Joint Economic Committee
CHAIRMAN ROBERT F. BENNETT
ECONOMIC POLICY RESEARCH
July 7, 2003

NEW POSSIBILITIES FOR FINANCING ROADS

It is an unfortunate fact of life that our roads are deteriorating while congestion worsens every year. Fixing our roads will not be easy; billions of dollars will be needed to stave off further declines, and there is little appetite in Congress to raise federal taxes on gasoline. The table below shows that current spending proposals for highways and mass transit for the next six years far outstrip the $218 billion spent on roads and mass transit over the previous six years. The overarching question is how will the federal government fund a significant increase in surface transportation expenditures without raising gasoline taxes.

	Package Size (billions $)	Gas Tax Increase
House Infrastructure and Transportation	375	Yes, by indexing tax retroactively to 1993 and for subsequent years to inflation
Congressional 2004 Budget Resolution	280	No
Senate Environment and Public Works	311	?
Administration	247	No

Source: Congressional Research Service, H Con Res 95

A new funding mechanism for highways

There are other ways to fund transportation spending increases that should be explored. For instance, many economists believe a new transportation authorization bill should grant the states more flexibility in raising money for funding transportation projects. To that end, Reps. Mark Kennedy (R-MN) and Adam Smith (D-WA) have proposed the Freeing Alternatives for Speedy Transportation (FAST) Act (H.R. 1767). The bill would remove the current prohibition on tolls for federal highways, as well as ensure that states wouldn't be penalized for coming up with innovative ways to fund transportation construction. While toll lanes alone cannot make up the projected shortfall between the various spending proposals and revenues that will be generated by the gas tax, the judicious use of tolls would raise significant revenue.

Efficient tolls can reduce congestion

Ideally, the toll charge would vary based on the current congestion level on the road -- the more cars on the road, the higher the price of the toll lane. As the toll increases, drivers will change their behavior; when the toll is relatively high people will use car pools, take mass transit, or postpone unnecessary trips. In high-traffic corridors the market can pay the bulk of the cost of constructing and maintaining the road.

Since roads are not continuously congested, variable tolls reduce traffic and spread it out more evenly over the course of the day. In essence, properly managed fares can reduce the level of lane expansion necessary by maximizing the efficiency of the current infrastructure. The idea of variable pricing for toll lanes is the same principle that dictates lower ticket prices for movie matinees and discounts for "early bird" dining specials at restaurants: price differentials over the course of a day can alleviate crowds.

Regardless of the degree of success, innovative congestion pricing would not come close to alleviating the need for new roads. Most large cities desperately need new and improved highways to deal with the immense increases in traffic that have occurred in recent years.

Tollbooths are *passé*

When most people think of tolls they associate it with long queues of cars waiting to pay 50¢ to cross a bridge, thereby *increasing* congestion on roads. In reality, leaps in tolling technology have made cumbersome tollbooths unnecessary. Today, cars can use transponders to electronically pay tolls without stopping the flow of traffic. Transponders are inexpensive and the tolling authority often provides them at no cost to drivers. Drivers can either receive a monthly bill or else pre-pay (anonymously, should they wish) for a certain number of trips.

Proposals, like the FAST Act, encourage states to take advantage of this innovative technology by allowing them to toll new lanes on the federal interstate provided that they use an electronic tolling system.

Tolls are not the same as taxes

Some politicians resist any legislation that might lead to an expansion of tolled lanes on the principle that tolls merely represent a new form of taxation. However, it is important to note that tolling *is not* just another name for a tax. When used on newly built lanes financed by toll revenues, tolls serve as a voluntary access charge for drivers who choose to use a lane that is less congested. In essence, ***when people use a toll lane they are buying time.***

Dedicated toll lanes function much the same as FedEx and other next-day shipping companies. Someone wishing to send a package via U.S. mail can do so at an inexpensive price, but the delivery will take longer and the ultimate delivery date will be less predictable. However, someone who absolutely needs a package delivered overnight can guarantee an on-time delivery by paying extra and using FedEx.

Those who worry that states will exploit tolls to fund revenue shortfalls by gouging citizens should be heartened to know that the FAST Act specifically addresses this temptation in its legislation. The FAST Act requires that all revenues raised from tolls be dedicated ***only to the lanes where the tolls are collected***. States are also constrained from charging unreasonably high access charges by the marketplace. Because tolls are added only on new lanes, drivers will always have a choice whether or not to pay the toll. If the toll is set at a price drivers are not willing to pay, the newly added lane will be underutilized, costing the state potential revenue and drawing the ire of its citizens.

Tolling Success Stories

Various permutations of congestion pricing have been in place since Singapore's Area Licensing Scheme was introduced in 1975. With electronic tolling, Singapore managed to reduce the number of single drivers and better utilized its road capacity by distributing trips more evenly throughout the day.

Domestically, there have been several value pricing projects established under the Value Pricing Pilot program. Perhaps the most successful pilot project is the High Occupancy Toll (HOT) lanes on Interstate 15 in San Diego. The program allowed two lanes, previously reserved for carpools with at least two passengers, to provide access to all drivers willing to pay a toll to enter the lane. The toll was set at a level so as to ensure that traffic in the lanes traveled near the speed limit.

The project was immensely successful and led to several dramatic improvements in road performance. The number of people carpooling increased and rates of carpooling violations decreased. Drivers believed that the toll lanes were safer and more reliable. Revenues generated were high enough that an express bus was added to I-15, providing another alternative for commuters. An overwhelming 94% of transit riders, 92% of carpoolers, and over 70% of all commuters felt that congestion pricing was a "fair" system given that travelers choose to pay the charge. The managed lanes on I-15 have proven so successful that the San Diego Association of Governments plans to expand its value pricing system by replacing the two HOT lanes with four new HOT lanes.

Most recently, in February 2003 London introduced a congestion-pricing scheme that charges vehicles entering the central city. Though met with intense skepticism by political opponents, the pricing experiment has proven to be even more successful than its designers had anticipated. The average driving speed in London's central city has increased 37% and the total number of cars entering Central London has decreased by 20%.

Freedom for States

The FAST Act and similar proposals encouraging greater utilization of toll lanes do not seek to mandate the wholesale use of tolls by states. However, states should have the *option* to use tolls to finance the reconstruction of new roads and should incur no penalty for doing so. In a federal system of government, states should be encouraged to pursue innovative methods for financing and providing essential services to the citizenry, and this is indeed what the FAST Act would achieve. Given the significant difference between proposed highway spending plans and projected gas tax revenues, the FAST Act is a modest measure that can help bridge the chasm.

Further reading

Joint Economic Committee Hearing on Financing Our Nation's Roads
http://jec.senate.gov/hearings/hearings_may06.html

Getting Unstuck: Three Big Ideas to Get America Moving Again
by Robert D. Atkinson
http://www.ppionline.org/documents/Transportation_1202.pdf

Privatization Watch-The Surface Transportation Issue
http://www.rppi.org/may03pw.pdf

JEC publications released in June:

- **"Putting the U.S. Economy in Global Context,"** June 24, 2003.
  Compares economic growth – as measured by GDP – in the U.S. and other major economies.

- **"Prescription Drugs Are Only One Reason Why Medicare Needs Reform,"** June 17, 2003.
  Explains why the program needs market-based reforms to become more financially viable and responsive to patients.

- **"Health Insurance Spending Growth – How Does Medicare Compare?"** June 10, 2003.
  Compares cost growth rates of Medicare with various other insurers, such as the Federal Employee Health Benefits Program (FEHBP).

- **"Recent Economic Developments: Looking Ahead to Stronger Growth,"** June 3, 2003.
  Gives an overview of the U.S. economy, including a review of key economic data released in May.

Other recent JEC publications include:

- "Medicare Beneficiaries' Links to Drug Coverage."
- "A Primer on Deflation."
- "Economics of the Debt Limit."
- "Dividend Tax Relief and Capped Exclusions."
- "How the Top Individual Income Tax Rate Affects Small Businesses."