

COUNTY ROAD FUND RESOLUTION R2019-133 TRANSPORTATION PROJECT & FINANCE PROPOSAL – CONCEPT FINALIZATION

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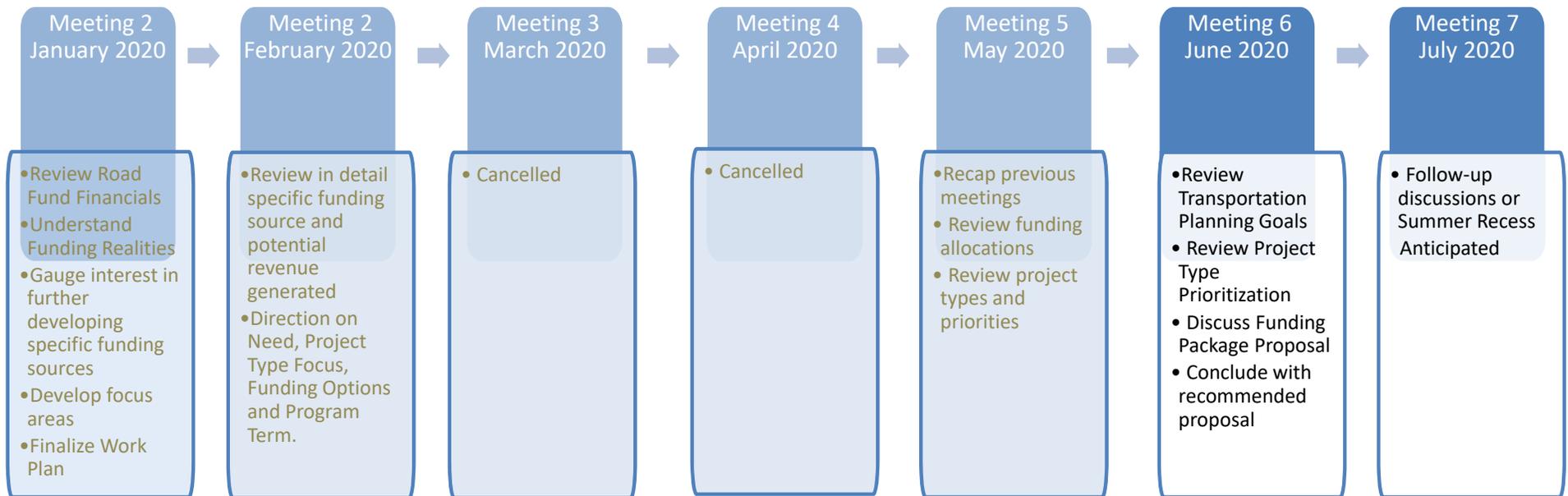
Agenda

- Objectives
- Workplan
- Comprehensive Plan – Transportation Goals
- Project Priority Groups and Prioritization Methods
- Funding Allocation Outlook
- New Funding Source(s)
- Discussion – Finalizing the Proposal: Phase 1
- Questions

Meeting Objectives

- Agreement on the need and resulting gap
- Agreement on new revenue source focus
- Finalize initial recommended phase 1 proposal to be forwarded to Council per Resolution direction

2020 Work Plan Development: R2019-133



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Comprehensive Plan – Transportation Element

TRANSPORTATION SYSTEM DEVELOPMENT

GOAL T-1 Collaborate in the development of a countywide multimodal transportation system that considers the mobility needs of all residents, emphasizes safety, minimizes impacts to the natural and built environments, and facilitates goods movement.

T-1.1 Strategically expand capacity and increase efficiency of the system to move goods, services, and people to and within the Urban Growth Area.

T-1.2 Focus on investments that produce the highest benefits with the least amount of environmental impacts.

The urban transportation system includes (T-1.1):

- Roadways
- Fixed-route public transit and shuttle services
- Bicycle and pedestrian facilities
- Water, rail, air, and industrial port and intermodal facilities
- Passenger and freight rail

GOAL T-3 Invest in all five categories of MOPIA (Maintenance, Operations, Preservation, Improvements, and Administration) in stewardship of the transportation system. Maintenance, Operations, and Preservation are the highest priorities.

Comprehensive Plan – Transportation Element

- GOAL T-5** Prioritize transportation capacity improvements in the following order:
- T-5.1** Upgrade or build new transportation facilities to encourage and support growth and economic development in urban areas of the County.
 - T-5.2** Upgrade or build new transportation facilities in the more rural areas of the County to serve large lot, low density residential development at appropriate service levels.
- GOAL T-4** Place a high priority on roadway safety.
- T-4.1** Complement Washington State’s *zero death and disabling injury* target through safety improvements and education.
- GOAL T-6** Place particular emphasis on the development of an interconnected, multimodal transportation system within designated centers and along corridors connecting centers.
- T-6.1** Provide for the needs of freight movement and employees to and from the Frederickson Manufacturing/Industrial Center by ensuring a variety of transportation modes, and designing and funding road improvements to accommodate freight movement.
- GOAL T-12** Develop an interconnected countywide system of active/nonmotorized transportation facilities that provide travel options, promote physical activity and well-being, contribute to a healthier population and cleaner environment, and enhance safety.

Comprehensive Plan – Transportation Element

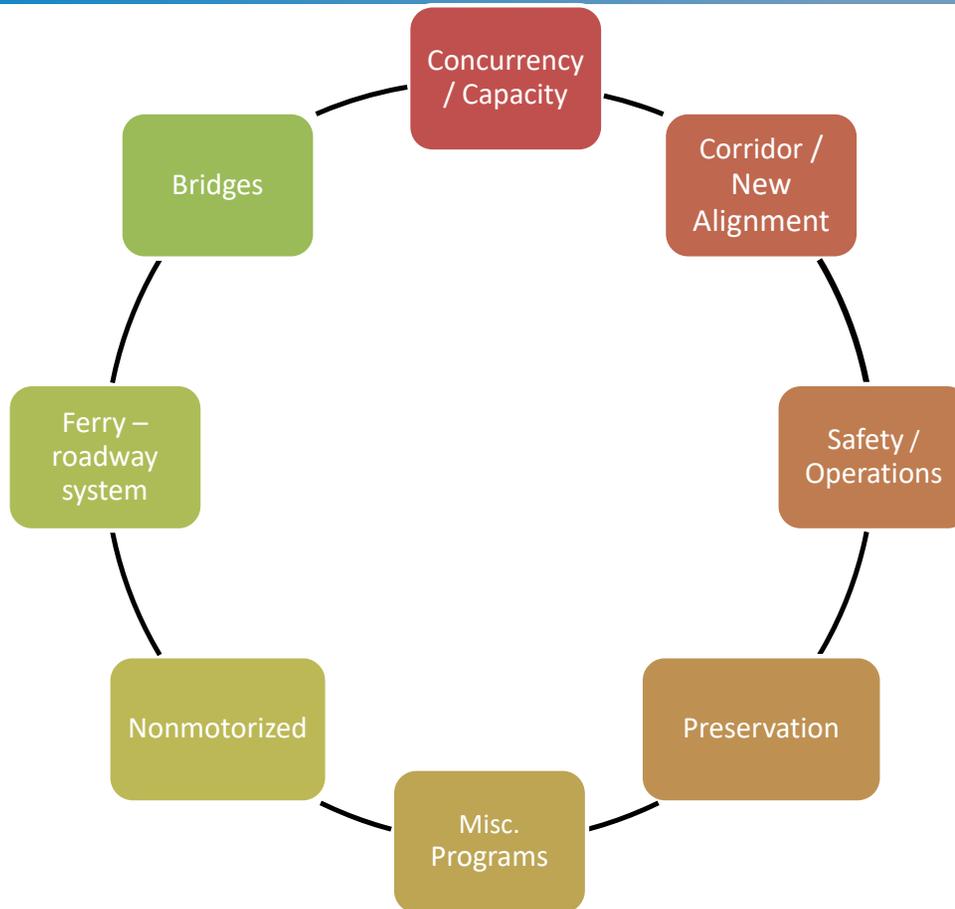
CONCURRENCY AND LEVEL OF SERVICE

Level of service standards exist for all arterials and transit routes to serve as a gauge to judge performance of the system. These service standards should be regionally coordinated.

To gauge the performance of the County road system, Pierce County Council adopts level of service standards (hereafter referred to as service standards or standards). The standards are set according to the [Capital Facilities Element](#) of this Plan. The standards reflect the maximum acceptable level of congestion throughout the County.

- GOAL T-25** Establish service standards for County arterials and reflect the level of service standards for state highways to monitor the performance of the system, evaluate improvement strategies, and facilitate coordination for funding.

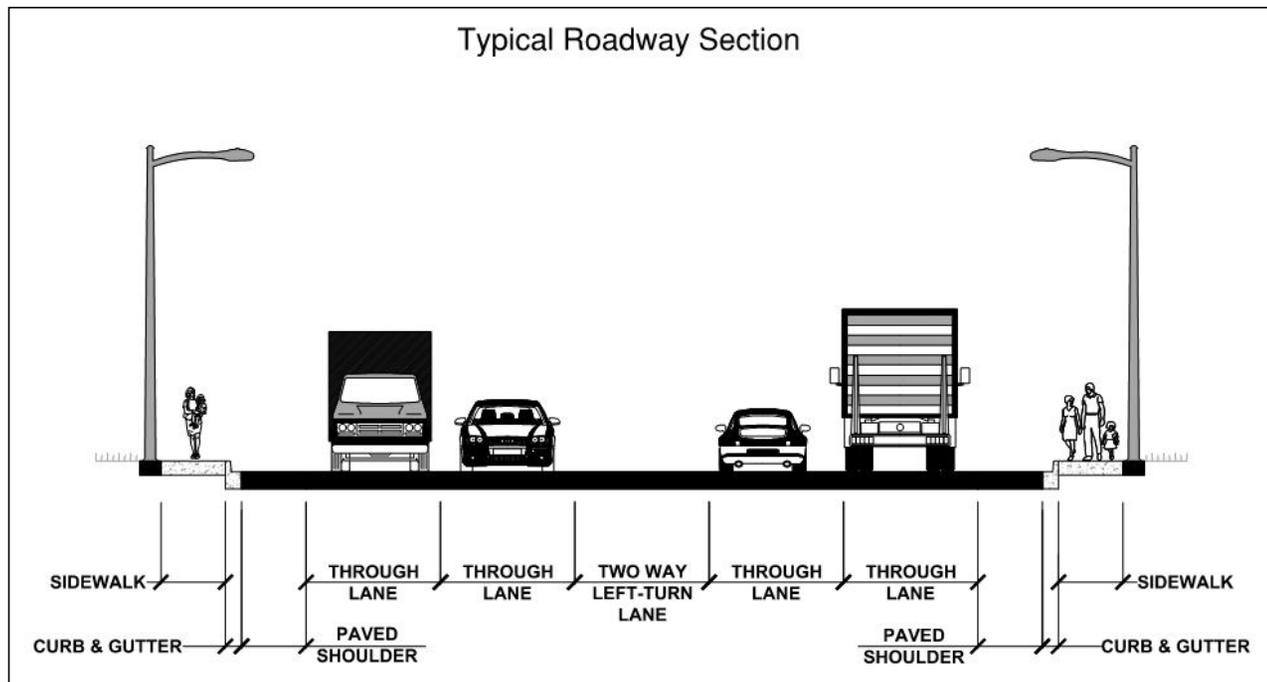
Transportation Improvement Program (TIP) Project Types



Project Type Interrelationships

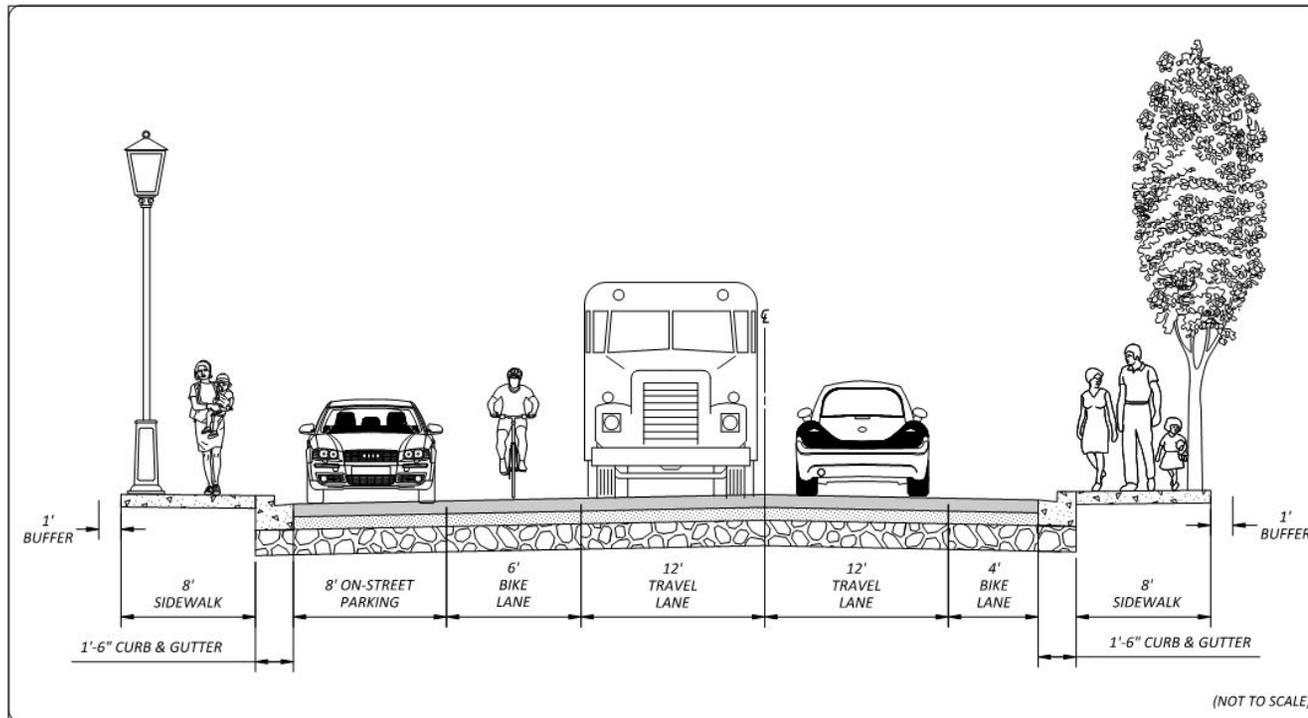
- Interrelationships exist between project types
- Multi-beneficial projects
- Challenging to specifically quantify all of the benefits
- Example Projects:
 - Canyon Road: Capacity project, yet has safety, active transportation, preservation and economic development benefits.
 - 168th Street: Non-motorized project, yet has safety and preservation benefits
 - 92nd Avenue / 224th Street: Safety project, yet has preservation, capacity, and non-motorized benefits

Multi-Beneficial Projects



Project is classified as “Capacity”, yet has other clear benefits including Active Transportation, Preservation, Safety and even Economic Development

Multi-Beneficial Projects



Project is classified as “Non-motorized”, yet has other clear benefits including Preservation and Safety.

TIP Prioritization Factors & Metrics

COMMENTARY ON PROJECT PRIORITIES

Project Priorities and Priority Groups

Each project is evaluated based upon the goal and purpose of meeting a specific County transportation system need. Projects included in this program have been recognized as meeting a County transportation system need. These projects have been selected by a number of prioritization procedures. During the prioritization process each project is assigned to a specific priority group based upon the projects main purpose and need for the project. Funding determination for a project is based upon the priority of a project as it relates to the overall transportation system. Given the present level of available transportation financing, not all projects are fully funded. The projects listed in the program provide other agencies with a clear indication of what the County would accomplish if additional funding was obtained. If an unexpected source of funding for a particular project should become available, that project could be moved forward in the programming process with only minor revisions to the work program.

Criteria assessed to assign an overall priority for each project include:

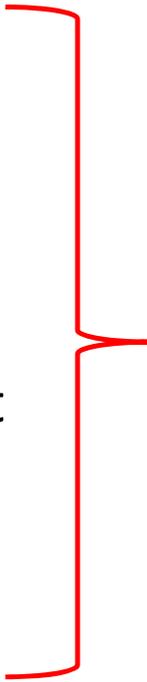
- **Active Grants** - projects with active grants have deadlines that must be met to utilize the funding.
- **Stakeholder Influence** - outside influences can include Council, School District, Industry, or other entity participation.
- **Projects Underway** - projects that are already in the Preliminary Engineering, Final Engineering, Right of Way, or Construction phases. Projects in the Construction phase are typically given the highest priority.
- **Potential Grants** - projects for which grants are being pursued or have potential for grant applications. These projects may be given a higher priority than those that don't have funding or lack elements that would make them competitive grant candidates.
- **Cost** - not all projects are fully funded due to their high cost. In order for high cost, high priority projects to move forward, they are included in the TIP and funds are allocated as they become available for different phases. High priority projects tend to stay at the top of the list in their group due to factors such as concurrency failure or sufficiency rating of bridges. These projects may have a higher overall priority than other projects that meet more of the prioritization factors in order to keep them moving forward and eventually completed as funding becomes available. The project may gain additional funding or complete funding through grants or other outside sources.
- **Funding Source** - depending on how a project is funded and the associated timelines and requirements tied to the funding determines the priority of each project. Examples are municipal bonds, traffic impact fees, and the Bridge Replacement Advisory Committee (BRAC).
- **Timing/Deadlines** - projects may have deadlines associated with funding or need to be constructed by a certain date due to factors such as concurrency failure or inadequate sufficiency rating.
- **Regulatory Requirements** - projects may not be a priority within the County system, but due to regulatory requirements for compliance, such as American with Disabilities Act, they must be included in the TIP. These projects are then prioritized by assessing need, cost, timing, and other applicable factors.
- **Professional Judgment** - once all factors are considered and an overall priority number is not apparent, the group relies on their professional judgment to prioritize a project accordingly.

N-7

TIP Prioritization Factors & Metrics

Select Metrics :

1. Travel Time
2. Speed
3. Reliability
4. Safety
5. Cost effectiveness
6. Impact to the Natural Environment
7. Impact to the Built Environment
8. Health Impacts



All Metrics not applicable to all Project Types.
More useful when utilized with a specific Project Type itself.

Example Project Type Prioritization - Bridge

Sufficiency Rating

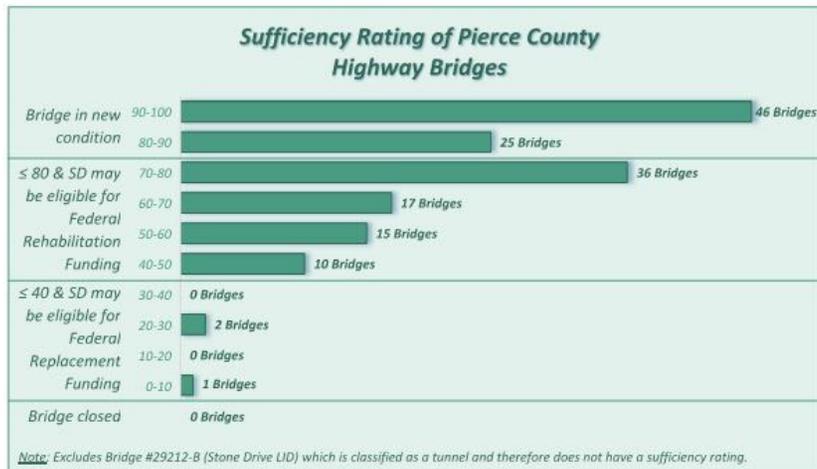
The sufficiency rating (SR) formula provides a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The sufficiency rating is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. The formula considers the following:

- ✓ Structural adequacy and safety
- ✓ Serviceability and functional obsolescence
- ✓ Essentiality for public use
- ✓ Special reductions

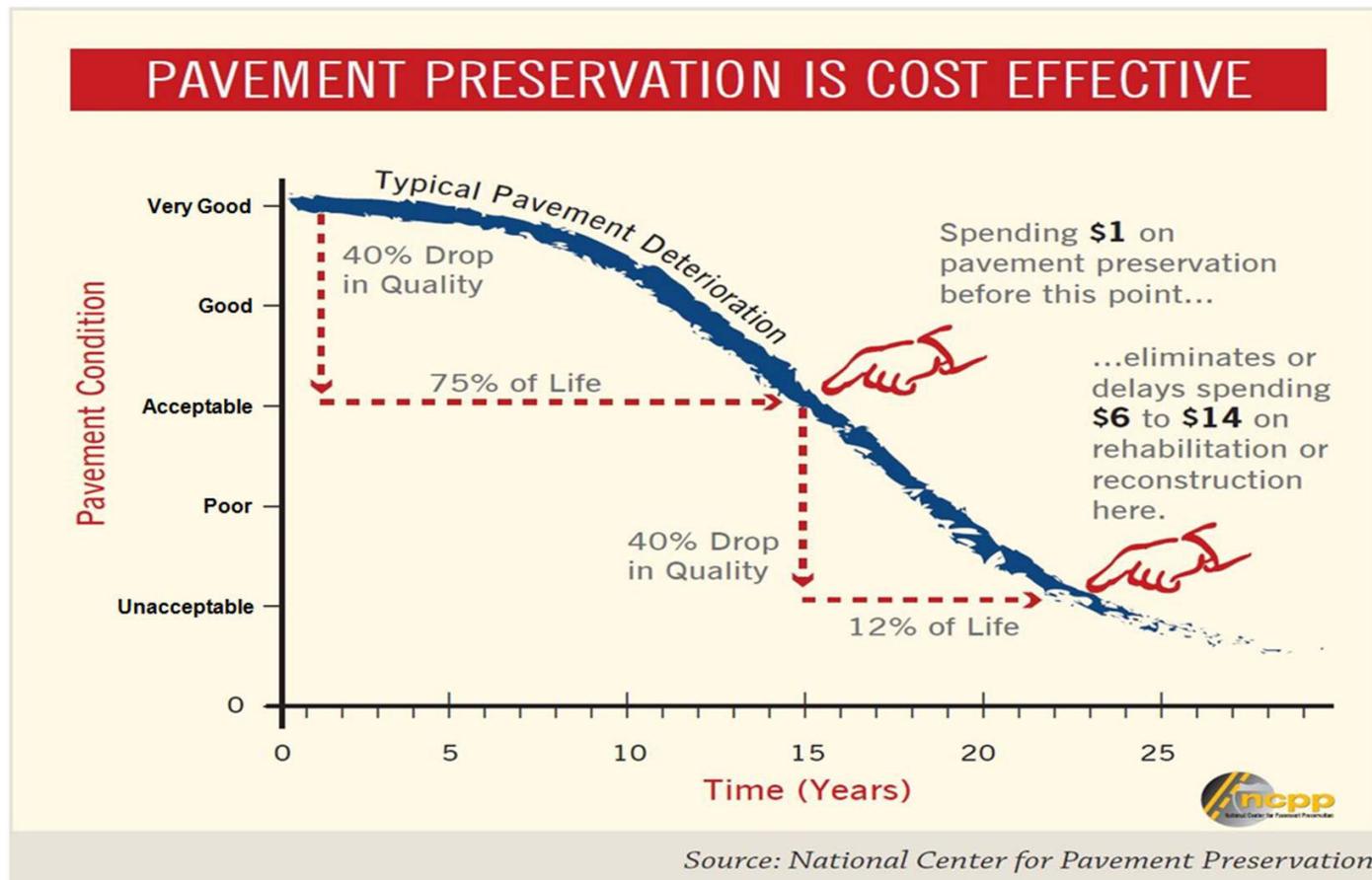


Sufficiency Rating drives Programming

- Rehabilitation Recommendations
- Load / Height Restrictions
- Seismic Retrofits
- Full replacement



Example Project Type Prioritization – Pavement Preservation



Example Project Type Prioritization – Concurrency

Table A-1. Comparison of 2017 to 2019 and 2025 V/S Ratios
(Selected County Roadways with Daily V/S >= 0.9 in 2019 or in 2025)

Segment Name	Segment Limits	2019 Daily Count	Daily Threshold		Daily V/S Ratio					1st Year V/S >= 1.00 ¹
			2019	2025	2017	2018	2019	Trend 18-19	2025	
9 ST E	182 AV E TO 190 AV E	14,850	17,600	17,600	0.809	0.901	0.843	↓	0.908	
9 ST E	190 AV E TO 198 AV E	15,057	17,600	17,600	0.732	0.826	0.855	↑	0.903	
94 AV E	136 ST E TO 144 ST E	17,625	19,800 ³	19,800 ³	0.895	0.977	0.890	↓	0.980	
122 AV E	136 ST E TO 144 ST E	19,175	17,600	17,600	1.044	1.062	1.080	↑	1.195	2016
122 AV E	144 ST E TO 145 ST E	19,175	17,600	17,600	1.061	1.062	1.080	↓	1.235	2016
122 AV E	145 ST E TO 152 ST E	19,400	17,600	17,600	1.062	1.067	1.102	↑	1.253	2016
122 AV E	152 ST E TO SUNRISE PKWY E	17,525	17,600	17,600	0.950 ²	0.970	0.995	↑	1.191	
122 ST E	130 AVCT E TO 134 AV E	14,178	17,600	17,600	0.725	0.775	0.805	↑	0.957	
122 ST E	134 AV E TO SR 162	15,228	17,600	17,600	0.649	0.836	0.865	↑	1.014	
128 ST E	SR 162 to MCCUTCHEON RD E	5,509	17,600	17,600	0.261	0.305	0.313	↑	0.954	
CANYON RD E	80 ST E TO 84 ST E	16,200	17,600	44,000	0.864	0.929	0.920	↓	0.453	
CANYON RD E	SR 512 EB ON/OFF RAMP TO 112 ST E	55,493	66,000	66,000	0.847	0.847	0.840	↓	0.927	
CANYON RD E	128 ST E TO 136 ST E	54,516	66,000	66,000	0.831	0.832	0.826	↓	0.922	
MILITARY RD E	SHAW RD E TO RESERVOIR RD E	18,800	22,000	22,000	0.866	0.856	0.854	↓	0.906	
MILITARY RD E	RESERVOIR RD E TO 134 ST CT E	20,700	22,000	22,000	0.858	0.870	0.940	↑	1.015	
MILITARY RD E	134 ST CT E TO 136 ST E	20,700	22,000	22,000	0.858	0.870	0.940	↑	1.015	
PIONEER WY E	TACOMA C/L TO WALLER RD E	21,325	22,000	22,000	0.986	0.907	0.969	↑	1.112	
PIONEER WY E	52 ST E TO CANYON RD E	17,794	22,000	22,000	0.674	0.788	0.808	↑	0.951	
PORTLAND AV E	430' N of 76 ST E TO 80 ST E	15,000	17,600	17,600	0.838	0.848	0.852	↑	0.909	
SHAW RD E	PUYALLUP C/L TO 122 ST E	19,650	22,000	22,000	0.875	0.843	0.893	↑	1.027	
SPANAWAY LOOP RD S	TULE LAKE RD S TO 138 ST S	28,600	33,000	33,000	0.831	0.939	0.867	↓	0.922	
SPANAWAY LOOP RD S	138 ST S TO MILITARY RD S	28,675	33,000	33,000	0.836	0.900	0.868	↓	0.922	
SPANAWAY LOOP RD S	MILITARY RD S TO 154 ST S	27,102	33,000	33,000	0.762	0.814	0.821	↑	0.924	
SPANAWAY LOOP RD S	154 ST S TO 174 ST S	26,944	33,000	22,000	0.746	0.809	0.816	↑	0.920	

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V/S >= 1.00
0.95 >= V/S < 0.99
0.80 >= V/S < 0.94
V/S < 0.8

2020 TIP Priority Group Breakdown

2020 TIP Annual Program by Priority Group:

Priority Group from Resolution	2020 TIP \$	Percentage of Total Funding
Capacity	\$ 12,708,000	39 %
Canyon Road Corridor (Northerly Ext.)	\$ 5,153,000	15 %
Preservation	\$ 8,690,000	27 %
Safety	\$ 2,831,000	9 %
<u>Active Transportation</u>	<u>\$ 3,151,000</u>	<u>10 %</u>
Total	\$ 32,533,000	100 %

- Some projects don't fit exactly into one of the 5 categories. Example would be miscellaneous engineering. These projects/programs were placed where they best fit based on engineering judgement.
- Another example would be fish barrier projects which were placed in preservation

Resolution Refresher

- Goal to address key project priorities currently lacking full funding.
- Project priorities and funding levels, timelines and mechanisms addressed.
- Project focus on concurrency with safety, active transportation preservation, and economic development addressed.
- Not intended to “Fix Everything”

Resolution: Prioritization

- Let current prioritization process and need drive the allocation.
- Utilize guiding principles, polices and resources including but not limited to:
 - Comprehensive Plan
 - Transportation Element
 - Active Transportation Plan
 - Safe Routes to School Plan
 - ADA Transition Plan
 - Transportation Concurrency Report
 - Bridge Engineer’s Inspection Report
 - Applicable State and Federal Policy

Funding Gap Analysis

Existing Revenue Type	Yearly Avg.
TIF	\$10 M
Grants	\$10 M
REET 2	\$5 M
Bond Obligation	(\$4 M)
Construction Fund	<u>\$10 M</u>
Totals	\$31 M

Needed Expenditure Type	Total (2020 \$)	Yearly Avg.
Capacity	\$288 M	\$14.4 M
Canyon Road Corridor	\$278 M	\$13.9 M
Preservation (CIP)	\$248 M	\$12.4 M
Safety	\$164 M	\$8.2 M
Active Transportation	<u>\$80 M</u>	<u>\$4.0 M</u>
Totals	\$1,058 M	\$52.9 M

Net Yearly Gap = \$52.9 M - \$31 M =
\$21.9 M

Assumptions:

- Revenue's are approximate average yearly estimates

Program Priority Group Allocation

Project Priority Type	Yearly Avg. Need	Percentage Funding Allocated
Capacity	\$14.4 M	30 %
Canyon Road Corridor	\$13.9 M	25 %
Preservation	\$12.4 M	15 %
Safety	\$8.2 M	20 %
Active Transportation	<u>\$4.0 M</u>	<u>10 %</u>
Total	\$52.9 M	100%

Funding allocation directly correlated to need.
 Slight exception is Preservation
 Canyon Road Corridor = Economic Development

Important Project Considerations

- Transportation Concurrency Corridor projects will take a great deal of time to complete and additional funding is needed.
- Intersection projects are not Concurrency projects but do address congestion and are geographically distributed
- Active Transportation projects (AT) are both Necessary AND Costly
Cost per mile example:
 - 121 Street South: Project length = 0.11 Miles or 581 feet
Total Project Cost = \$1,327,630
Cost/Mile = \$12,069,363

Program Scheduling & Prioritization – Key Issues & Flexibility



Pierce County

- Certain project types may be programmed to take place in first few years of program
- Projects without Right of Way (ROW) needs able to construct sooner
- Capacity projects with significant ROW and Environmental impacts constructed in outer years.
- Prioritization can be viewed as a matter of timing

Top Funding Mechanisms Worth Further Discussion



Summary from previous meeting discussions:

- Levy Lid-Lift
- REET 2
- Law Enforcement Transfer / Diversion Options

Targeted Funding Hypothetical Options

	Replace Traffic Enforcement Transfer	Levy Lid-Lift to \$1.600000	Levy Lid-Lift to \$1.700000	Levy Lid-Lift to \$1.800000	REET 2
Option 1	✓				
Option 2	✓	✓			
Option 3	✓	✓			✓
Option 4	✓		✓		✓
Option 5	✓			✓	✓

Funding Package Concept to “Fill the Gap” – Option 4



Revenue Type	Details	New Approximate Revenue Total
Levy Lid-Lift	Increase to \$1.70 / \$1,000 A.V.	\$15,700,000
REET 2	Extend Sunset Date / Bond	\$4,000,000
Traffic Law-Enforcement Transfer	Recoup Transfer Amount	\$2,950,000
Total Yearly Approximate New Revenue		\$22,650,000

Current road levy rate is \$1.405731 (\$/Thousand)

Net Yearly Gap = \$52.9 M - \$31 M = \$21.9 M

Discussion: Finalize Concept Phase 1 Proposal

- Funding allocation and size in alignment with overall need
- Established prioritization processes and methods in accordance with current TIP process and industry metric standards as starting baseline
- Resolution requests the Commission's recommended proposal be provided to the Council by July 30th.
- Future discussions on prioritization and projects – Phase 2

QUESTIONS?

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