

A winter scene with a snow-covered road, a utility pole, and evergreen trees under a clear blue sky. The text is overlaid on the image.

Nevada County Road Maintenance and Capital Improvement Plan Fiscal Year 2016-2021

Nevada County Department of
Public Works
January 2017

Purpose of the CIP Presentation

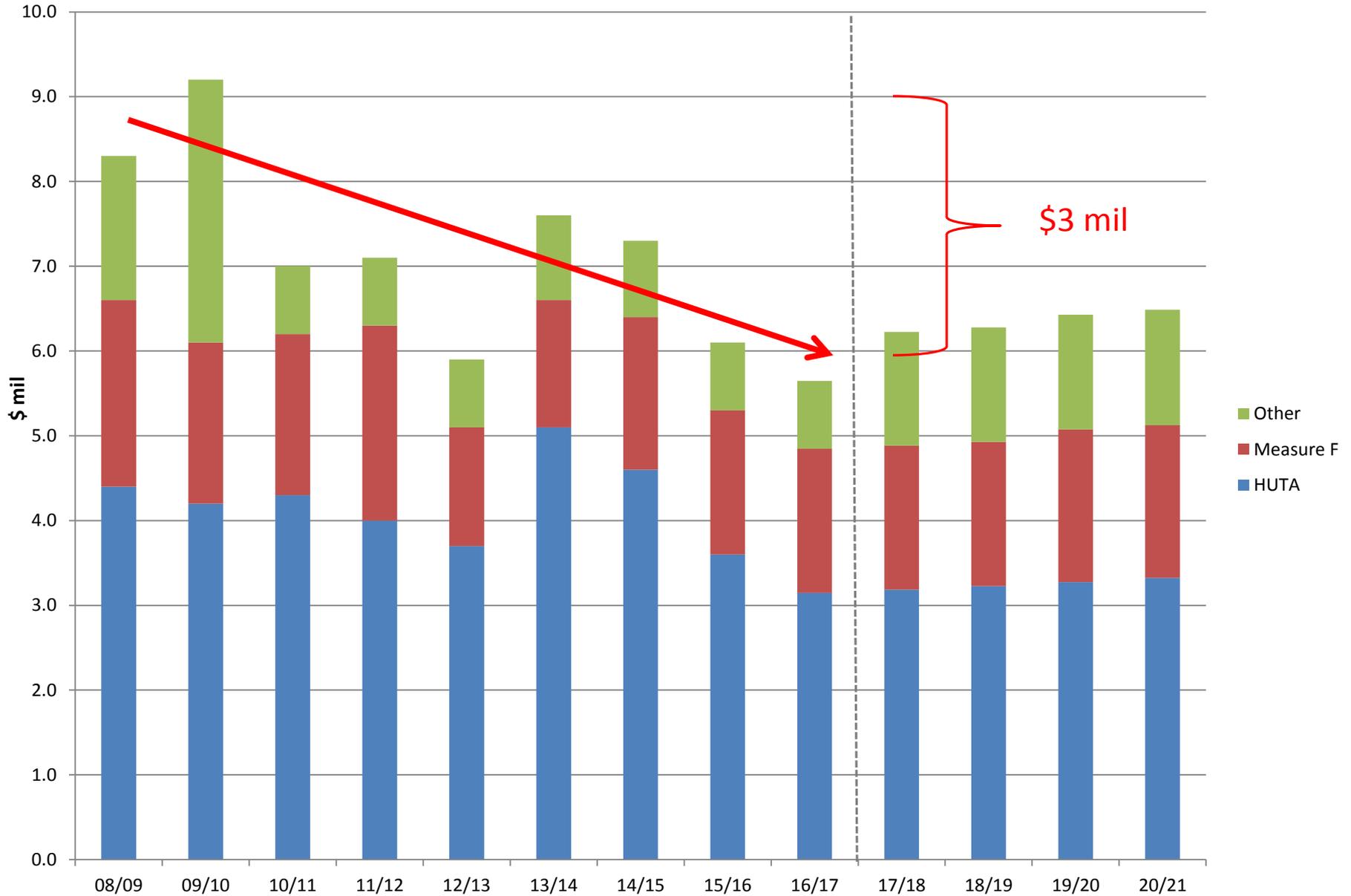
- Provide an update on current road revenue and expenditures
- Review current maintenance and capital funding priorities and recommendations
- Provide an opportunity for input and direction on priorities prior to budget preparation

Overview of Maintained Mileage System

- **560 miles of County maintained road (distance of I-5 between Redding and Disneyland). Approximately 1500 to 1800 miles of private roads.**
- **Of the 560 miles:**
 - **39% are unpaved**
 - **59 miles maintained in road maintenance districts (PRDs or CSAs)**
 - **50 bridges and 40 large culverts**
 - **Less than 2 miles of pedestrian facilities**
- **Historically maintained by 29 permanent roads maintenance staff and up to 15 temporary/seasonal workers**
- **3rd lowest traffic fatality rate of rural counties**
- **Top 10 counties as far as pavement condition**

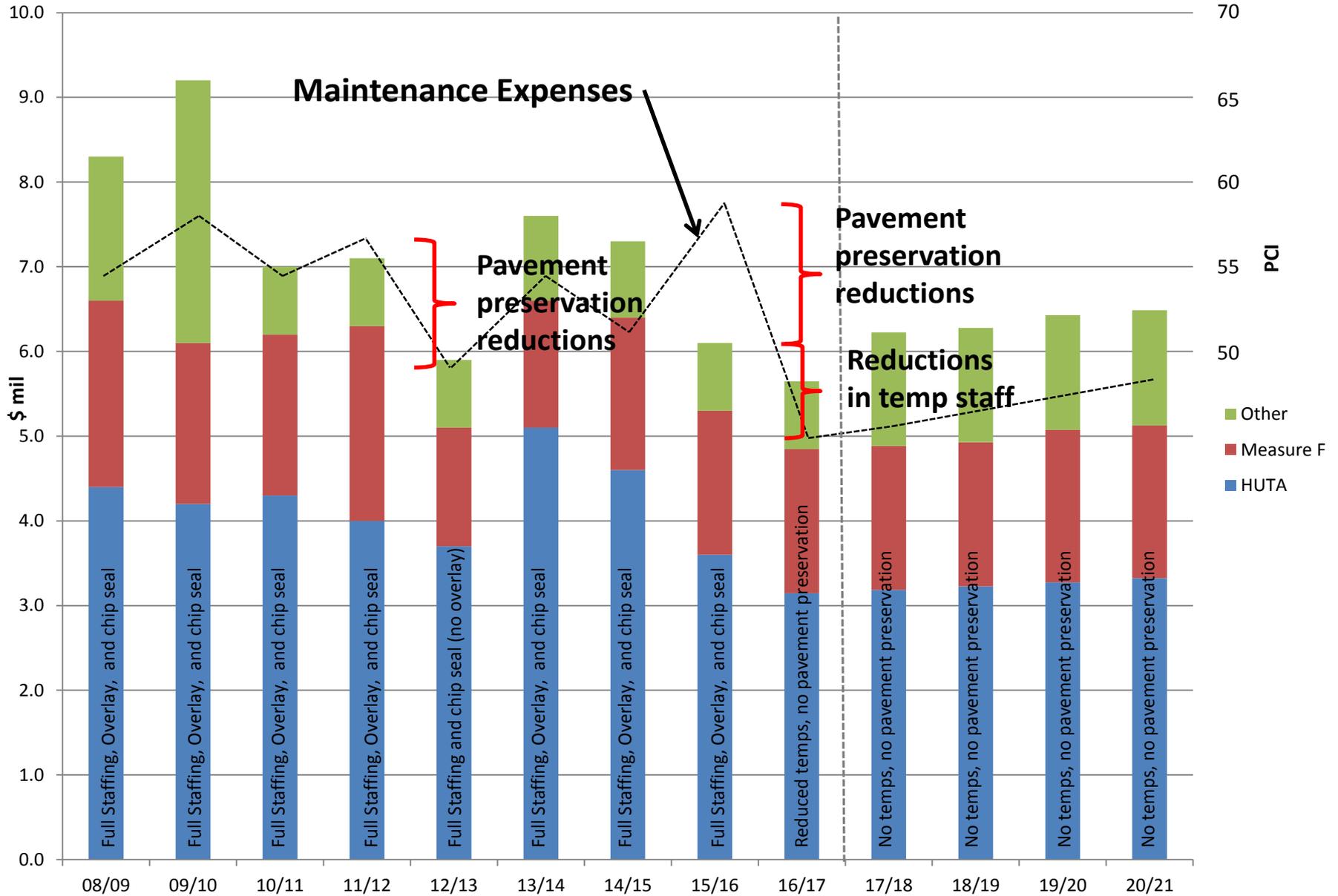
Maintenance Revenue

DPW Roads Maintenance Revenues

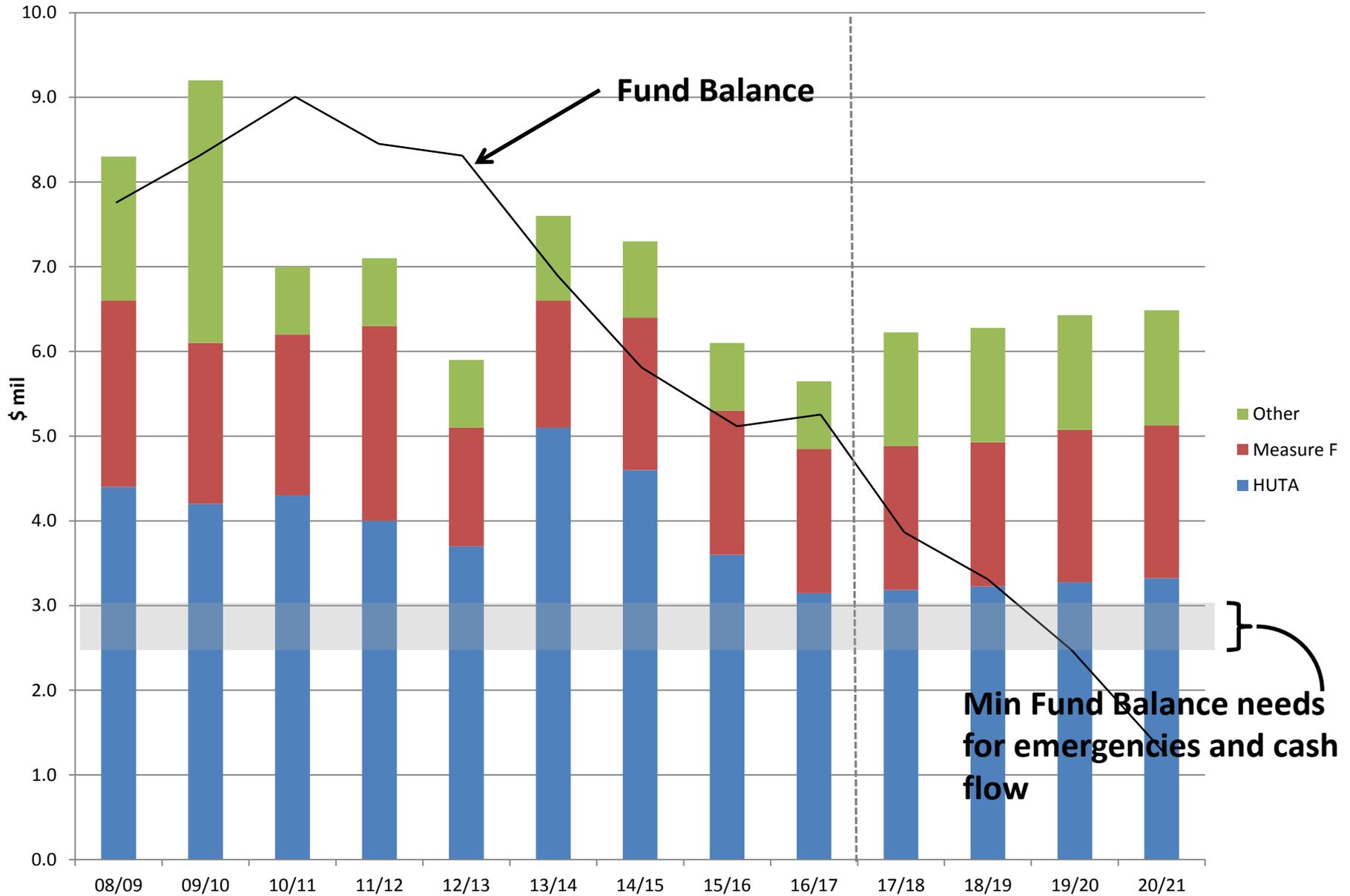


Maintenance Expenses

DPW Roads Maintenance Revenues and Expenses



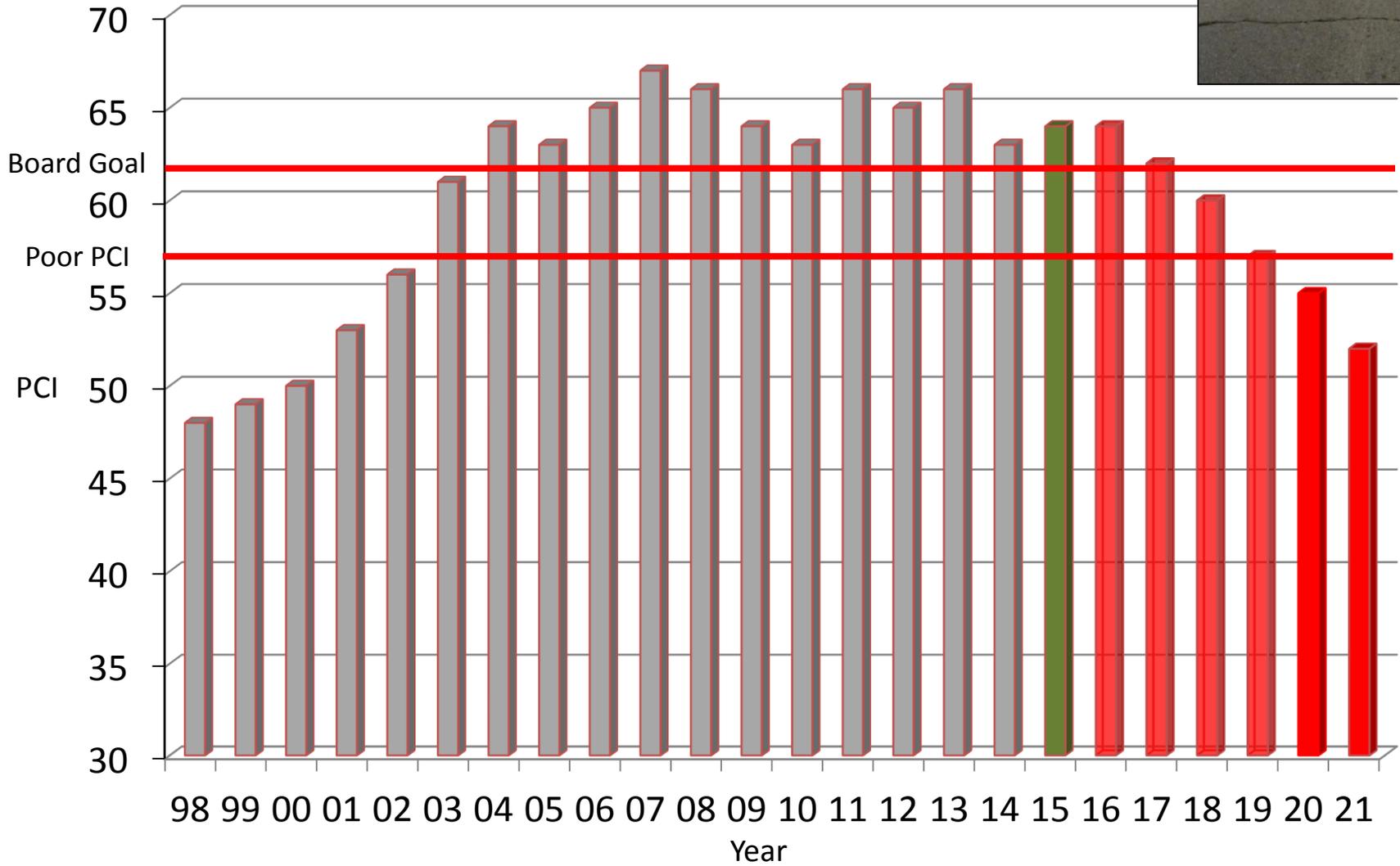
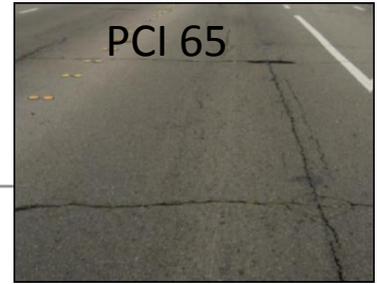
DPW Roads Maintenance Revenues and Fund Balance



Pavement Condition Index

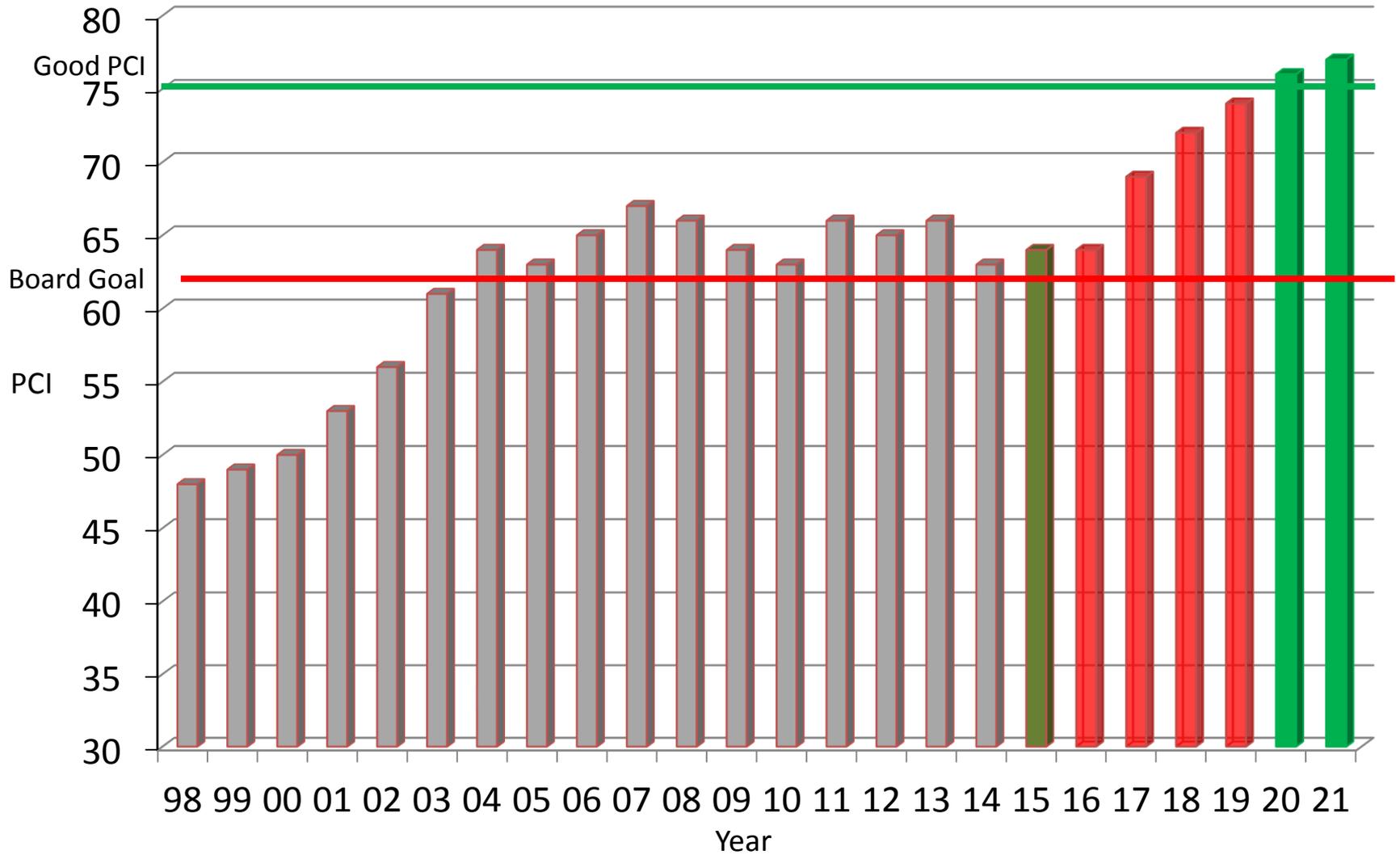
CONDITION CATEGORY	PAVEMENT CONDITION INDEX (PCI)		GENERAL TREATMENTS TRATEGY
	Upper Limit	Lower Limit	
Excellent	100	86	Do Nothing/Corrective Maintenance
Good	85	75	Preventative Maintenance
At Risk	74	58	Resurface
Poor	57	40	Rehabilitation
Failed	39	0	Reconstruction

Nevada County PCI 1998 - 2021



Nevada County PCI

1998 – 2021 with Frazier – Beall Bill



Summary

Continued reduction in historic gas tax revenue in fiscal year 2017/18

- No annual overlays or chipseals programmed after 2015, resulting in long term degradation in pavement condition
- Elimination of seasonal maintenance staff
- Continue to defer equipment maintenance and replacement
- Continued basic pavement maintenance (safety activities, pothole repair, drainage repairs, vegetation removal)
- Continued response to service requests but limited ability to do proactive road widenings and improvements (Newtown, Cooper, Scotts Valley, Mooney Flat, Pasquale, Banner Mountain Trail)

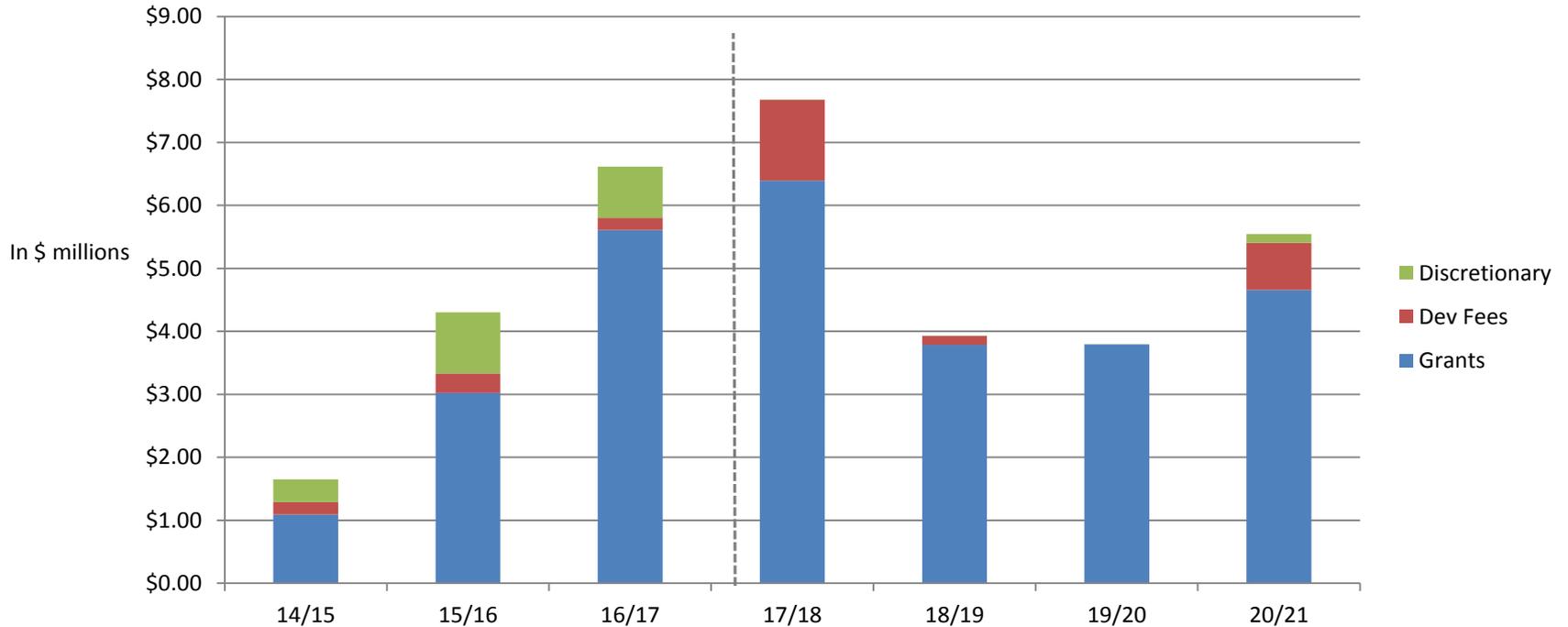
Continued State and Federal Grants for capital projects

Capital Projects

(All Amounts in Millions)

Capital Expenditures

<u>Function</u>	<u>15/16</u>	<u>16/17</u>	<u>17/18</u>	<u>18/19</u>	<u>19/20</u>	<u>20/21</u>
Safety/Shoulder	\$1.49	\$2.63	\$3.02	\$0.64	\$0.28	\$0.61
Bridges	\$0.78	\$3.98	\$4.49	\$3.52	\$3.89	\$4.71
<u>Circulation</u>	<u>\$1.47</u>	<u>\$1.10</u>	<u>\$2.23</u>	<u>\$0.24</u>	<u>\$0.00</u>	<u>\$0.99</u>
Total	\$3.74	\$7.71	\$9.74	\$4.40	\$4.17	\$6.31



Project	Type	Amount
<u>2017 Capital Projects</u>		
Nevada City Sidewalk	Sidewalk Extension	\$421,000
Retrac Bridge	Bridge Replacement	\$1,541,000
2017 Countywide Striping Program	Safety Striping	\$240,000
2017 Thermoplastic Striping Program	Safety Striping	\$362,000
High Friction Surface Treatment	Safety Road Surfacing	\$751,000
SR 49 Emergency Vehicle Preemption	Signal Preemption	\$136,000
Garden Bar at Wolf Creek (Sanford)	Bridge Rehabilitation	\$1,020,000
Garden Bar at Wolf Creek (Railcar)	Bridge Replacement	\$1,364,000
McCourtney at Rock Creek	Bridge Replacement	\$1,364,000
2017 PRD and CSA Microsurface	PRD / CSA Road Preservation	\$506,000
Combie, Rule 20A, Phase 3	Utility Undergrounding	\$1,185,000
TOTAL – 2017 Capital Projects		\$8,890,000

Project	Type	Amount
<u>Key Future Capital Projects</u>		
6 Bridges (2018-2021)	Bridge	\$17,887,000
2018 Thermoplastic Striping Program	Safety Striping	\$377,000
Road Safety Audit – Phase 2 (2018)	Safety - Signage	\$1,121,000
Combie widening (2018)	Safety / Widening	\$3,479,000
Donner Pass Road Maintenance (2020)	Safety / Maintenance / Widening	\$10,390,000

Maintenance Expenditures

2015/16 Measure F

- \$259,800 – Pavement Preservation
- \$167,900 – Shoulder/Drainage Maintenance
- \$519,996 – Roadside Clearing and Brushing
- \$686,097 – General Maintenance
- \$ 16,282 – Annual Striping
- \$1,650,075

Board Input and Direction

DPW Roads Maintenance Revenues, Fund Balance, Expenses, and Pavement Condition

	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
Revenue														
HUTA		\$4.4	\$4.2	\$4.3	\$4.0	\$3.7	\$5.1	\$4.6	\$3.6	\$3.1	\$3.2	\$3.2	\$3.3	\$3.3
Measure F		\$2.2	\$1.9	\$1.9	\$2.3	\$1.4	\$1.5	\$1.8	\$1.7	\$1.7	\$1.7	\$1.7	\$1.8	\$1.8
Other		\$1.7	\$3.1	\$0.8	\$0.8	\$0.8	\$1.0	\$0.9	\$0.8	\$0.8	\$1.3	\$1.4	\$1.4	\$1.4
Total		\$8.3	\$9.2	\$7.0	\$7.1	\$5.9	\$7.6	\$7.3	\$6.1	\$5.6	\$6.2	\$6.3	\$6.4	\$6.5
Fund Balance														
HUTA		\$1.3	\$2.3	\$2.1	\$2.0	\$2.8	\$2.7	\$2.0	\$2.0	\$1.7	\$1.7	\$1.5	\$1.5	\$1.3
New HUTA		\$1.5	\$1.5	\$1.5	\$1.9	\$1.7	\$1.5	\$1.5	\$1.5	\$1.3	\$0.9	\$0.6	\$0.3	\$0.0
Measure F		\$0.4	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Fed Forest		\$0.0	\$0.3	\$0.7	\$0.8	\$0.5	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Exchange		\$0.4	\$0.4	\$0.4	\$0.4	\$0.5	\$0.5	\$0.5	\$0.5	\$0.3	\$0.1	\$0.2	\$0.3	\$0.0
RSTP		\$3.3	\$2.7	\$3.0	\$2.8	\$2.9	\$1.9	\$1.9	\$1.1	\$1.9	\$1.1	\$0.8	\$0.3	\$0.0
Prop 1B		\$0.8	\$0.6	\$1.3	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total		\$7.7	\$8.2	\$9.0	\$8.5	\$8.4	\$6.9	\$5.9	\$5.1	\$5.2	\$3.9	\$3.2	\$2.5	\$1.3
Maintenance Expenses		\$6.8	\$7.5	\$6.9	\$7.3	\$5.8	\$6.9	\$6.2	\$7.7	\$5.0	\$5.2	\$5.3	\$5.4	\$5.6
PCI		66	64	63	65	65	66	63	65	63	61	59	55	50
overlays		x	x	x	x		x	x	x					
chip seals		x	x	x	x	x	x	x	x					

DPW Roads Maintenance Revenues, Fund Balance, Expenses, and Pavement Condition

