPP funded 2,797 miles of preservation activities on the statewide county road system.

The heaviest impact of not funding this activity would fall on the arterial system generally, and the identified Freight and Goods system specifically. While CAPP funds contribute only a portion of county preservation work, it is a critical portion, and if not funded, would severely impair the counties' ability to adequately maintain the regional transportation links of the arterial and collector system.

Questions: Contact Randy Hart or Karen Pendleton at 360.753.5989

Assumptions and Calculations

Expansion or alteration of a current program or service:

This is not an expansion or alteration of a current program or service, it is the continuation of capital funding.

Detailed assumptions and calculations:

The agency has made a commitment to assist the counties in the improvement and preservation of their arterial road systems and ensure grants are used for their intended purposes.

This grant program is a capital program authorized by statute. This decision package allows for the re appropriation of existing capital funds to enable on going administration of this program.

Counties depend upon the distribution of CAPP funds for construction and maintenance of arterials and collectors. This program was authorized by the legislature to enable counties to ensure at least minimal preservation activities on the arterial system. CRAB administers these programs to guarantee fairness in the award process. CRAB also ensures pavement management systems are in place in each county for optimum, effective use of CAPP maintenance dollars.

This grant program is a capital program authorized by statute. This decision package allows for the re-appropriation of existing capital funds to enable on going administration of this program.

Workforce Assumptions:

None

Strategic and Performance Outcomes

Strategic framework:

This grant program is a capital program authorized by statute. This decision package allows for the re-appropriation of existing capital funds to enable on going administration of this program.

Performance outcomes:

None

Other Collateral Connections

Intergovernmental:

39 Washington State Counties

Stakeholder response:

N/A

Legal or administrative mandates:

N/A

Changes from current law:

N/A

State workforce impacts:

N/A

State facilities impacts:

N/A

Puget Sound recovery:

N/A

IT Addendum

Does this Decision Package include funding for any IT-related costs, including hardware, software, (including cloud-based services), contracts or IT staff? No

County Road Administration Board
Biennial Budget 2019-21

Summary of Goal-oriented Initiatives and Investments, Expected Outcomes

GOALS AND OBJECTIVES

1. **GOAL:** To establish and monitor an annual certification process to insure that the county road departments comply with legislative directives and adopted standards of good practice.

OBJECTIVES:

- To annually review the compliance of all counties with the adopted standards of good practice.
- To annually update and maintain a current and complete inventory of all county roads.
- To biannually conduct an in-depth on-site performance audit of each county.

2. **GOAL:** To provide funding to counties to assist them in preserving and improving their county road systems.

OBJECTIVES:

- To resurface county arterials on an optimum time schedule, as determined by use of a Pavement Management System, in order to minimize long-term costs.
- To construct and improve county rural arterials and collectors to improve safety and to enable them to support increasing freight and goods traffic.
- To rehabilitate or replace existing county bridges and other structures to preserve operational and structural integrity.

3. **GOAL:** To provide assistance and support to county road departments and their county legislative authorities on issues relating to county roads in order to enhance the safe and efficient movement of people and goods over those roads.

OBJECTIVES:

- To provide quality training to county engineers, public works directors, and other county Public Works staff to enable them to perform their duties more efficiently and effectively.
- To provide timely, accurate information to county road departments and county legislative authorities on issues relating to county roads.
- To increase the awareness of the role of the county road system in the overall statewide transportation system.

4. **GOAL:** To assist counties in developing uniform and efficient transportation-related information technology (IT) resources by providing, developing and supporting a full range of information tools and services for all aspects of transportation-related public works operations.

OBJECTIVES:

- To ensure effective use of IT tools through development or procurement of, and support and training for, appropriate applications and software.
- To maintain a high level of professionalism in the use of information technology in county road departments through training and support.
- To enhance the effectiveness of county personnel in their projects and initiatives through information technology consultation.
- To promote cooperative communication, information exchange, and IT uniformity through conferences, workshops, and website activities.

COUNTY ROAD ADMINISTRATION BOARD TEN-YEAR REVENUE & EXPENDITURE PLAN

Based on June 2018 Transportation Revenue Forecast Council Table A.4. Motor Vehicle Tax Biennial Comparison

Monday, September 17, 2018	19-21	21-23	23-25	25-27	27-29
9:50 AM	Plan	Plan	Plan	Plan	Plan
Rural Arterial Program Account (102) - CRAB					
REVENUES					
Beginning Fund Balance	18,000	7,000	7,000	7,000	7,000
Motor Vehicle Fuel Tax Distribution	41,154	41,794	42,275	42,666	42,996
Connecting Washington Distribution	4,844	4,844	4,844	4,844	4,844
Treasury Deposit Earnings	90	35	35	35	35
Total Revenues	64,088	53,673	54,154	54,545	54,875
EXPENDITURES					
CRAB - Operating - Base	958	958	968	967	972
CRAB - Rural Arterial Program Capital	56,135	45,715	46,191	46,578	46,903
Minimum Fund Balance	7,000	7,000	7,000	7,000	7,000
Total Expenditures	64,088	53,673	54,154	54,545	54,875
Ending Fund Balance (RATA 102)	7,000	7,000	7,000	7,000	7,000

Monday, September 17, 2018	19-21	21-23	23-25	25-27	27-29
9:50 AM	Plan	Plan	Plan	Plan	Plan
Motor Vehicle Account (108) - CRAB					
REVENUES					
Beginning Fund Balance	0	0	0	0	0
Motor Vehicle Fuel Tax Distribution	3,612	3,630	3,685	3,740	3,796
Treasury Deposit Earnings	0	0	0	0	0
Total Revenues	3,612	3,630	3,685	3,739	3,796
EXPENDITURES					
CRAB - Operating - Base	2,156	2,174	2,229	2,283	2,340
CRAB - County Ferry Capital Improvement	1,456	1,456	1,456	1,456	1,456
Minimum Fund Balance	0	0	0	0	0
Total Expenditures	3,612	3,630	3,685	3,739	3,796
Ending Fund Balance (MVA 108)	0	0	0	0	0

Monday, September 17, 2018	19-21	21-23	23-25	25-27	27-29
9:50 AM	Plan	Plan	Plan	Plan	Plan
County Arterial Preservation (186) - CRAB					
REVENUES					
Beginning Fund Balance	1,000	1,000	1,000	1,000	1,000
Motor Vehicle Fuel Tax Distribution	31,746	32,240	32,611	32,912	33,167
Connecting Washington Distribution	4,844	4,844	4,844	4,844	4,844
Transportation Partnership Account Transfer In	1,500	1,500	1,500	1,500	1,500
Treasury Deposit Earnings	5	5	5	5	5
Total Revenues	39,095	39,589	39,960	40,261	40,516
EXPENDITURES					
CRAB Operating - Base	1,462	1,484	1,506	1,529	1,552
CRAB Capital - Maintenance Level	36,633	37,105	37,454	37,732	37,964
Minimum Fund Balance	1,000	1,000	1,000	1,000	1,000
Total Expenditures	39,095	39,589	39,960	40,261	40,516
Ending Fund Balance (CRAB 186)	1,000	1,000	1,000	1,000	1,000

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Supporting Statistical Information and Analysis - Status of Rural County Roads

A reasonable estimate of the 'value' of the County Road System would be the cost to replace what we have today. In 1988, the Road Jurisdiction Study was published. Part of the study was to determine reasonable cost estimates for the replacement of roads, streets, and highways. Using these replacement cost factors, inflated to 2017 dollars, provides an estimated replacement cost of the County Road System of \$36.7 Billion.

This 'value' is based on the calculations to determine the Motor Vehicle Fuel Tax Allocation Factors for the various counties. The formula includes the replacement costs of the County Road System. The replacement cost factors are for replacement-in-kind construction only and not all assets are included in the available inventories. Therefore, this value estimate is low. Some of the other factors that increase the actual replacement cost of the County Road System include:

- **Design Standards and Constructability:** When a county road is replaced or reconstructed, the project must meet current design standards. The backbone of the county road system was roads built in the late 1800's through the 1920's, with significant additions during the 30's, 40's and 50's. Most county roads were never designed but evolved over time: from a wagon trail to a gravel road to a paved road, usually without the benefit of engineered alignments or designed base structures. County roads transverse varying terrain and must include design considerations for the quality of the soils under the road, stability of side slopes, drainage, and land use.
- **Right-Of-Way:** The County Road System encumbers over 284,900 acres or 445.2 square miles of land. This acreage has a value of \$2.2 Billion, based on a 2017 (IPD) average value of \$7700 per acre. As the County Road System serves all areas of the state, this estimate of value of land occupied by the County Road System is somewhat questionable. County Roads serve many varied areas; from densely populated urban area roads to roads providing access to very rural areas. The Right-Of-Way costs not only include the cost of the land, but also include the associated costs of relocation of businesses, homes, and people.
- **Environmental Requirements:** The replacement cost factors were developed in the late '80s, before many of the current environmental concerns evolved into the many environmental rules and regulations that must be complied with in order for a road to be constructed or improved. Performing the studies, acquiring permits, and doing the required mitigation is an additional cost that must be determined for each project considered. These costs can run upwards of 50% of the actual project construction costs.
- **Impact of Inflation:** Gasoline and diesel taxes are an important stream of revenue for state and federal government to fund the construction and maintenance of the road infrastructure. According to the Institute on Taxation and Economic Policy (ITEP), gasoline and diesel taxes raise \$35 billion annually and cover 85% of funding for road construction and maintenance (ITEP, May 2014 Policy Brief). However, the funding for road

construction and maintenance coming from fuel taxes eroded over the years for two reasons:

- First, cars have become more fuel-efficient and thus, reduce the fuel tax revenue over time. In its Annual Energy Outlook 2016 Early Release, the Energy Information Administration (EIA) estimates that motor gasoline consumption will decrease by 0.95% annually in the period between 2011 and 2040.
- Second, the fuel tax in most states is a fixed per-gallon amount that is not adjusted in regular intervals. Most states levy a fixed-rate gas tax that collects a specific number of cents in tax on every gallon of gas purchased. In Texas, for example, drivers have been paying exactly twenty cents per gallon in state gas taxes for more than a quarter century. Thirty states have gas taxes designed entirely around this type of fixed-rate structure while the remaining twenty states levy variable-rate gas taxes where the rate is periodically adjusted—usually once or twice per year.

Among the twenty states with variable-rate gas taxes, there are more than half a dozen types of formulas used to adjust the gas tax rate. Fifteen of these states base their gas taxes fully or partly on the price of gas—much like the traditional sales taxes that most states levy on things like furniture, toothpaste, and televisions. Six states include a broad measure of inflation, the Consumer Price Index (CPI), in their variable-rate formulas. This approach is akin to the annual adjustments seen in many states' exemptions, deductions, and credits offered under their income taxes. Many states include a mix of factors in their variable-rate formulas. Three states (Maryland, Michigan, and Utah) consider both gas prices and inflation, for example, while Georgia adjusts its gas tax rate based on inflation and the rate of improvement in fuel efficiency for new vehicles registered in the state.

State gas taxes are the single most important source of transportation revenue under the control of state lawmakers. Roughly, 30 percent of state own-source highway funding comes from state gas taxes. Many states use gas tax revenues for mass transit projects as well, under the sensible assumption that highway users benefit from the congestion-reducing effects of transit.

However, while gas taxes remain a vital transportation revenue source today, their relative contribution to state transportation budgets is declining. Taxes and fees paid by drivers (the most significant of which is the gas tax) now make up a smaller share of total highway funding than at any point since the Interstate Highway System was created in 1957. This shift in transportation finance did not come about because of a conscious change in policy. Instead, it is due to flaws in the design of the gas tax that have left it incapable of handling the challenges outlined below.

State gas taxes, as currently designed, are an unsustainable revenue source. This means that over time, the revenue generated by state gas taxes tends to fall increasingly short of meeting state infrastructure needs. The most unsustainable type of gas tax is the fixed-rate tax, where the tax rate remains unchanged year after year. However, even variable-rate gas taxes are sometimes unable to generate an adequate amount of revenue over time.

The unsustainability of state gas taxes is a result of two important developments. First, vehicle fuel efficiency has risen by 17.2 percent since 1990, from 18.9 to 22.1 miles per gallon. While improving fuel efficiency is no doubt a positive development overall, it also creates an undeniable problem for the gas tax. As efficiency has improved, drivers are now able to travel further distances on each tank of gas before they have to stop, refuel, and pay anything in gas taxes. Those extra miles squeezed out of each tank of gas are effectively tax-free, relative to what drivers had been paying previously.

The second challenge confronting state gas taxes is the rising cost of building and maintaining the nation's transportation infrastructure. While fuel efficiency improvements directly reduce the amount of revenue raised by gas taxes, the rising cost of construction puts additional strain on whatever revenues are raised. Since 1990, transportation construction costs have risen by 62.3 percent, meaning that a construction project that previously cost \$500,000 would now cost over \$800,000 to complete.

However, while the costs of asphalt, concrete, and machinery inevitably grow, most state gas taxes are rarely increased. Lawmakers worried about the political ramifications of "raising taxes" too often kick the proverbial can down the crumbling road, even if the "tax increase" under consideration is only an attempt to address the inevitable shortfall created by rising costs and improving fuel efficiency.

Gas tax decline has been a major factor in the worsening condition of the nation's infrastructure. According to the American Society of Civil Engineers (ASCE), a quarter of America's bridges are structurally deficient or obsolete, one-third of the nation's major roads are in poor or mediocre condition, over 40 percent of all major urban highways are congested, and nearly half of all Americans lack access to bus or rail transit. Because of these deficiencies, the ASCE estimates that Americans lose the monetary equivalent of \$101 billion in travel time delays and wasted fuel each year. Business leaders are keenly aware of these problems and often come down on the side of raising state gas taxes to fund a more efficient transportation system. Their conclusion is that the economic costs arising from a deteriorating transportation network outweigh the cost of paying more in gas tax.

Any discussion of transportation revenues in Washington State would be incomplete without the introduction of the current study of a Road Users Charge (RUC) by the Washington State Transportation Commission (WSTC). For the past five years, WSTC and a specially appointed Steering Committee have investigated a per-mile charge as a potential replacement for the state gas tax. Leading Washington's efforts to research and evaluate RUC, WSTC, and the Steering Committee found the concept feasible as a potential state policy. Accordingly, they adopted principles and a policy framework to guide development of a RUC system. They then developed operational concepts to show how mileage could be recorded, reported, and paid by drivers. WSTC and the Steering Committee also conducted a financial analysis of RUC as a stable revenue source. To take the next steps, they developed a comprehensive list of fiscal and policy issues to be addressed before RUC could be implemented as a gas tax replacement. During the last two years, WSTC and the Steering Committee focused on preparing for a statewide public demonstration (or pilot) project. In mid-2016 the US Department of Transportation announced the award of \$3.847 million in federal funds for a 2,000-vehicle, statewide, live pilot test of a RUC system in Washington, thus ensuring adequate funding for

pilot preparations and set up. Those 2,000 drivers are participating in the yearlong WA RUC Pilot Project and are currently reporting their mileage and providing feedback to help state decision makers understand if this potential policy could work for Washington drivers.

Counties were ignored, by in large, in the last three gas tax increases, garnering less than 1.5 cents from the 26.4 cents increase. Next steps in the RUC process will be critical for counties as additional revenue and a new formula for distribution will inevitably be up for discussion.

The population of the State of Washington has soared in the last two years. Many counties have had developers put in new local access roads and dedicate them to the counties. However, the traffic impacts to major and minor collectors have overwhelmed most counties' abilities to meet the added demand. Over the years, counties have upgraded many of the important routes. They have solved safety problems and built all-weather roads for freight traffic. However, other factors influence transportation needs and funding:

- Eastern Washington now has 62.6% of the county roads and only 22% of the population and very low property values to pay for the roads. All-weather roads are probably the largest single challenge to support their agricultural economies. In order to stretch limited resources and get farmers involved in setting priorities, several eastern Washington counties have citizen advisory boards working with the road departments in setting the road program priorities.
- The Puget Sound core of Western Washington, along with Clark and Spokane County, has experienced rapid population growth. However, it also has extremely high property values. Congestion is probably the biggest problem and the 'fixes' are extremely expensive. Another interesting situation is the effect of annexations and incorporations, reducing the tax base at the same time the county roads connecting the various smaller cities must be increased in capacity. The county in effect is responsible for larger roads connecting cities at the same time the growth of the cities is reducing the tax base to pay for the roads the cities need.

Counties have four main sources of road revenues. Many of the larger counties also have a number of smaller sources of revenue.

- Property Tax: This is very significant in western Washington, and in particular central Puget Sound. It is almost nothing in many rural eastern Washington counties.
- State Gas Tax: This is very significant in all 39 counties. In eastern Washington, this is the bulk of the road fund.
- Federal Gas Tax: On December 4, 2015, President Obama signed into law Public Law 114-94, the Fixing America's Surface Transportation Act (FAST Act). The FAST Act funds surface transportation programs—including, but not limited to, Federal-aid highways—at over \$305 billion for fiscal years (FY) 2016 through 2020. It is the first long-term surface transportation authorization enacted in a decade that provides long-term funding certainty for surface transportation. This summary reviews the policies and programs of the FAST Act administered by the Federal Highway Administration (FHWA). The Moving

Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, included provisions to make the Federal surface transportation more streamlined, performance-based, and multimodal, and to address challenges facing the U.S. transportation system, including:

- improving safety,
- maintaining infrastructure condition,
- reducing traffic congestion,
- improving efficiency of the system and freight movement,
- protecting the environment,
- reducing delays in project delivery.

The FAST Act builds on the changes made by MAP-21, setting the course for transportation investment in highways:

Improves mobility on America's highways: The FAST Act establishes and funds new programs to support critical transportation projects to ease congestion and facilitate the movement of freight on the Interstate System and other major roads. Examples include developing a new National Multimodal Freight Policy, apportioning funding through a new National Highway Freight Program, and authorizing a new discretionary grant program for Nationally Significant Freight and Highway Projects (FASTLANE Grants).

Creates jobs and supports economic growth: The FAST Act authorizes \$226.3 billion in Federal funding for FY 2016 through 2020 for road, bridge, bicycling, and walking improvements. In addition, the FAST Act includes a number of provisions designed to improve freight movement in support of national goals.

Accelerates project delivery and promotes innovation: Building on the reforms of MAP-21 and FHWA's Every Day Counts initiative, the FAST Act incorporates changes aimed at ensuring the timely delivery of transportation projects. These changes will improve innovation and efficiency in the development of projects, through the planning and environmental review process, to project delivery.

The gas tax has been the traditional source for transportation funding since its inception in the 1930s, but lawmakers have resisted increasing the amount that drivers pay. The federal government typically spends about \$50 billion per year on transportation projects; the gas tax only brings in \$34 billion annually.

- **Federal Timber Tax:** The SRS program provides assistance to rural counties and school districts affected by the decline in revenue from timber harvests on federal lands. Historically, rural communities and schools have relied on a share of receipts from timber harvests to supplement local funding for education services and roads. During the 1980s, national policies substantially diminished the revenue-generating activity permitted in these forests. The resulting steep decline in timber sales decreased the revenues that rural counties and school districts received from forest management activities.

In response to this decline, SRS was enacted in 2000 (P.L. 106-393) to stabilize payments to counties and to compensate for lost revenues. In October 2008, SRS was reauthorized

(P.L. 110-343) and amended to continue on a sliding payment scale. Most recently, SRS was reauthorized retroactively on March 23, 2018 for FYs 2017 and 2018. In FY 2017, SRS provided \$256 million to over 700 rural counties, parishes, and boroughs across the nation. SRS expires at the end of FY 2018.

The expiration of SRS will create dramatic budgetary shortfalls if Congress fails to renew this long-standing federal obligation to county governments. Enactment of a sustainable long-term program to share revenues generated from the management of designated federal lands with forest counties and schools will ensure that students receive essential education services and rural communities have critical funding for roads, conservation projects, search and rescue missions and fire prevention programs.

Typically, maintenance and construction together comprise approximately 67% of the county road department annual budget. Property tax and state gas tax pay for maintenance and provide matching funds for grants. Continued pressures on Current Expense funds due to Referendum 49 and Initiatives 695 and 747 have caused counties to divert more of the property tax revenue away from the road fund to pay for other essential county services, which are up by nearly 129% since 2003.

Grants from the federal gas tax, state grants from TIB and CRAB (RAP) and state gas tax pay for the construction program. Right now, counties could spend dollars in addition to expected levels if additional money were available. The needs are immense and counties have the ability to get projects under construction.

However, a continuation of the existing levels of state and federal support is in effect a reduction in the funding level due to the lost purchasing power caused by inflation. Even more critical, any reduction in the funding level from either state or federal sources will further hinder county programs and severely test 'weak' links in our transportation system.

The true 'value' of the County Road System is incalculable. The County Road system provides vital access to the nearby and remote corners of our state. The County Road System provides access to:

- emergency services and response in times of urgent need
- farms, ranches, and the transport of agricultural products
- industrial, manufacturing and processing plants
- employment sites for commuters and customers
- many scenic and recreational areas of our state
- Low-cost locations for the required utilities of modern life (water, sewer, electricity, phone, gas, TV cable, etc.).

Without the County Road System, life as we know it would be very different, immensely less enjoyable, and much costlier.

COUNTY ROAD MILEAGE - 1/1/17

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	14.49	1,093.855	665.819	1,759.67	1,774.16	547.499	1,091.778	1,124.919
ASOTIN	59.524	20.569	80.09	167.083	152.325	319.41	399.50	100.304	203.251	231.960
BENTON	126.233	51.921	178.15	393.232	290.070	683.30	861.46	296.697	593.394	253.131
CHELAN	54.005	25.970	79.98	357.040	209.965	567.01	646.98	235.655	471.960	123.325
CLALLAM	83.010	16.410	99.42	271.860	118.970	390.83	490.25	135.190	269.740	3.150
CLARK	420.710	148.290	569.00	281.210	272.660	553.87	1,122.87	420.950	906.915	13.220
COLUMBIA	0.000	0.000	0.00	271.678	229.126	500.80	500.80	141.369	282.738	354.096
COWLITZ	46.320	25.570	71.89	259.612	195.690	455.30	527.19	221.260	442.570	6.560
DOUGLAS	61.878	38.150	100.03	1,145.547	400.310	1,545.86	1,645.89	296.990	600.750	1,205.030
FERRY	0.000	0.000	0.00	504.300	232.320	736.62	736.62	177.625	355.628	535.095
FRANKLIN	16.494	11.530	28.02	609.840	336.930	946.77	974.79	342.980	684.490	394.000
GARFIELD	0.000	0.000	0.00	234.077	213.026	447.10	447.10	123.576	247.152	317.780
GRANT	63.473	30.124	93.60	1,536.435	872.622	2,409.06	2,502.65	828.157	1,663.970	1,030.195
GRAYS HARBOR	33.685	22.283	55.97	264.705	242.564	507.27	563.24	260.231	520.423	36.345
ISLAND	96.130	35.015	131.15	272.254	179.926	452.18	583.33	214.941	430.610	5.060
JEFFERSON	5.136	0.000	5.14	254.989	138.475	393.46	398.60	130.335	261.300	72.373
KING	631.350	207.793	839.14	388.191	242.575	630.77	1,469.91	450.368	940.092	51.033
KITSAP	412.787	167.663	580.45	195.511	140.057	335.57	916.02	307.720	622.876	8.450
KITTITAS	9.986	11.997	21.98	242.743	296.375	539.12	561.10	304.562	613.859	63.310
Klickitat	0.000	0.000	0.00	695.629	384.490	1,080.12	1,080.12	366.050	731.240	516.456
LEWIS	35.536	22.440	57.98	718.062	266.135	984.20	1,042.17	286.542	573.800	41.681
LINCOLN	0.000	0.000	0.00	1,338.937	658.430	1,997.37	1,997.37	384.740	769.480	1,541.410
MASON	27.749	9.556	37.31	316.122	263.281	579.40	616.71	263.244	526.618	44.782
OKANOGAN	7.132	2.802	9.93	838.125	490.593	1,328.72	1,338.65	418.576	837.152	661.666
PACIFIC	0.000	0.000	0.00	215.586	130.305	345.89	345.89	120.005	240.400	44.535
PEND OREILLE	0.000	0.000	0.00	380.343	180.856	561.20	561.20	167.490	334.980	265.609
PIERCE	631.981	425.545	1,057.53	250.110	250.410	500.52	1,558.05	675.955	1,430.590	14.140
SAN JUAN	0.000	0.000	0.00	184.000	86.802	270.80	270.80	86.802	173.604	41.464
SKAGIT	71.332	36.910	108.24	373.527	319.040	692.57	800.81	355.950	712.790	40.157
SKAMANIA	0.000	0.000	0.00	148.929	90.449	239.38	239.38	90.449	181.369	28.750
SNOHOMISH	631.106	184.011	815.12	463.019	311.715	774.73	1,589.85	492.666	1,012.279	11.035
SPOKANE	288.681	126.250	414.93	1,447.327	664.390	2,111.72	2,526.65	720.050	1,480.813	1,132.061
STEVENS	0.000	0.000	0.00	929.652	560.605	1,490.26	1,490.26	468.405	936.840	823.945
THURSTON	332.788	112.923	445.71	350.863	232.180	583.04	1,028.75	345.103	704.269	21.690
WAHIAKUM	0.000	0.000	0.00	56.489	81.819	138.31	138.31	78.311	156.622	12.654
WALLA WALLA	42.664	34.884	77.55	452.578	423.464	876.04	953.59	413.380	826.930	365.252
WHATCOM	124.520	69.980	194.50	456.030	288.300	744.33	938.83	358.280	719.400	30.840
WHITMAN	0.000	0.000	0.00	1,282.679	614.511	1,897.19	1,897.19	421.031	842.062	1,454.799
YAKIMA	121.490	101.610	223.10	773.750	646.630	1,420.38	1,643.48	726.400	1,468.420	538.822
STATEWIDE	4,446.46	1,943.92	6,390.38	20,415.92	12,374.21	32,790.13	39,180.51	12,775.84	25,863.15	13,460.78
EASTERN	862.319	459.533	1,321.85	14,694.850	8,522.857	23,217.71	24,539.66	7,481.536	15,036.887	12,932.861
WESTERN	3,584.14	1,484.39	5,068.53	5,721.07	3,851.35	9,572.42	14,640.95	5,294.30	10,826.27	527.92

County Road Log Data certified 1/1/2017 by the County Road Administration Board

Supporting Statistical Information and Analysis –

Status of Rural County Owned Bridges

Washington State's 39 counties are responsible for the operation, maintenance, repair, and replacement of more than 3,300 bridges on the county road systems. These bridges vary from twenty to several hundred feet in length, and from under 12 to more than 80 feet wide. The Counties are also responsible for a considerable number of bridges and drainage structures under 20 feet in length. They carry roads over streams, canals, rivers, lakes, roads, railroads, and utilities. Eight of the bridge structures serve as docks in the four counties that operate ferries. Some have been built in the last few years, and some date from early in the last century. Every one is inspected at least once every two years and maintained to insure the safety of the travelling public. When necessary, deteriorating bridges are closed until funding is secured and the bridges are repaired or replaced. A recent example is King County's South Park Bridge over the Duwamish River south of Seattle, closed on June 30, 2010. A funding package for design and construction of a replacement bridge with federal, state, and local funds was assembled, and the new replacement bridge opened to the public on June 14, 2014.

Bridge materials and designs have evolved over the years. The first bridges in Washington State were likely locally cut logs laid across a stream. Wooden trestles came into use in the late 1880's. Iron and steel truss bridges were probably next, as the components could be fabricated at distant locations, transported by train or horse wagon, and then assembled with rivets and bolts on the site. In the early 1900's, concrete became a viable bridge material that could be mixed on site and poured into arches and columns. Steel deck girders became popular as the strength of steel increased in the mid-20th century, and the designs needed for the Interstate Highway System brought advances in pre-cast concrete girders, deck panels, and larger box culverts. Further advances in corrugated steel and aluminum have evolved from small round culverts to long open-bottom spans. Few county bridges need the sophisticated features of a suspension or cable-stayed bridge design, but the 21st century will probably see innovations in plastic, composite, and synthetic materials.

County Owned and Maintained Bridges by Material Type				
Material	Concrete	Steel	Timber	Total
Number	2610	421	277	3308
Percent	79%	13%	8%	100%

About 16% of the bridges on the county road systems are considered deficient, and in need of major rehabilitation or replacement. Deficient bridges fall into two categories: "Structurally Deficient" (SD) or "Functionally Obsolete" (FO). Those classified as Structurally Deficient are unable to accommodate legal highway loads (typically 40 tons/80,000 lbs.), and are each posted with a lower load limit. Functionally Obsolete bridges typically have travel lanes less than 12 feet wide and overhead clearances of less than 15 feet, or difficult alignments for modern highway vehicles and agricultural equipment. Priority for the limited replacement funding is focused on the Structurally Deficient bridges for obvious safety reasons. Other bridges, especially in urban areas, may be identified for replacement or widening to carry more vehicles as traffic flows and congestion increase.

Bridge restrictions are a major impediment to truck traffic and freight movement. Removing bridge restrictions can provide (1) alternate truck routes that save time and/or distance and (2) truck routes that can carry full legal loads and sizes. Both result in more efficient truck travel. There are 76 structures that are rated 'Structurally Deficient' and 183 that are rated as 'Functionally Obsolete' on the County Freight and Goods System. The estimated county bridge improvement needs on CFGS routes identified in this current study is \$693 million (2015 dollars).

County Owned and Maintained Bridges by ADT Range						
ADT	1-399	400 - 1499	1,500 - 2,000	2,001 - 4,999	5,000 & Over	Total
Number	2031	738	120	263	156	3308
Percent	61%	22%	4%	8%	5%	100%

How long is a bridge?

For the purposes of federal funding eligibility and inventory requirements, a "bridge" is defined as having a clear span of greater than twenty feet in length. As technology has advanced, most modern spans that are less than 20 feet long have been constructed as concrete "box culverts" or corrugated metal pipe arches. The use of large circular pipes (approximately four to twelve feet in diameter) has become less common as environmental issues of fish passage and stream flow characteristics have favored designs with more natural streambeds. As standards for fish passage and stream restoration continue to develop and become more complex, the lengths of new and replacement structures over water have increased significantly. It is not uncommon for the replacement of an existing 48" round culvert pipe to require an open-bottom structure with a span of 12 to 30 feet, or even a bridge of significant span.

On the other end of the spectrum, some county bridges span hundreds of feet. The Sauk River Bridge in Snohomish County near Darrington is 479 feet long, and the Elwha River Bridge in Clallam County is not only almost 600 feet long, but is also high – with the road deck some 80 feet above the Elwha River.

County Owned and Maintained Bridges by Length						
Length	20' - 50'	51' - 100'	101' - 250'	251' -500'	Over 500'	Total
Number	1476	1003	654	132	43	3308
Percent	45%	30%	20%	4%	1%	100%

How long can a bridge last?

It is common for bridge designs to be based on an estimated useful life of 50 to 75 years. Some major structures, such as the Brooklyn Bridge in New York City, have been in service for more than 125 years with regular maintenance and rehabilitation. In Washington State, some bridges are nearing their centennials. Among the county inventories, many bridges date from the 1920s and 1930s and are still in use beyond the expected design lives. Among these older bridges, a significant number were constructed on state highway routes, which were transferred to counties following the opening of the Interstate Highways forty to sixty years ago. Major segments of SR 99 from Vancouver to Tumwater and Marysville to Blaine were transferred to Clark, Cowlitz, Lewis, Thurston, Snohomish, Skagit, and Whatcom counties with the opening of I-5. Portions of US 12 between Yakima and the Tri-Cities were transferred to Yakima and Benton counties with the opening of I-82. The portions of US 10 that were not incorporated into the new I-90 alignment became county roads through Kittitas, Grant, Adams, Lincoln, and Spokane counties. A review of the county bridge inventory data indicates there are 33 county bridges in service today that are over 100 years old. Most of these are steel truss, concrete arch, or timber structures.

County Owned and Maintained Bridges by Age (Years)					
Age	Over 85	84-60	59 - 35	Under 35	Total
Number	102	458	1395	1353	3308
Percent	3%	14%	42%	41%	100%

What is involved in a Bridge Inspection?

Bridges are to be inspected at least every two years for structural soundness and condition. The elements of the inspection are determined by the bridge type and the materials used in the construction of the bridge. Trained and certified bridge inspectors who may be county employees, consultants, or employees of another government agency complete these inspections. Depending upon the structural design of the bridge, its location and environment, specialized equipment may also be needed to perform the inspection.

For instance, an under bridge inspection truck ("UBIT") has an articulated crane that places a small working platform or bucket above or below the bridge deck. This device allows for close-up inspection of critical structural members that are both high above the roadway, below the deck and high above the road, railroad, or river the bridge crosses.

There are a limited number of these vehicles available in Washington State, and the counties and other bridge owners have developed a high level of cooperation and coordination to make the best use of this costly equipment. The UBIT is especially useful for the inspection of "fracture critical" bridge components, the failure of which could lead to a catastrophic bridge collapse.

Another specialized inspection technique addresses the potential for scour damage to the foundations of bridges that cross waterways. The flow of a river or stream, especially during seasonal high water flows or floods, can undermine the submerged substructure and foundations, leading to settlement or washout of a bridge pier or abutment. Underwater inspections, using remote cameras and skilled underwater divers, are needed to accomplish these inspections and evaluations.

The bi-annual costs for bridge inspections can range from several hundred dollars for a simple span over a small waterway to tens of thousands of dollars if a UBIT is utilized or an underwater inspection is required. New technologies for inspection are currently being tested around the country with the purposes of driving down the cost and the time it takes to do the inspections, and limiting exposure of inspection teams to hazardous situations. The most notable is the use of UAV's.

Upon completion of a bridge inspection, the data is compiled and uploaded into the Local Agency Bridge Database managed by the Local Programs division of WSDOT. If the rating indicates some level of structural deficiency or functional obsolescence, the county is responsible to install signs indicating the load limits for various types of vehicles. In extreme cases, the bridge may be closed to traffic until repairs are made or the bridge is replaced. Either limitation often creates significant impacts on local residents and businesses, as the detour route may be many miles long.

County Owned and Maintained Bridges by Sufficiency Rating Range						
	Very Poor	Poor	Fair	Good	Excellent	
Rating	0 - 19	20 - 39	40 - 59	60 - 79	80 - 100	Total
Number	19	67	265	851	2106	3308
Percent	0.5%	2%	8%	26%	63.5%	100%

Bridge Maintenance

The type and amount of bridge maintenance required varies by the original design and the results of the most recent inspection report. Modern pre-cast concrete girder bridges may need only minor deck cleaning and guardrail maintenance for several years after construction. On the other hand, older steel truss bridges may need rust removal and painting on a more frequent basis. Even with a design life of 50 to 75 years, the bi-annual inspections identify major maintenance needs as bridges age. While the "average" Washington county is responsible for about 85 bridges (greater than 20 feet), the number varies from more than 300 in Yakima County to none in Island County. With a statewide estimated replacement cost near \$5.4 billion, the costs to maintain current county bridges are very necessary and worthwhile investments. County bridge maintenance is budgeted and paid for from county road fund revenues.

Bridge Rehabilitation and Replacement

There comes a time when a bridge has simply worn out, and must undergo major rehabilitation or be replaced. Securing funding for these major expenses can be challenging. The federal Highway Bridge Replacement and Rehabilitation Program (HBRRP) plays a major role in providing funding for replacement and rehabilitation. However, these funds are limited, and grants are awarded on a competitive basis. In Washington State, the Bridge Advisory Committee (BAC), comprised of WSDOT and local agency representatives, reviews local agency candidate bridges for the limited federal funds. Even if a project is awarded a grant, it is usually for only 80% of the eligible project cost. This leaves the local agency responsible for 20% of the bridge replacement cost, as well as a portion of the roadway approach costs on most projects. Bridge projects in urban areas may compete for matching funds from the Transportation Improvement Board, and matching funds for some rural bridge projects may be available from the County Road Administration Board.

Besides challenges in securing funding, bridge replacement projects are also subject to a myriad of state and federal permitting requirements. An Environmental Impact Statement is usually required as part of the process. Among the agencies with project review and approval responsibilities are the U.S Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Ecology, Washington Department of Fish and Wildlife, Washington Department of Natural Resources, and the local Shorelines Management Act. These agencies may impose project requirements pertaining to "fish windows" (limitations when equipment may work within the waterway), fish habitat restoration, storm water runoff control and treatment and other issues. If an existing bridge has been designated as an historic structure, the Washington Department of Archaeology and Historic Preservation may play a role in approving plans to rehabilitate or replace the structure.

Bridges under 20 Feet and other Drainage Structures

Of equal importance are the bridges and other drainage structures under 20 feet in length. While there are no hard numbers on quantity yet, a reasonable estimate of 20,000 to 25,000 structures was recently made by the Washington State Association of County Engineers. Regardless the actual number, these structures act as bridges and should be inspected for the same critical elements. Many of these structures are constructed of timber, steel, and concrete but a good number are structural arch culverts, which are capable of crossing spans in excess of 10 feet. Thousands of smaller culvert pipe add to the maintenance burden and require attention on an annual basis.

The one of the greatest challenges facing counties with these structures is the absence of a funding mechanism beyond the county road fund. The lack of a federal or state replacement program means that often these structures serve well past their intended service life and can fail catastrophically during storm events. When these events happen, the replacement structure are designed to handle the possibility of future events and are often replaced with much larger structures or even converted to bridges in many cases. Without outside funding for these larger structures, counties must face the difficult task of finding multiple grants and emergency funding to reopen the roadway to traffic.

New Bridges

Securing funding and approvals for a new bridge on a new route or a new bridge to expand capacity on an existing route involves all the issues noted above. Additional funding alternatives may include traffic impact fees, formation of a road improvement district or local improvement district, developer contributions, and general obligation or revenue bonds.

COUNTY BRIDGE DATA - NOVEMBER 2017

Washington State Bridge Inventory System

Bridges 20 Feet or Greater in Length on Federal Aid (FAR) and Non Federal Aid (NFAR) Routes
Posting Consideration Based on all AASHTO Legal Load Trucks

COUNTY	County Owned Bridges	Bridges Posted or May Consider Posting				Bridges With Posting Not Required				Deficient Bridges*
		FAR	Square Feet	NFAR	Square Feet	FAR	Square Feet	NFAR	Square Feet	
ADAMS	112	4	16,434	6	6,875	63	120,170	39	37,469	13
ASOTIN	18	0	0	0	0	13	1,654,154	5	11,952	1
BENTON	50	1	1,280	0	0	23	77,460	26	27,957	8
CHELAN	51	3	19,037	2	1,392	26	130,403	20	54,119	11
CLALLAM	29	0	0	3	7,938	11	73,219	15	64,528	9
CLARK	55	0	0	1	569	26	112,123	28	56,852	14
COLUMBIA	61	1	3,312	2	2,237	32	57,492	26	41,139	9
COWLITZ	62	1	1,999	2	6,783	27	144,755	32	59,590	13
DOUGLAS	20	1	2,700	0	0	13	56,916	6	12,657	0
FERRY	22	0	0	2	4,532	7	11,708	13	24,889	7
FRANKLIN	85	1	896	3	1,978	40	72,569	41	60,573	7
GARFIELD	33	0	0	0	0	20	20,657	13	15,769	5
GRANT	194	6	21,295	8	11,502	94	240,732	86	123,645	17
GRAYS HARBOR	167	3	54,989	1	744	81	368,851	82	162,533	25
ISLAND	0	0	0	0	0	0	0	0	0	0
JEFFERSON	32	0	0	0	0	13	23,082	19	67,852	4
KING	129	1	1,161	3	8,318	80	536,922	45	115,526	52
KITSAP	37	0	0	2	3,076	21	81,215	14	20,051	3
KITTITAS	114	0	0	2	9,400	29	96,847	83	140,528	8
Klickitat	57	0	0	0	0	14	44,952	43	91,128	15
LEWIS	197	0	0	2	2,664	70	251,497	125	249,838	25
LINCOLN	122	1	840	7	4,344	43	75,029	71	114,130	13
MASON	53	0	0	2	10,886	10	44,917	41	110,449	13
OKANOGAN	49	0	0	4	3,320	12	59,992	33	74,771	4
PACIFIC	60	4	12,010	13	47,995	5	20,513	38	94,515	13
PEND OREILLE	28	2	2,736	2	1,440	12	115,594	12	15,541	6
PIERCE	100	3	54,557	0	0	65	286,324	32	56,601	37
SAN JUAN	4	0	0	0	0	1	636	3	4,021	2
SKAGIT	105	0	0	1	3,971	43	201,832	61	131,896	22
SKAMANIA	25	0	0	3	6,938	5	35,395	17	57,508	6
SNOHOMISH	166	5	8,318	9	22,848	93	583,783	59	195,445	41
SPOKANE	106	6	14,690	6	6,190	47	268,368	47	120,945	21
STEVENS	49	2	6,432	0	0	9	30,957	38	71,081	8
THURSTON	94	0	0	2	1,724	62	265,210	30	69,862	20
WAHIAKUM	20	0	0	1	2,496	12	38,930	7	13,485	1
WALLA WALLA	104	7	25,200	9	7,965	33	110,109	55	125,938	11
WHATCOM	138	2	16,955	9	15,871	34	135,918	93	165,284	32
WHITMAN	249	2	4,700	5	4,002	122	248,447	120	161,318	56
YAKIMA	307	0	0	7	9,367	166	470,546	134	232,693	50
TOTAL	3,304	56	269,541	119	217,365	1,477	7,168,224	1,652	3,254,078	602

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

Supporting Statistical Information and Analysis

Status of county freight and goods systems all weather roads

The Washington State Legislature has recognized that Washington State is uniquely positioned as a gateway to the global economy. Washington, as one of the most trade-dependent states per capita in the nation, depends on an efficient multimodal transportation network in order to remain competitive. The vitality of the state's economy is placed at risk by growing traffic congestion that impedes the safe and efficient movement of goods. Freight corridors that serve international and domestic interstate and intrastate trade and those freight corridors that enhance the state's competitive position through regional and global gateways are strategically important. Ownership of the freight mobility network is fragmented and spread across various public jurisdictions, private companies, and state and national borders. Transportation projects have grown in complexity and size, requiring more resources and longer implementation periods. State investments in projects that enhance or mitigate freight movements should pay special attention to solutions that utilize a corridor solution to address freight mobility issues with important transportation and economic impacts beyond any local area.

The County Freight and Goods System (CFGS) is made up of 12,709 centerline miles of county road, 32.4% of the 39,170 total miles of county road. 10,472 miles of the CFGS are classified as arterials and collectors. This represents 82.4% of the County Freight and Goods System.

Deficiency Elimination Evaluation

One of the tasks of the Cost Responsibility Study (CRS) was to define a set of "Minimum Tolerable Conditions" (MTC) that a Freight and Goods Transportation System (FGTS) route must meet to be deemed 'adequate'. The MTCs were established for Roadway Width and Structural Adequacy.

- Roadway Width is a measure of the safety and ease of operation of trucks. A narrower roadway provides operational impediments to safe and efficient operation of trucks. Pavement Width and Shoulder Width are required fields in the Road Log, and are certified correct by the County Engineer.
- Structural Adequacy is the ability of the pavement and base to adequately support the number of heavy loads on the road. Weeks of Weight Restriction (how many weeks in a typical year the road is restricted to lighter loads) and Base Adequacy (an evaluation of the adequacy of the road base to support the volume of heavy trucks using the road) are not required fields. The counties were encouraged to enter correct data in these fields. However, due to data and staff limitations, some information may not be current.

A scenario approach was adopted by the CRS to produce estimates of needs under alternative sets of minimum tolerable conditions. This provides policy makers with a range of options and information on how the needs vary depending on the MTCs selected. Scenario 1 is "all weight restrictions addressed," and assumes that all FGTS segments with weight restrictions will be upgraded to all-season roads. Scenario 2 is "some weight restrictions addressed," and assumes that minimal weight restrictions would be allowed in the lower truck route classes (T-3 thru T-5). Scenario 3 is "most severe weight restrictions addressed," and assumes moderate weight restrictions will be allowed in all truck route classes.

Deficiencies are determined by comparing the data in the Road Log with the Minimum Tolerable Condition, established in the CRS. The total miles of the several identified improvements are determined, and cost factors used to determine the funding needed to remove the deficiencies.

The costs for improvements to ensure that minimum tolerable conditions exist were originally determined in the Road Jurisdiction Study (1988), reviewed and updated for the Cost Responsibility Study (1993), and adopted for use in the Needs Assessment Evaluation (1994). They represent standards of design and construction that existed at that time. These costs have been adjusted to 2016 dollars using WSDOT Planning and Programming Service Center, Economics Branch, implicit price deflators.

These cost estimates are conservative. The costs assume structural adequacy and adequate width. They do not include costs that are necessary for other safety improvements or upgrades to improve truck operational efficiencies, currently required environmental permitting, mitigation, and project delays or other potential restrictions. The emphasis on environmental concerns has dramatically escalated since these cost factors were developed.

Maintenance Needs Evaluation

The Road Jurisdiction Study (RJS) included an evaluation of annual maintenance needs. It identified a reasonable standard for road maintenance for a typical local agency and determined costs required to achieve that standard. The Cost Responsibility Study used those standards and costs to determine annual maintenance needs for the FGTS. For the Needs Assessment Study, CRAB used the RJS and CRS standards and costs to develop a maintenance needs assessment routine applicable to county roads.

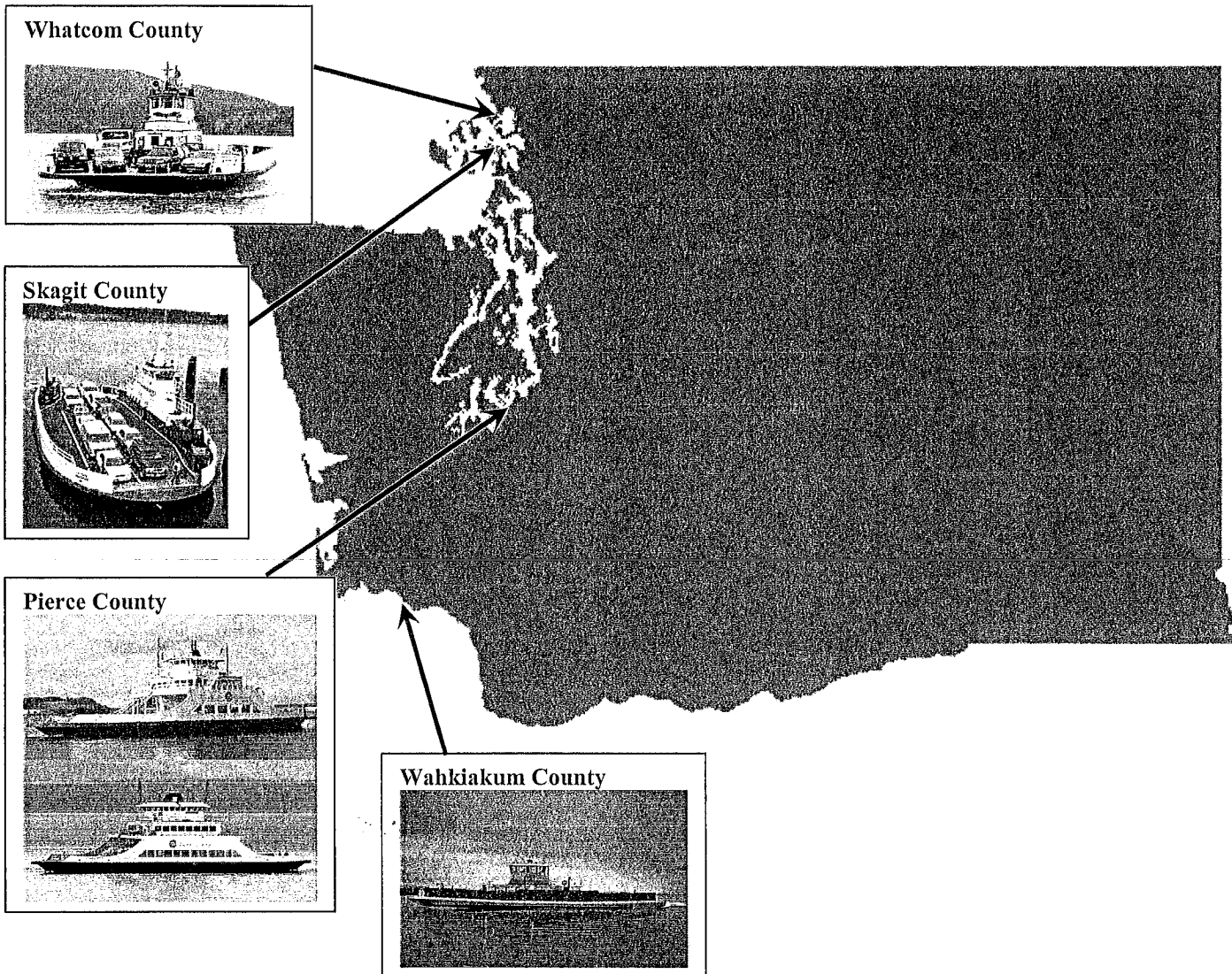
This evaluation was used (with costs updated to reflect 2016 costs) to determine the estimated annual maintenance needs on the County Freight and Goods system. It must be noted that these costs are 'not unreasonable' estimates of the total statewide annual maintenance needs for counties, based on the criteria established by the RJS and CRS.

COUNTY FREIGHT AND GOODS SYSTEM - 1/1/2017

COUNTY	Freight and Goods System - Truck Route Class					Total	Total	%
	T-1	T-2	T-3	T-4	T-5	FGTS	Adequate	Adequate
ADAMS			143.345	223.296	271.862	638.50	236.765	37.1%
ASOTIN		0.15	22.954	19.976	0.000	43.08	37.622	87.3%
BENTON			254.232	112.087	36.278	402.60	168.589	41.9%
CHELAN			48.500	83.315	42.840	174.66	54.620	31.3%
CLALLAM			74.050	61.550	11.010	146.61	3.750	2.6%
CLARK	0.22	10.44	135.420	159.550	0.000	305.63	253.080	82.8%
COLUMBIA			10.303	49.058	146.807	206.17	11.200	5.4%
COWLITZ			77.720	57.120	3.000	137.84	110.120	79.9%
DOUGLAS			7.060	85.560	171.150	263.77	15.310	5.8%
FERRY			109.250	115.710	0.000	224.96	27.310	12.1%
FRANKLIN			111.390	154.050	252.510	517.95	247.760	47.8%
GARFIELD			0.000	10.130	125.746	135.88	113.026	83.2%
GRANT		10.19	269.425	259.438	305.353	844.41	57.736	6.8%
GRAYS HARBOR			212.566	7.120	0.000	219.69	193.082	87.9%
ISLAND			12.436	48.640	0.200	61.28	60.126	98.1%
JEFFERSON			39.640	33.005	65.750	138.40	108.055	78.1%
KING	3.90	33.30	273.461	93.017	0.000	403.68	368.628	91.3%
KITSAP		1.73	209.823	105.895	0.000	317.45	227.050	71.5%
KITTITAS		1.86	144.079	180.406	0.080	326.43	243.727	74.7%
Klickitat			174.680	112.340	0.000	287.02	7.630	2.7%
LEWIS		1.98	124.934	261.604	102.441	490.96	270.665	55.1%
LINCOLN			131.900	281.720	363.904	777.52	446.470	57.4%
MASON		0.65	71.661	48.995	1.700	123.01	7.342	6.0%
OKANOGAN			100.505	116.463	181.684	398.65	5.426	1.4%
PACIFIC			0.000	135.409	0.000	135.41	26.889	19.9%
PEND OREILLE			38.393	125.397	62.208	226.00	0.490	0.2%
PIERCE	5.68	52.10	312.075	28.800	7.700	406.36	142.280	35.0%
SAN JUAN			23.921	64.327	0.000	88.25	56.783	64.3%
SKAGIT		4.48	132.900	103.012	0.000	240.40	110.497	46.0%
SKAMANIA			22.468	58.727	0.000	81.20	80.775	99.5%
SNOHOMISH	4.39	7.95	328.342	107.103	60.695	508.47	318.675	62.7%
SPOKANE	5.70	25.86	453.720	106.900	109.280	701.46	399.941	57.0%
STEVENS			91.820	164.520	78.950	335.29	12.820	3.8%
THURSTON		10.44	238.070	123.510	4.131	376.15	28.465	7.6%
WAHIAKUM			17.115	39.662	5.300	62.08	45.356	73.1%
WALLA WALLA		2.15	114.147	301.552	5.390	423.24	46.417	11.0%
WHATCOM		28.01	144.650	26.730	0.000	199.39	70.400	35.3%
WHITMAN			143.624	136.854	159.653	440.13	166.932	37.9%
YAKIMA		4.81	366.720	184.840	63.790	620.16	611.930	98.7%
TOTAL	19.89	196.09	5,187.30	4,387.39	2,639.41	12,430.08	5,393.74	43.4%

County Road Log Data Certified 1/1/2017 by the County Road Administration Board

COUNTY FERRY SYSTEMS



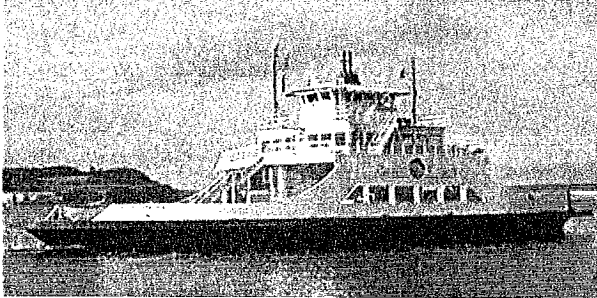
The topography of Washington State brings challenges to the transportation system. Besides the usual array of highway bridges, tunnels, and mountain passes, vehicle and passenger ferries are an integral part of the state transportation system. In addition to various public and private auto and passenger-only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

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

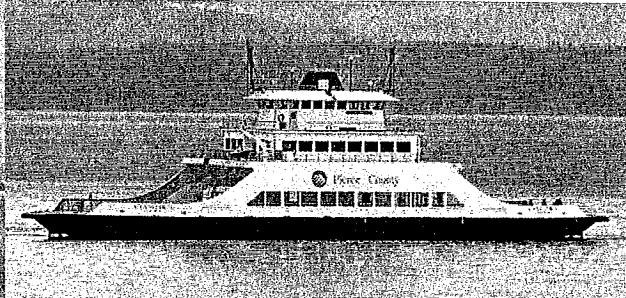
PIERCE COUNTY ANDERSON & KETRON ISLAND FERRIES

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

Christine Anderson



Steilacoom II



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

SKAGIT COUNTY - GUEMES ISLAND FERRY

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

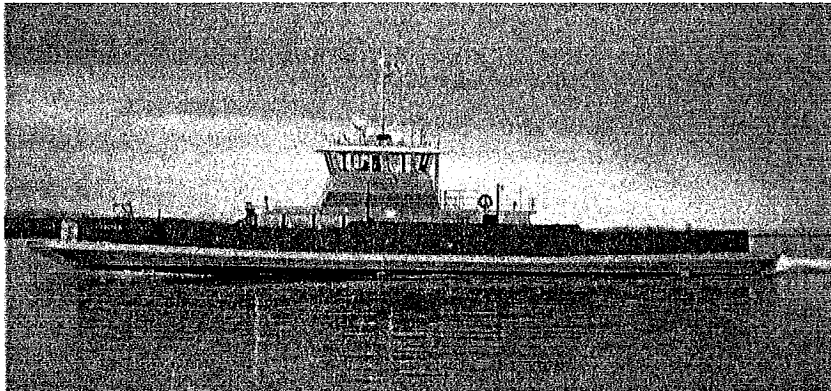


Vessel Built:	1979
Vessel Vehicle Capacity:	22
Vessel Passenger Capacity:	99
Length of Route:	0.7 mile
Crew Size:	3

WAHKIAKUM COUNTY

PUGET ISLAND, WASHINGTON - WESTPORT, OREGON FERRY

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

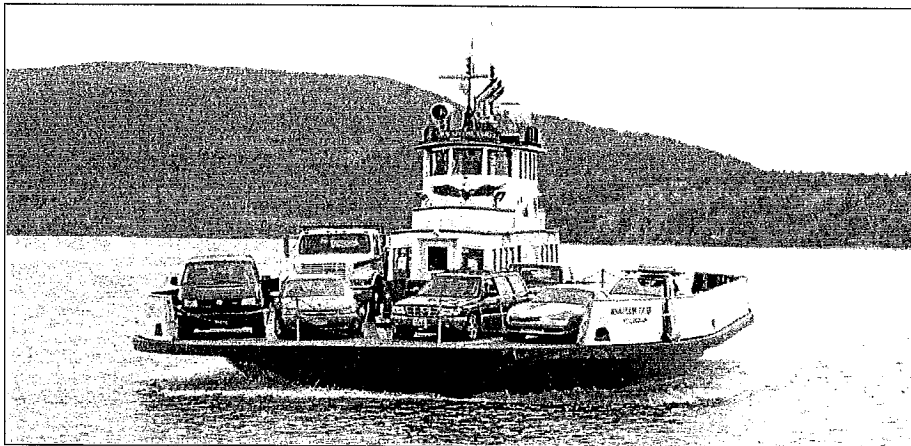


Vessel Built:	2015
Vessel Vehicle Capacity:	23
Vessel Passenger Capacity:	100
Length of Route:	1.5 miles
Crew Size:	2

WHATCOM COUNTY - LUMMI ISLAND FERRY

The M/V Whatcom Chief provides service between Gooseberry Point and Lummi Island (Gooseberry Point is located on the Lummi Indian Reservation). The ferry provides the only link to the mainland for the island's permanent and part-time residents. The boat begins/ends

the day at Lummi Island, with normal operating hours from 5:40 A.M. to 12:30 A.M. One round-trip takes a minimum of 20 minutes.



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

County Road

Relationship

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

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

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

Calendar Year 2017							
County	Total County Road Centerline Miles	Number of County Bridges, NBI	Length of Ferry Route (miles)	Ferry Docks Included in County Bridge Inventory	(from county financial reports)		
					Total County Road Related Expenditures	Total County Ferry Related O&M Expenditures	County Ferry O&M Expenditures as a Percent of Total Road Related Expenditures
Pierce	1558	100	3.5	3	\$89,067,156	\$3,902,286	4.4%

Skagit	801	105	0.7	2	\$29,728,108	\$2,863,906	9.6%
Wahkiakum	139	20	1.5	1	\$6,386,000est.	\$1,097,781	17.2%est.
Whatcom	939	138	0.9	2	\$28,126,933	\$3,037,242	10.8%

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

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

County Ferry System Use

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

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

Operation and Maintenance Costs

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

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

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

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

Operation and Maintenance Revenues

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

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

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

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

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

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

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

Other Local Funds - Represents the balance of revenue needs in order to offset all O&M costs. The source of other local funds are a county Road Fund and its various revenue sources. The two most significant sources include the counties' share of general distribution of Fuel Tax and the local Road Levy (property tax).

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

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

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