



# Shaping the Future of Transportation in the Region's Northeast Corridor!

## **Nashville Area Metropolitan Planning Organization**

Mayor Ernest Burgess, Chairman

Mayor Karl Dean, Vice Chairman

Michael Skipper, Executive Director

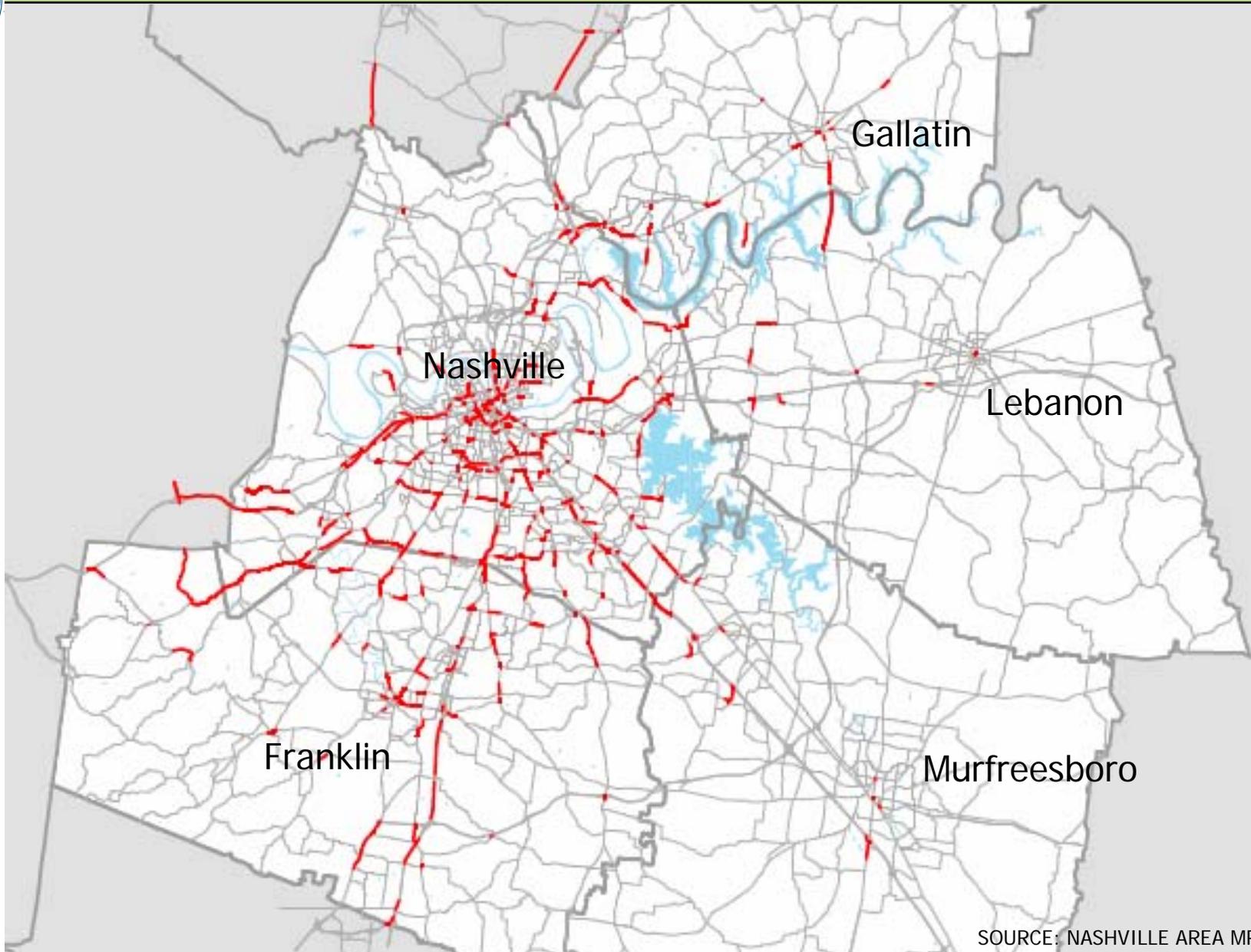
Félix Castrodad, Project Manager, NE Corridor Mobility Study

***[www.nashvillempo.org/northeast](http://www.nashvillempo.org/northeast)***



# EXISTING CONGESTION

NORTH EAST CORRIDOR MOBILITY STUDY

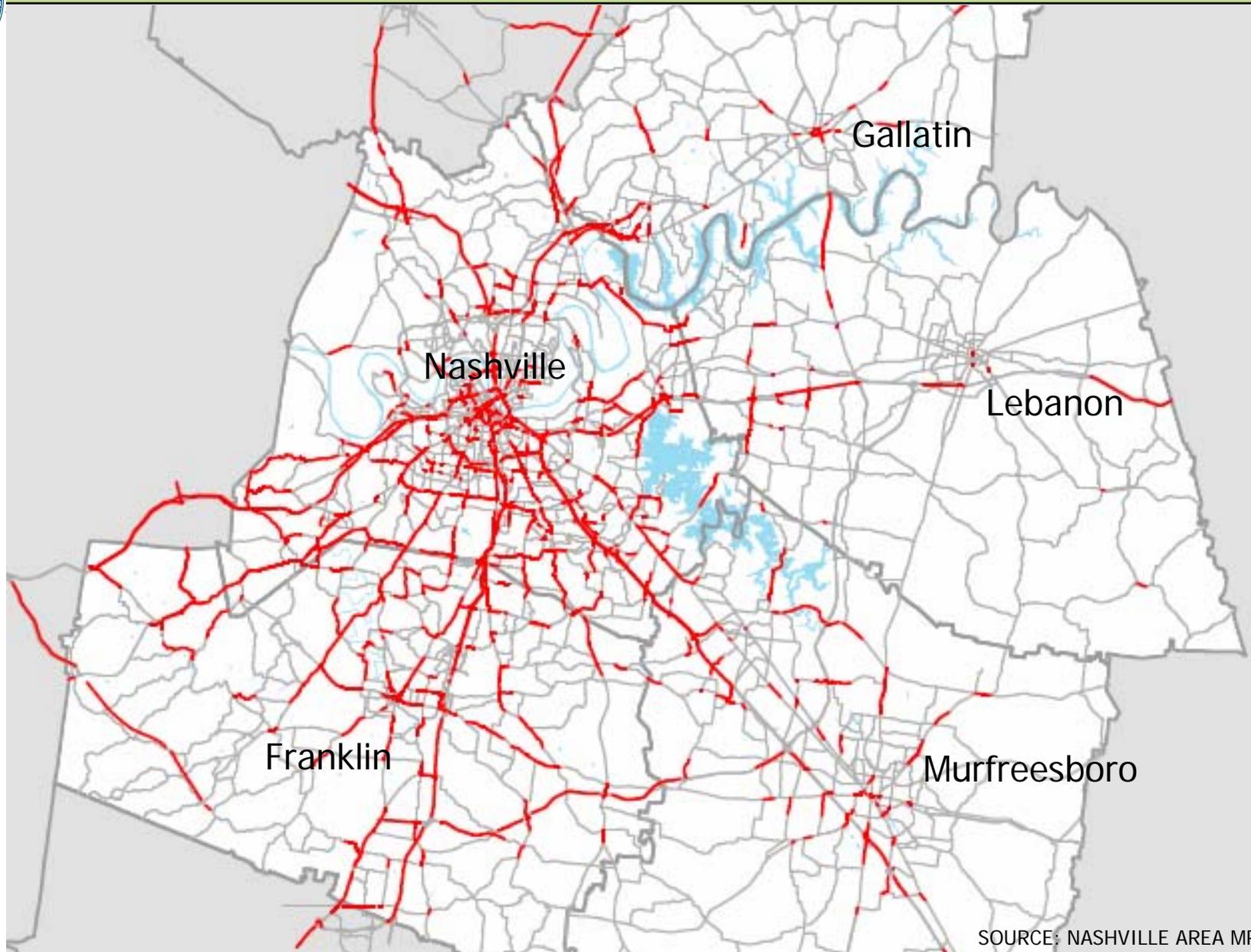


SOURCE: NASHVILLE AREA MPO



# FUTURE CONGESTION (2030)

NORTH EAST CORRIDOR MOBILITY STUDY



SOURCE: NASHVILLE AREA MPO

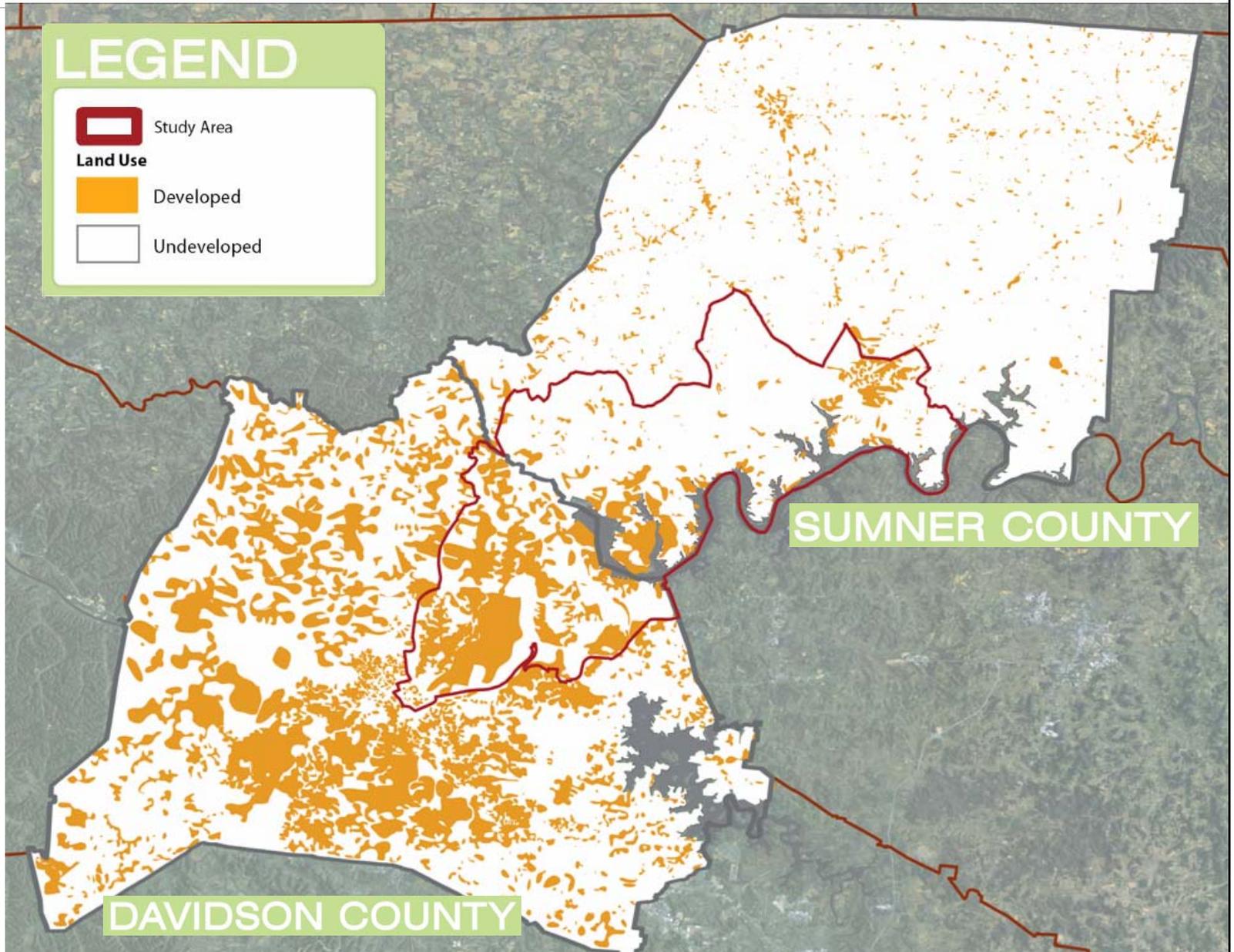


# 1970'S DEVELOPMENT PATTERN

NORTHEAST CORRIDOR MOBILITY STUDY

## LEGEND

-  Study Area
- Land Use**
-  Developed
-  Undeveloped



DAVIDSON COUNTY

SUMNER COUNTY

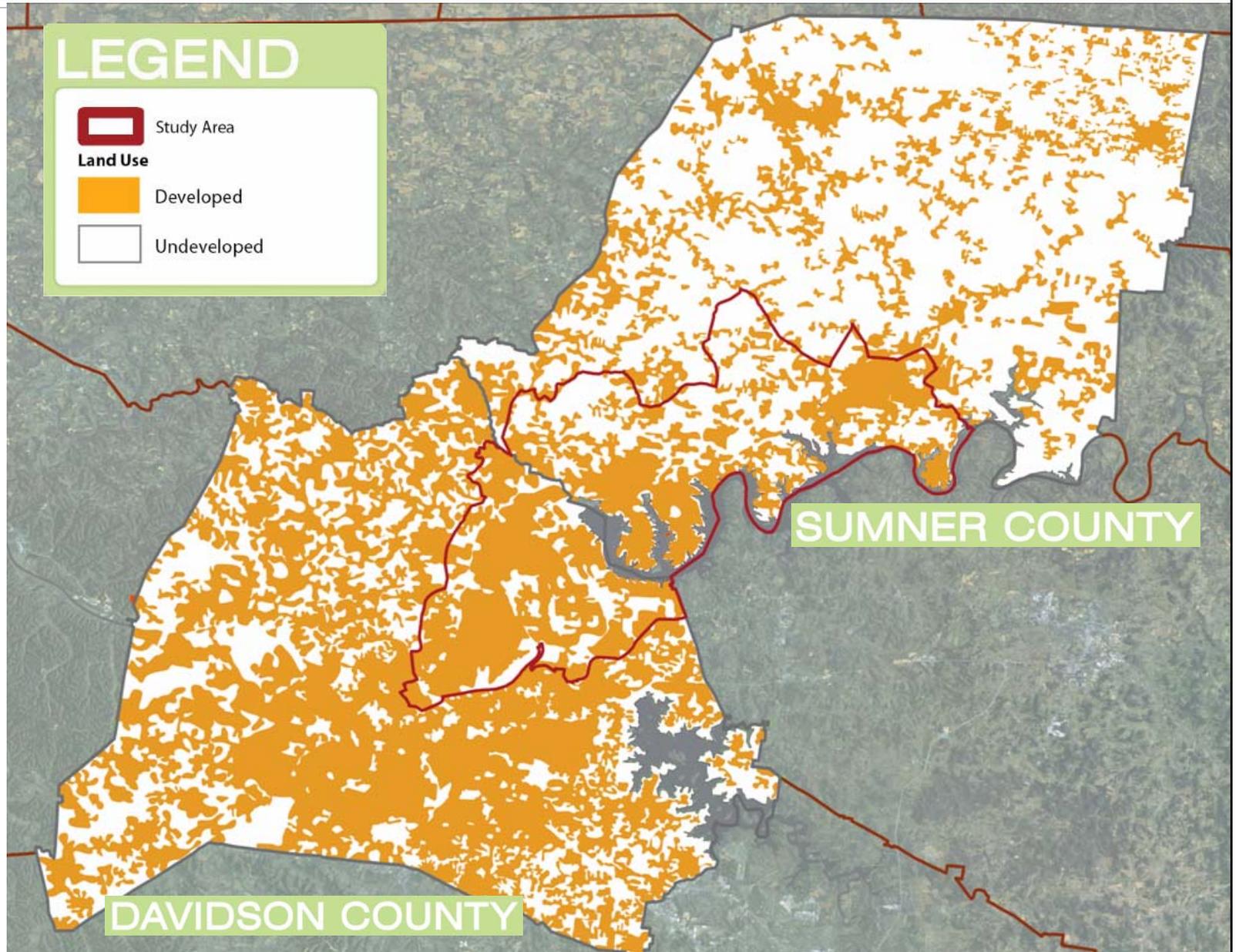


# EXISTING DEVELOPMENT PATTERN

NORTHEAST CORRIDOR MOBILITY STUDY

## LEGEND

-  Study Area
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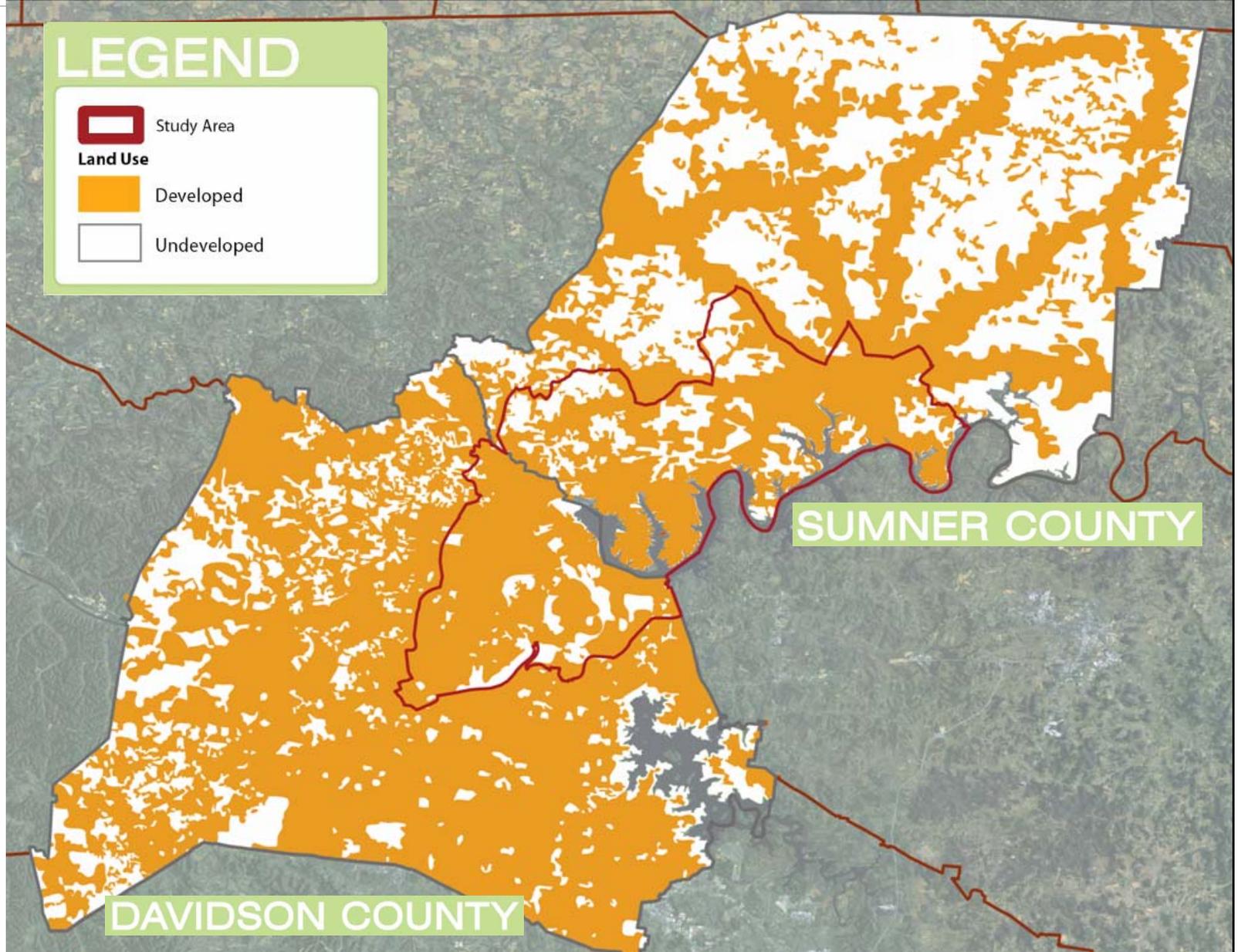


# 2030 DEVELOPMENT PATTERN?

NORTHEAST CORRIDOR MOBILITY STUDY

## LEGEND

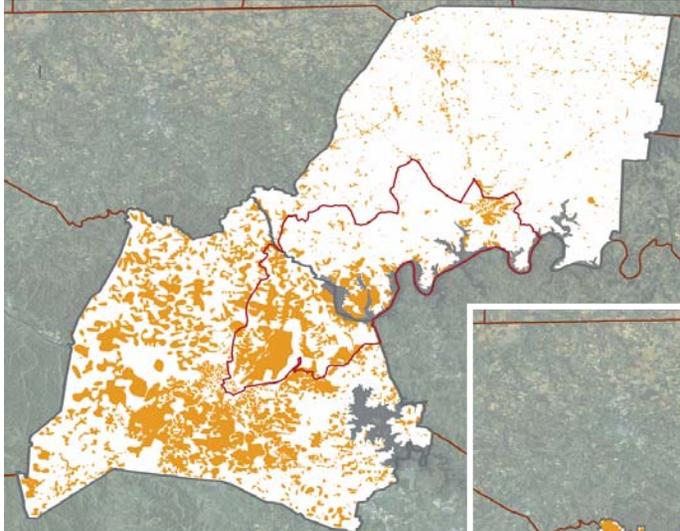
-  Study Area
- Land Use**
-  Developed
-  Undeveloped



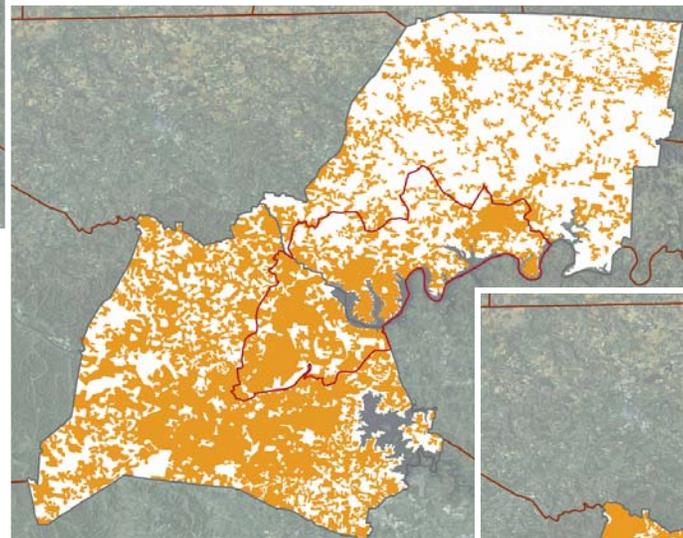


# PAST, PRESENT, FUTURE?

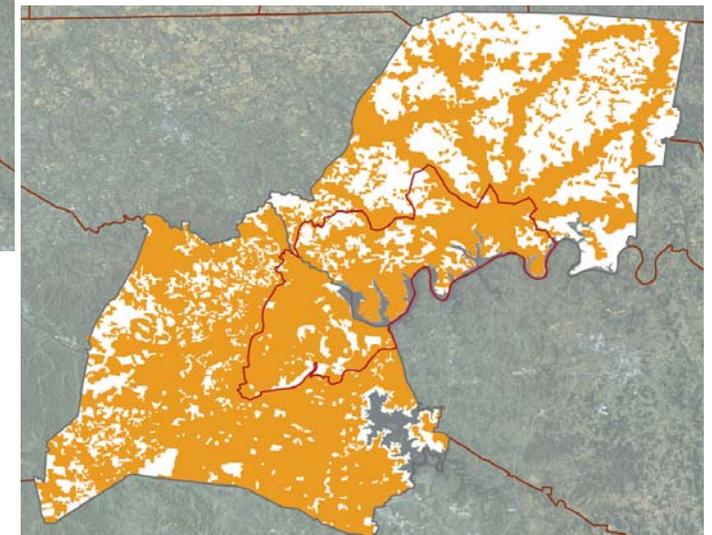
NORTHEAST CORRIDOR MOBILITY STUDY



PAST



PRESENT

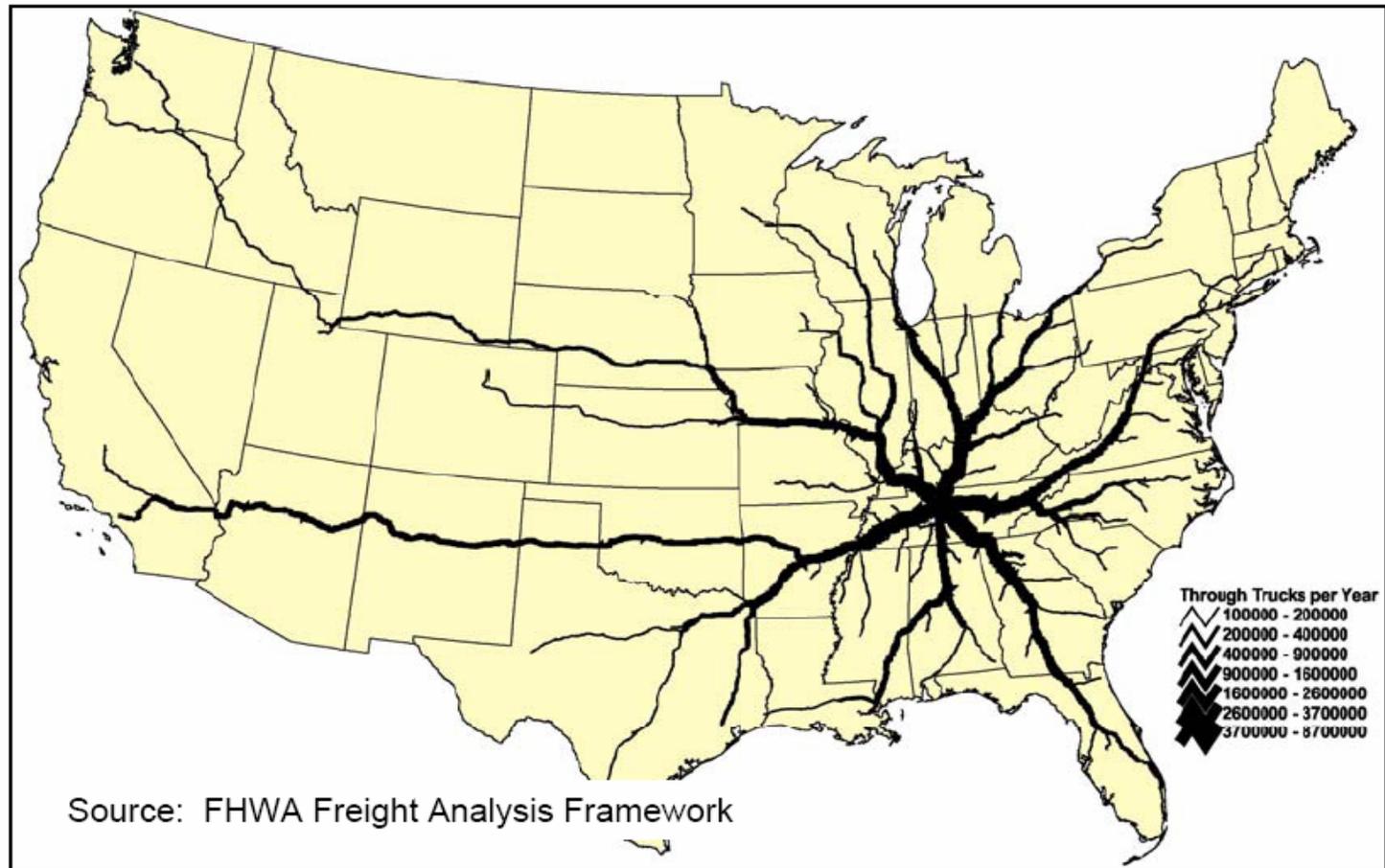


FUTURE???



# TRANSPORTATION IS A REGIONAL ISSUE

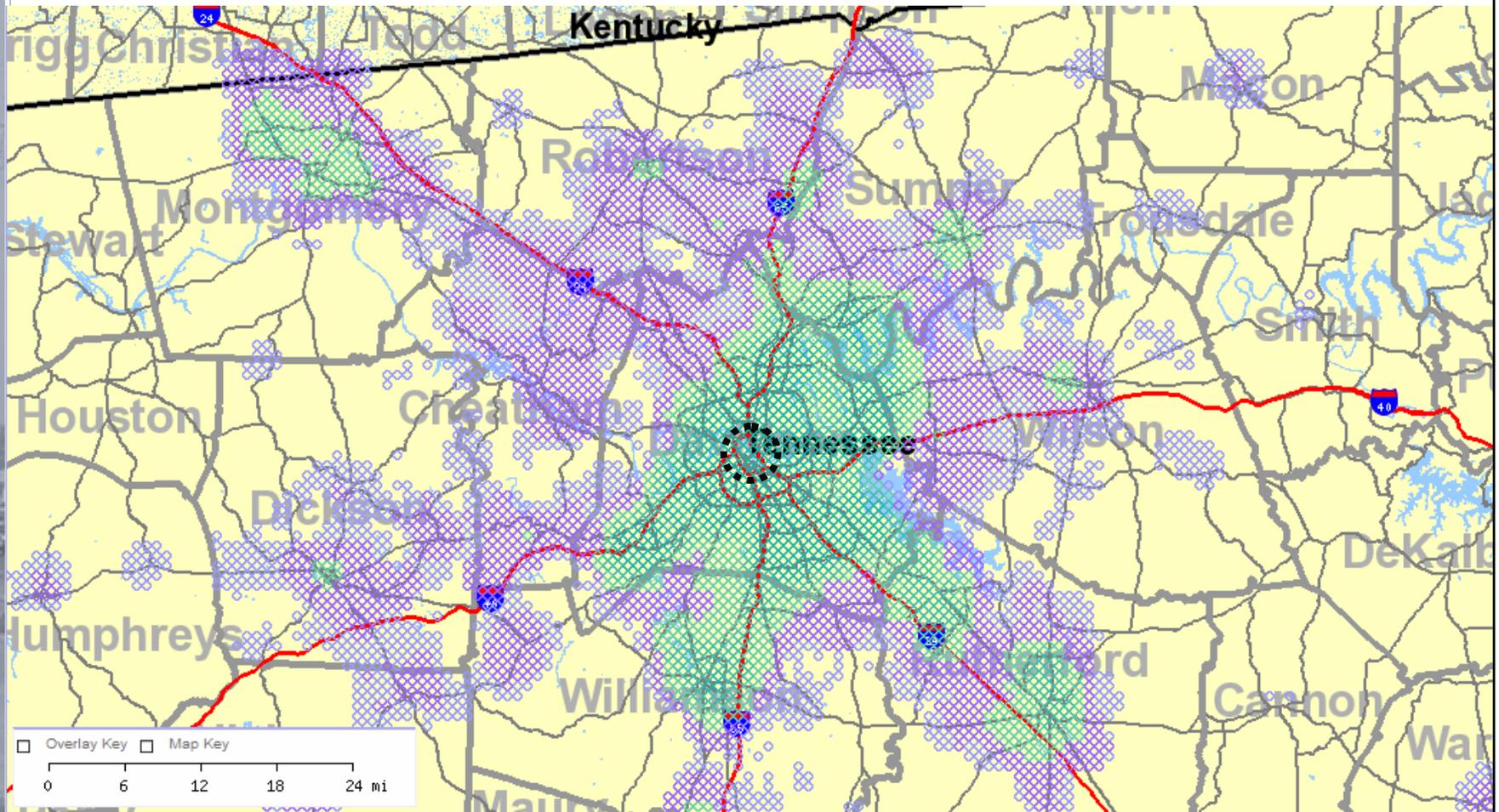
NORTH EAST CORRIDOR MOBILITY STUDY





# TRANSPORTATION IS A REGIONAL ISSUE

Work in Downtown Nashville, LIVE in.....



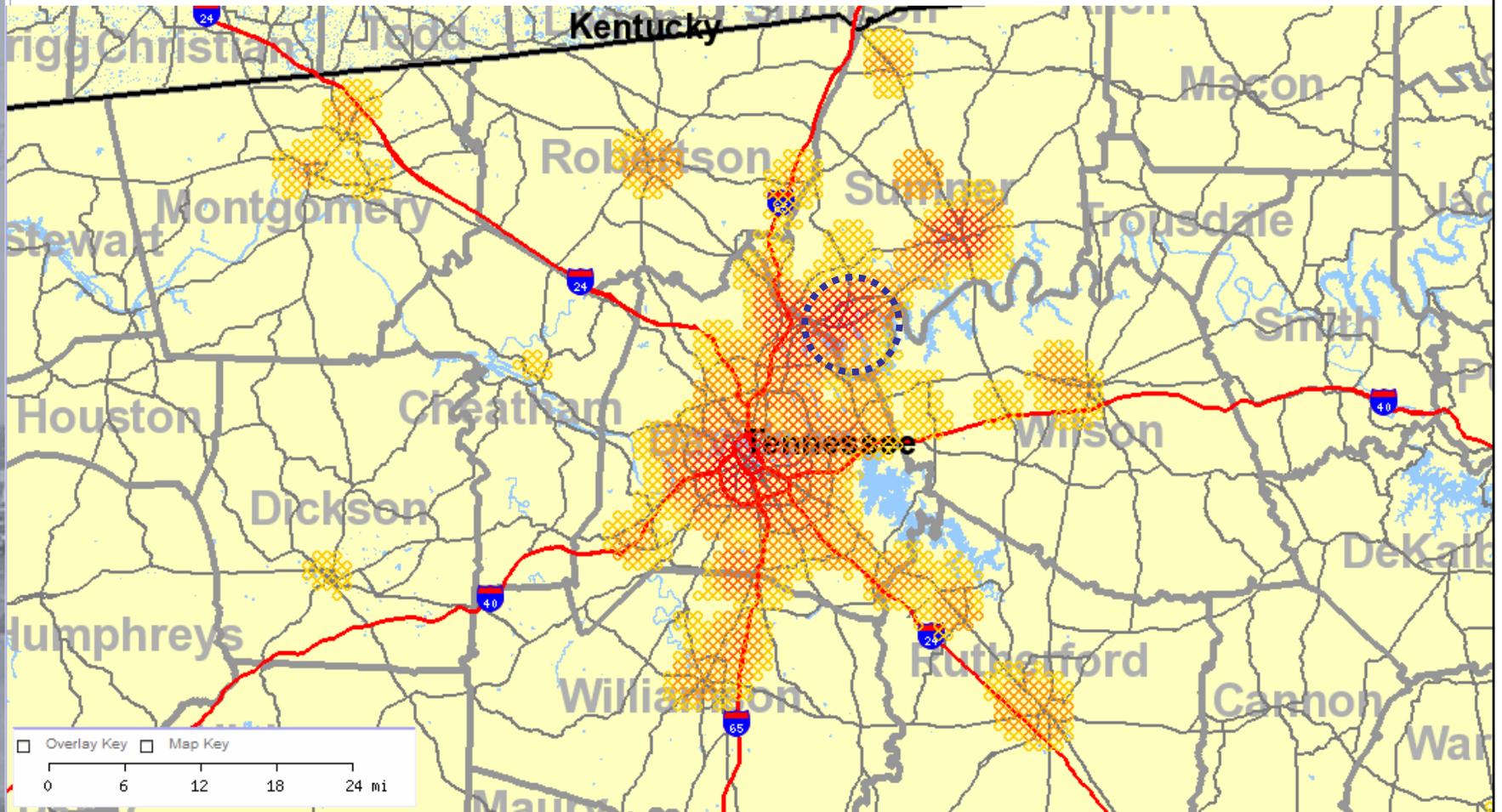
NORTH EAST CORRIDOR MOBILITY STUDY

SOURCE: US CENSUS BUREAU / US DEPT OF LABOR (2004)



# TRANSPORTATION IS A REGIONAL ISSUE

Live in Hendersonville area, WORK in.....



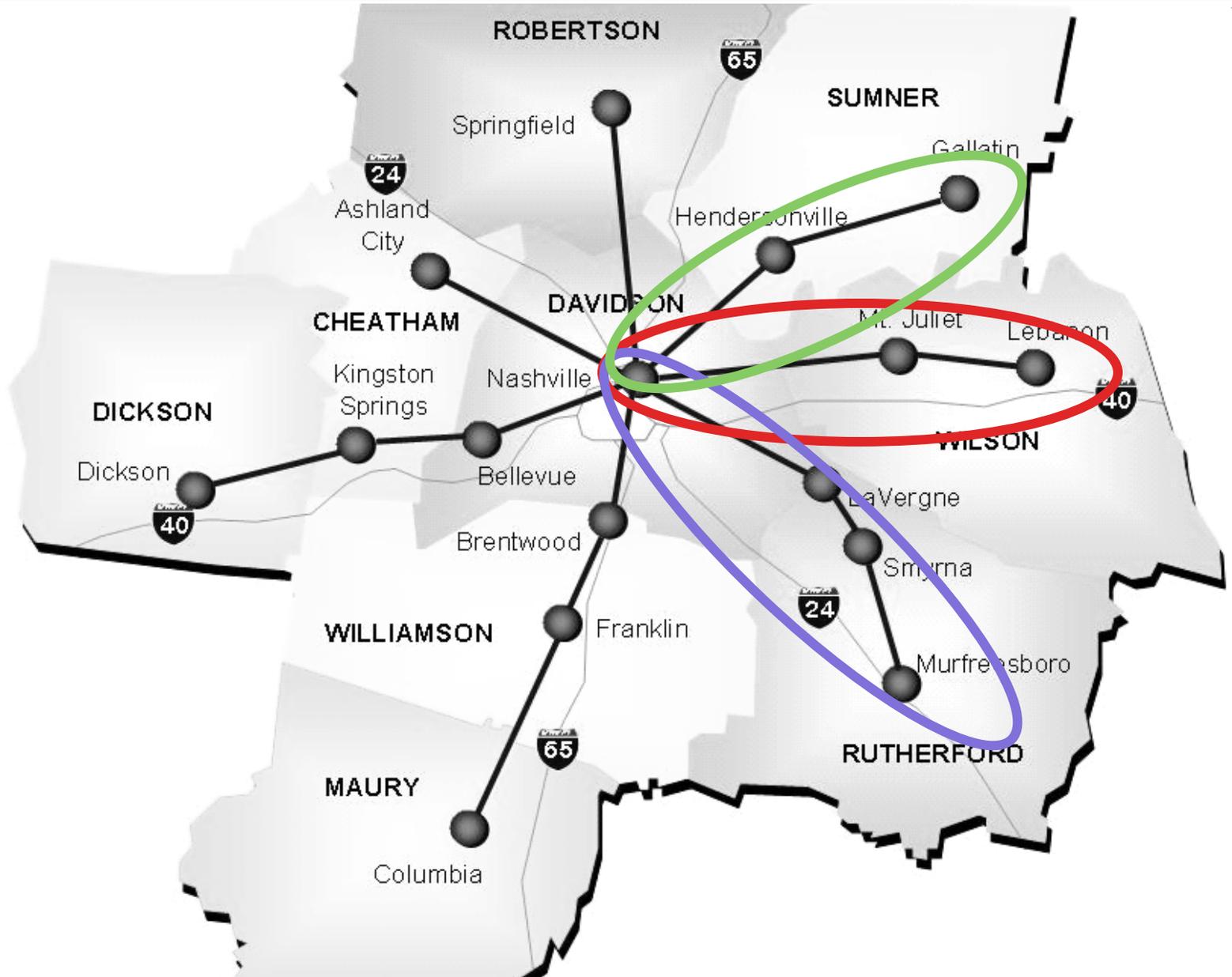
NORTH EAST CORRIDOR MOBILITY STUDY

SOURCE: US CENSUS BUREAU / US DEPT OF LABOR (2004)



# REGIONAL CORRIDORS

NORTHEAST CORRIDOR MOBILITY STUDY





# NORTH EAST CORRIDOR MOBILITY STUDY

NORTH EAST CORRIDOR MOBILITY STUDY

**DEVELOP TRANSPORTATION SOLUTIONS  
THAT SUPPORT COMMUNITY PRIORITIES &  
LOCAL GROWTH POLICIES**

**INSTITUTE LAND USE POLICIES & URBAN  
DESIGN GUIDELINES THAT SUPPORT  
TRANSPORTATION INVESTMENTS**



# WHAT'S IMPORTANT TO YOU?

NORTH EAST CORRIDOR MOBILITY STUDY

**Work Commute Times** ?    **Transportation Choices** ??????

**Access to Schools**    ????    **Walk-ability**    **Energy Consumption**

**Fuel Costs**    **Natural Habitat**    ????    **Water Quality**    **Open-Space**

**Parks & Recreation**    ????    **Quality of Schools**    **Police & Fire Services**

????    **Water / Wastewater Services**    **Air Quality**    **Natural Vistas**

**Historical/ Cultural Landmarks**    ???????    **Community Character**

**Affordable Housing Choices**    **Crime**    ??????    **Personal Safety**

**Security**    ???????    **Property Values**    ????    **Cost of Living**    ??????

**Entertainment / Dining Choices**    ??????    **Economic Opportunity**    ??????



# YOUR DRAFT GUIDING PRINCIPLES

N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y

***Expand and promote alternative transportation options to reduce congestion, protect air quality, and facilitate desired walkable development patterns***



NORTH EAST CORRIDOR MOBILITY STUDY

# Visual Preference Survey



# Character Preference Survey

## Variety of design options

- ▶ Land use
- ▶ Transportation
- ▶ Urban design
- ▶ Give us your “first impression”
  - ▶ Rate each image on a scale of 1 to 5
  - ▶ 1 is least desirable
  - ▶ 5 is most desirable



# Audience Response Survey

- Use your response card to answer the survey questions on the following presentation.
- Upon pressing a button, a green light indicates you have responded. A person cannot vote more than once.
- Not useful to open garages, switch TV channels, etc.

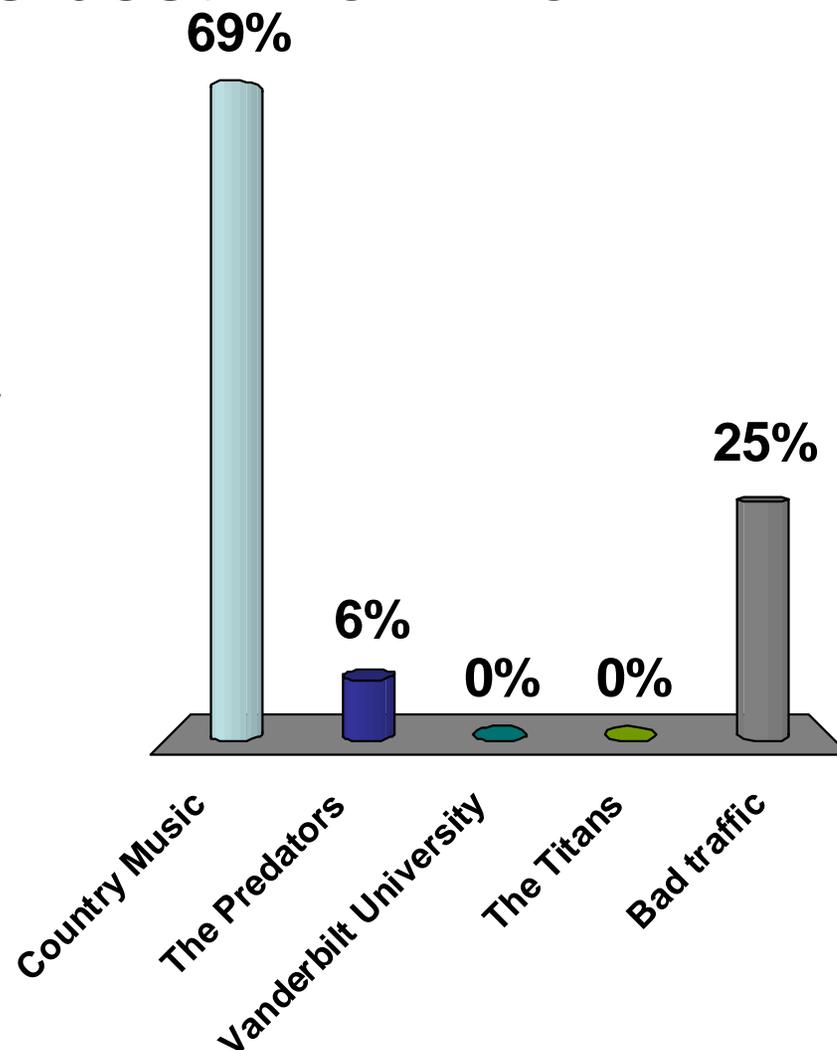




## Warm Up Question

The Nashville area is best known for?

1. Country Music
2. The Predators
3. Vanderbilt University
4. The Titans
5. Bad traffic

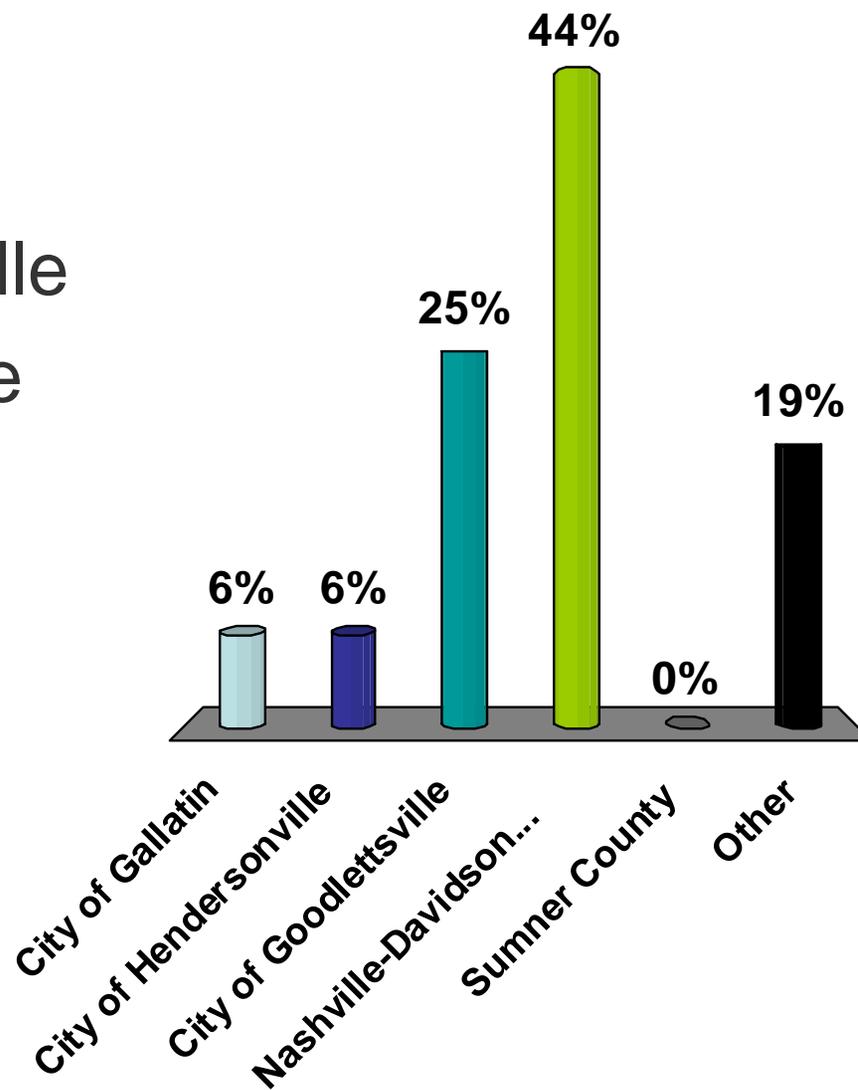




# Where do you live?

I live in:

1. City of Gallatin
2. City of Hendersonville
3. City of Goodlettsville
4. Nashville-Davidson County
5. Sumner County
6. Other

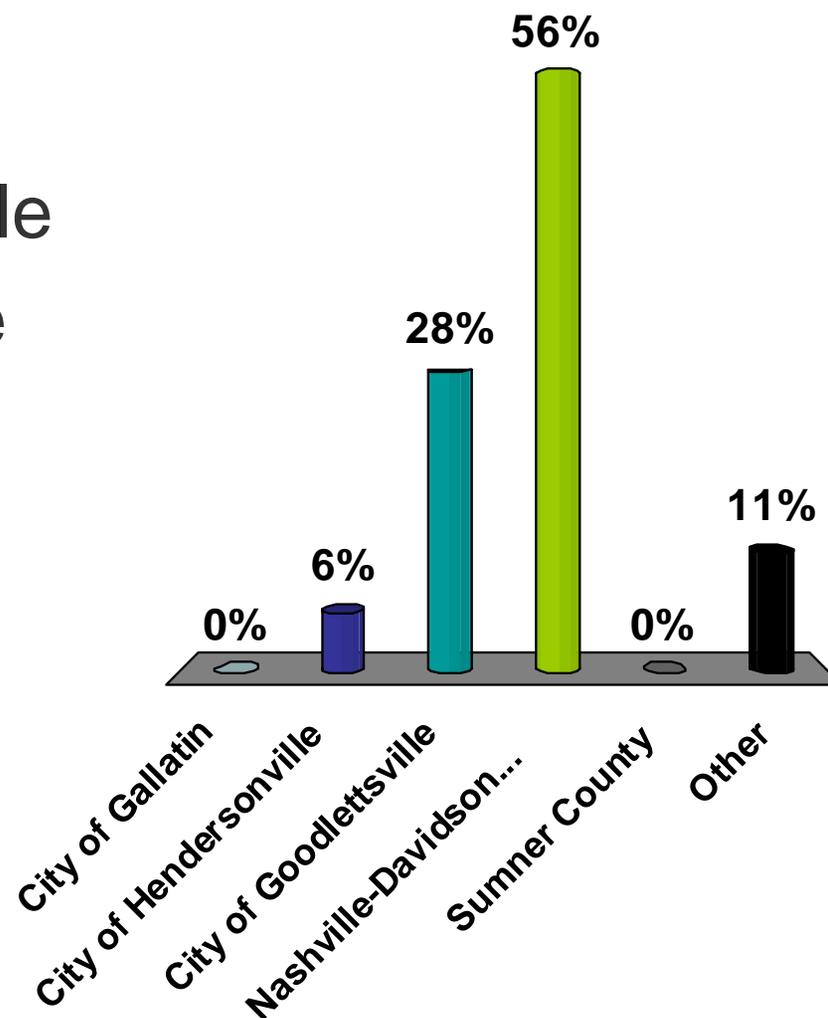




# Where do you work?

I work in:

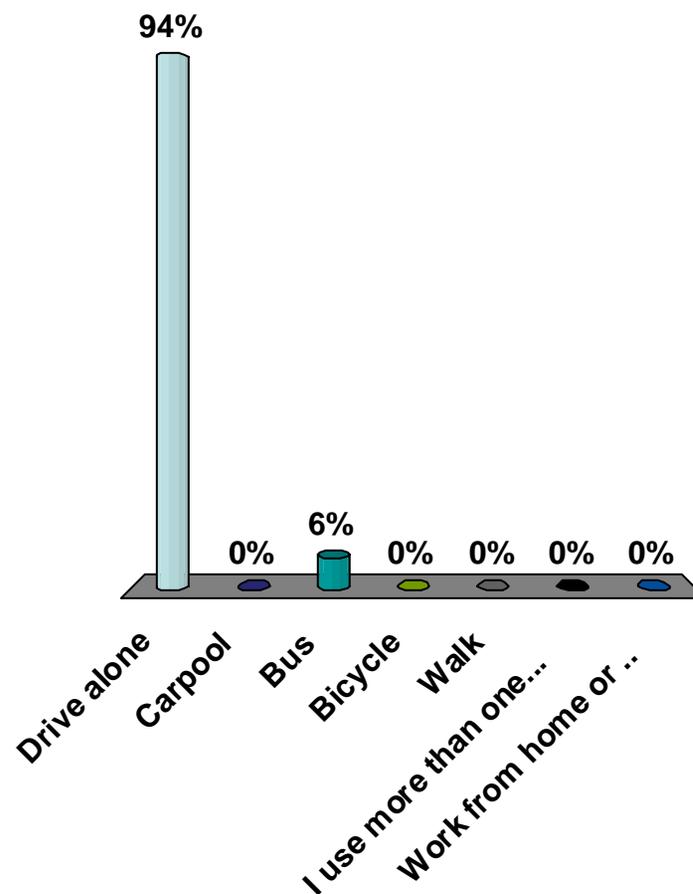
1. City of Gallatin
2. City of Hendersonville
3. City of Goodlettsville
4. Nashville-Davidson County
5. Sumner County
6. Other





# How do you commute to work?

1. Drive alone
2. Carpool
3. Bus
4. Bicycle
5. Walk
6. I use more than one mode
7. Work from home or do not work





# What is your opinion for the Northeast Corridor?

NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



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NORTHEAST CORRIDOR MOBILITY STUDY



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NORTHEAST CORRIDOR MOBILITY STUDY



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BEN CAVETT  
PLANNING  
LEADER • ARCHITECT  
404-869-280

# What is your opinion for the Northeast Corridor?



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# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y





# What is your opinion for the Northeast Corridor?

NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y





# What is your opinion for the Northeast Corridor?

## Image #15



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY

43%



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



40.9ds

# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



85%

# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



Pointer 26°06'04.61" N 80°12'07.09" W elev 10 ft

Streaming 100%

Eye alt 4169 ft



# What is your opinion for the Northeast Corridor?

## Image #45



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y

23% 23% 23% 23%



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y



# What is your opinion for the Northeast Corridor?



## Image #60



# What is your opinion for the Northeast Corridor?



NORTHEAST CORRIDOR MOBILITY STUDY





# What Are the Options?

Transportation

Land Use

Urban Design



***Expand and promote alternative transportation options to reduce congestion, protect air quality, and facilitate desired walkable development patterns***



# TRANSPORTATION

## Express Bus



**0.9 dwelling units per acre**

- ▶ Service that runs faster than regular bus lines from downtowns to suburbs (Park and Ride)
- ▶ Land Use Density  $< 4$  dwelling units per acre
- ▶ Cost per mile: \$1-2M
- ▶ Station Type: Sidewalk sign, platform
- ▶ Limited stops along normal bus routes



# TRANSPORTATION

- ▶ Electric or diesel train consisting of local short distance travel between a central city and suburbs
- ▶ Land Use Density <4 dwelling units per acre
- ▶ Cost per mile: \$3-25M
- ▶ Station type: station, platform
- ▶ 2-5 miles between stations

## Commuter Rail Transit



0.9 dwelling units per acre



# TRANSPORTATION

- ▶ Transportation services using buses on existing road rights of way according to a fixed schedule
- ▶ Land Use Density 4-7 dwelling units per acre
- ▶ Employment Density 50-60 jobs per acre
- ▶ Station type: sidewalk sign, station, platform
- ▶ 0.25 miles between stations

## Local Bus Service



**61.5 jobs per acre**



# TRANSPORTATION

## Modern Streetcar



**7.0 dwelling units per acre**

- ▶ Common carrier rail transit that runs or has run on streets providing local service, picking up and discharging riders at any street corner
- ▶ Land Use Density 7-20 dwelling units per acre
- ▶ Cost per mile: \$10-25M
- ▶ Station type: sidewalk sign, station, platform
- ▶ 0.25 miles between stations



# TRANSPORTATION

- ▶ Modern use of trolleys designed between 1900 to 1950, either replica of original or restored original.
- ▶ Land Use Density 7-20 dwelling units per acre
- ▶ Cost per mile: \$2-12M
- ▶ Station type: sidewalk sign, station, platform
- ▶ 0.25 miles between stations

## Heritage Trolley



**7.0 dwelling units per acre**



# TRANSPORTATION

## Dedicated Lane BRT



**7 dwelling units per acre**

- ▶ Transportation services using buses to perform premium services on existing roadways or dedicated rights of way. Combines the flexibility of buses with the frequency and travel time advantages of rail transit
- ▶ Land Use Density 7-20 dwelling units per acre
- ▶ Cost per mile: \$4-40M
- ▶ Station type: sidewalk sign, station, platform
- ▶ 0.25-2 miles between stations



# TRANSPORTATION

## Heavy Rail Transit



**21 dwelling units per acre**

- ▶ Steel wheeled/electric powered vehicles with two or more cars operating on a fully grade separated right of way.
- ▶ Land Use Density 20-25+ dwelling units per acre
- ▶ Cost per mile: \$50-250M
- ▶ Station type: Station, platform
- ▶ >1 mile for urban areas to 1-5 miles between stations



# TRANSPORTATION

NORTH EAST CORRIDOR MOBILITY STUDY

- ▶ Vehicle with an overhead power supply that can operate in mixed traffic and wide-ranging alignment configurations
- ▶ Land Use Density 20-25+ dwelling units per acre
- ▶ Cost per mile: \$20-60M
- ▶ Station type: sidewalk sign, station, platform
- ▶ 1 mile between stations

## Light Rail Transit



**21 dwelling units per acre**



N O R T H E A S T C O R R I D O R M O B I L I T Y S T U D Y

# Break-Out Session



## Break-out Session

- ▶ **Where do you think growth should occur? Should not occur?**
- ▶ **What type of land uses should that growth include? What should it look like?**
- ▶ **How should the transportation system be built to support YOUR growth vision?**