

The Fuel Tax and the Electric Vehicle

Case Study

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What is the Fuel Tax?

- Created to fund the building of roads.
- A 'popular' tax when it was created
 - People saw the improvements
- Increasing taxes to maintain roads is less popular
- Best example of a user fee

HOWEVER

- Electric vehicles do not pay the fuel tax.
- How should states tax electric vehicles to cover for their costs on the roads?

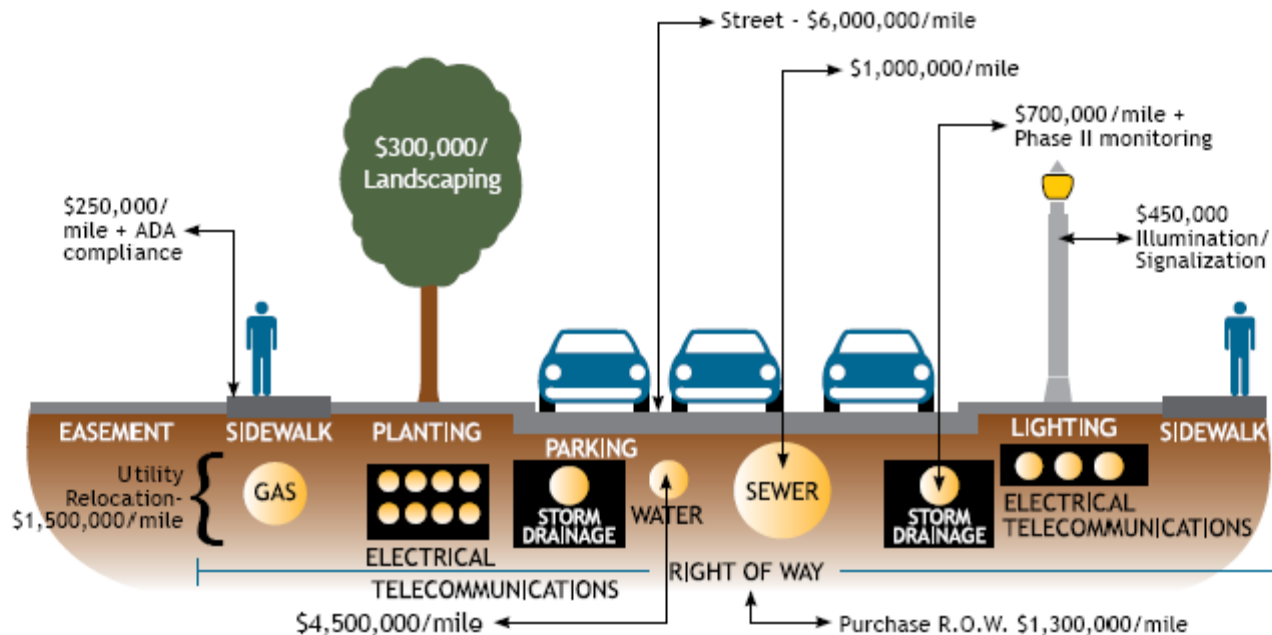
What is a road?

Typical “Complete street” costs

Actual 2008 bid specs = \$15.7 million per mile

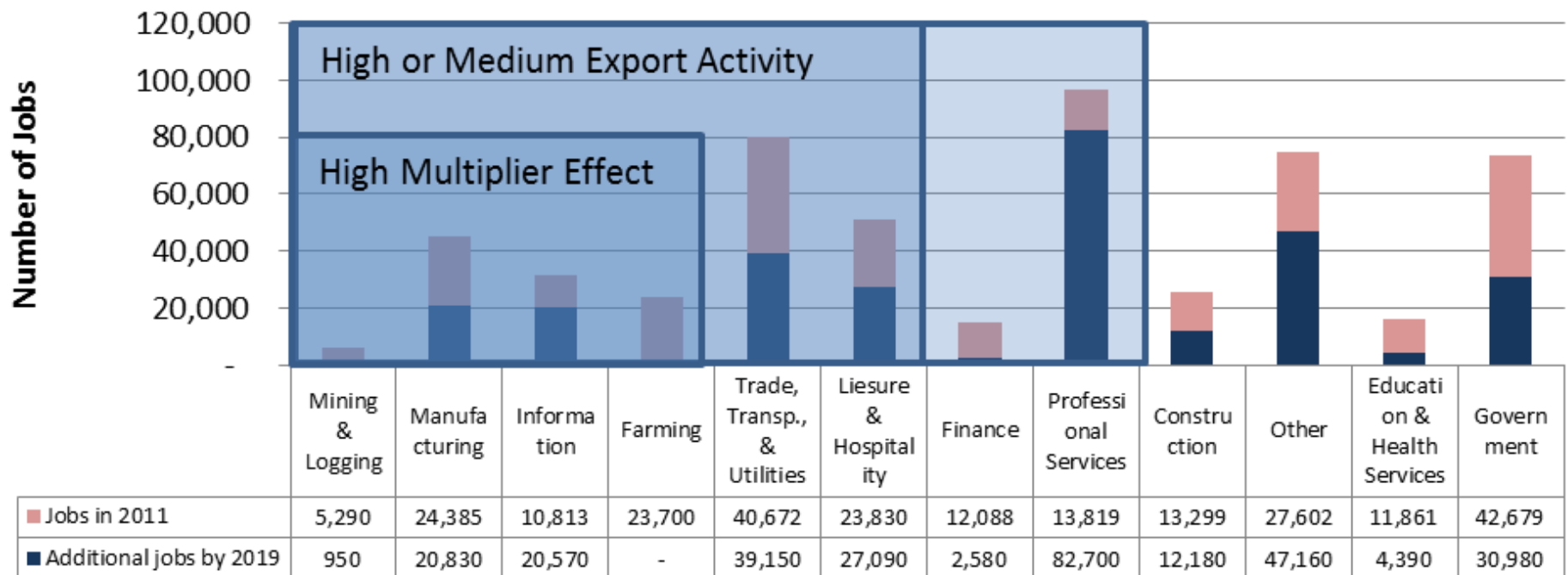
Typical City Infrastructure Costs Today

City streets are more than pavement.



How are roads tied to the economy?

WA Jobs that are Dependent on Transportation



What's the goal – help people or roads?

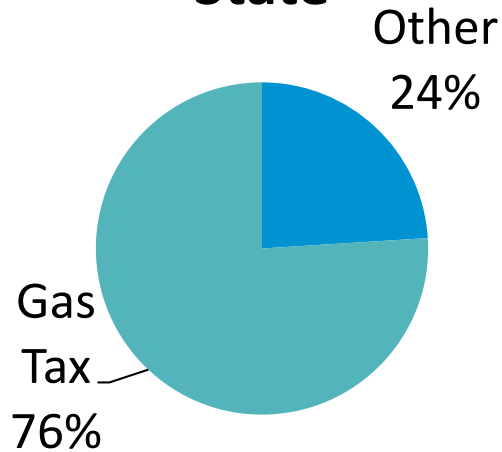
Where roads are

Where people are

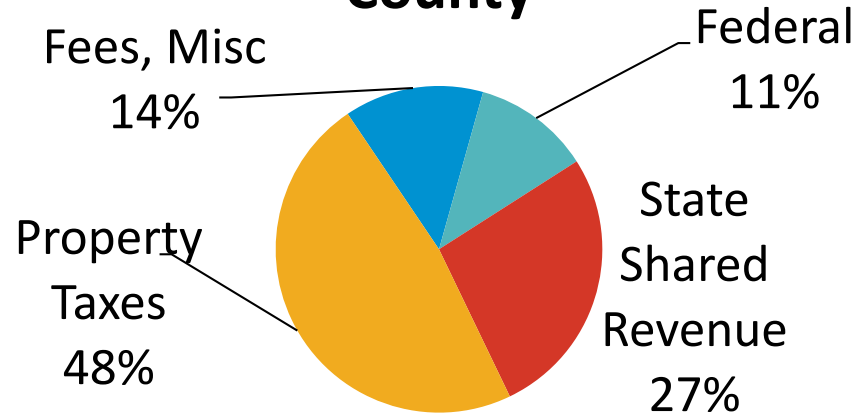
| Jurisdiction | Centerline Miles | | Daily Vehicle Miles Traveled (1000's) | |
|--------------|------------------|--------|---------------------------------------|---------|
| Interstate | 764.27 | 0.91% | 41,937 | 21.33% |
| State | 7,061.66 | 8.38% | 86,179 | 43.84% |
| County | 39,868.65 | 47.31% | 24,928 | 12.68% |
| City | 17,696.69 | 21.00% | 41,522 | 21.12% |
| Other | 18,877.85 | 22.40% | 2,030 | 1.03% |
| Total | 84,269.12 | 100% | 196,596 | 100.00% |

Revenue model varies based on jurisdiction

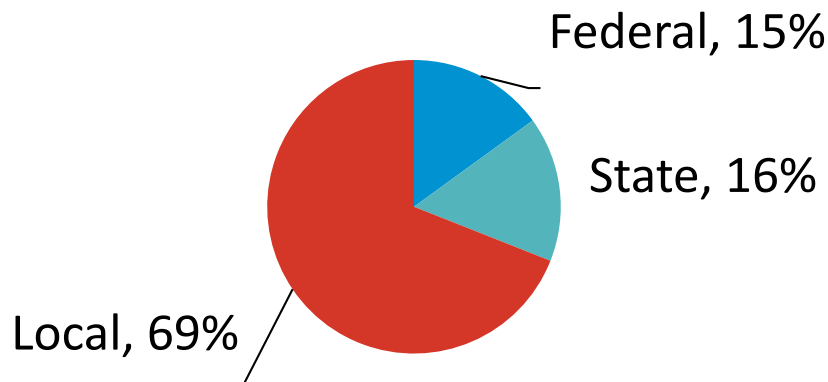
State



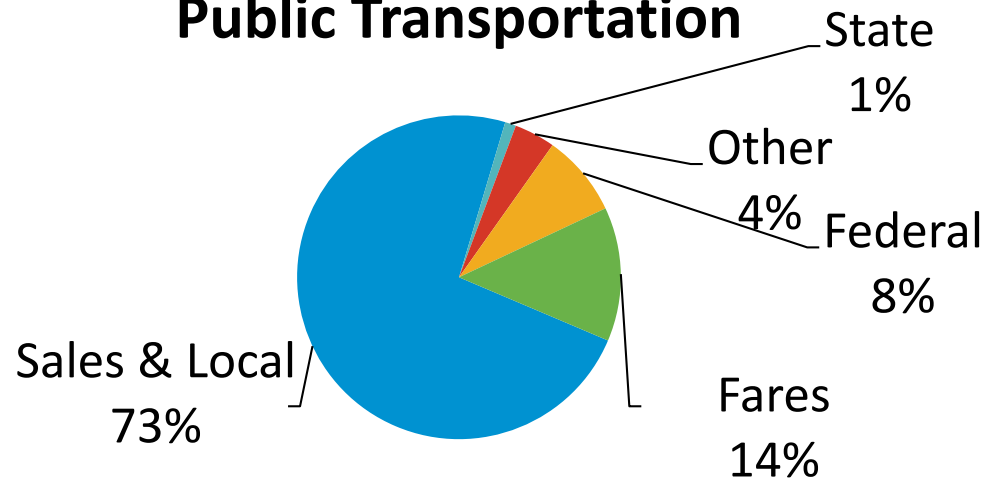
County



City



Public Transportation



Jurisdiction Pressures

- **Municipals:** traffic through main roads are caused by commuters who may not be paying a sales tax
- **County:** “Last mile” provider for many communities. Largest number of miles of roads with smallest tax base.
- **State/Interstate:** Fewest miles of roads and highest usage.
- **Public Transportation:** Serves customers that can't afford to pay for other forms of mobility.



37½¢

Per gallon Washington state gas tax rate as of July 1, 2008



-9½¢

261 specific transportation projects statewide*
(2005 Transportation Partnership Projects)

Funded
421 projects



-5¢

160 specific transportation projects statewide
(2003 Nickel Package projects)



23¢

Base Gas Tax



-11¢

Supports cities and counties for local roads



-4¢

Supports debt service to reduce bond debt that funded past highway and ferry projects

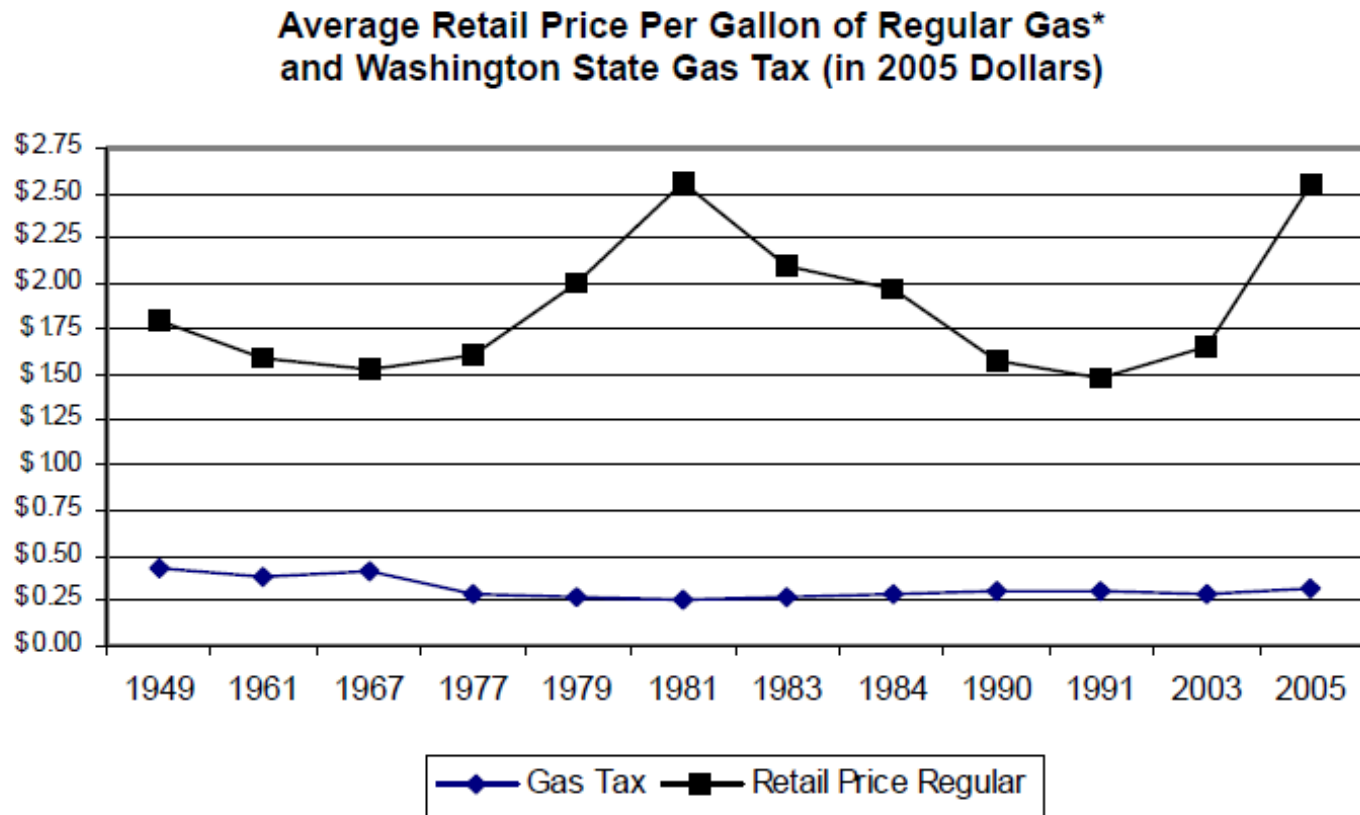


8¢

Remains for maintenance and operations as well as preservation, safety improvements, and congestion-relief projects for state highways and ferries

* Of the 9½ cents, 8½ cents is used by the state for highway projects, 1 cent goes to cities and counties for improvements to streets and roads.

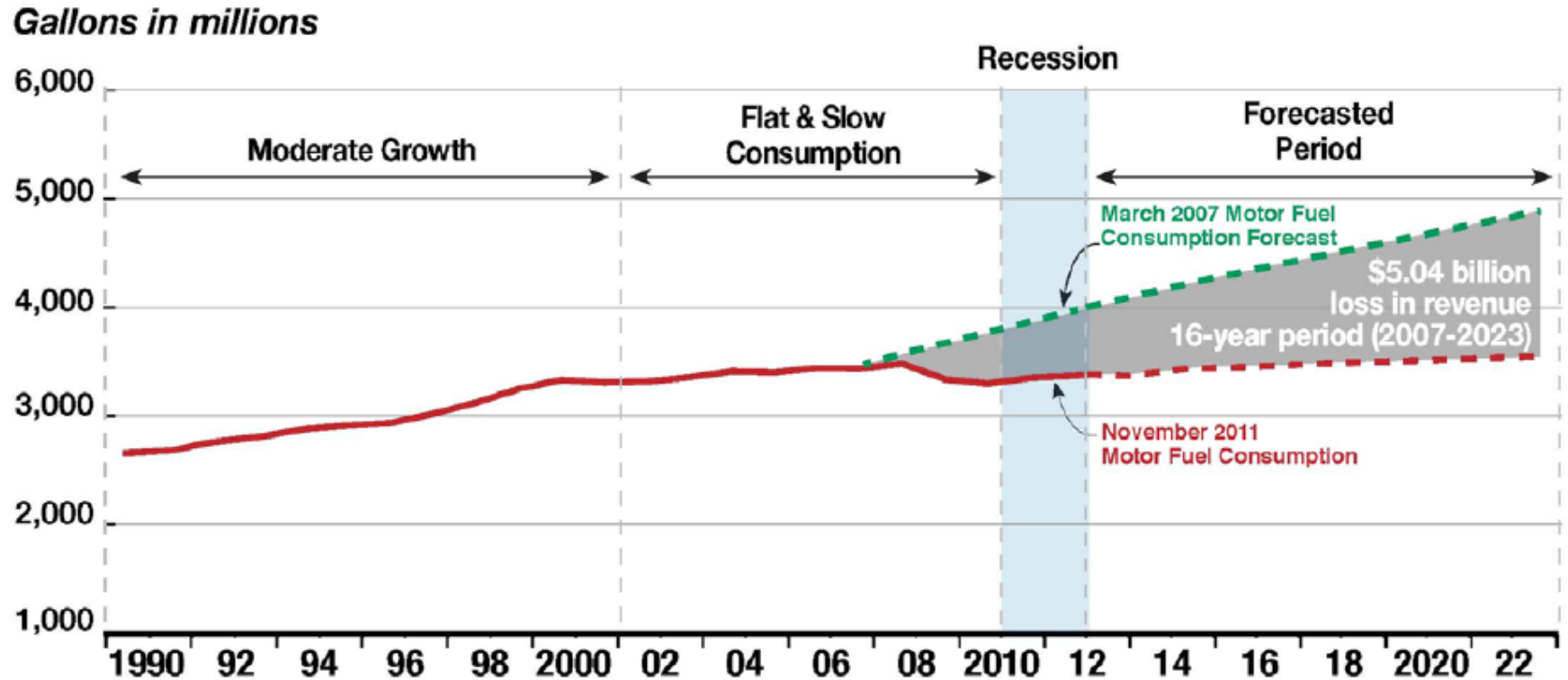
The Fuel Tax is a Flat Tax

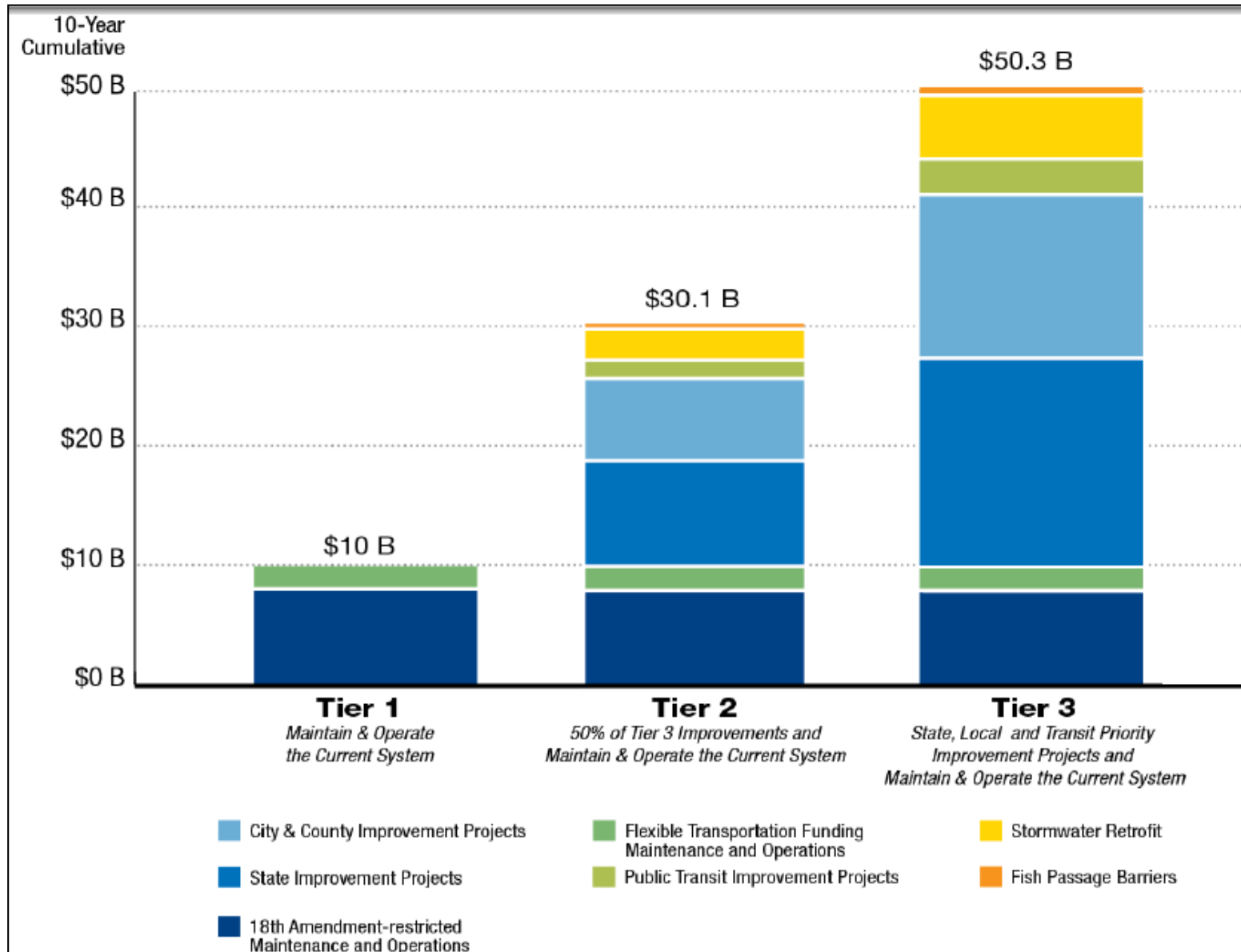


*1949-2003 prices are U.S. averages. 2005 price is Washington state average for August 8, 2005.

Sources: U.S. Department of Energy, Energy Information Administration; Washington State Department of Revenue

The gap in funding





Weight is the Foe of Transportation

| | Vehicles | | Cost Allocation of Damage | | Federal Usage Fee Recovery | |
|----------------------------|-----------|---------|---------------------------|---------|----------------------------|---------|
| | Number | Percent | \$ Millions | Percent | \$ Millions | Percent |
| Passenger Vehicles | 2,495,056 | 92.60% | \$19,841 | 59.70% | \$22,285 | 67.10% |
| Single Units Trucks | 83,100 | 3.10% | \$3,638 | 10.90% | \$3,142 | 9.50% |
| Combinations Trucks | 115,689 | 4.30% | \$9,754 | 29.40% | \$7,806 | 23.50% |

Revenue

The “Best” taxes are considered user fees. The more you use, the more you’re taxed.

- Broadbased Taxes
- Taxes by Gallon
- Annual Fees
- Taxes by Weight
- Taxes by Mile
- Other?

Revenue – Broadbased Taxes

ie, sales tax, property tax



- **Advantage:** Goes into a general fund and can be spent on anything.
- **Competing priorities:** libraries, police, schools

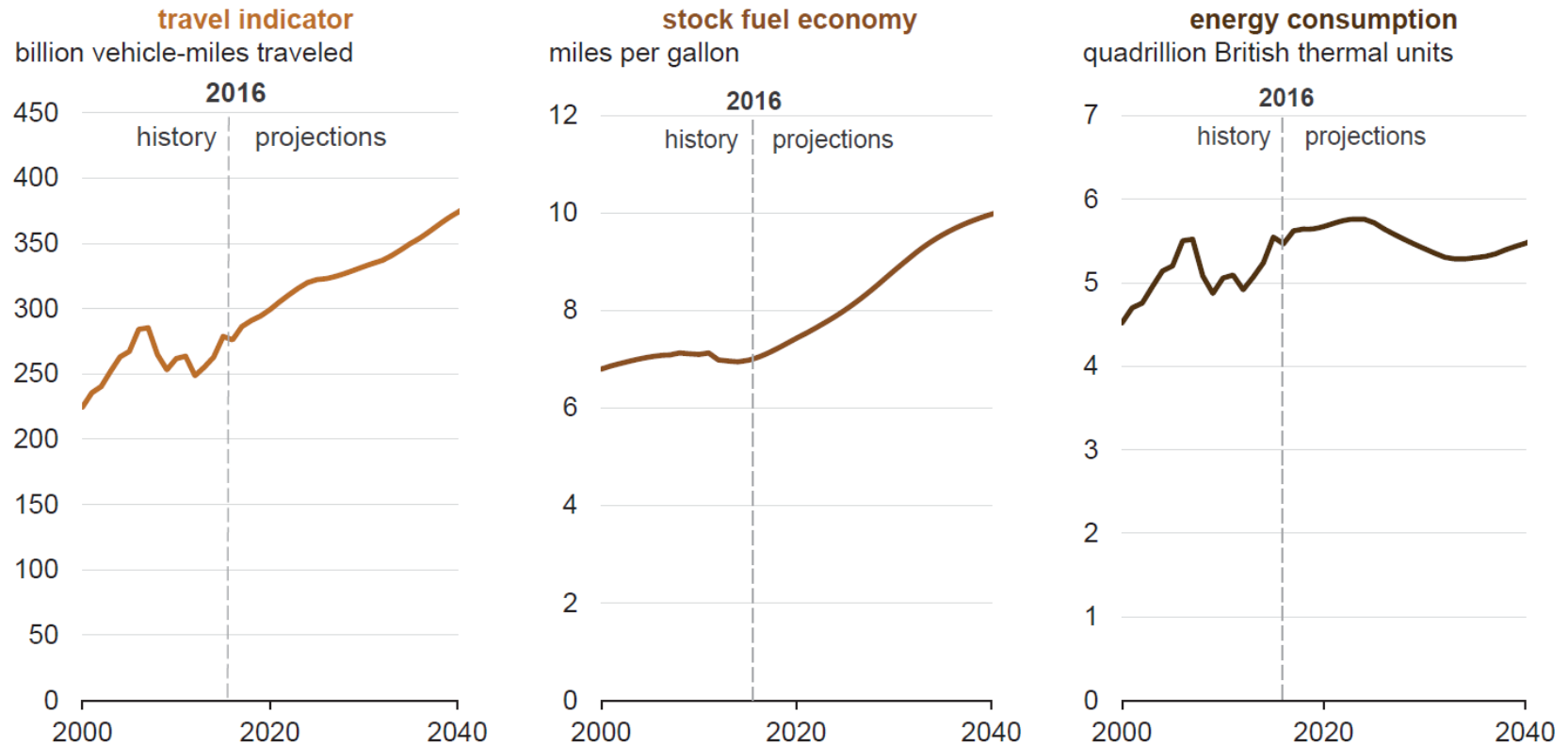


Tax by Gallon (Fuel Tax)

- Administered at the pump
- Statutorily set-aside for transportation purposes.
- Mildly correlated to miles driven.
- Does not take into account trucks (weight) and highly efficient cars



Future Pressures

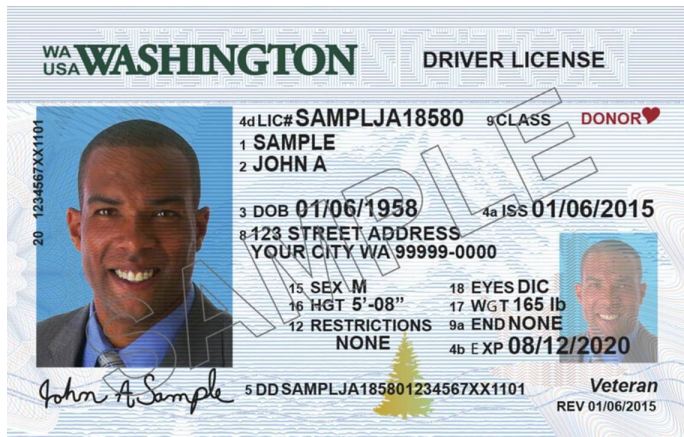


Fuel efficiency and miles travels rises together,
further eroding fuel tax effectiveness.

Congestion taxes and tolls

Annual Fees (excise tax)

- Tab fee (or registration fee) per car
- License fee (per person)
- **Advantage:** Simple to administer
- **Disadvantage:** Not correlated to usage



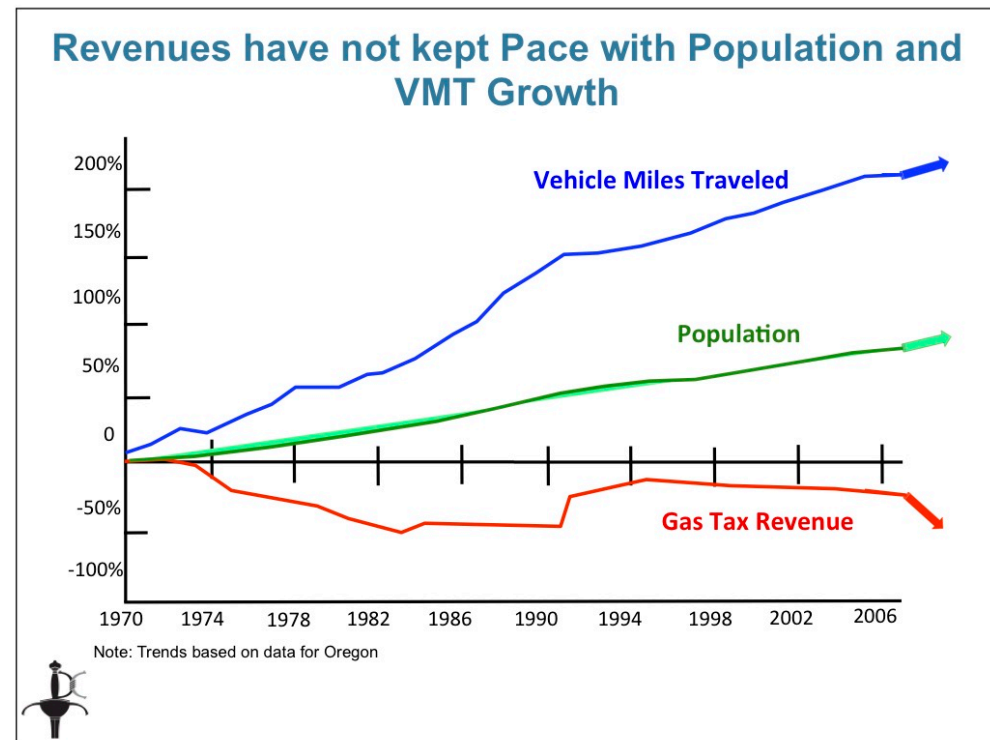
Taxes by Weight

- **Advantage:** Targets trucks that cause the most damage.
- **Disadvantage:** Hard to audit
 - Can't tell the difference between empty and full trucks without a weigh station
 - Requiring frequent weighings will slow down commerce



Vehicle-Miles Traveled (VMT)

- A tax based on the number of miles you traveled, collected at the fuel pump.
- Therefore, you need to enter in your odometer reading at each refueling.
- **Advantage:** A true user fee
- **Disadvantage:** Auditing, if done by the individual; privacy, if monitored by technology



CONCLUSIONS

Recommendations:

- Transportation goals according to RCW 47.04.280
- Economic Vitality
- Preservation
- Safety
- Mobility
- Environment
- Stewardship

Investment principles

The ten-year strategy must focus on transportation investments that strengthen the economy, protect and create jobs, and provide lasting community benefits throughout the entire state. It will:

1. Preserve existing transportation systems and services.
2. Improve mobility for people and commerce.
3. Enhance the safety and efficiency of the transportation system.
4. Provide community and environmental improvements that help attract, keep, and expand private businesses and a highly skilled work force.

Revenue

- The Task Force recommends that the Legislature consider the following potential funding options to pay for the needed investments.
- The options fall into two categories: fee increases that could be enacted by the Legislature by a simple majority vote; and increases in taxes that require either a two-thirds vote of the Legislature or a majority vote of the people.

Selected revenue options

| Sources | 10-year estimate (2014-2023) | Background and Considerations |
|---|------------------------------|---|
| Driver Record Abstract Fees (fee increase of \$2 based on 2011 SHB 2053) | \$ 65 m | <ul style="list-style-type: none"> • Currently \$10.00. • Does not keep up with inflation without regular increases. |
| Vehicle Title Fees (fee increase of \$10 based on 2011 SHB 2053) | \$ 237 m | <ul style="list-style-type: none"> • Currently \$30.00. • Does not keep up with inflation without regular increases. |
| Drivers License Fees (originals increase by \$20 and renewals increase by \$15) | \$ 185 m | <ul style="list-style-type: none"> • Currently \$45.00 for an original license and \$25.00 for renewals. Drivers must renew every 5 years. |
| Electric Vehicle Fee (\$100 annually) | \$ 10 m | <ul style="list-style-type: none"> • This source may be more useful over time if the use of electric vehicles increases. • Task force suggested exploring application to both electric and hybrid vehicles. |

Transition to new revenue sources

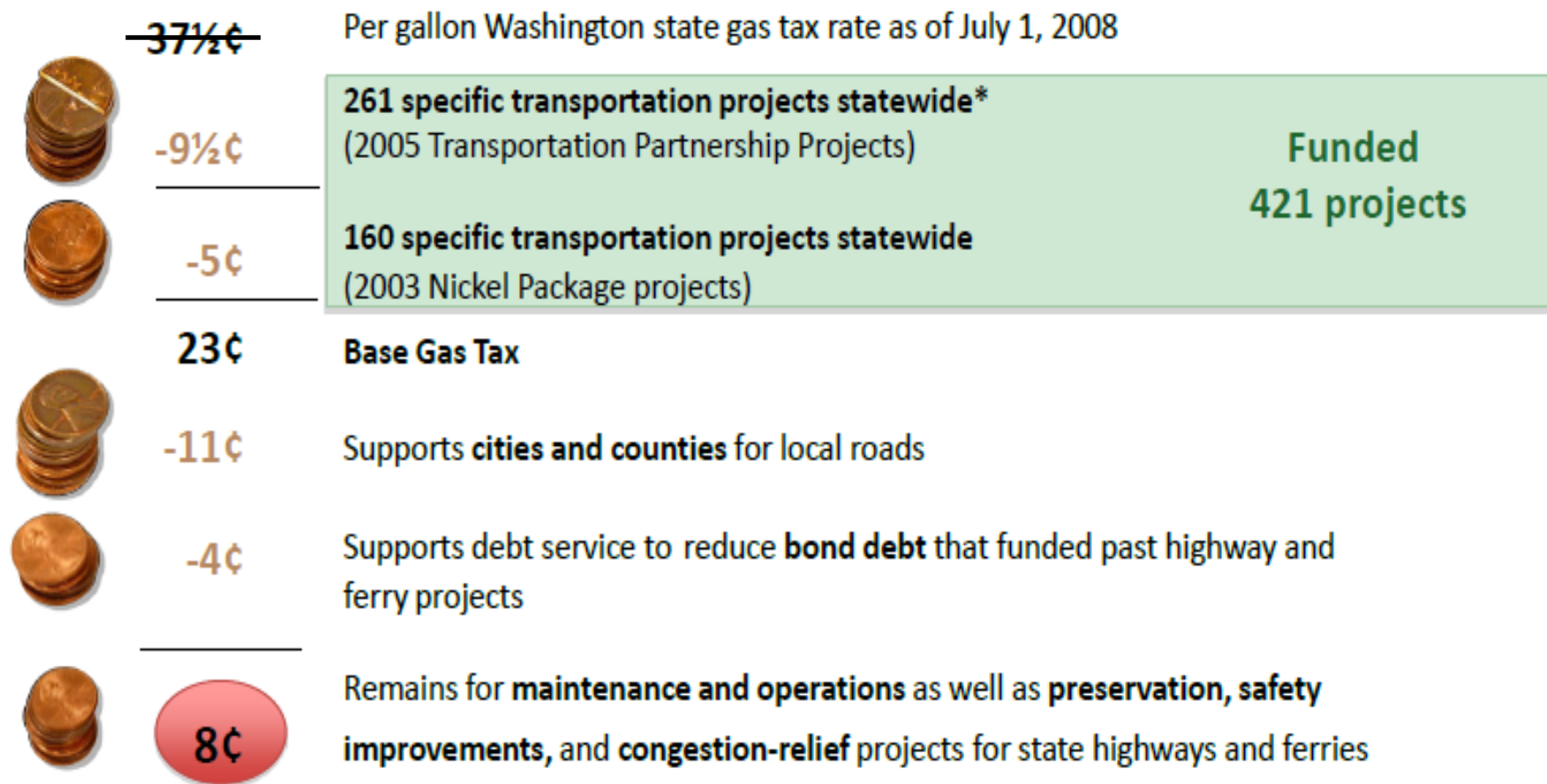
- The Task Force recommends that the State begin planning now for a transition to more sustainable funding sources for transportation.
- Doing so would recognize the problems inherent in continuing to rely upon the fuel tax as the primary source of funding for transportation.

2015 Connect Washington Transportation Package

2015 Legislature passes a \$5B transportation package

- \$0.119 rise in gas tax over 2 years
- Vehicle Weight fee rise from \$25 to \$72
- Elec Vehicle Fee from \$100 to \$150
- Misc fees (Studded tires, Registration Fees, sales tax etc)
- \$16B cumulative budget to 2031

The 2005 Package



* Of the 9½ cents, 8½ cents is used by the state for highway projects, 1 cent goes to cities and counties for improvements to streets and roads.

The 2016 Package

49.4¢



~~37½¢~~

-9½¢



-5¢

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Stayed the same!

11.9¢ allocated to
2015 Connecting Washington Projects
\$16 Billion package

Briefing on the American Society of Civil Engineers' 2013 Infrastructure Report Card



Thank You!