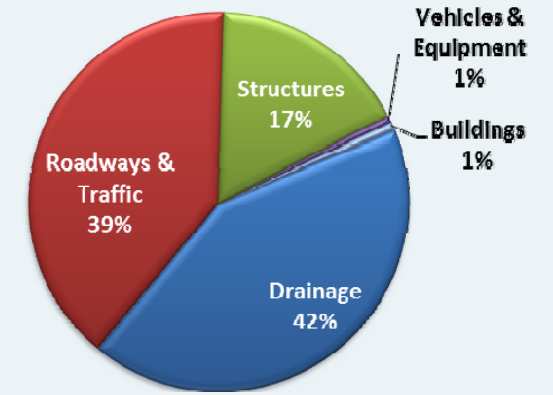
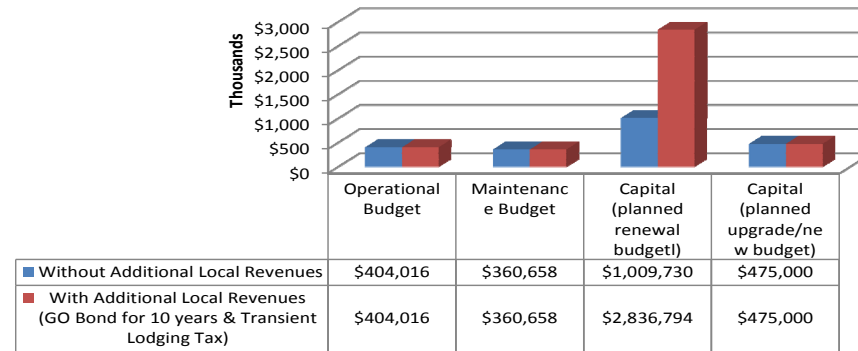


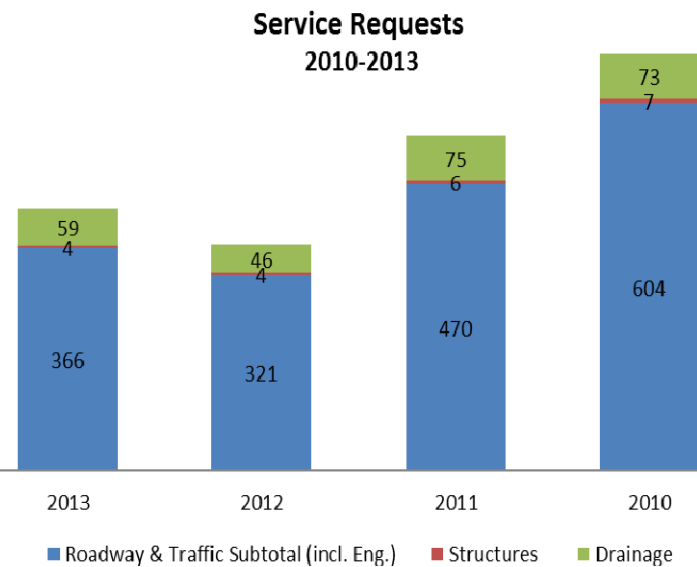
STRATEGY OUTLOOK

- The community has recently added additional revenues which has slowed the County road system's deterioration; however resources are insufficient to meet needs.
- Tillamook County manages an old road system. Approximately one-third of County transportation assets are in poor / very poor condition. This will grow over the next 10 years in spite of recent additional funding.
- The Road Department is not able to maintain current service levels for the next 10 years. The majority of expenditures are reactive maintenance with most resources allocated to reacting to potholes, failed bridges, culverts & guardrails. The one exception to this is vegetation management (spraying), the only preventative maintenance program currently. Moving forward with more revenue, the focus will be on renewal.
- Despite this, Tillamook County's Road Department performs at a very high level because of the skills, knowledge of the road system and experience of its people. These people are very effective at managing increasing risks as assets reach the end of useful operating life. Staffing continues to be insufficient.
- The Department's asset management plan captures current knowledge and experience and has helped guide County road system planning. However this overarching asset management plan is the first stage of asset management improvement. The County needs to further develop asset plans that show varying funding scenarios, what can be done, what can't be done and how the service level consequences and risks will be managed. This plan reflects this move.
- Even with monies approved by voters in 2013, funding is insufficient. The County will continue to seek opportunities to fund needs outside budget authority by partnering with key stakeholders and applying for grants.
- The County will continue to communicate levels of service based on best knowledge of the road system and available resources.

Roadways & Traffic - 2014 Budget



Comments on Tillamook County's Road Network





Key issues for roads are:

- The estimated useful life for county paved roads (low volume roads) is 20 years, based on AASHTO guidelines
- 100% of county roads are visually inspected and rated every other year. The visual inspection method uses pavement management software used by all Oregon counties. This method uses a 0-100 Pavement Condition Index, with 100 being the most favorable.
- Tillamook County's average network PCI is 50 or Poor condition in 2012, the lowest of all Oregon counties.

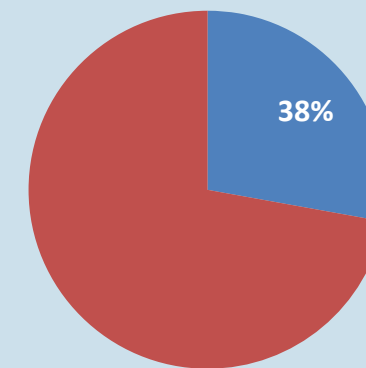
- The current funding allocation is clearly insufficient to address all of Tillamook County's future road maintenance needs. Funds are inadequate to achieve Good condition or prevent future decline of the County's road network.
- Preventive maintenance is a challenge given available funding. This investment level should be reexamined to target available resources on those roads most likely to decline below "Satisfactory," or between 45 and 70 PCI. This strategy is seen as necessary pending finding additional funding to address those roads in need of rehabilitation.

Source: PBS Consulting TCPW Asset Management Plan 2011; and Capitol Assets & Pavement Services, Inc. Pavement Management Budget Options Report, 2012.

WHAT SERVICE LEVELS LOOK LIKE (examples)

GOOD / FAIR QUALITY	POOR QUALITY
ROAD PAVEMENT	
	

Assets Supporting Roadway Services



Pavement

- Paved - 263 centreline miles
- Gravel - 65 centreline miles

Traffic Signals & Street Signs

- Traffic Signals
- Signs - 5,426
- Delineators - 456
- Posts - 4,173

Pavement Markings

- Painted center lines - 299 miles
- Painted Stop Bars

\$264,005,670

Total Value of Roadways Assets

SERVICE / ASSET ACTIVITIES

⇒ Pavement (Paved & Gravel)

⇒ Traffic Signals & Signs (Delineators, Posts)

⇒ Pavement Markings (Painted Center Lines, Painted Stop Bars)

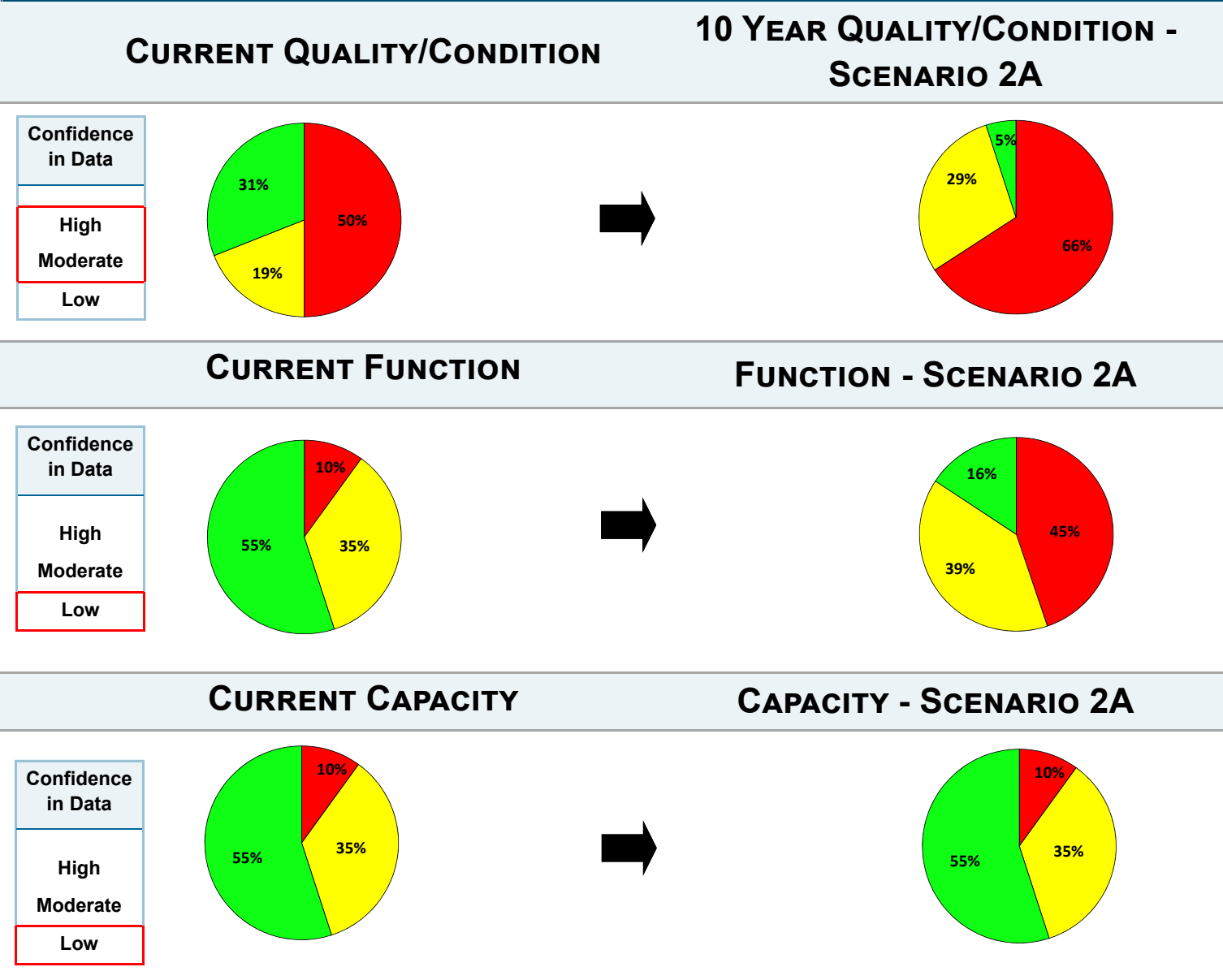
Tillamook County: Roadways & Traffic



FUNDING SCENARIO 2A – CURRENT INVESTMENT LEVEL WITHOUT ADDITIONAL LOCAL REVENUES

This Funding Scenario Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan balanced to the Asset Management Plan.

OVERALL ASSET PROVISION - FUNDING SCENARIOS



FUNDING DESCRIPTION

■ Good
 ■ Fair
 ■ Poor

- ⇒ Current condition/function/capacity
- ⇒ Scenario 2A – No additional local revenues
- ⇒ Scenario 2B - With Additional Local Revenues (GO Bond & Transient Lodging Tax)

The County uses a "Mix of Fixes" asset management strategy. Long term inadequate resources to manage the paved and gravel roads now requires a substantial initial investment to rehabilitate County roads and provide adequate preventive maintenance to ensure those roads in Good condition do not deteriorate. Recent addition of local funding will be targeted at high volume arterial roads and critical safety (functional) needs such as inadequate sight distance or inadequate signage. While an improvement, overall funding over 10 years is insufficient. The lifecycle and 10 year costs are what is determined that needs to be spent annually to maintain the current levels of service for the asset class and prevent further decline in service levels. The available funding reflects the budgeted funding allocation for the category. Only 20% of lifecycle needs are being funded.

SUMMARY OF ASSET COSTS

LONG TERM - LIFECYCLE COSTS

Life Cycle Gap it is estimated that there will be an average annual funding shortfall of **\$5,286,000** each year over the whole of life of the Roadways & Traffic asset class. This is based on the depreciation value from the Asset Register.

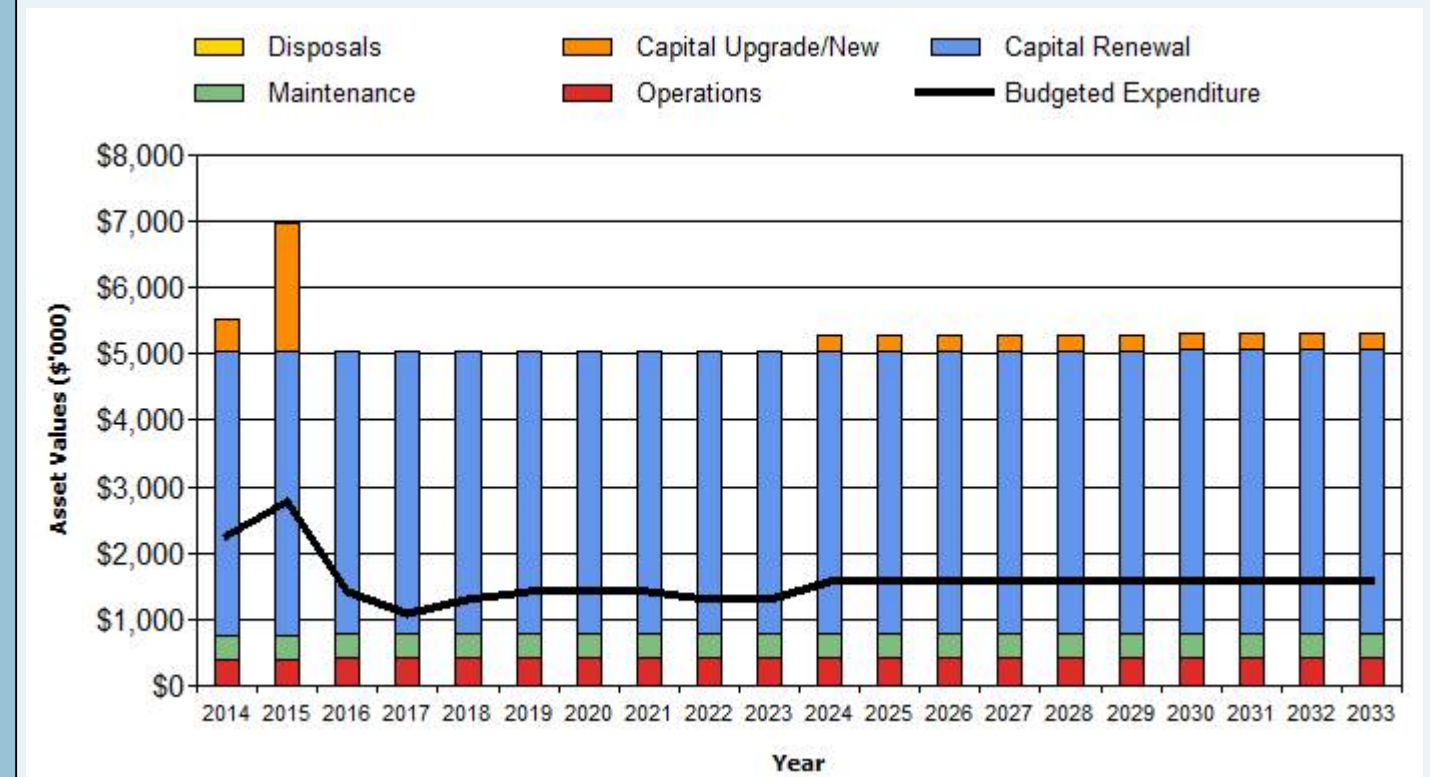
Lifecycle Cost (annually)	\$6,614,000
Lifecycle Available Funding (annually)	\$1,328,000
Lifecycle Gap (annually)	-\$5,286,000
Lifecycle Financing Indicator	20%

MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated that there will be an average annual funding shortfall of **\$3,953,000** each year over the next 10 years to maintain the current level of service for the Roadways & Traffic asset class.

10 Year Cost (annually)	\$5,052,000
10 Year Available Funding (annually)	\$1,328,000
10 Year Gap (annually)	-\$3,724,000
10 Year Financing Indicator	26%

20 Year Projected Operating & Capital Expenditure



Source: NAMS PLUS2 Roadways_2014_No Add Local Revenue_S2_V2 (Where no bars displayed the projected expenditure for this funding type is \$0)

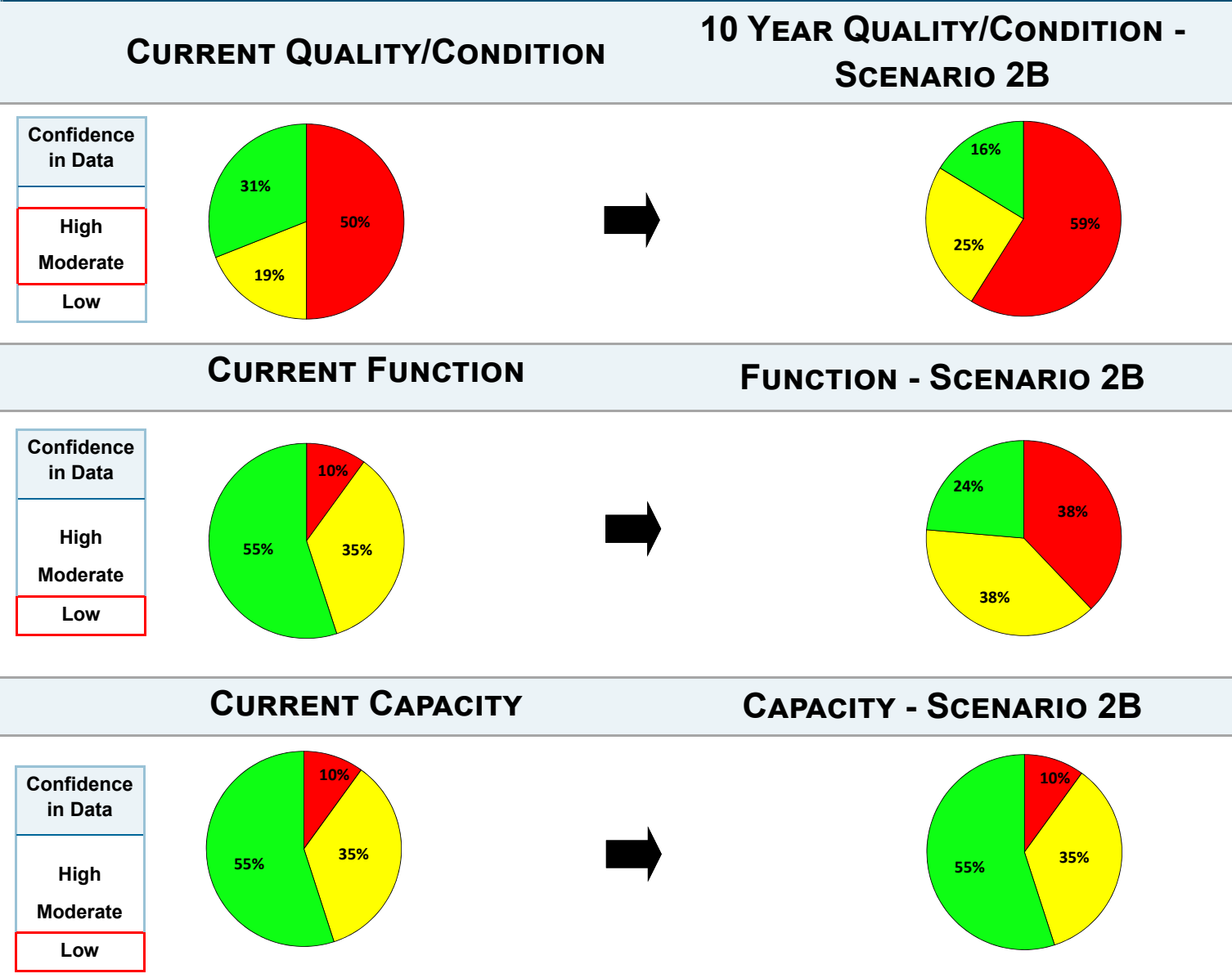
Tillamook County: Roadways & Traffic



FUNDING SCENARIO 2B – WITH ADDITIONAL LOCAL REVENUES (GO BOND FOR 10 YEARS & TRANSIENT LODGING TAX)

This Funding Scenario Summary shows the current and projected service levels, budget and expenditure profiles for the current Long Term Financial Plan balanced to the Asset Management Plan.

OVERALL ASSET PROVISION - FUNDING SCENARIOS



FUNDING DESCRIPTION

Good Fair Poor

- ⇒ Current condition/function/capacity
- ⇒ Scenario 2A – No additional local revenues
- ⇒ Scenario 2B - With Additional Local Revenues (GO Bond & Transient Lodging Tax)

The County uses a "Mix of Fixes" asset management strategy. Long term inadequate resources to manage the paved and gravel roads now requires a substantial initial investment to rehabilitate County roads and provide adequate preventive maintenance to ensure those roads in Good condition do not deteriorate. Recent addition of local funding will be targeted at high volume arterial roads and critical safety (functional) needs such as inadequate sight distance or inadequate signage. While an improvement, overall funding over 10 years is insufficient. The lifecycle and 10 year costs are what is determined that needs to be spent annually to maintain the current levels of service for the asset class and prevent further decline in service levels. The available funding reflects the budgeted funding allocation for the category. Only 44% of lifecycle needs are being funded.

SUMMARY OF ASSET COSTS

LONG TERM - LIFECYCLE COSTS

Life Cycle Gap it is estimated that there will be an average annual funding shortfall of **\$3,711,000** each year over the whole of life of the Roadways & Traffic asset class. This is based on the depreciation value from the Asset Register.

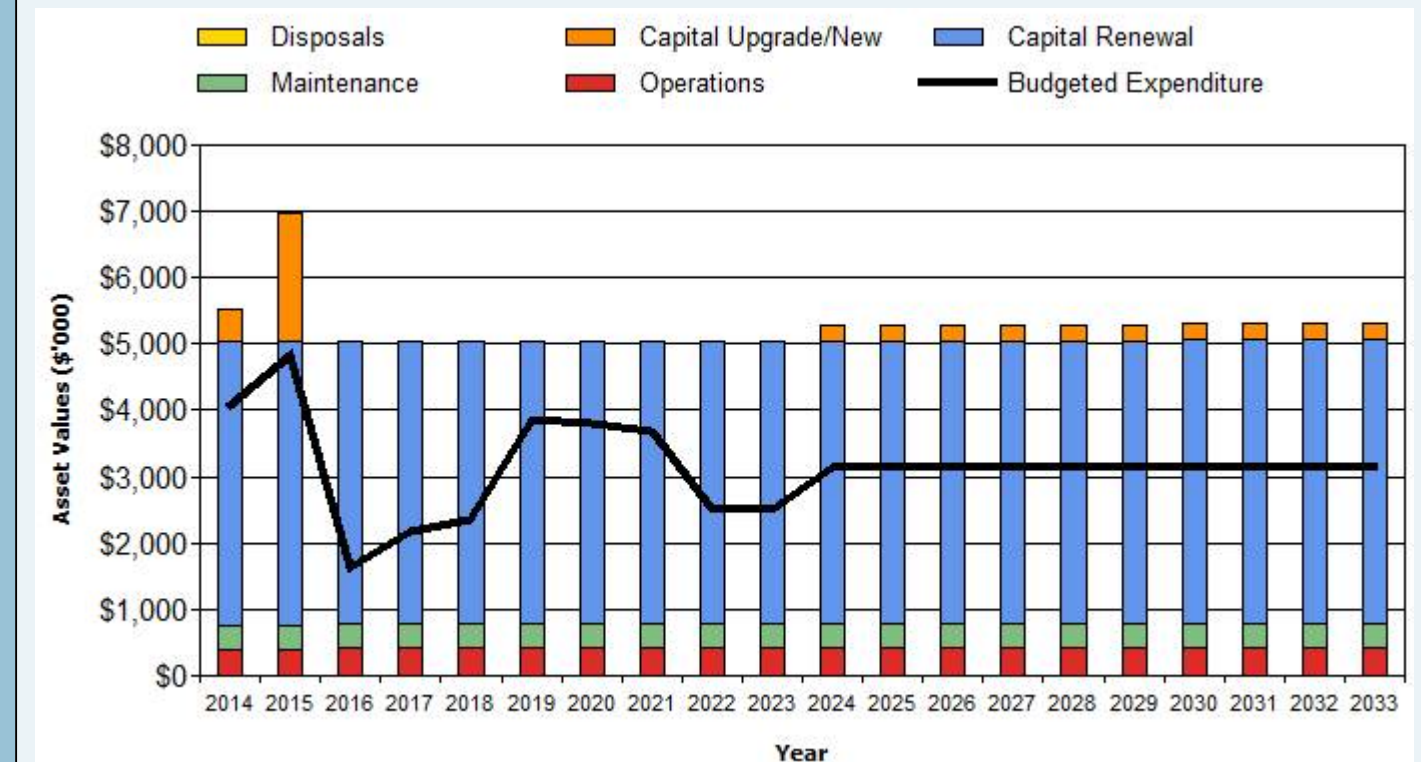
Lifecycle Cost (annually)	\$6,614,000
Lifecycle Available Funding (annually)	\$2,902,000
Lifecycle Gap (annually)	-\$3,711,000
Lifecycle Financing Indicator	44%

MEDIUM TERM - 10 YEAR FINANCIAL PLANNING PERIOD

It is estimated that there will be an average annual funding shortfall of **\$2,149,000** each year over the next 10 years to maintain the current level of service for the Roadways & Traffic asset class.

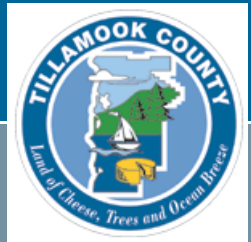
10 Year Cost (annually)	\$5,052,000
10 Year Available Funding (annually)	\$2,902,000
10 Year Gap (annually)	-\$2,149,000
10 Year Financing Indicator	57%

20 Year Projected Operating & Capital Expenditure



Source: NAMS PLUS2 Roadways_2014_With Add Local Revenue (Where no bars displayed the projected expenditure for this funding type is \$0)

Tillamook County: Roadways & Traffic



FUNDING SCENARIO 2— CURRENT INVESTMENT LEVEL

OUTCOMES & STRATEGIC OBJECTIVES

- Preserve the condition of paved roads so they do not fall into disrepair and require early replacement or reconstruction to ensure value for money expended.
- Ensure safety and minimize unpaved local road costs by blading and graveling every other year.

MANAGEMENT ACTIVITIES

- 1101 - Pothole Repair
- 1102 - Surface Blading
- 1104 - Shoulder Maintenance
- 1105 - Brooming
- 1150 - New Base/Sub Base
- 1151 - New Oil Mat (Gravel)
- 1152 - Oil Seal Coat (Pavement)
- 1153 - Paving less than 2 in.
- 1154 - Paving
- 1181 - Road Conditions

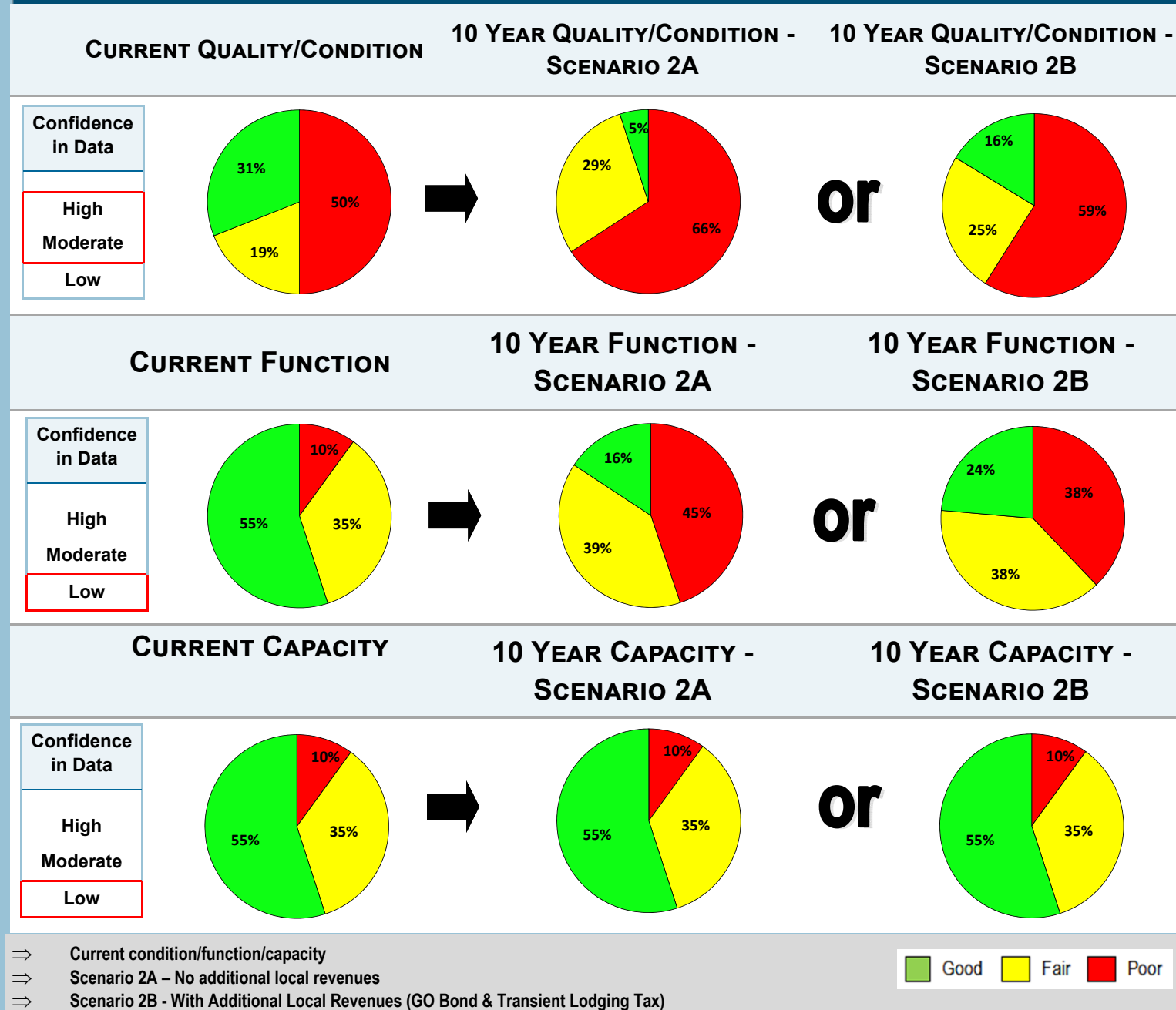
RISKS & RESPONSES

- Insufficient funding
- Insufficient staffing levels
- Lack of timely maintenance
- Poor design
- Wet climate/storm damage
- Poor drainage
- Insufficient utility inspection
- Traffic loads
- Lack of enforcement
- Heavy vehicle loading
- Vegetation impact
- Poor construction

RISK MANAGEMENT STRATEGY

- Communicate reduced level of service
- Fill pot holes and pave based on road classification and available revenues
- Focus on higher volume roads
- Grade gravel roads
- Transfer jurisdiction to other agencies
- Evaluate on a case basis the

OVERALL ASSET PROVISION - FUNDING SCENARIOS



ASSETS IN GOOD / FAIR CONDITION

50% Current → 38% Scenario 2A **or** 41% Scenario 2B



ASSETS IN POOR CONDITION

50% Current → 62% Scenario 2A **or** 59% Scenario 2B



Dashboard Document Control



Document ID: Tillamook County - Roadways & Traffic

Version No.	Creation Date	Revision Details	Author	Reviewer	Approver
V2 140207	29 Jan 2014	Creation of Dashboard with information provided by PBS and Tillamook County; (4 Feb 2014) applied edits provided by PBS via email on 1 Feb 2014. Updated risks &	KA, CL	PBS, JRA	
V3 140212	12 Feb 2014	Updates to C/F/C and NAMS outputs. Edits as per comments from PBS (received 11 Feb 2014)	CL		
V4 1402019	17 Feb 2014	Applied multiple formatting, and data changes per "Review with Client" edit document provided. Updated pie charts and figures to reflect the 2 scenarios	KA, CL		
V5 140307	7 Mar 2014	Update capacity pie chart to reflect no change over 10 years	CL		
V6 140313	13 Mar 2014	Final edits following client review—font size & color	PBS		

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