

A grayscale photograph of a busy urban plaza. In the foreground, several bicycles are parked in a rack. People are walking in various directions, some carrying bags. In the background, there are trees and a building. The overall scene is a typical city square.

*What If...*  
The Washington Region  
Grew Differently?

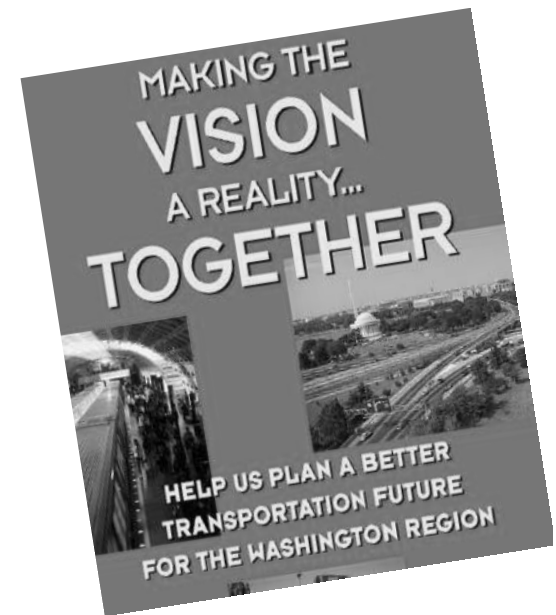
Results to Date of  
The TPB Regional Mobility and Accessibility Study

January 18, 2006

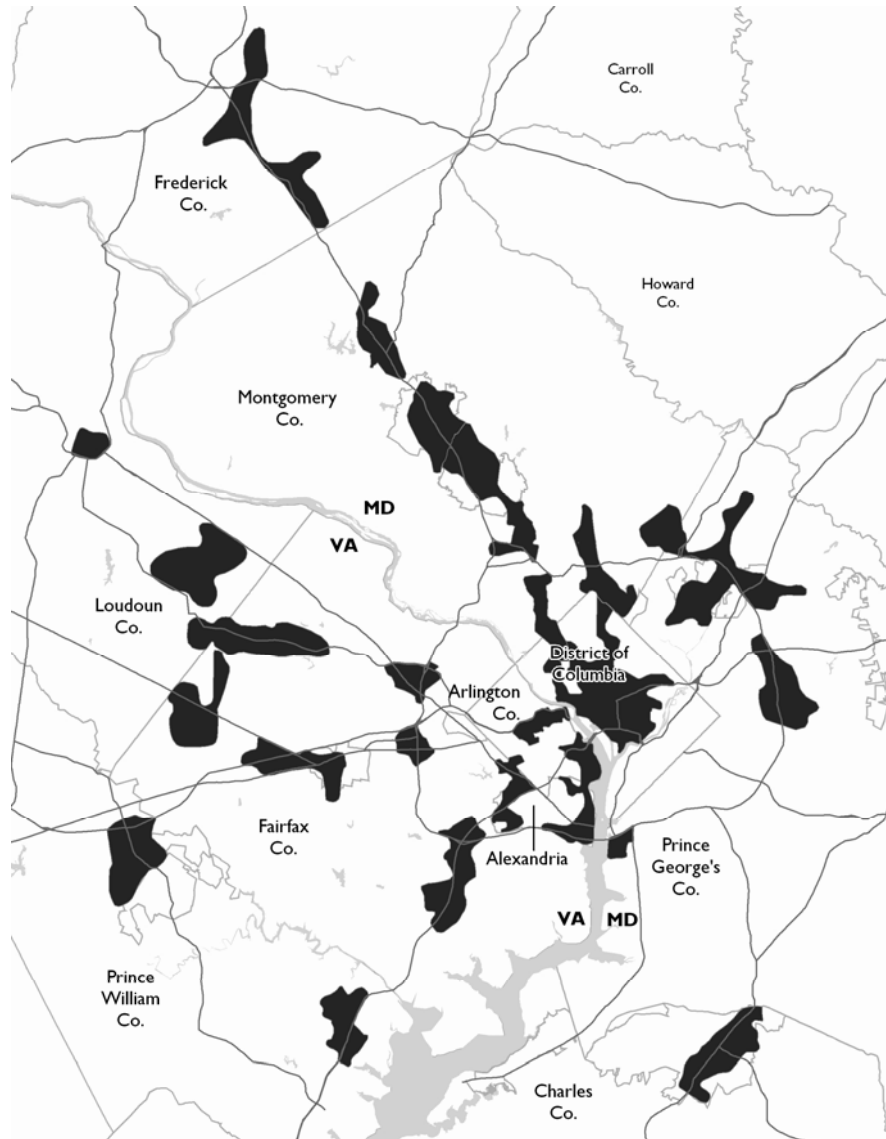
# The TPB Vision

*Approved in 1998*


- A policy framework guiding the region's transportation investments in the 21st century.
- Goals include:
  - Promoting activity centers
  - Increasing transit use
  - Reducing driving



# Regional Activity Centers



Intended to be focal points for jobs and housing, and nodes for transportation linkages.

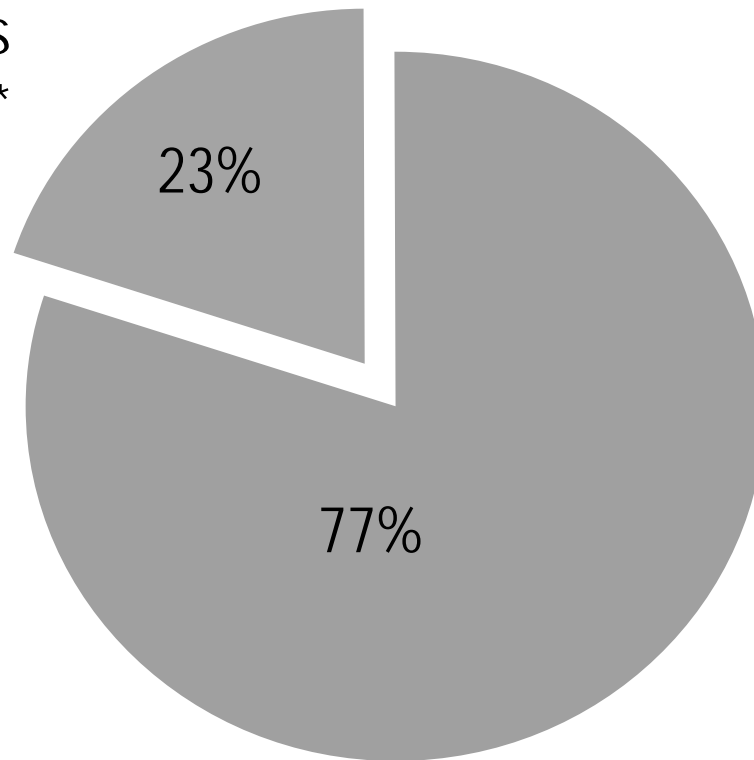


In 2000, the TPB  
recognized that in many  
respects, the region's  
long-range transportation  
plan was falling short of  
the Vision...

# Most Transportation Dollars Are Needed for Maintenance

*Little money is available for new transportation projects*

New Roads  
and Transit\*



Operations & Preservation\*

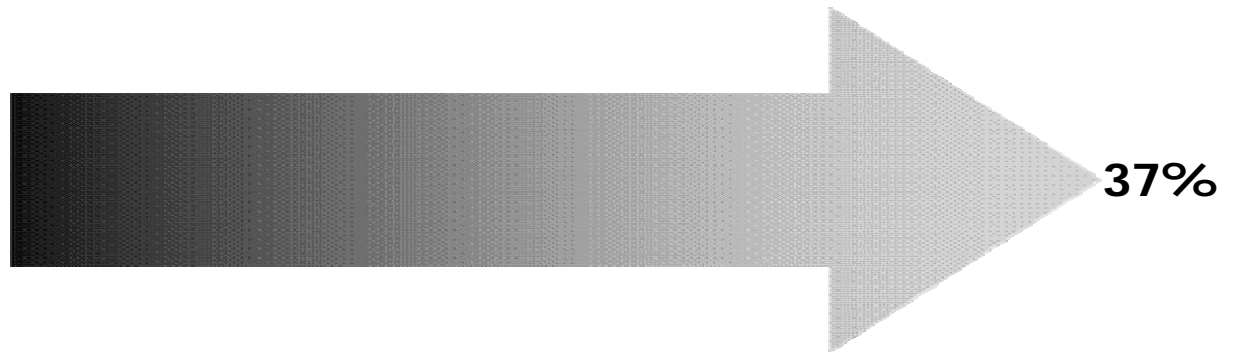
\* Based on region's 2003 Constrained Long-Range Plan

# The Highway System Won't Keep Pace with Growth

## *Forecast Trends 2000 - 2030*

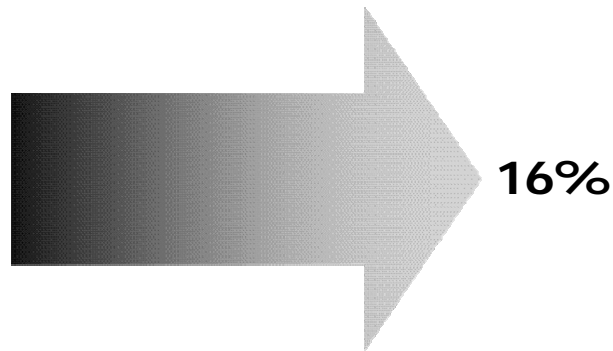
### **Daily Vehicle Miles Traveled**

2000: 109 Million  
2030: 150 Million



### **Freeway and Arterial Lane Miles**

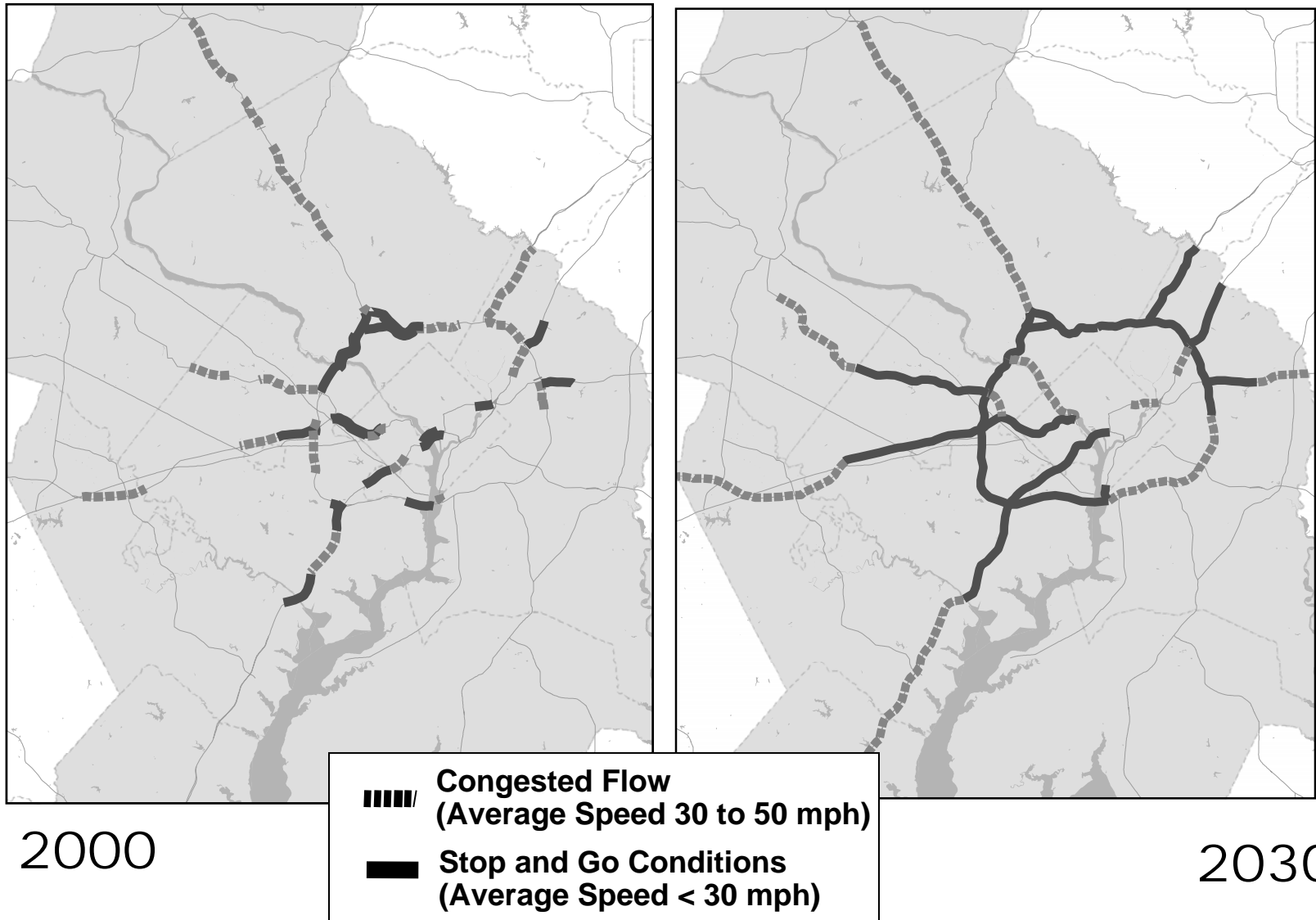
2000: 15,300 Miles  
2030: 17,600 Miles



Based on region's 2003 Constrained Long-Range Plan

# Most of the Beltway Will Be Stop and Go

Evening Highway Congestion 2000 and 2030

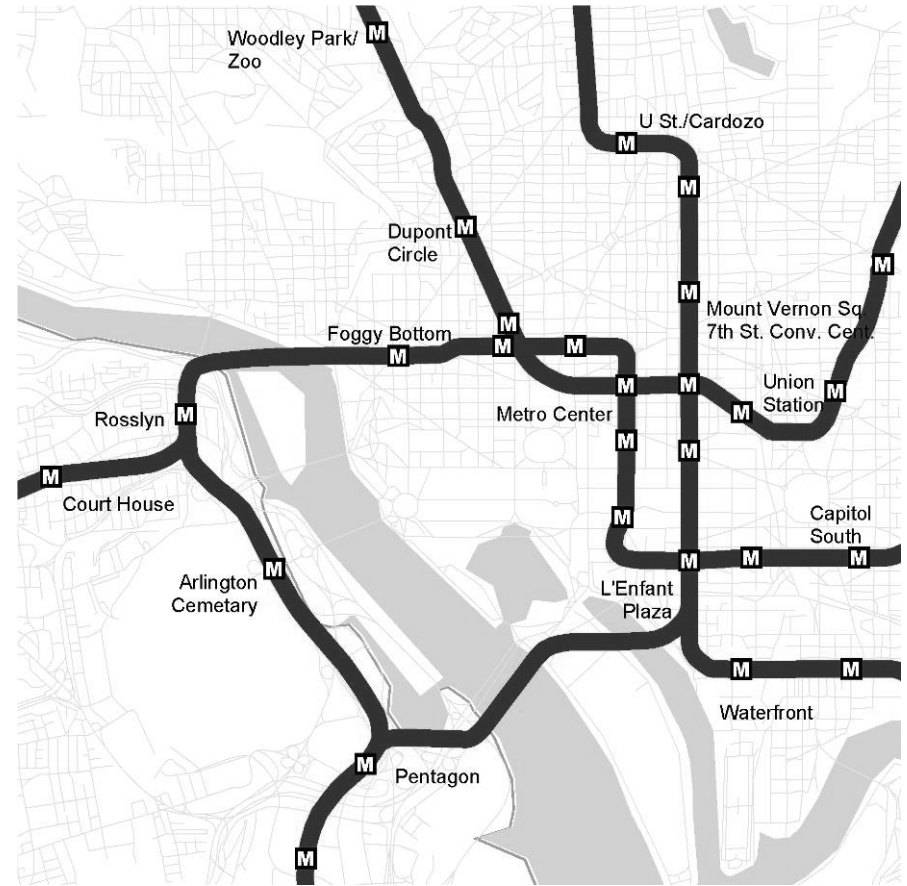


# Metro Platforms and Trains Will Be Packed

Morning Peak-Hour Transit Congestion: 2000 and 2030



2000



2030








# How can we move closer to the Vision?


In 2000, the TPB initiated a study to investigate scenarios that might better meet the objectives of the Vision:

- ✱ Promoting activity centers
- ✱ Increasing transit use
- ✱ Reducing driving



# Study of “What If” Scenarios

- ✱ *What if* job and housing growth were shifted? *What if* new roads or transit were built?
- ✱ How would 2030 travel conditions change?



# Study of “What If” Scenarios

- ✱ Scenario development did not address “how to” questions
  - ✱ Cost of transportation improvements
  - ✱ Necessary changes to land use policies
  - ✱ Market forces



# Who developed the scenarios?

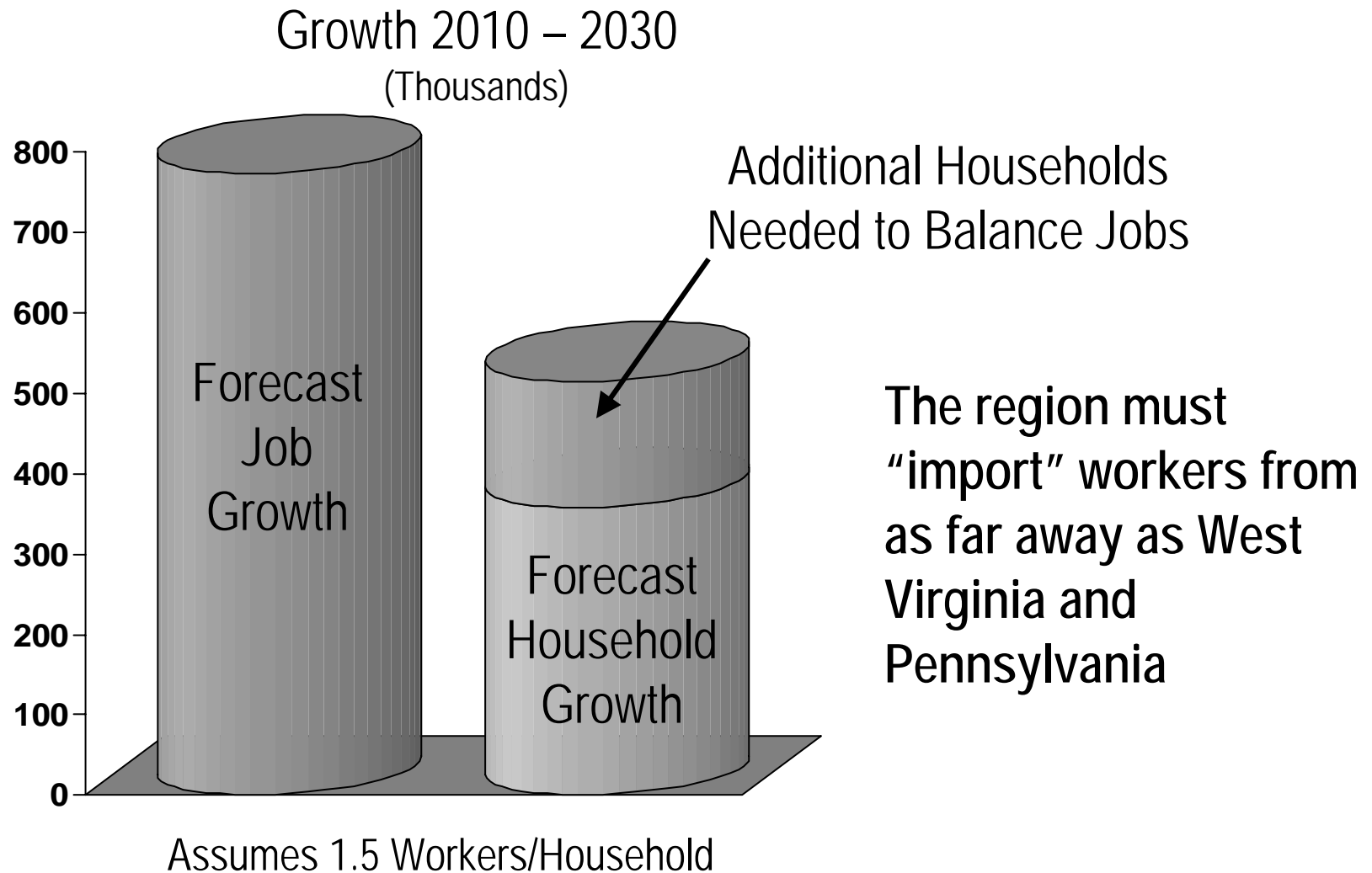
- ✱ TPB – Policy direction
- ✱ “Joint Technical Working Group” – Detailed specification and review
  - ✱ TPB Technical Committee members – transportation improvements
  - ✱ Planning Directors – land use changes
  - ✱ Citizens, including members of the TPB Citizens Advisory Committee



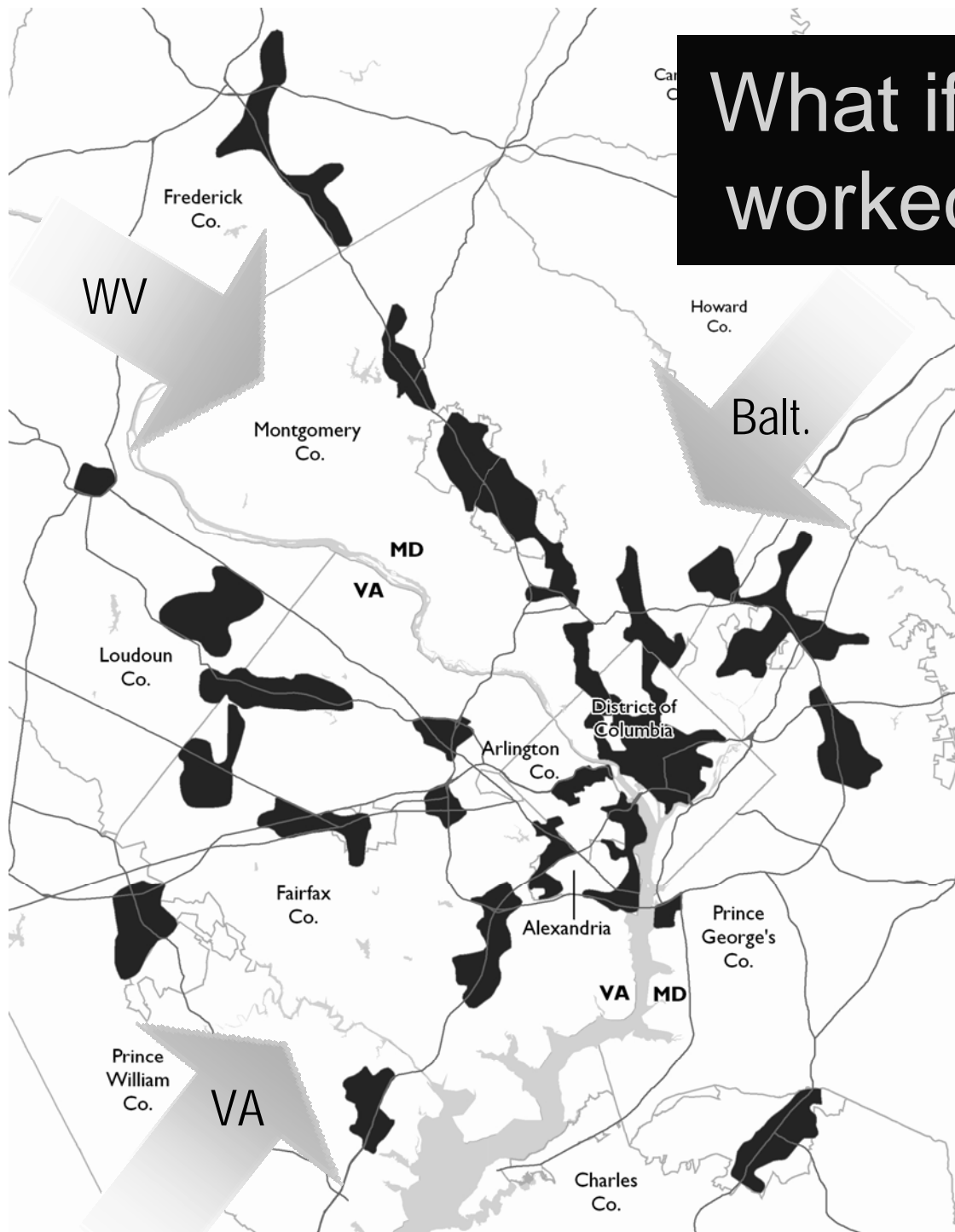
*Developing the Scenarios:*

What are **key issues**  
related to land use and  
transportation?

# Issue #1: Job Growth is Outpacing Household Growth




What if more people who worked here lived here?



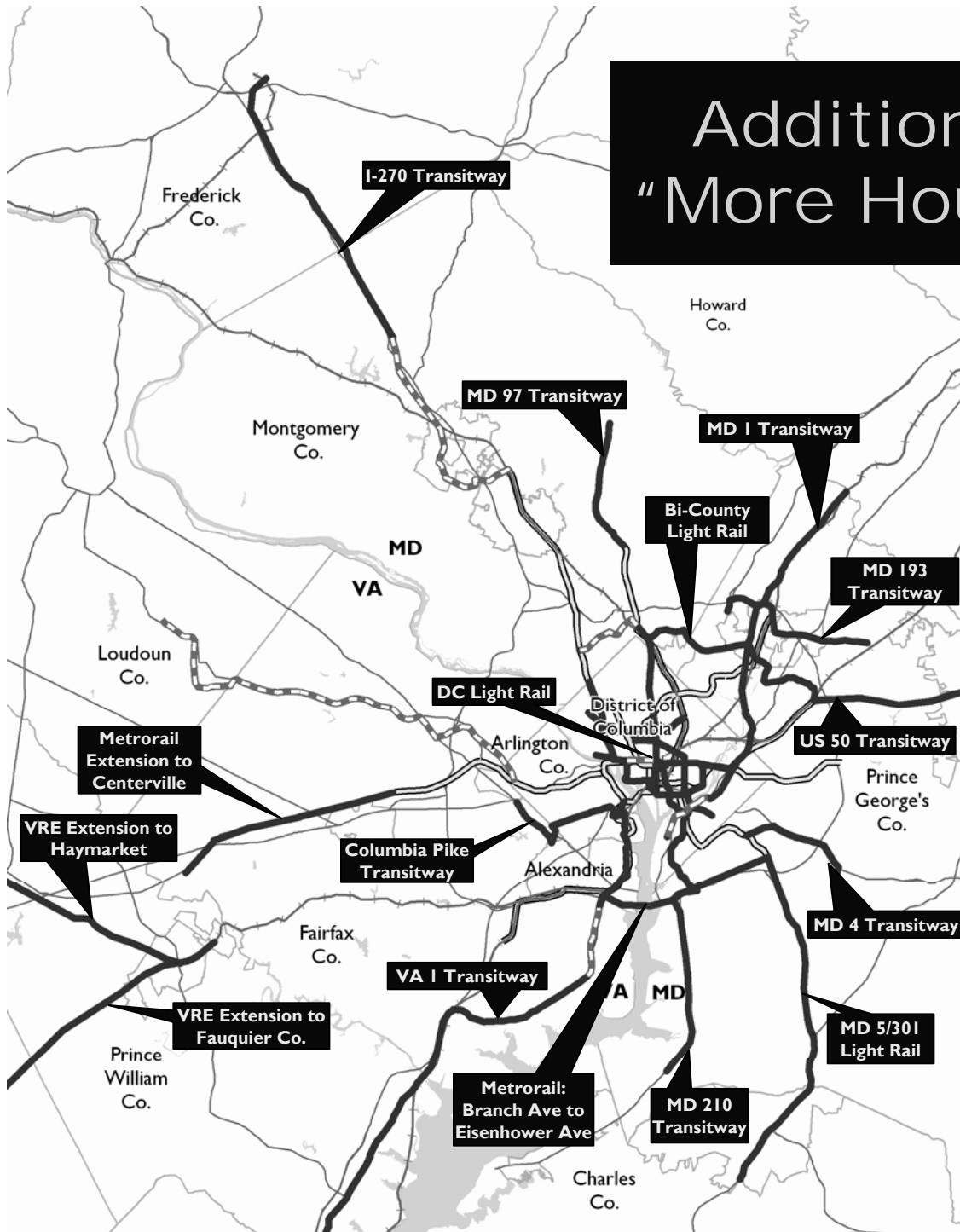
## “More Households” Scenario

- ✱ Increase household growth to balance forecast job growth
- ✱ Locate households in regional “Activity Clusters”




Increase household growth by 200,000

 Regional Activity Cluster

# Additional Transit for the "More Households" Scenario



- ✱ 30 miles of new Metrorail
- ✱ 30 miles of new commuter rail
- ✱ 218 miles of new light rail and bus rapid transit

 Existing Metrorail  
 Currently Planned Transit  
 Additional Transit in Scenario



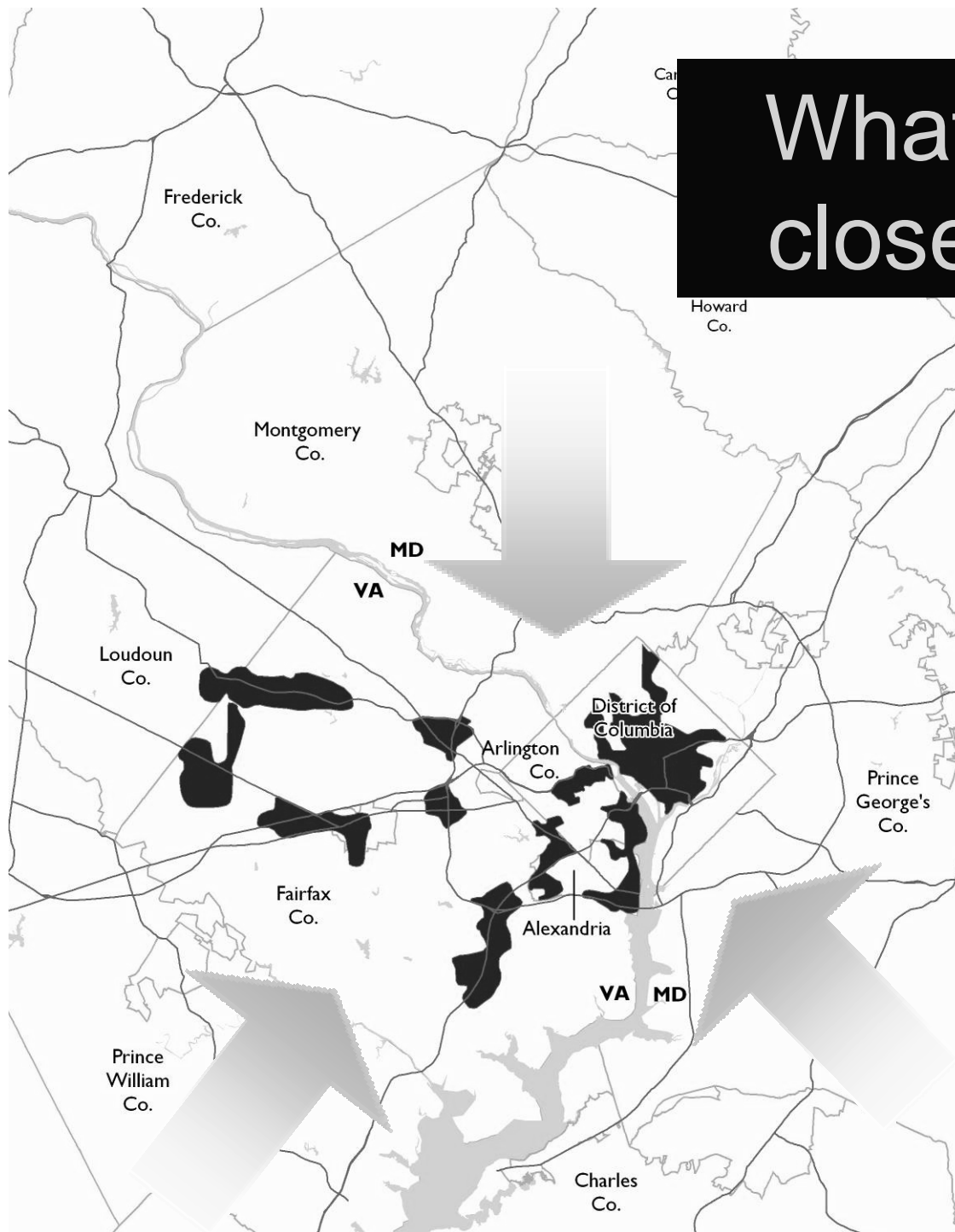
# Issue #2: Workers are Living Farther Away from Their Jobs

- ✱ Inner jurisdictions – most job growth
- ✱ Outer jurisdictions – lion's share of household growth

**How Far Is Too Far?**  
*Developer Plans 4,300 Homes 100 Miles From D.C.*




# What if people lived closer to their jobs?



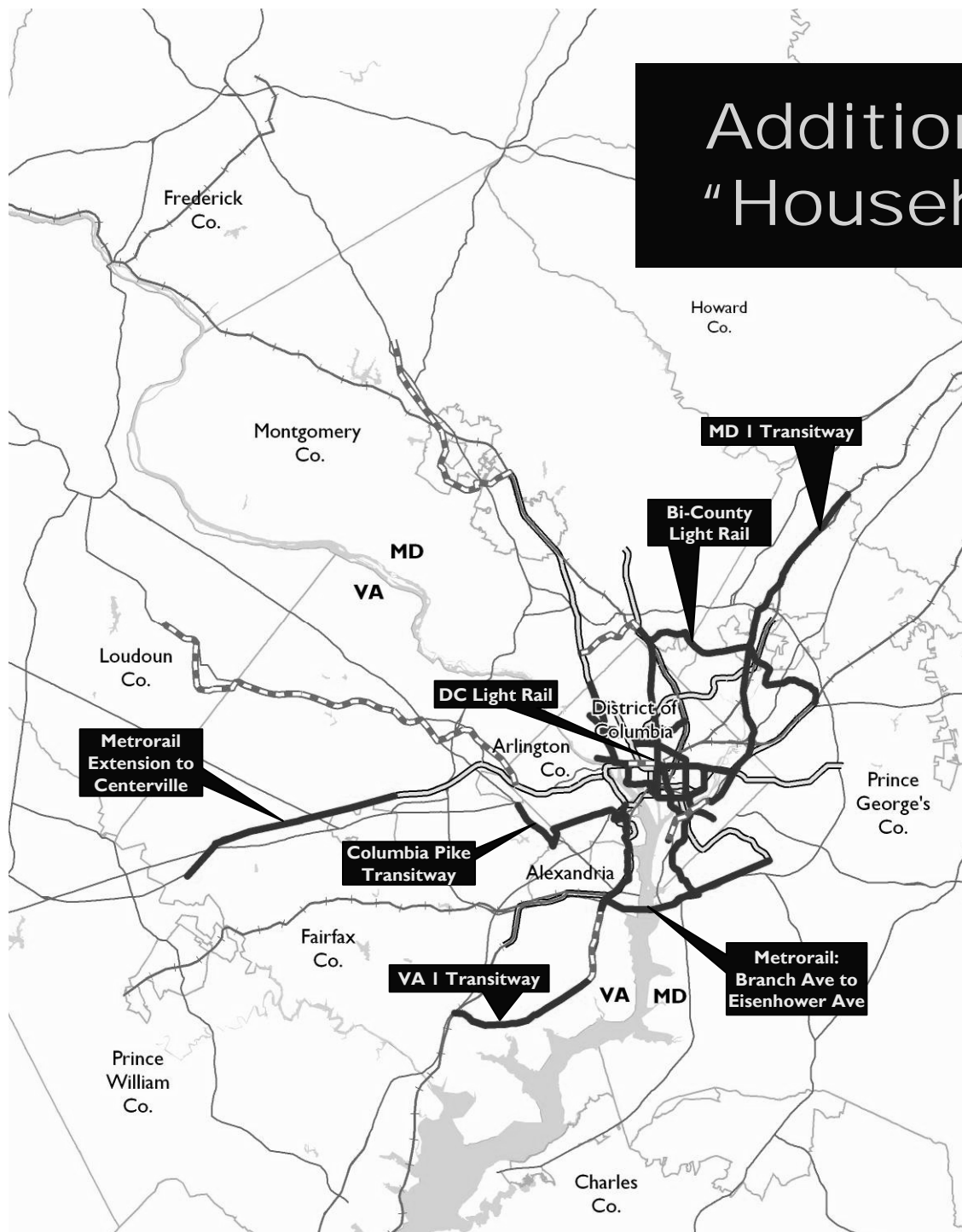
## “Households In” Scenario

- ✦ Shift household growth within the region from outer to inner jurisdictions (to get people closer to jobs)

Shift 84,000 households

 Regional Activity Cluster

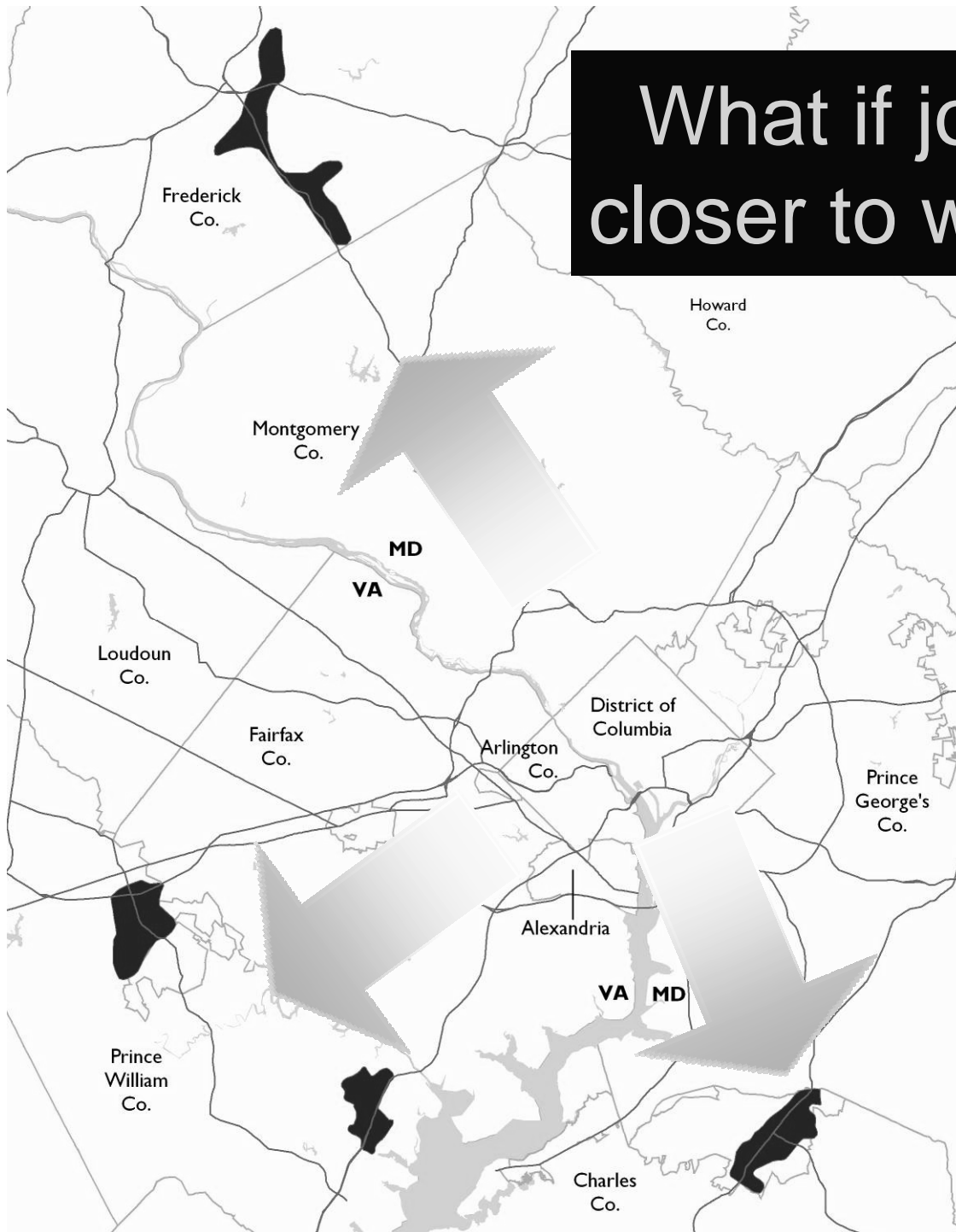
# Additional Transit for the "Households In" Scenario



- ✱ 30 miles of new Metrorail
- ✱ 121 miles of new light rail and bus rapid transit

Existing Metrorail  
Currently Planned Transit  
Additional Transit in Scenario

# What if jobs were located closer to where people live?



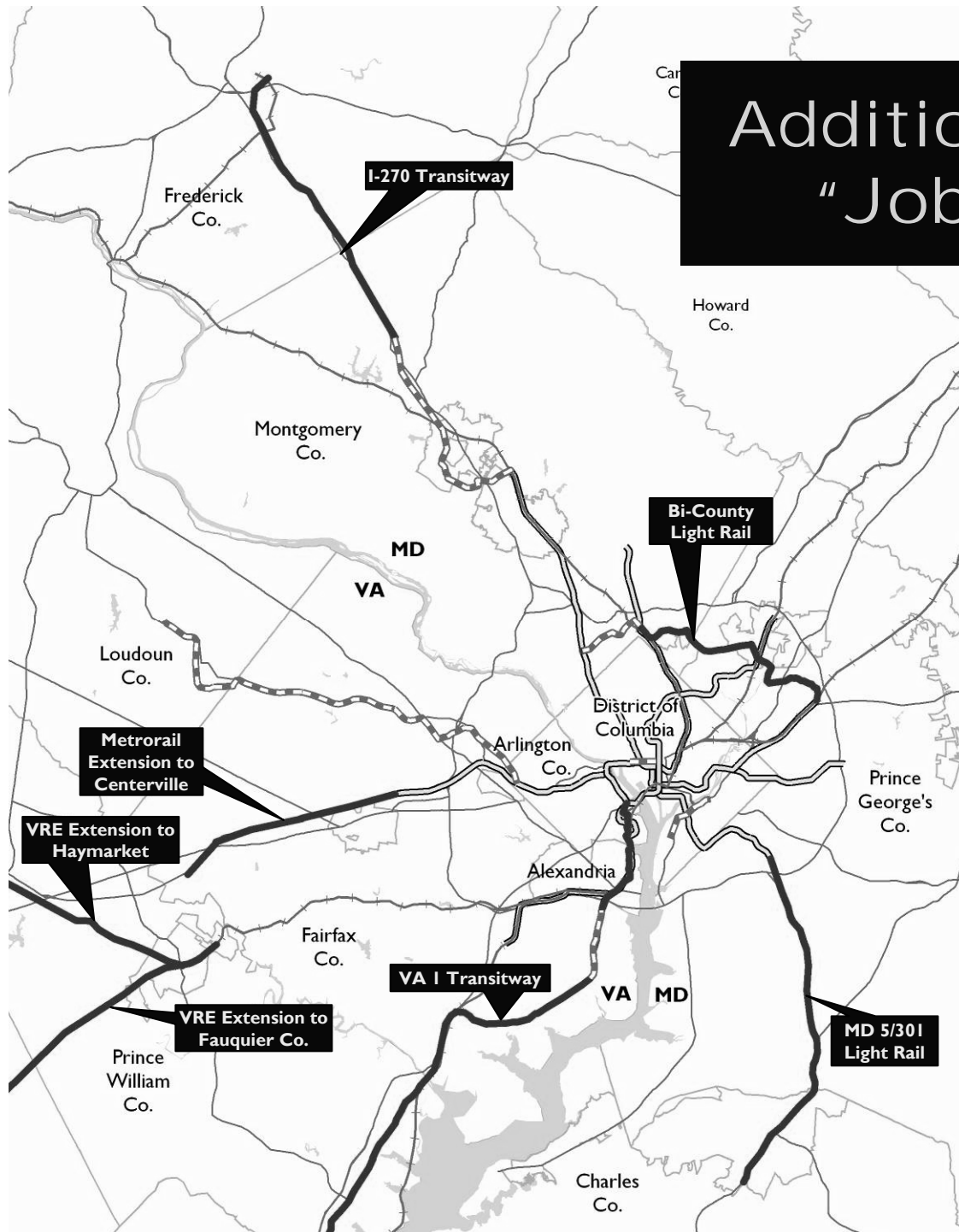
## “Jobs Out” Scenario

- ✦ Shift job growth to outer jurisdictions (to get jobs closer to new housing)

Shift 82,000 jobs

 Regional Activity Cluster

# Additional Transit for the "Jobs Out" Scenario

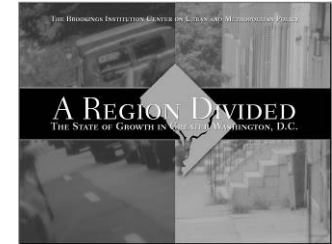


- ✱ 18 miles of new Metrorail
- ✱ 30 miles of new commuter rail
- ✱ 82 miles of new light rail and bus rapid transit

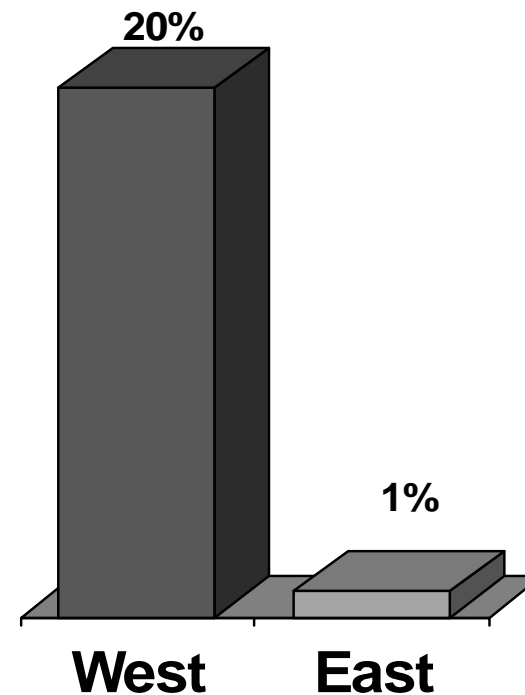
— Existing Metrorail  
- - - Currently Planned Transit  
— Additional Transit in Scenario

# Issue #3: East-West Divide

*A 1999 Brookings Institution report highlighted disparities between the eastern and western parts of the region*



Job Growth Rate 1990 – 2000



# Issue #3: East-West Divide

*West-bound travel clogs the roads during morning rush hour*



## Average Commute Time

- Up to 30 minutes
- Up to 40 minutes
- Over 40 minutes



What if there were more development on the eastern side of the region?



## “Region Undivided” Scenario

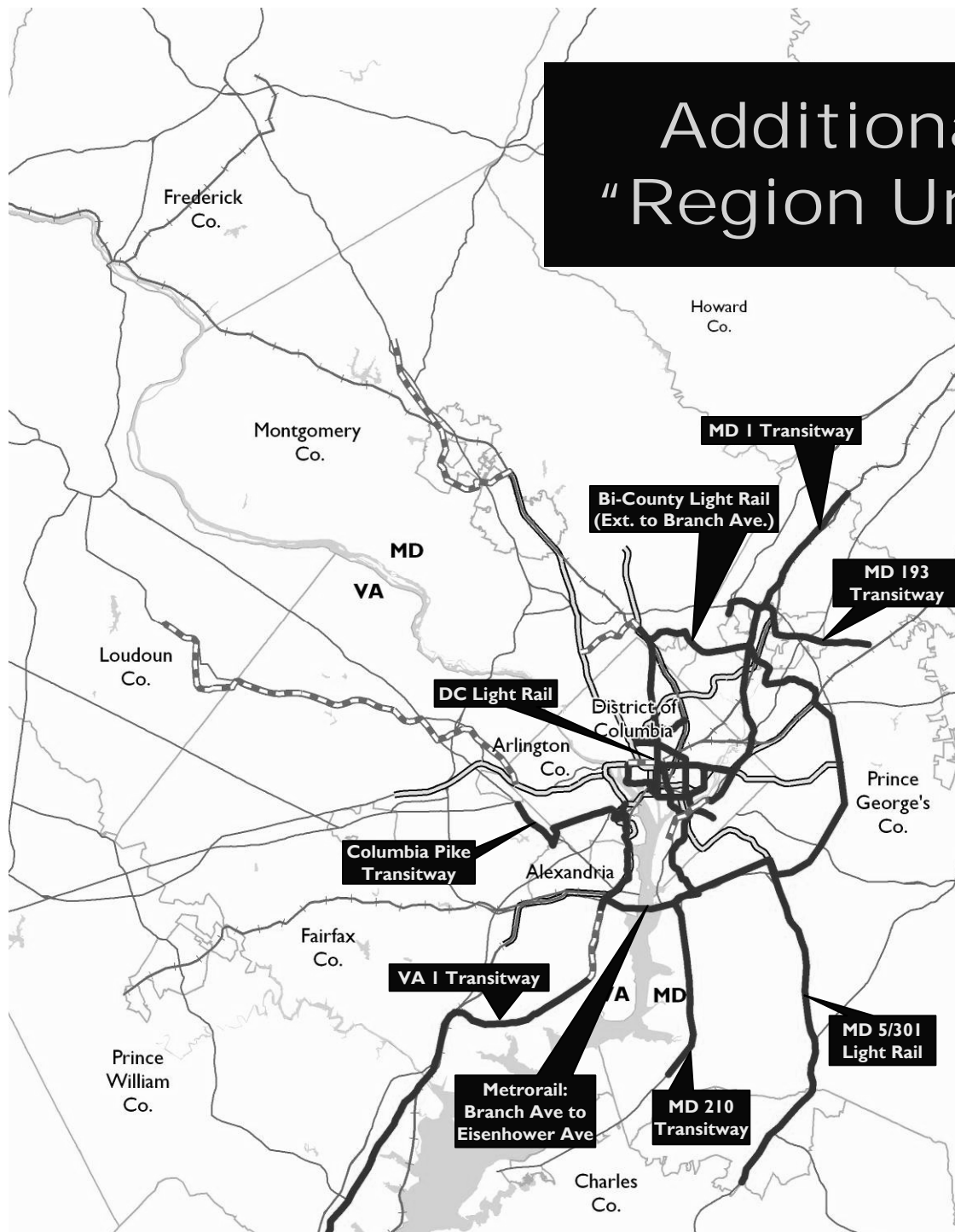
- ✦ Shift job and household growth from West to East

Shift 57,000 households and 114,000 jobs

 Areas Receiving Job Growth



# Additional Transit for the "Region Undivided" Scenario

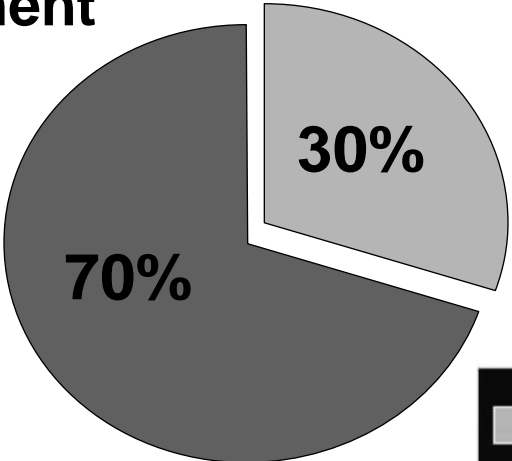


- ✱ 13 miles of new Metrorail
- ✱ 180 miles of new light rail and bus rapid transit

- Existing Metrorail
- - - Currently Planned Transit
- Additional Transit in Scenario

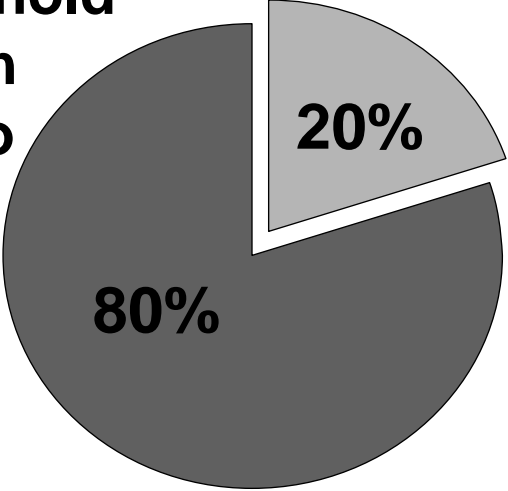
# Issue #4: Most Growth Located Outside Transit Station Areas

**Employment Growth 2010 to 2030**



■ Inside Transit Station Areas

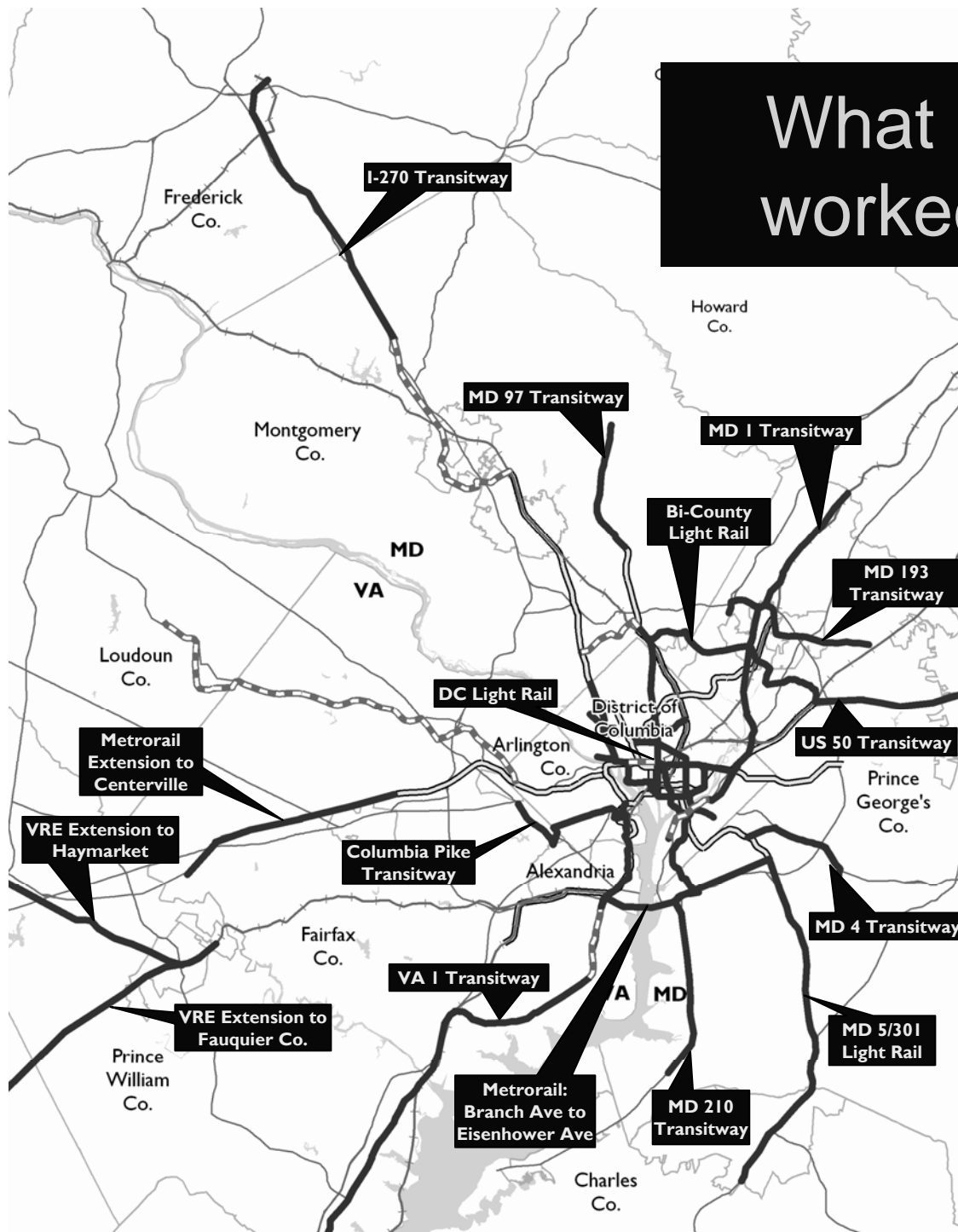
**Household Growth 2010 to 2030**



■ Outside Transit Station Areas



# What if people lived and worked closer to transit?



## “Transit Oriented Development” Scenario

- Locate job and household growth around transit
- Same transit network as “More Households” scenario

Shift 125,000 households and 150,000 jobs

- Existing Metrorail
- - - Currently Planned Transit
- Additional Transit in Scenario

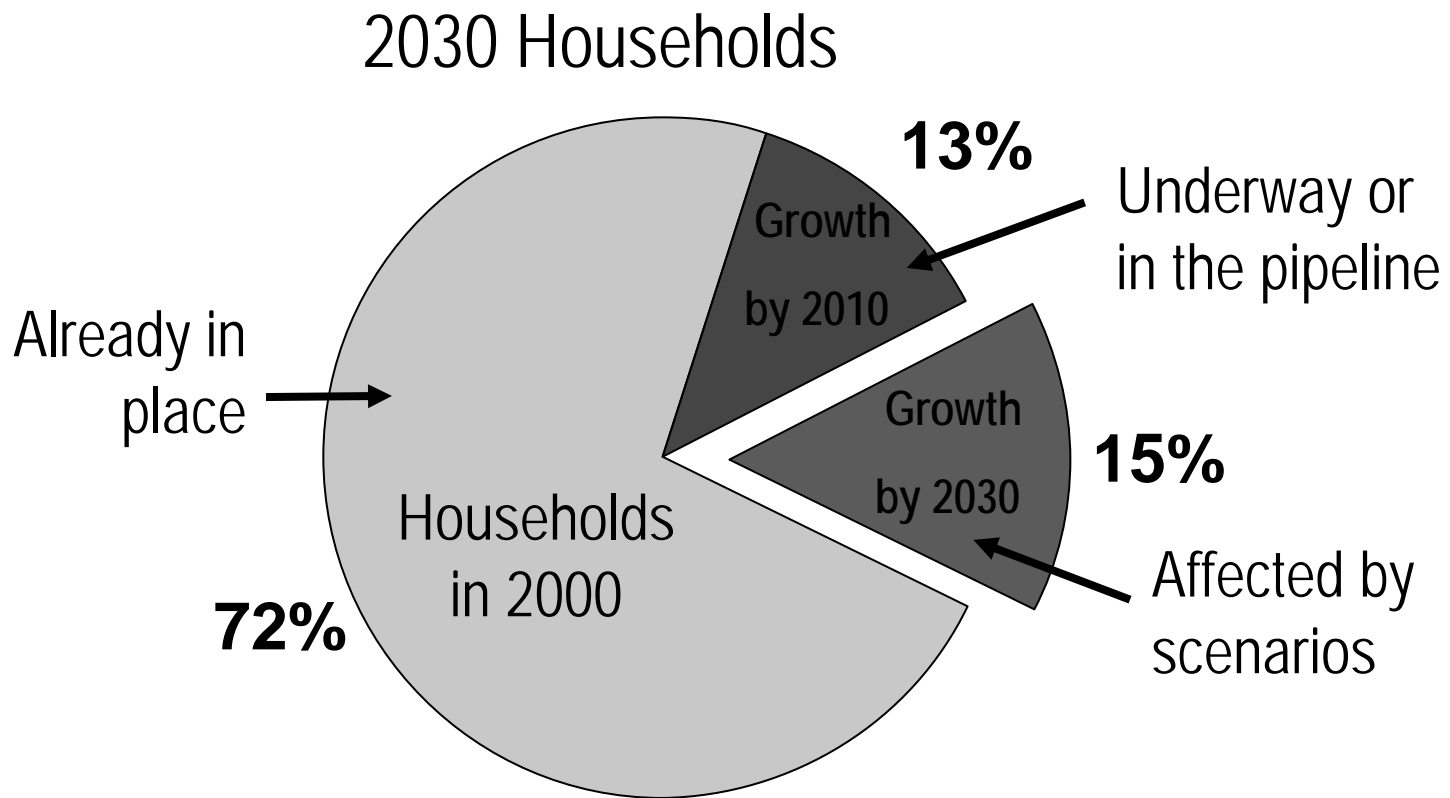


*Evaluating the Scenarios:*

How would future  
travel conditions  
change?

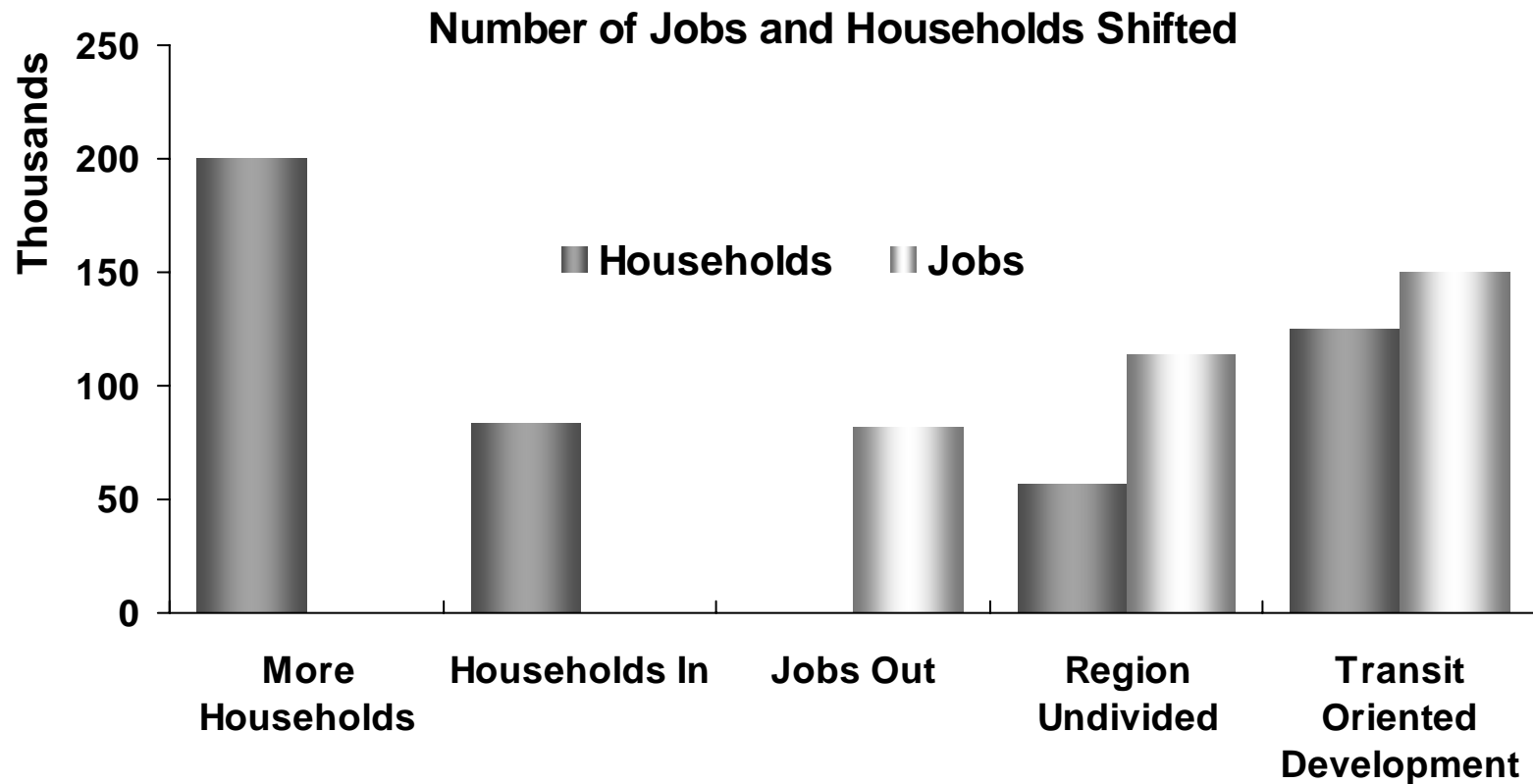
# Some Caveats:

Scenarios shift a relatively small percent of the total jobs and households anticipated for 2030



# Some Caveats:

Some scenarios make more dramatic land use changes than others





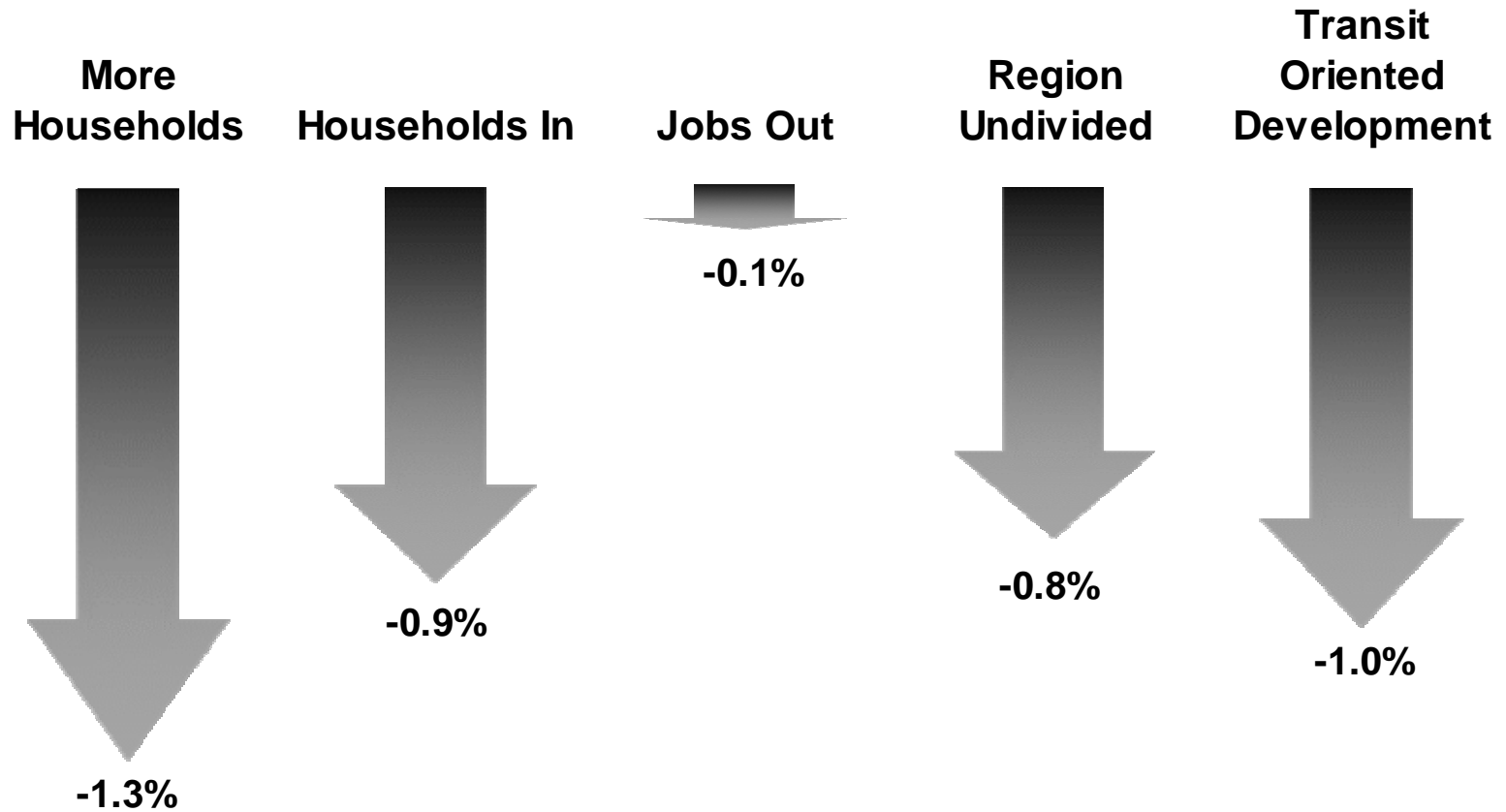
# Some Caveats:

- ✱ Baseline for comparison:
  - ✱ Round 6.4 population and employment forecasts for 2030
  - ✱ Long-range transportation plan as adopted in 2003
- ✱ The study includes many “measures of effectiveness”
  - ✱ This presentation highlights just a few of the major ones

# Driving would decrease

Compared to baseline forecasts for 2030

## Vehicle Miles Traveled





Under the “More Households” scenario, the average person would drive 2 miles less per day . . .



**Daily vehicle miles traveled per person**

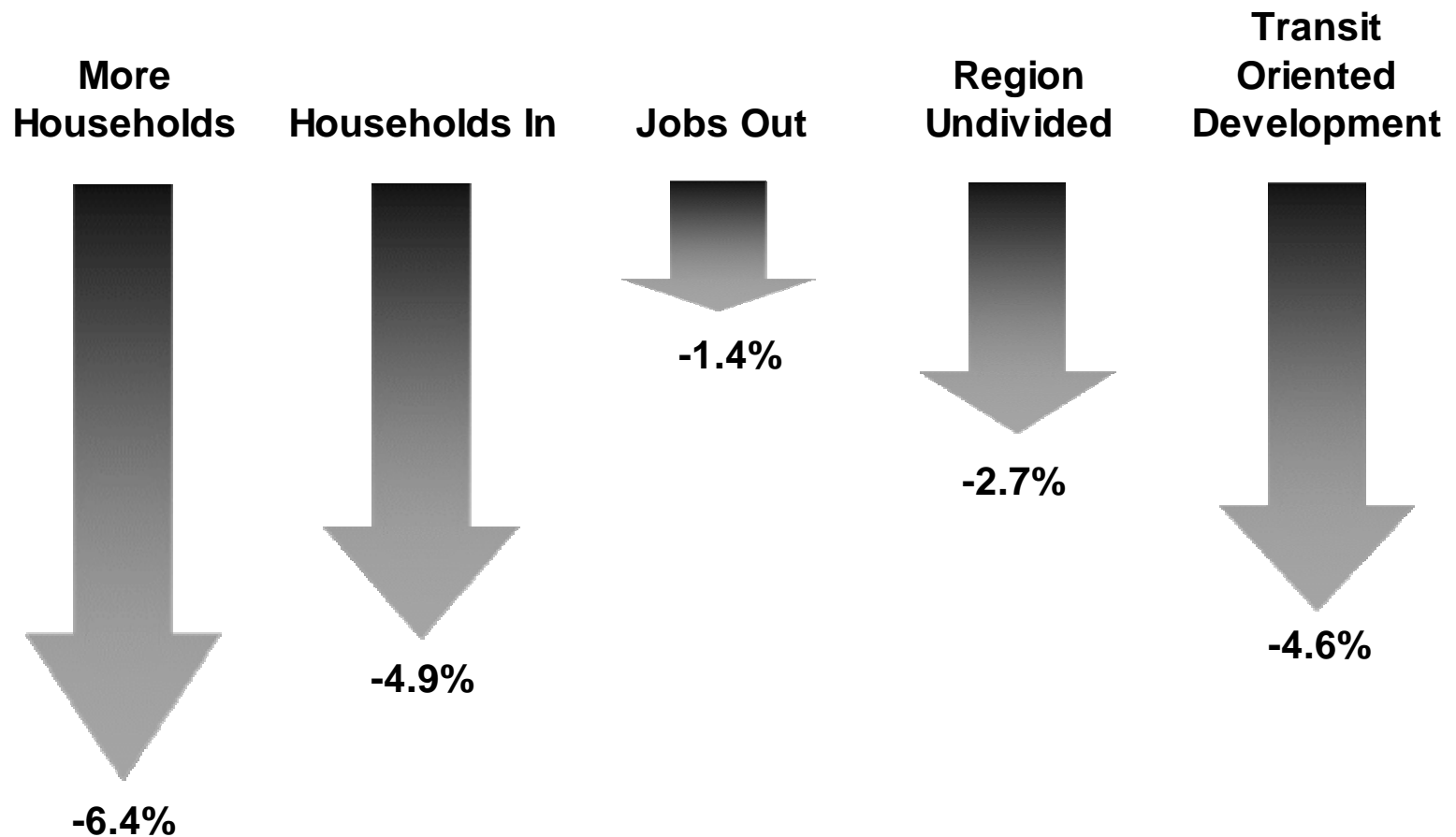
*Baseline: 24*

*“More Households”: 22*

# Congestion would decrease

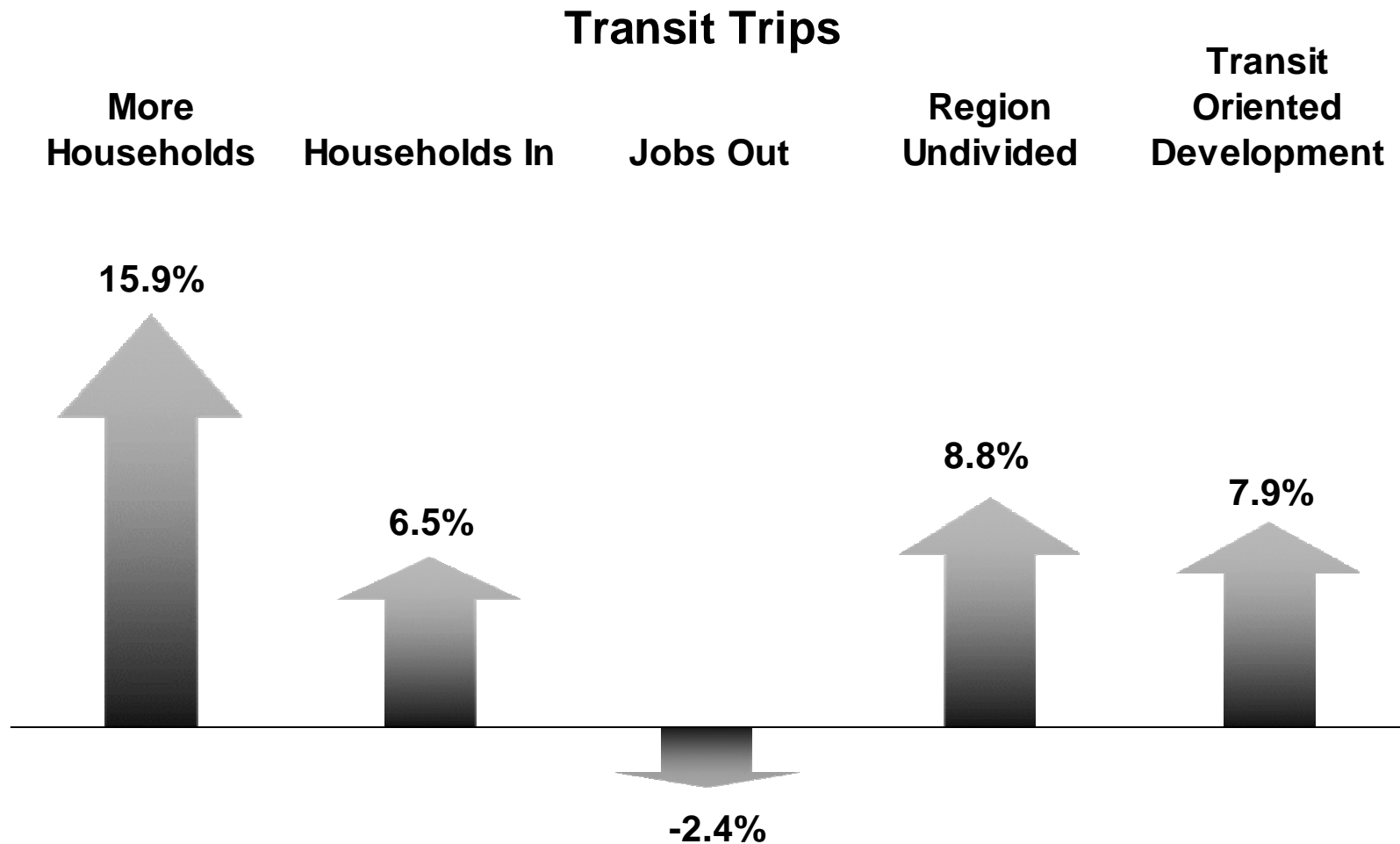
Compared to baseline forecasts for 2030

## Lane Miles of Severe AM Peak Period Congestion



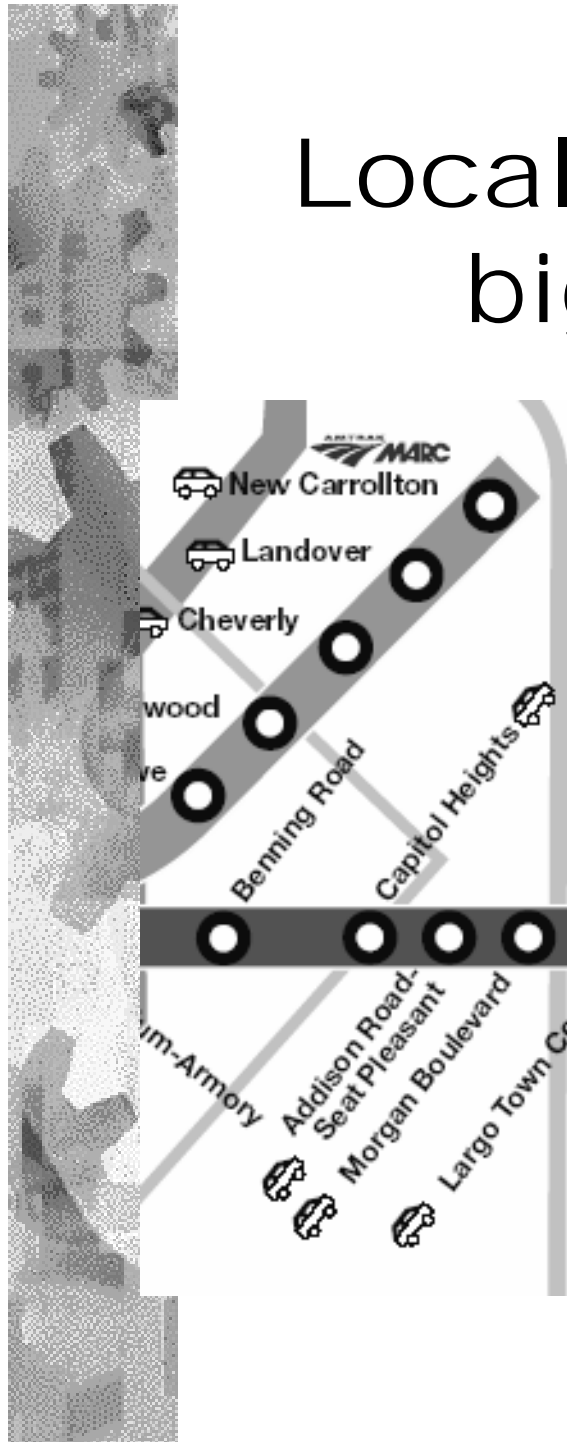
# Transit use would increase<sup>\*</sup>

Compared to baseline forecasts for 2030



<sup>\*</sup>Under the "Jobs Out" scenario, transit trips would increase in outer suburban activity clusters

Local impacts would be even bigger, in many places



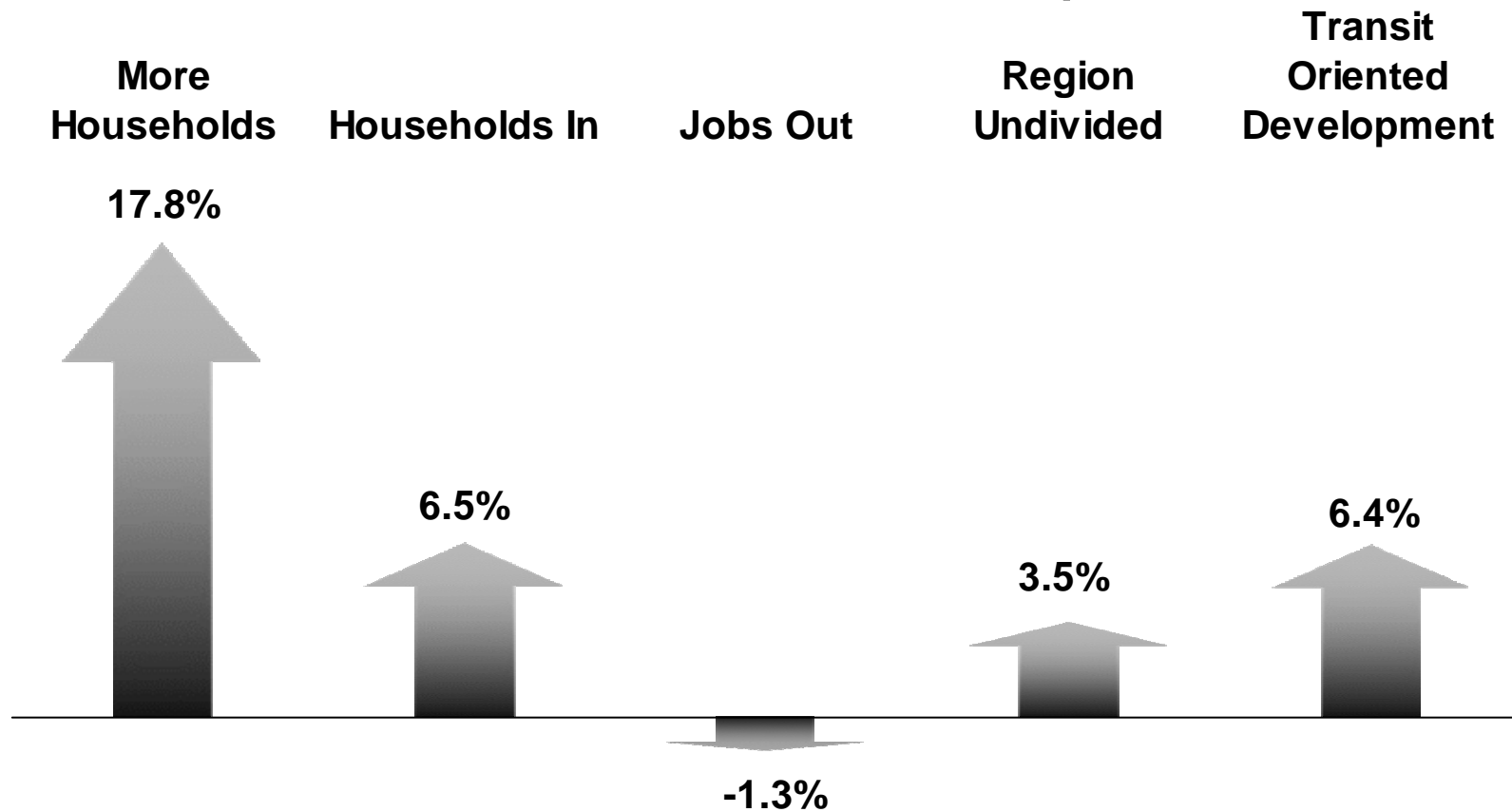
*Under the “Region Undivided” scenario:*

**Transit commute trips to the Largo area would more than double**, increasing the transit commute mode share from 9% to 15%.

# Walk and bike commuting would increase\*

Compared to baseline forecasts for 2030

## Walk and Bike Commute Trips



\*Under the "Jobs Out" scenario, walk & bike commuting would increase in outer suburban activity clusters



## *Key Findings:* What do the scenarios tell us?

- ✱ Increasing household growth and concentrating that growth in regional activity centers would
  - ↑ increase transit use, walking and biking
  - ↓ decrease driving and congestion
- ✱ Encouraging more development on the eastern side of the region would improve regional travel conditions

# How has the study been used so far?

- Development of COG's Round 7.0 cooperative forecasts for population and employment growth
  - Includes 2/3 of new households assumed under the "More Households" scenario*



# What public outreach has been conducted?

- Forums hosted by the TPB's Citizen Advisory Committee



- *Oxon Hill Forum, September 2005*
- *Dulles TOD Forum, September 2005*
- *Takoma Park Forum, November 2005*







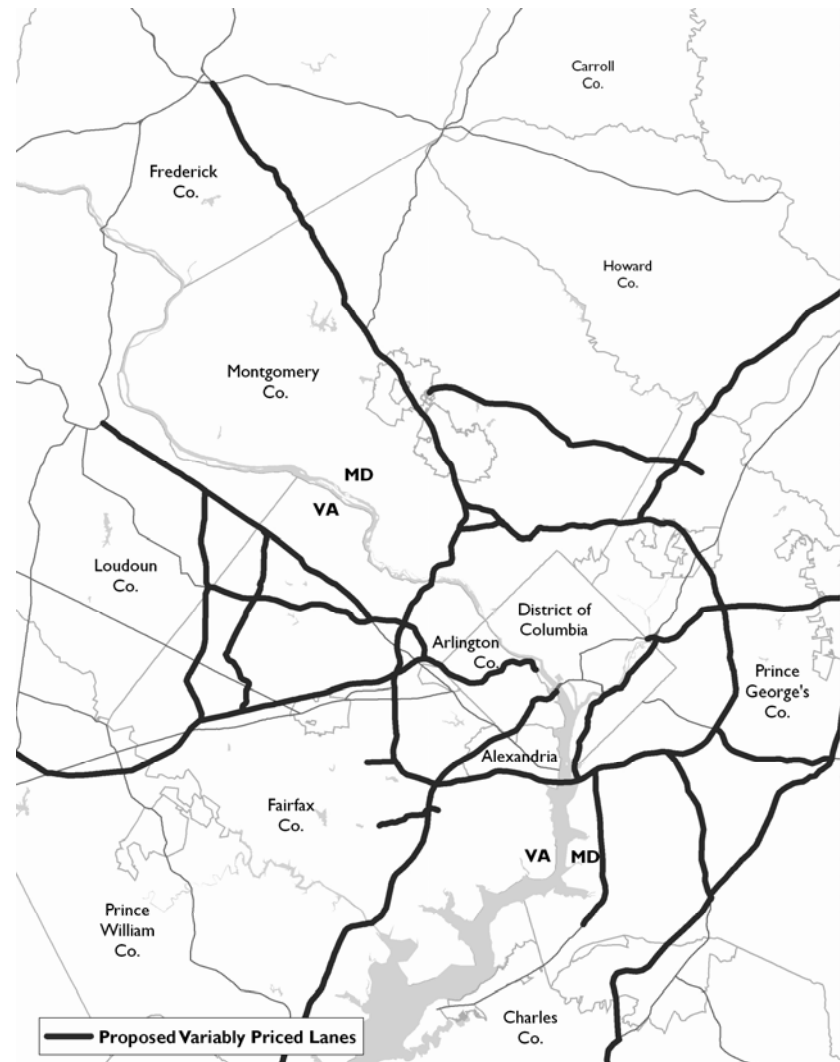
# Next Steps:

- ✿ Conduct more public outreach forums in different parts of the region
- ✿ Develop additional scenarios as needed
  - ✿ Current scenarios have looked at land use changes and transit improvements, but not highway improvements

# Next Steps:

What if the region built a network of variably priced lanes?

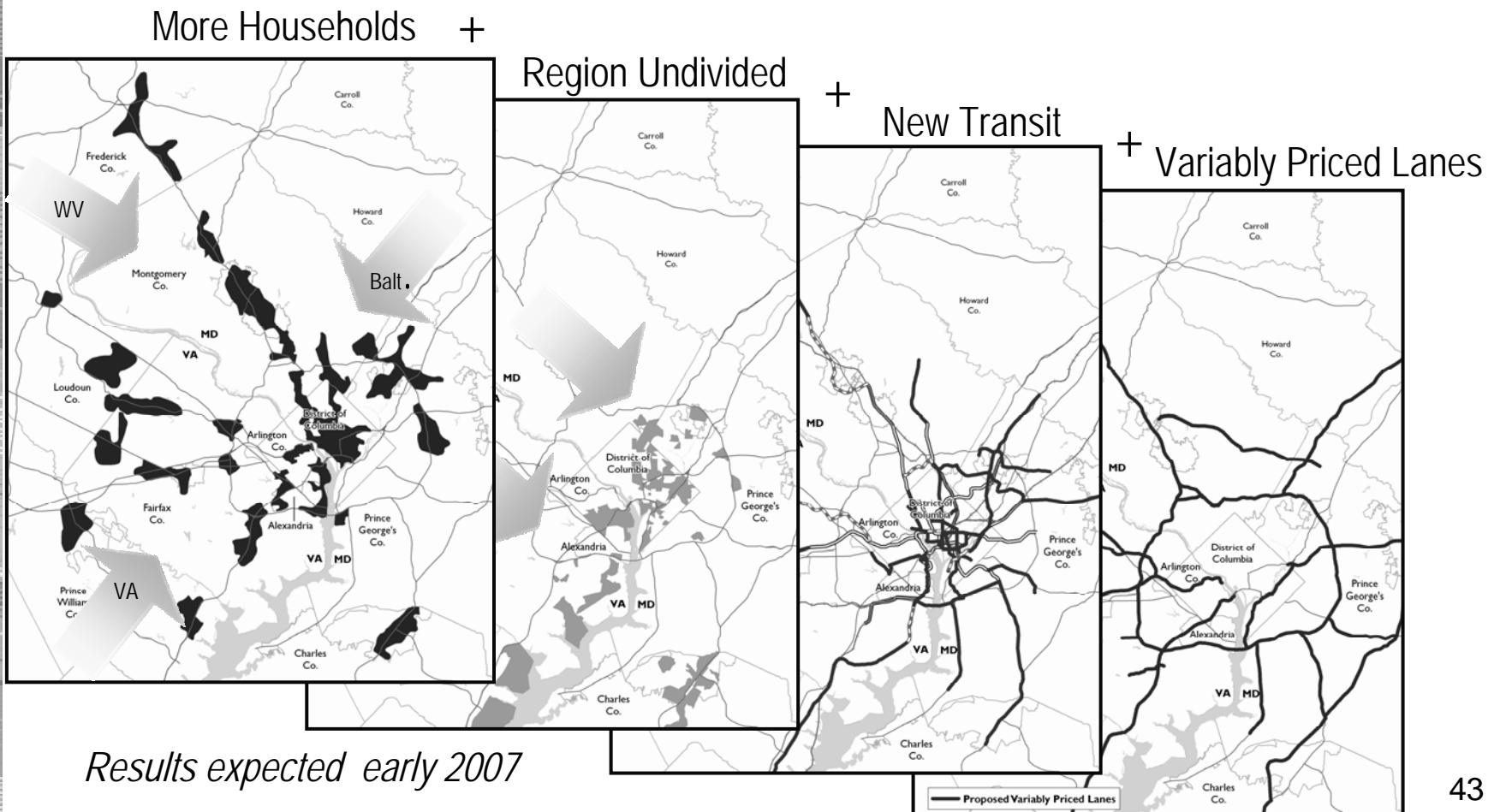
*Results expected by June 30, 2006*



# Next Steps:

What if multiple scenarios were combined?

*For example . . .*





# Next Steps:

How to apply lessons from the scenarios in a real-world environment?

- ✱ Scenarios were intended to “push the envelope” of what’s possible, but what’s realistic?
- ✱ What changes could be made
  - ✱ To the CLRP?
  - ✱ To local land use plans?
- ✱ What changes would have the highest pay-offs?