

# MAINTENANCE, PRESERVATION, & SEISMIC (“MPS”) PRESENTATION—MARCH 20. 2017



# WORK GROUP #1

- **Sen. Winters**
  - **Sen. Girod**
  - **Rep. Lively**
  - **Rep. Bentz**

# PREAMBLE

- Thanks to Victor Dodier, Patrick Brennan, Tim Walker, & Paul Mather for their incredible patience!

WILL OUR  
FUTURE BE  
THIS:



**OR THIS:**



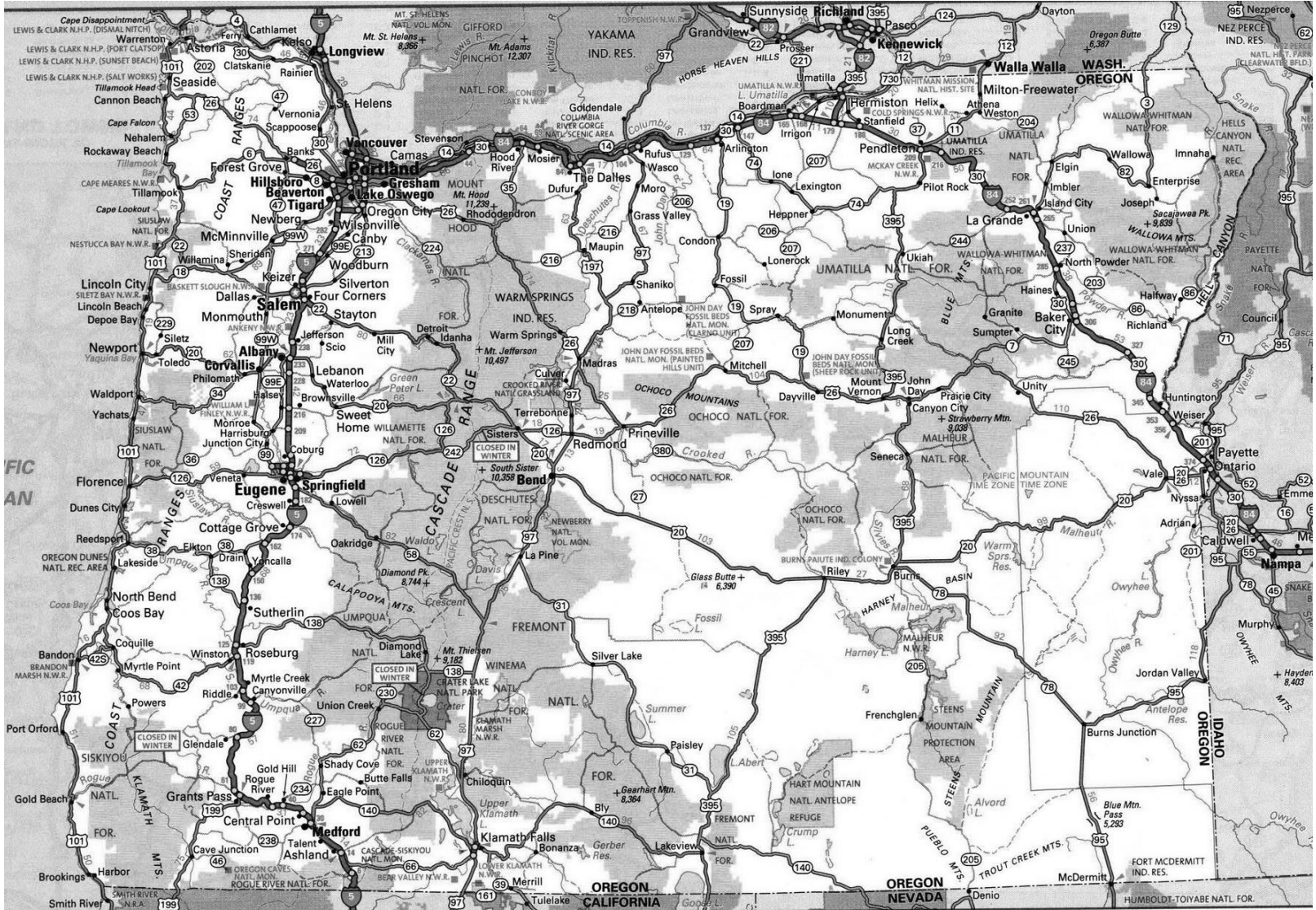
**Lytle Blvd, near Vale**

# OBSERVATIONS:

- 1. Oregon's bridges are old, and the cost of bringing them up to standard is in the billions.**
- 2. Cities and Counties are currently converting or planning to convert paved roads to gravel as road funding shrinks.**
- 3. The State system is in better condition than our cities and counties, but without additional investment, the system's inexorable decline will accelerate.**
- 4. Seismic investment is modest at best, so the State remains at enormous risk, both as to loss of life and as to risk of losing a huge chunk of its GDP because without transportation systems people cannot reach hospitals, products cannot be transported, and businesses will simply leave. (mention Ontario/Nyssa/Vale).**



# TO STATE THE OBVIOUS, ROADS ARE ESSENTIAL



# BRIDGES ARE INDISPENSABLE



Fremont Bridge, Portland



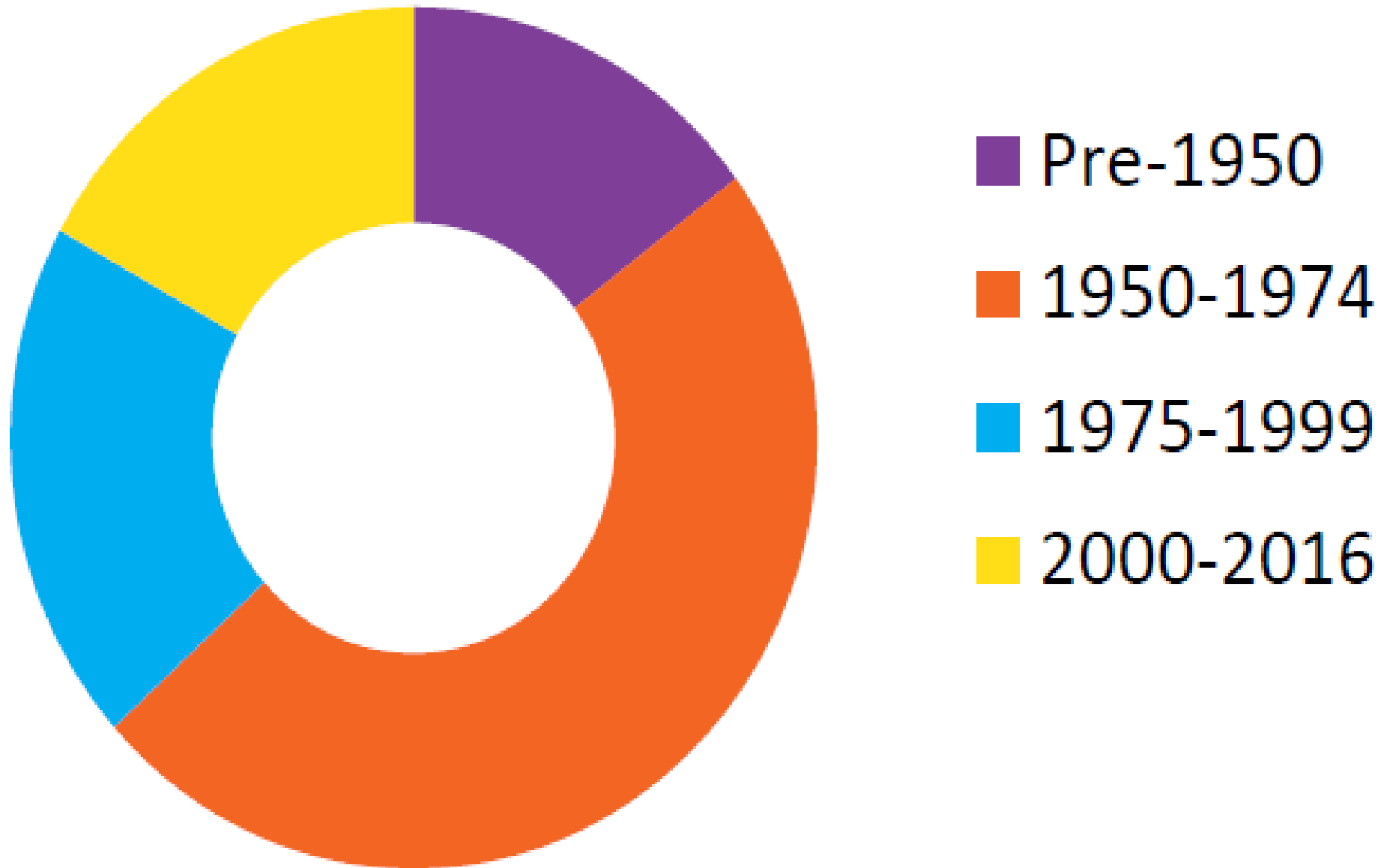
Marquam Bridge, Portland



Ferry St. Bridge, Eugene

BUT  
OREGON'S  
ROADS & BRIDGES  
ARE OLD!

# AGE OF OREGON'S BRIDGES



AND OREGON'S  
HIGHWAYS AND  
ROADS ARE  
FAILING:







OR 47, near Banks





OR 47, near Banks





2014/08/05 10:57

Hwy 380, Prineville

WHAT BRIDGE  
IS THIS?



Fremont Bridge, Portland







OR 99E, Portland



OR 99E, Portland

DEFINITIONS  
HELPFUL IN  
UNDERSTANDING  
DESCRIPTIONS OF  
ROAD CONDITIONS

# PAVEMENT CONDITION CLASSIFICATIONS:

- **Very Good**
- **Good**
- **Fair**
- **Poor**
- **Very Poor**

# VERY GOOD

- Stable, no cracking, no patching, and no deformation.
- Excellent riding qualities.
- Nothing would improve the roadway at this time.



# GOOD

- Stable, minor cracking, generally hairline and hard to detect.
- Minor patching and possibly some minor deformation evident.
- May have dry or light colored appearance.
- Very good riding qualities.
- Rutting may be present but is less than  $\frac{1}{2}$ ".



# FAIR

- Generally stable, minor areas of structural weakness evident.
- Cracking is easier to detect, patched but not excessively.
- Deformation more pronounced and easily noticed.
- Ride qualities are good to acceptable.
- Rutting may be present but is less than  $\frac{3}{4}$ ".



# POOR

- Areas of instability, marked evidence of structural deficiency, large crack patterns (alligatoring), heavy and numerous patches, deformation very noticeable.
- Riding qualities range from acceptable to poor.
- When rutting is present, rut depth is greater than  $\frac{3}{4}$ ".





# VERY POOR

- Pavement in extremely deteriorated condition.
- Numerous areas of instability.
- Majority of section showing structural deficiency.
- Ride quality is unacceptable (probably should slow down).
- Requires complete reconstruction or major rehabilitation.



# “PRESERVATION”

## Definition:

**Paving, striping, reconstruction and other activities designed to add useful life to existing highways, bridges, pavements, culverts and other assets.**



# “MAINTENANCE”

## Definition:

Keeping existing highways safe and usable for the traveling public through such means as repair, snow and ice removal, vegetation clearance, striping, signal repair and lighting.



# “MODERNIZATION”

## Definition:

Improvements that add capacity to the system.



# “SEISMIC”

## Definition

**Efforts to prepare for and upgrade bridges and landslides to be resilient to seismic events.**



# “DISINVESTMENT”

## Definition

**Failing to invest as the asset is used up. The consumption of capital investment without reinvestment.**



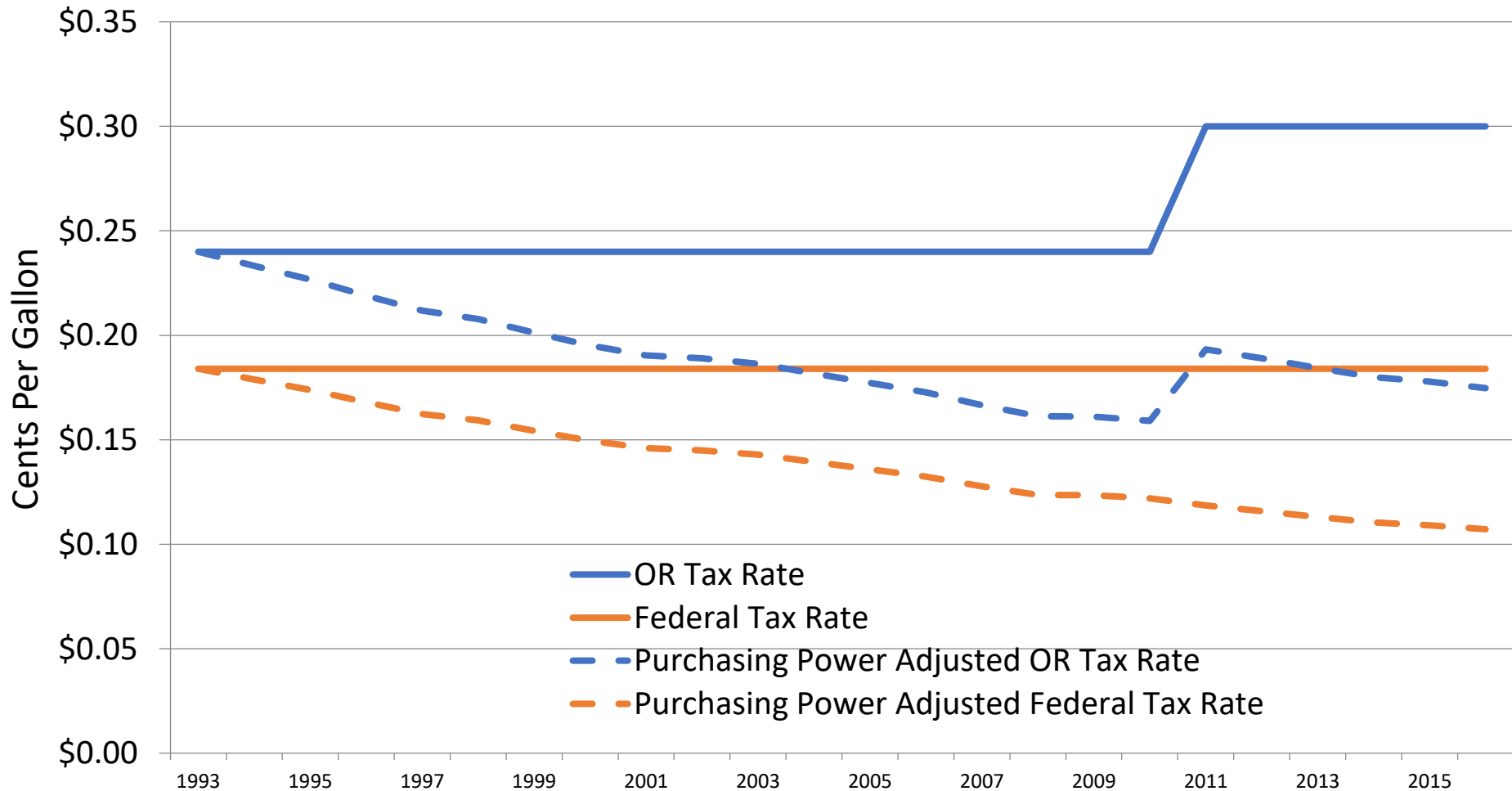
SADLY, OREGON HAS FAILED TO  
KEEP UP THE INVESTMENT  
NEEDED TO KEEP ALL OF ITS  
TRANSPORTATION ASSETS IN  
FAIR CONDITION  
AKA “DISINVESTMENT”

ALTHOUGH OREGON HAS  
RAISED REGISTRATION &  
SEVERAL OTHER FEES OVER  
THE 24 YEARS SINCE 1993,  
IT HAS RAISED THE GAS TAX  
ONLY ONCE (IN 2009) IN  
THOSE 24 YEARS.



# Gas Taxes Haven't Kept Up With Inflation

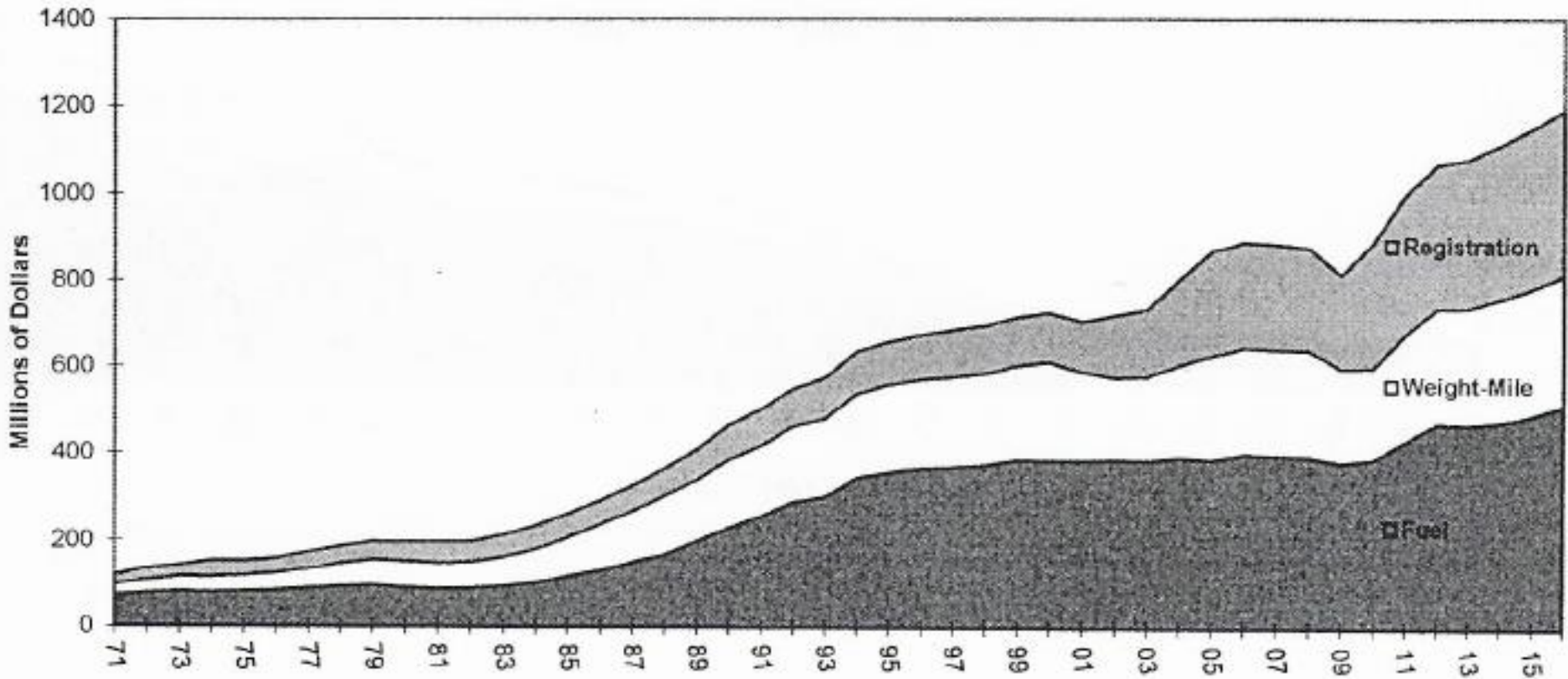
## Federal and State Gas Taxes, Nominal and Inflation-Adjusted



# OREGON'S GAS TAX HISTORY

- **1919** Oregon enacts nation's first gasoline tax of one cent per gallon. Other states (such as Colorado and New Mexico) soon follow Oregon's lead. \$342,000 raised the first year.
- **1921** Gas tax raised from one to two cents by Oregon Legislature.
- **1923** Gas tax raised to three cents a gallon by the legislature.
- **1930** Gasoline tax increased from three to four cents per gallon.
- **1932** Gasoline tax adopted by Federal Government as a way to raise money for roads, thirteen years after Oregon had adopted this idea.
- **1933** Gasoline tax increased from four to five cents per gallon.
- **1943** Cities first shared in the distribution of collected gasoline taxes. Previously, only counties received a portion of the money collected. Cities' share established at 5 percent.
- **1947** Counties allocation from the state highway fund increased to 19% by the legislature. City allocation increased to 10 percent.
- **1949** Gasoline tax raised from five cents to six cents a gallon.
- **1967** Gasoline tax raised from six to seven cents a gallon, the first raise in 18 years. County apportionment increased to 20 percent and city apportionment increased to 12 percent.
- **1979** County apportionment of gas tax increased to 20.07% with city apportionment increased to 12.17% to make up for revenue loss due to repeal of fuel tax refunds to counties and cities.
- **1981** Gas tax increased from 7 cents to 8 cents per gallon.
- **1984** Gas tax increased to 9 cents per gallon.
- **1985** Gasoline tax increased to 10 cents per gallon.
- **1986** Gas tax increased to 11 cents per gallon.
- **1987** Gasoline tax increased to 12 cents per gallon.
- **1988** Gasoline tax increased to 14 cents per gallon.
- **1989** Gasoline tax increased to 16 cents per gallon.
- **1991** Gasoline tax increased to 20 cents per gallon.
- **1992** State gasoline tax increased to 22 cents per gallon.
- **1993** State gasoline tax increased to 24 cents per gallon.
- **2009** Jobs and Transportation Act sets date for raising fuels taxes.
- **2011** State gasoline tax increased to 30 cents per gallon.

# MOTOR VEHICLE AND FUEL TAX REVENUE



# MOTOR VEHICLE AND FUEL TAX REVENUES

Gross Tax Collections\* (millions)

Fiscal Year	Fuel Tax		Weight-Mile Tax		Registration & License		Total Collections	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	Growth
1970-71	72.7	60.2%	25.9	21.4%	22.2	18.4%	120.8	
1971-72	78.6	58.1%	30.4	22.5%	26.3	19.4%	135.3	12.0%
1972-73	83.4	58.1%	34.1	23.8%	26.0	18.1%	143.5	6.1%
1973-74	80.4	52.7%	36.2	23.7%	36.0	23.6%	152.6	6.3%
1974-75	82.7	54.1%	37.0	24.2%	33.1	21.7%	152.8	0.1%
1975-76	86.1	54.2%	39.3	24.7%	33.5	21.1%	158.9	4.0%
1976-77	90.6	52.1%	43.3	24.9%	40.0	23.0%	173.9	9.4%
1977-78	95.7	51.1%	50.8	27.1%	40.7	21.7%	187.2	7.6%
1978-79	99.2	49.8%	56.5	28.4%	43.3	21.8%	199.0	6.3%
1979-80	92.4	46.6%	60.1	30.3%	45.9	23.1%	198.4	-0.3%
1980-81	88.8	44.8%	58.8	29.6%	50.8	25.6%	198.4	0.0%
1981-82	90.6	45.4%	60.0	30.1%	48.9	24.5%	199.5	0.6%
1982-83	96.6	45.2%	65.2	30.5%	51.9	24.3%	213.7	7.1%
1983-84	104.9	44.6%	76.4	32.5%	54.1	23.0%	235.4	10.2%
1984-85	118.6	45.2%	89.1	34.0%	54.7	20.8%	262.4	11.5%
1985-86	132.0	45.1%	105.6	36.1%	55.1	18.8%	292.7	11.5%
1986-87	151.5	46.3%	116.6	35.6%	59.0	18.0%	327.1	11.8%
1987-88	168.3	46.1%	135.0	37.0%	61.6	16.9%	364.9	11.6%
1988-89	200.6	48.9%	139.5	34.0%	69.7	17.0%	409.9	12.3%
1989-90	231.1	49.5%	155.3	33.3%	80.5	17.2%	467.0	13.9%
1990-91	257.6	51.2%	161.1	32.0%	84.5	16.8%	503.2	7.8%
1991-92	290.2	52.8%	173.2	31.5%	86.2	15.7%	549.6	9.2%
1992-93	302.3	52.5%	179.1	31.1%	94.5	16.4%	575.9	4.8%
1993-94	345.9	54.4%	191.4	30.1%	98.6	15.5%	635.9	10.4%
1994-95	357.8	54.3%	201.3	30.6%	99.5	15.1%	658.6	3.6%
1995-96	368.1	54.5%	203.3	30.1%	104.1	15.4%	675.6	2.6%
1996-97	370.2	53.9%	206.9	30.1%	109.3	15.9%	686.4	1.6%
1997-98	375.6	53.9%	209.9	30.1%	111.3	16.0%	696.9	1.5%
1998-99	387.9	54.1%	215.7	30.1%	113.1	15.8%	716.7	2.8%
1999-00	386.4	53.2%	225.4	31.0%	114.6	15.8%	726.4	1.4%
2000-01	386.2	54.7%	202.7	28.7%	117.6	16.6%	706.5	-2.7%
2001-02	388.8	53.9%	187.9	26.0%	144.7	20.1%	721.4	2.1%
2002-03	387.0	52.7%	192.4	26.2%	154.7	21.1%	734.1	1.8%
2003-04	394.0	49.0%	211.0	26.3%	198.5	24.7%	803.5	9.5%
2004-05	388.8	44.7%	237.9	27.3%	243.4	28.0%	870.1	8.3%
2005-06	401.4	45.1%	243.9	27.4%	245.0	27.5%	890.3	2.3%
2006-07	398.8	45.0%	243.1	27.4%	244.0	27.5%	885.9	-0.5%
2007-08	395.6	45.1%	243.4	27.7%	238.4	27.2%	877.4	-1.0%
2008-09	382.0	46.9%	215.8	26.5%	217.5	26.7%	815.3	-7.1%
2009-10	389.3	43.8%	210.1	23.6%	290.3	32.6%	889.7	9.1%
2010-11	432.2	43.2%	245.4	24.5%	323.1	32.3%	1,000.7	12.5%
2011-12	472.6	44.3%	264.5	24.8%	330.7	31.0%	1,067.8	6.7%
2012-13	469.9	43.5%	267.0	24.7%	342.7	31.7%	1,079.6	1.1%
2013-14	476.0	42.8%	282.8	25.4%	353.5	31.8%	1,112.3	3.0%
2014-15	491.7	42.7%	291.0	25.3%	367.7	32.0%	1,150.4	3.4%
2015-16	513.1	43.0%	300.5	25.2%	378.4	31.7%	1,192.0	3.6%

\* Exclusive of dedicated revenue such as recreational vehicle fees and custom license plates.

# VALUE OF INVESTING NOW!

## 5 LEVELS OF PAVEMENT CONDITIONS:

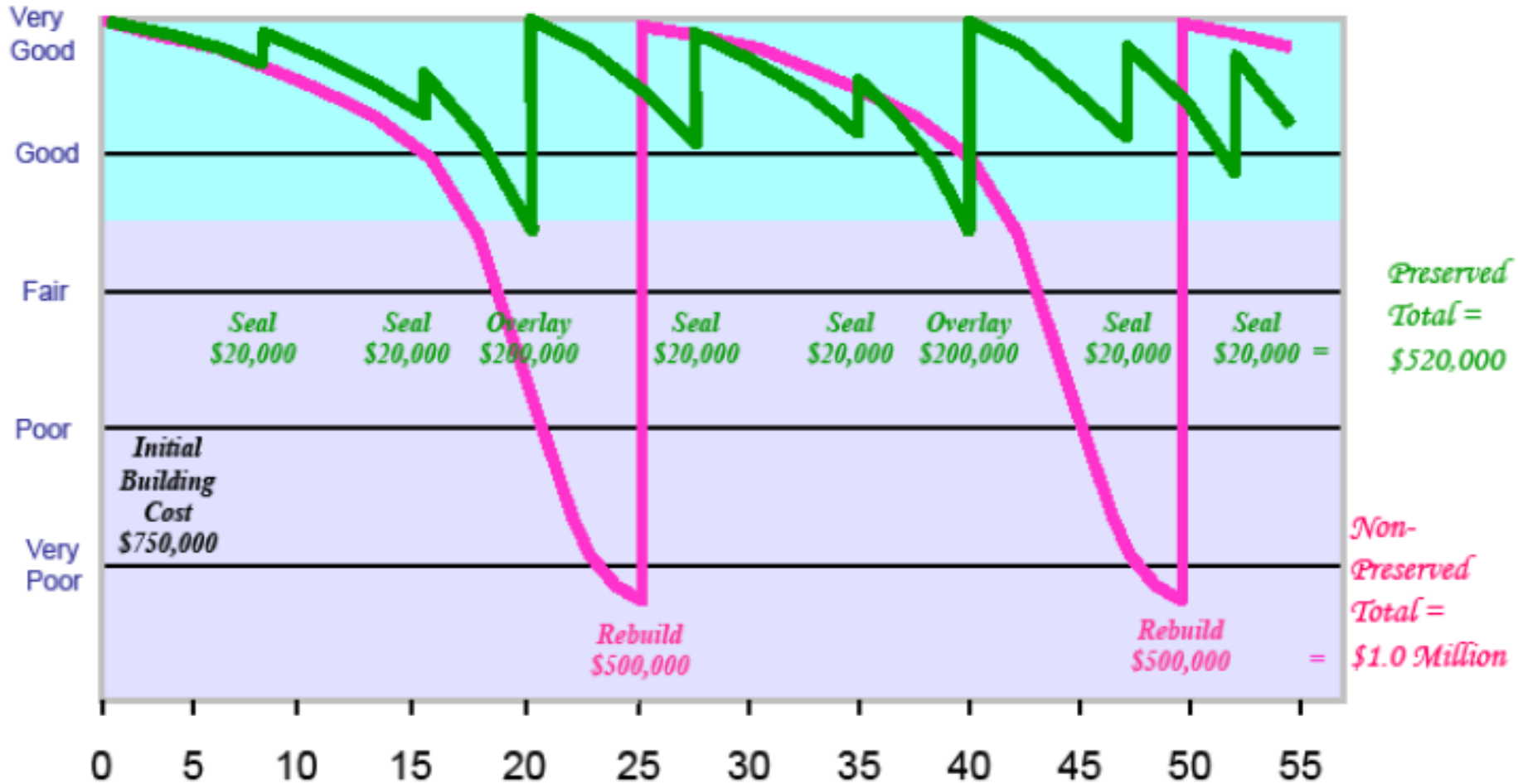
TIME: STATE, COUNTY, CITY	CONDITION:	COST:	COST OF FAILING TO INVEST (PER YEAR):
	• Very Good		
5 years	↕		\$5,000/yr
	• Good		
7 years	↕		\$15,000/yr
	• Fair		
5 years	↕	\$15	\$30,000/yr
	• Poor		
5 years	↕		\$75,000/yr
	• Very Poor		

# Preserved vs Non-Preserved Road

## Cost per Mile for 2 Lane Road Over 55 years

Pavement Condition

Preserved Non-Preserved



*The poorer the road, the greater the liability.*

Pavement Age (Years)

WHAT WE ARE  
SPENDING NOW

BEFORE WE LOOK AT WHAT  
EACH JURISDICTION SPENDS  
NOW,  
HOW DO WE KNOW THAT  
MONEY CURRENTLY BEING  
SPENT BY  
THE STATE, COUNTIES, AND  
CITIES  
IS BEING SPENT WISELY?



PERHAPS BY LOOKING AT  
THOSE ACCOUNTABILITY  
PROTECTIONS CURRENTLY IN  
PLACE.

# **STATE SPENDING ACCOUNTABILITY FRAMEWORK**

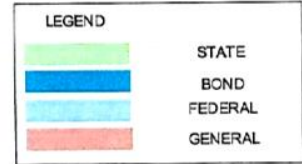
- 1. Ways & Means Budget Process**
- 2. The Oregon Transportation Commission Oversight**
- 3. Legislative Committee Inquiries**
- 4. Oregon Secretary of State Audits**
- 5. User (Driver) Complaints**
- 6. Federal Oversight of Projects**
- 7. The Press**

CURRENT  
STATE  
BUDGET

# SOURCES AND USES OF FUNDS

## DEPARTMENT OF TRANSPORTATION

2017-2019 Governor's Budget

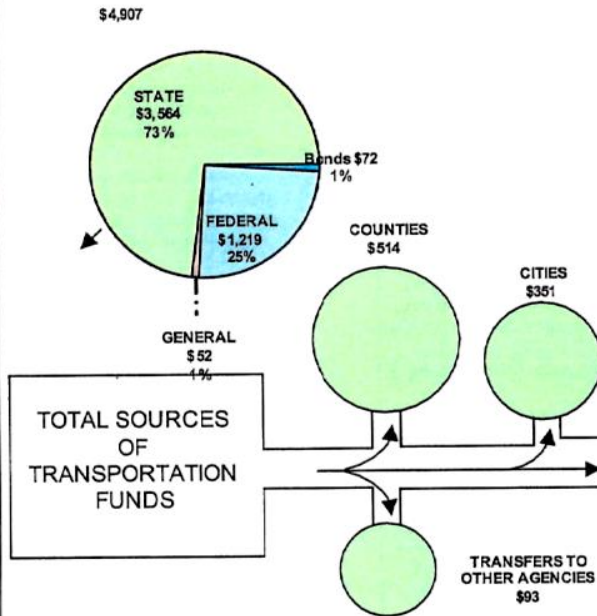


### SOURCES OF FUNDS

### USES OF FUNDS

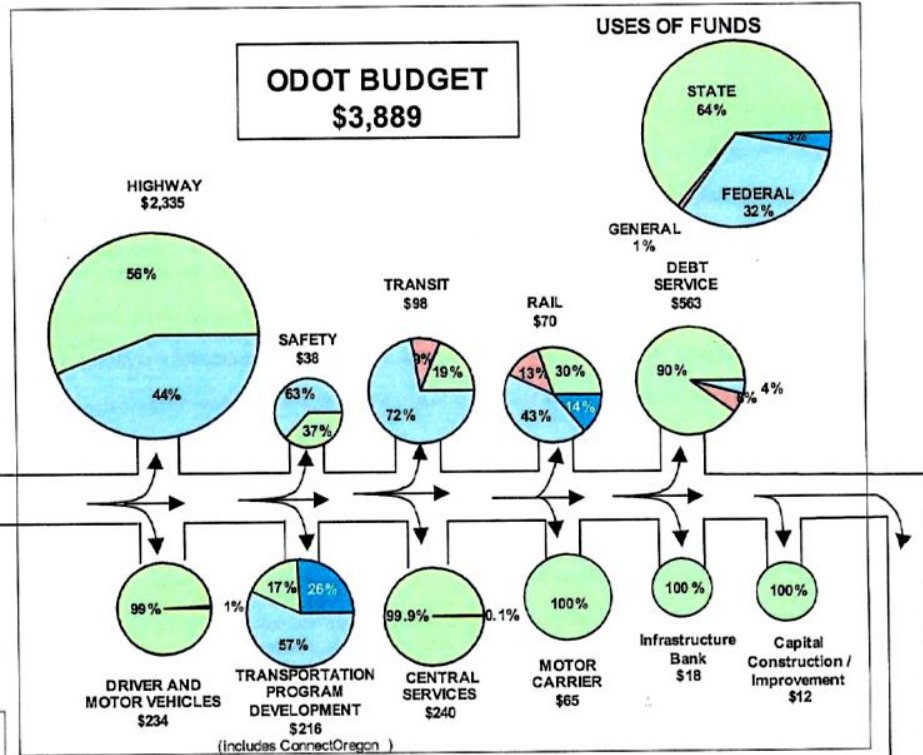
#### TOTAL AVAILABLE REVENUE

REVENUES	
Beginning Balance	\$ 486
Motor Fuels Tax	1,162
Federal Funds	1,219
Weight Mile Tax	633
Driver and Vehicle Licenses	720
Transportation License. & Fees	102
Transfers to ODOT	272
General Fund	52
Lottery Proceeds	121
Bond/COP Sales	72
Sales and Charges for Service	22
All Other Revenue	46
<b>TOTAL REVENUE</b>	<b>\$ 4,907</b>

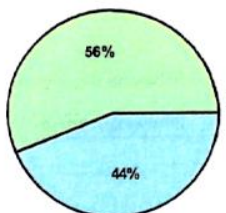


#### ODOT BUDGET \$3,889

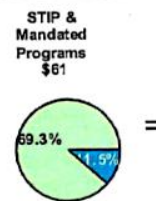
#### USES OF FUNDS



#### HIGHWAY BUDGET \$2,335



Category	Amount
Maintenance	\$516
Special Programs	\$355
Preservation	\$254
Operations	\$223
Bridge	\$270
Modernization	\$325
Local Government	\$392



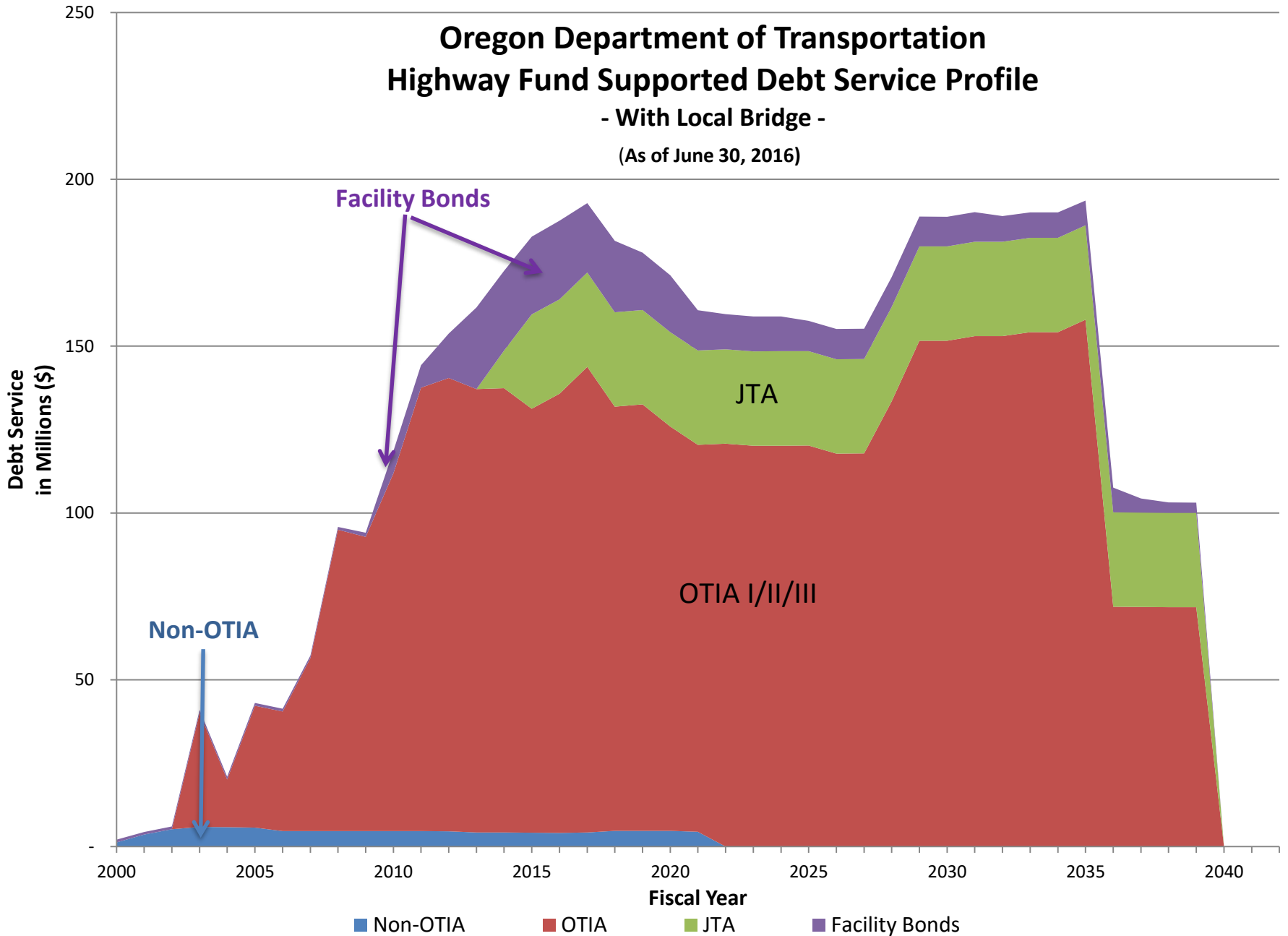
Category	Amount
STIP & Mandated Programs	\$61
STIP & Mandated Highway Programs	\$32
Rail/Transit/Safety	\$9
Trans Program Dev. (bond proceeds)	\$7
Infrastructure Bank	\$2
Other Dedicated Programs	\$11



# Oregon Department of Transportation Highway Fund Supported Debt Service Profile

- With Local Bridge -

(As of June 30, 2016)



## State Highway Fund Supported Debt Service by Bond Program

State Highway Fund Supported Debt Service by Bond Program									ODOT Share	Local Share <sup>3</sup>
Fiscal Year	Non-OTIA/JTA	Facility Bonds (DMV and T-Bldg)	State Radio Project <sup>1</sup>	OTIA I & II	OTIA III (State Only)	OTIA III Local	JTA <sup>2</sup>	Total	ODOT's Debt Service (Amount not available for other ODOT uses)	Local Govt. Debt Service (Amount not available for other City and County uses)
2018	\$ 4,729,816	\$ 4,964,513	\$ 16,492,474	\$ 32,499,566	\$ 85,682,525	\$ 19,730,138	\$ 44,052,897	\$ 208,151,928	\$ 171,681,476	\$ 36,470,452
2019	\$ 4,735,280	\$ 4,290,029	\$ 12,915,765	\$ 33,389,019	\$ 85,629,959	\$ 19,544,660	\$ 54,643,825	\$ 215,148,536	\$ 178,687,892	\$ 36,460,644
2020	\$ 4,712,591	\$ 4,198,362	\$ 12,899,811	\$ 29,960,850	\$ 85,197,280	\$ 16,682,439	\$ 61,294,925	\$ 214,946,257	\$ 183,099,019	\$ 31,847,238
2021	\$ 4,493,490	\$ 3,735,050	\$ 8,320,966	\$ 29,173,241	\$ 83,333,943	\$ 14,007,415	\$ 66,741,775	\$ 209,805,881	\$ 181,211,845	\$ 28,594,036
2022		\$ 3,200,250	\$ 7,287,699	\$ 24,668,317	\$ 88,790,432	\$ 17,766,896	\$ 66,384,175	\$ 208,097,768	\$ 177,996,714	\$ 30,101,054
2023		\$ 3,203,250	\$ 7,240,526	\$ 18,993,595	\$ 86,421,411	\$ 24,978,005	\$ 67,029,700	\$ 207,866,487	\$ 173,391,685	\$ 34,474,802
2024		\$ 3,197,250	\$ 7,224,507	\$ 18,992,044	\$ 86,268,981	\$ 24,973,686	\$ 66,995,825	\$ 207,652,293	\$ 173,182,585	\$ 34,469,708
2025		\$ 3,197,500	\$ 5,865,329	\$ 18,997,648	\$ 86,103,099	\$ 24,965,793	\$ 66,955,325	\$ 206,084,695	\$ 171,620,077	\$ 34,464,617
2026		\$ 3,198,500	\$ 5,863,661	\$ 18,152,030	\$ 84,314,067	\$ 24,962,019	\$ 69,373,075	\$ 205,863,352	\$ 171,825,318	\$ 34,038,033
2027		\$ 3,200,000	\$ 5,859,420	\$ 18,174,471	\$ 84,126,514	\$ 24,955,224	\$ 69,315,325	\$ 205,630,954	\$ 171,588,495	\$ 34,042,459
2028		\$ 3,201,750	\$ 5,754,981	\$ 18,487,466	\$ 104,897,635	\$ 19,230,173	\$ 53,704,588	\$ 205,276,592	\$ 176,802,686	\$ 28,473,906
2029		\$ 3,198,500	\$ 5,664,355	\$ 26,351,364	\$ 114,911,571	\$ 19,231,083	\$ 32,291,350	\$ 201,648,223	\$ 169,241,458	\$ 32,406,765
2030		\$ 3,195,250	\$ 5,663,747	\$ 25,104,578	\$ 134,899,221		\$ 32,291,100	\$ 201,153,896	\$ 188,601,607	\$ 12,552,289
2031		\$ 3,201,750	\$ 4,449,150	\$ 25,535,951	\$ 135,161,703		\$ 32,291,225	\$ 200,639,779	\$ 187,871,803	\$ 12,767,975
2032		\$ 3,202,250	\$ 4,449,150	\$ 25,536,702	\$ 134,404,100		\$ 32,289,175	\$ 199,881,377	\$ 187,113,026	\$ 12,768,351
2033		\$ 3,196,750	\$ 4,449,500	\$ 22,034,591	\$ 138,073,113		\$ 32,288,875	\$ 200,042,829	\$ 189,025,533	\$ 11,017,295
2034		\$ 3,195,250	\$ 4,445,000		\$ 158,321,541		\$ 32,287,213	\$ 198,249,004	\$ 198,249,004	\$ -
2035		\$ 3,197,250	\$ 4,212,500		\$ 159,417,999		\$ 32,290,063	\$ 199,117,811	\$ 199,117,811	
2036		\$ 3,197,250	\$ 4,208,000		\$ 71,895,100		\$ 32,288,700	\$ 111,589,050	\$ 111,589,050	
2037			\$ 4,210,250		\$ 71,844,100		\$ 32,290,700	\$ 108,345,050	\$ 108,345,050	
2038			\$ 3,103,500		\$ 71,796,000		\$ 32,290,200	\$ 107,189,700	\$ 107,189,700	
2039			\$ 3,102,750		\$ 71,741,700		\$ 32,289,075	\$ 107,133,525	\$ 107,133,525	
2040							\$ 27,078,300	\$ 27,078,300	\$ 27,078,300	
2041							\$ 27,077,300	\$ 27,077,300	\$ 27,077,300	
2042							\$ 27,077,100	\$ 27,077,100	\$ 27,077,100	
2043							\$ 27,081,000	\$ 27,081,000	\$ 27,080,984	
2044							\$ -	\$ -	\$ -	

<sup>1</sup> Assumes all State Radio Project debt service is paid by the Highway Fund

<sup>2</sup> 2017 JTA Bonds debt service subject to change. Assumes \$390M net proceeds; 25-year maturity; \$100M at 4% interest rate and \$290M at current interest rates plus 50 bps.

<sup>3</sup> Includes 39.95% of the DMV building ending in 2020, 50% of OTIA 1 & II, 100% of OTIA III Local

# **TOOLS FOR COUNTY ACCOUNTABILITY**

- 1. The “Local Road & Street Questionnaire”**
- 2. The County Budget Process**
- 3. The Statute That Requires That The Money Allocated Be Spent On Roads (ORS 203.035-Fuel Tax Law)**

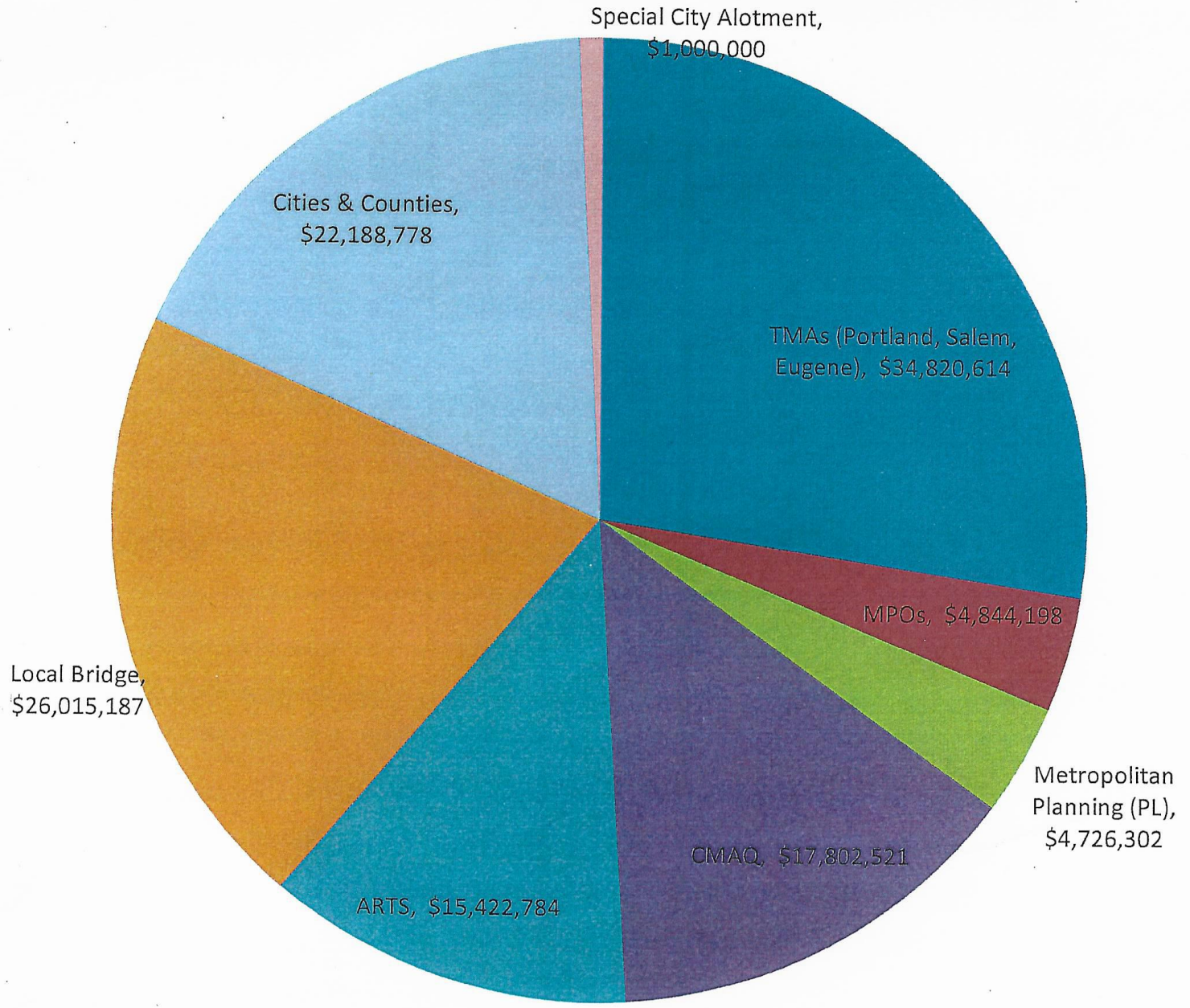
**CURRENT  
COUNTIES  
BUDGET**



## Oregon Counties Existing 2016 State Highway Fund (SHF)

County	Road Mileage	Vehicles	Miles/Vehicles	Existing 2016 SHF
Sherman	447	3,732	0.1197	\$216,476
Gilliam	407	3,589	0.1134	\$207,375
Wheeler	259	2,436	0.1065	\$139,733
Harney	812	11,580	0.0701	\$660,103
Morrow	959	15,999	0.0600	\$914,718
Wallowa	713	12,135	0.0588	\$691,350
Lake	729	13,335	0.0547	\$758,177
Malheur	1,735	36,574	0.0474	\$2,109,598
Grant	488	11,757	0.0415	\$672,122
Baker	905	23,818	0.0380	\$1,363,860
Jefferson	601	27,877	0.0216	\$1,576,191
Wasco	674	32,710	0.0206	\$1,863,437
Umatilla	1,670	92,438	0.0181	\$5,287,865
Union	598	33,907	0.0176	\$1,936,525
Crook	472	34,367	0.0137	\$1,928,481
Klamath	869	85,381	0.0102	\$4,889,810
Tillamook	328	34,862	0.0094	\$1,985,530
Douglas	1,141	135,254	0.0084	\$7,737,713
Columbia	538	65,029	0.0083	\$3,700,018
Linn	1,103	142,304	0.0078	\$8,113,324
Curry	225	30,623	0.0074	\$1,746,769
Coos	526	75,830	0.0069	\$4,323,831
Hood River	203	30,741	0.0066	\$1,756,276
Lincoln	339	54,206	0.0063	\$3,083,904
Yamhill	669	109,825	0.0061	\$6,254,889
Polk	478	80,351	0.0060	\$4,558,625
Benton	447	81,941	0.0055	\$4,676,446
Josephine	561	105,078	0.0053	\$5,985,059
Clatsop	229	43,845	0.0052	\$2,499,526
Deschutes	937	222,066	0.0042	\$12,487,163
Jackson	962	237,059	0.0041	\$13,485,087
Lane	1,436	368,590	0.0039	\$21,009,786
Marion	1,116	338,960	0.0033	\$19,215,647
Clackamas	1,411	434,650	0.0032	\$24,745,463
Washington	1,394	518,568	0.0027	\$29,349,957
Multnomah	293	730,013	0.0004	\$41,442,925
<b>Total</b>	<b>26,675</b>	<b>4,281,430</b>	<b>0.9226</b>	<b>\$243,373,761</b>

# Annual (FY16) Transportation Funds to Locals



# **TOOLS FOR CITY ACCOUNTABILITY**

- 1. The “Local Road & Street Questionnaire”**
- 2. The County Budget Process**
- 3. The Statute That Requires That The Money Allocated Be Spent On Roads (ORS 203.035-Fuel Tax Law)**

**CURRENT  
CITIES  
BUDGET**

- **\$351 million from gas tax revenue biennially**
- **Some portion of \$392 million from state gas tax funds biennially.**
- **Local tax**

# AMOUNT CURRENTLY BEING SPENT FOR MPS

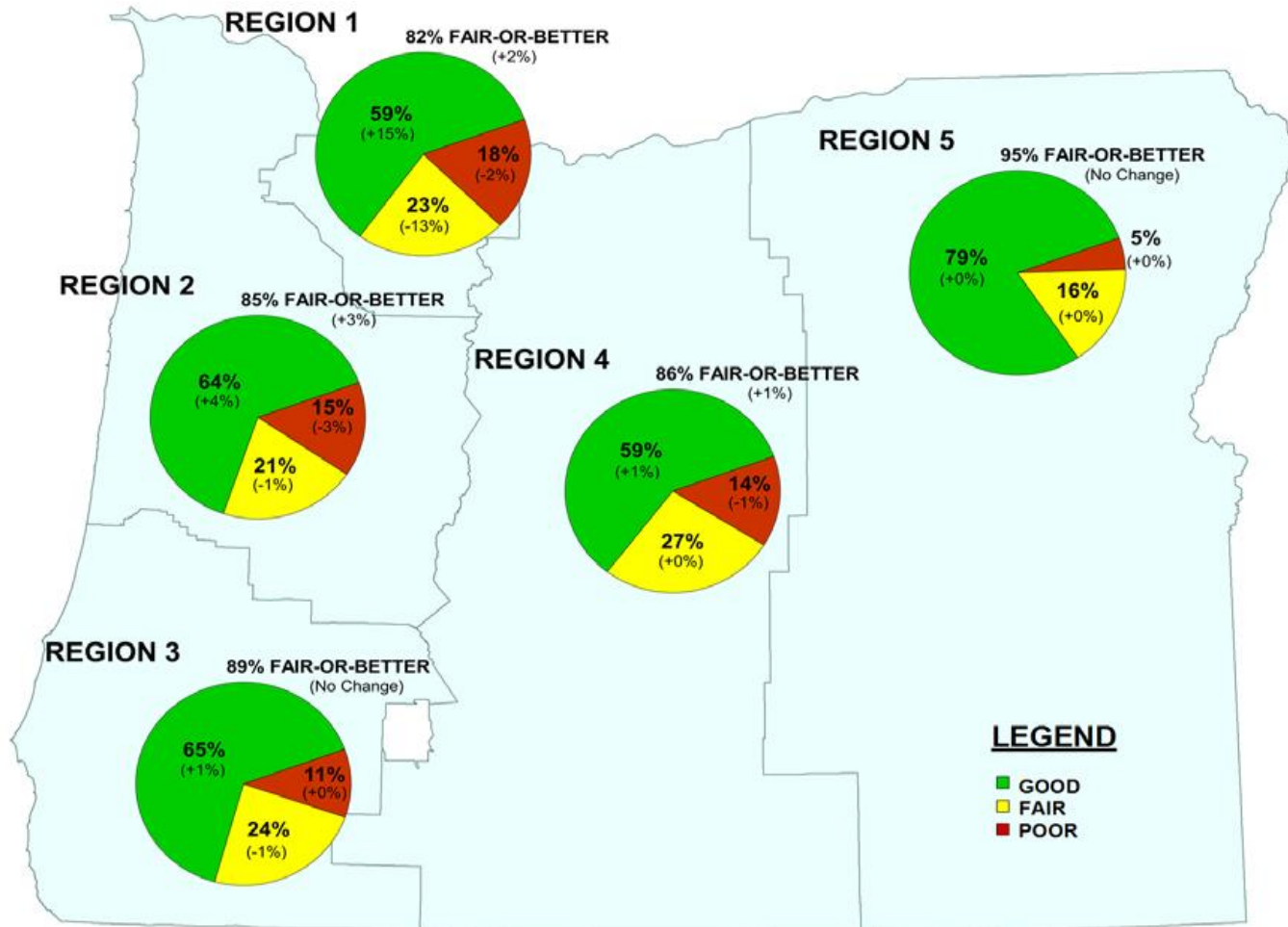
	STATE	COUNTY	CITY
Pavement	\$85 million	\$53.1 million (recent avg)	Included below
Maintenance	\$200 million	\$244.6 million (recent avg)	\$199 million
Bridges	\$85 million	N/A	Included above
Seismic	\$35 million *one-time expenditure	\$0	\$0
Culverts	\$15 million	N/A	Storm water mgmt. included above

WHAT IS THE  
CURRENT CONDITION  
OF OUR STATE'S  
ROADS AND BRIDGES?

# STATE

Roads: 86% in fair condition or better

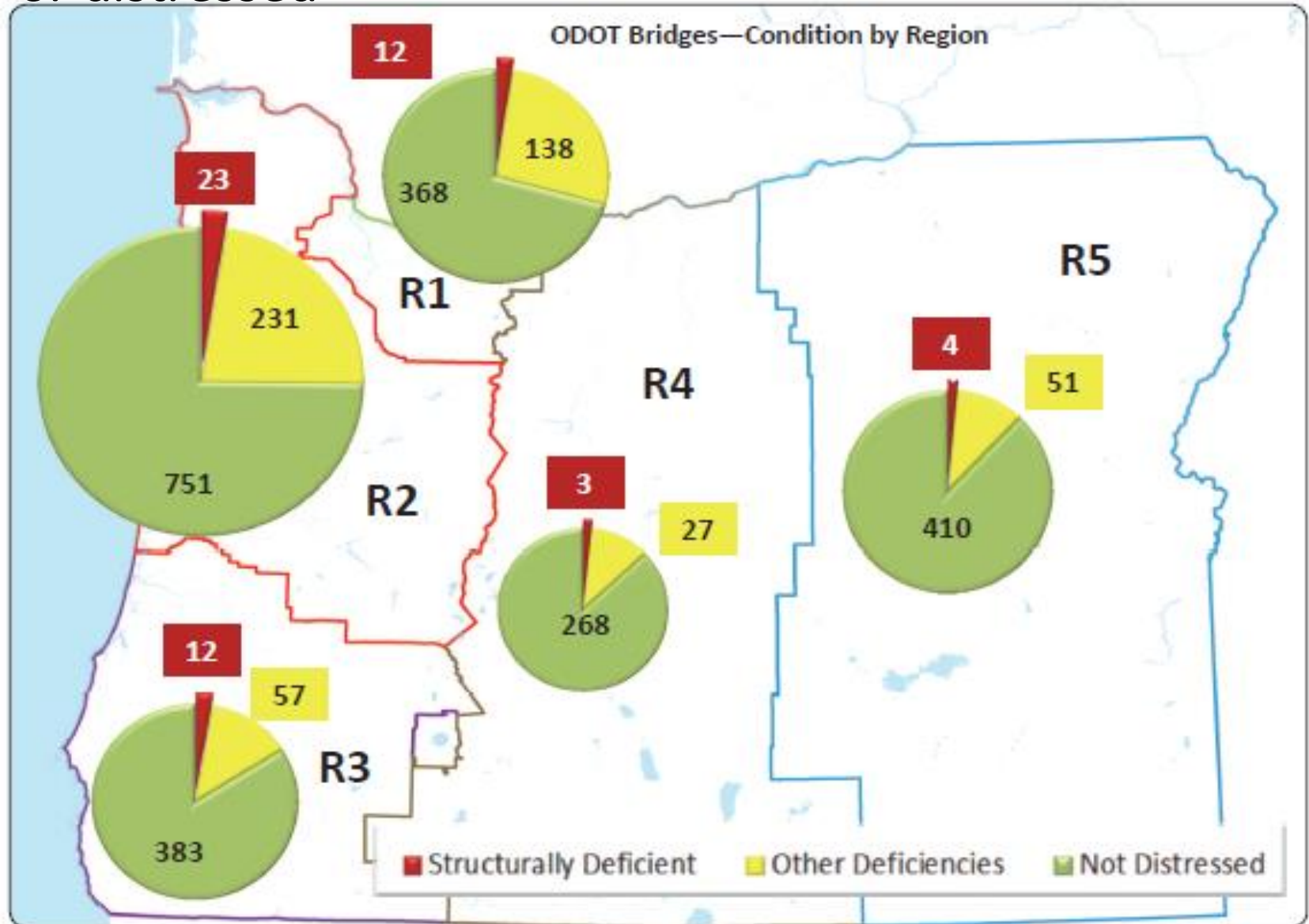
Oregon Pavement Condition by Region, 2016





# STATE

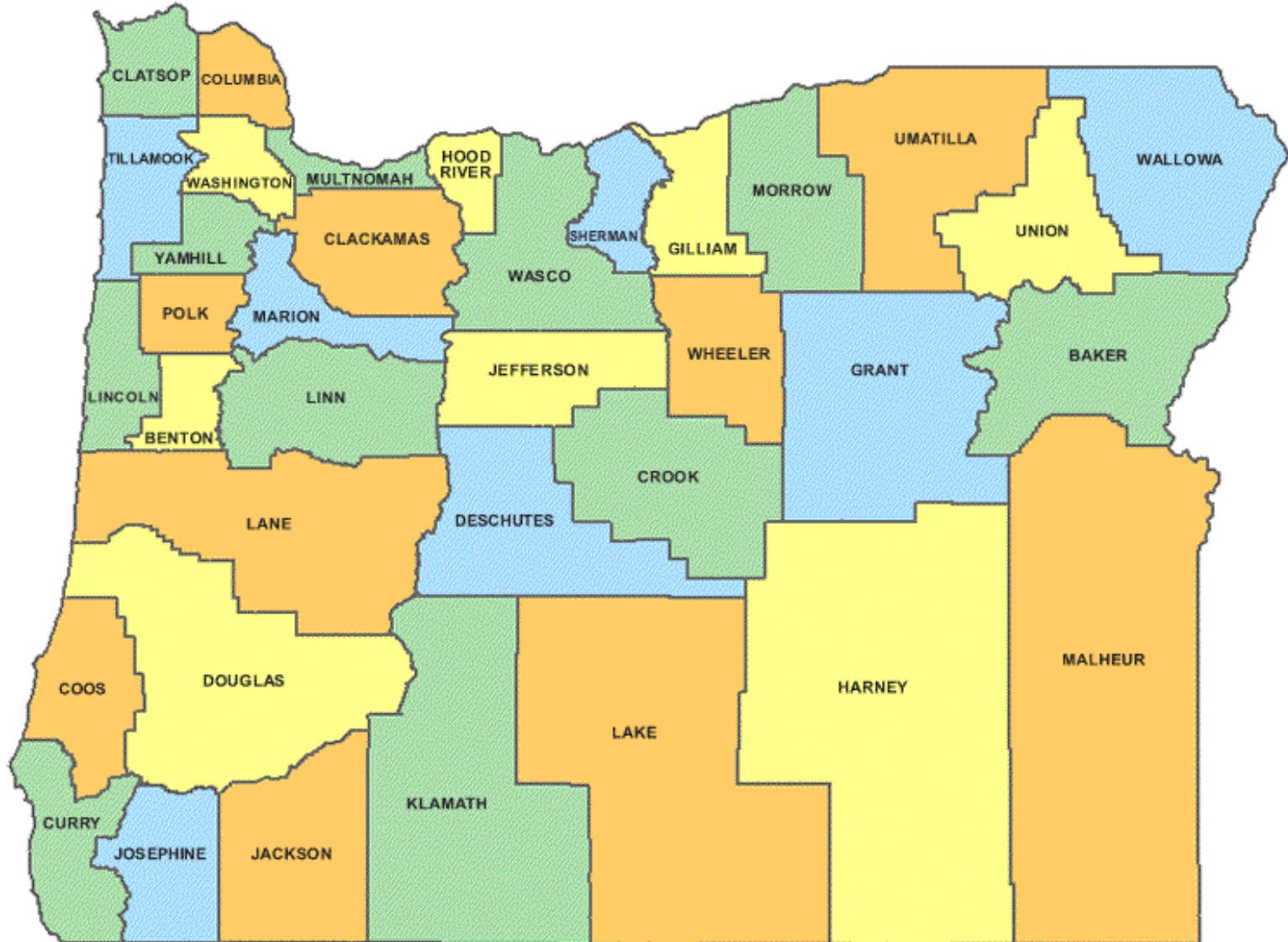
Bridges: 20.5% of state highway bridges are either deficient or distressed



# COUNTIES

Roads: 34.2% in fair condition or worse

Bridges: 6% of all county bridges in poor condition



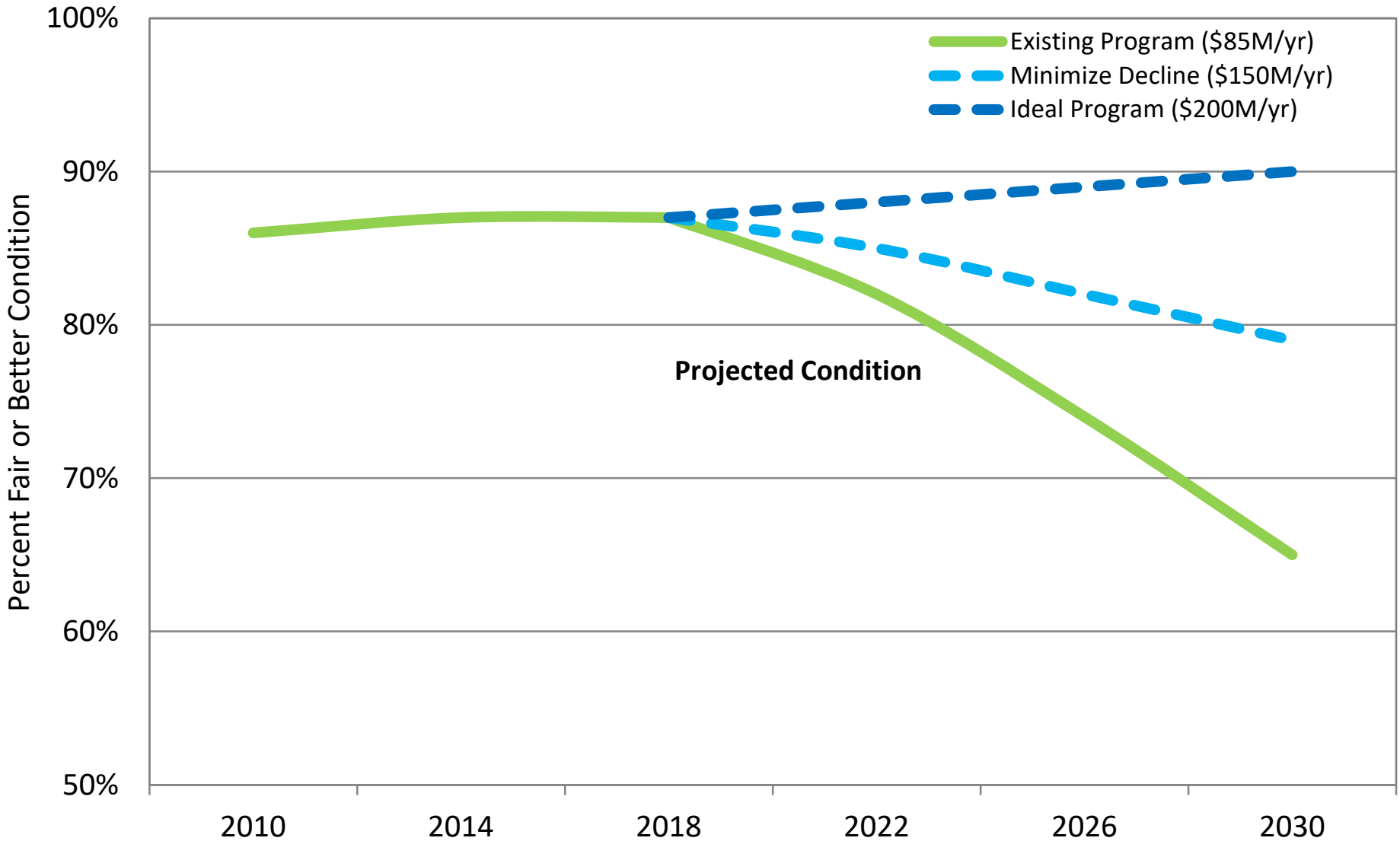
# CITIES

**Roads: 83% in fair condition or worse**

**Bridges: 5% of all city bridges in poor condition**

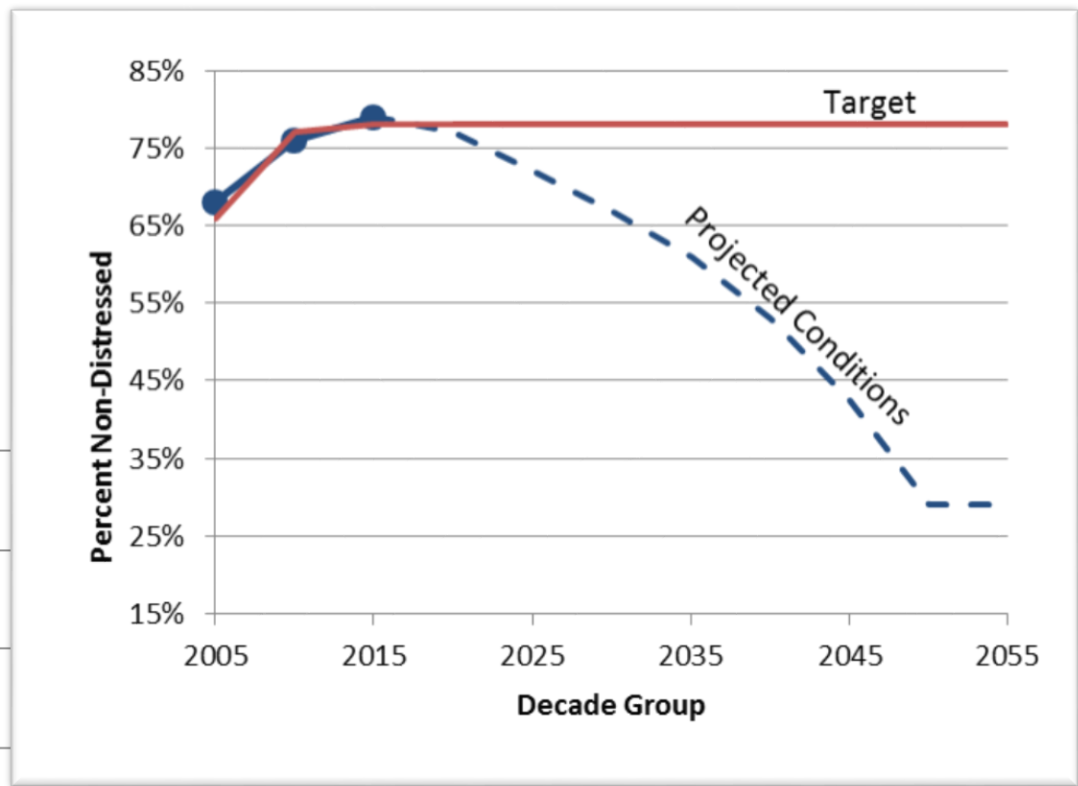
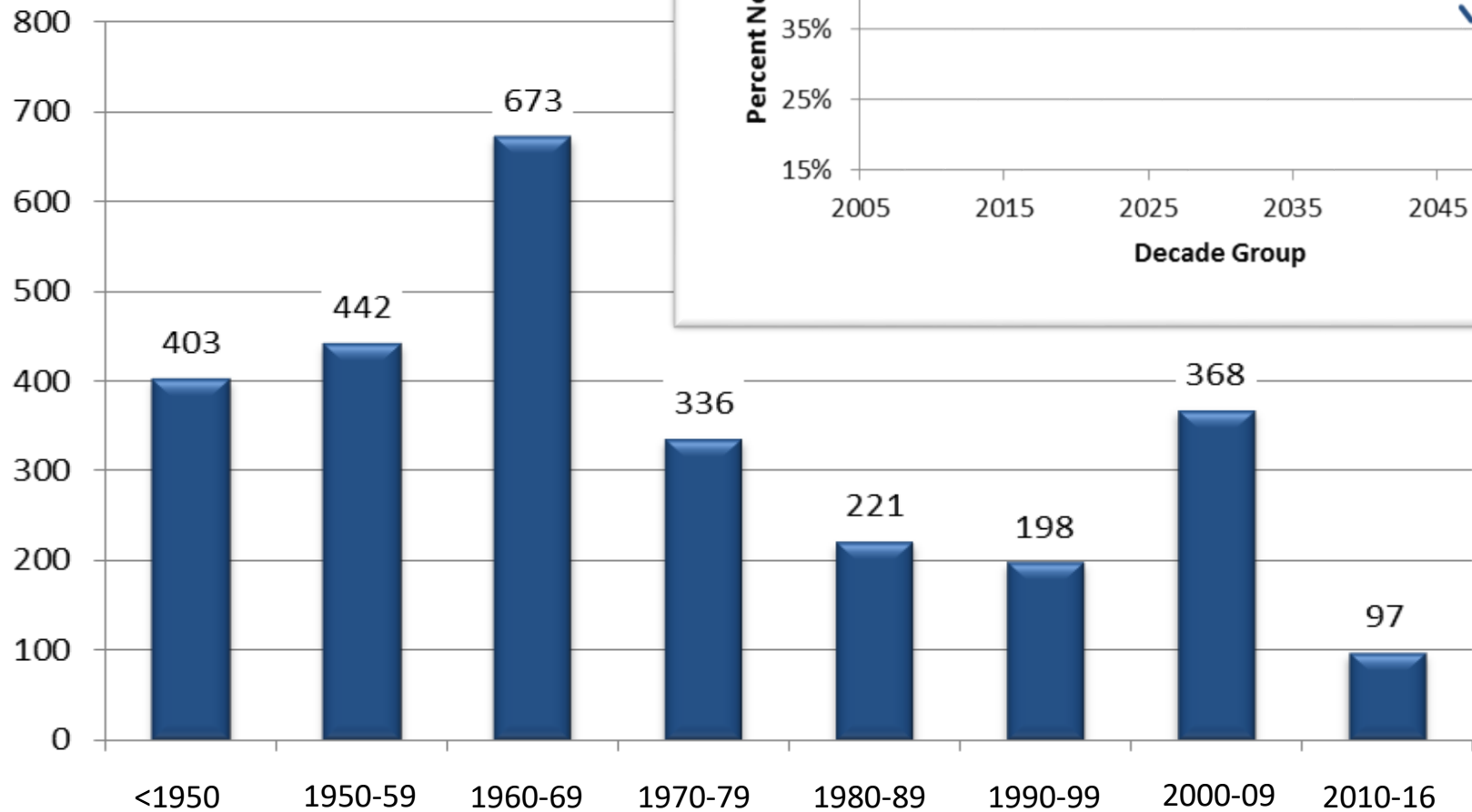


# Projected Pavement Conditions



# Bridge

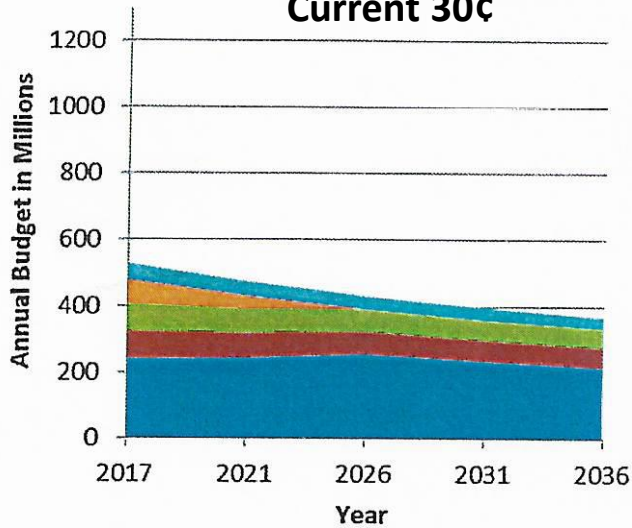
Age & Conditions



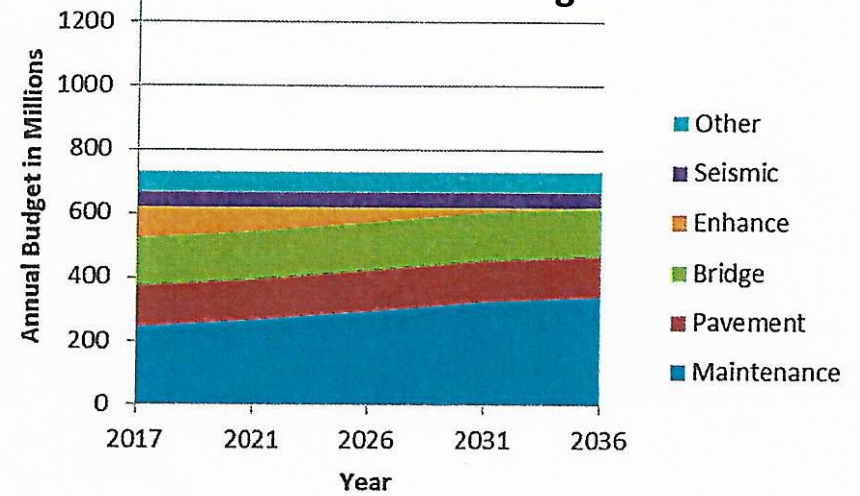
SO, WHAT  
AMOUNT  
SHOULD WE  
INVEST IN OUR  
ROAD AND  
BRIDGES NOW?

HERE ARE 4 20-YEAR  
BUDGET SCENARIOS  
CREATED BY ODOT:

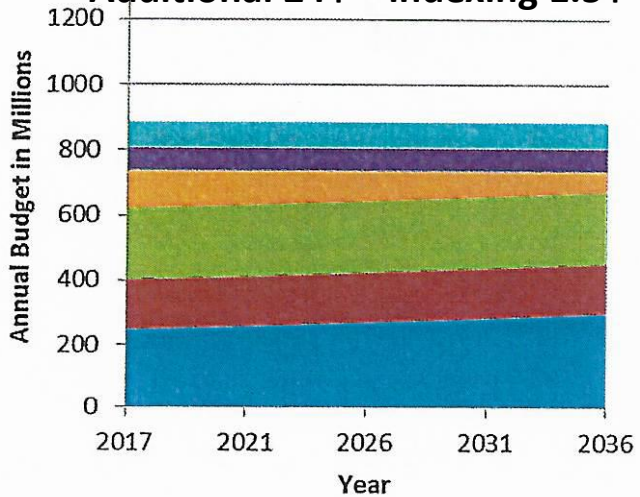
### Scenario 1 Budget Current 30¢



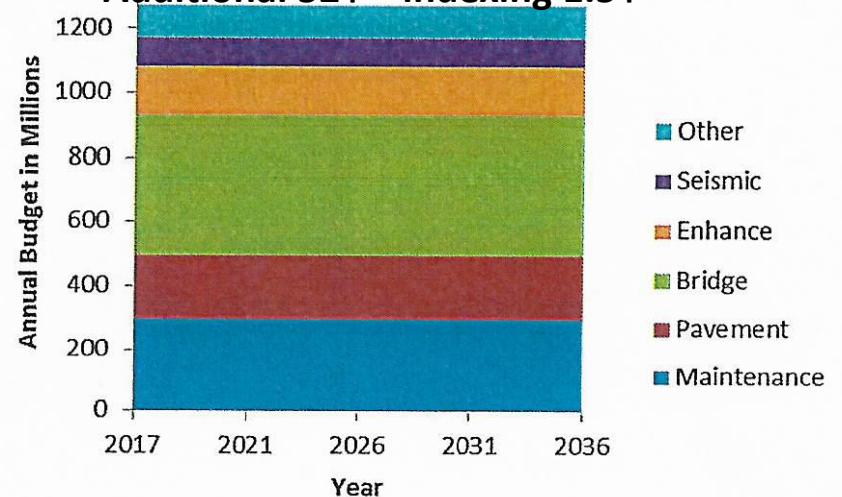
### Scenario 2 Budget Additional 14¢ + indexing 1.5¢



### Scenario 3 Budget Additional 24¢ + indexing 1.5¢



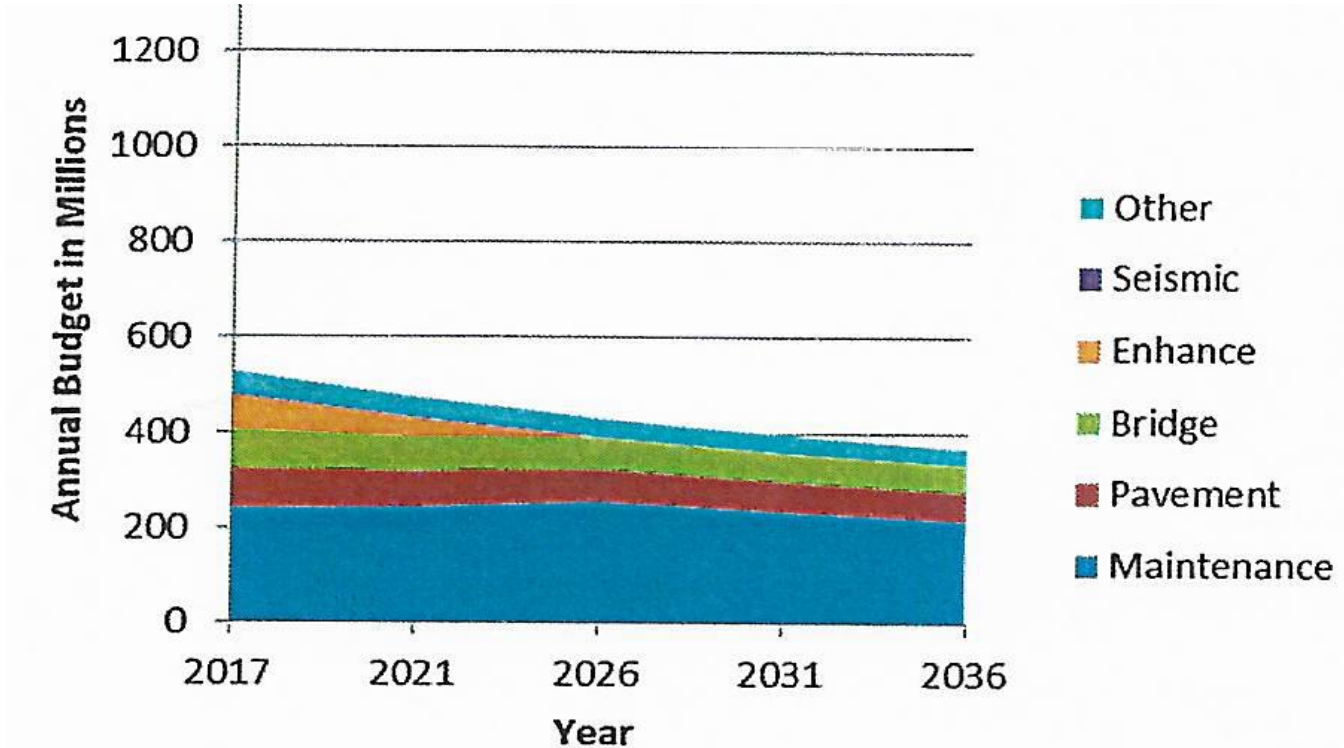
### Scenario 4 Budget Additional 52¢ + indexing 1.5¢





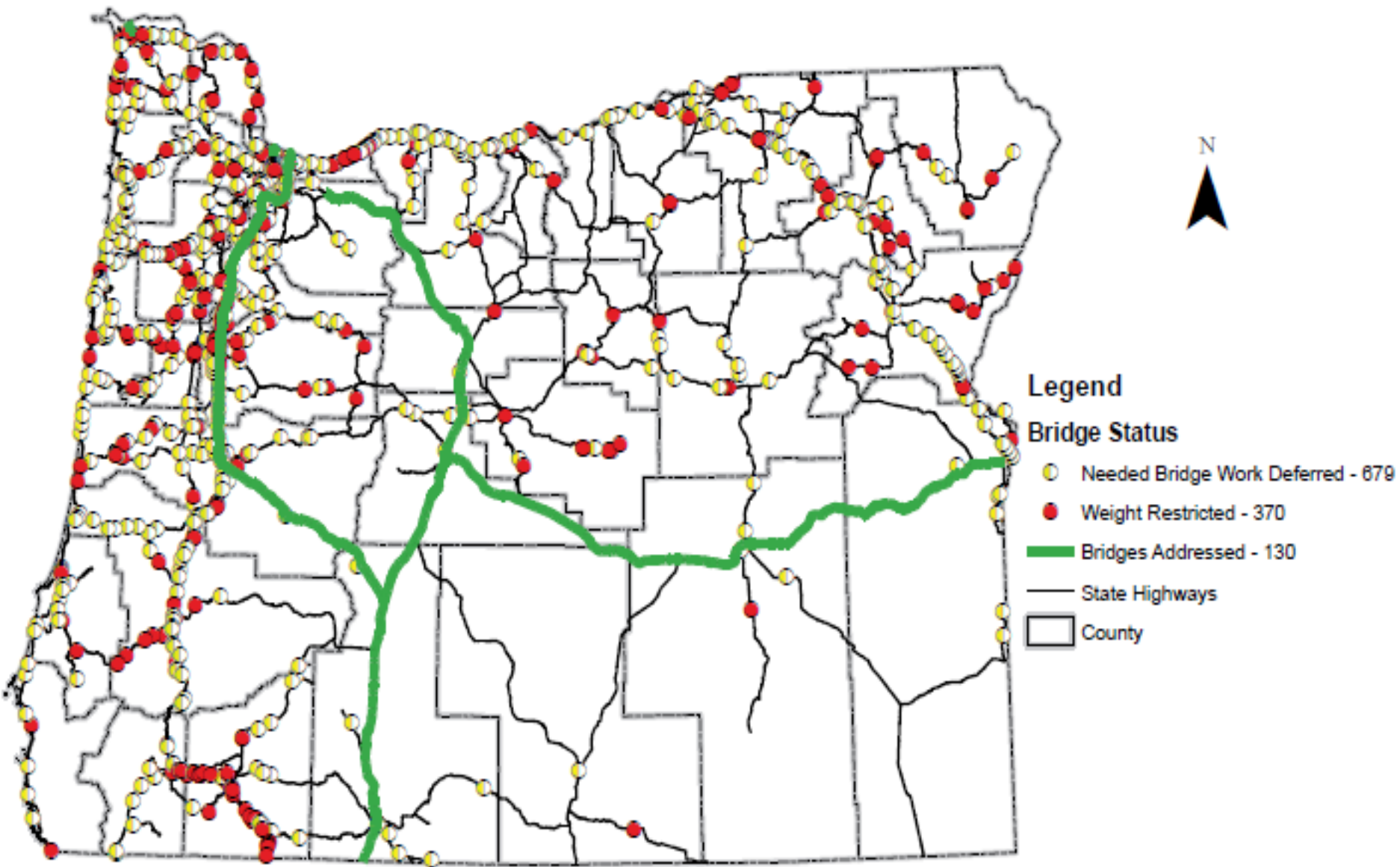
# SCENARIO #1

## (CURRENT 30¢)



Scenario 1 Budget Assumptions	Maintenance	Pavement	Bridge	Enhance	Seismic	Other	Annual Total	20-Year Budget
Average Annual Budget for 20-Year Period in millions nominal dollars	\$306	\$85	\$85	\$19	\$0	\$50	\$545	\$10.9 billion
Average Annual Budget Adjusted for Inflation for 20-Year Period	\$243	\$68	\$68	\$17	\$0	\$40	\$436	\$ 8.7 billion

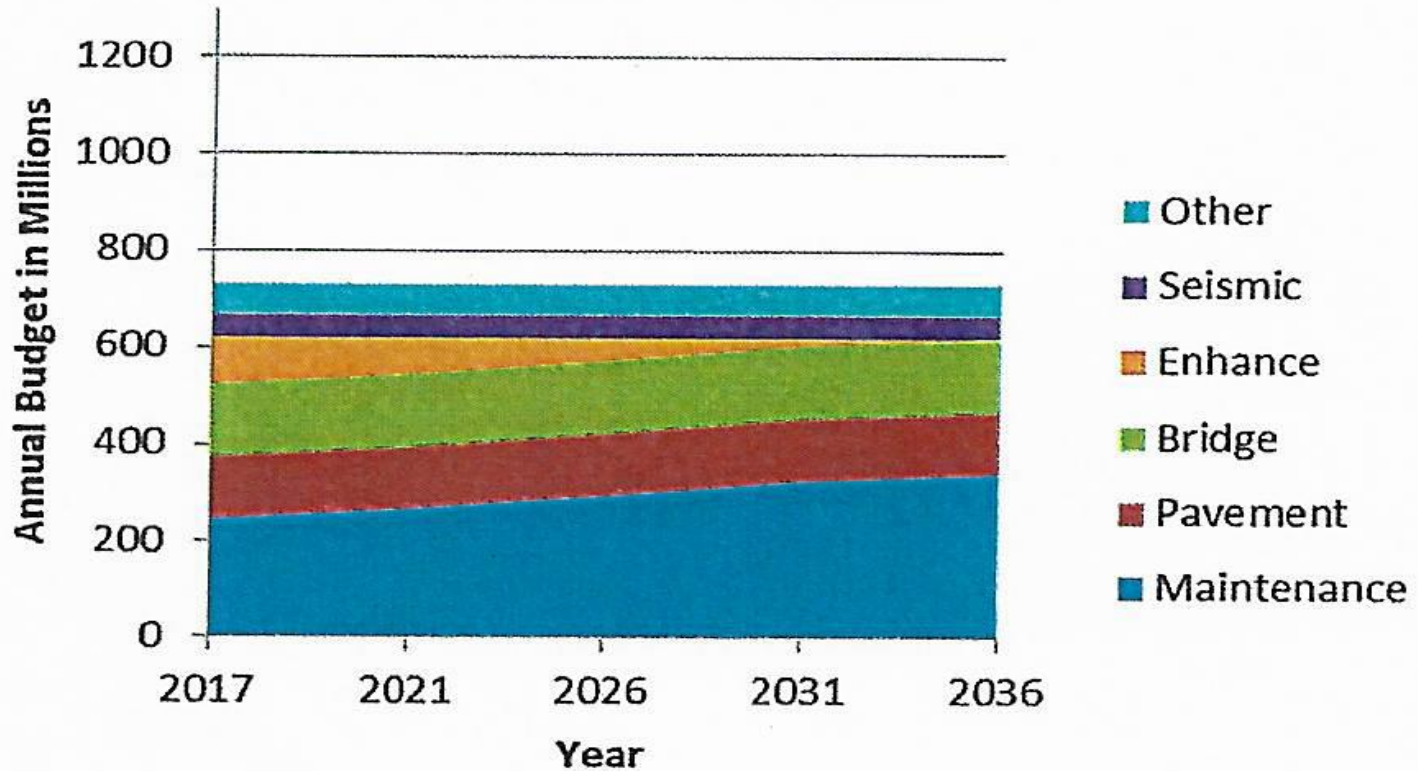
# SCENARIO #1



# SCENARIO #2

(14¢ INCREASE)

(30+14= 44¢)

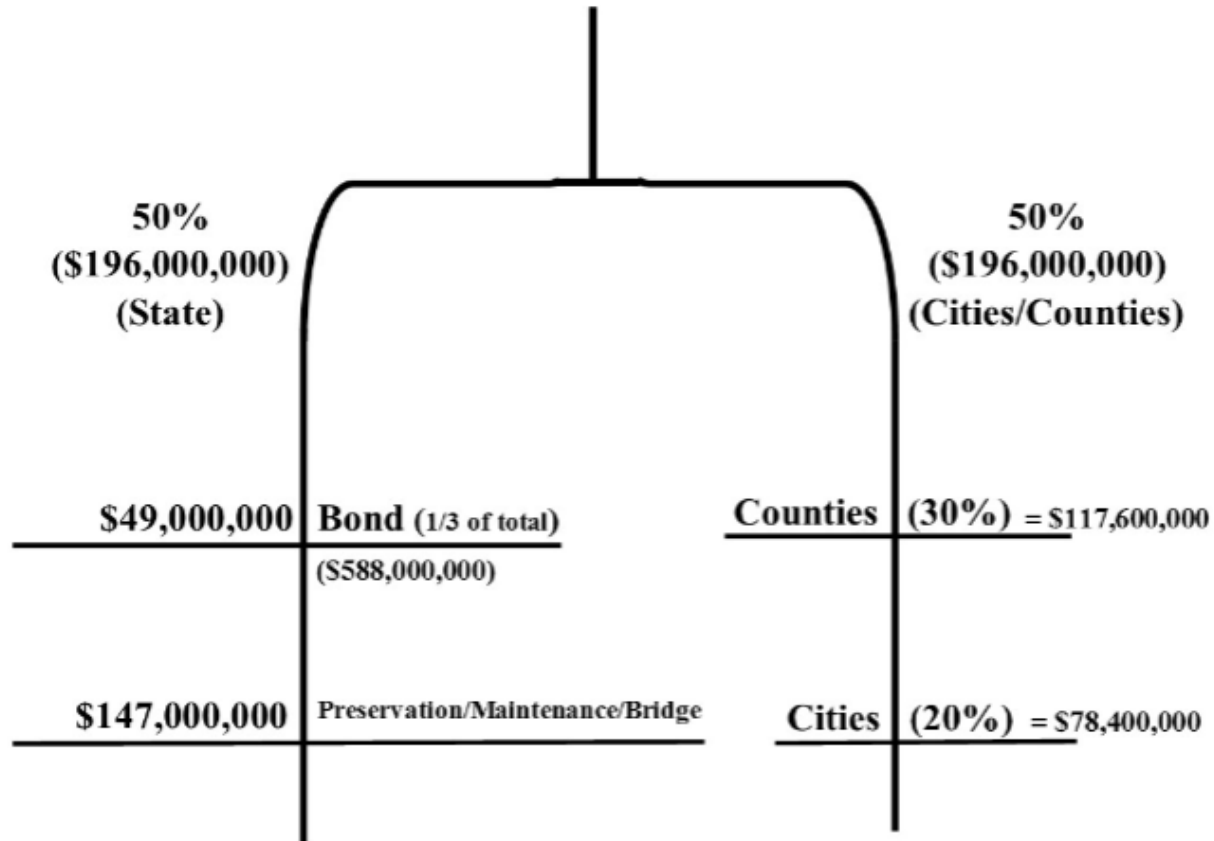


Scenario 2 Budget Assumptions	Maintenance	Pavement	Bridge	Enhance	Seismic	Other	Annual Total	20-Year Budget
Average Annual Budget for 20-Year Period in millions	\$302	\$127	\$150	\$43	\$49	\$64	\$735	\$14.7 billion

## SCENARIO #2

14¢ x \$28 million = \$392,000,000

(Total = 30+14 = 44¢)

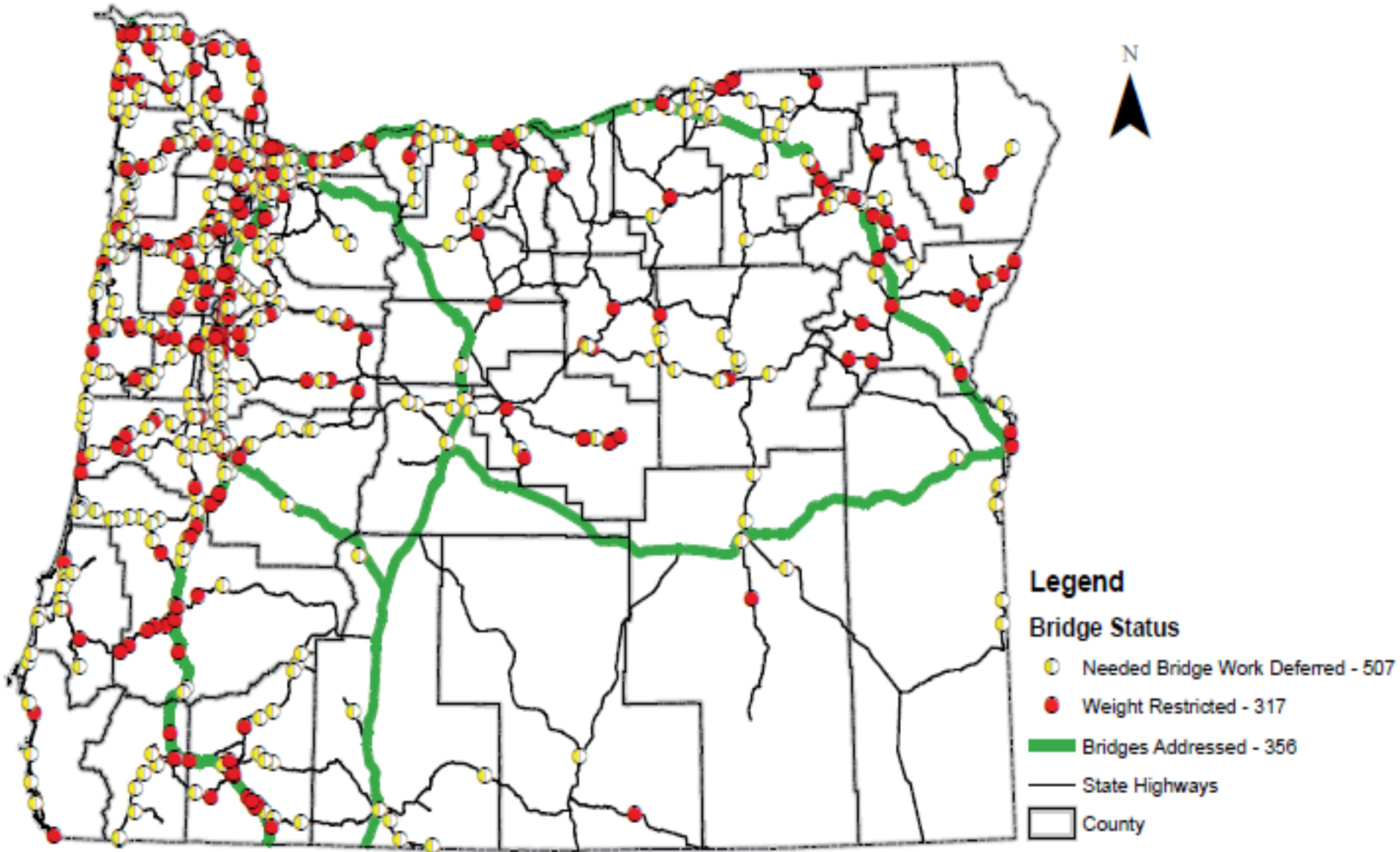


### Decisions:

1. How much tax? 14¢?
2. How much bond? 25%?

Amount of Bond: \$588,000,000

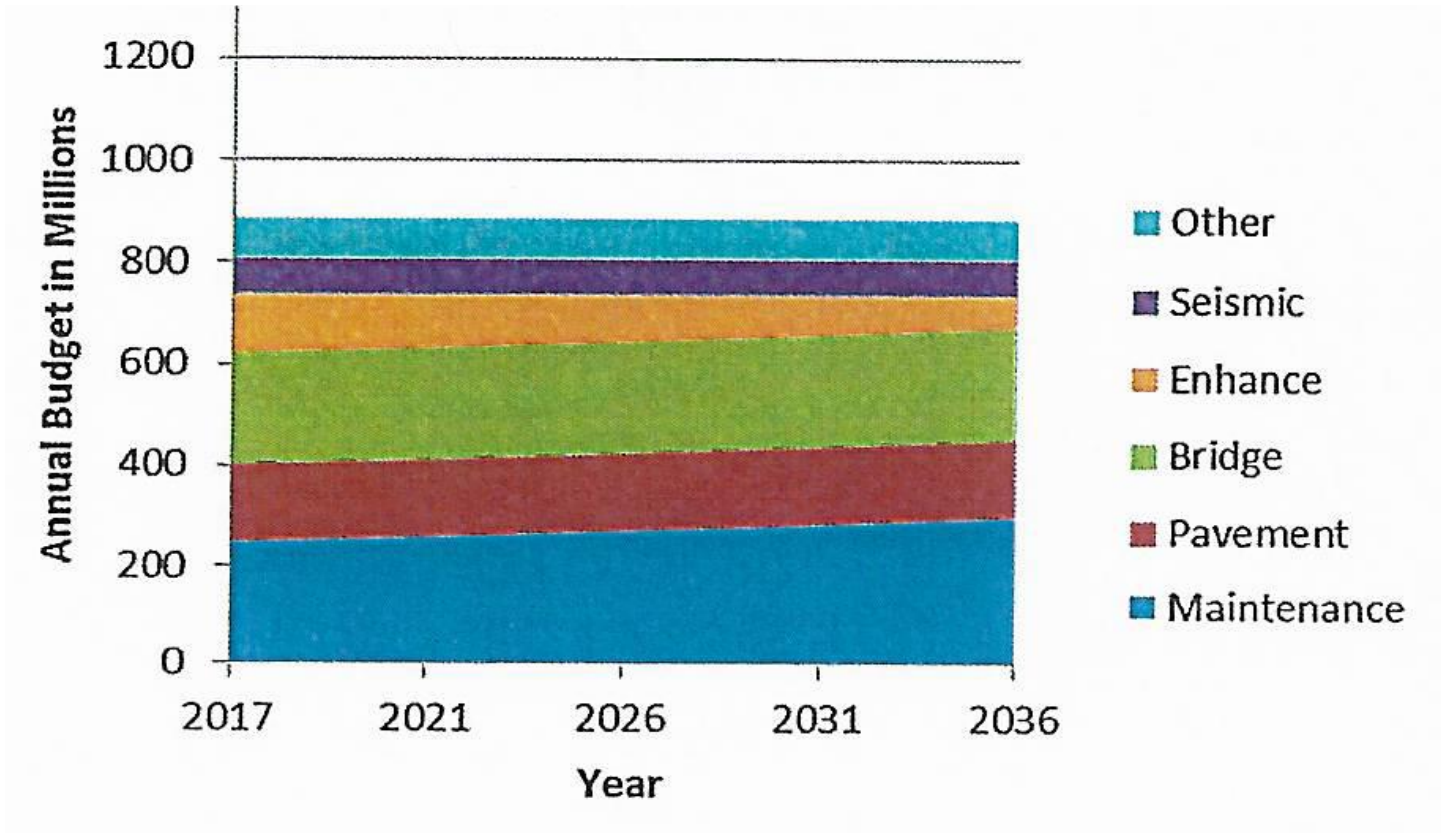
# SCENARIO #2



# SCENARIO #3

(24¢ INCREASE)

(30+24= 54¢)

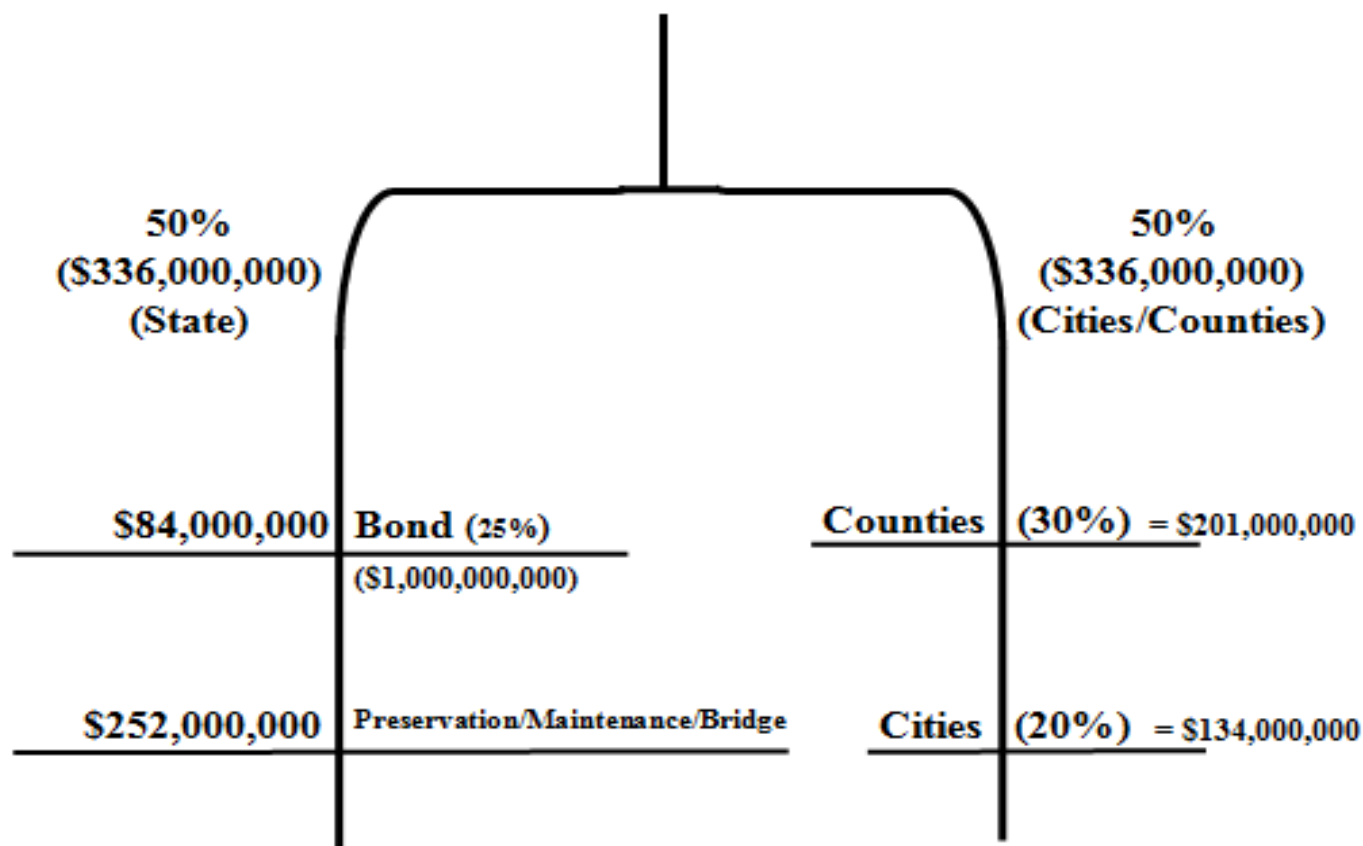


Scenario 3 Budget Assumptions	Maintenance	Pavement	Bridge	Enhance	Seismic	Other	Annual Total	20-Year Budget
Average Annual Budget for 20-Year Period in millions	\$275	\$154	\$220	\$90	\$70	\$77	\$887	\$17.7 billion

### SCENARIO #3

24¢ x \$28 million = \$672,000,000

(Total = 30+24 = 54¢)

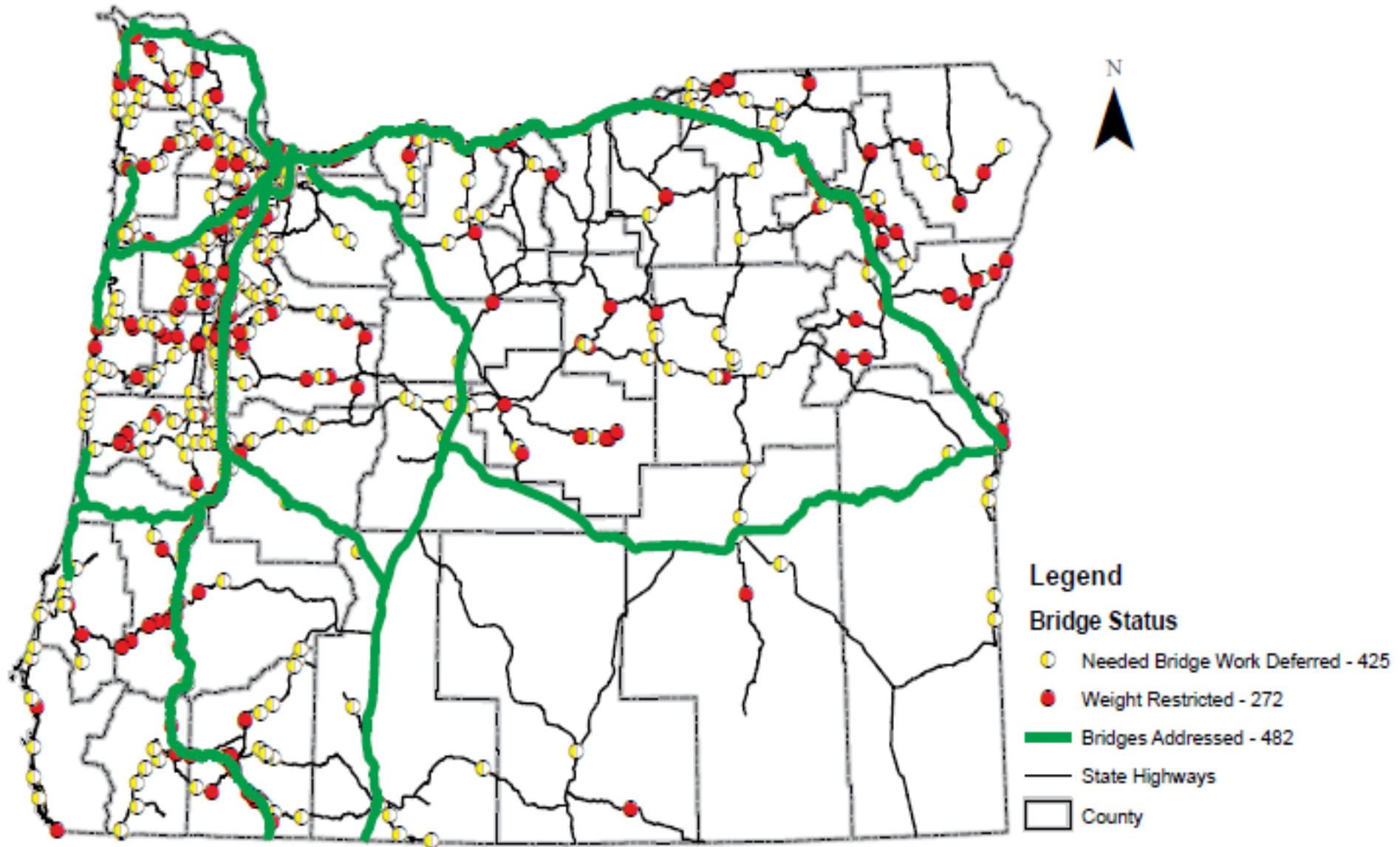


#### Decisions:

1. How much tax? 24¢
2. How much bond? 25%?

Amount of Bond: \$1,000,000,000

# SCENARIO #3



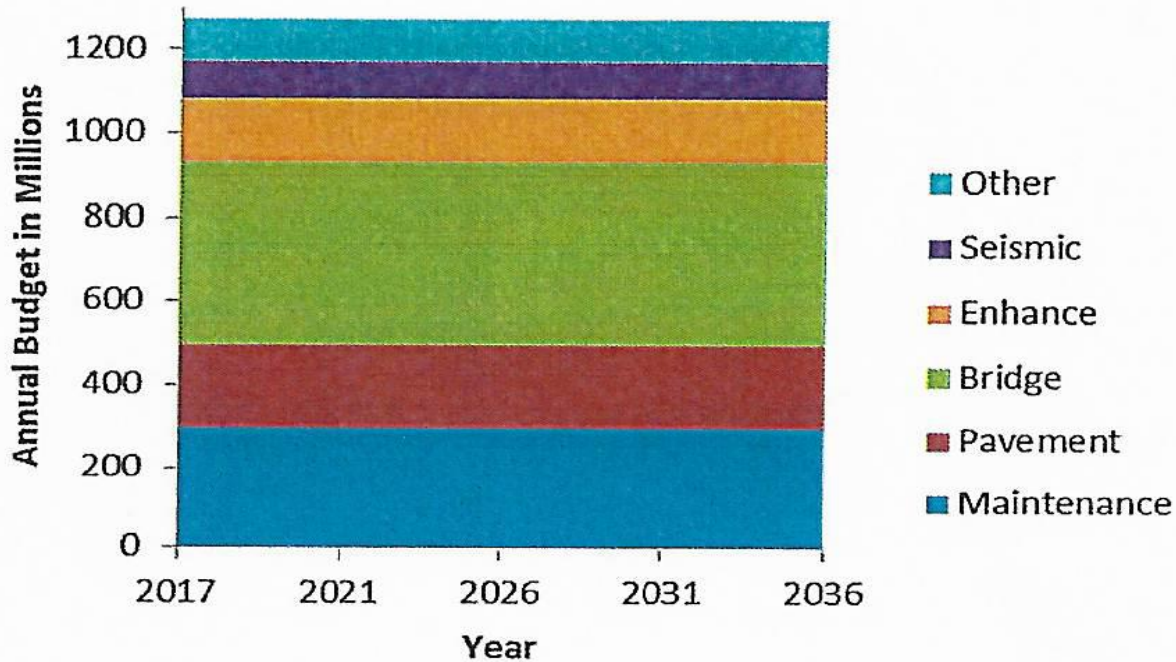


# SCENARIO #4

(52¢ INCREASE)

(30+52= 82¢)

## Scenario 4 Budget

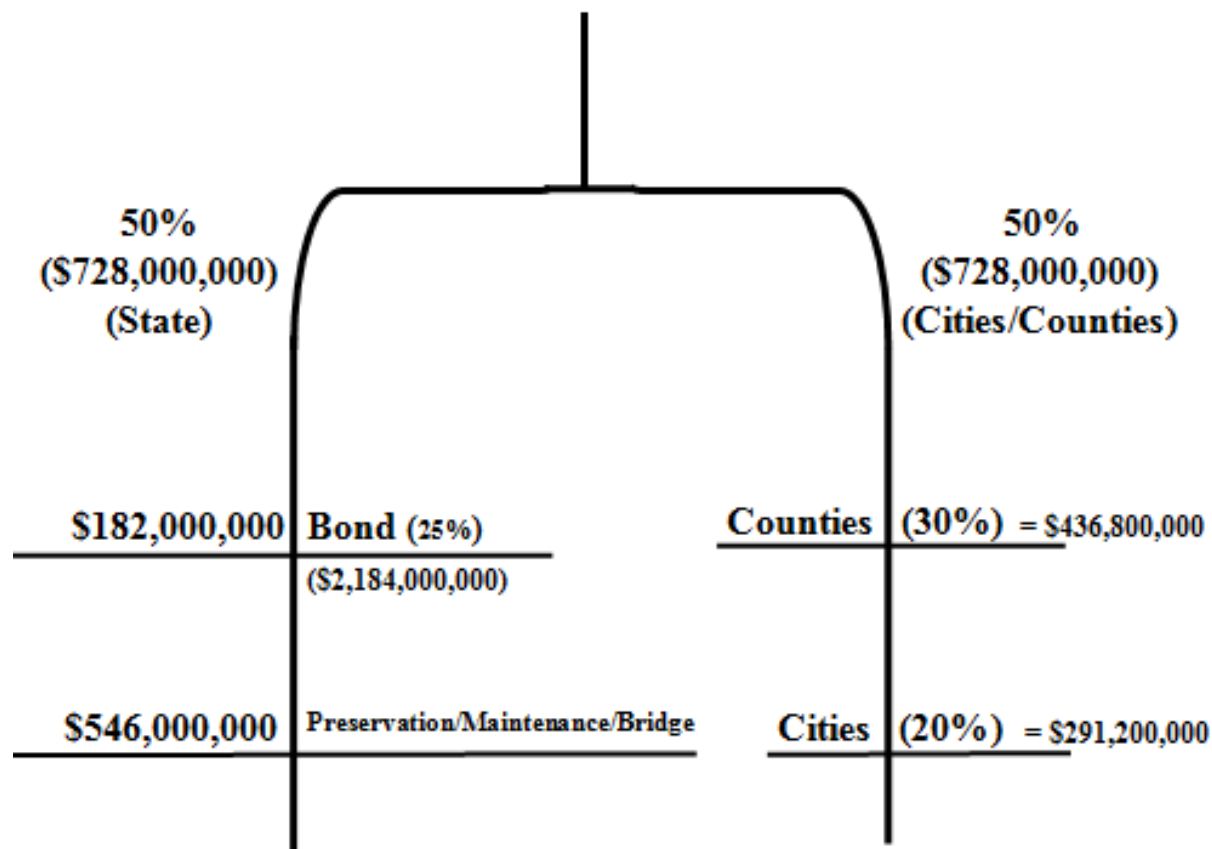


Scenario 4 Budget Assumptions	Maintenance	Pavement	Bridge	Enhance	Seismic	Other	Annual Total	20-Year Budget
Average Annual Budget for 20-Year Period in millions	\$300	\$200	\$435	\$150	\$90	\$100	\$1,275	\$25.5 billion

# SCENARIO #4

52¢ x \$28 million = \$1,456,000,000

(Total = 30+52 = 82¢)

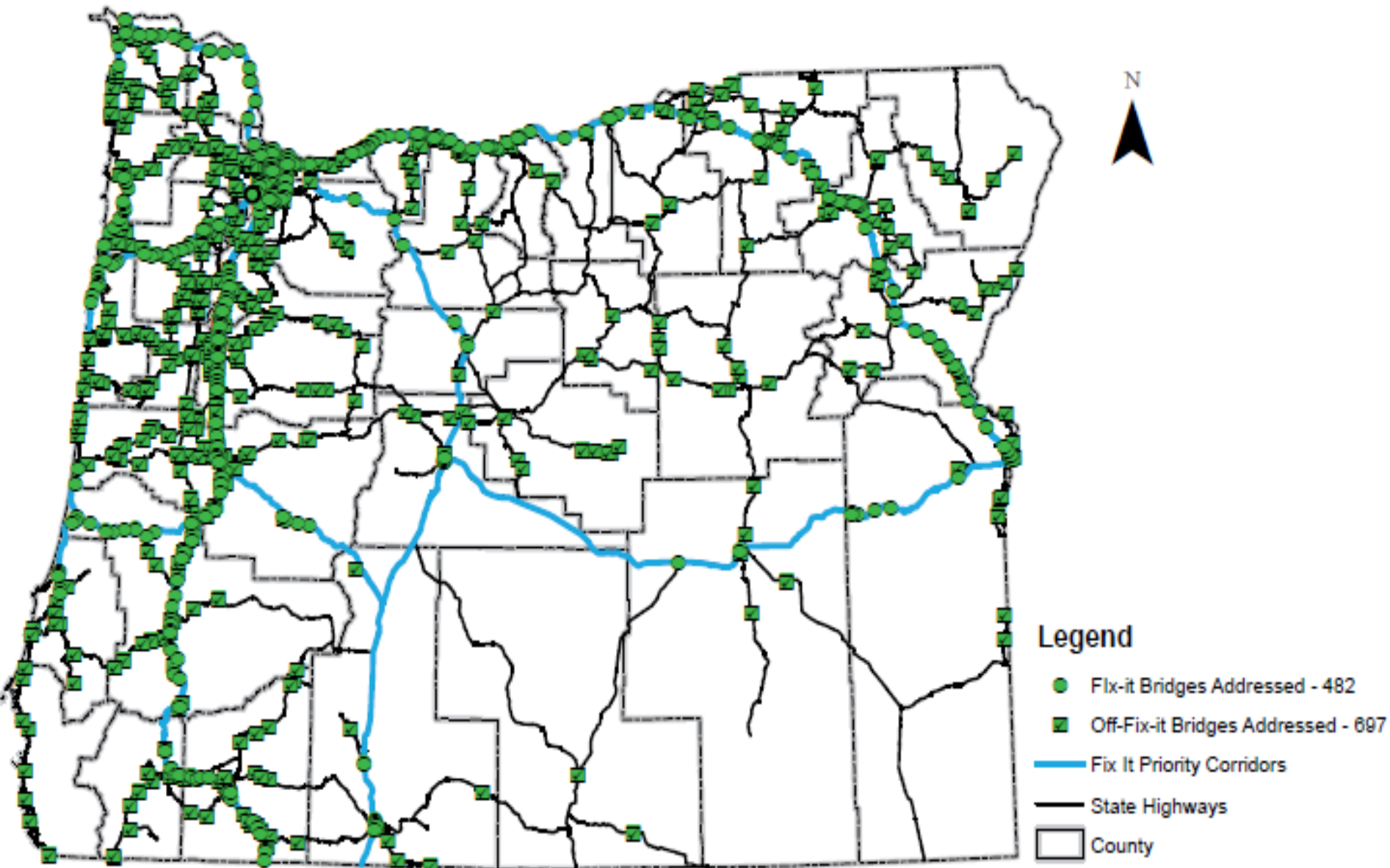


### Decisions:

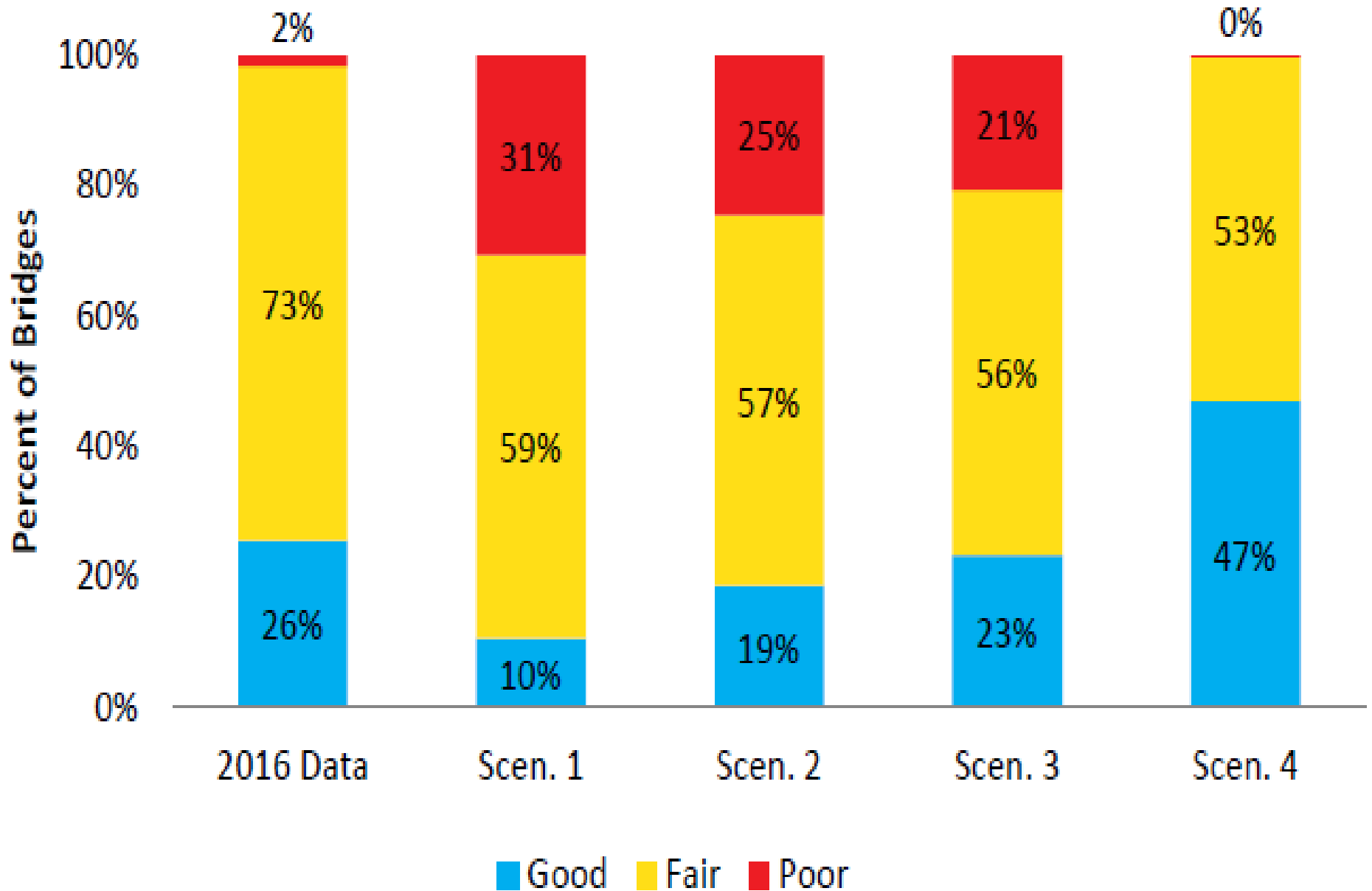
1. How much tax? 52¢
2. How much bond? 25%?

Amount of Bond: \$2,184,000,000

# SCENARIO #4



## Bridge Conditions: Current & 2036 Forecast by Scenario



**(These numbers are over the next 20 years)**  
**Table 1. Scenario Analysis Summary of Results**

	<b>Scenario 1</b> Current Funding	<b>Scenario 2</b> Limited Highway Corridors	<b>Scenario 3</b> Preserve Priority Corridors	<b>Scenario 4</b> Meet Needs
<b>Economic Impacts</b>				
Forfeit Jobs	75,000 - 120,000	70,000 - 90,000	50,000 - 60,000	0
Lost GDP, billions	\$155 - \$605	\$144 - \$355	\$88 - \$156	0
<b>State Infrastructure Condition</b>				
Bridges Repaired	130	355	482	1179
Bridges Weight Restricted	370	317	272	0
Pavement % Fair or Better	53%	68%	76%	90%
20 Year Budget,* billions	\$8.7	\$14.7	\$17.7	\$25.5
Bridge Backlog, billions (disinvestment)	\$7.4	\$5.7	\$4.3	\$0.0
Pavement Backlog, billions (disinvestment)	\$4.6	\$2.5	\$1.7	\$0.0

\* See scenario descriptions for detailed list of assumptions. Increased budgets are for 20-year core highway budget categories only: Maintenance, Pavement, Bridge, Seismic, Enhance and Other, not entire ODOT budget; dollars are expressed as 2016 values.

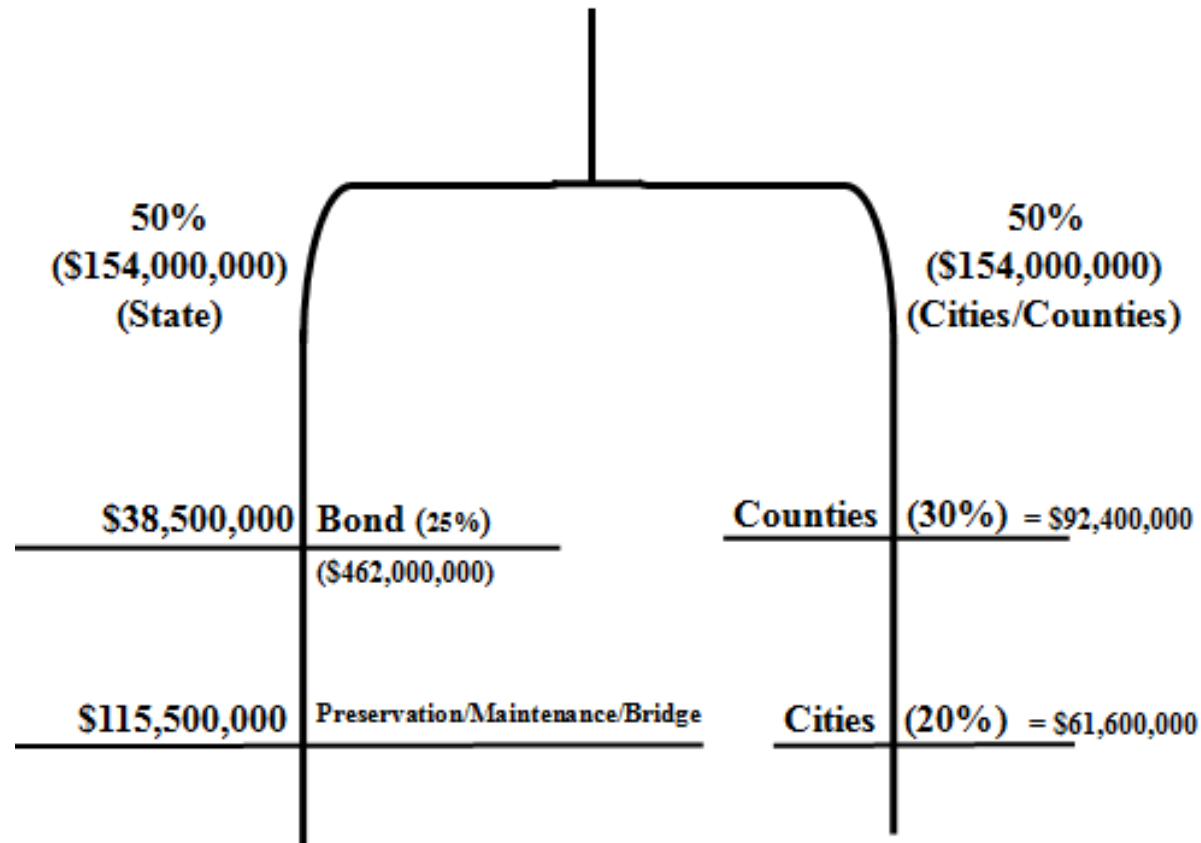
SEVERAL MEMBERS OF  
THE WORK GROUP THINK  
THAT AN 11 CENT  
INCREASE WOULD BE  
ACCEPTABLE.

HERE IS HOW AN 11 CENT  
INCREASE LOOKS:

# 11 CENT SCENARIO

11¢ x \$28 million = \$308,000,000

(Total = 30+11 = 41¢)



## Decisions:

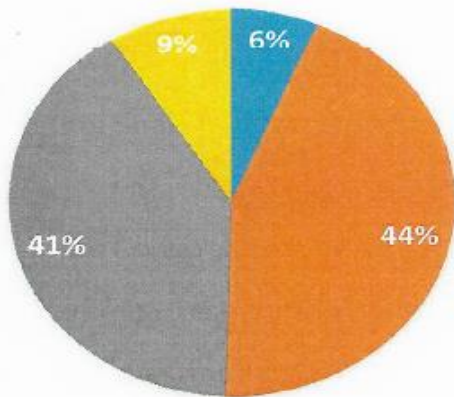
1. How much tax? 11¢?
2. How much bond? 25%?

Amount of Bond: \$462,000,000

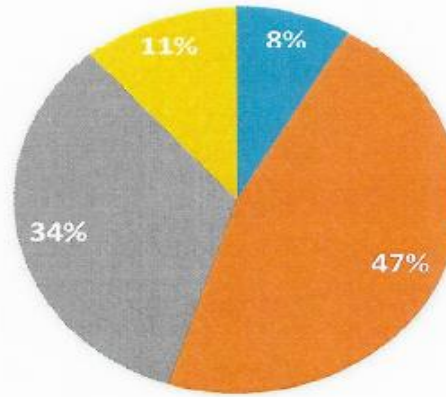
# HOW COUNTIES/CITIES WOULD USE ADDITIONAL REVENUE:

Statewide Funding Package Size	\$300 million	\$450 million	\$600 million
County Share of Statewide Package	\$90 million	\$135 million	\$180 million
Funding Category	Annual Expenditures		
Capital Construction	\$39,600,000	\$63,450,000	\$88,200,000
Pavement Preservation	\$36,900,000	\$45,900,000	\$48,600,000
Safety Investments	\$8,100,000	\$14,850,000	\$25,200,000
Maintenance and Operations	\$5,400,000	\$10,800,000	\$18,000,000
Equivalent Gas Tax Increase	\$0.11	\$0.16	\$0.21

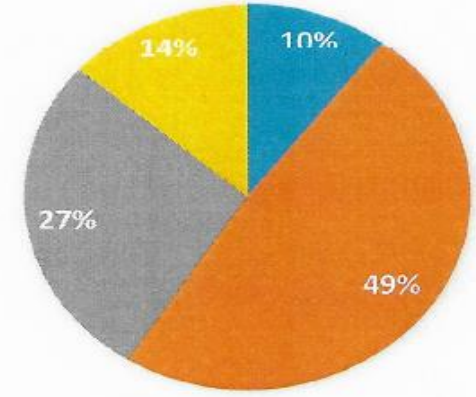
**\$300/\$90**



**\$450/\$135**



**\$600/\$180**



**Capital Construction**  
Ex: Road Construction, Bridge Replacement, Congestion Relief

**Pavement Preservation**  
Ex: Chip Seal, Overlay, Pavement Repair

**Safety Improvements**  
Ex: Signage, Signals, Pavement Striping

**Maintenance and Operations**  
Ex: Culvert Repair, Gravel Road Repair, Storm Response/Repair



PHASED  
INCREASE

The 24 year period of disinvestment has created a shortfall that cannot be made up in one year.

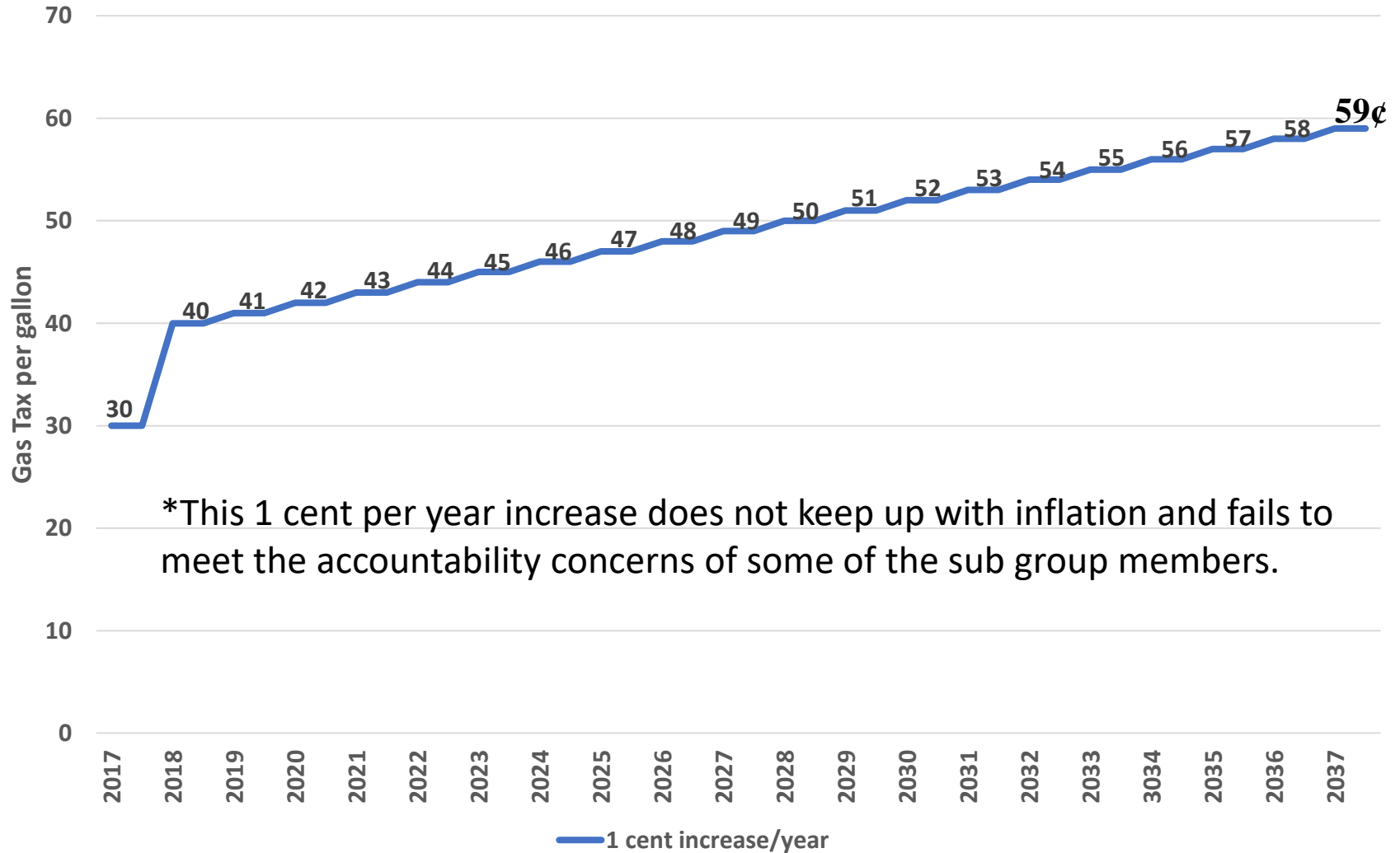
Thus, a “phased-in increase in road taxes” is a suggested alternative.

What follows is a set of alternative amounts over the next 20 years.

The work group did not reach a consensus on the amount or the means of implementing the phase-in.

# PHASED INCREASE #1

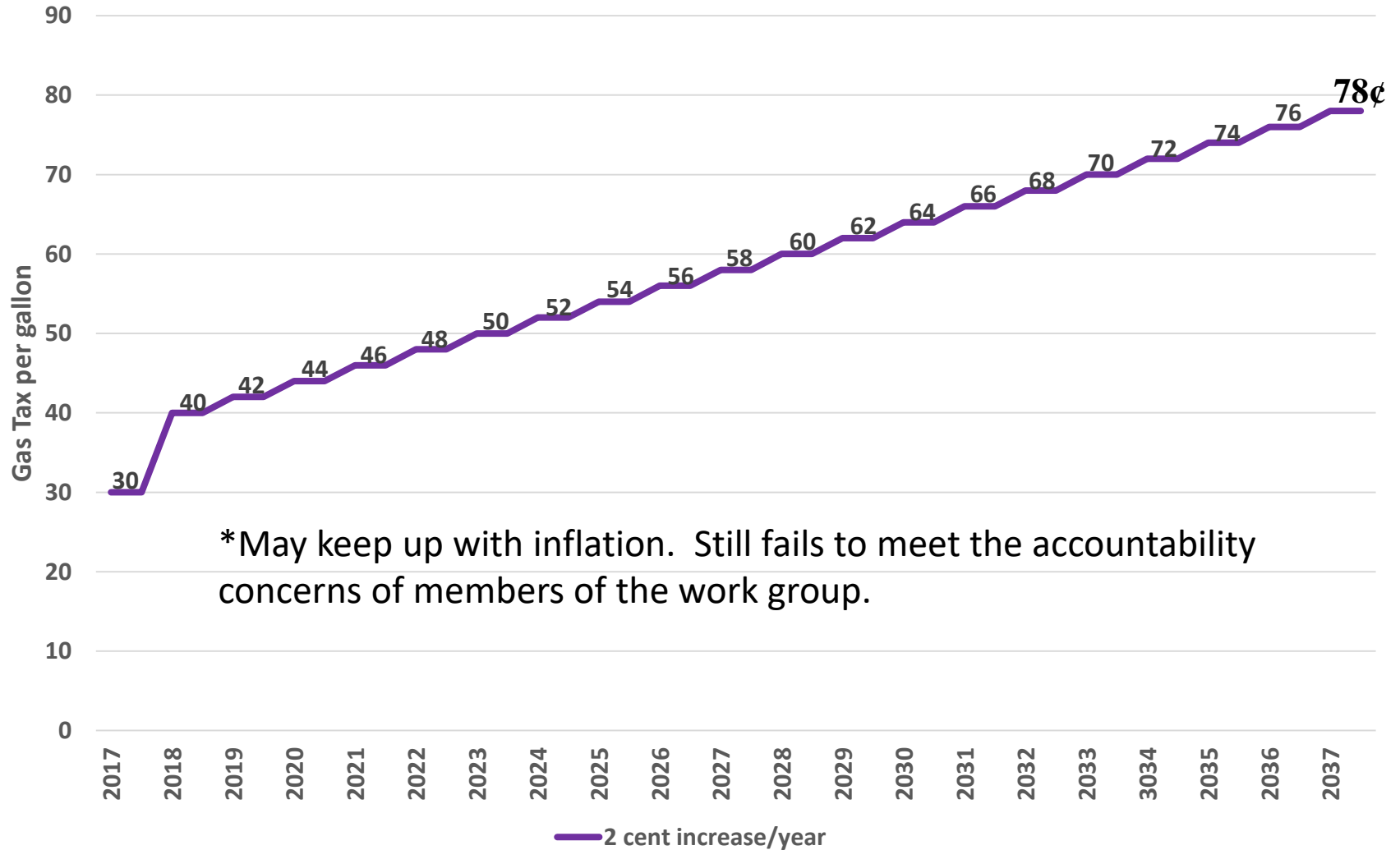
1 cent increase/year



\*This 1 cent per year increase does not keep up with inflation and fails to meet the accountability concerns of some of the sub group members.

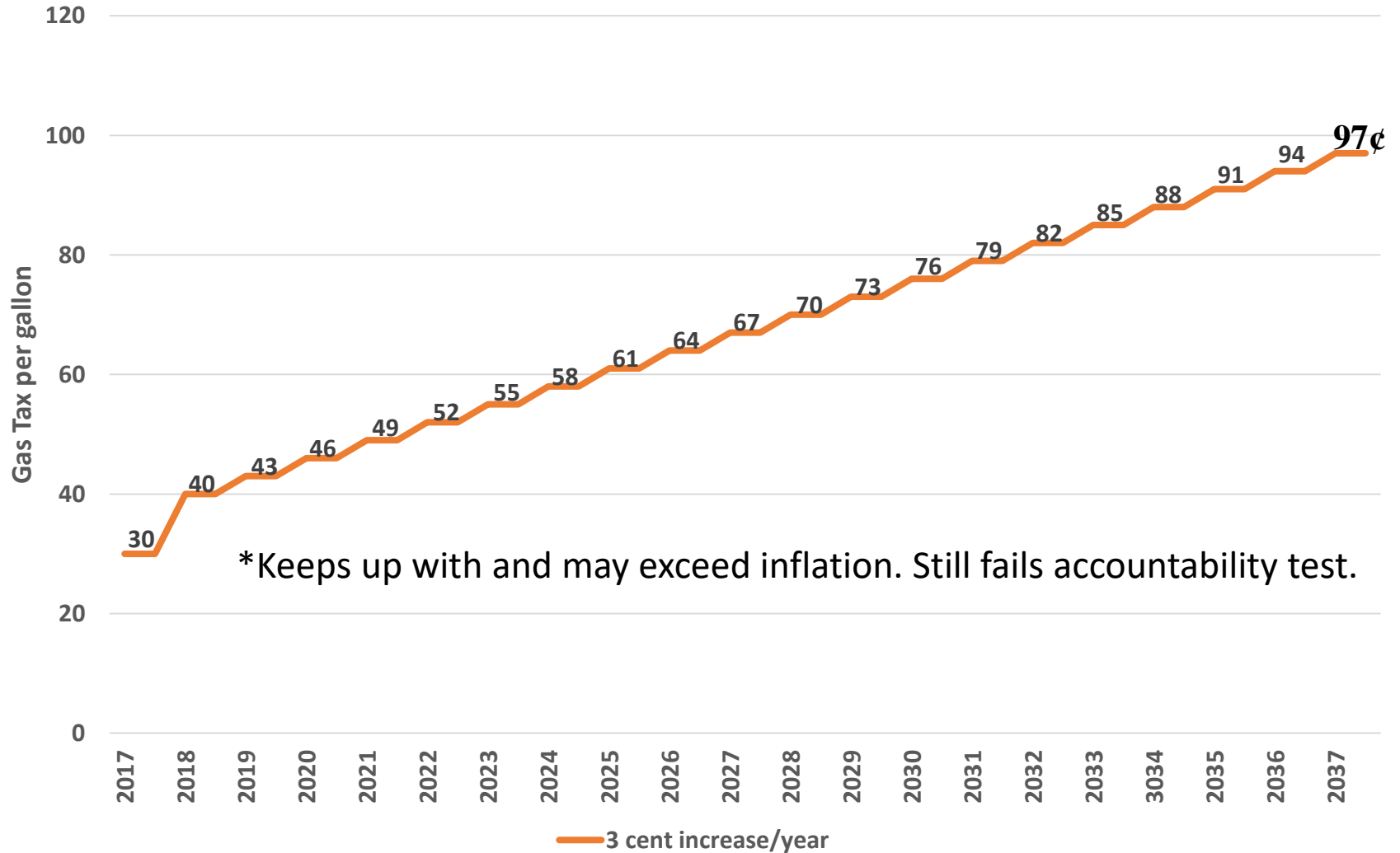
# PHASED INCREASE #2

2 cent increase/year



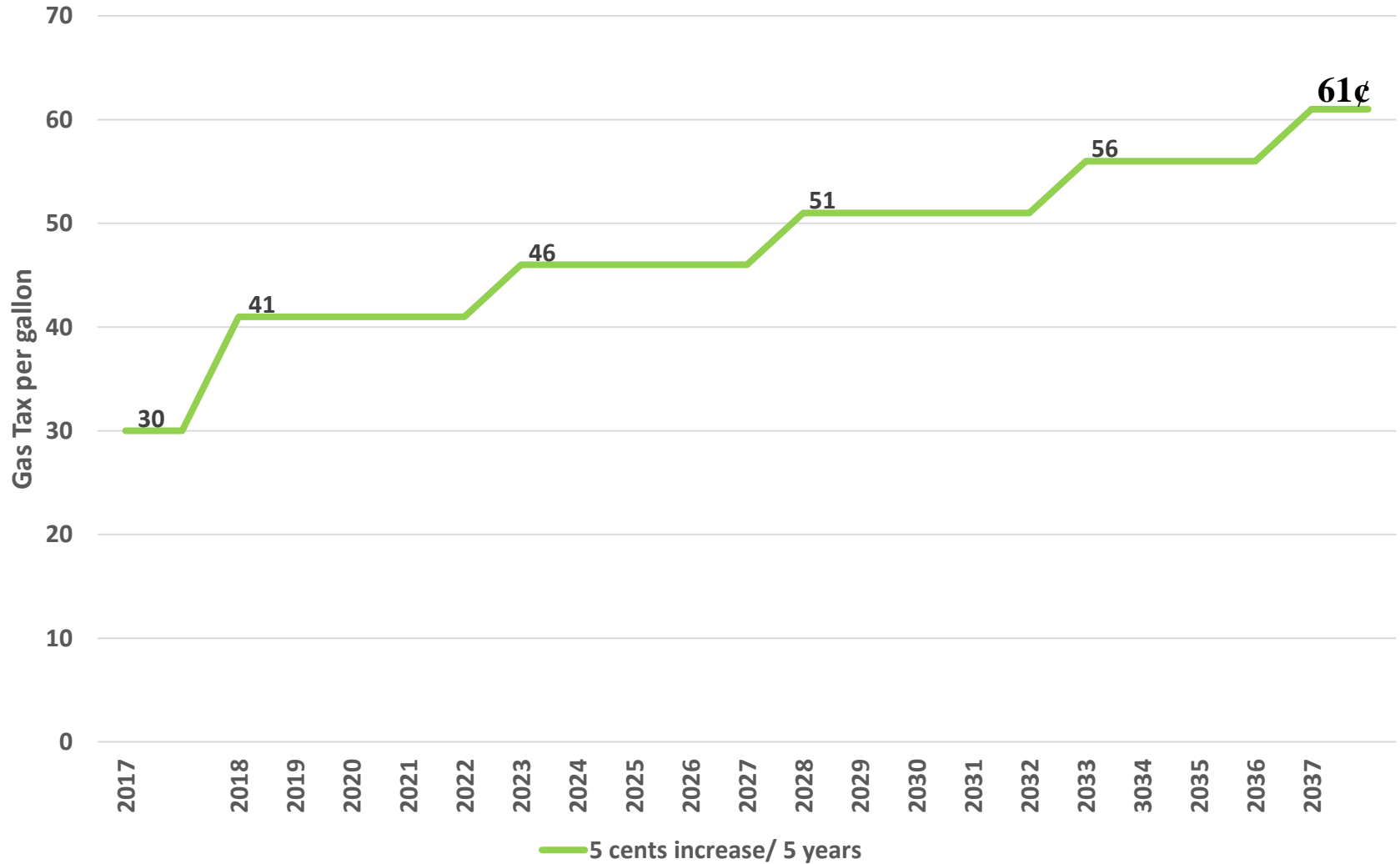
# PHASED INCREASE #3

3 cent increase/year



# PHASED INCREASE #4

5 cents increase/ 5 years



SOME MEMBERS OF WORK  
GROUP #1  
SUGGESTED THAT THE  
“PHASED-IN INCREASES”  
BE DELEGATED TO THE  
OREGON TRANSPORTATION  
COMMISSION.

# SEISMIC





# HOW BRIDGES WILL WITHSTAND A SEISMIC EVENT

- **Over half of the 2,736 Oregon's state highway bridges were built before 1970.**
- **Most of these bridges have reached or exceeded their 50 year design life and were not built to withstand a major seismic event.**
- **The current ODOT bridge budget is able to fund an average of 3 bridge replacements a year.**
- **At this rate it would take over 900 years to replace Oregon's state bridges.**

IT WOULD COST  
\$5.1 BILLION  
TO PAY FOR  
SEISMIC-RELATED  
BRIDGE AND  
ROCKFALL COSTS

The following table shows the program cost and its components for each of the five phases.

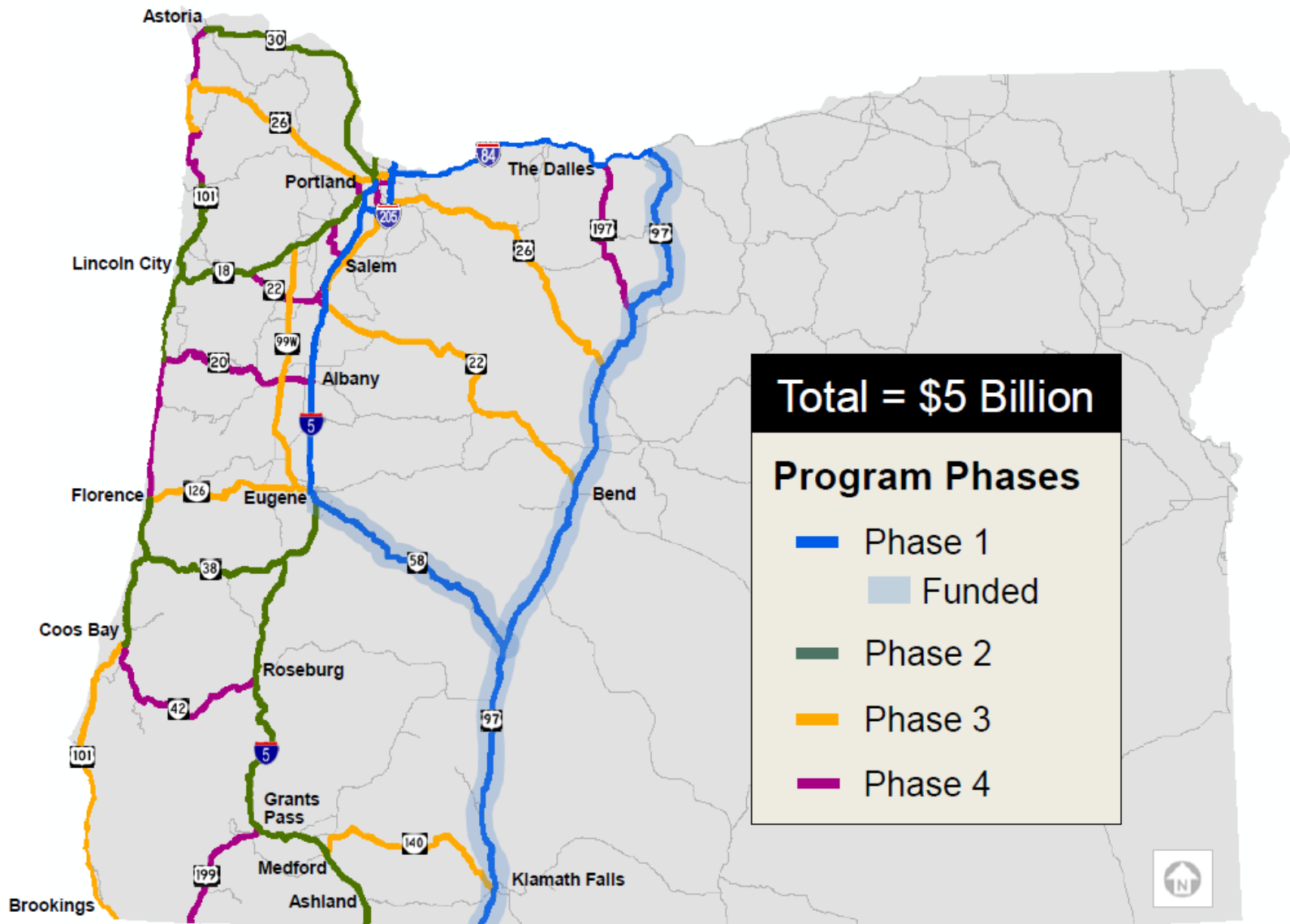
Program Phases	Total Bridges Cost		Landslides/Rockfalls Cost		Total Seismic <b>PLUS</b> Program Cost (\$)
	No. of Bridges	Cost (\$)	No. of Slides/Rockfalls	Cost (\$)	
1	187	\$ 738,063,042	64	\$ 197,659,690	\$ 935,722,732
2	195	\$ 631,903,411	157	\$ 272,032,450	\$ 903,935,861
3	165	\$ 612,111,479	671	\$ 483,183,300	\$ 1,095,294,779
4	159	\$ 640,079,763	293	\$ 126,120,930	\$ 766,200,693
5	12	\$ 1,432,253,140	0	\$ 0	\$ 1,432,253,140
SubTotal	718	\$ 4,054,410,836	1185	\$ 1,078,996,370	\$ 5,133,407,206

Table 1: Seismic Plus Program Cost Summary

ACCORDING TO ODOT, AT 11  
CENTS, WITH A 1 CENT PER  
YEAR PHASED-IN INCREASE,  
OREGON'S BRIDGES WILL NOT  
GET FIXED, THEY JUST WON'T  
FALL APART AS FAST.

# Seismic Plus Program

## State Highway Network



# Overall Seismic Resiliency Triage Strategy






**\$200 M over 20 years**

**Rogue Valley Seismic Triage**  
(bridges and unstable slopes on I-5 and OR 140)



**Coastal Forward Supplies & Seismic Response Kits**

-  Astoria
-  Newport
-  Coos Bay



**Local ODOT Triage**

(address strategic ODOT and local bridges/major river crossings)



**Seismic Options Report**

(not part of \$200 M total above)

-  Phase 1 – Partially Funded
-  Phase 2

WORK GROUP #1  
DISCUSSED BUT DID  
NOT REACH  
CONSENSUS  
REGARDING THE  
FOLLOWING:

SHOULD THE GAS TAX  
BE INCREASED,  
AND IF SO,  
BY HOW MUCH?

(SEVERAL OF WORK GROUP #1  
MEMBERS SUGGESTED BETWEEN  
9-11¢)



SHOULD PART OF AN  
INCREASE, IF ANY, BE  
USED SOLELY FOR MPS, OR  
SHOULD IT BE DIVIDED  
BETWEEN MPS,  
CONGESTION RELIEF, AND  
SEISMIC?

THE ESTIMATED ROI  
ON PRESERVATION IS:  
9 TO 1

THE ROI ON  
MODERNIZATION IS  
MORE DIFFICULT TO  
MEASURE.

IF PART OF ANY GAS TAX  
INCREASE IS BONDED,  
UPON WHAT SHOULD THE  
BONDED SUM BE SPENT?

COLLATERAL  
ISSUES  
DISCUSSED

INCREASE  
SMALL CITY ALLOTMENT  
FROM \$1 MILLION  
TO \$5 MILLION

(WORK GROUP #1 WAS IN  
GENERAL AGREEMENT ON THIS)

ADOPT THE COUNTIES  
AGREEMENT CONCERNING  
ALLOCATION OF A PORTION  
OF THE COUNTY  
ALLOCATION TO LOW-  
REGISTRATION COUNTIES  
WITH MANY ROAD MILES.

## Special County Allotment (SCA) Based on a Miles / Registered Vehicles Ratio

**New SCA Fund:** \$ 5,000,000  
**New Revenue:** \$ 85,000,000

*Amount expected for traditional allocation*

County	Road Miles	Registered Vehicles	Miles / Vehicles	Existing 2016 State Highway Fund	New SCA to County	New Transportation Package (2017)		
						Total New Revenue	\$ Change	% Change
Sherman	447	3,732	0.1197	\$ 216,476	\$ 664,248.22	\$ 1,034,517	\$ 738,340	249.3%
Gilliam	407	3,589	0.1134	\$ 207,375	\$ 629,235.51	\$ 1,001,900	\$ 700,489	232.4%
Wheeler	259	2,436	0.1065	\$ 139,733	\$ 591,092.88	\$ 787,524	\$ 639,455	431.9%
Harney	812	11,580	0.0701	\$ 660,103	\$ 389,070.79	\$ 1,550,982	\$ 618,971	66.4%
Morrow	959	15,999	0.0600	\$ 914,718	\$ 332,855.96	\$ 1,673,277	\$ 650,487	63.6%
Wallowa	713	12,135	0.0588	\$ 691,350	\$ 326,119.10	\$ 1,258,387	\$ 567,037	82.0%
Lake	729	13,335	0.0547	\$ 758,177	\$ 303,553.01	\$ 1,326,472	\$ 568,295	75.0%
Malheur	1,735	36,574	0.0474	\$ 2,109,598	\$ 263,258.50	\$ 3,286,914	\$ 989,369	43.1%
Grant	488	11,757	0.0415	\$ 672,122	\$ 230,321.79	\$ 1,135,858	\$ 463,736	69.0%
Baker	905	23,818	0.0380	\$ 1,363,860	\$ 210,825.89	\$ 2,047,549	\$ 683,689	50.1%
Jefferson	601	27,877	0.0216	\$ 1,576,191	\$ 119,647.81	\$ 2,249,286	\$ 673,095	42.7%
Wasco	674	32,710	0.0206	\$ 1,863,437	\$ 114,299.91	\$ 2,627,135	\$ 763,697	41.0%
Umatilla	1,670	92,438	0.0181	\$ 5,287,865	\$ 100,297.19	\$ 7,223,350	\$ 1,935,485	36.6%
Union	598	33,907	0.0176	\$ 1,936,525	\$ 97,896.60	\$ 2,707,583	\$ 771,058	39.8%
Crook	472	34,367	0.0137	\$ 1,928,481	\$ 76,205.89	\$ 2,686,981	\$ 758,500	39.3%
Klamath	869	85,381	0.0102	\$ 4,889,810	\$ 56,472.45	\$ 6,641,367	\$ 1,751,557	35.8%
Tillamook	328	34,862	0.0094	\$ 1,985,530	\$ 52,291.02	\$ 2,729,942	\$ 744,413	37.5%
Douglas	1,141	135,254	0.0084	\$ 7,737,713	\$ 46,819.44	\$ 10,469,754	\$ 2,732,041	35.3%
Columbia	538	65,029	0.0083	\$ 3,700,018	\$ 45,921.28	\$ 5,036,972	\$ 1,336,954	36.1%
Linn	1,103	142,304	0.0078	\$ 8,113,324	\$ 43,043.39	\$ 10,981,554	\$ 2,868,230	35.4%
Curry	225	30,623	0.0074	\$ 1,746,769	\$ 40,842.76	\$ 2,395,576	\$ 648,807	37.1%
Coos	526	75,830	0.0069	\$ 4,323,831	\$ 38,521.00	\$ 5,867,819	\$ 1,543,988	35.7%
Hood River	203	30,741	0.0066	\$ 1,756,276	\$ 36,652.05	\$ 2,403,235	\$ 646,959	36.8%
Lincoln	339	54,206	0.0063	\$ 3,083,904	\$ 34,753.77	\$ 4,194,819	\$ 1,110,915	36.0%
Yamhill	669	109,825	0.0061	\$ 6,254,889	\$ 33,838.10	\$ 8,469,103	\$ 2,214,214	35.4%
Polk	478	80,351	0.0060	\$ 4,558,625	\$ 33,029.32	\$ 6,186,877	\$ 1,628,252	35.7%
Benton	447	81,941	0.0055	\$ 4,676,446	\$ 30,293.13	\$ 6,333,529	\$ 1,657,083	35.4%
Josephine	561	105,078	0.0053	\$ 5,985,059	\$ 29,624.00	\$ 8,100,816	\$ 2,115,756	35.4%
Clatsop	229	43,845	0.0052	\$ 2,499,526	\$ 28,969.23	\$ 3,398,958	\$ 899,432	36.0%
Deschutes	937	222,066	0.0042	\$ 12,487,163		\$ 16,895,880	\$ 4,408,716	35.3%
Jackson	962	237,059	0.0041	\$ 13,485,087		\$ 18,191,462	\$ 4,706,375	34.9%
Lane	1,436	368,590	0.0039	\$ 21,009,786		\$ 28,327,469	\$ 7,317,684	34.8%
Marion	1,116	338,960	0.0033	\$ 19,215,647		\$ 25,945,081	\$ 6,729,434	35.0%
Clackamas	1,411	434,650	0.0032	\$ 24,745,463		\$ 33,374,647	\$ 8,629,185	34.9%
Washington	1,394	518,568	0.0027	\$ 29,349,957		\$ 39,645,181	\$ 10,295,224	35.1%
Multnomah	293	730,013	0.0004	\$ 41,442,925		\$ 55,936,005	\$ 14,493,079	35.0%



# OREGON'S ORPHAN HIGHWAYS



# ORPHAN HIGHWAYS

**The notion is that there are roads that belong to the state, but the state doesn't care about them, and they ought to be in the ownership of the local government. But the local government doesn't have initiative to take them because ODOT has deferred improvement for so many years.**

# **REGULATORY MODIFICATIONS TO REDUCE COSTS**

- 1. Develop a priority measure for projects that have a lower cost per mile for the transport of aggregate to the project.**
  - Green because less fuel burned getting there
  - Economic because the price should be less if closer
- 2. A study of laws and regulations that affect the cost of fuel in Oregon, the impact of that cost on low-income Oregonians, and the impact they have on the ability of the state to add additional costs to a gallon of fuel.**
  - Included in the study are:
    - the LCFS
    - the lack of self-serve gas
    - the Clean Fuels programs

# THE VW SETTLEMENT MONEY—

ALLOCATE THE 15%  
AVAILABLE IN THAT  
PROGRAM FOR CHARGING  
STATIONS TO LIGHT DUTY  
VEHICLE CHARGING  
STATIONS.

**FLEX FUNDS  
(\$26 MILLION)  
NOW GOING TO  
TRANSIT SHOULD BE  
DISCUSSED**

A MORE REFINED  
“USER PAYS”  
SYSTEM WAS  
DISCUSSED

(ROAD MILE TAX/TOLLING,  
FOR EXAMPLE)

ODOT SHOULD BECOME  
MORE EFFICIENT IN IT'S  
USE OF FUNDS,  
AND  
HERE ARE SOME  
EXAMPLES OF ODOT  
EFFICIENCIES,  
WHICH SHOULD BE  
CONTINUED:

# IMPROVEMENTS IN EFFICIENCY

## 1. Right-sizing ODOT agency staffing:

- 7% Reduction in FTE--\$35 million

## 2. Delivering projects more efficiently:

- Engineering automation
  - Automated machine guidance--\$1.5 million average net benefit
  - Mobile mapping--\$1 million net benefit per year
- Culvert repair without fish passage requirements--\$35.75 million

## 3. Making DMV more efficient:

- Maintain/Reduce FTE--\$10 million
- Online registration renewal
- Call center management—personnel cost savings
- Driver education course completion tests
- New driver manual--\$52,566
- Scanning certificates of financial responsibility--\$35,910 (biennial estimate)
- Microfilm replacement
- Credit/debit card acceptance
- Electronic convictions



# **IMPROVEMENTS IN EFFICIENCY**

## **CONTINUED**

### **4. Making contracting more efficient:**

- Electronic file management--\$100,000 (biennial estimate)
- Architecture & Engineering contract improvement effort
- Contract Administration/Construction Engineering Inspection exemption--\$50,000 (biennial estimate)

### **5. Saving on the cost of facilities:**

- Standardized design for ODOT facilities
- Energy savings in ODOT facilities--\$36,000
- Facilities consolidation
  - Reducing leased space--\$2,030,438
  - Related monthly expenses--\$11,270 monthly
  - Elimination of annual DAS assessment--\$25,721
  - Consolidation of Transportation Safety Division facility--\$72,000
- Reduced custodial costs at the transportation headquarters building--\$200,000 (biennial estimate)

### **6. Administrative savings:**

- Cellular program consolidation--\$34,000 monthly average
- Managed print services--\$200,000
- Efficient transit grant management-

WORK GROUP #1  
BRIEFLY DISCUSSED  
ESTABLISHMENT OF A  
TASK FORCE TO REFINE  
OREGON'S APPROACH TO  
DELIVERING MEGA  
TRANSPORTATION PROJECTS  
(IN EXCESS OF \$500 MILLION)



**The End!**