



Interstate Tolling for Wisconsin: Why and How

by

Robert W. Poole, Jr.

Director of Transportation Policy

Reason Foundation

<http://reason.org/transportation>

bob.poole@reason.org



Interstate reconstruction/modernization should be highway users' national goal

- ⊕ Our premium highway infrastructure: 25% of VMT on 2.5% of lane-miles.
- ⊕ Over 40,000 miles will need reconstruction in the next two decades.
- ⊕ Replace 200 major interchange bottlenecks
- ⊕ Estimated cost is at least \$1 trillion.
- ⊕ Congress will not provide dedicated funding for that size project.
- ⊕ Modest tolls could finance this program.



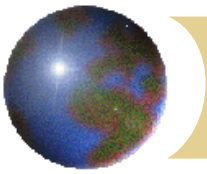
Reason Foundation's Interstate 2.0 study (2013):

- ✚ Estimate cost of reconstructing entire Interstate system;
- ✚ Estimate cost of needed lane additions, including truck-only lanes;
- ✚ Assess the feasibility of financing this project via all-electronic tolling (AET)
- ✚ Address political feasibility.



Overall results

- ⊕ NPV of cost = **\$983 billion.**
- ⊕ NPV of revenue = 99% of NPV cost.
- ⊕ 30 states positive with basic toll rates, of which 9 could do it with lower rates.
- ⊕ 9 states need slightly higher rates
- ⊕ 6 urban states need even higher rates.
- ⊕ Only 6 rural states are not really toll-feasible.



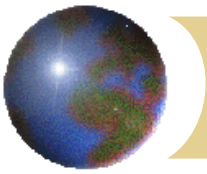
Wisconsin, specifically

- ✚ Reconstructing & widening: \$26B
 - ▣ 2010 \$, Poole study for WPRI, 2011
- ✚ Potential toll revenue: \$29B
 - ▣ 2016 \$, HNTB tolling study, 2016
- ✚ Toll-financed Interstate modernization would free up federal & state fuel tax money for all other transport needs.



What's stopping toll-financed Interstate reconstruction?

- ⊕ Federal law bans tolling “existing” lanes.
- ⊕ Tolling only *new* lanes won't pay for reconstruction.
- ⊕ But reconstructed lanes are *replacements*, not “existing” lanes.
- ⊕ Strong opposition from trucking industry; concerns from AAA, AHUA.
- ⊕ Congress leery of battle with highway users.



How can we make toll-financed reconstruction politically feasible?

- ✦ Listen to highway users' concerns.
- ✦ Develop new, user-friendly tolling policies for toll-financed Interstate modernization.
- ✦ Hence Reason's proposal: Value-Added Tolling



Two concerns that technology is making obsolete

#1. Delays, emissions, accidents at toll plazas.

All-electronic tolling is eliminating toll booths and plazas.

#2. High cost of toll collection vs. fuel tax collection.

AET and streamlined business model cut collection cost to 5% of revenue.



Major remaining highway user concerns:

1. No value-added—charging tolls on “existing” highways.
2. Revenue diverted to other uses.
3. Double taxation—paying tolls and fuel taxes on the same highway.
4. Traffic diverted to parallel routes.



No value added?

Early applicants to Interstate *reconstruction* pilot program saw tolls as new revenue.

- ✦ Arkansas, Pennsylvania, Wyoming, proposed tolling as more of a general funding source.
- ✦ Virginia proposed I-95 border tolls, far short of paying for reconstruction.
- ✦ Only Missouri and North Carolina proposed serious reconstruction—but failed to reach political consensus.

Replacing obsolete pavement and interchanges adds real value.



Diverting toll revenues

About a dozen agencies divert toll revenue to:

- ❑ Other highways in the state
- ❑ Urban mass transit
- ❑ Economic development
- ❑ Canals
- ❑ Public buildings (World Trade Center)

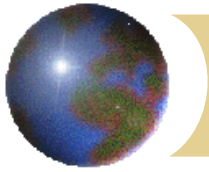
Maria Matesanz of Moody's calls this "cash cow-ification of toll roads."



“Double taxation”

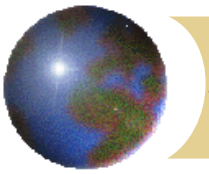
Paying tolls and fuel taxes on the same Interstate:

- ✚ Average motorist pays 2.2¢/mi. on non-tolled Interstate, but 6.5¢/mi (total) on tolled Interstate.
- ✚ Highway users don't consider tolled Interstates to provide 3X as much value as non-tolled Interstates.



Traffic diversion to parallel routes:

- ✦ It happens, and is assessed in toll road traffic & revenue studies.
- ✦ It *does* cause pavement impacts on the parallel routes.
- ✦ It *does* add noise and emissions on parallel routes.
- ✦ But the *lower* the toll rate, the *less* traffic diverts.



Value-Added Tolling takes these concerns seriously

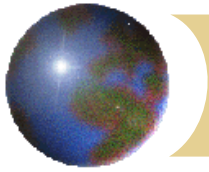
1. Limit the use of toll revenues to the tolled facilities;
2. Charge *only enough* to cover the full capital and operating costs;
3. Begin tolling *only* when construction or reconstruction of a corridor is finished;
4. Use tolls to *replace*, not supplement, existing fuel taxes.



AAA supports

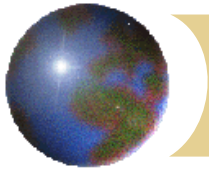
Value-Added Tolling

- ✦ National AAA board meeting, Seattle, December 2015
- ✦ Invited presentation by Poole on Value-Added Tolling.
- ✦ Board voted to support, and urged AAA clubs to support in their states



Wisconsin's options today (1)

- ✦ Request a slot in federal tolled reconstruction pilot program
- ✦ Other potential applicants include CO, CT, IN, OR, RI
- ✦ Allows only one Interstate corridor to be rebuilt with toll financing



Wisconsin's options today (2)

- ✦ Apply to join FHWA Value Pricing Program
- ✦ Applies only to congested urban Interstates
- ✦ Allows tolling all lanes to manage traffic congestion.



Would the public accept tolling?

Survey research* finds:

- ✚ On list of funding sources for needed project, tolling is least-bad alternative.
- ✚ With *taxes*, paying more is certain, but getting better service is uncertain.
- ✚ With *tolls*, you only pay if a project you can use is built, and toll is reasonable.

*NCHRP Synthesis 377 (2008)



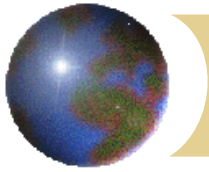
Could Wisconsin DOT accept fuel-tax rebates?

- ❖ Rebates not a new idea—e.g. truck fuel tax rebates on NY Thruway and Mass. Turnpike.
- ❖ Much easier to do with AET: tolling software knows customer, vehicle type, EPA mpg rating, miles driven.
- ❖ State DOT provides the rebates, based on data from the toll operator.
- ❖ State comes out ahead, since per-mile yield of tolls is higher than that of fuel taxes.



Longer-term reform needed

- ✚ Expand toll-financed reconstruction program to all 50 states.
- ✚ Allow each state to toll-finance replacement of ALL a state's Interstates.
- ✚ Encourage use of revenue-risk P3 concessions.
- ✚ Require Value-Added Tolling principles.
- ✚ This could be part of Trump infrastructure initiative.



Incentive for states to do this

- ✦ If Congress guarantees same amount of federal highway aid, and
- ✦ If state DOT converts all its Interstates to tolls, then
- ✦ Federal money can be devoted to all non-Interstate transportation needs.



Further information:

Interstate 2.0, Modernizing the Interstate Highway System via Toll Finance

(PS#423, Sept. 2013)

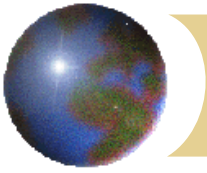
Value-Added Tolling: A Better Deal for America's Highway Users

(PB#116, March 2014)

Truck-Friendly Tolls for 21st Century Interstates,

(PS#446, July 2015)

<http://reason.org/transportation>



Questions & discussion

Bob.Poole@reason.org