Overview of 64 Express Lanes

Secretary of Transportation
Aubrey Layne
April 12, 2017
More Choices for Motorists
Coming December 2017
Purpose and Use

• Our purpose is two-fold:
  – Reduce congestion by making better use of the highway space we have available
  – Improve reliability for drivers who choose to use the Express Lanes

• Use of Express Lanes is voluntary

• Tolls will be based on Dynamic Pricing and determined on a transaction basis using a single gantry system

• Dynamic Pricing is based on the number of vehicles in the Express Lanes at the time of use
Dynamic Pricing

- Dynamic Pricing is a first for Hampton Roads
- The cost to enter the Express Lanes changes based on how many drivers are using them at the time. In other words, rates are based on traffic flow
- Deputy Secretary Nick Donohue will have more on the technical aspects of Express Lanes
HOV Lanes

- Current HOV lanes are under utilized
- In 2008, the U.S. Secretary of Transportation encouraged Virginia to convert the lanes to Express or HOT lanes after a congressional request was made to return the HOV lanes to general purpose lanes
- Conversion to Express Lanes is expected to reduce congestion in the general purpose lanes
History of Tolling in Hampton Roads

Tolls are not new to Hampton Roads

- **Fixed tolls**
  - HRBT, $1.25 each way, removed in 1976 when HRBT Eastbound Tunnel opened

- **Tolls removed in 1976**
  - James River Bridge, 90-cents each way
  - George P. Coleman Bridge, 85-cents (E-ZPass rate)
  - Va-Beach-Norfolk Expressway (now known as I-264) had 25-cent toll each way from 1967-1995
History of Tolling in Hampton Roads

• Downtown and Midtown Tunnels
  – Downtown Tunnel originally tolled in 1952
  – Midtown Tunnel originally tolled in 1962
  – Tolls were 25-cents each way
  – Tolls removed on both facilities in 1986 after original bond debt had been repaid
History of Tolling in Hampton Roads

- **Facilities currently tolled in Hampton Roads**
  - Downtown and Midtown Tunnels
  - Chesapeake Bay Bridge-Tunnel
  - Chesapeake Expressway
  - Coleman Bridge
  - Dominion Boulevard
  - South Norfolk Jordan Bridge
What are Express Lanes?

- Concept developed by Reason Foundation in early 1990s as market based solution to manage congestion
- Manages congestion by providing travel choices to commuters and through the use of variable tolls
- Provides high-speed, reliable travel
- Can involve new travel lanes or conversion of under-utilized HOV lanes
How do Express Lanes Work?

- Guarantee of high speed, reliable trip of at least 45-55mph
- Provides incentive for carpooling and transit use through free use of lanes
- Offers non-HOV vehicles opportunity to use lanes for a price
- Toll varies based on usage to ensure free-flow travel
  - Higher toll when demand to use lanes is high
  - Lower toll when demand is lower
Express Lanes versus Fixed Tolls

• Fixed tolls apply to all lanes of a roadway regardless of occupancy and do not guarantee free-flow travel
• Express lanes are typically only a portion of the roadway which allows for toll-free travel in general purpose lanes
National Experience with Express Lanes

• Express lanes operate in 12 metro areas in the United States
  – Seattle, Houston, Los Angeles, Northern Virginia, San Francisco, Dallas-Fort Worth, Minneapolis-Saint Paul, Miami, Denver, Salt Lake City, San Diego

• Additional projects underway/under study in several additional metro areas
  – Charlotte, Chicago, Phoenix

• SR91 in Southern California was first express lane project and opened in 1995
Express Lanes Benefit All Commuters

Reduction in congestion on general purpose lanes along I-495 corridor due to Express Lanes
Express Lanes Benefit All Commuters

Reduction in congestion on general purpose lanes along I-95 corridor due to Express Lanes
Express Lanes Benefit All Commuters

SR167 south of Seattle

• 16 mile conversion of single HOV lane in each direction

• Speeds in general purpose lanes increased by 20%

• Express Lane users save 6 minutes on average
Express Lanes Benefit All Commuters

95 Express in Miami

• Pre-Express Lanes in 2008: 20mph or less in HOV and general purpose lanes

• Post-Express Lanes in 2011: 47 – 35 mph in general purpose lanes and 50+mph in express lane

• Continued shift in traffic from general purpose lanes to express lanes
  – From 2011 to 2013 GP lane volume decreased by ~3% while overall combined volumes increased
Improving Transit Usage

95 Express in Miami

- 57% increase in transit ridership between 2008 and 2010
- 53% of new riders said express lanes influenced their decision to use transit
- 38% of new riders said they used to drive
- Bus travel times reduced by 17 minutes
Improving Transit Usage

Increase in riders along corridors after introduction of Express Lanes
Improving Transit Usage

Previous mode of new transit ridership in cities instituting express lanes.
Maximizing Person Throughput

I-15 Express Lanes in Salt Lake City

Express Lanes: 1700 vehicles / hour x 2 persons / vehicle = 3400 persons / hour

General Purpose Lanes: 1300 vehicles / hour x 1.25 persons / vehicle = 1625 person / hour

That’s twice as many people!
Maximize Person Throughput

![Graph showing number of people per hour per lane on I-15.]

- General Purpose Lane
- Managed Lane

21% More People Moved During Avg P.M. Commute
Express Lanes Offer a Choice

Strong majority of customers spend less than $20 per month

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Express Lanes Offer a Choice

I-405 Express Lanes in Seattle


Comparison of the frequency of drivers using the express toll lanes by measure of unique Good To Go! passes during weekdays.
Managing Congestion through Choices

- Express Lanes are a proven tool to manage traffic that have been used across the nation
- All commuters benefit from express lanes, even those that do not choose to pay tolls
- As urban areas become more constrained we must find ways to move more people in the current roadway
- Key to enhance transit service and carpooling
Jim Utterback
VDOT Hampton Roads District Administrator
About the Project
Express Lanes Location

Segment 1: I-664 to I-264
8.4 miles of Two-Lane Reversible HOV Lanes

Begin Segment 1

End Segment 1
Segment 1 Access Locations

- Ingress Point
- Egress Point
Typical Entrance Signing Layout
Typical First Regulatory Sign
EB I-64 Entrance Advisory Pricing Sign
Typical Second Regulatory Sign
EB I-64 Entrance Confirmation Pricing Sign
Toll Zone Gantries

Conceptual Rendering
Segment 2 and 3 toll zones will have single gantry
Timeline

- Installation of overhead gantries and signs starts late April 2017
- Overhead gantry and sign installation completed August 2017
- System testing begins Fall 2017
- Operational: December 2017
Charles Kilpatrick
VDOT Commissioner
Timeline

- December 2015 - Letter sent to HRTPO initiating feasibility study of converting HOV to HOT on I-64
- January 2016 - VDOT briefed Commonwealth Transportation Board and HRTPO on beginning of study
- July 2016 - VDOT finalized the study
- October 2016 - Commonwealth Transportation Board votes to convert HOV Lanes to Express (HOT) Lanes
- March 2017 - CTB awards contract for I-64 Express Lanes Tolling Systems and Services to TransCore of Tennessee
Plans for Testing

It is VDOT’s intent to perform exhaustive testing to ensure the unique characteristics of this facility will function as expected.

These characteristics include:
- Dynamic pricing
- Time of day functionality
- Signage
- Reversible operations

This will be a VDOT facility. The intent and focus of the operation is to address congestion management by providing greater people throughput in the corridor.

This facility’s credibility will not be called into question.
Grindly Johnson
Deputy Secretary of Transportation
Toll Payment

• You need an E-ZPass to travel on the Express Lanes during operational hours
• All drivers must have either a standard E-ZPass or E-ZPass Flex transponder
  – Monday through Friday, 5 to 9 a.m. (Westbound) and 2 to 6 p.m. (Eastbound)

• To travel for free, an E-ZPass Flex transponder is required so the driver can indicate there are two or more occupants in the vehicle, to meet the HOV2+ requirement
E-ZPass Flex

• An E-ZPass with switchable feature designed for those who are traveling with two or more people in their vehicle

• When you have two or more people in your vehicle, you can slide the switch to the right and the transponder will display "HOV ON." Do this before entering the roadway and you can ride the Express Lanes for free

• For those riding solo, slide the switch to the left, covering the words "HOV ON," and travel the Express Lanes at the toll rate

• E-ZPass Flex also works like a standard E-ZPass wherever E-ZPass is accepted
Ways to Get an E-ZPass

- An E-ZPass account can be opened with $35 prepaid balance. There are no additional costs or fees
  - Online at EZPassVa.com
  - By phone at 877-762-7824
  - Norfolk E-ZPass Customer Service Center, 1701 Church Street
  - Portsmouth E-ZPass Customer Service Center, 4010 Victory Boulevard
  - Department of Motor Vehicles
  - E-ZPass On-the-Go retailers
    - Farm Fresh, City of Chesapeake, City of Norfolk, City of Suffolk, City of Portsmouth, Creekmore Hardware, Navy Exchange, Pit Stop, Taylor’s Do It Centers

- E-ZPass Flex transponders are available at the Norfolk and Portsmouth E-ZPass Customer Service Centers
E-ZPass Marketing and Communications

• VDOT launched a Hampton Roads E-ZPass awareness campaign last fall
  – Online
  – TV
  – Cable
  – Print
  – Radio

• Six toll facilities in the area
  – All would benefit from additional E-ZPass awareness
    – Paid media campaign
    – Grassroots outreach
Wrap Up

• Everyone will benefit from the Express Lanes
• Motorists will have choices
  – If you carpool (HOV 2+) today, you will travel the lanes for free
  – If you’re driving solo, you can pay a toll to use the lanes
• We’re moving people versus vehicles
• Improved travel reliability
• Revenues from the facility will only support the corridor
• If you travel the Express Lanes, you need an E-ZPass