## Overview of the TPB's Regional Mobility and **Accessibility Scenario Study**

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Scenario Study Task Force October 17, 2007

# Why did the TPB initiate the Scenario Study?

- Dissatisfaction with the 2000 CLRP
- Desire to promote the TPB Vision
- Advocacy of CAC and other involved citizens
- Interest in looking at a variety of alternatives at the regional scale

# Key Questions of the Scenario Analysis

- What if job and housing growth were shifted? What if new roads or transit were built?
- How would 2030 travel conditions change?
- Not looking at "how to," just "what if."

# RMAS Joint Technical Working Group

- Responsible for developing the scenarios
- Includes transportation and land use staff from TPB members, and interested citizens.

## A Building Block Approach

Alternative Land-Use and Transportation Scenarios

Baseline – "CLRP Plus"

Regional Transportation Plan and Current Growth Forecasts

## The Baseline (a.k.a. CLRP+)

#### **CLRP Plus:**

- started with the 2003 CLRP
  - includes Dulles Metrorail, CCT, Purple Line (Bethesda-Silver Spring) and Anacostia LRT
- removed "transit constraint" through regional core
- increased frequency of rail and bus service
- other improvements

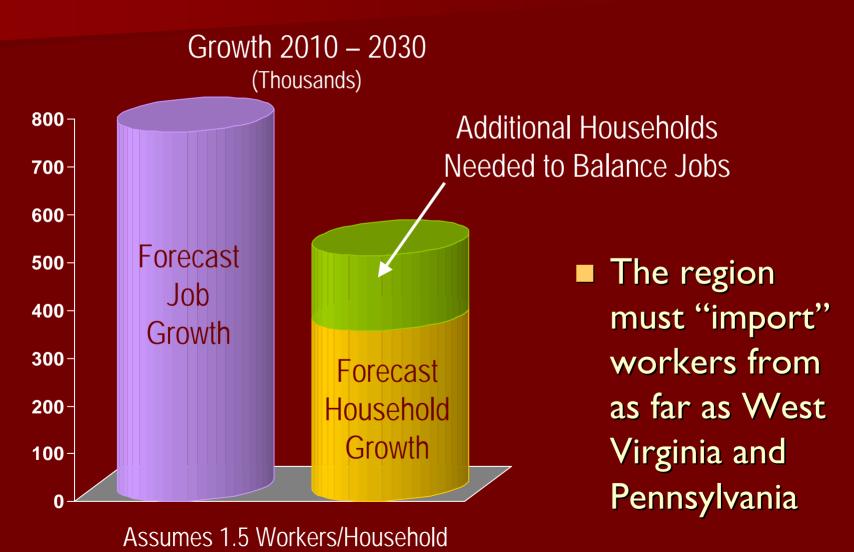
## Scenario Assumptions and Principles

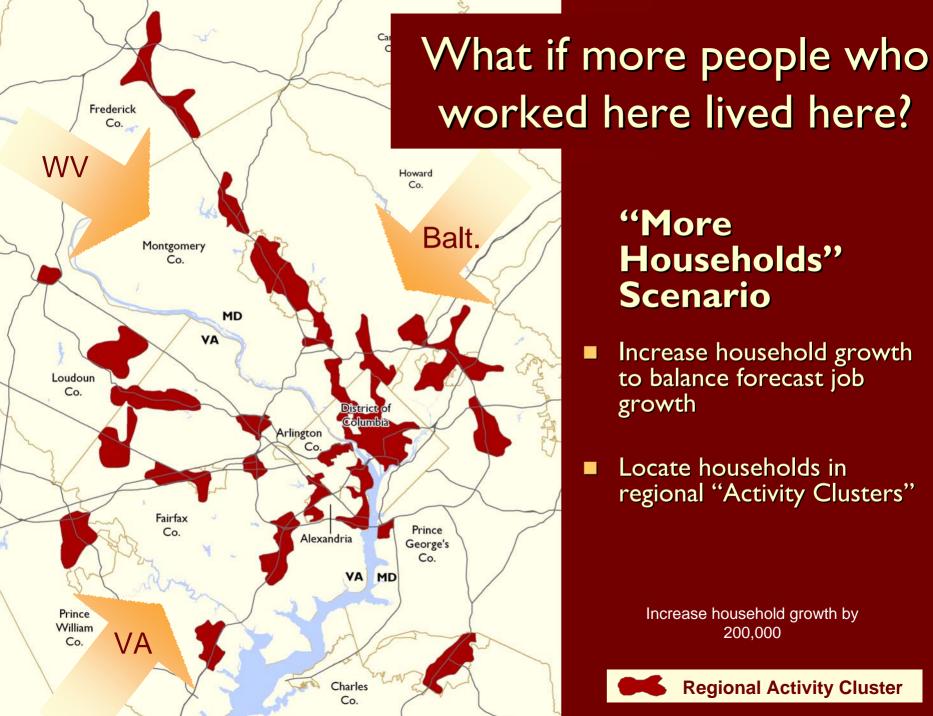
- Bring workers and jobs closer together
- Create jobs and housing balance
- Not restricted by zoning or comprehensive plans but changes must be "realistic"
- Land use changes to go hand-in-hand with transit
- Land use changes to begin in 2010

## Developing the Scenarios:

# What are the key challenges examined in the study?

# Issue I: Job growth is outpacing household growth





#### "More Households" **Scenario**

- Increase household growth to balance forecast job growth
- Locate households in regional "Activity Clusters"

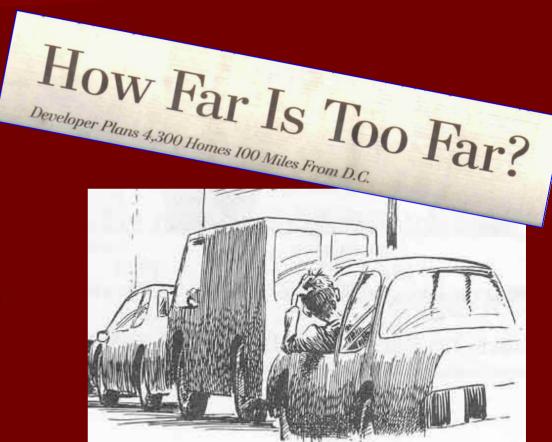
Increase household growth by 200,000

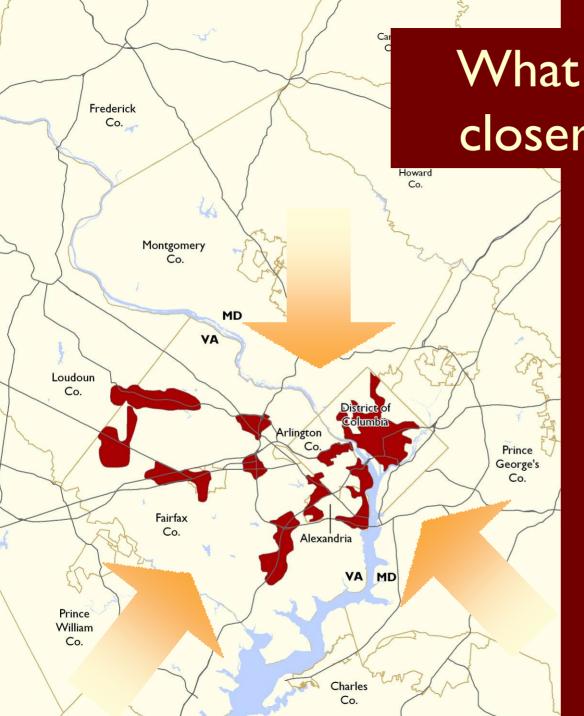


**Regional Activity Cluster** 

# Issue 2: Workers are living farther away from their jobs

- Job growth concentrated in inner jurisdictions
- Residential growth concentrated in outer jurisdictions





# What if people lived closer to their jobs?

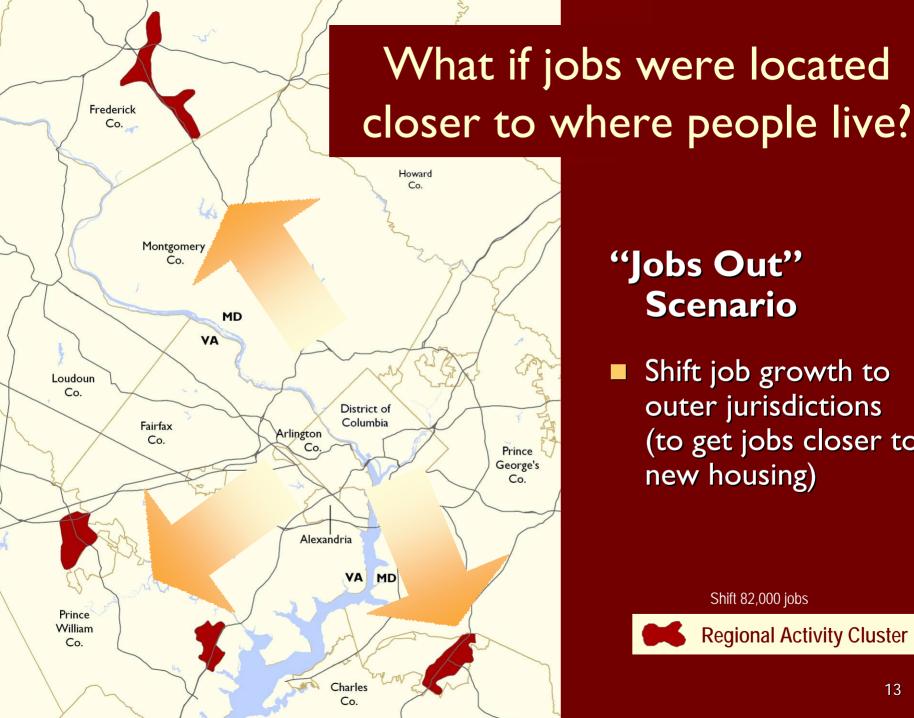
## "Households In" Scenario

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

Shift 84,000 households



**Regional Activity Cluster** 



#### "Jobs Out" **Scenario**

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

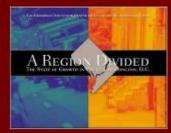
Shift 82,000 jobs



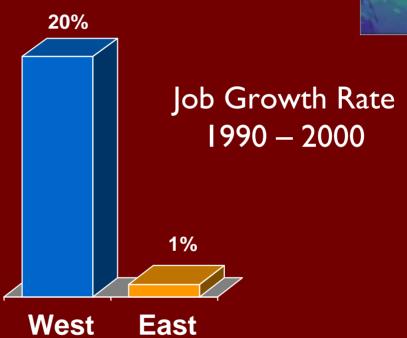
**Regional Activity Cluster** 

#### Issue 3: East-West Divide

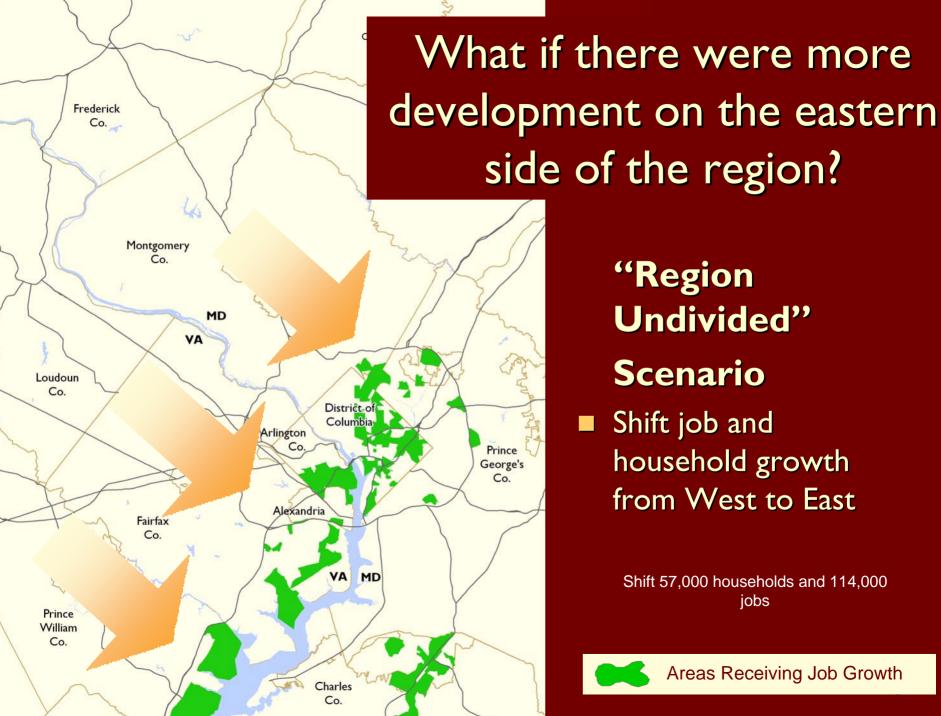
1999 Brookings Institution report found regional disparities between east & west.











"Region **Undivided**"

**Scenario** 

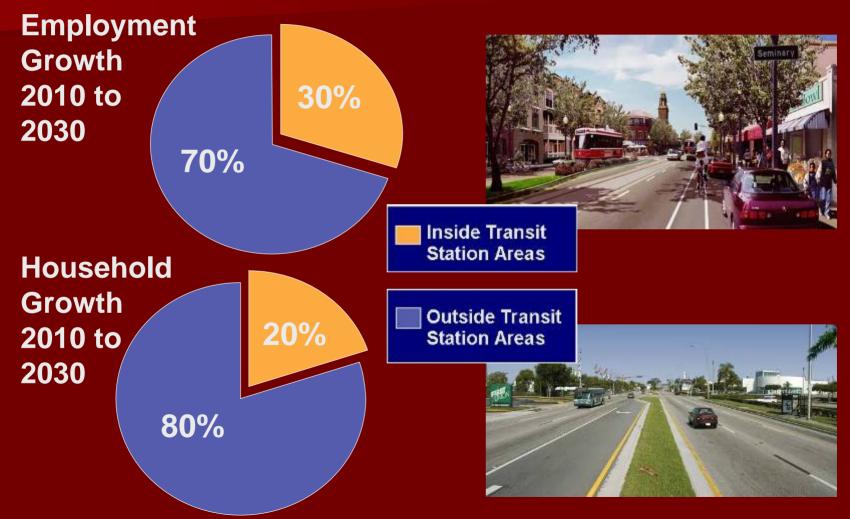
Shift job and household growth from West to East

> Shift 57,000 households and 114,000 iobs

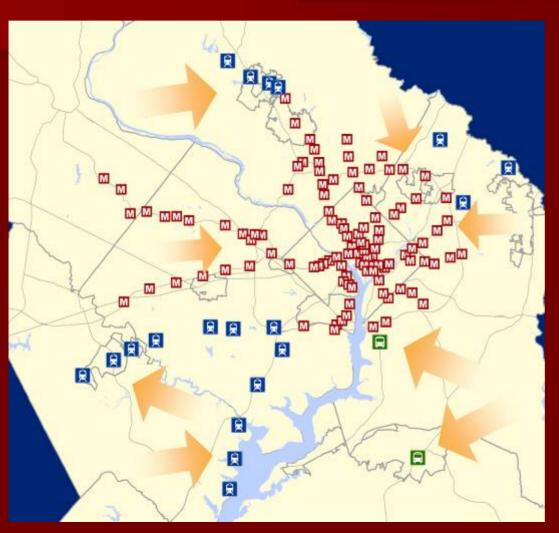


Areas Receiving Job Growth

# Issue 4: Most growth will be located outside transit station areas



# What if people lived and worked closer to transit?



# "TransitOriented Development" Scenario

 Locate job and household growth around transit stations

#### I-270 Transitway Frederick Co. Howard Co. MD 97 Transitway Montgomery MD | Transitway **Bi-County** Light Rail MD MD 193 VA **Transitway** Loudoun Co. DC Light Rail US 50 Transitway Metrorail Arlington **Extension to** Prince Centerville George's **VRE** Extension to Co. **Haymarket** Columbia Pike Alexandria **Transitway MD 4 Transitway** Fairfax Co. **VA I Transitway** MD **VRE Extension to** MD 5/301 Fauquier Co. **Light Rail** Prince William Metrorail: Co. MD 210 Branch Ave to Transitway Eisenhower Ave Charles Co.

What if there were more transit facilities?

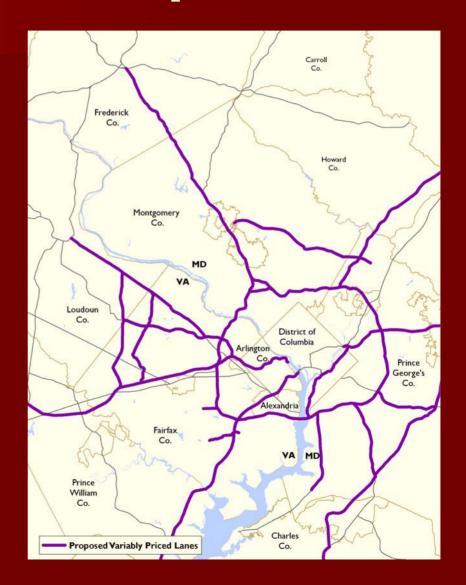
Transitprojectschosen tomatch eachscenario



## **Next Step:**

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

Results expected by the end of 2007

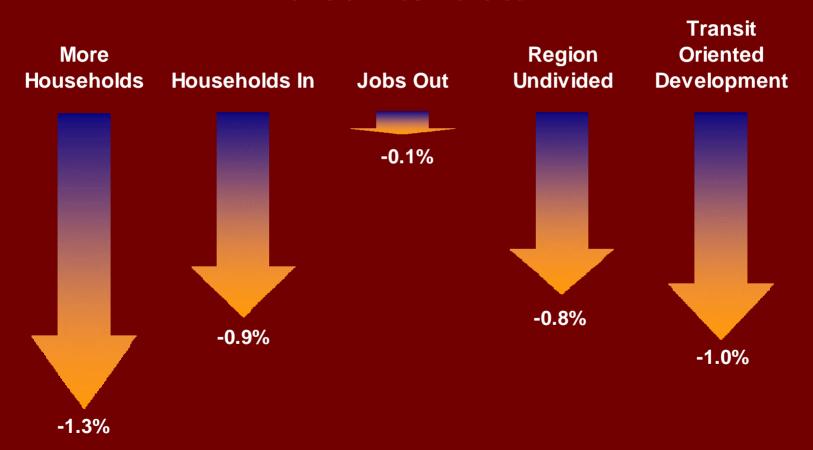


## Analyzing the Scenarios

## 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

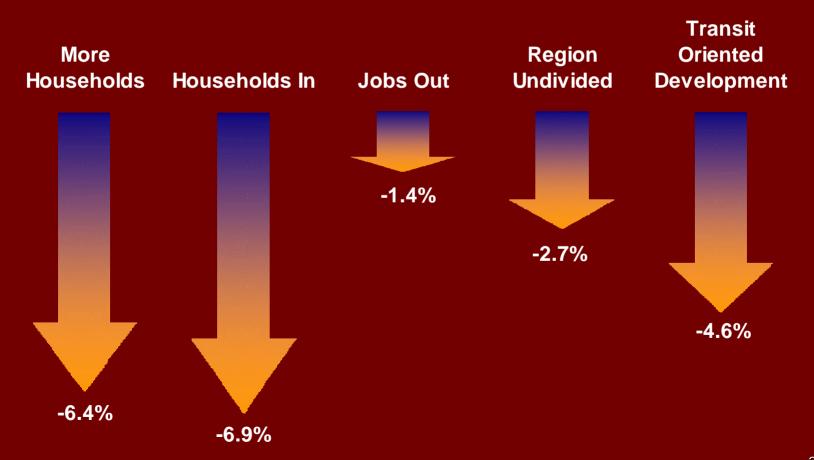
2030 Baseline: 24

"More Households": 22

### Congestion would decrease

Compared to baseline forecasts for 2030

#### Lane Miles of Severe AM Peak Period Congestion



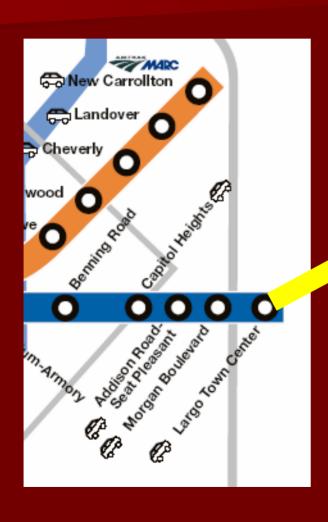
#### Transit use would increase\*

Compared to baseline forecasts for 2030



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

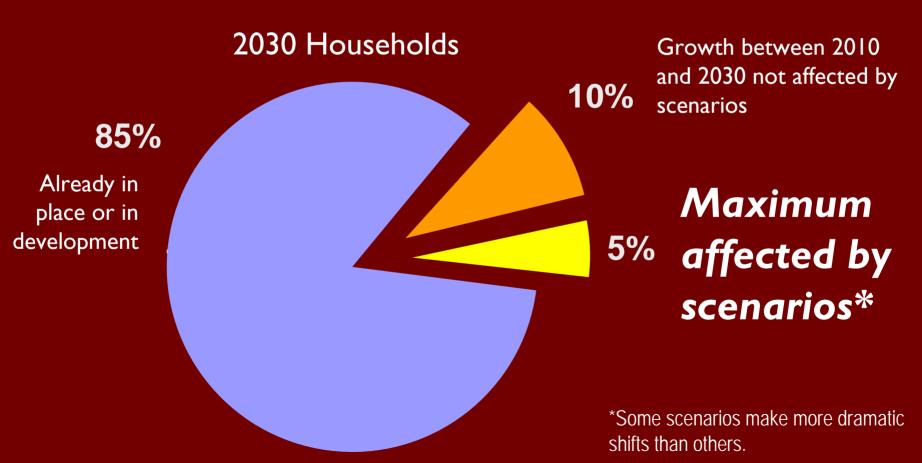
### Local impacts could be greater



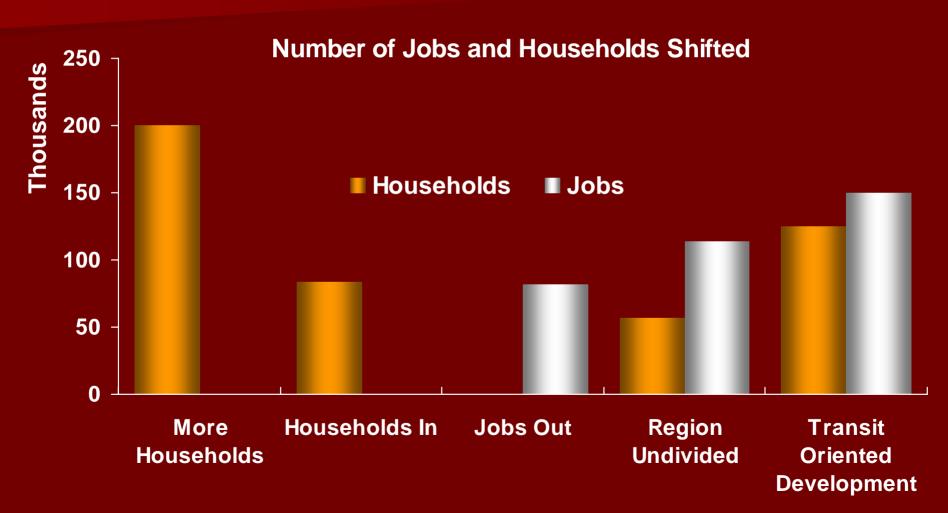
Transit
commute trips
to the Largo
area would
more than
double.

#### Scenario Limitations:

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



# Some scenarios make more dramatic land use changes than others



#### What do the scenarios tell us?

We can positively affect transportation conditions if we find ways to:

- Increase housing
- Decrease distances between jobs and houses
- Address the east/west regional divide
- Focus more development in regional activity centers and in transit-oriented developments

#### But..."let's be realistic!"

#### Some comments:

- The scenarios are too extreme...
- The scenarios are *too timid...*



## Moving to Implementation

■ COG's Round 7.0 cooperative forecasts for population and employment growth include 2/3 of the new households assumed under the "More Households" scenario.



#### From "What If" to "How To"

#### Possible next steps:

- At the *macro* level: Determine which aspects of the scenarios would:
  - Have the highest pay-offs
  - Be most realistic
  - Be most desirable
- At the *micro* level:
  - Work with jurisdictions to implement changes at the local level...

The Transportation/Land-Use
Connections (**TLC**) program
is supporting community
planning efforts

