

capital beltway **HOT** lanes

presentation to

**Virginia Department
of Transportation**

PPTA Advisory Committee

December 2003



FLUOR DANIELSM
A FLUOR Company

some like it
HOT!

agenda

Introduction and Team Overview	<i>Herb Morgan</i>
What are HOT Lanes?	<i>Gary Groat</i>
Fluor's Concept	<i>Gary Groat</i>
Plan of Finance	<i>Dave Klinges</i>
Why HOT Lanes?	<i>Gary Groat</i>
Fluor and Team Commitment	<i>Herb Morgan</i>

fluor daniel



- One of the world's largest publicly owned engineering, procurement, construction, and maintenance companies
- In business for almost 100 years
- Consistently ranked on ENR's "Top Design-Build Firms" and "Top 400 Contractors" lists
- One of the world's safest contractors

- Leader in public-private partnerships
- Successful implementation of large-scale infrastructure projects

30,000
employees
worldwide

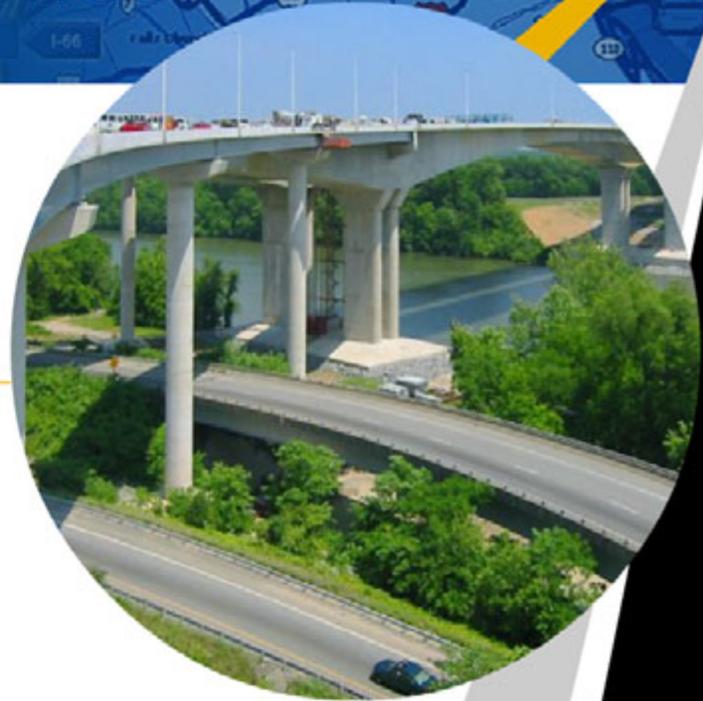
2002
Revenues
\$10 Billion

relevant design build experience



E-470 Toll Road
\$323 Million
Completed: May 2000

Pocahontas Parkway
\$302 Million
Completed: September 2002



Conway Bypass
\$383 Million
Completed: May 2001



the fluor team



Fluor Daniel	<i>Prime Contractor/Developer</i>
HNTB Corporation	<i>Design and CE&I</i>
The Lane Construction Corp.	<i>Lead Civil Contractor</i>
Vollmer Associates	<i>Traffic and Revenue Forecasting</i>
Greenhorne & O'Mara, Inc.	<i>Utilities and ROW Acquisition</i>
Wetland Studies & Solution, Inc.	<i>Wetland Permitting/Mitigation</i>
Bear Stearns & Company	<i>Bond Underwriter</i>
Research/Strategy/Mgmt Inc.	<i>Opinion Polling</i>
Reed Smith LLP	<i>Government Relations</i>
VMS, Inc.	<i>Asset Management</i>
Edelman	<i>Public Outreach</i>



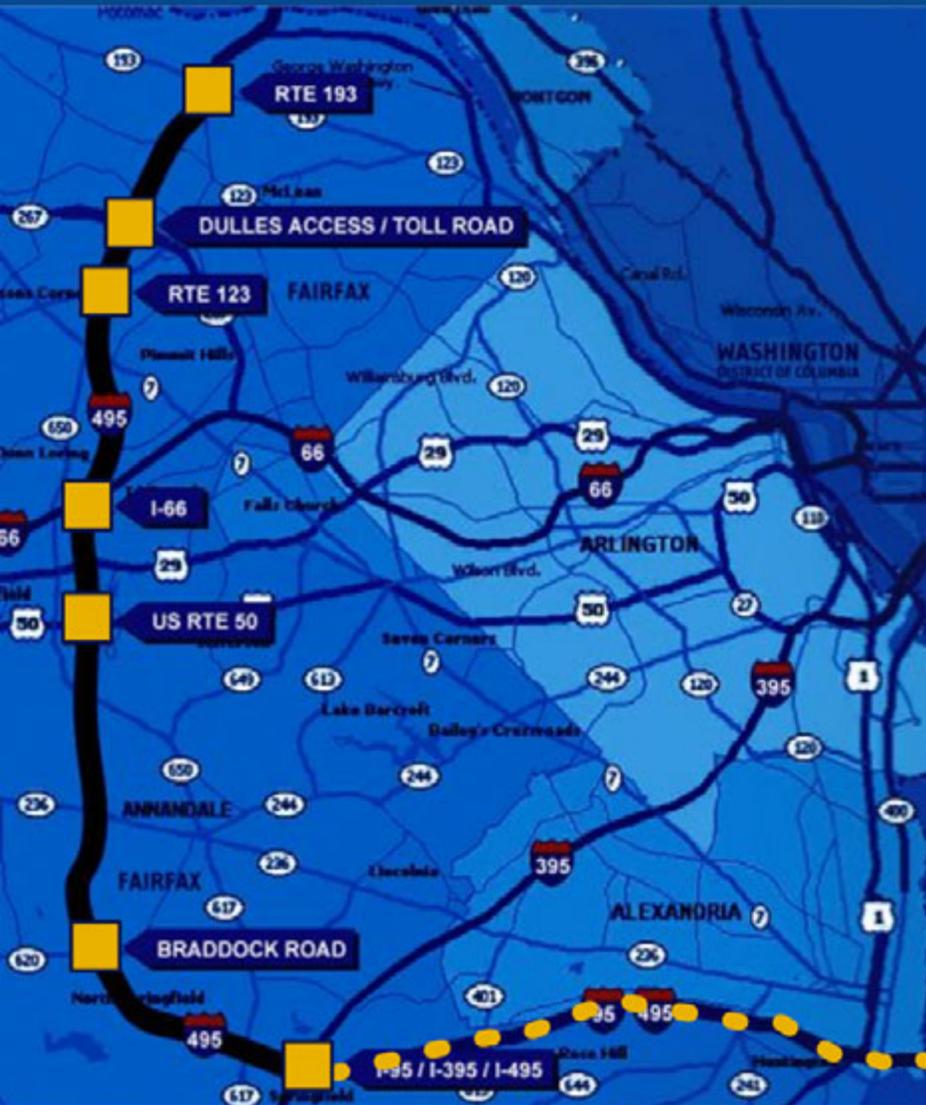
what is a **HOT** lane?



- Multiple passenger vehicles ride free
 - HOV3+
 - Vanpools
 - Express bus services
- Single and double occupancy pay toll
- NO TRUCKS
- NO TOLL BOOTHS
- Actively managed**



beltway **HOT** lanes



- 12 miles
(West of the Springfield interchange to South of Georgetown Pike)
- 7 entry/exits
- 5 intermediate entry/exit points
- 2 direct ramp to ramp access
 - Dulles Access
 - I-66
- Potential for expansion



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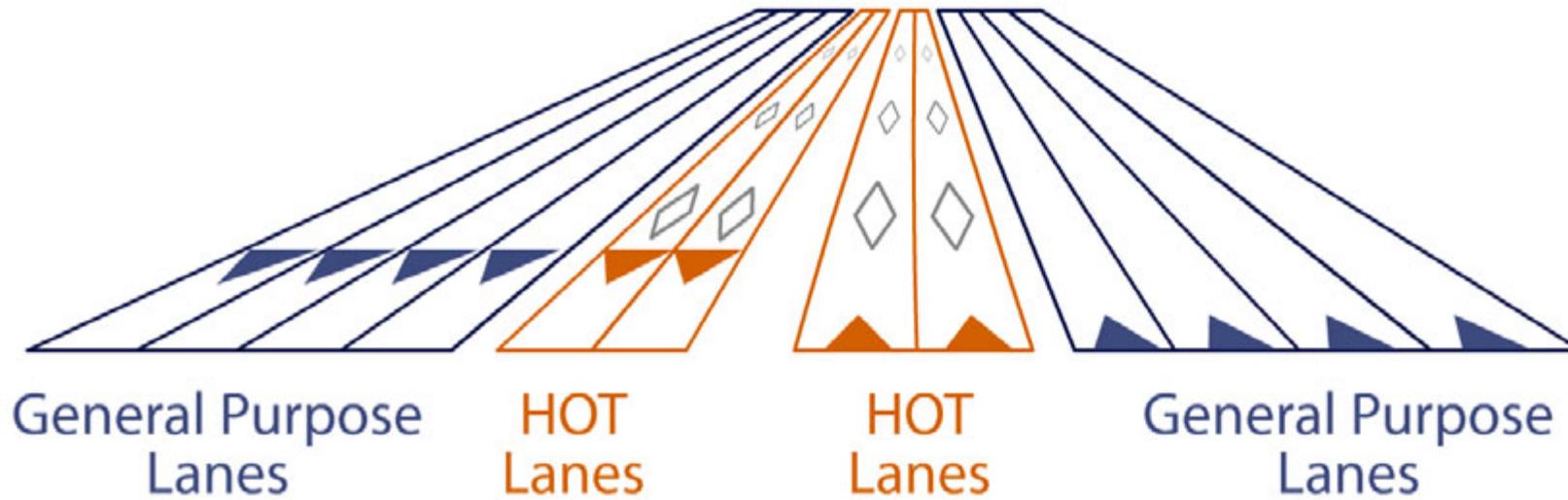
some like it
HOT!

HOT lanes in operation



12 lane configuration

8 GP and 4 HOT Lanes



HOT lanes in operation

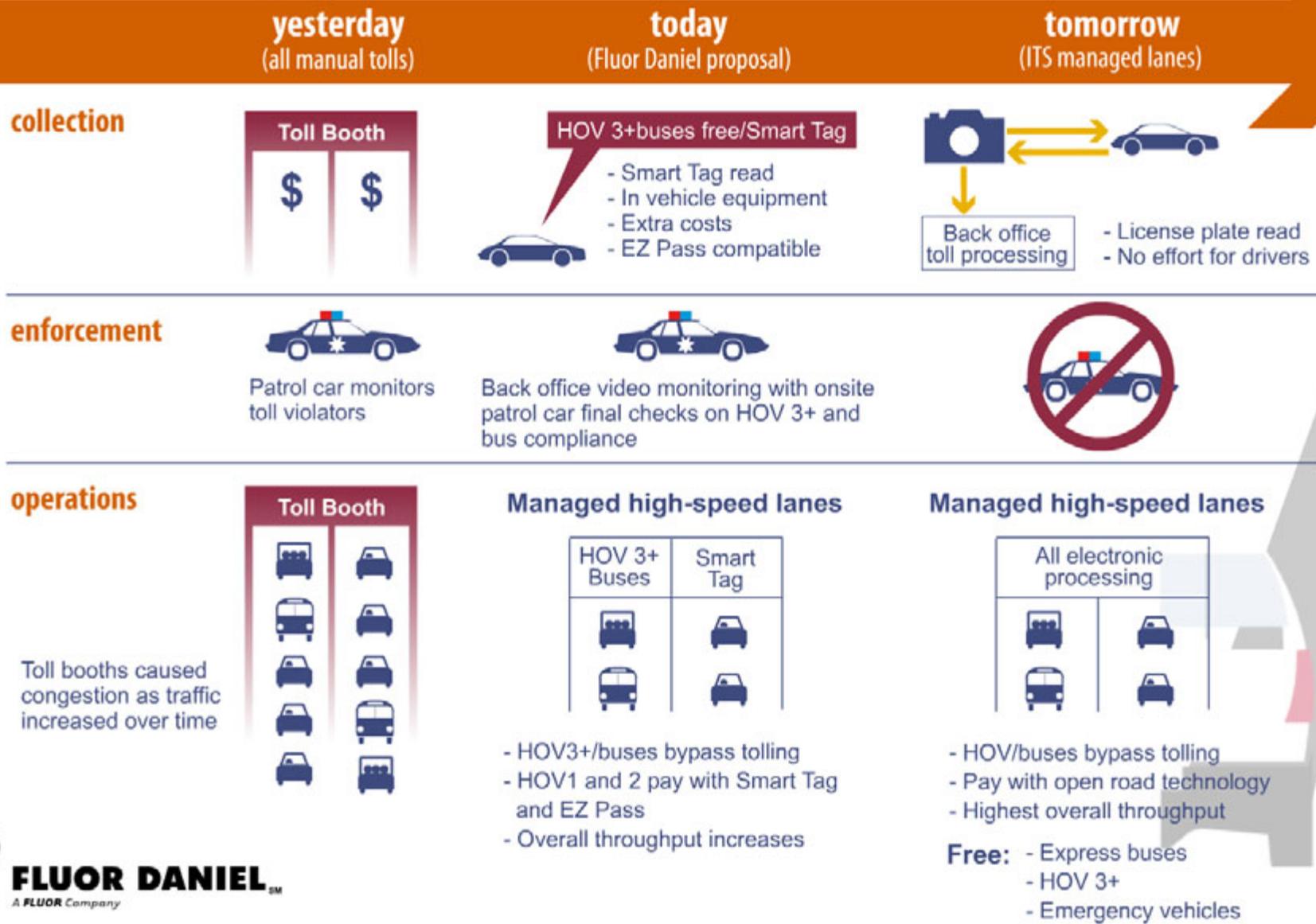


why not two **HOT** lanes?

- Beltways – no distinct directional demand; thus HOT lanes must operate both directions, reversible lanes are not an option
- Single lane does not permit the passing of slower or stalled vehicles, and has reduced capacity
- Inability to pass will increase travel time
- People less likely to pay tolls at minimal travel time savings
- Unable to guarantee level of service C or better
- Reduced capacity may not allow HOV3 and buses to ride free

proven technology that is upgradeable

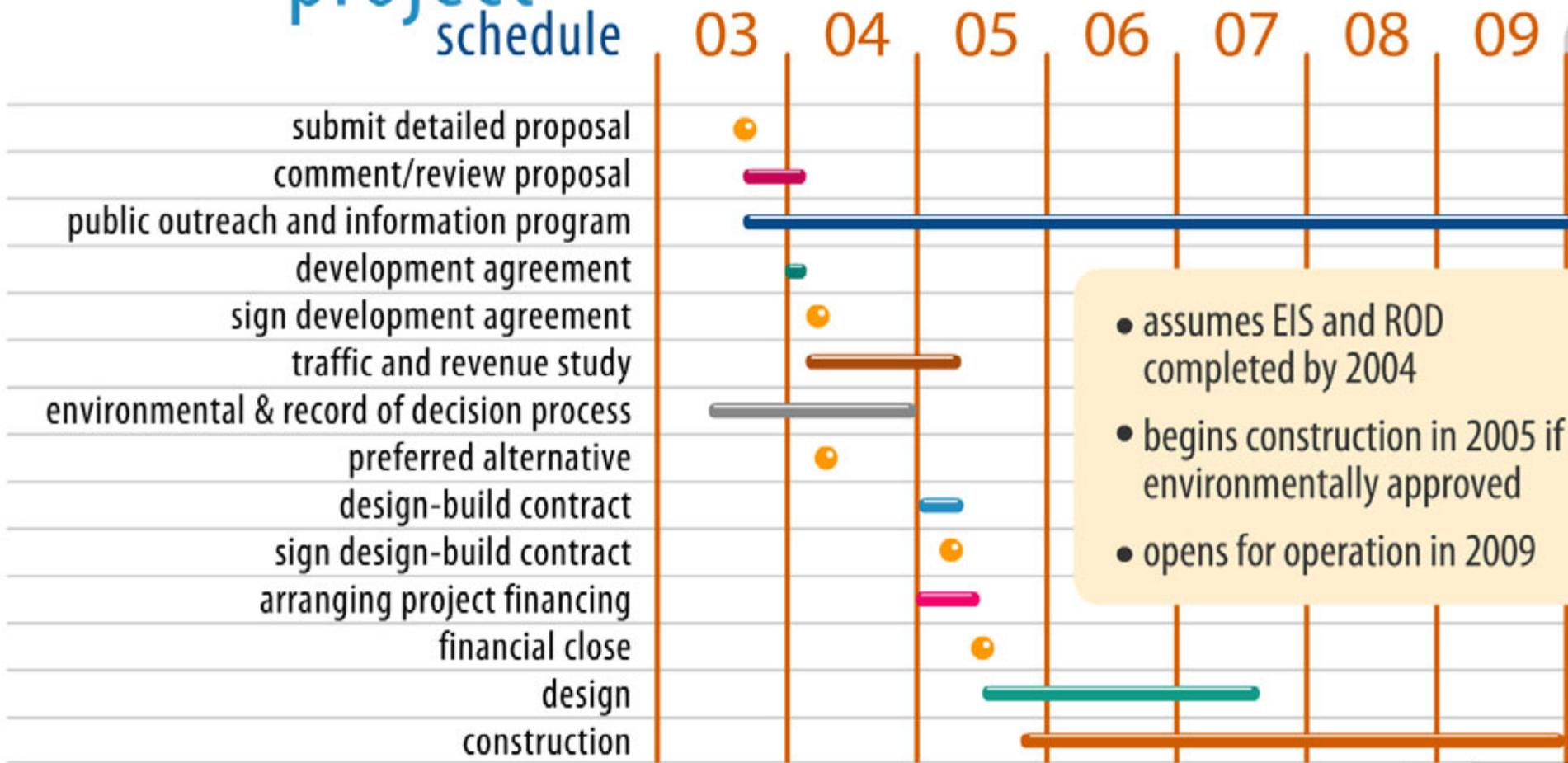
toll technology timeline



HOT lanes in operation in 2009



project schedule



- assumes EIS and ROD completed by 2004
- begins construction in 2005 if environmentally approved
- opens for operation in 2009



responding to citizen concerns

- 2002 EIS proposals ...
*take up to **300+** homes and businesses*
- 2003 Fluor HOT Lane proposal ...
*takes **6 or fewer** residences*

responding to citizen concerns

Concerns

Accommodating other modes of transportation

Multi-billion dollar price-tag

Lack of Long-term mobility

Environmental sensitivity

Response

Fluor's HOT lane proposal is compatible with future transit alternatives, including rail and Bus Rapid Transit

Fluor's concept cost 1/3 less than lowest cost EIS alternative; it virtually pays for itself with toll revenue

Managed HOT lanes assure mobility far into the future

Incorporate all EIS mitigation (e.g. new noise walls)



ROW requirements comparison: tysons corner - route 123 & 7



Capital One Building



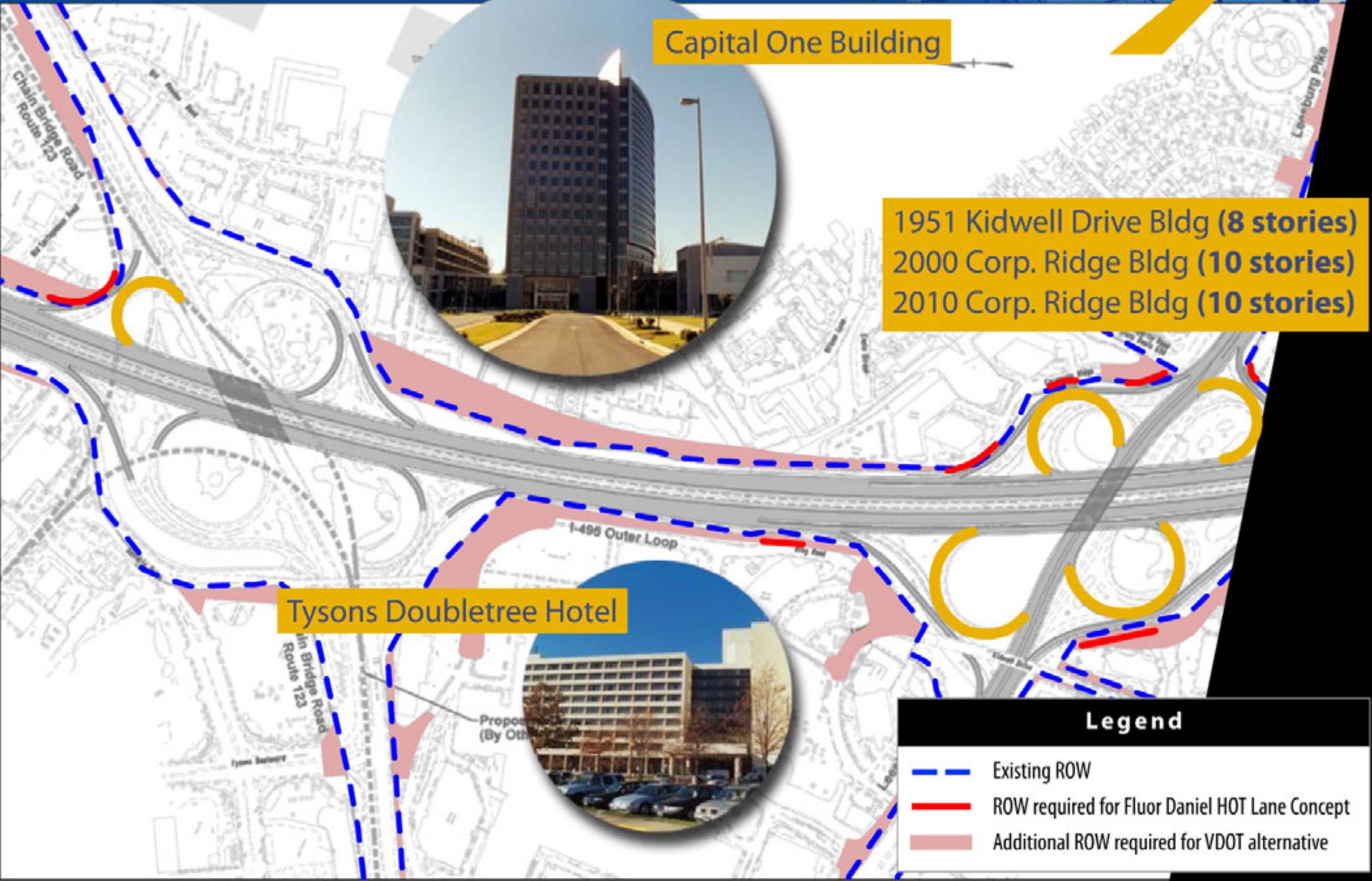
- 1951 Kidwell Drive Bldg (8 stories)
- 2000 Corp. Ridge Bldg (10 stories)
- 2010 Corp. Ridge Bldg (10 stories)

Tysons Doubletree Hotel

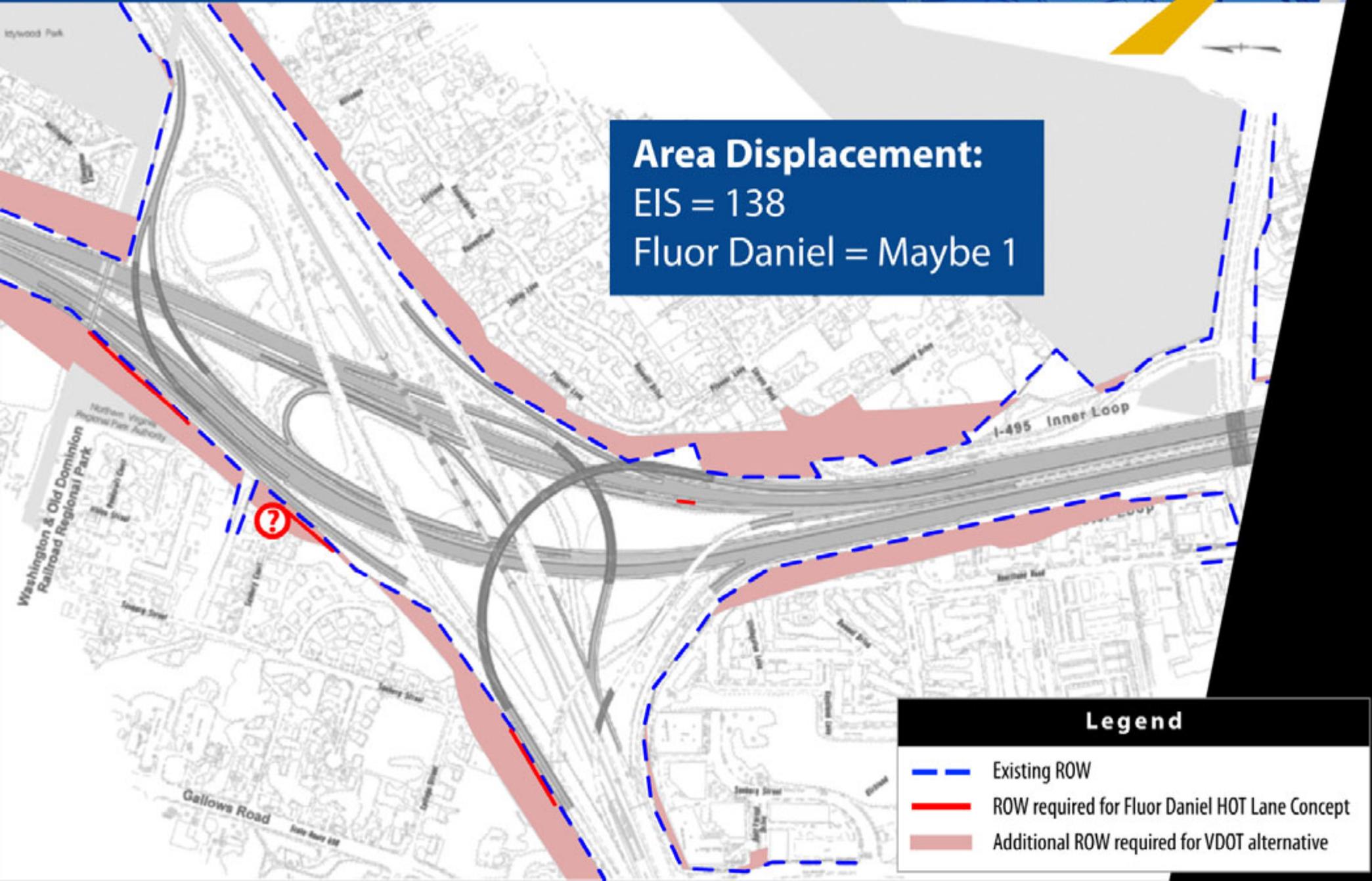


Legend

- Existing ROW
- ROW required for Fluor Daniel HOT Lane Concept
- Additional ROW required for VDOT alternative



ROW requirements comparison: I-66

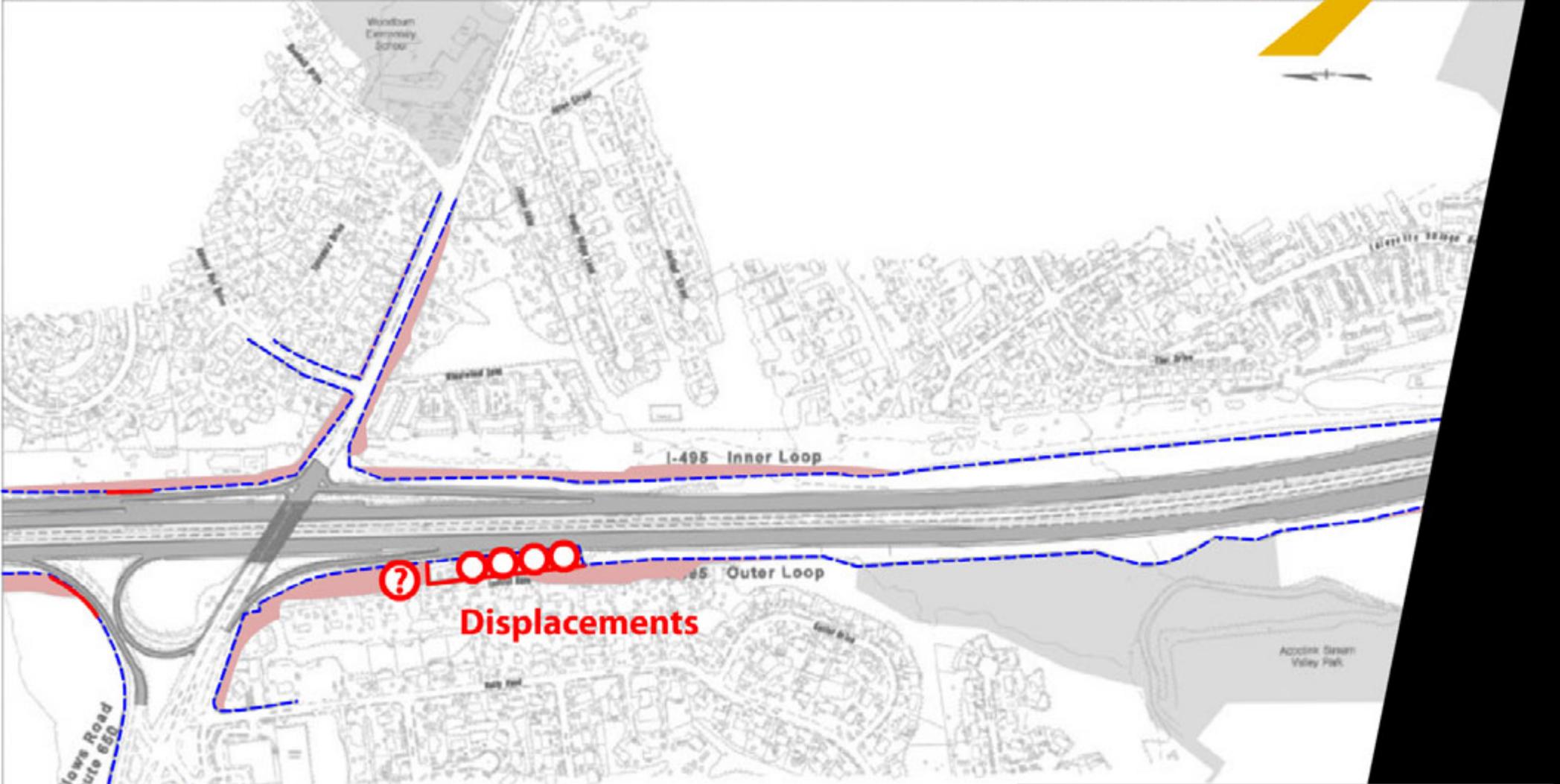


Area Displacement:
EIS = 138
Fluor Daniel = Maybe 1

Legend

- Existing ROW
- ROW required for Fluor Daniel HOT Lane Concept
- Additional ROW required for VDOT alternative

ROW requirements comparison: gallows road - route 650

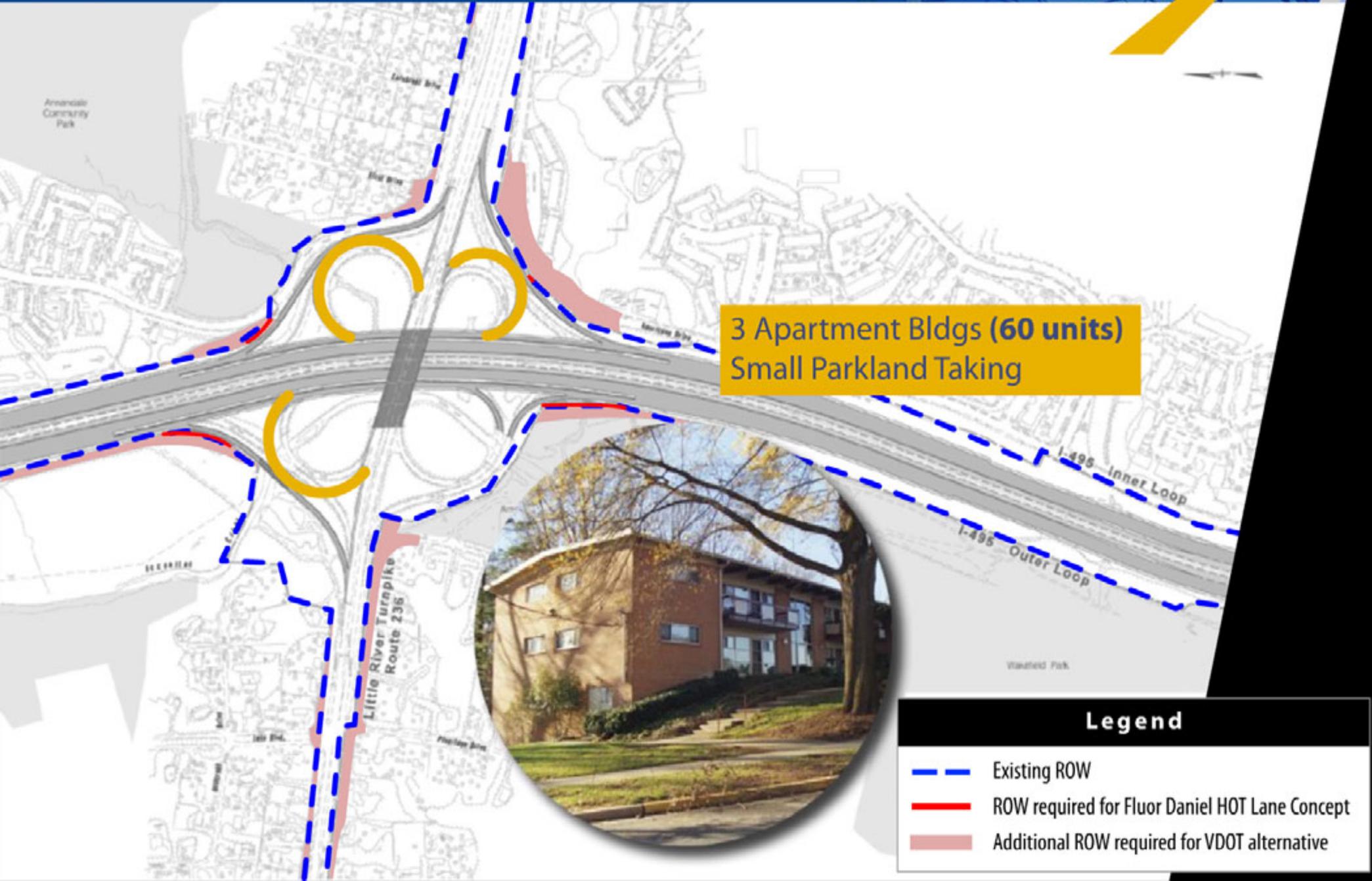


Displacements

Legend

-  Existing ROW
-  ROW required for Fluor Daniel HOT Lane Concept
-  Additional ROW required for VDOT alternative

ROW requirements comparison: little river turnpike - route 236

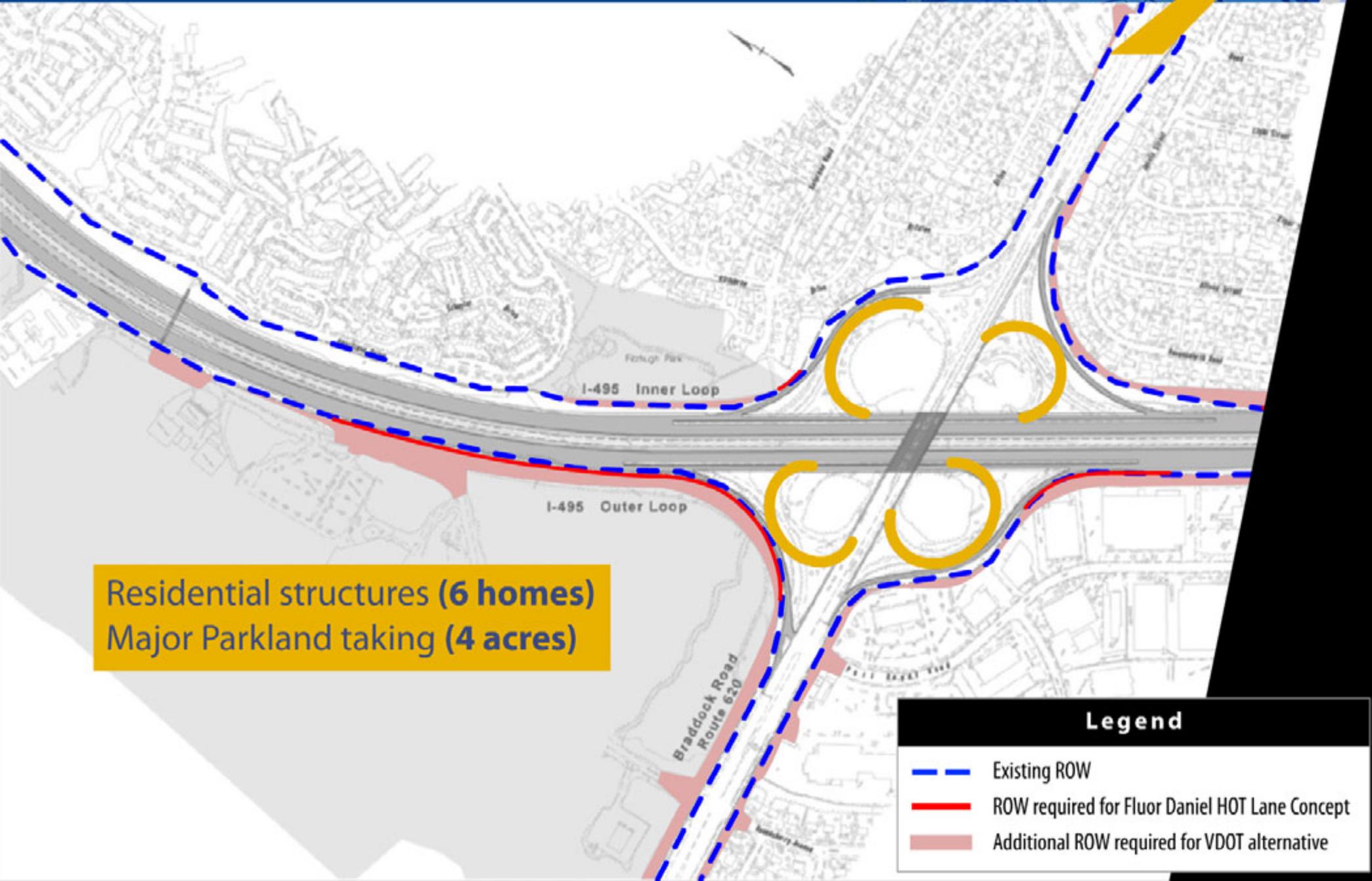


3 Apartment Bldgs (60 units)
Small Parkland Taking

Legend

- Existing ROW
- ROW required for Fluor Daniel HOT Lane Concept
- Additional ROW required for VDOT alternative

ROW requirements comparison: braddock road - route 620



Residential structures (**6 homes**)
Major Parkland taking (**4 acres**)

Legend

- Existing ROW
- ROW required for Fluor Daniel HOT Lane Concept
- Additional ROW required for VDOT alternative

safety improvements



- Beltway roadway will be improved to today's safety design standards, as will 80 percent of interchange ramps
- Eliminates unsafe left entry/exit points from main roadway
- Reduces congestion, the greatest cause of Beltway accidents
- Safety is one of the major reasons commuters choose HOT lanes

The Beltway will be safer with **HOT** Lanes than it is today



toll revenues are primary funding source

Est. construction cost = \$693.4 million

Funding Strategy

- Bonds and TIFIA loan financing account for 87 percent of costs
 - Both to be repaid with revenue from tolls
 - No state or county general or moral obligation
- Public investment 13 percent
- Variable tolls (\$1 to \$4.80) for one and two passenger vehicles
- Dollars inflated to year of construction



financial benefits go to the public

- Privately developed, publicly owned project at lowest cost
- Set price and on-time guarantee
 - Fluor will be responsible for cost overruns, and pay liquidated damages if the job is not completed on schedule
- Bondholders bear all revenue projection risk
 - Taxpayers will not be responsible for the debt
 - Bonds will not count against Virginia's or Fairfax County's AAA bond rating
- VDOT funds operation and maintenance
- When bonds and loans are paid, \$100 million per year in revenue could finance other transportation improvements



commuters benefit

- Commuters will have new travel choices on the Beltway
- HOT lanes are “free” lanes for HOV 3+, vanpools and express bus services
- HOT lane users will travel at 65 mph 24/7
- HOT lanes will reduce congestion on the remainder of the Beltway and reduce shortcuts through adjacent neighborhoods
- HOT lanes provide the missing link in the Northern Virginia HOV system by connecting I-95, I-66 and the Dulles Toll Road
- Congestion relief and more commuter choices in 2009

transit benefits

New HOV Connections

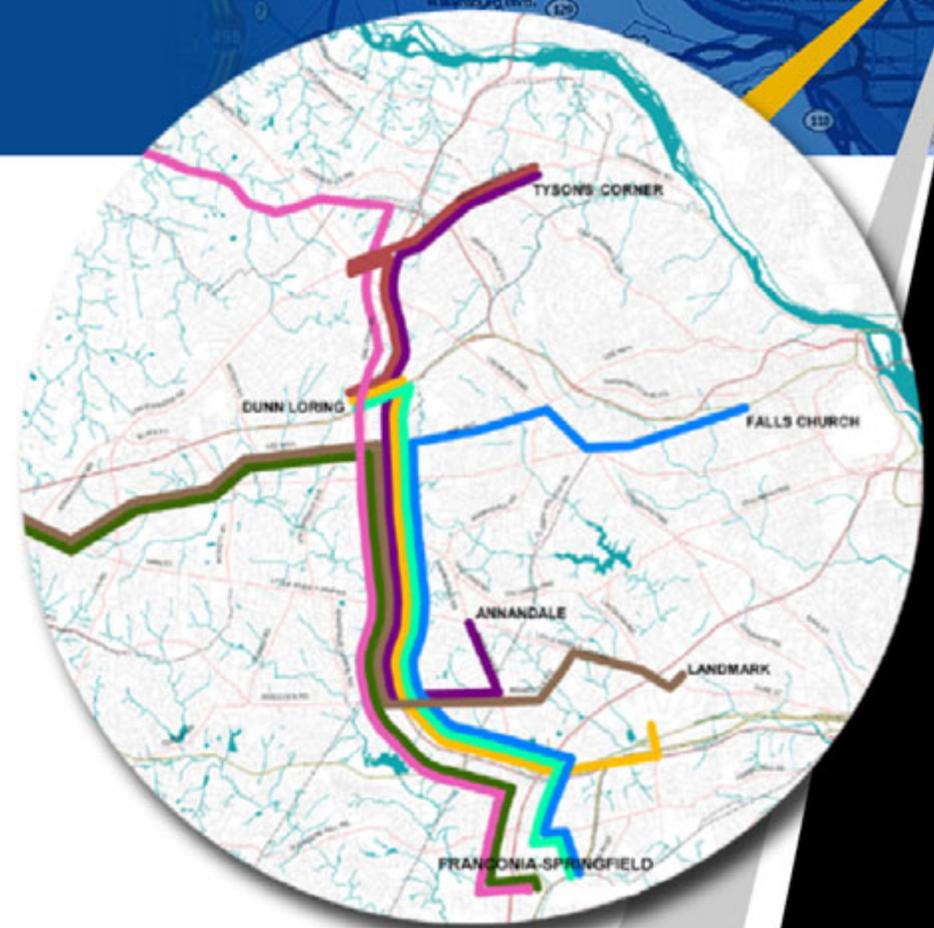
- HOV along the Capital Beltway
- Linkages between:
I-95, I-66, I-395, and VA 267
- Existing park and ride lots

Missing Link

■ Park and Ride Lots

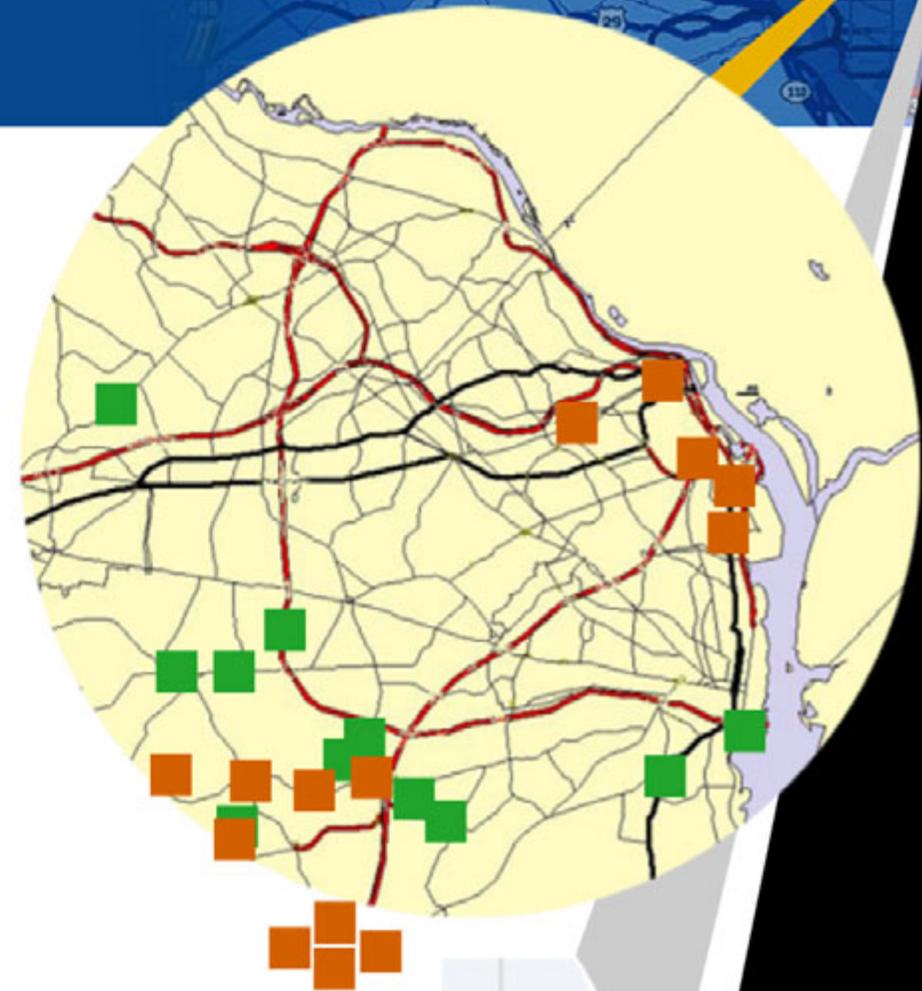
transit benefits

- New HOV Connections
- BRT/Express Operations
 - Improved routing for existing bus service
 - Opportunities for new express service
 - Potential for high quality “BRT-like” service



transit benefits

- New HOV Connections
- BRT/Express Operations
- Enhanced opportunities for “slugging”
 - Promotes slugging at existing P&R lots
 - Creates opportunities for new slug lots
 - Opens a new corridor for slugs



■ Slug Pick Up Sites
■ Park and Ride Lots

transit benefits

- New HOV Connections
- BRT/Express Operations
- Enhanced opportunities for “slugging”
- Improved access to Metrorail and VRE
 - New linkages for existing feeder bus
 - Increased possibilities for kiss and ride
 - Improved connections to Blue, Orange, Yellow and Silver Line



HOT lanes make sense for fairfax county



- HOT lanes will be added substantially within the existing right-of-way
 - No more than 6 homes to be taken
 - Earlier EIS alternatives would have taken more than 300 homes and businesses
 - HOT lanes reinforce existing residential and business development patterns in a corridor key to Fairfax County's economic vitality
 - Fluor's HOT lane proposal will not significantly impact air quality
 - Full NEPA compliance
- 

HOT lanes make sense for virginia



- A new way to move more people than cars
 - Helps finance itself reducing taxpayer burden
 - Reduces need for more conventional widening solutions
 - Can be implemented faster than rail solutions
 - Citizens will accept tolls if there is a measurable benefit
 - Potential for expanding into a regional system
- 



some (most) like it **HOT!**

- 600 adults (303 in Fairfax; 297 other Northern Virginia jurisdictions); 15 minute telephone survey
- Interviews conducted September 2-7, 2003 by Research/Strategy/Management using random digit dialing
- 62 percent** support adding HOT lanes to the Beltway
- Support increases much more when certain conditions are added to the concept:
 - Shortening travel time on a consistent basis (15 to 1)
 - Fixed cost/fixed date with financial penalties to contractor (8 to 1)
 - Banning trucks from HOT lanes (7.5 to 1)
 - No new taxes (6 to 1)
 - Minimal displacement (5.5 to 1)
 - Variable tolling (2 to 1)



endorsements



Letter to the Editor, The Fairfax Journal - August 27, 2003

Now a private firm, Fluor, has come up with a plan which seems to make a great deal of sense... The Fluor plan will allow improvement of the Beltway capacity in the correct way. It is environmentally sensitive and, critically, is mass-transit friendly...

We have two messages for VDOT as the process proceeds:

1. Keep the improvements to the Beltway within the existing right-of-way.
2. Move this along on the fastest schedule possible. We cannot afford to have this project languish because of the bureaucratic delays.

Signed by:

Delegates

Vincent Callahan
David Albo
Kristen Amundson
Thomas Bolvin
Jeannemarie Devolites
James Dillard
Timothy Hugo

Robert Hull
Brian Moran
Chapman Petersen
Kenneth Plum
Thomas Rust
James Scott
Vivian Watts

Senators

Richard Saslaw
Ken Cuccinelli
Janet Howell
Jay O'Brien
Linda Puller
Patricia Ticer
Mary Margaret Whipple



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some like it
HOT!

HOT lanes in action

- **Katy Freeway near Houston, Texas**, so successful the state is currently expanding the lanes from 2 to 4 lanes. This facility was constructed, and is owned and operated by the Houston Metropolitan Transit Authority.
- **I-15 in San Diego, California**, has been so popular the San Diego Associated Government is lengthening it from 8 to 20 miles and widening it from 2 to 4 lanes.
- **SR-91 in Orange County, California**, recently purchased by local government and continues to be extremely popular among users.



fluor daniel's commitment

- Best construction practices
- Fair, equitable and honest dealings with affected landowners
- Fixed price contract – guaranteed schedule with liquidated damages for late completion...a first for Northern Virginia
- Ongoing dialogue with VDOT, Fairfax supervisor and citizens during planning, construction and operational phases – no surprises!

