

# **BOWERS HILL INTERCHANGE IMPROVEMENTS STUDY**

Range of Concepts

| HRTPO Working Group

| May 21, 2021

# Citizen Comment Opportunity on Range of Alternatives

- Updated materials and public survey available for 40 days
- Public made aware of opportunities through web site updates, multiple mailing list notifications, social media
- Comments generally favor larger build and have a preference for no tolls
- Responses are sometimes inconsistent with Purpose and Need or other comments
- Comments are not all focused on study – addressing other locations and/or topics

# Purpose and Need – as concurred upon in December 2020

The purpose of the Bowers Hill Interchange Improvements Study is to reduce congestion, improve travel reliability, and provide additional travel choice on I-664 from and including the Bowers Hill Interchange to College Drive.

The following needs have been identified for the study:

- Reduce Congestion
- Improve Travel Reliability
- Provide Additional Travel Choice

# No Build: Retaining

A “no action” alternative required in the NEPA analysis

- **How the Option Meets the Purpose and Need**
  - Reduce Congestion – it does not
  - Improve Travel Reliability – It does not
  - Provide Additional Travel Choice – It does not



# Concept A: Add One General Purpose (GP) Lane in Each Direction on I-664: Recommend Not Retaining

- **Concept includes addressing interchanges along the corridor with widening to the inside/outside to be determined following concurrence**
- **How the Option Meets the Purpose and Need**
  - **Reduce Congestion – Provides Additional Capacity (see next slide)**
  - **Improve Travel Reliability – Provides Additional Capacity (see next slide)**
  - **Provide Additional Travel Choice – It does not**



# Concept B: Add Two GP Lanes in Each Direction on I-664: Recommend Not Retaining

Concept includes addressing interchanges along the corridor with widening to the inside/outside to be determined following concurrence

- **How the Option Meets the Purpose and Need**
  - **Reduce Congestion – Provides Additional Capacity**
  - **Improve Travel Reliability – Provides Additional Capacity**
  - **Provide Additional Travel Choice – It does not**

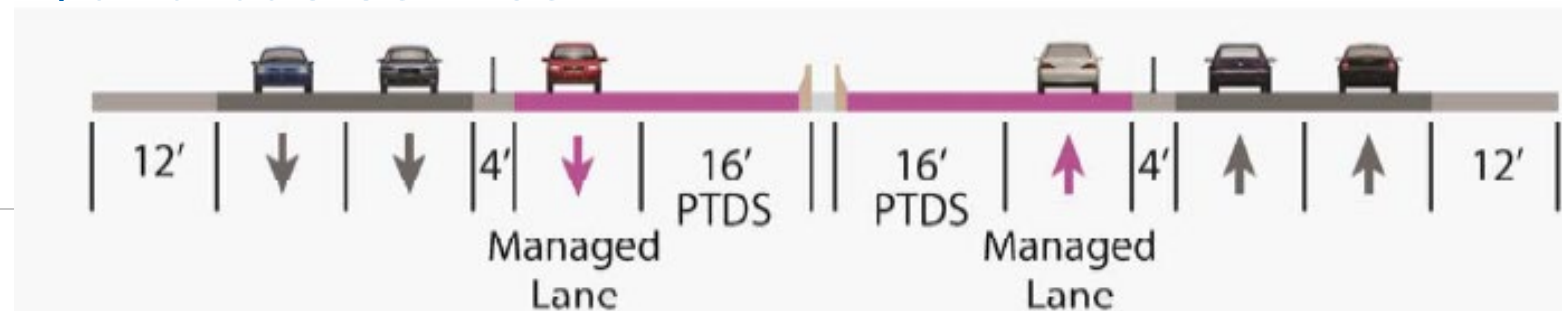


# Concept C: Add One Managed Lane and a Part-time Drivable Shoulder (PTDS) in Each Direction on I-664: Recommend Retaining

Concept includes addressing interchanges along the corridor with widening to the inside/outside to be determined following concurrence. The concept assumes the PTDS would be part of the Managed Lane System.

## How the Option Meets the Purpose and Need

- Reduce Congestion – Provides Additional Capacity
- Improve Travel Reliability – Provides Additional Capacity
- Provide Additional Travel Choice – Managed Lane System provides choices for HOV, HOT, and bus service





# Concept D: Add Two Managed Lanes in Each Direction on I-664: Recommend Retaining

Concept includes addressing interchanges along the corridor with widening to the inside/outside to be determined following concurrence.

## How the Option Meets the Purpose and Need

- Reduce Congestion – Provides Additional Capacity
- Improve Travel Reliability – Provides Additional Capacity
- Provide Additional Travel Choice – Managed Lane System provides choices for HOV, HOT, and bus service





# Concept E: Add Collector-Distributor (CD) Lanes around Interchanges on I-664: Recommend Not Retaining

Concept includes constructing CD lanes at interchanges. If retained, this concept also would address the Bowers Hill Interchange. It can still be considered and/or applied to a preferred alternative if not retained as a stand-alone option.

## How the Option Meets the Purpose and Need

- **Reduce Congestion** – Does not address the entire corridor
- **Improve Travel Reliability** – Would only address interchange areas
- **Provide Additional Travel Choice** – It does not

**Concept F: Transportation System Management (TSM) and Transportation Demand Management (TDM): Recommend Not Retaining as Stand-Alone Alternative**  
Could be applied to a preferred alternative or advanced as independent projects that could be implemented as the same time as the preferred alternative. Consideration must be focused on the study area.

## **How the Option Meets the Purpose and Need**

- **Reduce Congestion – Only at select ramps**
- **Improve Travel Reliability – Only at select ramp**
- **Provide Additional Travel Choice – Enhanced bus service would see no travel-time advantage**

# Concept G: Transit Only Improvements: Recommend Not Retaining

Virginia Department of Rail and Public Transit (DRPT) has stated that transit-only lanes are not necessary in this corridor. Enhanced transit is not precluded from the corridor if this alternative is not advanced.

## How the Option Meets the Purpose and Need

- Reduce Congestion – It does not
- Improve Travel Reliability – It does not
- Provide Additional Travel Choice – Enhanced bus service would see no travel-time advantage

# Recommended Range of Alternatives

## Retain for Detailed Study in the EIS

- No Build Alternative
- Add One Managed Lane and a PTDS
- Add Two Managed Lanes

## Do Not Retain for Detailed Study in the EIS

- Add One General Purpose Lane
- Add Two General Purpose Lanes
- CD lanes
- TSM/TDM as a stand-alone option
- Transit Only Improvements

## Assumptions:

- An Interchange Access Report (IAR) will be developed to inform details of each interchange.
- Decisions on widening to the outside or inside will be made following concurrence.

# For Your Information

