

## About Congestion Pricing

### How Congestion Pricing Works

Congestion Pricing aims to reduce rush-hour traffic by shifting it to other transportation modes (like carpools, vanpools and transit) or to off-peak periods. This is typically accomplished by varying toll prices based on the time of day or the amount of traffic on the road. For example, when toll lanes get relatively full, prices increase. When toll lanes are less full, prices decrease. If roads are not congested at all, then no tolls apply.

The toll rates for different time periods may be set in advance, or they may be set dynamically by Traffic Management Centers, meaning they may increase or decrease every few minutes to ensure that the lanes are used fully without a breakdown in traffic flow. Toll prices are displayed on electronic signs prior to the entrance of each tolled section.

The idea is to reduce traffic congestion by using tolls as a management tool. By removing just 5 percent of the vehicles from a congested roadway, traffic flows much more efficiently.

Similar variable charges have been successfully used in other industries. Cell phone companies charge their customers more during the day, when usage is high, and offer “free” minutes at night, when usage is lower. Hotels do the same—when there is an event or convention in town, room rates are higher because the demand is higher.

To keep traffic flowing freely, tolls are collected at highway speeds using electronic toll collection technology—and there are no tollbooths to slow cars down. For this to work, vehicles must be equipped with electronic transponders (E-ZPass), which are read by overhead antennas or gantries. (Click [here](#) to learn more about Electronic Tolling).

## Types of Congestion Pricing

There are two basic types of Congestion Pricing:

- Some roadways use variable priced tolls on all lanes.
- Others maintain some regular, free lanes, and convert the remaining lanes—or the existing High Occupancy Vehicle (HOV) lanes—into High Occupancy Toll (HOT) lanes. In HOT lanes, low or Single Occupancy Vehicles are charged a toll, while High Occupancy Vehicles like carpools, vanpools, public transit buses, motorcycles and emergency vehicles are allowed to use the lanes free of charge or at reduced rates. To use HOT lanes, motorists must either meet the minimum vehicle passenger requirements to ride free or choose to pay a toll. Drivers who choose not to use HOT lanes can always remain in the regular lanes for free.

In Northern Virginia, HOT lane construction has already begun on the I-495 corridor.

## Why Congestion Pricing is necessary for reducing traffic

In Virginia, the average commute time to work is 26.5 minutes—the seventh highest in the nation.

The number of cars on the road today has grown dramatically over the past few decades, as rising incomes have led to increased car ownership and an increased demand for new roads. In the last two decades, the number of cars on the road grew at a rate far greater than the number of roads being built. As a result, roads and neighborhoods have been experiencing more chronic congestion and serious crashes than ever before.

To put it simply, there just aren't enough roads to accommodate all the people driving today.

Congestion problems are most serious in the northern region of Virginia close to Washington, DC and in the Hampton Roads area, where traffic merges into bottlenecks at bridges and tunnels. Traffic congestion causes approximately 38 annual hours of delay for the average urban motorist in Virginia—nearly one full working week. And in some parts of the state, travel delays are significantly longer.

Each day 3.5 million to 4 million trips are made by Hampton Roads drivers, with about a quarter of them during rush hour, according to the Hampton Roads Planning District Commission. What's interesting is that about 10 percent of all morning rush hour vehicles are occupied by people on nonessential trips, such as shopping or personal errands. And in the afternoon, that figure rises to almost 30 percent.

Congestion Pricing encourages drivers to use discretion when it comes to making rush hour trips—even by as little as 15 minutes—or to choose non-interstate routes. This can significantly lower interstate congestion levels at a cost cheaper than paying for new construction.