

Potholes or Tolls?

Perspectives on Transportation Finance

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Infrastructure crisis
Implications
Funding & finance
Options & Actions



Sad State of U.S. Infrastructure



AMERICA'S GPA: D⁺

ESTIMATED INVESTMENT NEEDED BY 2020: \$3.6 TRILLION

2013 REPORT CARD for *** america's INFRASTRUCTURE



[LAUNCH THE REPORT CARD >](#)

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CATEGORIES

WATER & ENVIRONMENT

Dams	D
Drinking Water	D
Hazardous Waste	D
Levees	D ⁻
Solid Waste	B ⁻
Wastewater	D

TRANSPORTATION

Aviation	D
Bridges	C ⁺
Inland Waterways	D ⁻
Ports	C
Rail	C ⁺
Roads	D
Transit	D

PUBLIC FACILITIES

Public Parks & Recreation	C ⁻
Schools	D

ENERGY

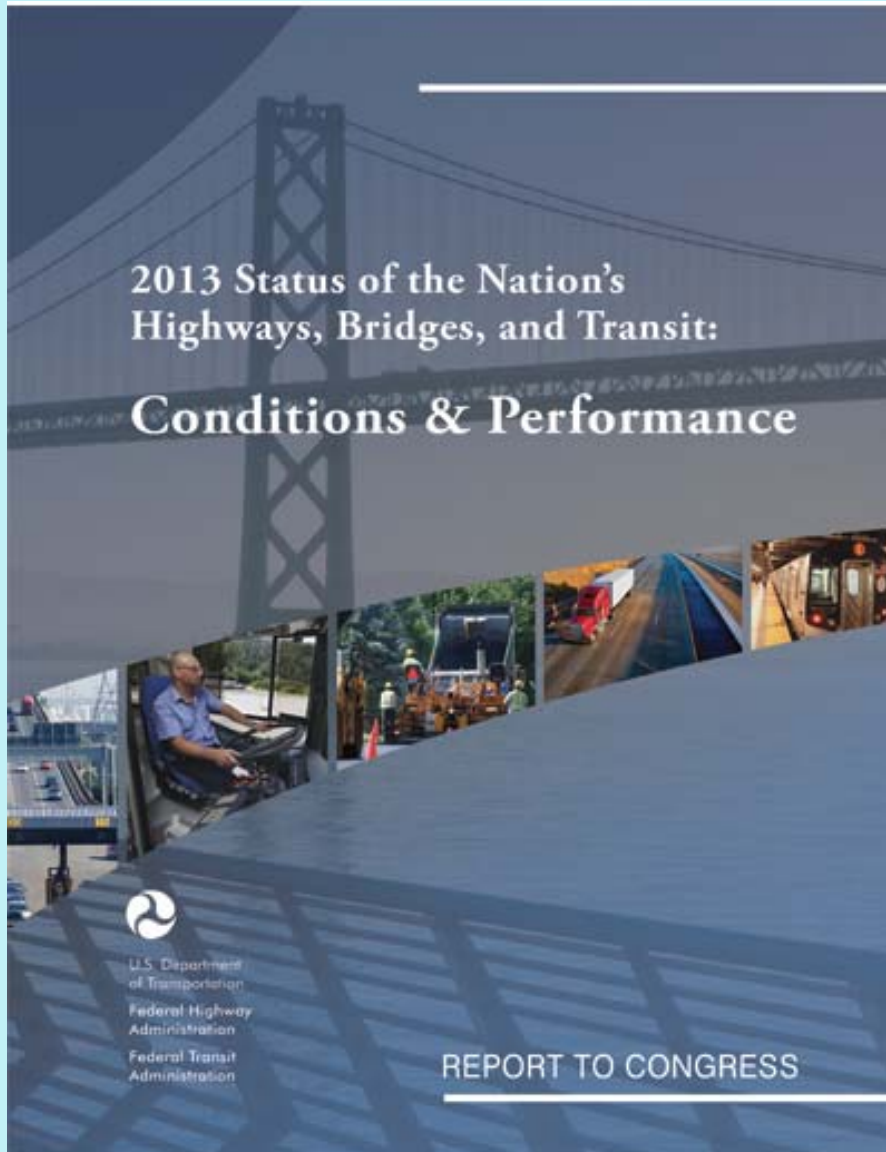
Energy	D ⁺
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[Previous Report Cards >](#)

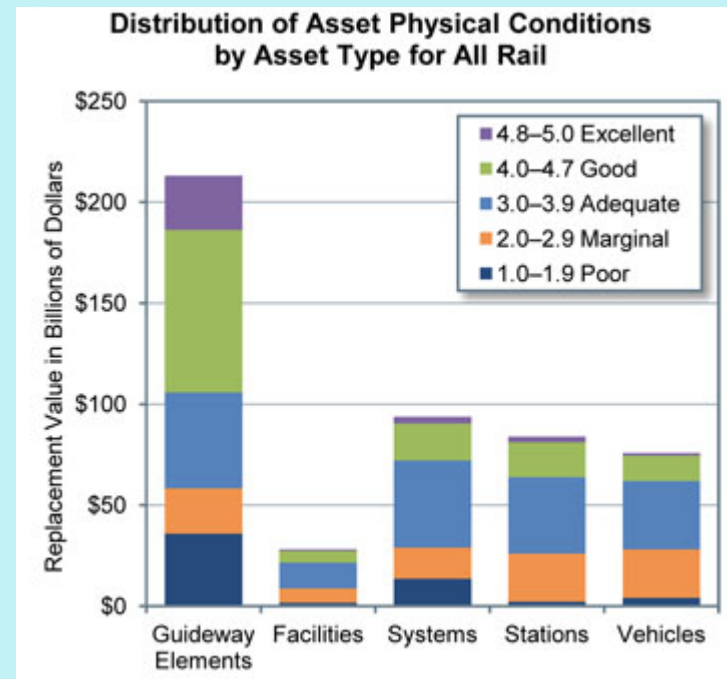
I-5 Bridge, Skagat River, Washington

Every failure
is not an
example...





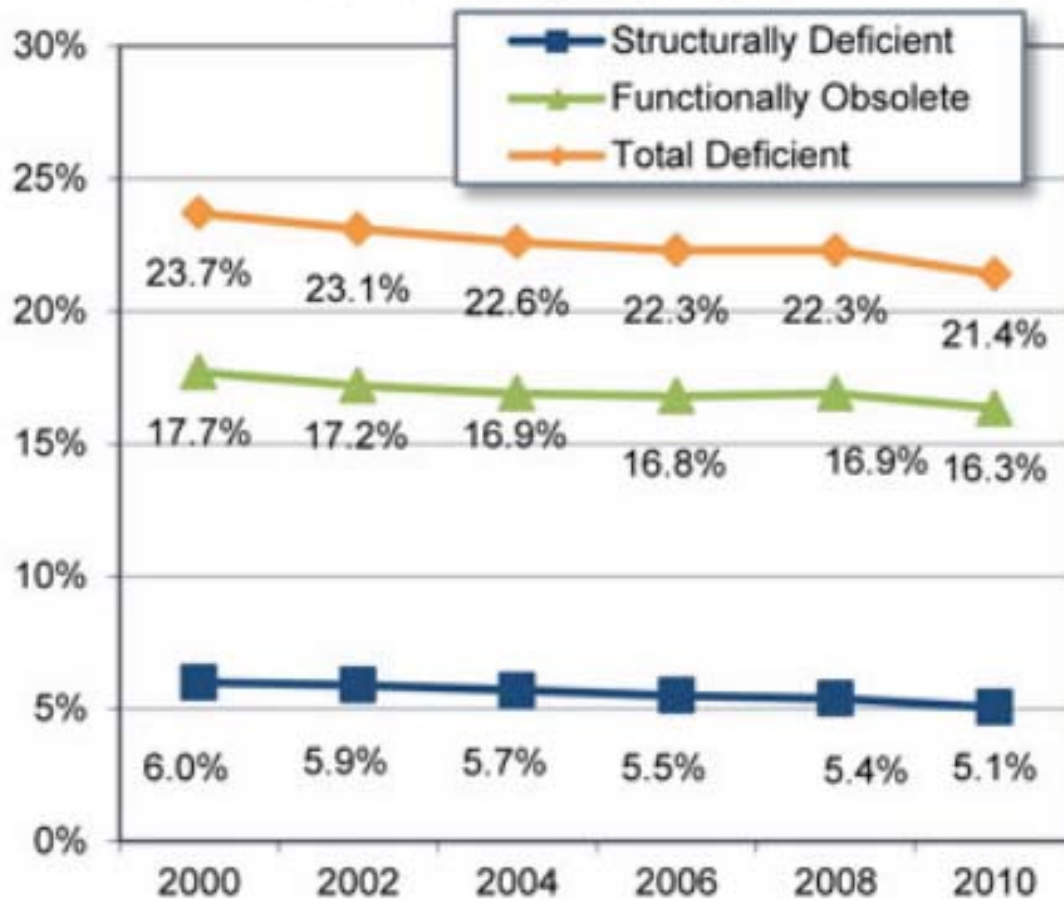
We have lots of data, will have more



Transit “Backlog”
U.S., poor to marginal condition: \$307 billion
Chicago, \$20 billion
Classification issues

2013 Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance

Percentage of NHS Bridges Classified as Deficient, 2000–2010



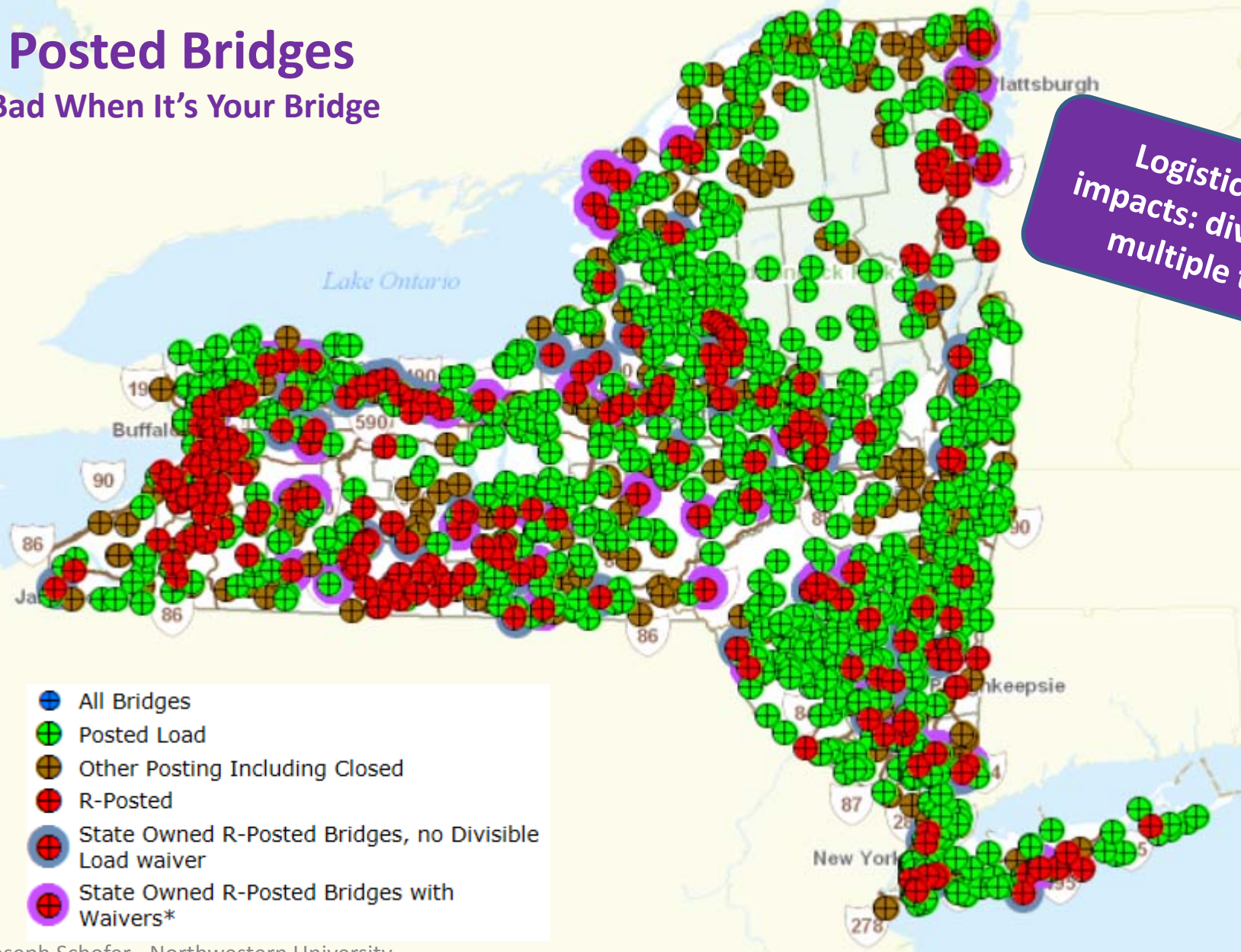
Illinois	All Bridges	NHS Bridges
Count	26,621	4,754
SD	2,275 (8.5%)	298 (6.3%)
FO	1,971 (7.4%)	672 (14.1%)
Both	4,246 (15.9%)	970 (20.4%)







<http://www.fhwa.dot.gov/bridge/nbi.cfm>

Posted Bridges

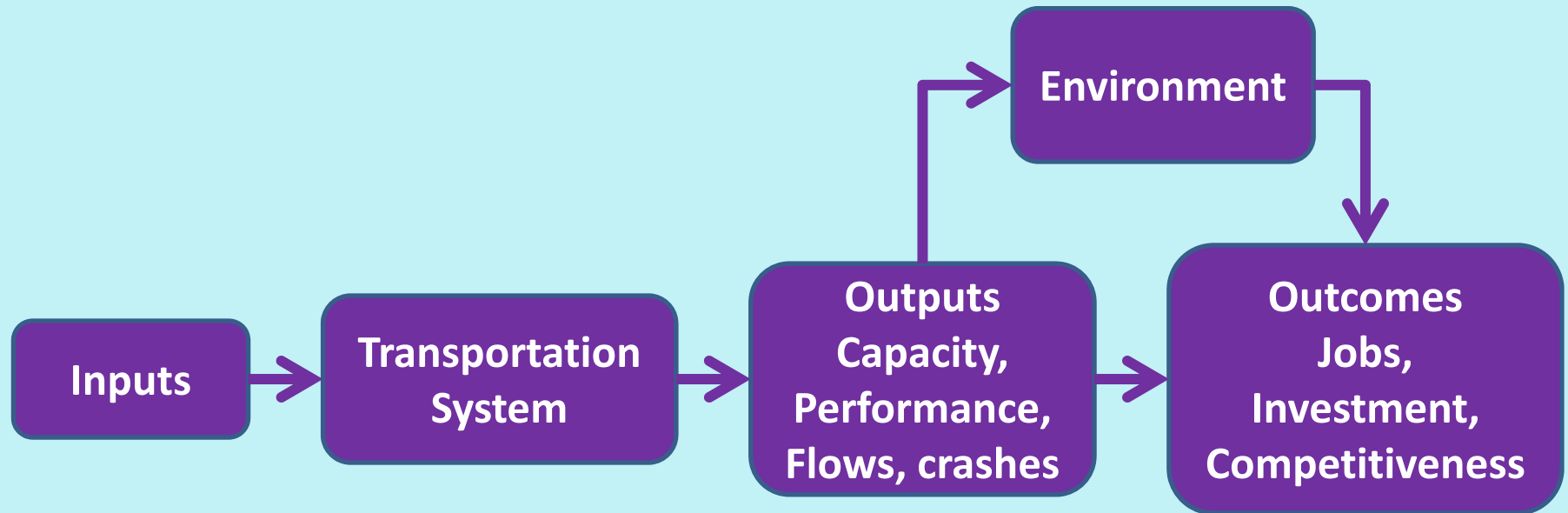
Bad When It's Your Bridge

Logistic costs
impacts: diversions,
multiple trips



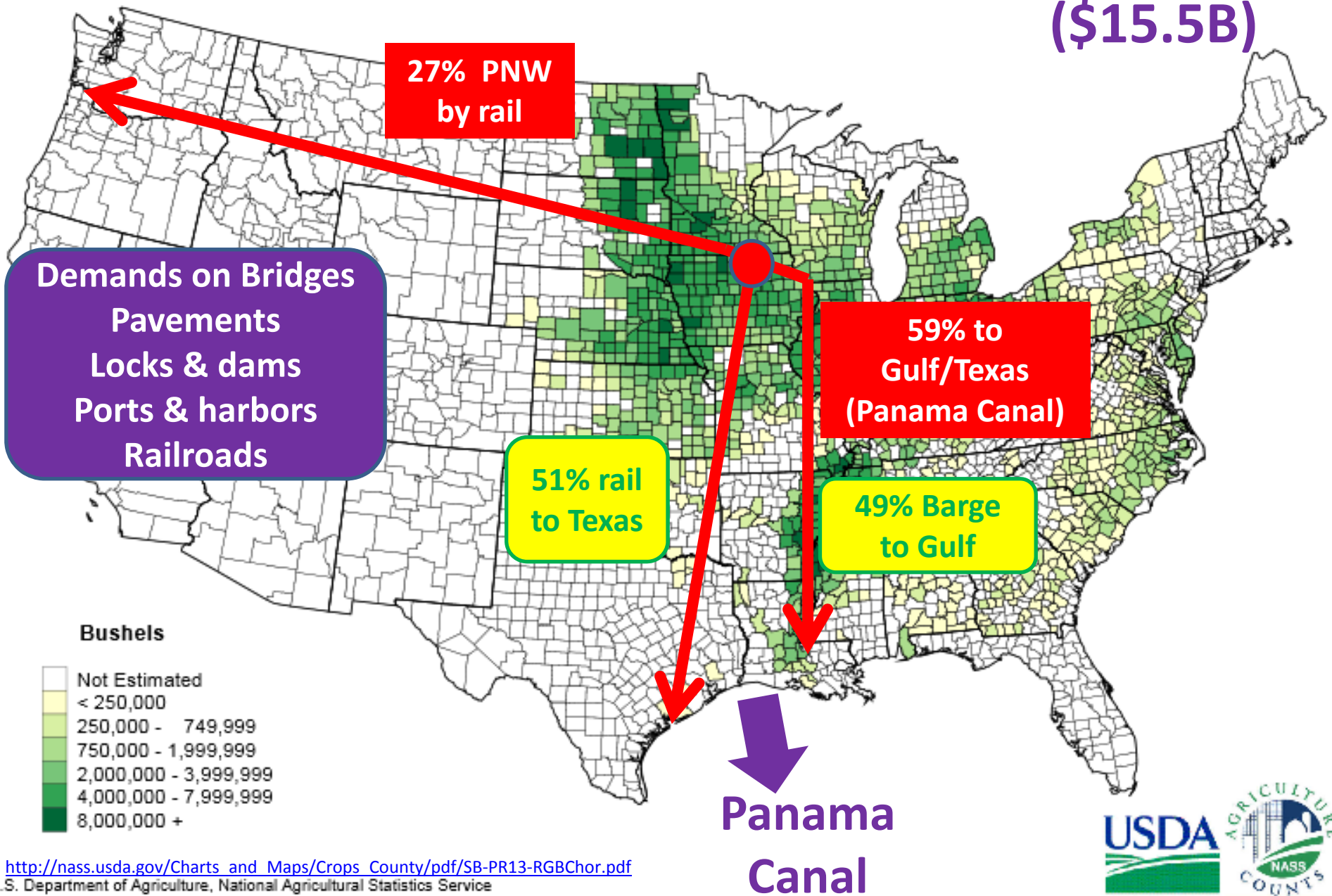
-  All Bridges
-  Posted Load
-  Other Posting Including Closed
-  R-Posted
-  State Owned R-Posted Bridges, no Divisible Load waiver
-  State Owned R-Posted Bridges with Waivers*

What's Important



2014 US Soybean Exports 44.5x10⁶ metric tons

(\$15.5B)



Problem: Not Enough Money

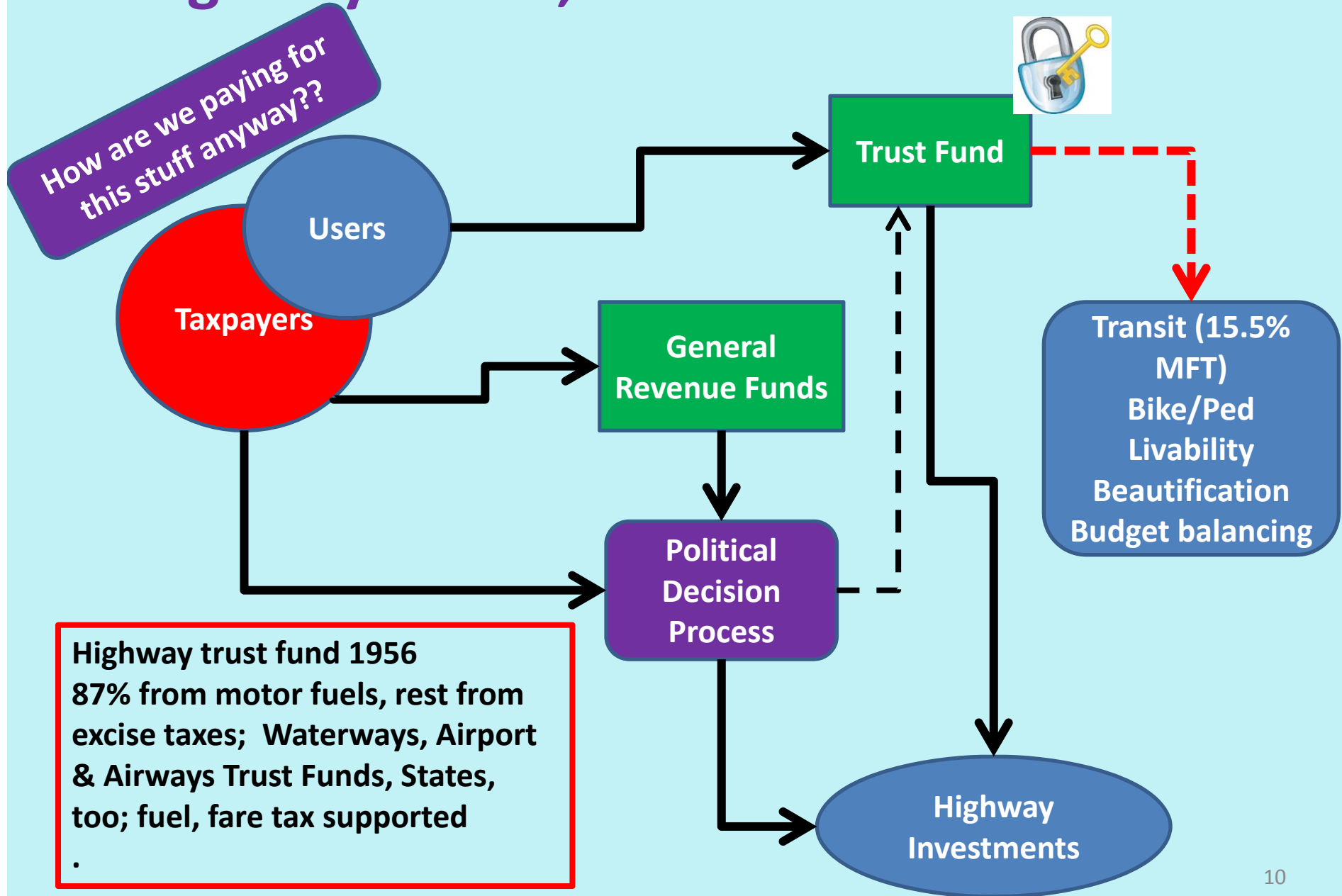
**“Roads to Ruin: Towns Rip Up the Pavement
Asphalt Is Replaced By Cheaper Gravel; 'Back to Stone Age'”**

WSJ July 17, 2010

Shedding
assets



Highways: Fees, Fund Flows and Politics



MFT - Illinois

2 cents/mile

Illinois Gasoline



19.00	State Excise Tax
11.72	Other State Taxes/Fees
30.72	Total State Taxes/Fees
49.12	Total State plus Federal Excise Taxes (@ 18.4 cpg)

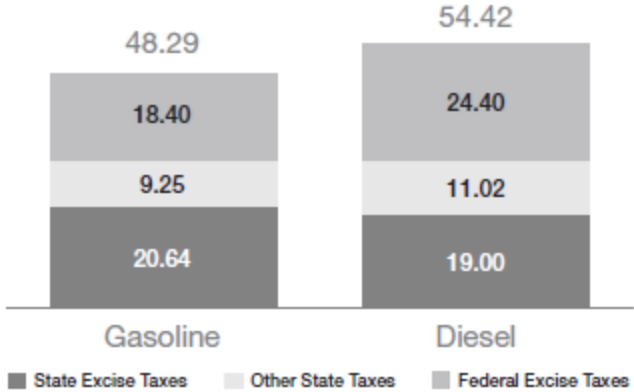
Illinois Diesel



21.50	State Excise Tax
17.99	Other State Taxes/Fees
39.49	Total State Taxes/Fees
63.89	Total State plus Federal Excise Taxes (@ 24.4 cpg)

National Average

(cents per gallon)



IL MFT last increased 1990 (CPI 2014 +81%)
 US MFT last increased 1993 (CPI 2014 64%)

Notes

“Other Taxes” declined 8.38 cpg for gasoline and 3.74 cpg for diesel in Q12015. Illinois exempts E85 and diesel blends of more than 10% biodiesel from sales taxes. It also allows E10 and biodiesel blends of 2-10% to receive an exemption of 20% off the sales tax. The sales tax exemption for biodiesel is set to expire at the end of 2018. Other Taxes column includes a 1.1 cpg tax for underground storage tank fund, and other local sales and gasoline taxes. The state-wide sales tax is 6.25%, with some local sales taxes making it as high as 10%. Cook County collects 6 cpg, and Chicago 5 cpg. DuPage, Kane, and McHenry Counties impose 4 cpg tax. Any city of over 100,000 can also impose a tax of 1 cpg by referendum.

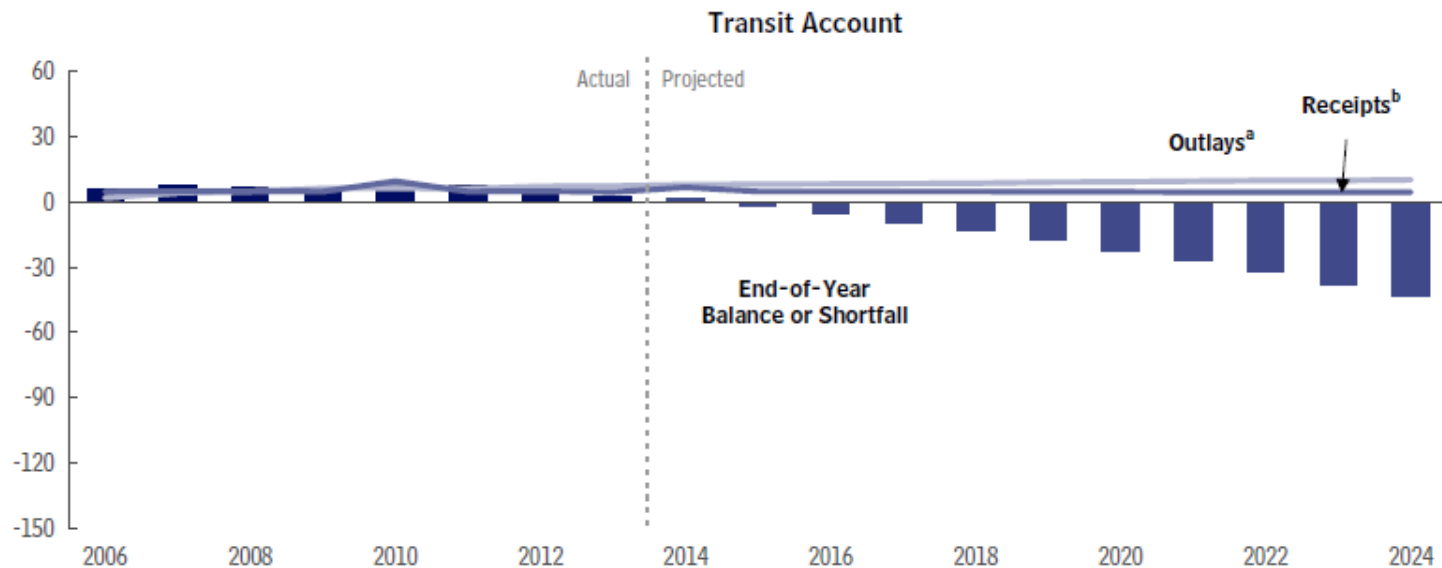
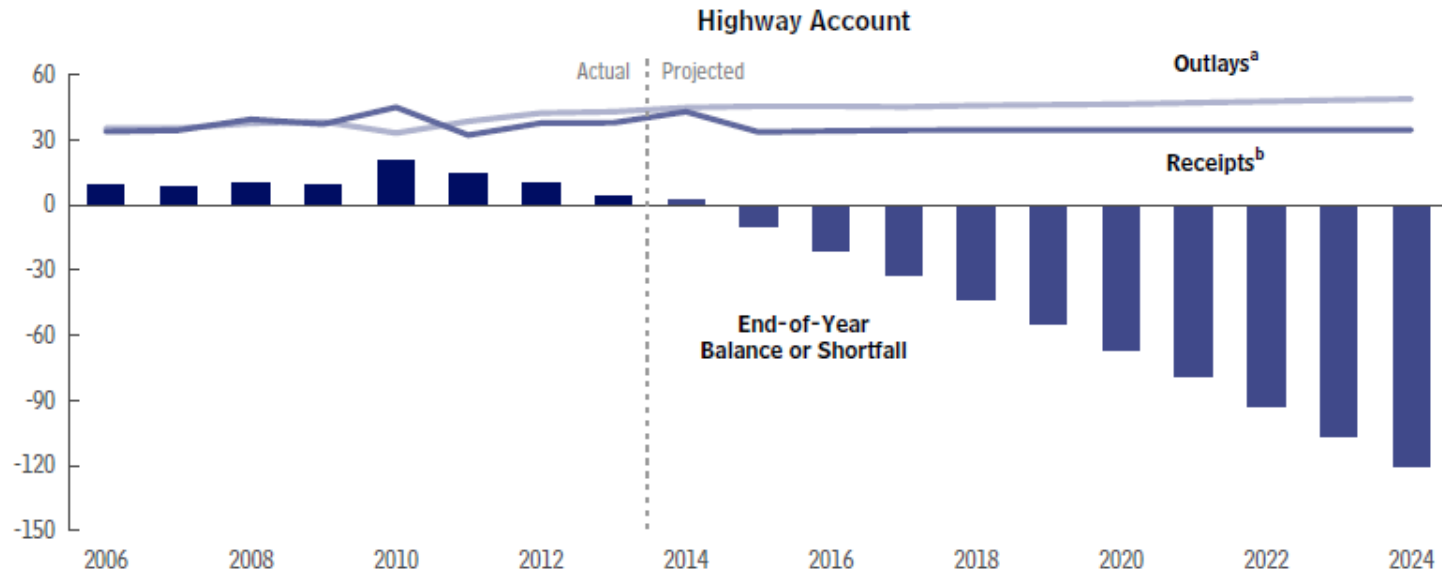


To find out more, visit www.api.org/tax

-- Click here for [Illinois Fuel Tax Information](#)

Receipts, Outlays, and Balance or Shortfall for the Highway Trust Fund Under CBO's April 2014 Baseline

(Billions of dollars)



Subsidizing the HTF

Who pays for this?

General fund transfers to Highway Trust Fund

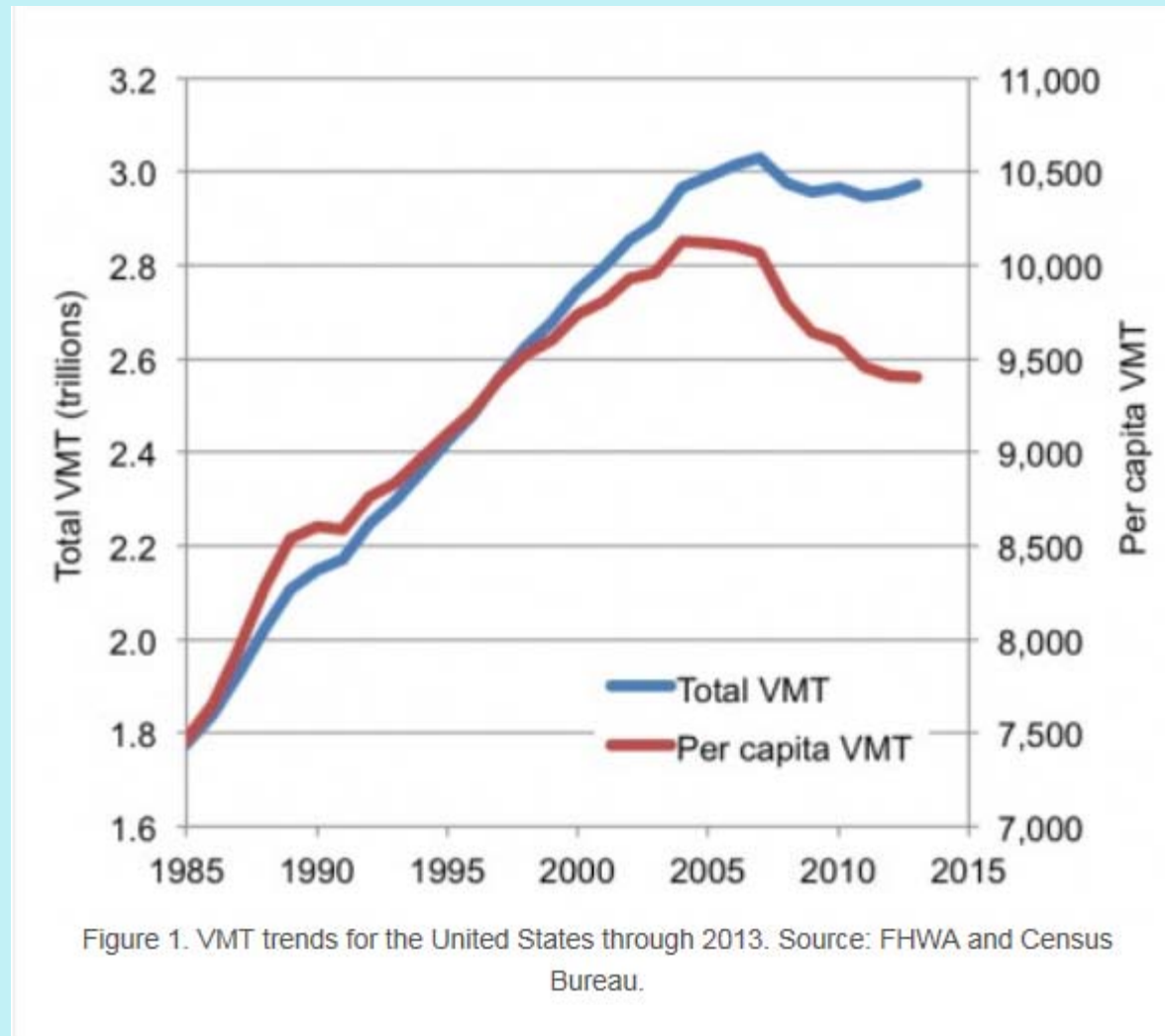


Metropolitan Planning Council

metroplanning.org @metroplanners

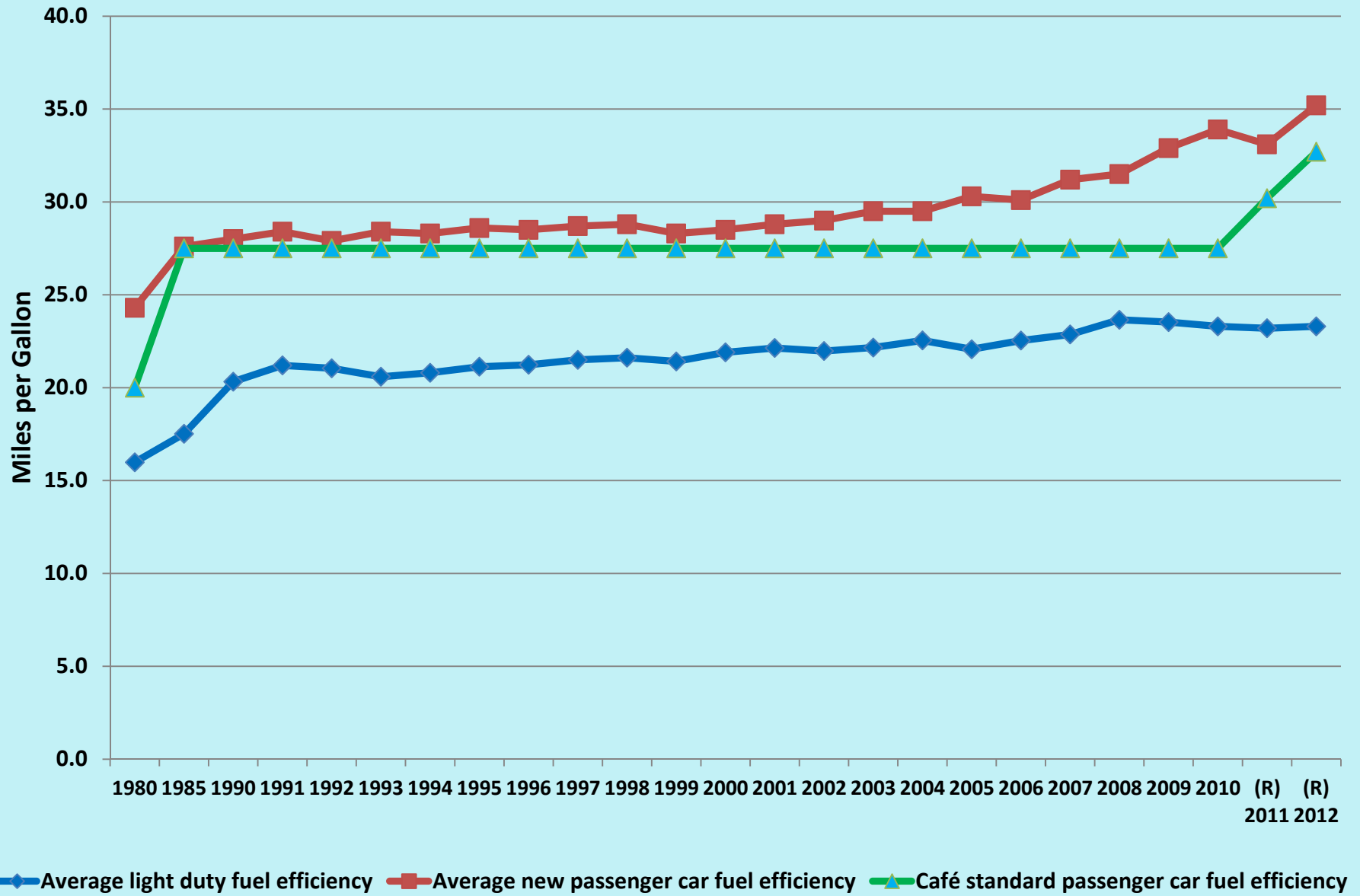
Logic of MFT:
user pays

What's Behind This Shortfall?

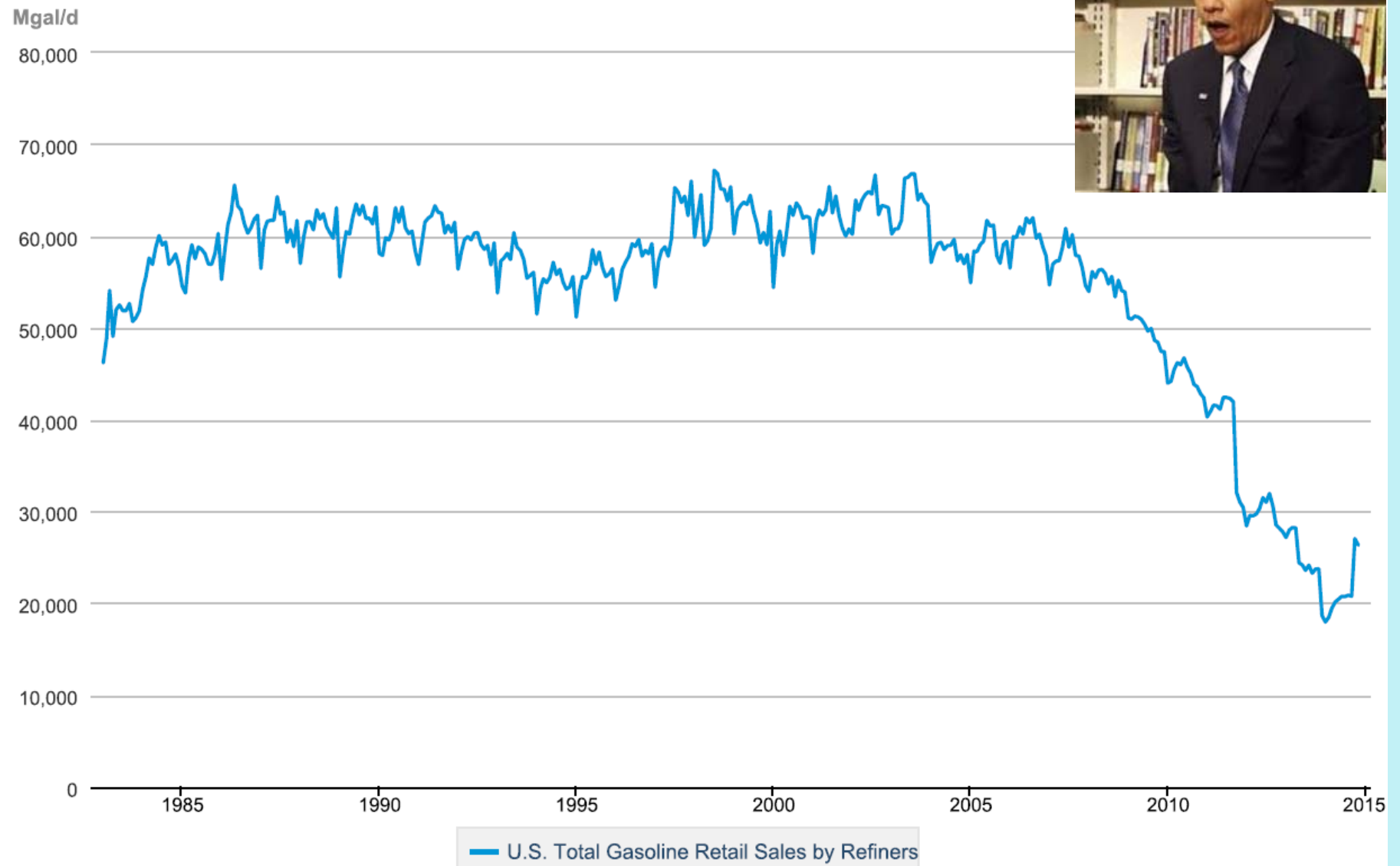


<http://www.ssti.us/about-ssti/>

Trends in U.S. Passenger Car Fuel Efficiency



Refiner Motor Gasoline Sales Volumes



Cost Inflation: Another Reality

CPI:

\$1.00 in 1990 (24 years) = 55¢ in '14

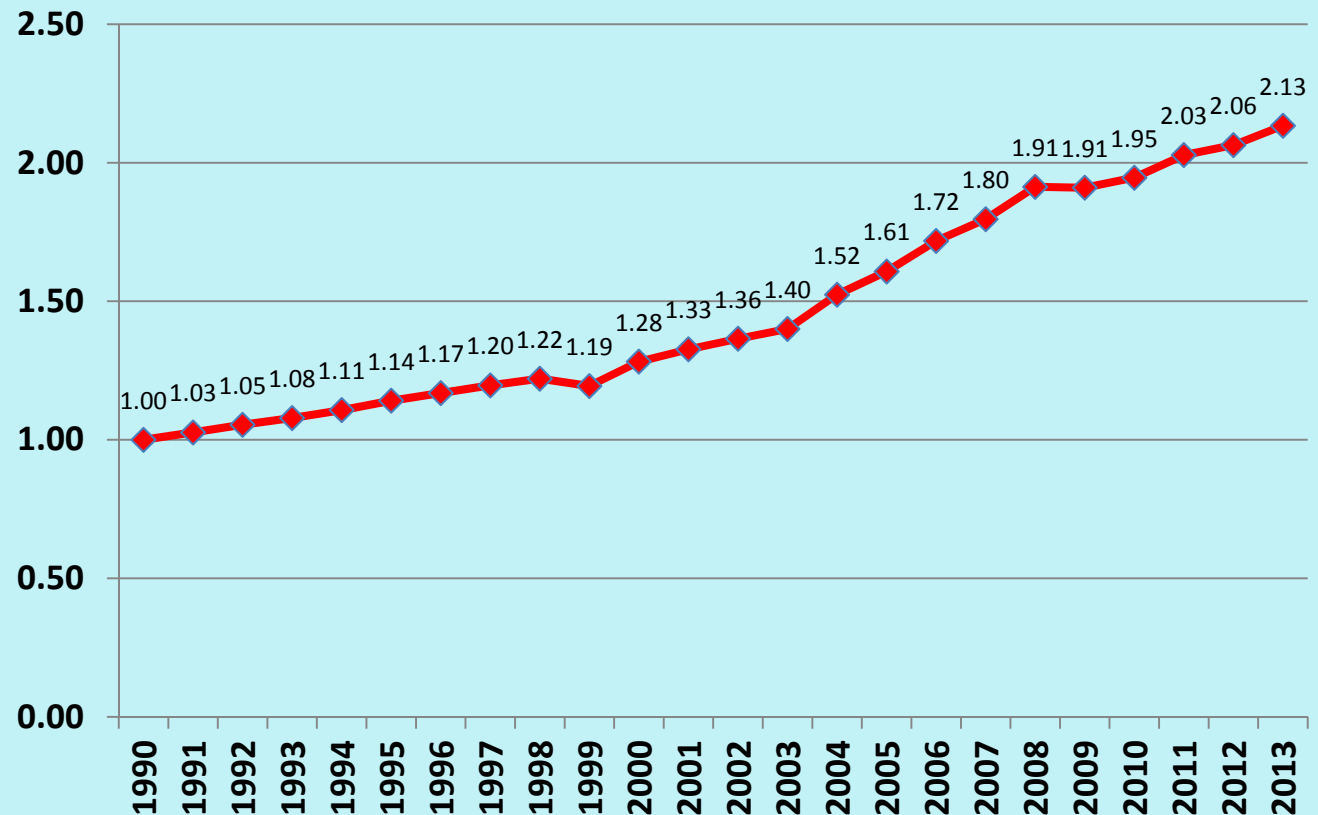
\$1.00 in 1993 (21 years) = 61¢ in '14

RSMEANS

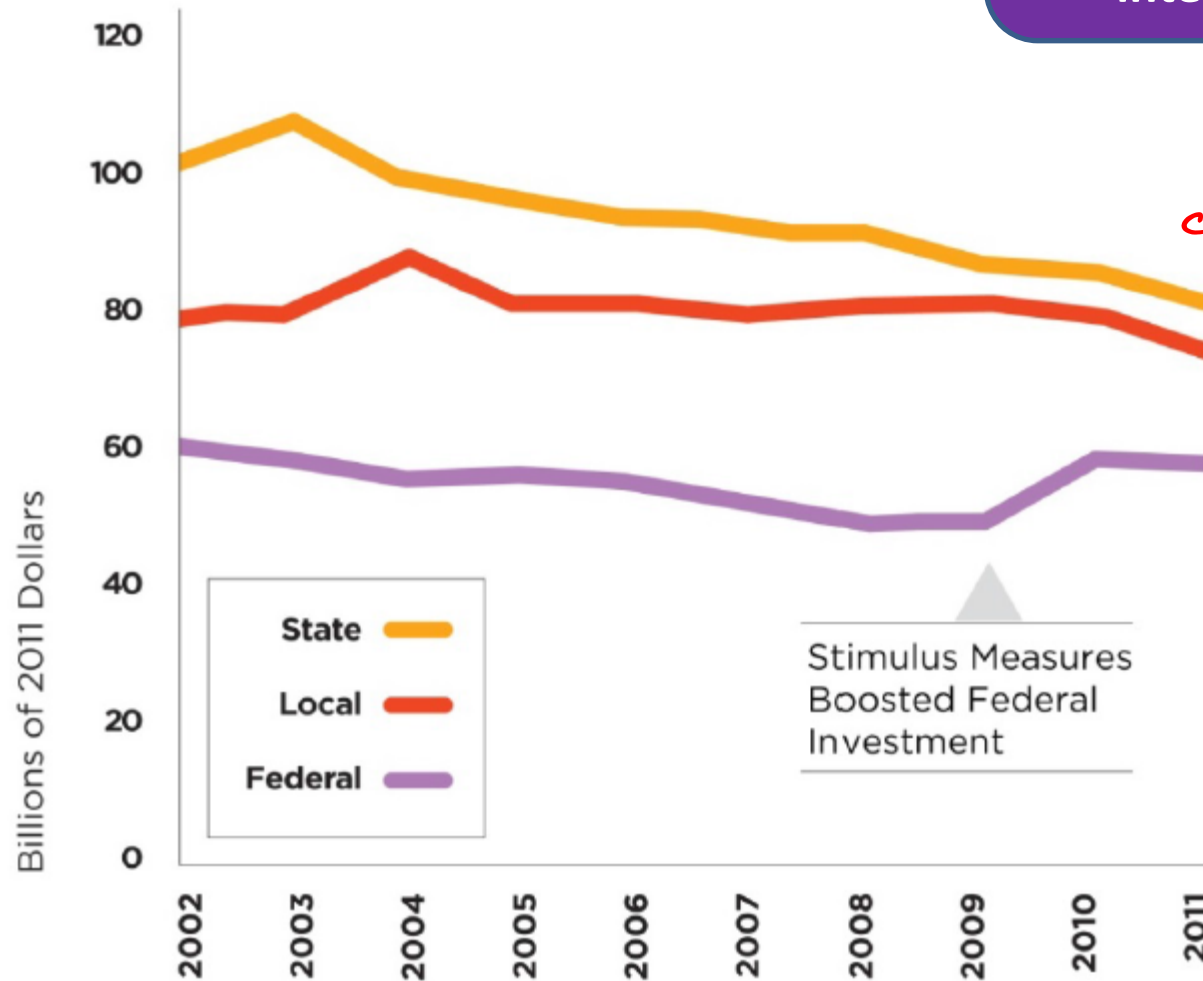
\$1.00 in 1990 = 47¢ in '13

\$1.00 in 1993 = 51¢ in '13

Construction Cost Index



Highway and Transit Spending by Level of Government (2002 - 2011)



Who is spending the money?
What are their priorities?
Balancing potholes and
intermodal terminals

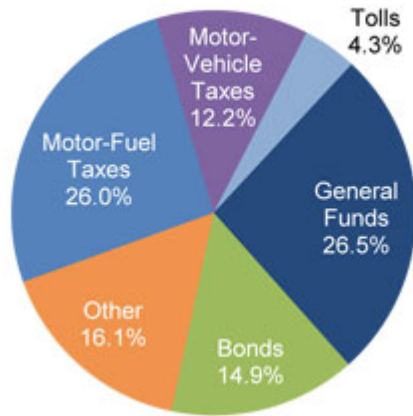
*This is not
cumulative!*

Stimulus Measures
Boosted Federal
Investment

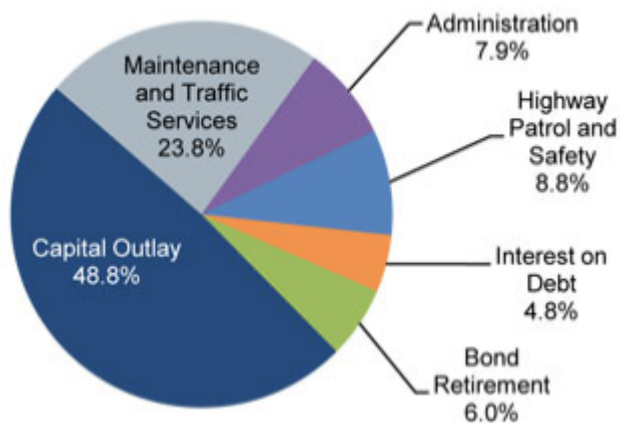
Beyond Traffic - USDOT

US Highway Fund Sources and Expenditures 2010

Revenue Sources for Highways, 2010



Highway Expenditure by Type, 2010



\$210 b collected; \$205 b spent all levels

Wait! Maybe the problem is that we're not spending the money well!

- **Wrong projects, bad projects**
 - Name your own!
- **Inefficient project delivery**
- **Poor quality control**
 - Fix it again
- ***Deferred* maintenance**
 - Effects on cost, performance
- **Failure to protect public infrastructure**
- **Graft, corruption**
- **Diverting money**
 - Bus, bike ped, environment...



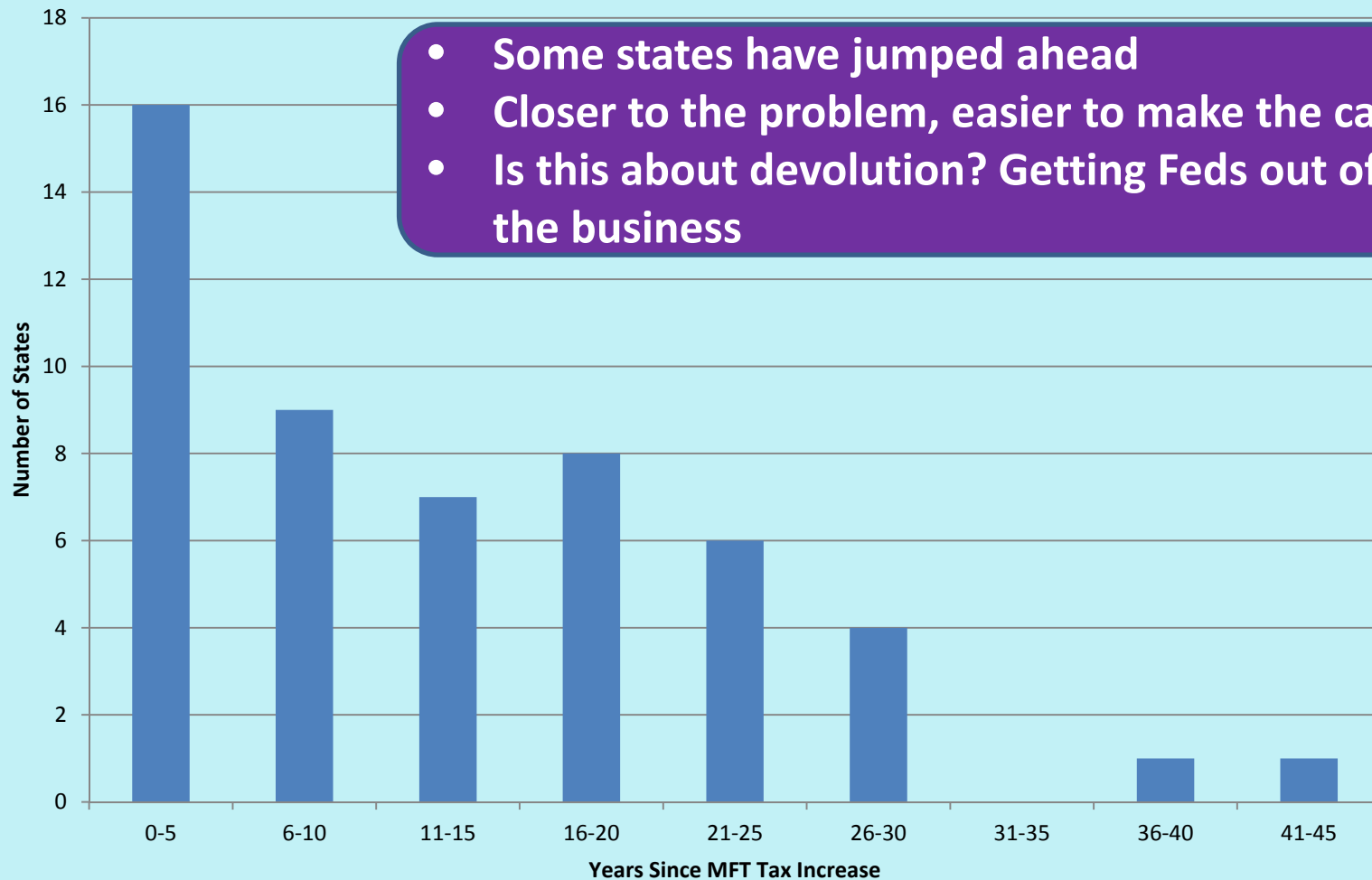


OK, Raise the Darn Gas Tax!

- **Why not?**
 - Public resistance
 - But it was free before
 - Grover Norquist pledge—no new taxes... ever
 - We don't trust you with our money
- **Who will be first to take the plunge?**
 - Who can make the case and how?
- **Why do it?**
 - Users pay
 - Equitable?
 - Easy to collect
 - Market signal
- **Index MFT tax**
- **But liquid fuel tax may have limited future...**



State Changes in MFT Rate (Gasoline)



- Some states have jumped ahead
- Closer to the problem, easier to make the case?
- Is this about devolution? Getting Feds out of the business

<http://www.fhwa.dot.gov/policyinformation/motorfuel/sep14/mmfr10.cfm>

Backing Off Devolution

...Senate Environment and Public Works Committee Chairman James Inhofe (R-Okla.) slammed the proposal to eliminate the gas tax, which is known as “devolution,” on Wednesday.

“Interstate commerce doesn’t stop at state boundaries,” he said. “No state is an island.”



Inhofe said he used to be a “father of devolution” earlier in his career in Congress, “until we realized it didn’t work.”

“One of the two things that really does work in government is this system,” he said in reference to the Highway Trust Fund and defense funding. “This is coming from a conservative.”

The Hill 2/25/15

No New Taxes: Use the Money Better

Yet almost as soon as this small glimmer of relief has appeared, the Washington political class moved to signal its openness to raising the gas tax. **Instead of looking for new tax revenue, lawmakers should seek to spend the billions in gas tax revenues they already collect more efficiently. For example, around a third of gas tax revenues collected are spent on non-highway projects.** (*Americans for Prosperity* <http://reformamerica2015.com/>)

“If the politicians did not steal from the fuel tax funded highway trust fund to pay for light rail, bike lanes, and the like, the problem would not be as bad.” (Reader comment, WSJ 2/24/15)

Iowans are sharply divided on the gas tax increase, according to the most recent Des Moines Register Iowa Poll. A survey conducted earlier this month **found 50 percent of respondents opposed raising the gas tax by about 10 cents, while 48 percent were in favor and 2 percent were not sure.** (Des Moines Register, 2-24-15)

The Legislature is moving toward a 10-cent increase in the state fuel tax, but foes of a tax increase — any tax increase — say state and local governments should instead **look to other sources of revenue or reallocate existing revenue.** (Editorial, Des Moines Register, 2-17-15)

“Gas tax hike takes effect Sunday”

[William Petroski](mailto:bpetrosk@dmreg.com), bpetrosk@dmreg.com 4:42 p.m. CST February 25, 2015

It's official: Iowa's gas tax is going up.

Gov. Terry Branstad signed a bill on Wednesday raising the state's gasoline and diesel fuel taxes by 10 cents a gallon.

The bill passed the Iowa House and Senate on Tuesday after legislative leaders from both parties worked with the Republican governor to reach a consensus on a funding package to provide an additional \$215 million annually for city, county and state roads.

Branstad received Senate File 257 in his Iowa Capitol office on Wednesday morning and immediately signed it.

"This is a great example, on a difficult and controversial issue, of the kind of bipartisan cooperation that really makes Iowa stand out as a state where we work together and we get things done on behalf of the citizens

of our state," Branstad said. **"This is important for economic development. This is important for our farmers to be able to get their crops to market.** I know that many people have been waiting a long time for this."

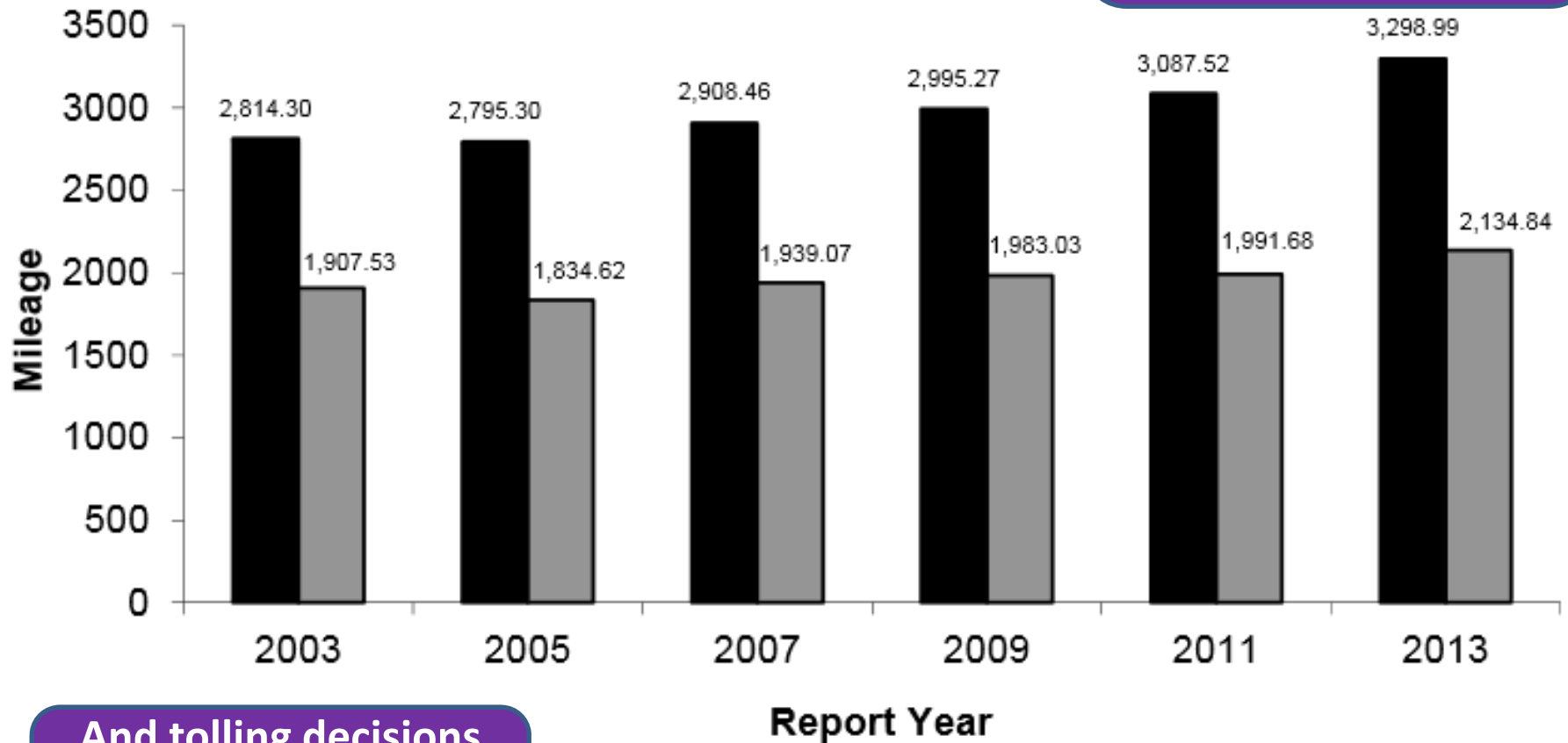
The last gas tax increase was in 1989.

Branstad pointed out the fuel tax increase has had broad support from groups like the Iowa Farm Bureau, Chambers of Commerce and other business groups, and Iowa's trucking industry. He noted the bill also **imposes restrictions on future debt and bonding for local government road projects. That's important, he said, explaining that he believes in a "pay-as-you-go" method of financing road construction with user fees that benefit people who pay the extra fuel tax.**

Tolls

Transponders make tolls painless... if you have a credit card ... and can pay the bills

Toll Road Mileage



And tolling decisions are steps away from political process

■ Interstate

■ Non-Interstate

Project-Focused Revenue Sources

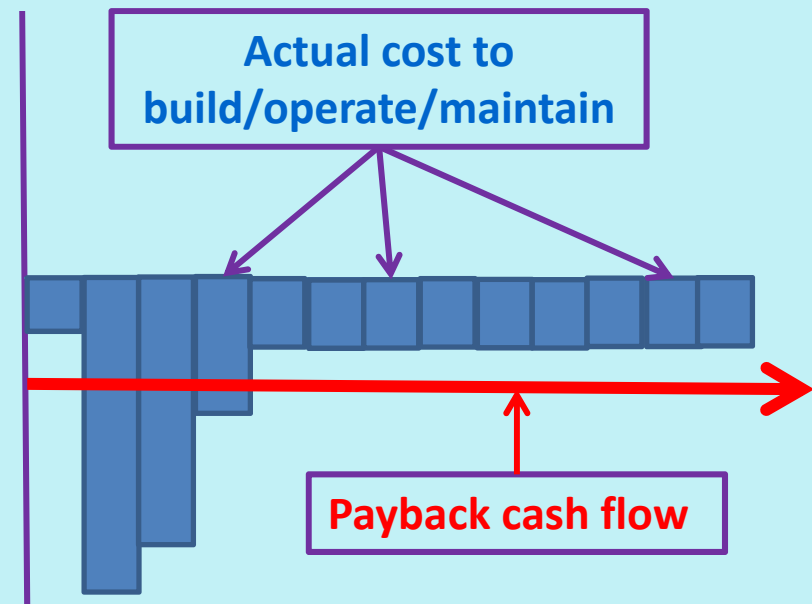
- **Impact fees (from developers)**
 - Compensation for remediation
- **Voluntary “contributions”**
 - To facilitate business interests
- **Concern: self-serving, private priorities, not systematic**
- *A group of companies including e-commerce giant Amazon.com Inc. is paying thousands of dollars a year in fees to one California county for reliable access to an interstate highway. (WSJ 2/24/15)*



Borrowing

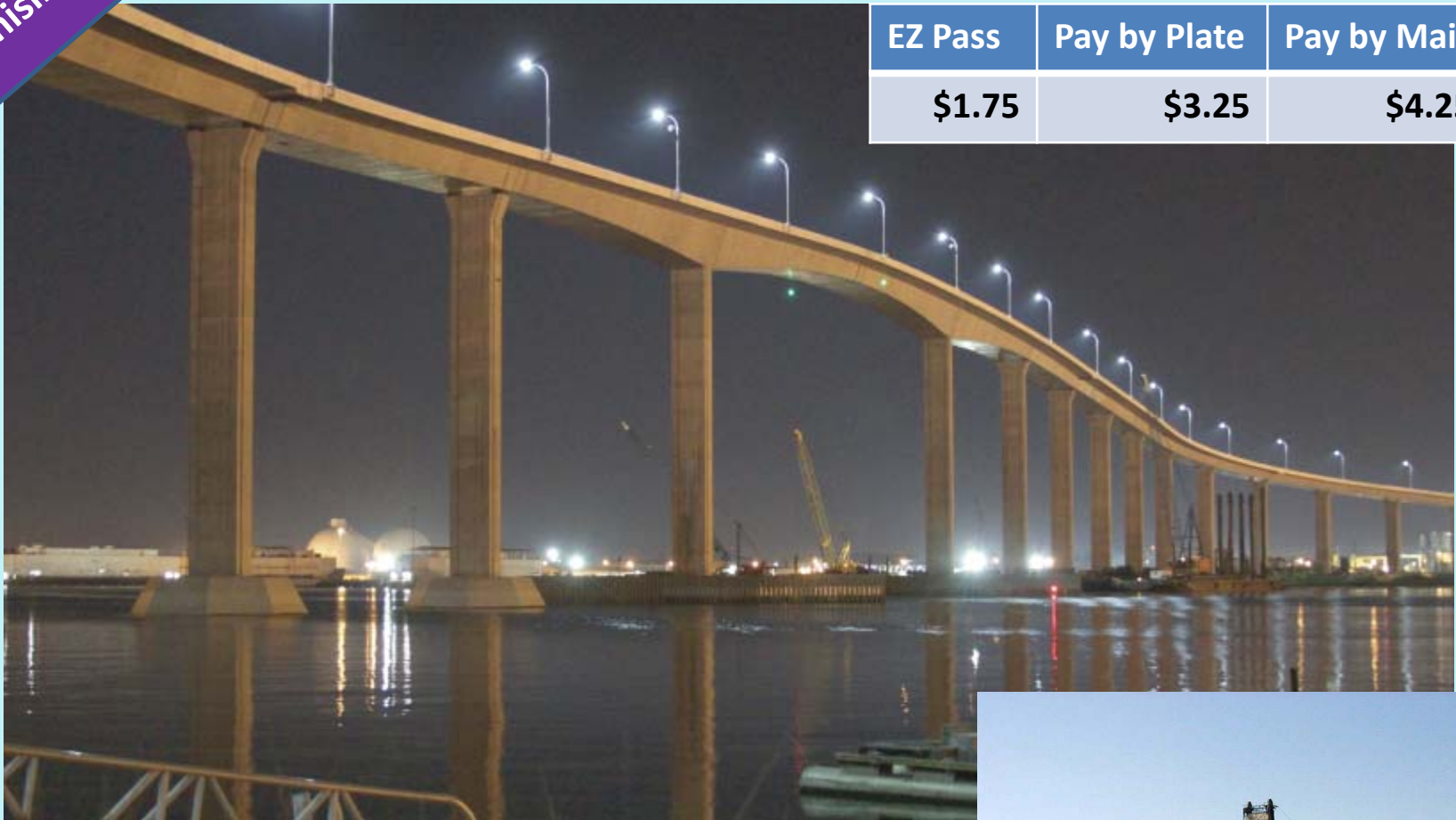
A Small Digression: Funding *versus* Financing

- **Paying the bills vs finding \$**
- **Value of time shifting**
 - Especially when you can't stockpile or print money
 - Feds vs states
- **Borrowing money**
 - From whom?
 - Bonds
 - GARVEEs, Municipal Bonds, Private Activity Bonds (PAB), Qualified Public Infrastructure Bond (QPIB)
 - Loans, loan guarantees
 - TIFIA (Transportation Infrastructure Finance and Innovation Act) loans, Infrastructure bank
 - Defaults – what happens then?



Franchising

South Norfolk Jordan Bridge



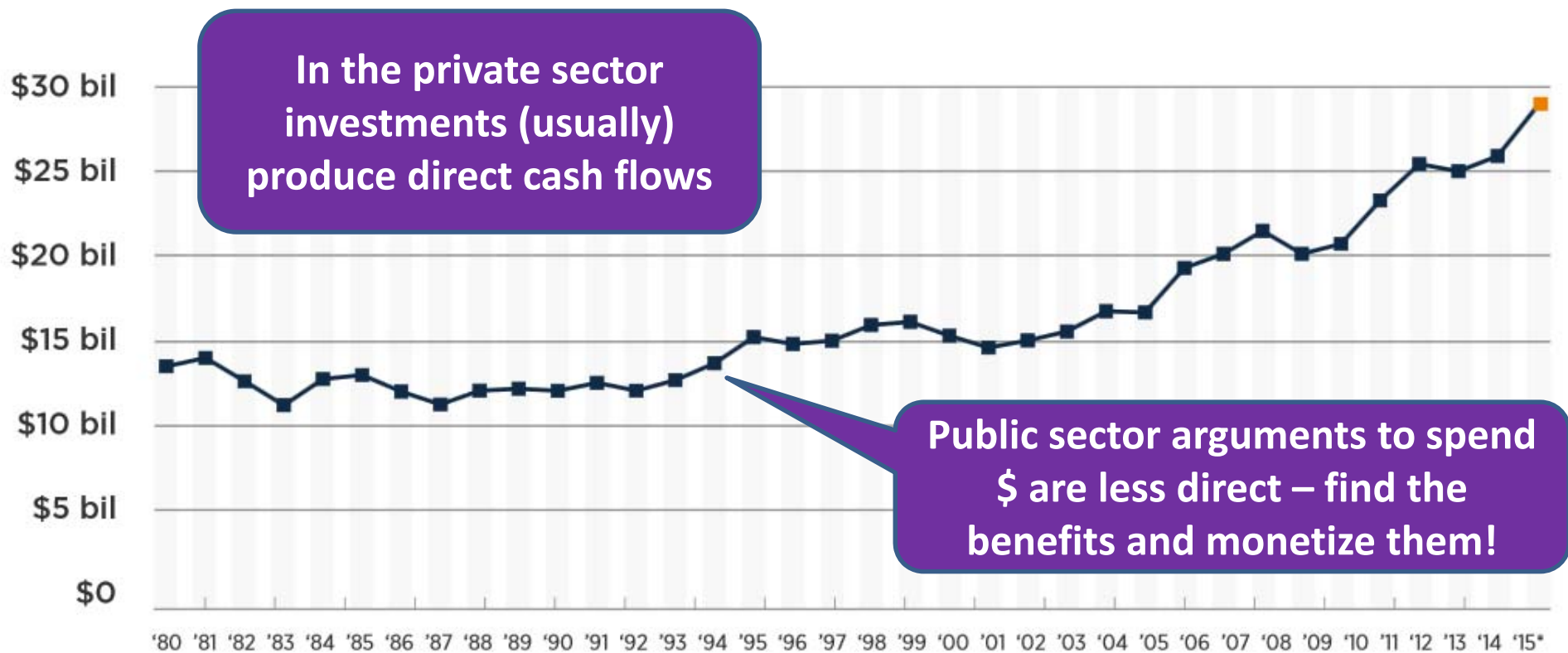
EZ Pass	Pay by Plate	Pay by Mail
\$1.75	\$3.25	\$4.25

Open the door to franchising market opportunities – what projects will be selected?



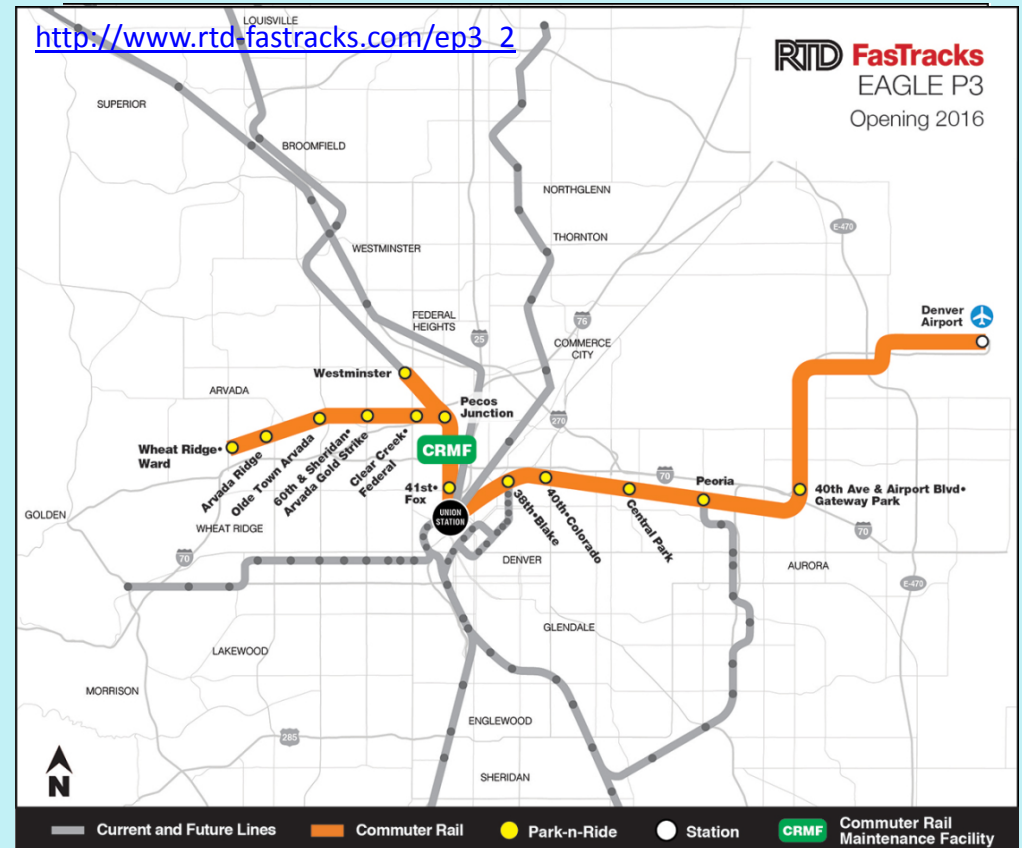
FREIGHT RAILROADS HAVE SPENT \$575 BILLION ON THE RAIL NETWORK SINCE 1980

Freight Railroad Spending on Infrastructure and Equipment

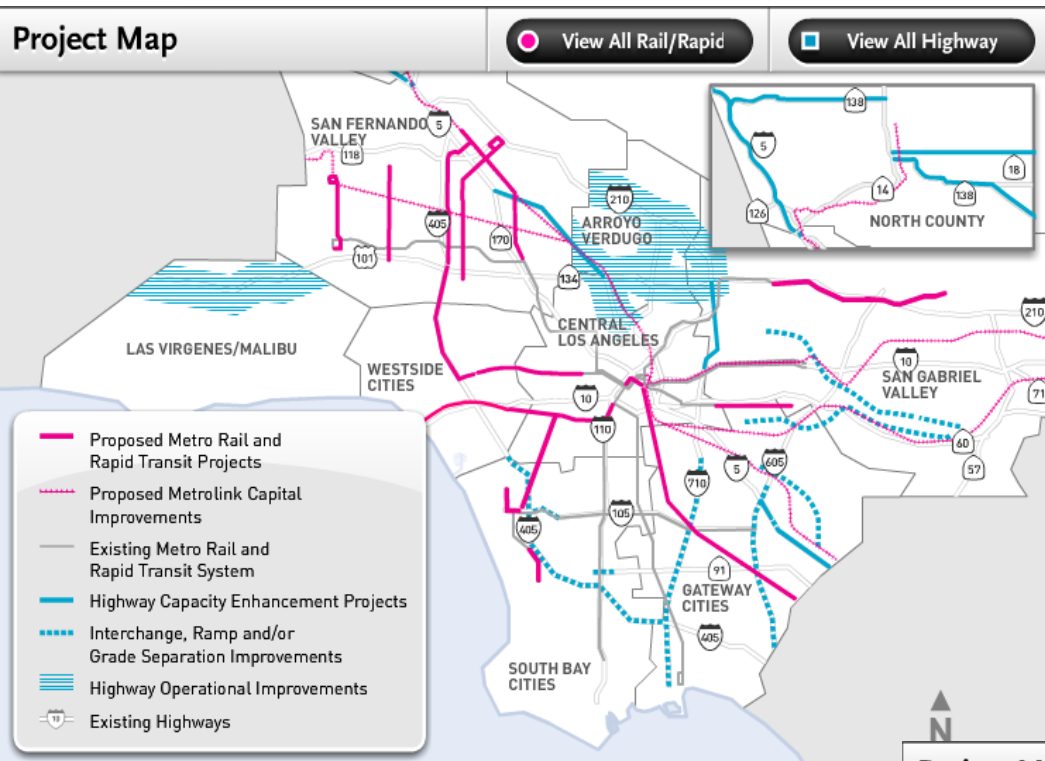


PPPs: Public Private Partnerships

- Finance and project deliver strategy
 - Use other people's money to get benefits sooner
 - Risk sharing & management
 - Contracting efficiencies
- Pedaling Panaceas to the Public
- Must get return on investment
 - Tolls!
 - Availability payments
 - Leasing agreements



\$2.2 B cost : \$1.03 B Fed. grant; \$.450 B Denver Transit Partners (DTP) ; \$1.03 B Fed. loan
DTP builds, finances, operates, maintains 34 years; accepts cost-performance risks
Denver RTD accepts revenue risks (monthly availability payments) Min. cost s.t. performance



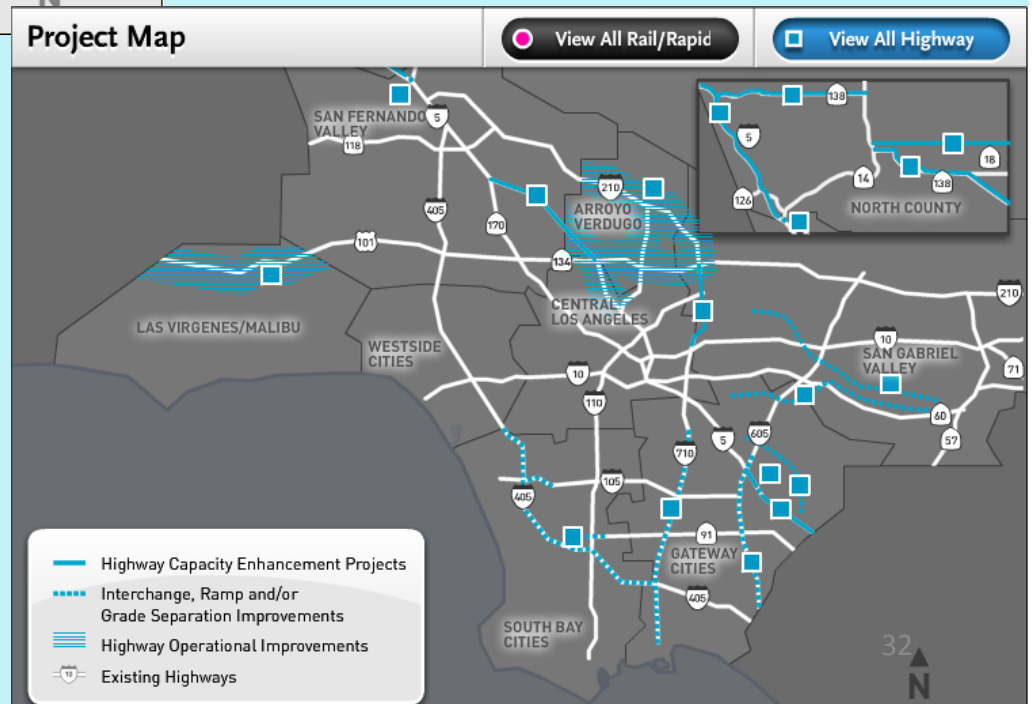
Local option taxes LA County Measure R Transactions

Exchange: money
for projects

<http://www.metro.net/projects/measurer>

Measure R is a half-cent sales tax for Los Angeles County to finance new transportation projects and programs, and accelerate those already in the pipeline. The tax took effect July 2009. It includes an Expenditure Plan that identifies projects to be funded and additional fund sources that will be used to complete the projects.

Joseph Schofer - Northwestern University



What To Do?

1. Better Projects

- Data-driven decisions
- Objective measures of condition, performance
- Credible, auditable estimates of benefits and costs

2. Transactions – exchanging money for value

- Locally salient
- Outcome oriented

3. Confirm and learn

- Post-project audits

4. Effective project delivery

- Maximize value added

5. Communicate

- Citizens, Journalists, Engineers, Political leaders
- Who are the communicators?

6. Explain the connections:

- fees, capacity, LOS, and competitiveness & quality of life
- Explain the finance system

7. Synchronize costs and user fees

8. Phase out gas tax

- More direct and transparent user fee system

**Stay
tuned**