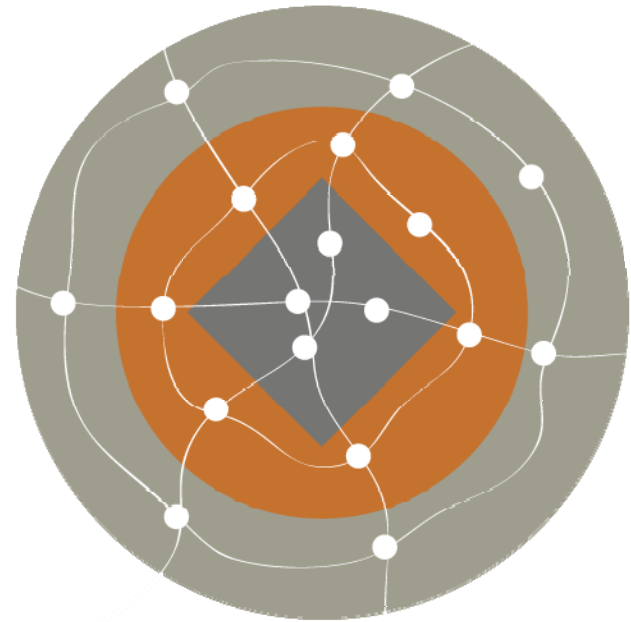


## **Agenda:**

- 1. Briefing on the “CLRP Aspirations” Scenario**
- 2. Major Corridor Studies Considering Managed/Priced Lanes in the Region**
- 3. Briefing on FHWA Grant to Study the Public Acceptability of Road Pricing**

# **TPB Scenario Study: CLRP Aspirations**

## **Final Results**



# Why do we need an “Aspiration”?

beginnings

roads and pricing

transit

land use

results

next steps



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1. Activity centers capture significant growth, but not enough (30% of 2015-2030 jobs and 24% of households)
2. Many activity centers do not have high quality transit (rail is not enough)
3. Many transit stations are still underutilized
4. Transit is underfunded



# Why Another Scenario Study?

beginnings

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transit

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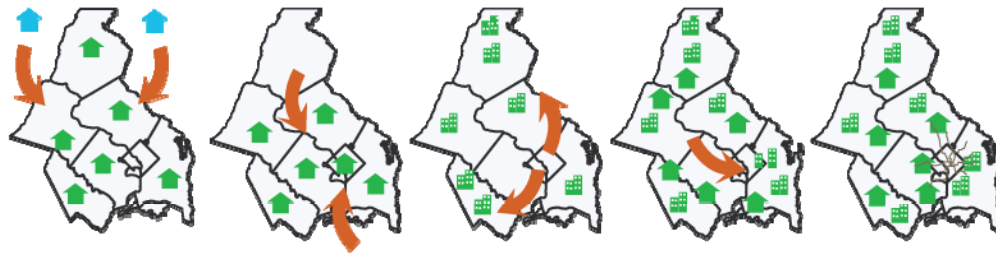
next steps



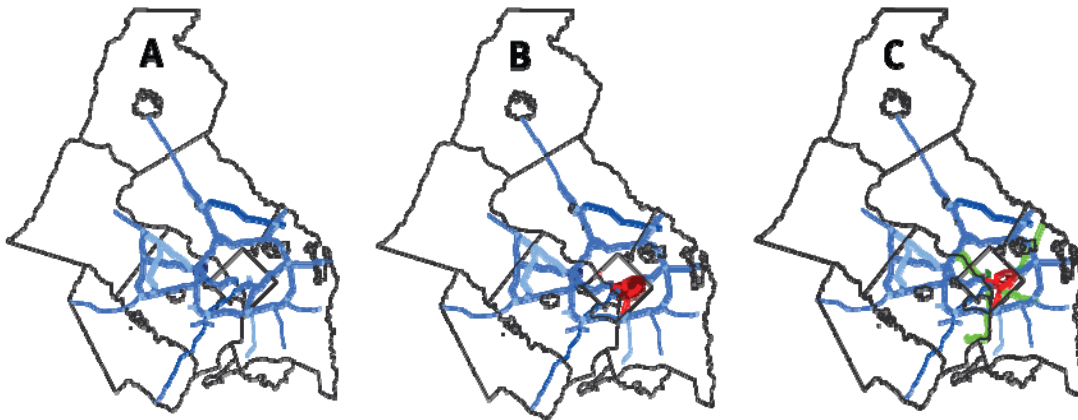
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## What Ifs

### 1. RMAS: Moving Jobs and Housing Closer Together



### 2. TPB Value Pricing Study: Pricing can provide capacity and revenue for transit



## Goals

### 3. The TPB Vision

“Economically strong regional activity centers with a mix of jobs, housing, services, and recreation in a walkable environment”

“A web of multi-modal transportation connections which provide convenient access”

“A user-friendly, seamless system”

“Reduction of per capita VMT ”

**Creating a regional land use and transportation “aspirational” vision**

# Three Components of an Integrated System



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## 1. Pricing Options

Address congestion through pricing of new and existing lanes  
Provide capacity and revenue for enhanced transit

## 2. Supportive Transit

Use menu of rail and bus transit options from previous scenarios  
Build on previous scenarios with extensive new BRT system  
Connect activity centers  
Review by Regional Bus Subcommittee

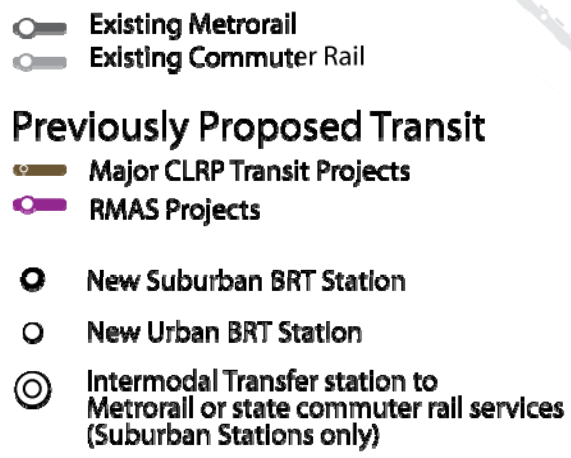
## 3. Land Use Decisions

Concentrating growth in activity centers and around transit  
Consistent review and refinement by planning directors





## next steps



# Dense, Mixed Use, TOD Centers



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beginnings

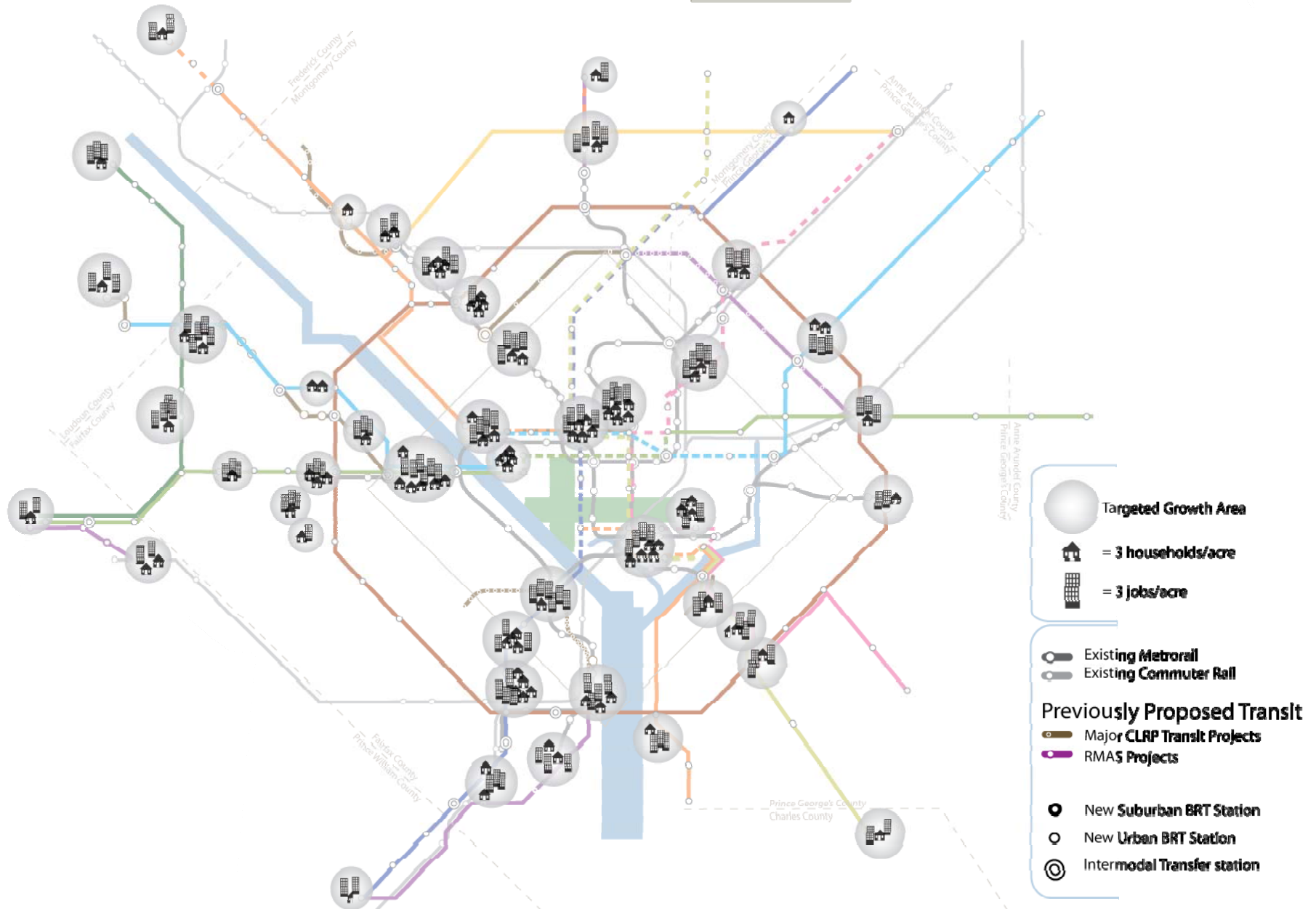
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# Summary: What Changed?

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## **Relative to the 2030 Baseline CLRP and Land Use Forecasts, the Aspirations Scenario changed:**

1. Land use by bringing 3.5% new households and 1% new jobs into the region from external areas and by increasing the share of jobs and households in targeted growth areas by 11% and 42% respectively
2. The transportation network by creating a 1650-mile priced lane network\*, a 500-mile BRT network (primarily on the priced lanes), 140 miles of local circulator service, and 3 new rail lines.

\*includes 1) 400 priced lane miles converted from HOV lanes (24%)  
2) 750 priced new lane miles (46%)  
3) 500 priced existing lane miles (30%)

# Scenario Analysis Results

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- 1. The full scenario** was analyzed for travel demand and emissions impacts relative to the baseline (2008 CLRP+ 7.2 Cooperative Forecast)
- 2. A land use sensitivity** that tested the travel demand and emissions impacts relative to the baseline consists of the scenario land use and the 2008 CLRP transit and highway networks. No pricing or BRT is included.

# Congestion Levels Change

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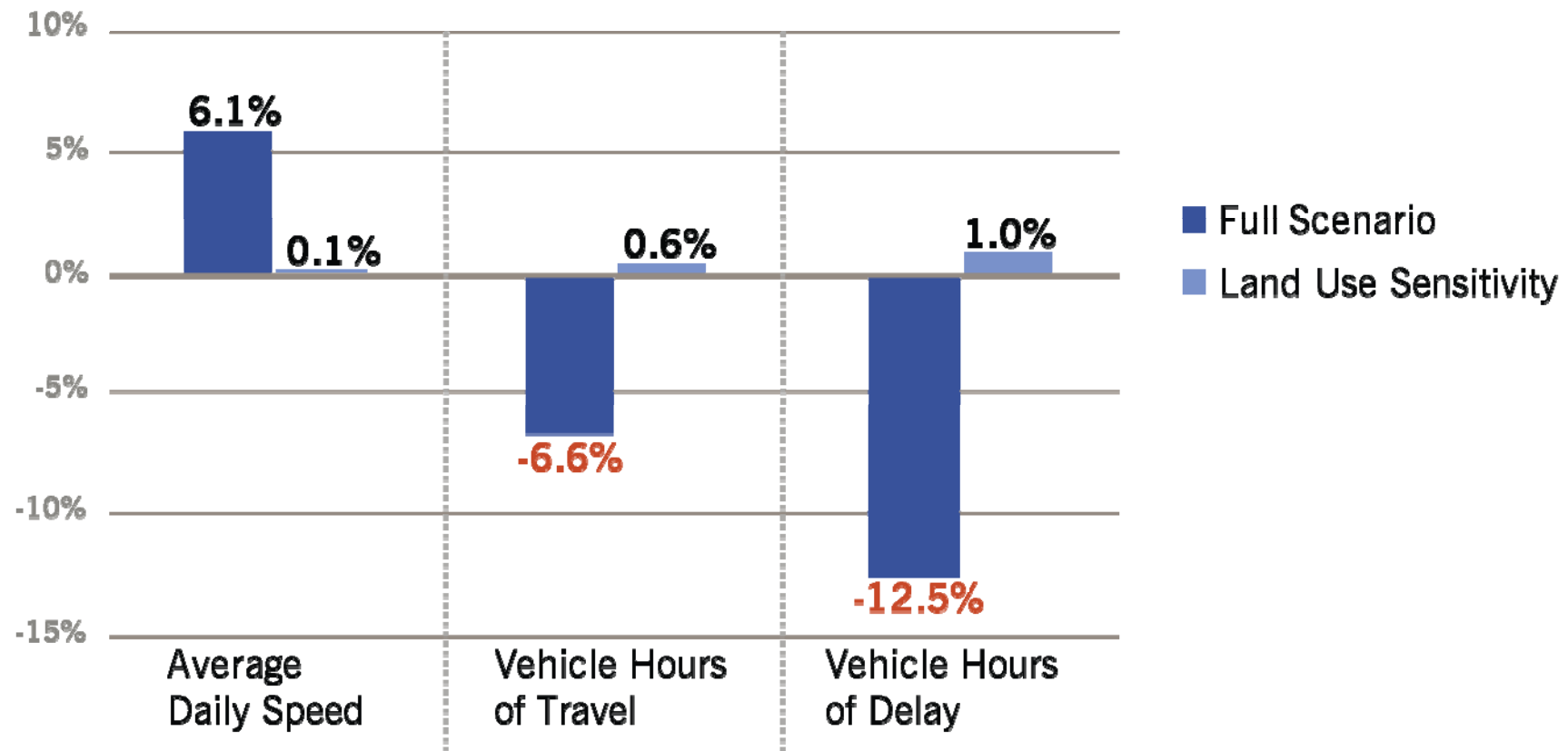
results

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## Change in Speed, Travel Time and Delay from baseline, 2030



**The priced network drastically reduces delay.**

# Transit and Bike/Walk Increases

beginnings

roads and pricing

transit

land use

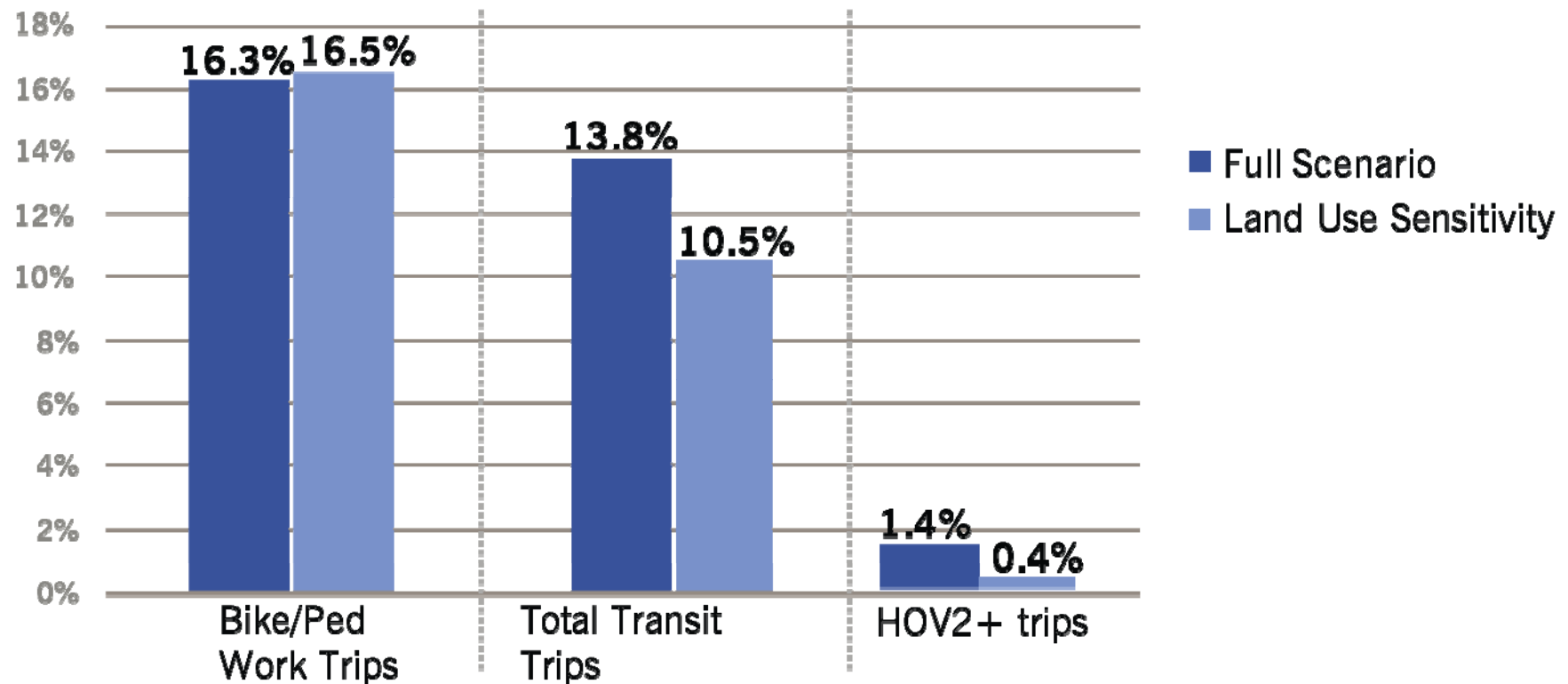
results

next steps



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## Change in Bike/Ped and Transit from baseline, 2030



**Mixed use, transit-oriented centers increases transit, bike, and walk trips and a new transit network increases transit connections**

# Auto Use Changes

beginnings

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land use

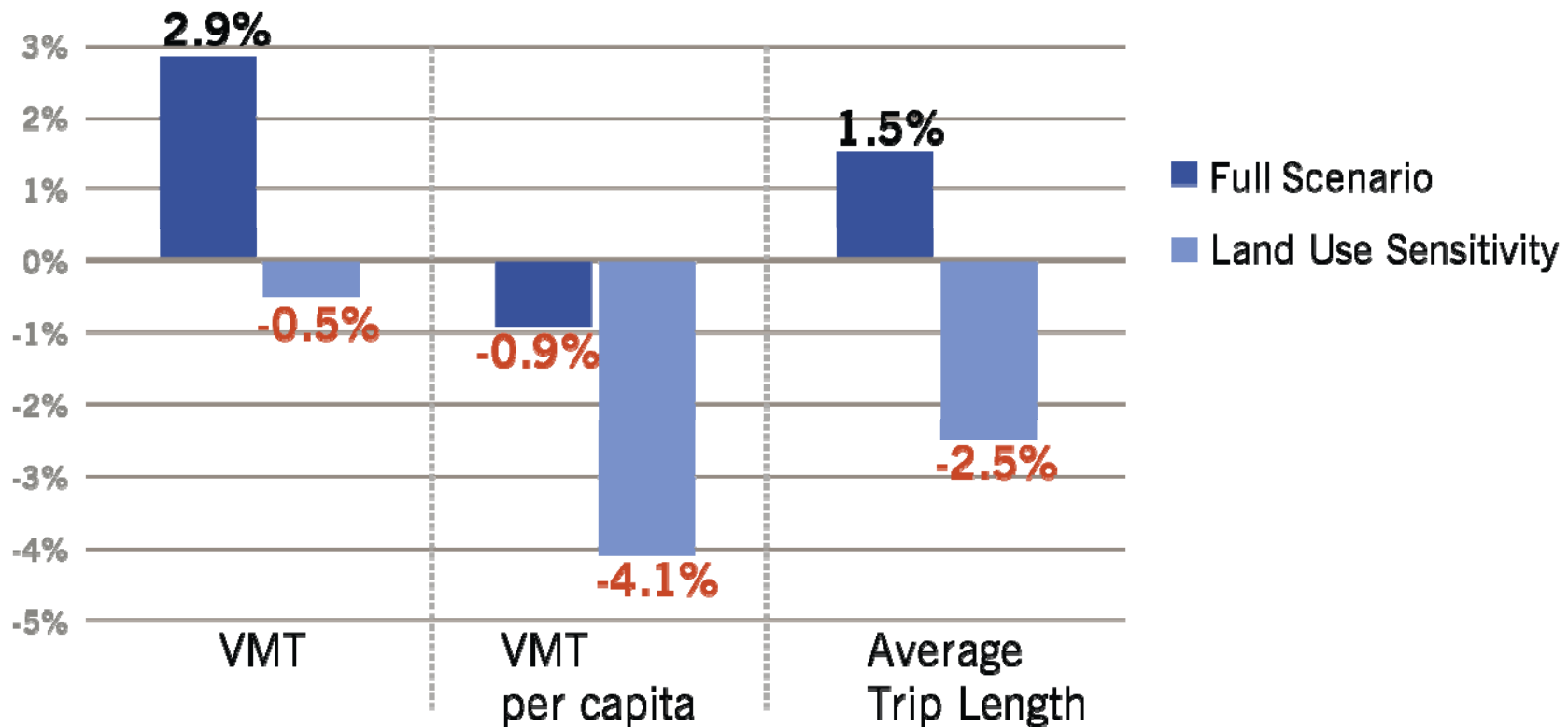
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## Change in Auto Use, from baseline, 2030



**Faster speeds and more road capacity in the full scenario allow more driving, while the land use only enables alternative options**

# Air Pollution Emissions Rise



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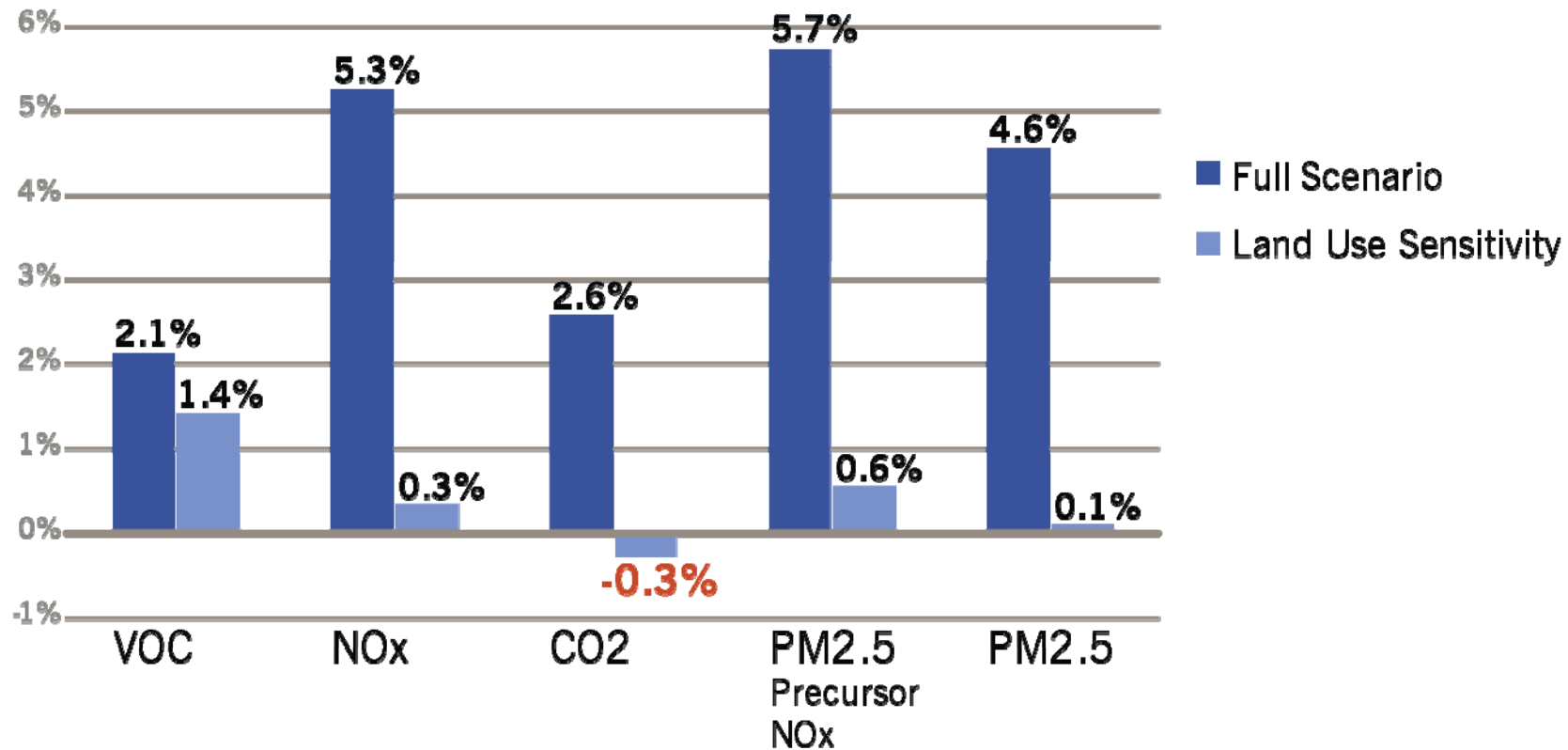
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## Change in Emissions from baseline, 2030



**Higher VMT and faster speeds in the full scenario translate into higher emissions of air pollutants. Emissions in the land use sensitivity increase less than the 3.5% increase in population.**



# Why Did We See these Impacts?

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## **1. Higher density + mixed-use + transit-oriented centers = more walkability and access to transit**

more bike/walk trips, more transit trips, potentially more efficient use of existing system

## **2. Extensive BRT + pricing = more access to transit**

more transit trips, some on new system but many on existing system

## **3. More road capacity + pricing = faster speeds, longer trips**

reduced congestion, more VMT, more air pollution

## **4. More population + jobs + increased density= “smart growth”**

higher mode share by non-auto modes and shorter trips, rather than increasing VMT

# Further Work



beginnings

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## 1. Scenario analysis with new model

New model will have analysis out to 2040, finer-grained zones, modeling for all bike/walk trips (not just work trips), use of 2007/8 Household Travel Survey

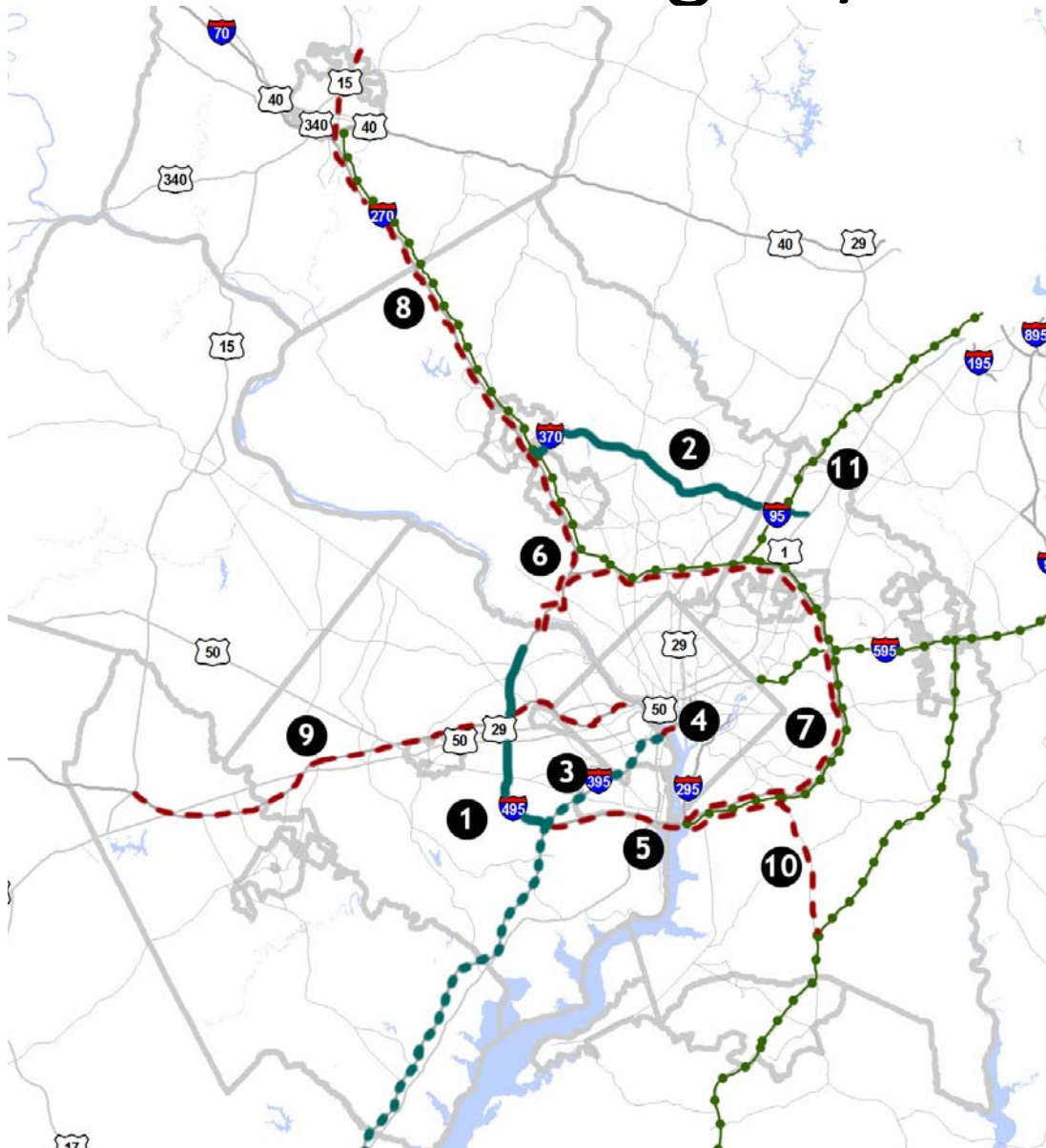
## 2. Comprehensive benefit-cost analysis

Recent experience in B-C analysis can be used to balance the scenario's mixed results

## 3. Analyze other pricing alternatives

Different pricing schemes and networks can be analyzed to determine a wider range of potential costs and benefits

# Major Corridor Studies Considering Managed / Priced Lanes



## Under Construction ———

1. Capital Beltway in Virginia HOT Lane Project
2. Intercounty Connector (ICC)

## Included in CLRP - - - - -

3. I-95/395 HOV/Bus/HOT Lanes Plan

## Corridor Studies - - - - -

4. 14th Street Bridge Corridor
5. South Side Mobility Study
6. West Side Mobility Study
7. Capital Beltway Study
8. I-270/US 15 Multi-Modal Corridor Study
9. Interstate 66 Studies
10. MD 5 Corridor Transportation Study

## Network Analysis Study .....

11. MDOT Maryland Managed Lanes Study

# Public Acceptability of Regional Road Pricing: Can it be Designed to Garner Public Support?

- New TPB study will examine the public acceptability of various regional road pricing scenarios
- Funded Through the Value Pricing (VPP) Program of the Federal Highway Administration (FHWA)
- Proposal submitted on November 3, 2009
- Grant awarded on August 2, 2010

# Conducting the Study

- Working group of 10-14 experts will frame options/scenarios for comprehensive regional road-use pricing
- Consultant(s) will conduct telephone survey and convene stakeholder focus groups to discuss scenarios; results to be significant at regional and jurisdictional levels
- Report results to TPB

# Administering the Study

- Submitted by VDOT on behalf of TPB to FHWA on Nov. 3
- TPB will be lead implementing agency, with support from Brookings Greater Washington
- Total Budget = \$400,000
  - \$320,000 Federal with \$80,000 COG match
- One-year project, beginning Oct. 2010 (estimated)