



Congestion Pricing and Electronic Tolling

Like many states, Connecticut's ability to respond to increasing congestion by simply building more highways is no longer viable. A new strategy is needed, one that uses our infrastructure more efficiently while giving drivers more options.

One strategy that might succeed is congestion pricing, which sometimes is called road or value pricing. Connecticut is studying our two most congested highways to evaluate whether congestion pricing using electronic tolling can reduce traffic congestion in the study areas.

Congestion pricing combined with transportation system improvements may achieve a noticeable level of congestion relief.

I-95 and I-84 Congestion Pricing Studies Kick Off

Connecticut was recently awarded grants from the Federal Highway Administration (FHWA) under FHWA's Value Pricing Pilot (VPP) program. The funds will be used to study congestion pricing in two key corridors:

- I-95 corridor from New Haven to New York, and
- I-84 in Hartford

Each study will include a thorough examination of congestion problems and travel patterns in the respective study area, and will identify improvements that will help reduce congestion. **The goal will be to find a combination of pricing and transportation system improvements that achieve a noticeable level of congestion relief.**

Overhead gantries with remote sensors in action...note that vehicles operate at normal speeds.

Fees are collected using electronic toll tags through overhead gantries... there is no need to slow down.



What is Congestion Pricing?

The most popular form of congestion pricing gives drivers a **choice** to use specially-designed, electronically-tolled **express lanes** or use the regular **free lanes** on an interstate highway. Higher prices are charged during the most congested periods to encourage drivers to travel at less congested times of day, to shift to less congested routes, or to shift to transit. If it is not possible or practical to add a special lane to a highway (due to limited right-of-way width, for example) then variable pricing of **all lanes** in a congested corridor using electronic tolling can also help manage congestion.

*New electronic tolling systems are superior to old cash collection method... There are **no toll booths**.*

The idea is to balance travel **demand** with roadway **supply** (capacity) by using electronic tolls as a management tool.

There is a general consensus among economists that congestion pricing represents the single most viable and sustainable approach to reduce traffic congestion and provide the travelling public with "choices" for travel each day.

What is Electronic Tolling?

Old methods of collecting tolls relied on cash collection at toll booths, which often caused traffic back-ups and accidents. New electronic methods of toll collection use special equipment mounted on **overhead gantries** to read an EZ Pass or similar toll tag. Drivers do not need to slow down and traffic flows at normal highway speeds. This eliminates safety and delay problems associated with older-style toll booths.

Engaging Residents, Businesses and Other Stakeholders

The public will be engaged in a discussion of how tolls might affect their communities and businesses. Commuters, residents, the business community and other stakeholders will provide essential input to help shape recommendations that emerge from the studies, and weigh in on alternatives for congestion management and electronic tolling. Public involvement on this important public policy question will include:

- Focus group research
- Surveys of residents, businesses, and the travelling public
- Direct outreach to community and business groups
- Community forums and round table discussions
- Project web sites to disseminate information and solicit comments
- Equity assessments that examine the potential impact of tolls on communities and businesses
- Public information meetings



*The study of congestion pricing and tolling in CT will include **extensive public engagement**.*

Express toll lanes can also benefit bus service by reducing travel time and improving service reliability.

Technical Analysis

The congestion pricing studies will include a thorough assessment of traffic and transportation issues as well as tolling and pricing issues - such as:

- Analysis of existing traffic conditions and potential traffic impacts
- Identification of potential highway and transit improvements to help relieve congestion
- Revenue forecasting for various pricing or tolling scenarios
- Financial analysis and study of Public-Private Partnership (PPP) options



How Could Electronic Tolling be Used on CT Roads?

Express Toll Lanes

Cities like Miami added new lanes to existing highways and collect tolls only on these new lanes. For drivers who are willing to pay the toll, express lanes offer the opportunity to bypass congested sections of highway. They also benefit drivers in the existing non-toll lanes by adding capacity to the highway and reducing travel times. Over the past decade, the use of express toll lanes has proven to be the most popular implementation method for congestion pricing in numerous cities and several states.

HOT Lanes

Converting High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes can help reduce congestion and give drivers a choice. Single occupant vehicles (SOV) are allowed access to the lanes by paying a toll which typically varies by time of day.

Spot Pricing

All-electronic tolls can be added at a specific location in order to generate funds to offset the significant cost of the project. Examples could include bridges, tunnels, and major interchange facilities.

Whole Facility Pricing

Congestion pricing can also be applied to all lanes along a length of a corridor utilizing all electronic tolling to manage congestion during peak travel times.

*Express toll lanes also benefit drivers of non-toll lanes by **adding capacity** to the highway.*



Vehicles passing under toll gantry at normal highway speeds.

Where Can Toll Revenues Be Used?

Federal law requires that **congestion pricing revenues be reinvested in the same corridor where they are collected**. This includes the highway that is tolled, and in the case of express or HOT lanes can also include improvements to transit facilities. Congestion pricing is *most effective* when combined with improvements that increase operational efficiency, safety, or capacity. These include adding travel lanes, fixing problems like substandard merging and weaving sections, or improving transit.

What are the Potential Issues that the Studies Need to Address?

Concerns about congestion pricing may include:

- ✓ Potential diversion of traffic from interstates to local streets must be analyzed and addressed so that diversions and impacts on local roads are minimized.
- ✓ Social or economic equity or the ability of low income people to pay the tolls.
- ✓ Businesses whose employees or delivery vehicles require extensive use of the roads may be sensitive to the costs of the new system.

The experience of other states shows that these challenges are manageable and usually less significant than they first seem.

In other states where these systems have been implemented initial public reaction has been tepid. However, once the systems are operational, public response has been quite favorable when the systems relieve congestion or when drivers are given a choice as with express lanes or HOT lanes.

In Summary

Why Consider Congestion Pricing and/or Tolling?

- Congestion pricing is being used in an increasing number of states as a means of improving the speed and reliability of highway travel. Congestion pricing has proven effective at reducing congestion by managing demand during peak periods.
- Toll revenues can be used to finance improvements, and in some cases, transit improvements that further reduce congestion.
- Toll revenues can help finance major reconstruction or replacement projects like the I-84 viaduct in Hartford.
- Drivers of all income levels value the option of being able to use the express lane on days they cannot be late.
- Traffic congestion levels in Connecticut have increased by 25% over the 10 year period between 2001 and 2011.¹
- In 2011, the total time of all people delayed in traffic in Connecticut was 64 million hours.¹
- In 2011, the cost of delay due to traffic congestion was estimated at \$1.34 billion in Connecticut's three largest metro areas.¹
- Growing congestion and unreliability burdens businesses with costs they cannot control or anticipate and threatens economic growth.
- Congestion increases fuel consumption and pollution.



¹Congestion data derived from 2013 report titled "Annual Urban Mobility Report" published by the Texas A&M Transportation Institute and is based on congestion experienced with three metropolitan areas of Connecticut - the Hartford, New Haven and Stamford/Bridgeport metro areas through 2011 (the last year where statistics are available).

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