

The County Road Administration Board - CRAB

CAPP & RAP

1

**CRAB, the board that administers CAPP & RAP**

- County Road Department and Engineer (1937, 1962)
- CRAB was created by legislature in 1965 to provide Statutory Oversight of county road departments.
- 9 member board:
  - 6 County legislative authorities (commissioners, council)
  - 3 County Engineers
- Selected by WSAC from small (2), medium (4) and large (3) counties.
- Meet quarterly for policy, status of county road departments, funding and project decisions, review research, and legislation.

2

**CRAB's 3 Purposes - RCW 36.78.070**

- CRAB provides:
  - Accountability through standards of good practice.
  - Fair administration of funding programs, and
  - Technical and professional assistance
    - 39 counties
    - 40,000 miles of roads,
      - 3,300 bridges,
    - 4 County Owned ferry systems.
    - Budget exceeds \$1.2 billion per year.
      - (Prop. Tax, MVFT, Federal and State Grants, other)

3

**CRAB, the agency and staff**

- With its director, CRAB employs a full time staff (16) to accomplish day-to-day functions and to provide information and support to the Board.
  - Statutory Oversight through standards of good practice
  - Compile and retain official county road system inventory known as the 'road log' for fuel tax distribution.
  - I.T. support for each county's road system management through Mobility software
  - Administer three funding programs, RAP, CAPP and CFCIP
  - Road Engineering design systems training
  - Professional 'County Engineer Training'
  - Participate in many other transportation related committees.
- www.crab.wa.gov

4

Washington State  
CRAB  
County Road Administration Board

HOME ADMINISTRATION FUNDING ENGINEERING TECHNOLOGY COUNTIES LIBRARY CONTACT

CONTACT (<http://www.crab.wa.gov/Administration/GoodPractice/standards.cfm>)

CRAB Standards of Good Practice

Click on the standards listed below to view brief summaries and links to the Office of the Code Reviser website for more information.

<a href="#">Standards of Good Practice</a>	<a href="#">Annual Certificate of Good Practice</a>
<a href="#">Maintenance Management</a>	<a href="#">Requires an annual review of each county's operations practices and results, assuring that standards are being considered and met. Failure can result in withholding of the primary revenue source, state fuel tax.</a>
<a href="#">County Engineer Vacancy</a>	<a href="#">WAC 136 Chapter 04</a>
<a href="#">Priority Programming</a>	
<a href="#">Six-Year Programs</a>	
<a href="#">Annual Road Program</a>	
<a href="#">County Parties Construction</a>	
<a href="#">Inspection of Drifters</a>	
<a href="#">County Accident Reports</a>	
<a href="#">Accommodation of Utilities</a>	
<a href="#">County Engineer Resignation</a>	
<a href="#">County Roadlog</a>	
<a href="#">Pavement Management</a>	
<a href="#">Standards.Mat.Date</a>	

Please forward any questions or comments to [Comptroller@CRAB.org](mailto:Comptroller@CRAB.org)

5

**The County Arterial Preservation Program - CAPP**

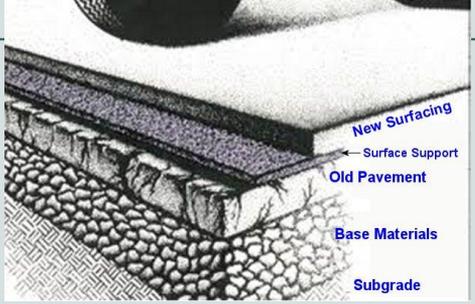
RCW 46.68.090 (2)(i) - Motor Vehicle Fund  
WAC 136-300 - Admin. of the CAPP

The pavement preservation program that encourages:

- Systematic response to traffic impacts.
- Efficient use of funds.
- Valuable information for policy / law makers.

6

**Vehicular support structure**

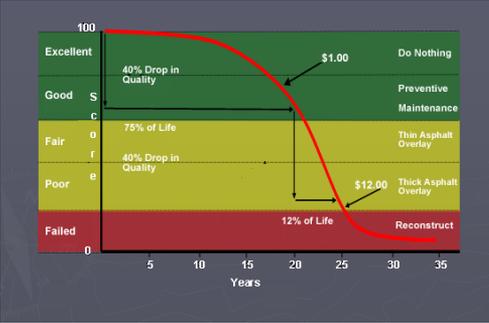


**A needy paved road system...**

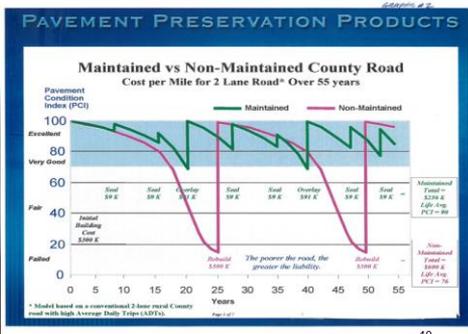


- CAPP: County owned paved road lane miles, by Function Class:
  - **RURAL:**
    - 02 Principal Arterial - 0
    - 06 Minor Arterial - 339
    - 07 Major Collector – 12,042
    - 08 Minor Collector – 9,633
  - **URBAN:**
    - 12 Principal Arterial – expressway – 0
    - 14 Principal Arterial – 601
    - 16 Minor Arterial – 1,850
    - 17 Collector – 1,577
- 09 Rural Local Access 18,033 19 Urban Local Access – 7,676
  - **26,043** - eligible
  - **25,709** - not eligible

**Recognize typical pavement life**



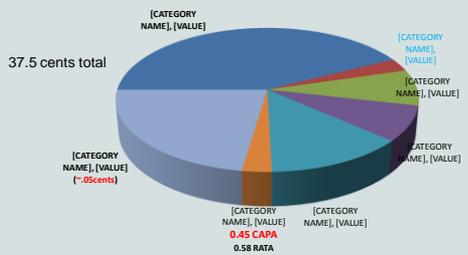
**Benefit of timely maintenance**



**Counties Must use a pavement management system to be eligible for CAPP funds**

- Measure the distresses of the road surface.
  - Every two years
  - Entered into database
  - Decision tree – Cost / Benefit, weighted by various factors.
  - prioritize maintenance activities and funding.
  - Application – repair and prepare, seal, overlay, reconstruct.
    - i.e. maintenance or construction?
- WA one of 5 states in 1980. All counties by 1990

**CAPP - a reliable funding source**



**A high priority system investment**

- 1990 – CAPA: 14,000,000
  - 2007 – TPA: 1,500,000 (Nickel Package)
  - 2012 – HSA: 5,000,000 (DOL License fees)
- 20,500,000**

**Efficiency assured by crab oversight**



- Use of funds is conditioned on:
  - Use of a Pavement Management System – Certified every April
  - Reporting of programs and accomplishments – every Dec., April.
  - On eligible direct and indirect work, including PMS and MMS

**CAPP reporting**

**2012 CAPP and HSA USAGE** Garfield County

WAC 136-300-090

ROAD LOG NO.	ROAD NAME	TOTAL LANE MILES	SEAL COATS	THIN OVERLAYS	STRUCTURAL OVERLAYS	EXPENDITURES (TOTAL DOLLARS AND CENTS)
4000	Walla Walla Rd	1.48	07	3	5	10,950
4001	Walla Walla Rd	8.20	07	5	5	33,850
4002	Walla Walla Rd	2.98	07	8	5	7,720
4003	Walla Walla Rd	3.80	07	4	18	5,080
4004	Walla Walla Rd	10.36	07	4	5	8,800
4005	Walla Walla Rd	3.96	07	4	5	2,280
4006	Walla Walla Rd	1.00	07	7	1	3
		<b>33.40</b>	<b>07</b>	<b>36</b>	<b>57</b>	<b>145,980</b>

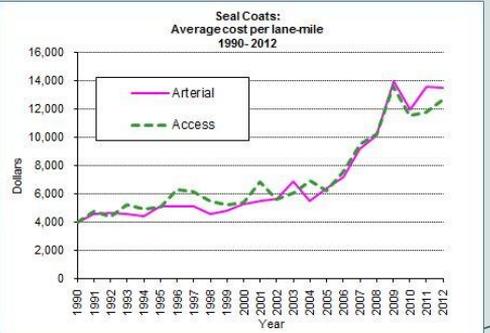
**CAPP reporting**

**2012 CAPP and HSA USAGE** COWLITZ County

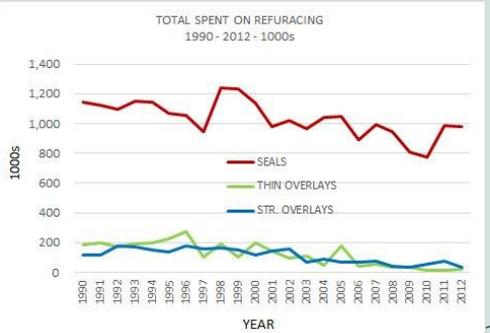
WAC 136-300-090

ROAD LOG NO.	ROAD NAME	TOTAL LANE MILES	SEAL COATS	THIN OVERLAYS	STRUCTURAL OVERLAYS	EXPENDITURES (TOTAL DOLLARS AND CENTS)
3000	Walla Walla Rd	1.80	08	0	0	8,150
3001	Walla Walla Rd	1.40	08	0	0	1,537
3002	Walla Walla Rd	2.40	07	0	0	5,730
3003	Walla Walla Rd	20.14	07	0	0	18,133
3004	Walla Walla Rd	4.52	07	0	0	6,515
3005	Walla Walla Rd	0.72	07	0	0	2,540
3006	Walla Walla Rd	1.90	06	0	0	22,879
3007	Walla Walla Rd	7.40	08	0	0	5,298
3008	Walla Walla Rd	0.10	07	0	0	6,425
3009	Walla Walla Rd	14.16	08	0	0	303,891
3010	Walla Walla Rd	1.90	08	0	0	40,865
3011	Walla Walla Rd	1.00	07	0	0	27,637
3012	Walla Walla Rd	0.74	06	0	0	382
3013	Walla Walla Rd	2.30	07	0	0	12,240
3014	Walla Walla Rd	1.30	08	0	0	8,404
3015	Walla Walla Rd	0.30	06	0	0	14,141
3016	Walla Walla Rd	1.16	08	0	0	9,086
3017	Walla Walla Rd	0.30	07	0	0	48,353
3018	Walla Walla Rd	0.30	08	0	0	3,493
3019	Walla Walla Rd	20.50	08	0	0	78,294
3020	Walla Walla Rd	0.70	08	0	0	18,219
3021	Walla Walla Rd	0.00	07	0	0	32,742
3022	Walla Walla Rd	0.00	07	0	0	30
3023	Walla Walla Rd	0.00	07	0	0	95
3024	Walla Walla Rd	0.00	07	0	0	1,091
3025	Walla Walla Rd	0.00	07	0	0	304
3026	Walla Walla Rd	0.00	07	0	0	332
3027	Walla Walla Rd	0.00	07	0	0	171
3028	Walla Walla Rd	0.00	07	0	0	2,228
3029	Walla Walla Rd	0.00	07	0	0	2,228
		<b>100.11</b>	<b>08</b>	<b>0</b>	<b>0</b>	<b>1,000,000</b>

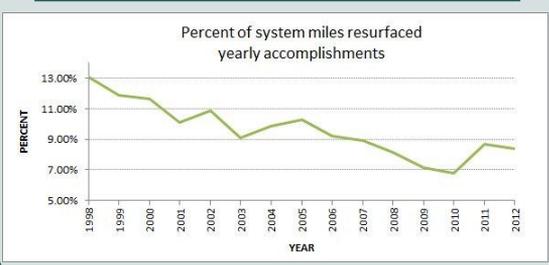
**Resurfacing trends – Increasing Cost**



**Resurfacing trends**

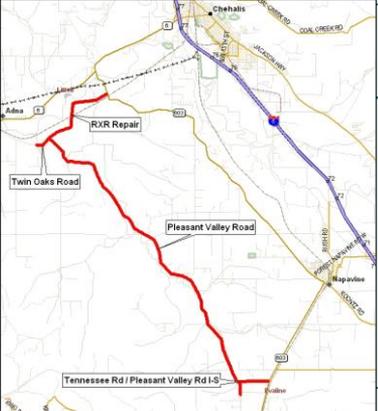


**Resurfacing trends –  
Reduced system coverage**



**CAPP examples -  
Lewis County**

- **Pleasant Valley, Twin Oaks, and Tennessee Roads.**
- 10.3 mile Truck Route in Lewis County:
- Damaged by heavy freight haul, avoiding SR 603 and I-5
- Cost: \$1,000,000 with \$300,000 in CAPA funds.

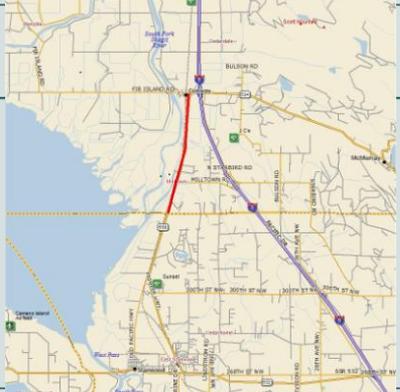


**CAPP examples -  
Lewis County**



**CAPP examples –  
Skagit County**

- **Pioneer Highway:**
- A commercial and commuter link between Skagit County and Snohomish County carrying approximately 10,000 vehicles a day.
- 20% truck traffic
- 10 year old structural pavement was deteriorating quickly.



**CAPP examples –**  
**Skagit County**

25

● Questions about CAPP?

26

**RAP purpose - rcw 36.79.020**

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Rural Arterial Trust Account... shall be expended for...

- (1) the construction and improvement of county rural arterials and collectors,
- (2) the construction of replacement bridges funded by the federal bridge replacement program on access roads in rural areas, and
- (3) those expenses of the board associated with the administration of the rural arterial program.

27

**Origins of RAP**

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- In 1983 the Washington State Legislature created the RAP to help finance the reconstruction of rural arterial roads facing high volumes of freight traffic in the wake of rail system abandonment.  
 (1970s Oil Embargo, rationing, and dwindling federal revenues)

28

**Old farm roads were unfit for freight**

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29

**Improvements funded by RAP allow trucks and cars to share the road safely.**

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30

### The County - RAP road system

- **Minor Arterials (06)** - 164 miles:
    - Link cities and major towns and resorts, longer distance and larger traffic movement within county.
  - **Minor Collectors (08)** - 6,004 miles:
    - link important traffic generators together within their environment .
      - Adjacent to local resources: agriculture, logging, recreation.
  - **Major Collectors (07)** - 6,382 miles:
    - link intra-county traffic generators to larger towns.
      - Agriculture, mining, shipping points
- Definitions from Geometric Design Guidelines (AASHTO)

### Road System



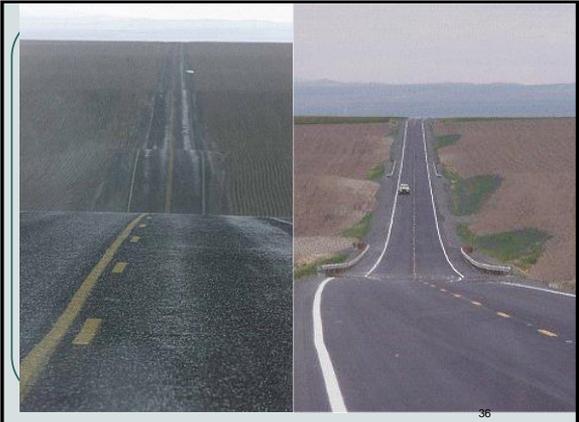
### Road System

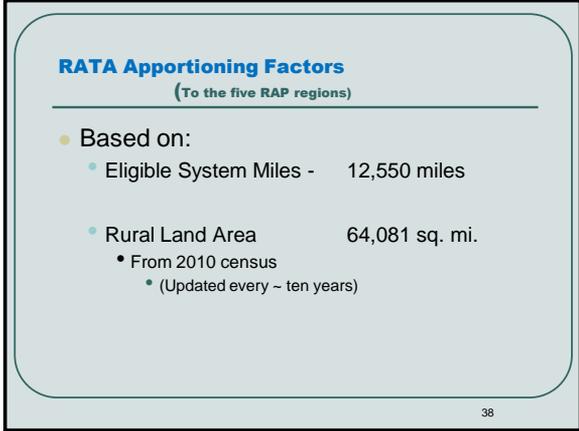
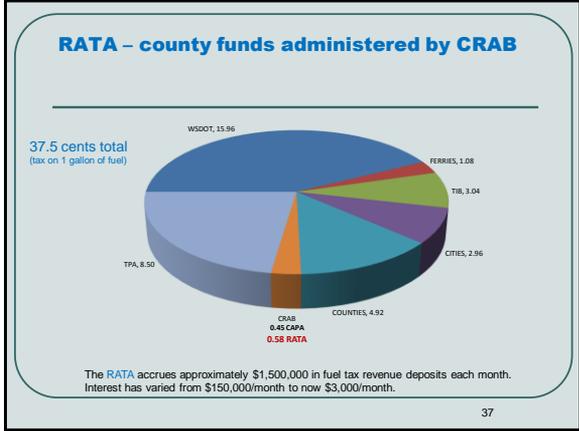


### Road System



### Road System



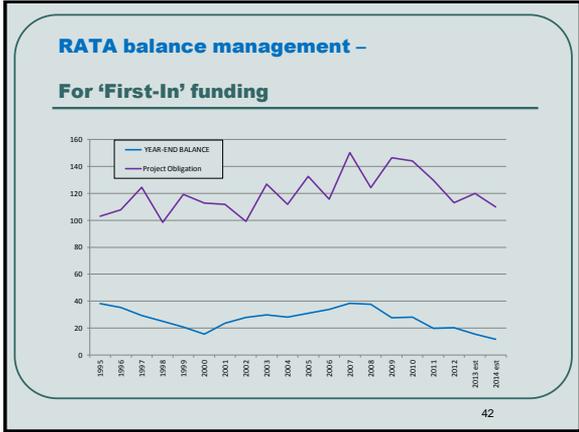
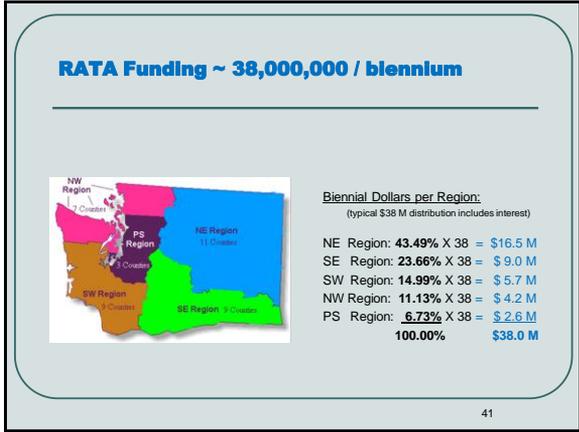


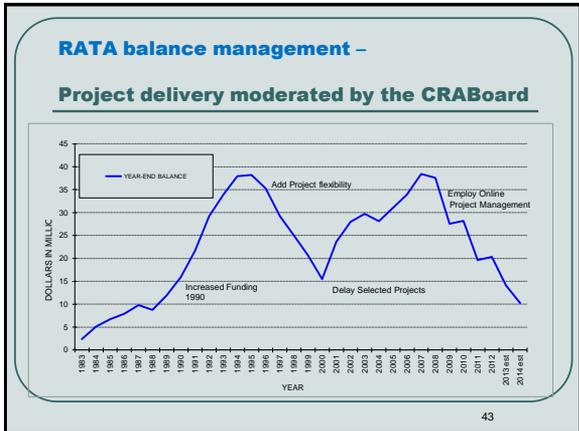
### RATA apportion factors to regions - 2013

1 part land area + 2 parts road miles

[AREA %] + [(MILES % X 2)] / 3 = Regional Factor

REGION	AREA SQ. MI.	% OF STATE	MILES 02, 06	MILES 07&08	TOTAL C/L MILES	% OF STATE	% of state x2	FINAL %
NE	26,648	41.58	30	5,547	5,577	44.44	88.89	43.49
NW	7,798	12.17	13	1,320	1,332	10.62	21.23	11.13
PS	4,756	7.42	95	706	801	6.38	12.77	6.73
SE	14,641	22.85	6	3,014	3,020	24.06	48.13	23.66
SW	10,238	15.98	20	1,799	1,819	14.49	28.99	14.99
TOTALS	64,081	100.00	164	12,386	12,550	100.00	200.00	100.00





- ### RAP Project Competition, within each region
- RCW 36.79.080
  - "Selection of priority improvement projects.. taking into account:"
    - Structural – gravel, dirt, BST, PCC, HMA
    - Capacity (width) – standard widths based on terrain and traffic volume
    - Alignment (crooked and steep)
    - Accidents & Fatal Accidents

- ### 1. Structural Ability to Carry Loads
- Visual Surface Rating; all regions – same set of "CRAB" eyes
  - Gravel roads: Cores, Truck Class. (NE and SE)
  - Surface Maintenance Costs (NE)
  - Truck Classification (annual tonnage) all Regions
  - Mechanical (pavement deflection measurement) NW & SW regions

- ### 2. Capacity
- Width
  - Traffic volume
  - % Trucks

- ### 3. Adequacy of alignment and road geometry
- % Grade (steepness)
  - Horizontal curves (degree of curve, radius, ball bank)
  - Vertical curves
  - Passing Sight Distance
  - Road, shoulder and lane width

- ### 4. Accident and fatal accident experience
- Accident History (3 to 5 years)
  - (Project Length, Traffic Volume)

**5. Local significance**

- Public Support
- Proximity to community services/traffic generators
- Functional Class

**RAP Requirements: County Commitment**

- Six Year Program – requires listing of proposed projects – public hearing. Updated annually
- Matching Funds (10%)
- Counties must restrict use of road (property tax) funds to:
  - Certified Traffic Law Enforcement costs
  - Limited Fish Barrier removal costs outside of R/W
  - Legitimate Road Purposes.

**Eligibility:**

- **County** - Annual Certification – by CRAB every April
  - Standards of Good Practice Items listed on web page.
- **Road** - Function Class (rural county arterial, sometimes local)
  - Affected by Federal census, incorporations, urban growth.
- **Project** – Must be on County 6 year TIP
  - Fulfills required public hearing and financial viability (rev and exp. plan)

**Eligibility – certified in CRAB/County contract**

- **Included in Contract Language** - WAC 136-150-040.
- The CRAB / County Contract cites the use of Road Levy, Traffic Law Enforcement and Fish Barrier Removal certifications.
- **Signed by County Elected Official** - WAC 136-150-050
- Contract is signed by the county executive or chair of the board of county commissioners (those who can authorize expenditure), certifying that the county is eligible for RAP funds.

**Eligible Project Types** WAC 136-130-020

- (1) **Reconstruction** ≥ 50% alignment change.
- (2) **3R** – rehabilitate, to full standards where feasible.
- (3) **2R** - resurfacing, restoration of pavement structure
- (4) **Intersection** - 3R or reconstruction work limited to the vicinity of an existing intersection, and may include additional travel lanes and right of way costs.
- (5) **Bridge and Drainage Structures** - replacement or major rehabilitation of an existing bridge or other drainage structure.
- \* All project type criteria are developed with county engineer input.

**RAP application and funding cycle**

2015 – 2017 Biennium

• Determine a call for projects	----	October 31, 2013
• Submit Preliminary Project List.	----	March 1, 2014
• Complete Field Reviews	----	June 30, 2014
• Submit Project Prospectuses	----	September 01, 2014
• CRABoard Review Project Arrays	----	October, 2014
• CRAB budget proposal to OFM-	----	November 01, 2014
• Review 6 year TIP for project listing	----	January, 2015
• Submit Road Levy Report	----	February 01, 2015
• Allocate Funds to Projects	----	April 2015 Brd Mtg
• Funds Available to Projects	----	July 1, 2015

## Review of final prospectus

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### WAC 136-161-060

CRAB Staff will ensure that Final Prospectus is:

1. Complete;
2. From the preliminary list;
3. Eligible;
4. Showing appropriate project schedule – within lapsing milestones
5. Math is correct.
6. Has required attachments – these show in clear terms what the county proposes to build.

55

## Priority Array

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- Projects are placed in a descending rank order. September, even years
- CRABBoard review – October, even years
- Send copy of array to each country – after CRABBoard review.
- Array helps the county budget and program via ensuing 6 year program.
- CRAB will fund projects in descending rank order at it's spring meeting prior to next biennium. Spring, 2015

56

## Selection for Funding

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- **WAC 136-161-070**
- Exclude ineligible projects
- Spring, Odd Year
- Declining rank order
- County funding limit
- The CRAB/County RAP Contract is based on scope, design and project limits indicated in the final prospectus.
- Includes reference to county forces construction limit

57

## CRAB/County Contract

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- Amendments (after funding) may be granted for:
  - Increases to funding – **prior to construction.**
  - Segmentation of the proposed project.
  - Changes in Scope.
  - Combining with another county project

58

## Emergency projects

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### • WAC 136-163-03 Eligibility

- The county must declare an emergency - attach to RAP Online form
- County must evaluate if State declaration – FHWA via WSDOT
- And Presidential declaration – FEMA
- CRABBoard will consider matching only after Fed \$ is approved.
- If no Federal funding, CRAB can provide up to 90%
- If funded, the county will bear a commensurate reduction in future funding limit.

59

## Increase RAP funding

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- **136-165-020** Requirements
- CRABBoard will not fund Scope Creep.
- The increase must be based **extraordinary and unforeseeable** circumstances beyond the control of the county.
- Cost increases during construction are borne by county
- Request only **once** – prior to award or commencement.
- Increase funding is limited to  $\leq 25\%$  of current RATA funding
- Provide an updated engr. est. 3 months prior to advertisement or commencement,
- If funded, the county will have a reduction in future funding limit.

60

### Lapsing Milestones

- § WAC 136-167-040
- § Project must commence design within one year of approval
- § Project must commence construction within six years of approval.

61

### Wynoochee Wishkah Road - Before



62

### Wynoochee Wishkah Road - After

Wider, stronger and protected from washouts.



63



64

### RAP Online

- Helps County and CRAB easily monitor project progress.
- Responds to legislature by showing project specific cash flow and maintain a lower but *practical* account balance.
- Encourages county managers and their staff to communicate regularly on project funding and schedule.
- Remains simple, unique and responsive.
- Questions?: CRAB Grant Programs Manager 360-350-6081.

65