

Should I-70 west of Denver be a toll road?

Edward Morey, Dec 11, 2007

Kirk Johnson had an article, *In Colorado, Traffic on the Interstate is at a Peak*, in the New York Times (Sept 19, 2004). The article is about congestion on I-70 west of Denver; as we all imagine, it is expected to get a lot worse. The article notes that I-70 is the main access road from the Front Range to the mountains and that it would be very costly to expand: requiring a second tunnel. Quoting from the article:

“Local politicians have instead argued for a rail option that would let Denverites leave their cars at home. Other transportation experts say the operational costs of running a mountain rail line could make the price of a ticket to the resorts prohibitive, or at least uncompetitive with private vehicles, resulting in a colossally expensive flop.”

As my environmental economics students know, I-70 on weekend mornings in the winter is my favorite example of what economists call congestion externalities. When I decide to take I-70 to Breckenridge or Vail on a Saturday morning, I take into account how long I will be in the car; what I do not take into account is how my presence on the road will slow down everyone else.

If I drive fast, don't switch lanes and everything goes perfectly, I might only cost each car behind me a second or so, but multiplied by the thousands of cars behind me this is a lot. If I pull out to pass on the hill west of Georgetown and am not traveling fast enough, everyone behind me must hit their brakes and total commute time to the ski areas increases by hours. But, I don't care; I don't pay that cost.

I-70 is a scarce resource that is being given away for free. Imagine a bar that gave away drinks on Saturday nights. It is going to be too crowded no matter how many times the owner widens the lanes to the bathrooms.

Why doesn't any one consider charging a toll, a toll that varies by day of the week, time of day, direction of travel, and season? This possibility was not even mentioned in the article. For much of the week, the toll would be zero (for example, going east on Saturday morning and going either direction at 10pm on Wednesdays). The highest tolls would be on weekend morning for west-bound traffic, and on weekend evenings for east-bound traffics. Tolls are also warranted for weekday rush hours.

It used to be that road tolls were difficult to collect, disrupting and slowing traffic in the

process, but this is ancient history: the transponder on our windshields, along with MasterCard, makes the cost of collecting the toll almost zero. For most users, there is no alternative to I-70 and the number of access points is limited. One does not even have to slow down to pay the toll.

Of course a toll would be a hardship on poor skiers; to be effective, the toll would have to be set high enough to significantly reduce congestion; that is, high enough to get some individuals to either not go or go at a less-crowded time. These will be the drivers with the least money or more flexible schedules.

Some will say that a road toll discriminates against poor people; it does in the same way that high prices for Merlot discriminates against poor wine drinkers. If we want to help poor people, there are better ways of accomplishing that goal than by giving them free road passes to the mountains.

I can't speak for others, but I would happily pay a \$10 toll if it gets me to Vail 30 minutes faster.

Commuters from places like Evergreen might actually like the toll once they realize its effects. I suspect that many of them would rather pay \$10 a day in toll charges and shave 30 minutes off their commutes than put up with the current mess. Of course, others will start commuting off-peak when the toll is lower or zero, or pass up that extra trip into town.

My first thought was that an I-70 toll would be bad for ski area operators, but now I am not sure. Fewer cars would drive to the ski areas at times when a toll is charged. On the other hand, a toll that varied by day of week and time of day would cause ski days to be more evenly distributed through the week, and lead to more overnight stays. Lift ticket prices could go up or down: in explanation, fewer would show up to buy tickets, but those showing up would be willing to pay more because there will be shorter lift lines.

Developers planning on building middle- or lower-class suburbs between Denver and the tunnel will not like road tolls for the weekday commutes. Developers of high-end homes will probably like the idea.

The cost of a train ticket won't look nearly as bad if one also needs a ticket to drive on the road.

The money collected by the tolls could be used to reduce other taxes, pay for improvements to I-70, or even pay for a rail line.

One problem with tolls is that we all feel there is something in the Constitution guaranteeing our right to drive for free. Few people think that paying for something that they currently get for free could make them better off.

Edward