

# Express Toll Lanes

## An Alternative to Gridlock

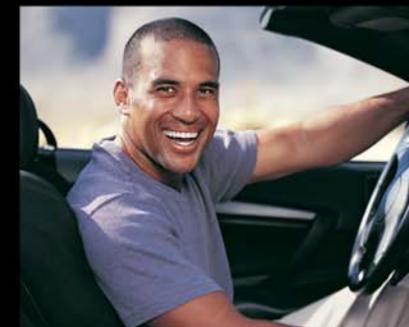
*What are Express Toll Lanes and  
How Can They Help Deliver  
on the Promise of a  
More Mobile Maryland?*



**For more information  
on Maryland's Express Toll Lanes  
studies and activities, please go to:  
[www.marylandtransportation.com](http://www.marylandtransportation.com)  
and click on the Express Toll Lanes icon,  
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7201 Corporate Center Drive  
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# fast, safe, reliable!

## The Congestion Challenge

Maryland's roadways are among the most congested in the country. Millions of people who rely on the State's highways to travel to work or school or for other everyday travel are paying too high a price – in essence a "congestion tax" – in time lost sitting idle in traffic. This same "tax" is being assessed on Maryland's businesses that rely on the transportation network to move materials and goods; have secure, safe, and reliable travel for their employees; and conduct their daily business.

Travel on Maryland's highways has increased by 20 percent since 1995 – despite only a four percent increase in miles of highway lanes over the same period. This imbalance has contributed to the increase in traffic congestion, making the Baltimore-Washington region one of the worst areas in the country in the amount of time it takes for people to commute to work. In light of the State's severe fiscal constraints, creative approaches must be found to reduce the "congestion tax."

### Committed to Improvements

The Maryland Department of Transportation (MDOT) has made a promise to Maryland's residents and businesses to make tangible and near-term improvements to traffic flow throughout the State and, in so doing, achieve MDOT's vision of a *More Mobile Maryland*. The State's transportation agencies are committed to easing the near-crippling congestion that clogs our highways – and to do so as soon as possible. Significant near-term improvements, however, cannot be achieved without new approaches and new funding.

### Express Toll Lanes Can Help Get Us There

The Maryland Department of Transportation (MDOT), State Highway Administration (SHA), and Maryland Transportation Authority (MdTA) are considering

a new initiative to help deliver on the Administration's promise and to provide Maryland's residents, employers, businesses, and visitors with an alternative to sitting idle in traffic: **Express Toll Lanes (ETLs)**.

Express Toll Lanes could offer Maryland's drivers and transit users a choice of relatively congestion-free travel whenever they need it most. An integrated system of Express Toll Lanes could help ease the impact of traffic congestion on Marylanders' lives and do so decades sooner than traditional approaches would allow.

### Who can benefit from Express Toll Lanes?

Express Toll Lanes give people the option of paying a fee for something they can count on: more reliable travel times when they need to get where they are going *on time*.

All kinds of drivers will choose to use the Express Toll Lanes when the benefit of reliable travel is worth more to them than the cost. Examples of those who benefit include:

- A parent who needs a reliable travel time to pick up a child at daycare
- A delivery company that must stay on schedule throughout the day
- Individuals who ride buses that travel on controlled access highways
- A service technician working to make more service calls in a day
- A taxicab or van service driver making trips to and from the airport
- An employee trying to get to a meeting on time

### What Are Express Toll Lanes?

The addition of Express Toll Lanes to some of the State's most severely congested major highways would give motorists the option of paying a fee to drive in separate, relatively free-flowing highway lanes on a given trip. This does not mean traditional toll roads with waits at tollbooths. Instead, **tolls would be collected 100 percent electronically** via the use of electronic transponders at highway speeds. Toll rates would vary based on demand – either by time of day or based on actual traffic conditions – increasing when the lanes are relatively full and decreasing when the lanes have extra capacity.

The Express Toll Lane concept under consideration would add new lanes to some of the State's most severely congested controlled access highways such as Interstates. In some cases, consideration also will be given to converting an existing travel lane to an Express Toll Lane to achieve optimal traffic flow.

But, in all cases, roadway capacity would be expanded and everyone would benefit – both drivers who choose to pay for less congestion and those who choose to continue to drive in the non-tolled lanes.

Express Toll Lanes based on variable-pricing structures – sometimes referred to as "value pricing" – work in much the same way as familiar peak-period pricing and discount programs routinely offered by utilities, airlines, transit systems, parking garages, and movie theatres to manage demand. Another familiar example of value pricing is telephone service plans with pricing structured to encourage use when overall demand is lower – i.e., nights and weekends.

Express Toll Lane programs can be structured to encourage motorists to travel during off-peak traffic hours and simultaneously provide alternatives for motorists who do not have the flexibility of switching their travel time – i.e., the option

to pay a fee to gain access to the express lanes. A parent who needs a reliable travel time to pick up a child at daycare, for instance, can choose to pay a fee to travel in the relatively free-flowing lanes. Similarly, a service technician can save valuable time by choosing to pay to travel in less congested lanes.



## What Are the Benefits of Express Toll Lanes?

A major benefit of the Express Toll Lanes concept is **the ability to provide needed highway lane capacity and an alternative to congestion much sooner than traditional approaches allow** – for instance, in as little as five to 10 years rather than the 15- to 50-year timeframe required with traditional funding methods alone. Consequently, additional benefits of Express Toll Lanes include:

- **A new viable travel choice for commuters** – and an alternative to spending valuable time stuck in traffic.
- **Travel-time reliability** – when predictable travel times are most critical to area motorists.
- **Access for buses to free-flowing lanes** – thus offering similar travel-time savings, travel-time reliability, and enhanced operating efficiency for transit.
- **The ability to manage customer demand for and use of the lanes through variable pricing** – to keep traffic flowing smoothly, even as overall demand for the lanes increases.
- **The ability to generate revenue directly from users** – to help pay for construction, maintenance, and operation of the lanes.
- **Improved traffic conditions and safety** – by reducing traffic congestion and congestion-related accidents.
- **Community and environmental benefits** – including the potential for reduced impacts of highway expansion as well as possible air quality improvements resulting from lowered vehicle emissions on the less congested highway lanes.

## Are Express Toll Lanes Right for Maryland?

Express Toll Lanes and similar traffic management concepts have been implemented successfully in several locations throughout the country and internationally where extreme congestion exists. Similar toll-lane strategies are being pursued in a growing number of places, including Virginia for its portions of the Capital Beltway and I-95.

Research from communities where programs already exist provides strong evidence of overall public support. For instance, 91 percent of San Diego's FasTrak users and 66 percent of non-users approve of the program, with a significant majority of both users and non-users agreeing that the FasTrak program reduces overall congestion.

Maryland shares many similarities with these communities, most notably chronic traffic congestion on existing roadways, growing travel demand for the foreseeable future, and limited funding from traditional transportation funding sources to address the needs. In response, Express Toll Lanes are being considered as a tool to help address congestion in some of the State's key transportation corridors.

### Queue Jump in Lee County, Florida

A traffic management approach being implemented in Lee County, Florida is a "Queue Jump" – a facility that can be used to bypass areas where congestion is particularly severe and occurs in a predictable pattern. Tolls will vary by time of day and be tied in with the county's existing electronic toll collection system.

### "FasTrak" Express Lanes on I-15 in San Diego, California

Faced with increasing congestion and limited funding, San Diego implemented express lanes in the median of I-15, allowing single occupant vehicles to pay for access to the HOV lanes. The fee is collected with an electronic transponder issued to each user and automatically debited from the driver's account. The charge varies based on the available capacity in the FasTrak lanes, with signs showing the charge before drivers choose to enter the lanes.

In addition to providing choices to commuters, the express lanes have generated approximately \$2 million annually that helps pay for transportation improvements in the corridor.



## Where Might Express Toll Lanes Be Effective in Maryland?

The Maryland Department of Transportation, State Highway Administration, and Maryland Transportation Authority plan to consider Express Toll Lanes wherever they make sense – that is, for controlled access highways such as Interstates that experience chronic congestion, in particular during peak travel times (e.g., morning and evening rush hours)

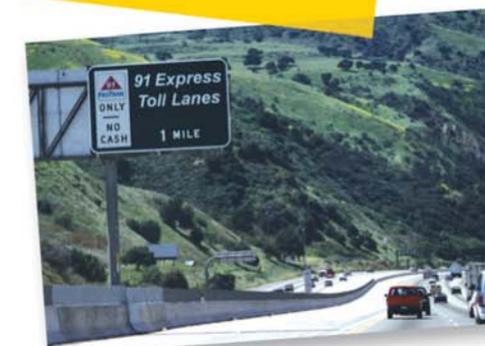
- **I-95, I-895 North split to north of MD 43** – Construction is currently underway for Maryland's first Express Toll Lanes. Express Toll Lanes are being added to I-95 from I-895 North split to north of MD 43 (10 miles). Construction is estimated for completion in 2011.
- **I-95, North of MD 43 in Baltimore and Harford counties** – Express Toll Lanes are one of several alternatives being considered for the area beginning north of MD 43, on the north-east side of Baltimore, extending north into Harford County.
- **I-95/I-495 (Capital Beltway)** – With sections of the roadway experiencing severe congestion and traffic volumes projected to continue to grow, consideration will be given to Express Toll Lanes.
- **I-270** – Express Toll Lanes could potentially be used in place of, or in conjunction with, current High Occupancy Vehicle (HOV) lanes on this increasingly important travel corridor that serves technology and other businesses operating in the corridor and provides access to growing residential communities.

### SR 91 in Orange County, California

Opened in 1995 as a four-lane facility in the median of a 10-mile section of one of the most heavily congested highways in the country, the SR 91 express lanes are separated from general-purpose lanes by a buffer and plastic pylons. The fee charged changes by time of day to maintain the free flow of traffic.

Opening of the express lanes provided additional capacity in the corridor and resulted in a lessening of congestion on the general-purpose (non-tolled) lanes and lessening of delays for users of the express lanes.

SR 91 customers report saving an average of more than 30 minutes per trip. In addition, since the express lanes were added, average peak-period speeds in the general-purpose (non-tolled) lanes have more than doubled. Customer satisfaction is over 90 percent. Time savings is the primary benefit cited. Users also recognize improved safety as an important benefit.



- **MD 5 (I-495 to US 301)** – Project planning studies are underway for MD 5 between I-495 (Capital Beltway) and US 301. Express Toll Lanes are one alternative being considered.
- **I-695 (Baltimore Beltway)** – Studies are being proposed that would consider Express Toll Lanes to manage the traffic and complete improvements on the Baltimore Beltway.

By considering these corridors collectively as a system of roads that are critical to Maryland's commuters, families, and businesses, Maryland's transportation agencies intend to deliver on the promise of comprehensive improvements and reduced delay to travel in all parts of the State.

## Conclusion

*Today, limited resources hinder Maryland's ability to improve traffic flow adequately in many parts of the State. Significant near-term improvements are not possible with a business-as-usual mindset.*

*Use of Express Toll Lanes is by no means a cure for all traffic congestion – and it is not the only response being considered. The targeted addition of Express Toll Lanes could help if deployed wisely and in concert with other elements of the Maryland Transportation Plan.*

*Express Toll Lanes will be considered where they can be expected to help ease the impact of congestion by providing transportation improvements decades sooner than could otherwise be achieved, offering Marylanders an alternative to spending valuable time sitting in traffic, and facilitating sustainable travel options throughout the State.*



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## FREQUENTLY ASKED QUESTIONS

### Q: How do Express Toll Lanes differ from traditional toll roads?

- A:** Express Toll Lanes differ from traditional toll roads in a number of important ways. With Express Toll Lanes:
- General-purpose (non-tolled) lanes and toll lanes exist together in the same corridor, offering motorists the choice of using the Express Toll Lanes when time is most valuable and using the general-purpose (non-tolled) lanes at other times.
  - Fees are collected electronically at highway speeds and without the need for tollbooths.
  - Tolls can vary between rush hours and non-rush hours based on the levels of demand and congestion. On traditional toll roads, toll rates generally are fixed and do not vary by time of day or level of congestion.

### Q: Who will use the Express Toll Lanes?

- A:** All kinds of motorists will choose to use the toll lanes – some as regular users and others only when they most need the time savings or reliability. Research from elsewhere in the country shows that drivers of all income levels opt to use Express Toll Lanes on occasions when their need for time savings outweighs the cost of paying a toll.

### Q: How much will it cost to use Express Toll Lanes?

- A:** Toll rates on the Express Toll Lanes would vary based on supply and demand and be adjusted to maintain optimal traffic flow. As an example, tolls to use San Diego's eight-mile FasTrak express lanes generally vary from \$1.00 to \$4.00 (or 12.5 cents to 50 cents per mile) on a typical day. Study is needed to estimate what the required toll rates would be for individual Express Toll Lanes in Maryland.

### Q: Where will the revenue go?

- A:** Revenue from the Express Toll Lanes primarily will be used to help pay off bonds issued to finance construction, as well for maintenance and operations of the new lanes, including needed enforcement.

### Q: Why not just build new highways and pay for them through the Transportation Trust Fund?

- A:** Maryland's Transportation Trust Fund primarily comprises revenue from the gas tax and motor-vehicle registration and titling fees. Some highway expansion projects are so big and expensive that it would take decades to accumulate enough money in the Transportation Trust Fund to pay for them. Express Toll Lanes would allow an expansion project to be built more quickly, free up traditional funding for other transportation needs, and help manage use of the new lanes to maintain the choice of a relatively congestion-free route.

### Q: Will the Express Toll Lane option discourage ridesharing and transit use?

- A:** No. Drivers still will have a financial incentive to carpool in the express lanes, reducing the cost of using the lanes by 1/2 or 1/3 for two- and three-person carpools, for instance. Also, Express Toll Lanes have the potential to improve transit travel times by ensuring access to relatively free-flowing travel lanes for commuter bus service, especially during rush hour.

### Q: Will the electronic equipment invade people's privacy?

- A:** No. Toll collection will be similar to Maryland's *E-ZPass*<sup>SM</sup> system. Transponders will be read by electronic readers and tolls will be debited from the driver's account. No additional information will be collected from the vehicles. Moreover, use of the lanes will be completely voluntary with drivers always having the choice between the Express Toll Lanes and the non-tolled general-purpose lanes.

### Q: How does Maryland's Express Toll Lanes Initiative differ from the HOT lanes approach being pursued in Virginia?

- A:** HOT is an acronym for High Occupancy/Toll. On HOT lanes, a solo driver can pay a fee to access High Occupancy Vehicle (HOV) lanes normally reserved for transit buses and carpools. HOVs generally are allowed to use HOT lanes at a discount or free of charge. HOT lanes are being pursued in Virginia for portions of the Capital Beltway and I-95.

The HOT lanes approach is not under consideration in Maryland. Primarily, this is because of limitations on the ability to enforce lane restrictions and occupancy requirements. The highways for which Express Toll Lanes are being considered generally cannot support physically separated lanes and enforcement of access restrictions on those lanes.

### Q: Will the Express Toll Lanes affect currently existing HOV lanes?

- A:** It is possible. The role and potential parallel use of HOV and Express Toll Lanes will vary by project and be evaluated on a case-by-case basis.



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