

The World is Flat

and Other Myths

BY JOHN HORSLEY



Myths sometimes stand in the way of solutions decision makers need to consider. For example, in 1492, the belief that the earth is flat was accepted as “truth.” Columbus debunked this myth by “sailing West to find the East.” But the fear of sailing off the edge of the earth into oblivion almost caused his crew to mutiny and abandon the quest.

Today there are two myths of note which stand in the way of Congress addressing how best to fund national transportation needs over the next 15 years. The first is the issue of “substitution.” In October of 2004, the General Accountability Office (GAO) issued a report which charged that states are diverting their own highway money to other programs and then

substituting federal assistance to make up the difference. The second myth is the proposition being touted as truth by current U.S. Department of Transportation (DOT) leadership that, because of increasing fuel efficiency, the gas tax is no longer viable as a source of support for highway and transit funding. The facts show that neither of these “myths” is true.

Myth #1: “Substitution”

It is interesting that the data GAO used in its 2004 report was the same data it used in a June 18, 2003, report which documented the substantial increases in highway investment made by all levels of government between 1982 and 2001.

GAO stated then that, “While the nation’s capital investment (in highways) more than doubled, state and local investment increased at twice the rate of federal investment over the past 20 years.” Their own data contradicts the assertion made the next year that “substitution” was going on. Federal Highway Administration (FHWA) data shows that during this period highway capital investment by state and local governments increased from \$14 billion to \$37 billion, while federal investment increased from \$15 billion to \$31 billion. Not mentioned by GAO was the increase in state and local spending for highway maintenance during this period which also increased substantially, from \$23 million in 1981 to \$68 million in 2002. So their recommendation that states be

Federal Percentage of Highway Capital Investment

1981	58 percent
1998	37 percent
2002	46 percent

punished for diverting their highway resources to other purposes, or the claim that states are not pulling their share of the load just don't square with the facts.

The basis for GAO's conclusion that states were reducing their spending on highways and substituting federal dollars to make up the difference were tables which showed that between 1998 and 2002, the rate of increase in federal highway investment increased faster than the rate of increase in state spending. As a consequence, the share of highway capital spending funded by the federal government increased from 37% in 1998 to 46% in 2002. This is true, but not the total picture and certainly not evidence of "substitution." Looking at the entire 20 years in question, the federal share of highway capital investment actually dropped from 58% in 1981 down to its low point in 1998 of 37%, before ramping back up to 46% in 2002. The acceleration in federal investment in this period was due to the passage of TEA-21 in 1998, and the 40% increase in funding it authorized, for which we are all most grateful.

The facts for the analysis period GAO used simply do not support the conclusion they reached.

During the period from 2002 to 2004, however, because of the economic downturn which occurred, states faced the worst period of fiscal crisis in 50 years. Many states during this period were indeed forced to shift transportation resources to their General funds in order to balance their state budgets. Even during this period we have not heard evidence of any state which failed to provide the percentage of state match required to qualify for federal highway assistance.

With the economy on the rebound, the good news documented by the National Association of State Budget Officers is that state spending on highways is again on the rise, growing by 5.9% in 2004, compared to a 1.5% decrease in 2003. State DOT contracting is also up. The "lettings" of highway construction contracts in Texas, for example increased from \$3 billion in 2002 to \$4.5 billion in 2004. In Ohio it went from \$1.1 billion in 2002 to \$1.3 billion in 2004.

This was made possible to the enactment of a 6 cent increase in the state's gas tax in 2003. Washington State increased its gas tax by 5 cents in 2003 and was able to increase its lettings by \$140 million the next year. Washington State in May 2005 just enacted an additional 9.5 cent increase in its gas tax. Based on the passage of a ballot referendum in 2004 by a margin of 84%, Missouri will be able to increase its lettings from \$550 million in 2004 to \$1 billion in 2006.

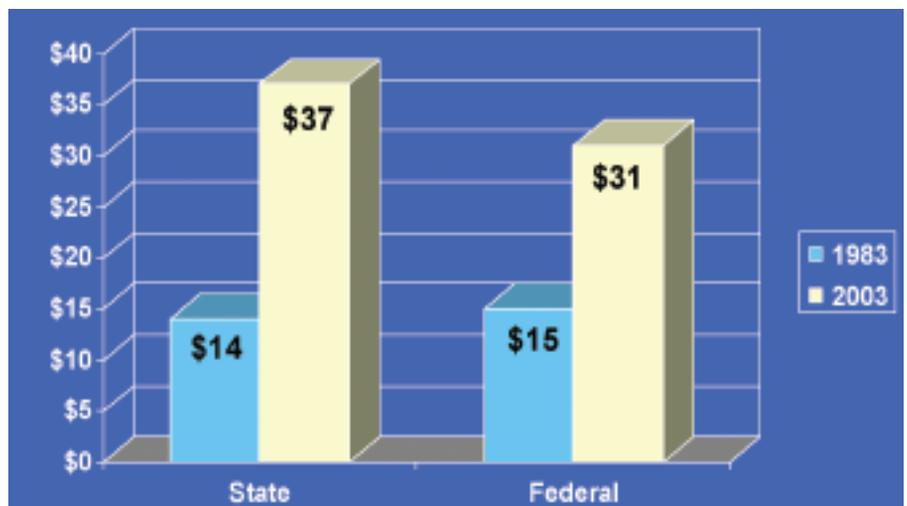
The other encouraging sign which took place in the November 2004 elections, is that of the 55 ballot measures on transportation nationwide, 42 were approved, for a 76% approval rate. Five of these were in California self-help counties where a two-thirds majority is required for approval. They passed.

The remarkable success story told by GAO's 2003 report is that during the 1980s and 1990s federal, state and local governments found a way to more than double their investment in highways. The increase by state and local governments during this 20-year period was more than 150%. The facts clearly dispel the GAO 2004 modeling theory that "substitution" has been going on.

As we look ahead to the next 20 years, according to the analysis of both U.S. DOT and AASHTO, substantial increases will again be required to meet national highway investment needs. The only way this can be achieved is if all three levels of government continue to pull their share of the load. At present the federal share of highway capital investment is around 45%. This must be sustained into the future. The good news emerging from this season's state legislative action is that states are again stepping up to do their share. North Dakota just passed a 2 cent gas tax increase. Idaho through the approval of GARVEE Bonds will increase its investments in highways by \$1.6 billion over 10 years. Oregon, by raising its vehicle registration fees last year, will increase its highway spending by \$2.1 billion over 10 years. Oklahoma will consider a statewide ballot measure on transportation in September.

Now if we can only get TEA-21 Reauthorization passed this summer in Washington, D.C., we are in business.

State and Federal Capital Investment in Highways



Lettings are Ramping Up

	2002	2004
	millions	
Texas	\$3,000	\$4,500
Ohio	\$1,100	\$1,300
Washington	\$ 250	\$ 390

Myth #2: "Because of increasing fuel efficiency, the gas tax is no longer viable as a source of support for highway and transit funding."

We are hearing this regularly from leaders at the highest levels in the U.S. Department of Transportation. I even heard it in the acceptance speech of a Purdue professor being recognized in January as the Council of University Transportation Centers "Man of the Year." The trouble is it just isn't true.

The U.S. "light duty automotive fleet" is made up of passenger cars, light trucks and sport utility vehicles. EPA's April, 2004 report on this fleet shows that fuel efficiency has not increased over the last 18 years, but has declined. In 1987, the average for the "light duty automotive fleet" was 22.1 miles per gallon. By 2004 it had declined to 20.8 miles per gallon. During this time many fuel-efficient passenger cars have indeed entered the market. But the popularity of pick up trucks and SUVs has also increased to an all-time high. They now constitute 48% of the market. Because Hummers and other gas guzzlers are now such a major part of the American scene, fuel efficiency has gone down, not up.

Another source of data which should put this myth in perspective is what an authority Congress listens to has to say. The Congressional Budget Office in January this year, projected a 3.3 percent annual increase in federal gas tax

revenues from 2005 to 2015. CBO says gas tax revenues are going up, not down.

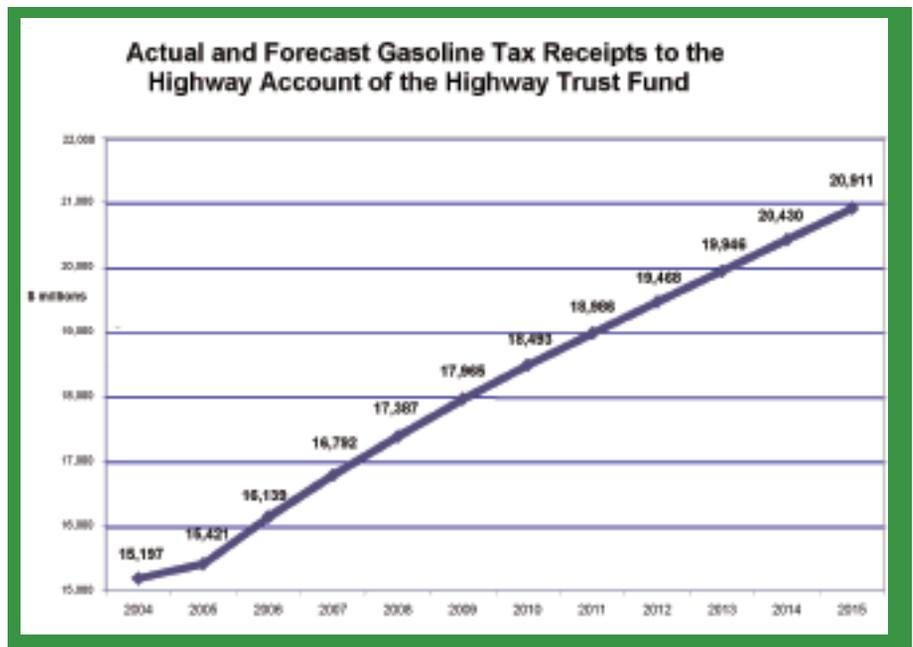
Many believe that the sale of hybrid vehicles like the Toyota Prius and Honda Civic are about to alter the equation. There is no question that hybrids are increasing in popularity, especially in light of the recent surge in gas prices to over \$2 per gallon. But let us put this in perspective. In December 2004 the Washington Post reported that in 2004, 79,000 hybrids had been sold nationally, 44,000 in 2003. That is out of more than 16 million in annual automotive sales, and more than 200 million vehicles registered nationally. Hybrids constitute less than .02% of the vehicle fleet today. A 2003 NCHRP study forecast that it could grow to as much as 3% by 2010, and 15% by 2020.

Toyota's Prius and Honda's hybrid Civic use between 25% to 50% less fuel than the general light duty fleet. An interesting note about the new American-made SUV hybrids now entering the market, is that they emphasize performance as much as they do fuel efficiency. Many are expected to use 10% to 25% less fuel. The long and short of it is that the

presence of hybrids in the overall fleet is expected to increase rapidly. Over the next 10 years they may erode gas tax revenues by between 1% to 3%. By the 2025 to 2035 timeframe, however, according to the NCHRP, study they could erode revenues by 15% or more. This is a legitimate concern we should take seriously and prepare to deal with in the timeframe from 2015 and beyond. But in the near term, it is not a significant factor.

The 2003 NCHRP study also addressed alternative fueled vehicles such as those fueled by hydrogen, electricity and compressed natural gas. The market share for these vehicles is not expected to exceed .02% until after 2020.

So if increasing fuel efficiency is not a current threat to Federal Highway Trust Fund revenues, what is? The real challenge facing federal fuel tax revenues is the loss in purchasing power due to inflation. The last time the federal gas tax increased was in 1993. By 2010, AASHTO forecasts that inflation will have reduced the purchasing power of Highway Trust Fund revenues by 30%. But this is nothing new.

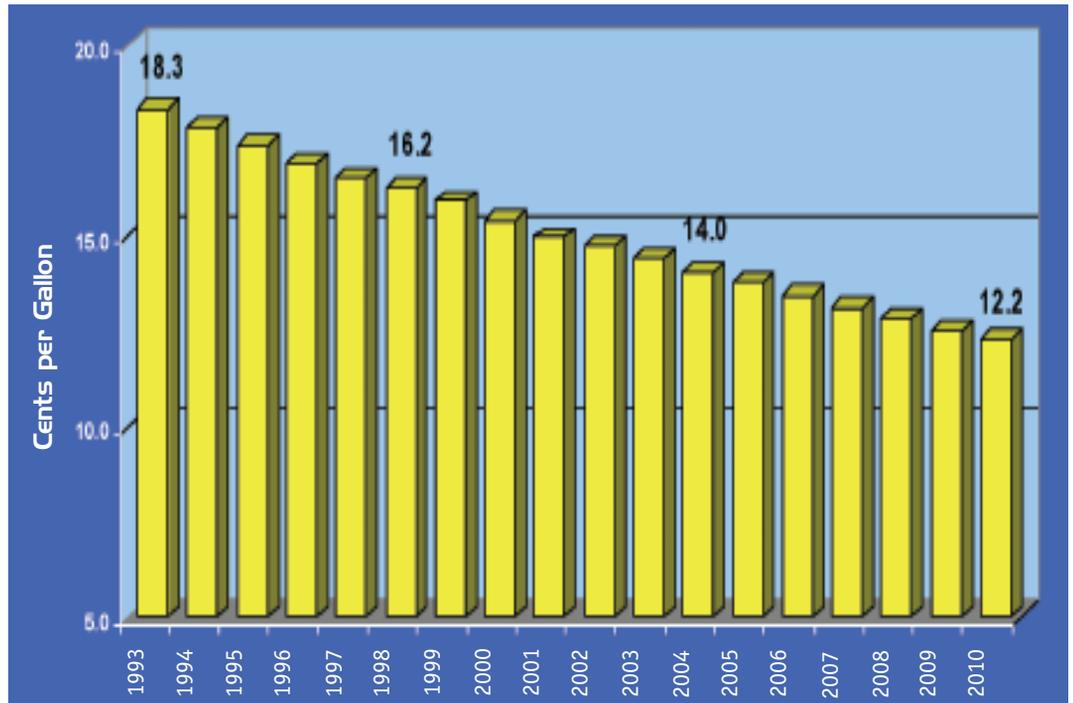


Loss in Purchasing Power Due to Inflation

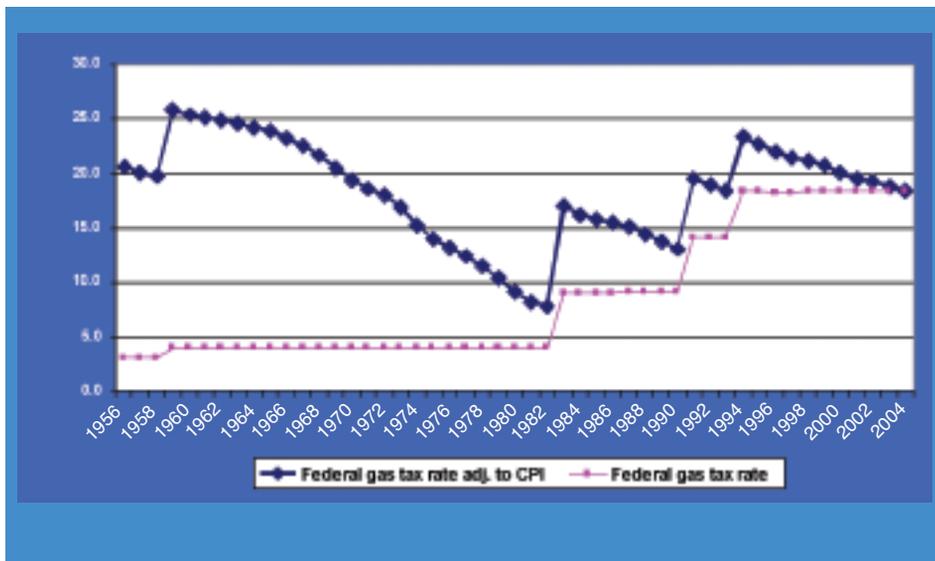
The first major increase in the federal gas tax came in 1956 and 1957 when it was increased to 4 cents under President Eisenhower to fund the Interstate Highway System.

By 1982, its purchasing power had been reduced by 62%. In that year President Reagan supported raising the gas tax by 5 cents. Over the next eight years it again lost ground until it was boosted by another 5 cents by President Bush Sr., in 1990, then by 4.3 cents under President Clinton in 1993. Because this tax is levied by a fixed amount of cents per gallon, rather than on the basis of a percentage as are sales taxes or income taxes, either it is adjusted periodically to restore its purchasing power, or it loses ground.

Loss in Purchasing Power Due to Inflation



Federal Gasoline Tax Rate in Real 2004 Dollars



Federal Gasoline Tax Rate in Real 2004 Dollars

How to restore and sustain the purchasing power of the Highway Trust Fund will be the central challenge to be taken up in the next Reauthorization in 2009.

These myths are like a smoke screen which prevents us from focusing clearly on the real issues and options. It is important to blow the smoke away so we again can begin the dialogue on how best to fund national highway and transit needs.

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