

Congestion Pricing in the San Francisco Bay Area – Should It Be Done?

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Submitted to the 2006 ITE Student Paper Award Contest
March 31, 2006

As the problem of congestion increases, it is important to consider whether various solutions are appropriate for a given location. Congestion pricing has been seen as a viable solution in many areas because it not only raises money for transportation projects, but it also encourages more efficient use of transportation systems. Congestion pricing generally means charging drivers for the amount of congestion they are imparting to other road users. Congestion pricing can be used to describe fixed toll systems that charge more during peak periods than off peak periods, or dynamic toll systems that charge a variable toll based on the amount of congestion on the road. The purpose is to reduce the number of drivers on the road during peak hours, which would alleviate congestion and lessen emissions that lead to air pollution. This idea is closely related to zonal road user charging and high occupancy toll lanes. Unlike other transportation funding methods, such as the gas tax, congestion pricing has a direct effect on driver decisions. In order to save money, drivers might decide to drive during off peak periods, car pool, or take public transportation. Each of these actions will help accomplish the goal of reducing congestion.

Traffic congestion is an increasing problem in the San Francisco Bay Area. San Francisco itself has a unique geographic layout. Since San Francisco is a peninsula, it is surrounded by water on three sides and can only be accessed from the North Bay via the Golden Gate Bridge, and from the East Bay by the Bay Bridge. These bridges form bottlenecks for entering and exiting the city, especially during peak hours. In addition, San Francisco's density leads to parking shortages and increased congestion due in part to people driving around looking for parking. This is especially apparent in the financial district in San Francisco, which has many tall office buildings, and yet very few parking

structures. However, this density presents an ideal situation for public transportation, especially since many people travel to a central location, the financial district, for work, setting the foundation for a many-to-one transit service.

If nothing is done to counteract current driving patterns, congestion in the San Francisco Bay Area is only going to increase. Congestion pricing can be used to both counteract congestion and raise money for transportation improvements. The first and easiest step would be to apply congestion pricing to the Golden Gate Bridge and the Bay Bridge. Currently these bridges have a fixed toll for anyone entering San Francisco. However, adding a variable toll that is higher during peak periods and lower during off peak periods would encourage some drivers to adjust their schedules to travel during off peak times or to find other transportation options. Variable tolls can also be added to other freeways that suffer from congestion during peak hours. Such tolls have proven successful on the East Coast of the United States.

Encouraging drivers to carpool would also help reduce congestion. The Golden Gate Bridge and Bay Bridge currently allow high occupancy vehicles (HOVs), which are generally vehicles with three or more passengers, to use the bridge without paying a toll. This saves drivers both time and money, which has been so attractive to drivers in the Bay Area, that a casual carpool has formed as a result. Passengers wait at designated spots, and drivers wishing to carpool pick up these passengers, drive them across the bridge, and drop them off in San Francisco. The same process works for the reverse commute. Everyone benefits, and there are fewer cars on the roads. This is a prime example of how road usage policies can affect the travel patterns of drivers.

The idea of giving priority to HOVs can be applied to vehicles on freeways as well by giving a discount to HOVs traveling on freeways with tolls. An extension to this strategy is to add high occupancy toll (HOT) lanes. Instead of charging a toll for the entire freeway, certain lanes can be designated as HOT lanes. HOVs can travel in these lanes for free, and other vehicles can travel in these lanes by paying a toll. Effectively, users are paying for a higher level of service; they are paying to travel in a less congested lane. This is an effective alternative if regulations do not allow an entire freeway segment to be tolled.

While variable tolls can help reduce congestion on certain freeways and bridges, zonal road user charging can alleviate congestion in a general area. The financial district in San Francisco could be an ideal candidate for zonal road user charging. This strategy has proven extremely successful in London, England, where congestion was reduced in the core of the city. The idea behind this strategy is that drivers pay a fee when they enter a certain zone. This fee can be variable and possibly only in effect during peak hours. Discounts can be given to low income groups in order to improve equity. In addition, those living within the zone should be given a discount. This strategy should only be applied in the most extremely congested areas. The boundaries of the zone should be clearly defined and the rules and regulations of the zone should be communicated to drivers. Implementing zonal congestion charging in the financial district in San Francisco would reduce congestion in the area and alleviate some of the parking problems.

In order for tolls and zonal road user charging to be successful, alternative transportation options should be made available. Therefore, these two strategies should

be implemented concurrently with improvements in public transportation and bike service. These improvements could include more frequent BART service between the East Bay and San Francisco, more bus lines and ferries from the North Bay to San Francisco, increased transit service between outlying areas of San Francisco and the financial district, and more bike lanes on roads. Currently San Francisco has plans for bus rapid transit (BRT) lines on both Geary and Van Ness Avenues, and a light rail line on Third St. All of these additions will provide more options for people to take public transportation to commute to downtown San Francisco for work. These changes would be complimentary to congestion pricing to reduce congestion in San Francisco.

Congestion pricing in the form of tolls and zonal charging might be unpopular at first. People do not want to pay for something that was once free. However, the benefits should be communicated to drivers. These measures will reduce congestion in the Bay Area and will raise money for transportation improvements, which are things people would support. If the program is successful, congestion pricing might even be able to replace the gas tax and transportation bond measures in raising money for transportation projects.

Although congestion pricing might receive resistance at first, it has many benefits. Congestion pricing can push people to more efficiently use the existing transportation systems. It can spread out the times during which people choose to drive, encourage people to car pool and take public transportation, and reduce congestion. In addition, congestion pricing can raise money that can be earmarked for transportation improvements. In this way, people using the roads will directly be paying for road improvements. Congestion pricing would be an effective solution to the congestion

problem in the San Francisco Bay Area. Placing variable tolls on congested freeways, adding peak pricing to the Golden Gate Bridge and the Bay Bridge, and implementing zonal road user charging in the financial district in San Francisco would help alleviate congestion and raise money for transportation improvements. Bay area commuters have already embraced innovative programs such as the casual carpool. The implementation of congestion pricing, along with the public transportation improvements already underway, could lead to additional shifts in travel patterns that can reduce congestion, reduce air pollution, and make a positive impact on the San Francisco Bay Area.