



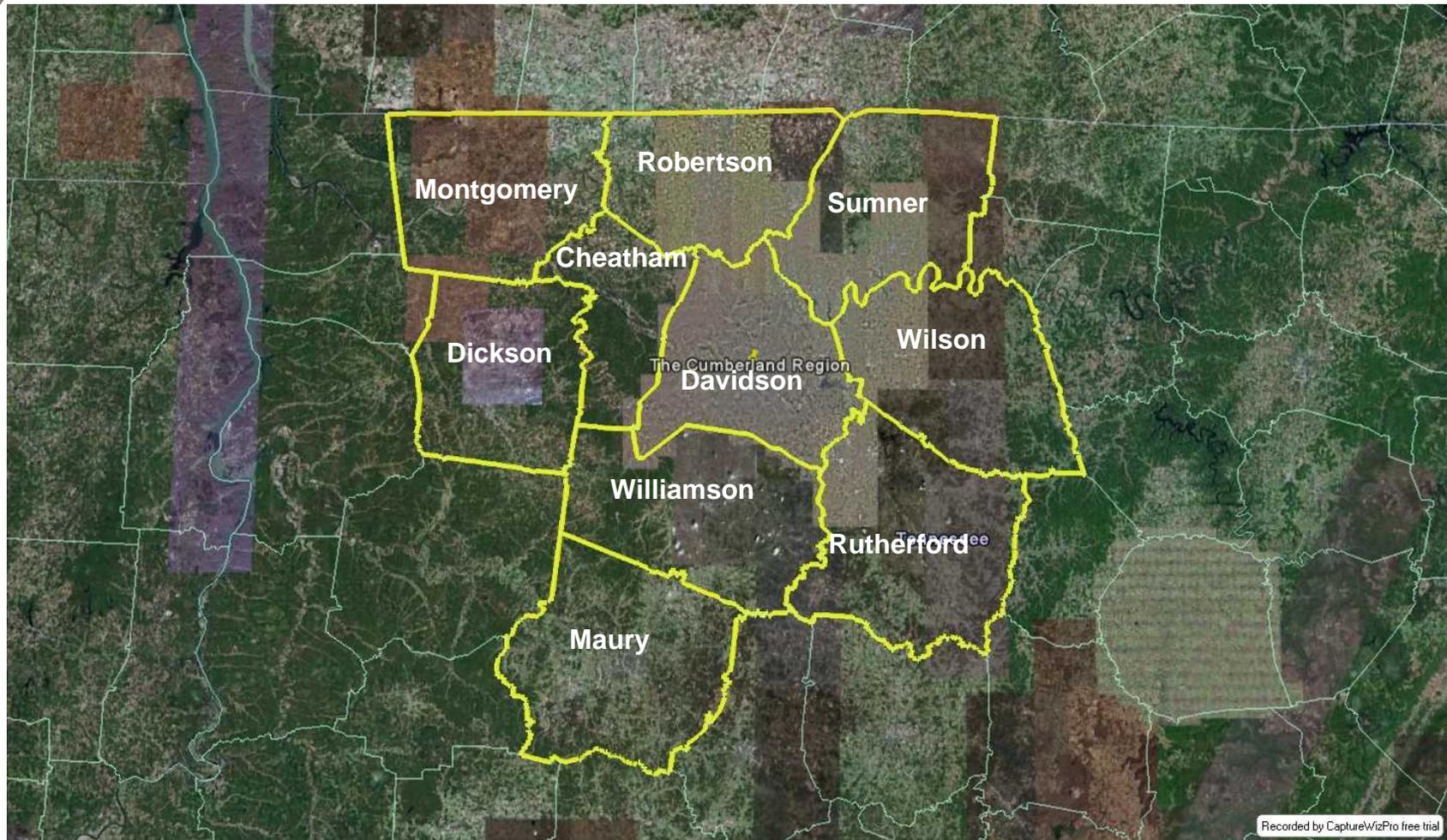
Nashville Area Metropolitan Planning Organization Tri-County Transportation & Land Use Study of Robertson, Sumner, Wilson Counties

Community Meeting – Sumner County
December 3, 2009

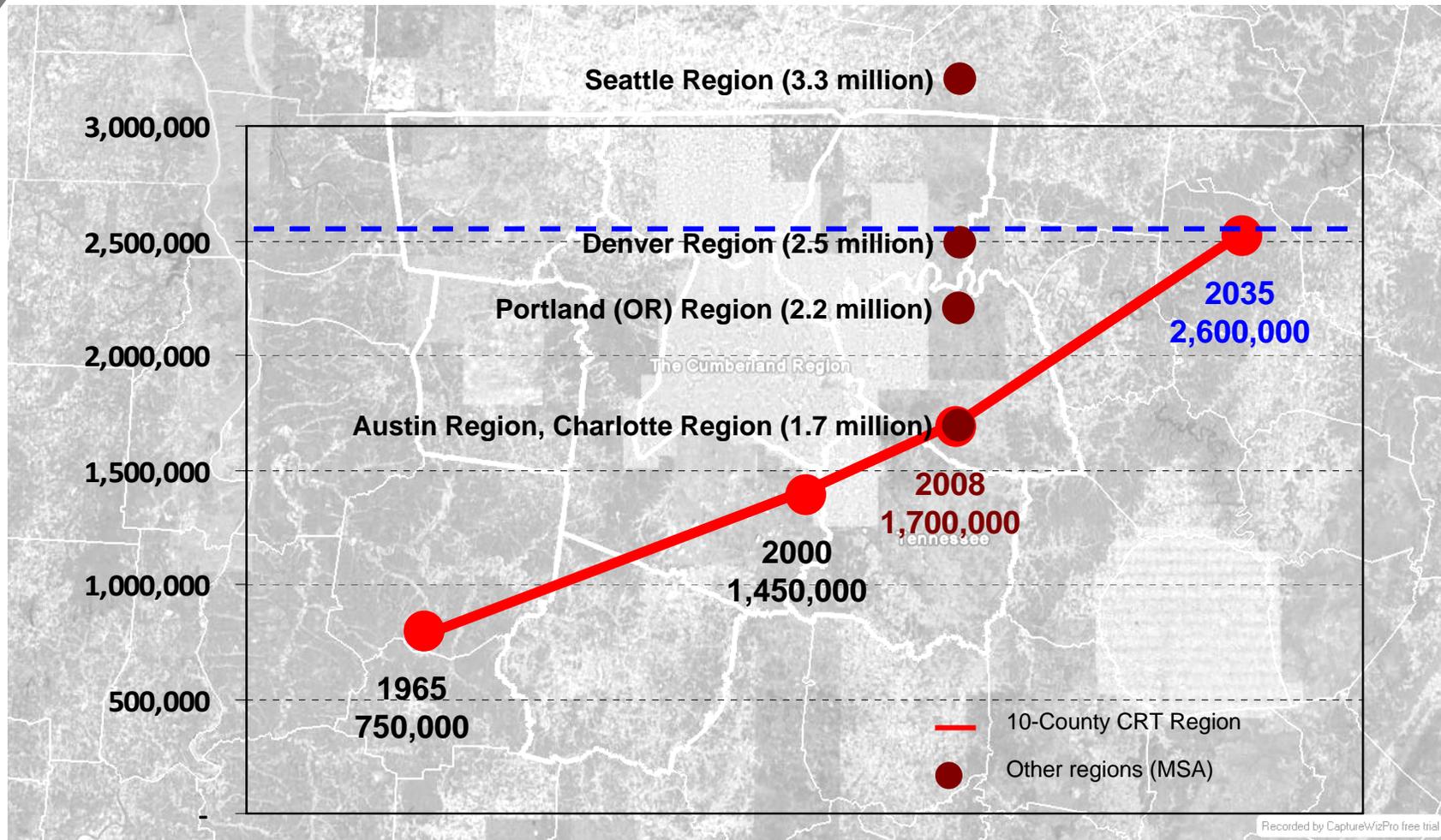


LandDesign • Kimley-Horn & Associates, Inc.
Basile Baumann Prost Cole & Associates, Inc. • Sterling Communications

10-County Middle Tennessee Area

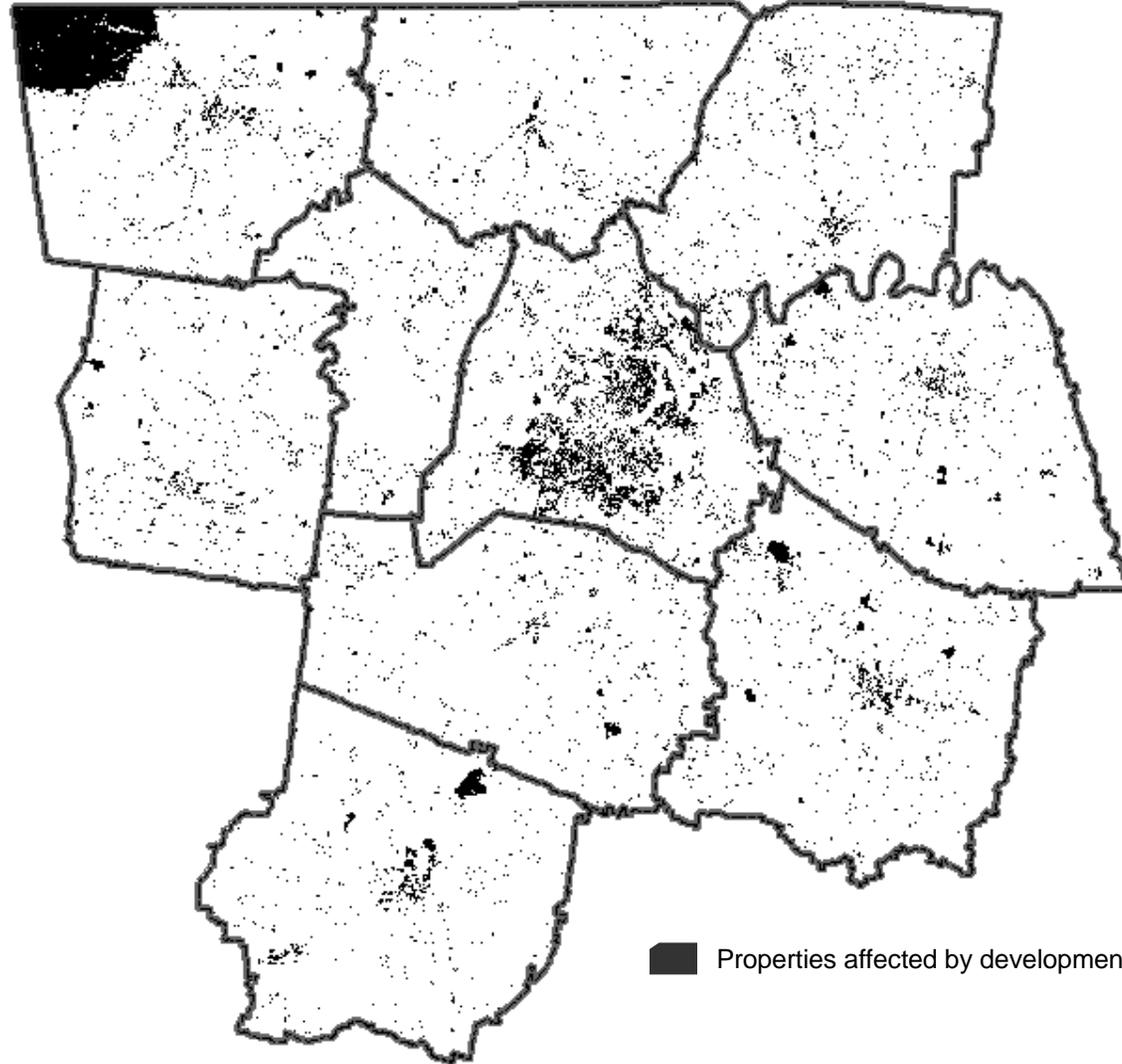


Regional Growth Trend



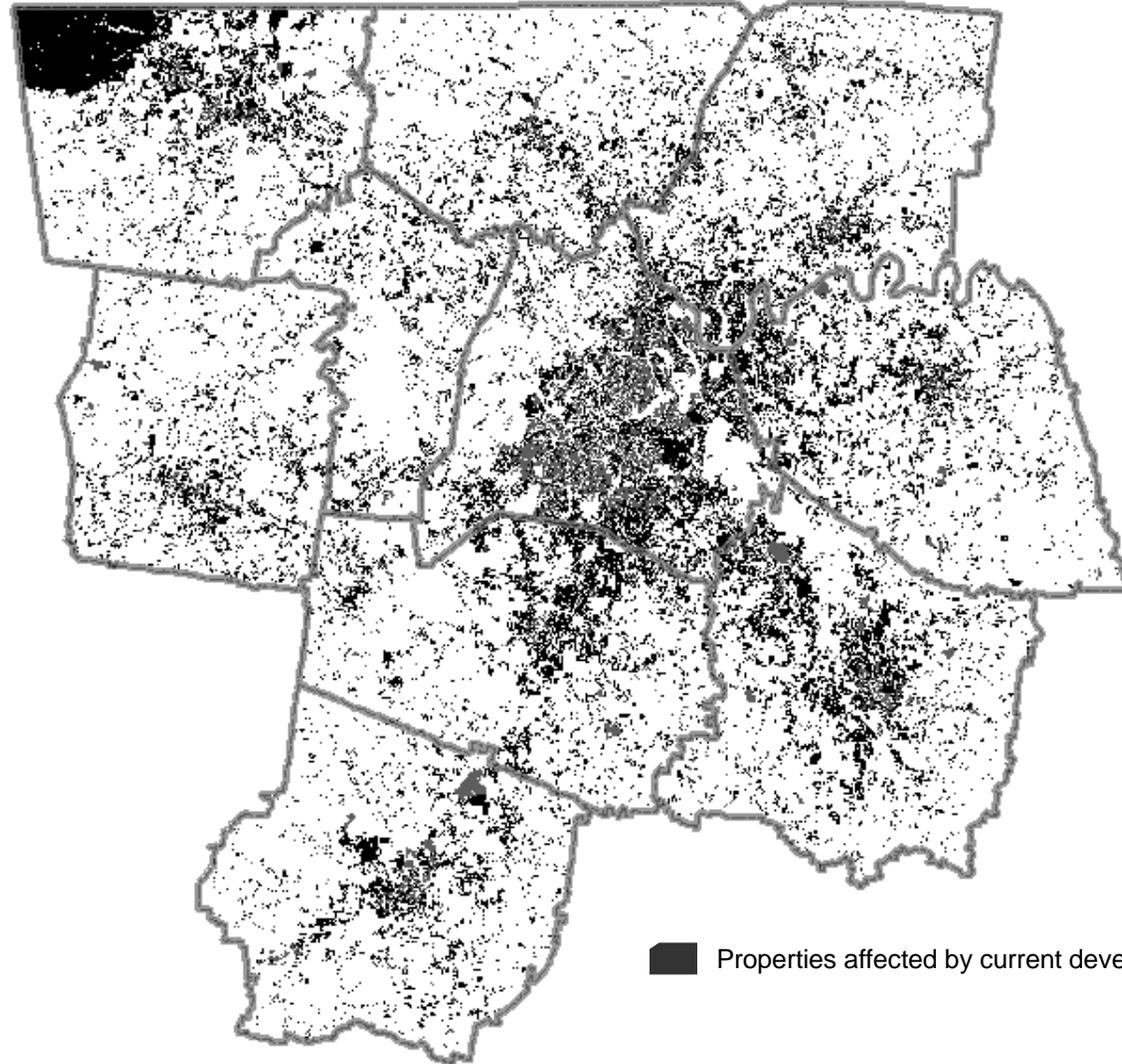
Source: U.S. Census Bureau, Woods & Poole Economics

Past Development Pattern, 1965



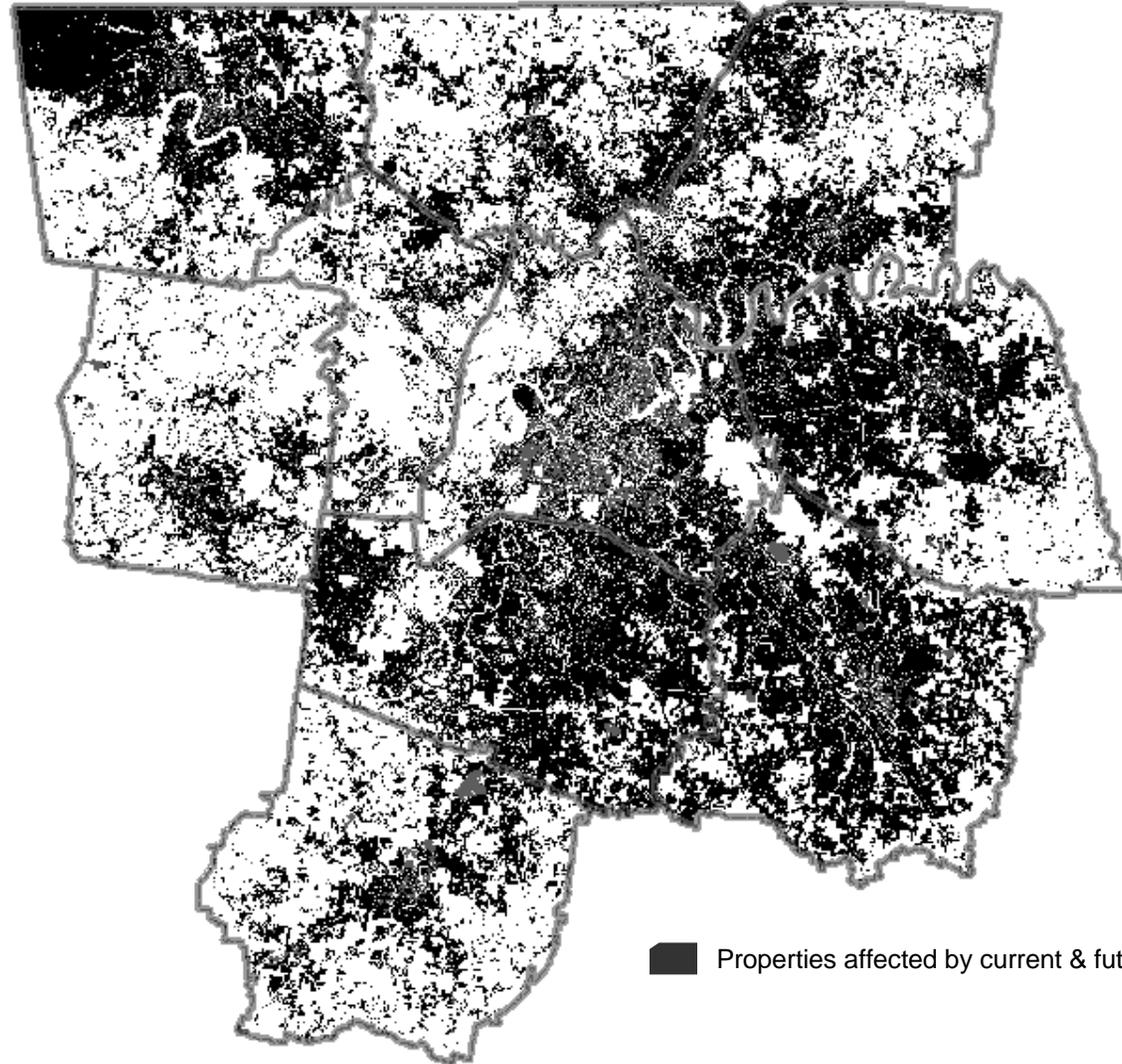
■ Properties affected by development in 1965

Present Day Development Pattern, 2008



■ Properties affected by current development

Future Development Pattern, 2035?

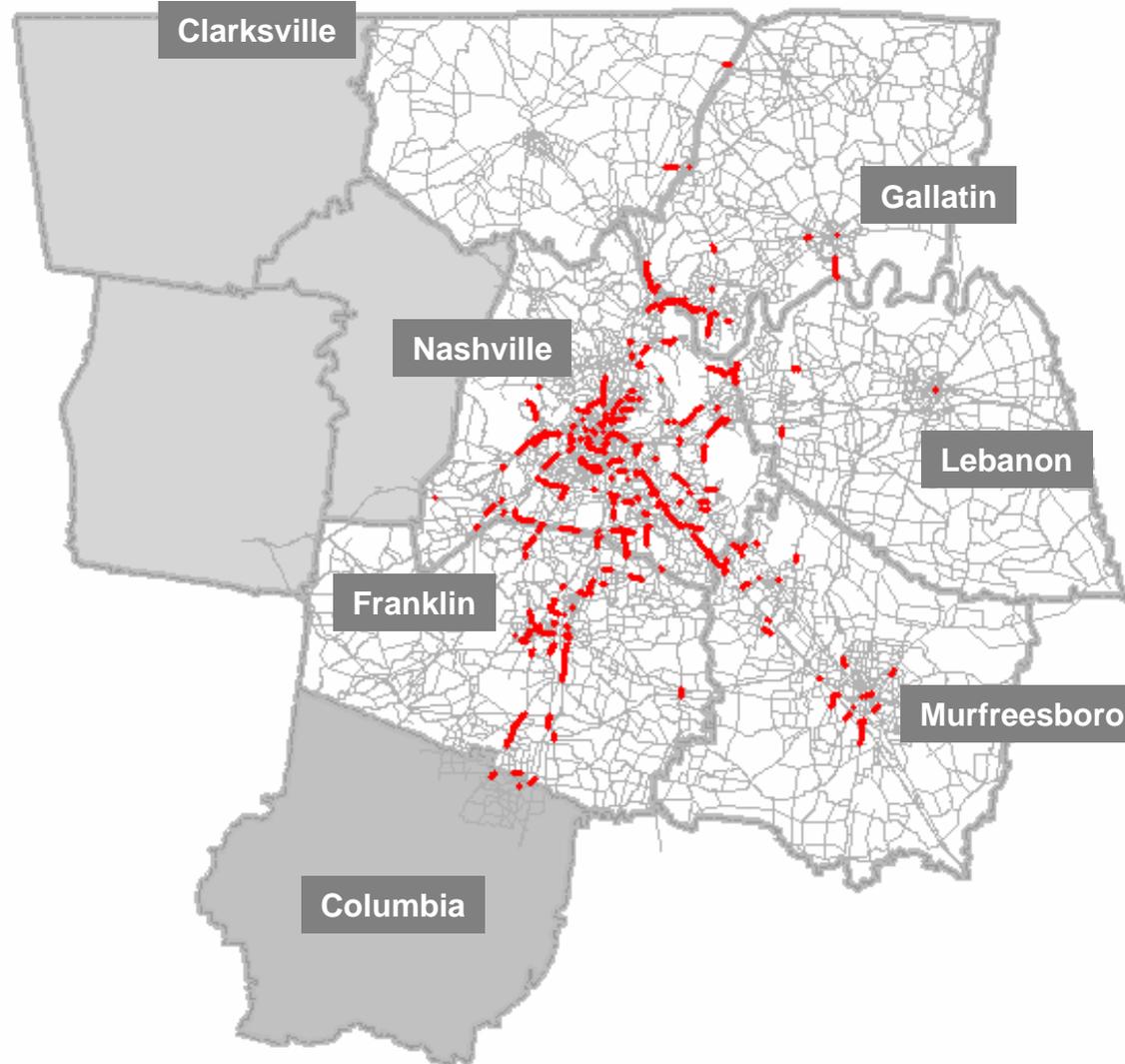


■ Properties affected by current & future development

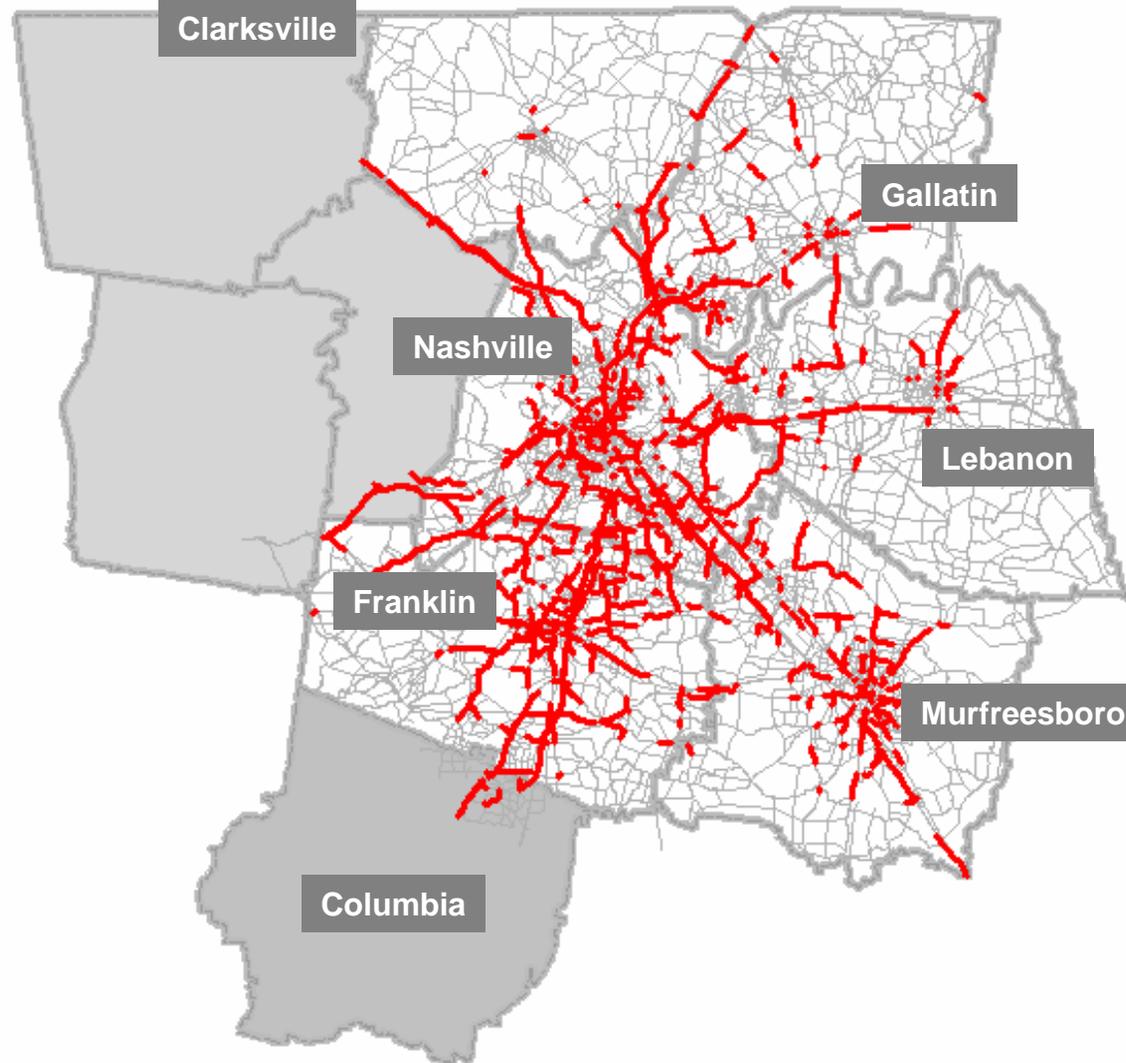
Regional Roadway Network



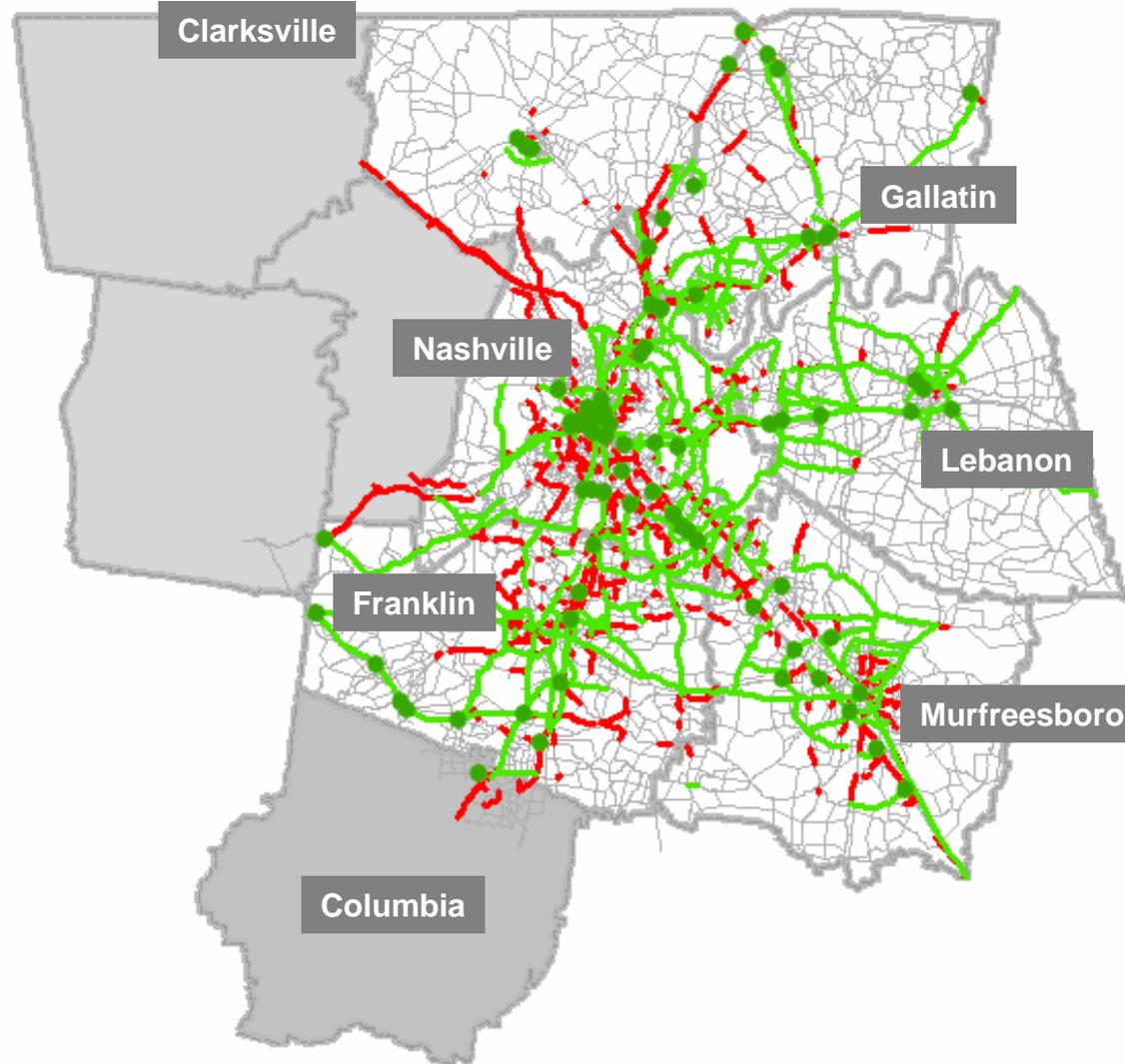
Present Day Congestion, 2008



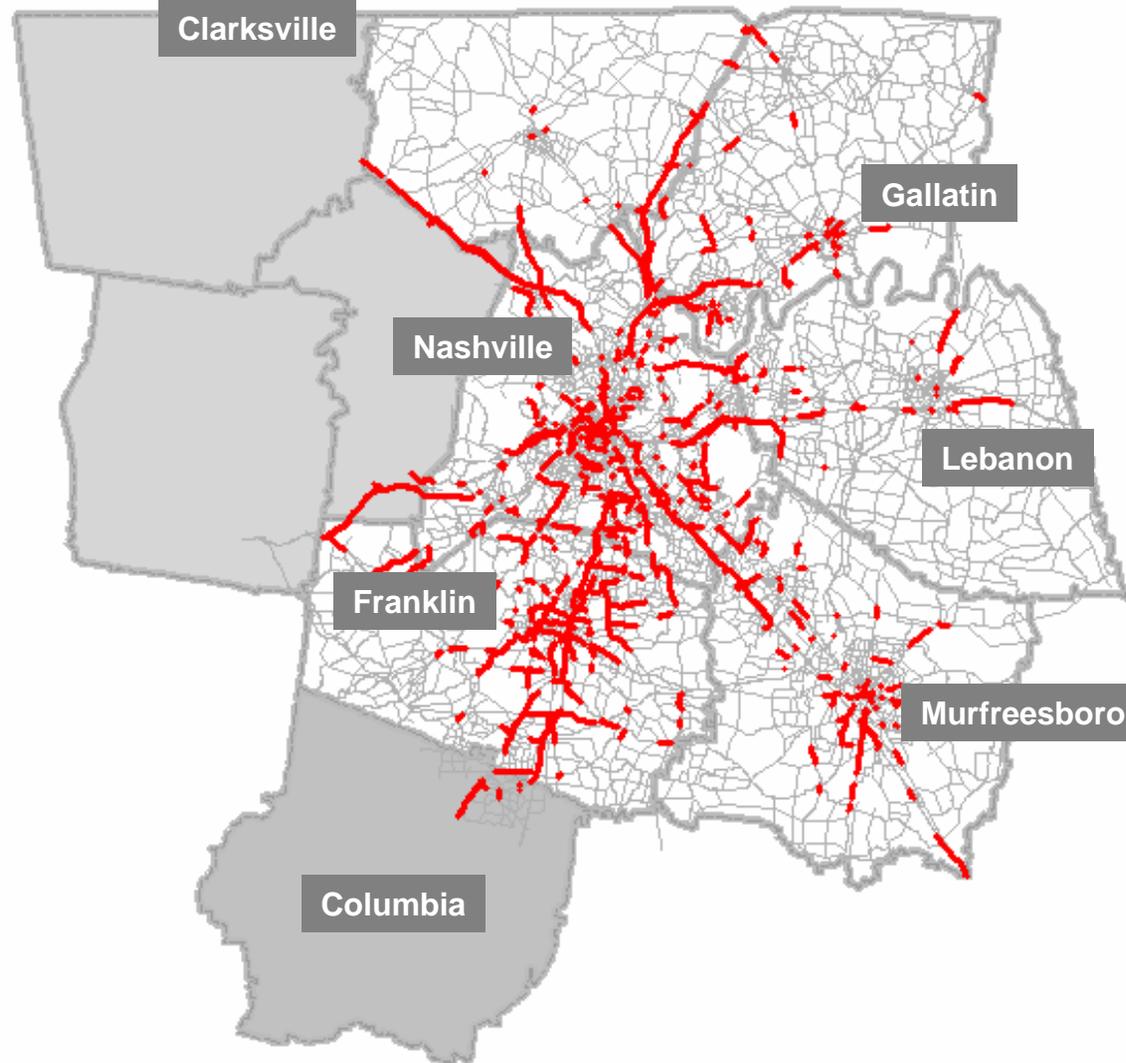
Future Congestion, 2035



Future Road Improvements by 2030



Future Congestion, 2035 – STILL!





Convergence of Issues

- Unmanageable Congestion
 - Longer Travel Times & Trip Lengths
- Increasing Energy Consumption / Costs
- Declining Air & Water Quality
- Aging Population/ Dispersed Families
- Worsening Personal Health / Increasing Cost of Care
- Lost Habitat / Natural Areas
 - Unsustainable Balance between Construction Costs/ Revenue Sources
- Lack of Housing Choice



Household Composition, 1960-2025

A Sharp Decline in Traditional Family Households

Households	1960	2000	2025
With Children	<u>48%</u>	33%	<u>28%</u>
Without Children	<u>52%</u>	67%	<u>72%</u>
<i>Single Person</i>	13%	26%	28%

Census for 1960 and 2000, 2025 adapted from Martha Farnsworth Riche, *How Changes in the Nation's Age and Household Structure Will Reshape Housing Demand in the 21st Century*, HUD, 2003.

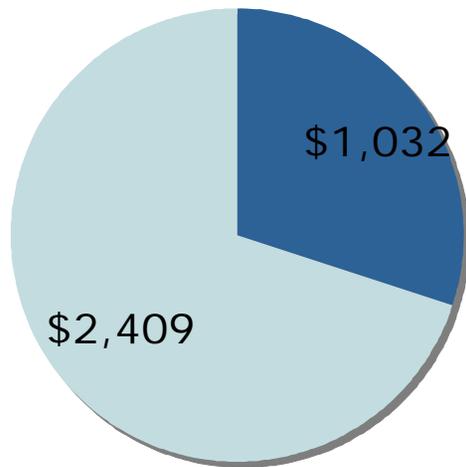
Housing Choice: Supply Vs. Demand



SOURCE: NELSON 2006.

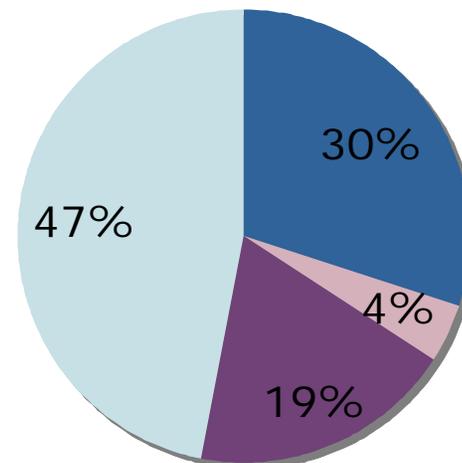
True Cost of Housing

Affordable Housing Cost as a Percentage of Monthly Income (Tennessee Median of \$3441)



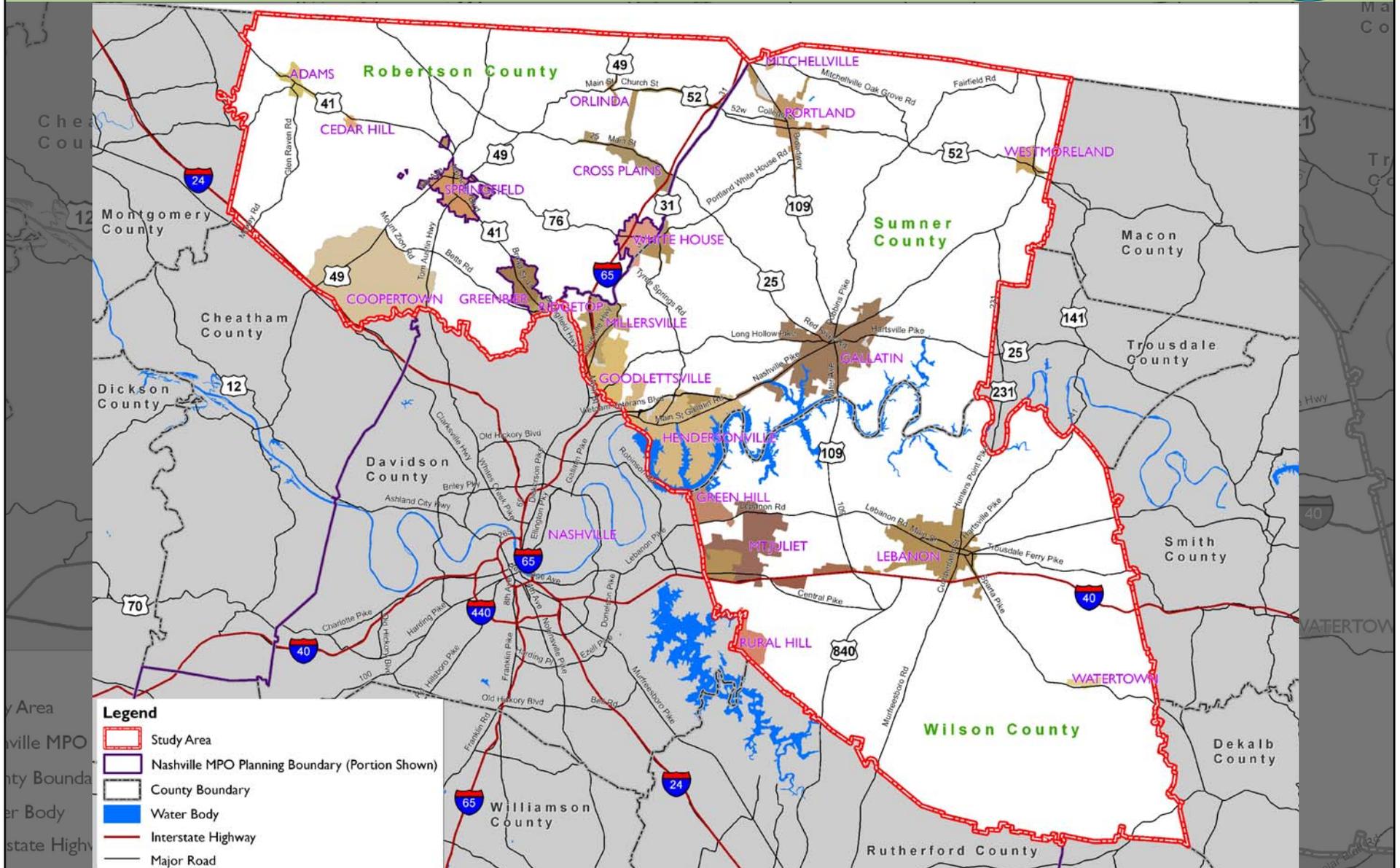
■ Housing ■ Remaining Income

Inclusive Monthly Housing Costs



■ Housing ■ Energy ■ Transportation ■ Remaining Income

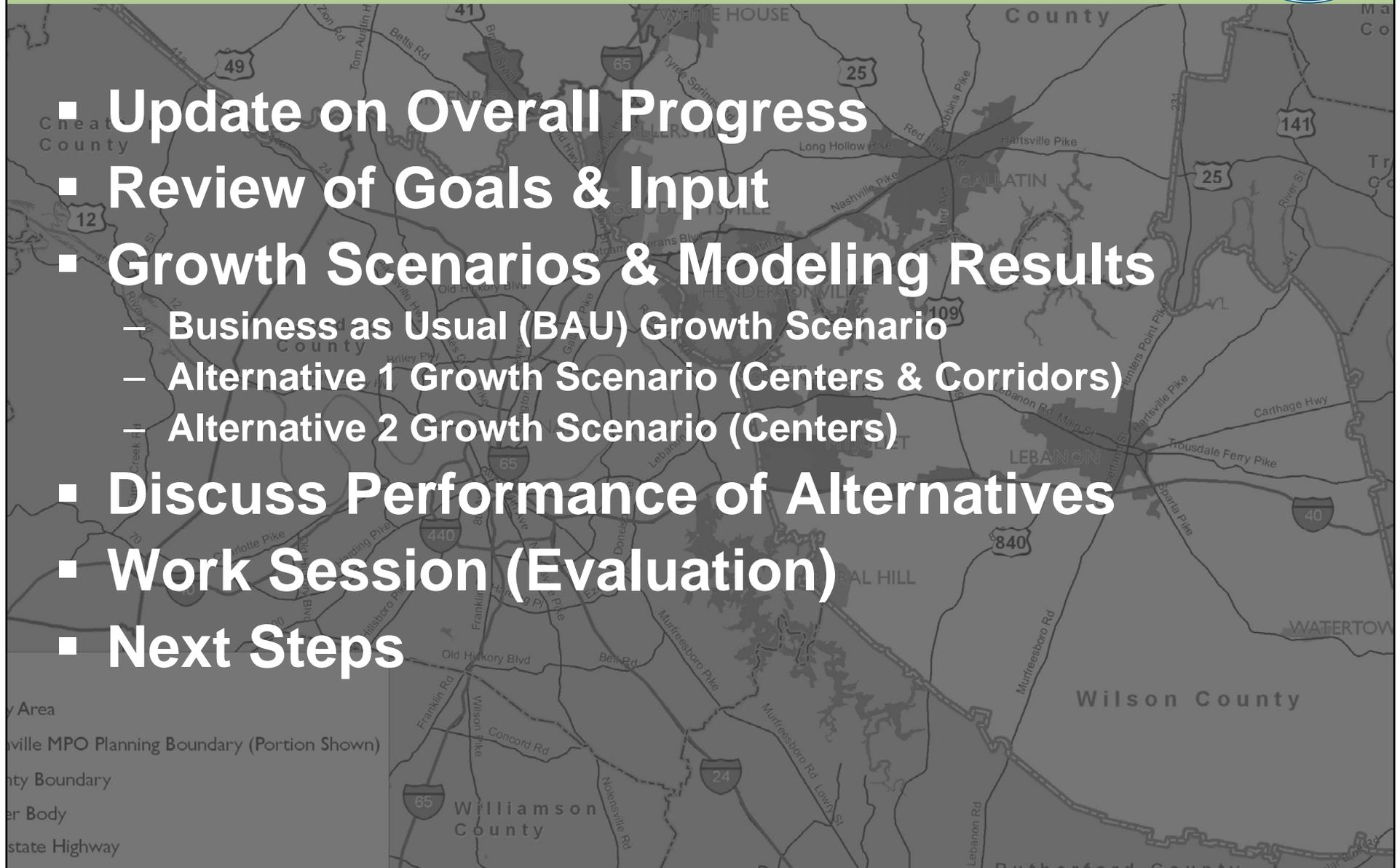
Tri-County Study Area

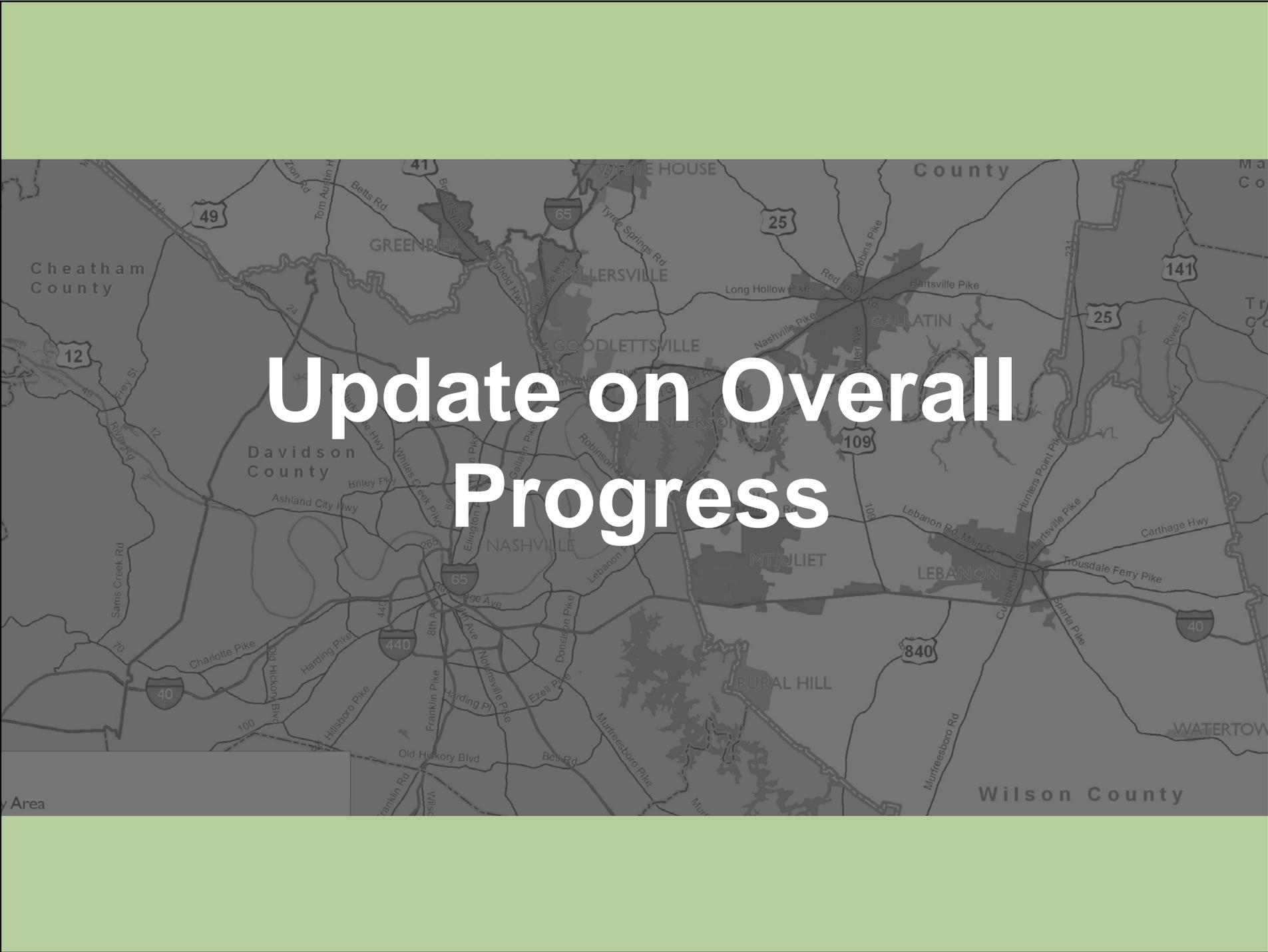


Agenda



- **Update on Overall Progress**
- **Review of Goals & Input**
- **Growth Scenarios & Modeling Results**
 - Business as Usual (BAU) Growth Scenario
 - Alternative 1 Growth Scenario (Centers & Corridors)
 - Alternative 2 Growth Scenario (Centers)
- **Discuss Performance of Alternatives**
- **Work Session (Evaluation)**
- **Next Steps**



A map of the Nashville, Tennessee area, showing major highways and city names. The map is overlaid with a large white text box. The text is centered and reads "Update on Overall Progress". The map shows the Nashville metropolitan area, including parts of Davidson County, Cheatham County, Wilson County, and Murfreesboro. Major highways like I-40, I-65, I-75, and US-41 are visible. City names such as Nashville, Mt Juliet, Gallatin, and Lebanon are also present. The map is framed by a green header and footer.

Update on Overall Progress



Update on Overall Progress

01

TASK 1

Consultant Coordination Plan

02

TASK 2

Public Participation Plan

03

TASK 3

Economic and Market Information

04

TASK 4

Develop/Evaluate BAU Growth Scenario

05

TASK 5

Develop/Evaluate Alternative Growth Scenarios

06

TASK 6

Prepare Preferred Plan and Supporting Illustrations

07

TASK 7

Policy Recommendations & Implementation Strategies

08

TASK 8

Final Report & Executive Summary

Goals & Input



Results of Group Exercise – Report Card

Goals	Grade
Historic Conservation and Enhancement	B-
Viable Agriculture	B
Rural Preservation	C+
Economic Enrichment while Safeguarding Existing Public and Private Development	B-
Preserve Urban Centers	B
Protection of Natural Resources	B-
Efficient Transportation System	C
Ensure Availability of Services	B
Provide Housing Options	C+
Maintain Sense of Community and Sense of Place	B-



A map of the Nashville, Tennessee area, showing major highways (Interstates 40, 65, 75, 25, 40, 49, 12, 141, 109, 840) and various cities and towns including White House, Greenbrier, Millersville, Goodlettsville, Hendersonville, Nashville, Mt Juliet, Lebanon, Rural Hill, and Watertown. The map is overlaid with a semi-transparent grey layer, and a large white text overlay is centered on the map. The text reads "Growth Scenarios: Business-As-Usual". The map also shows county boundaries for Cheatham, Davidson, Wilson, and Macon counties.

Growth Scenarios: Business-As-Usual

Land Supply & Suitability



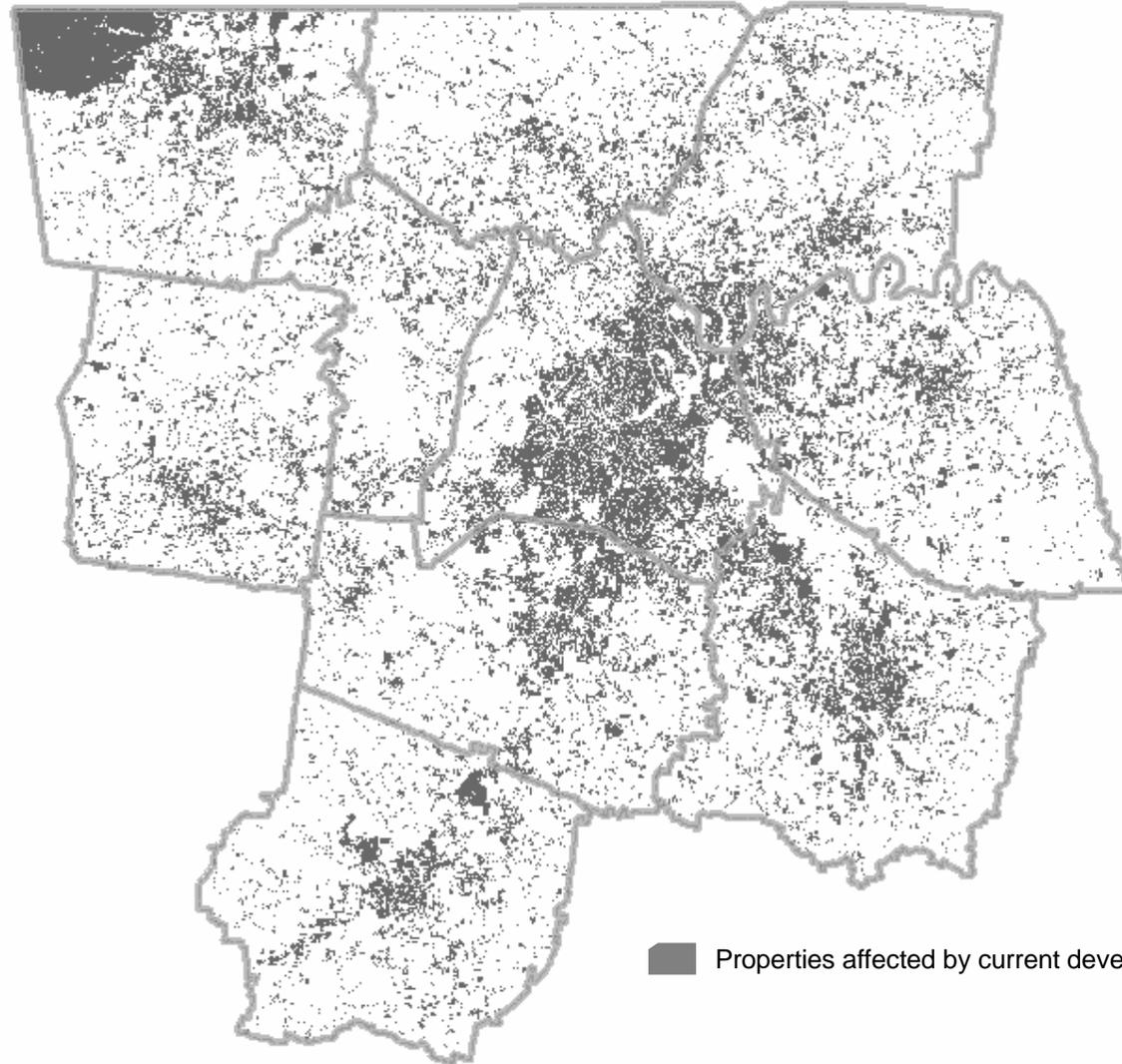
- Available land?

- Subtract already developed
- Subtract environmentally constrained

- Capacity of available land to support development

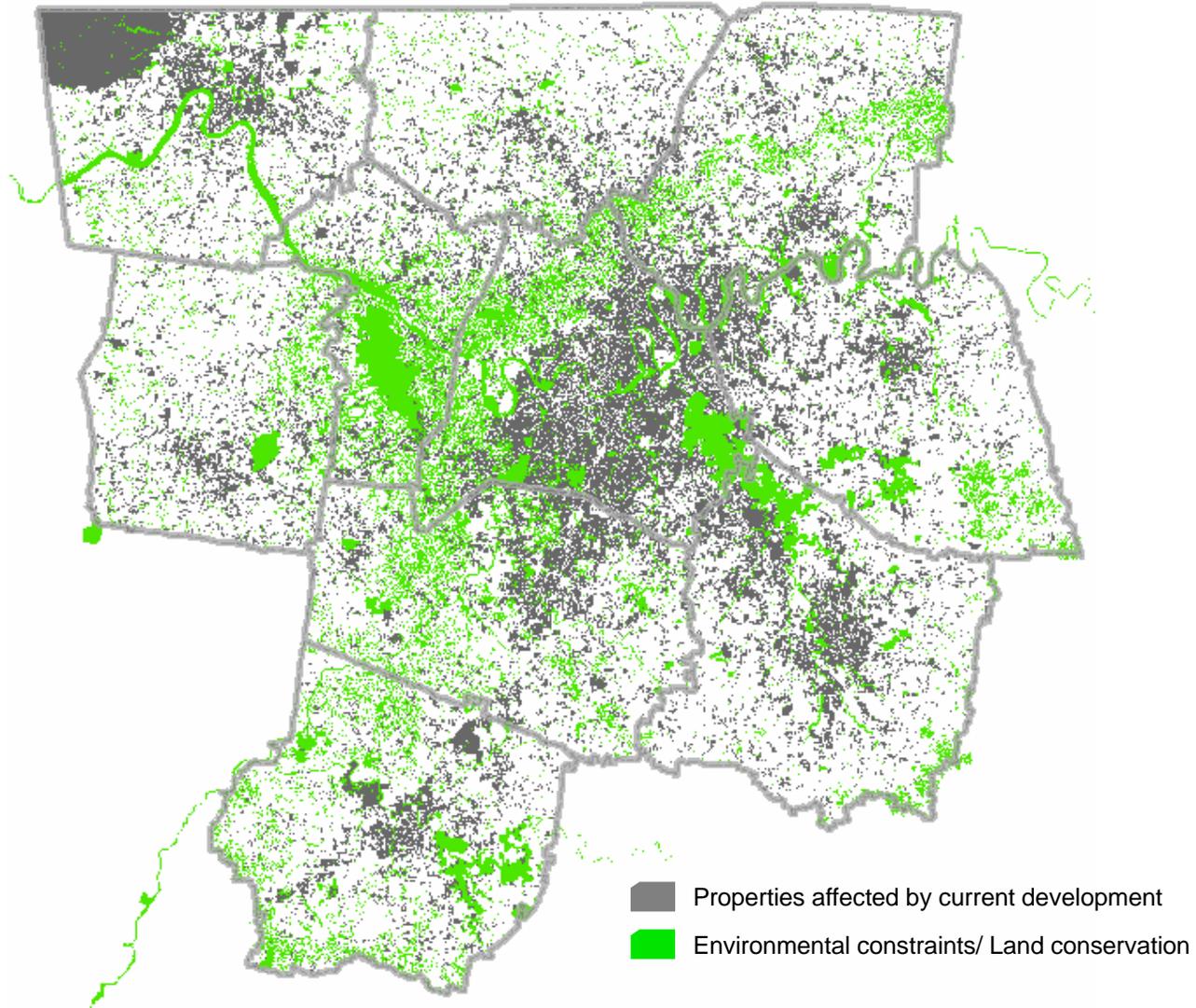


Existing Development Pattern (2008)

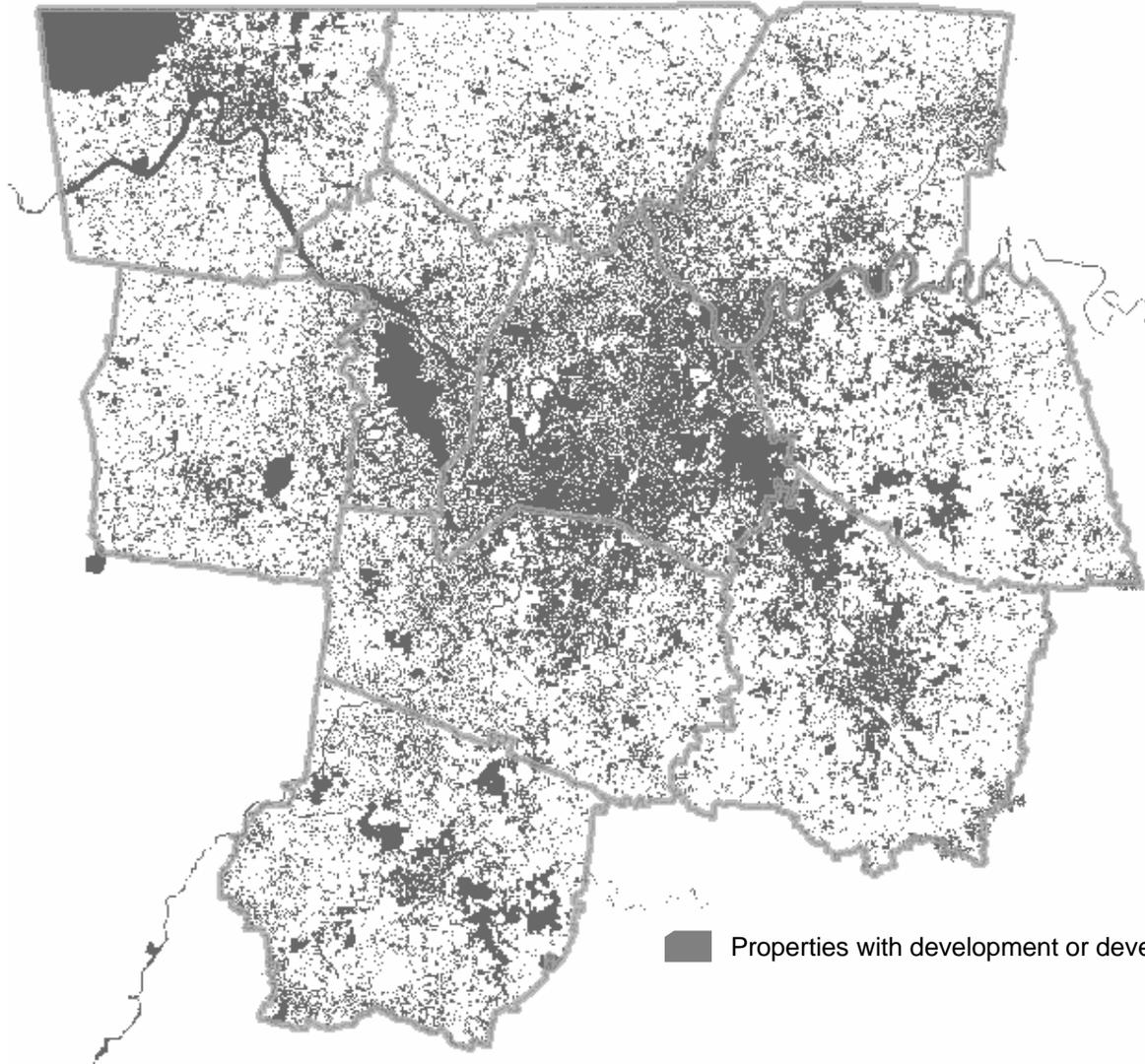


■ Properties affected by current development

Environmental Constraints

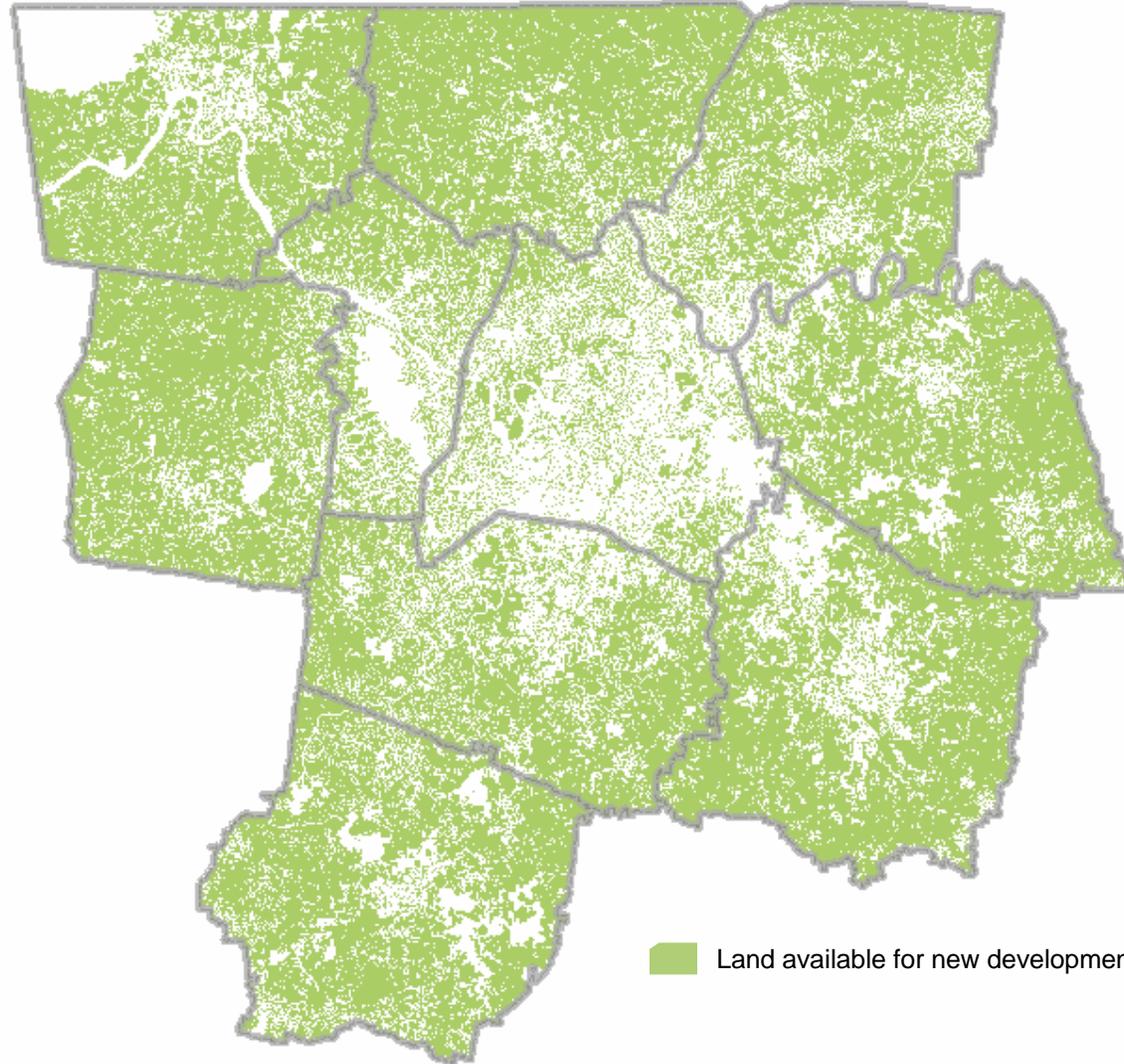


Developed or Constrained



■ Properties with development or development constraints

Vacant Greenfield Development Opportunities

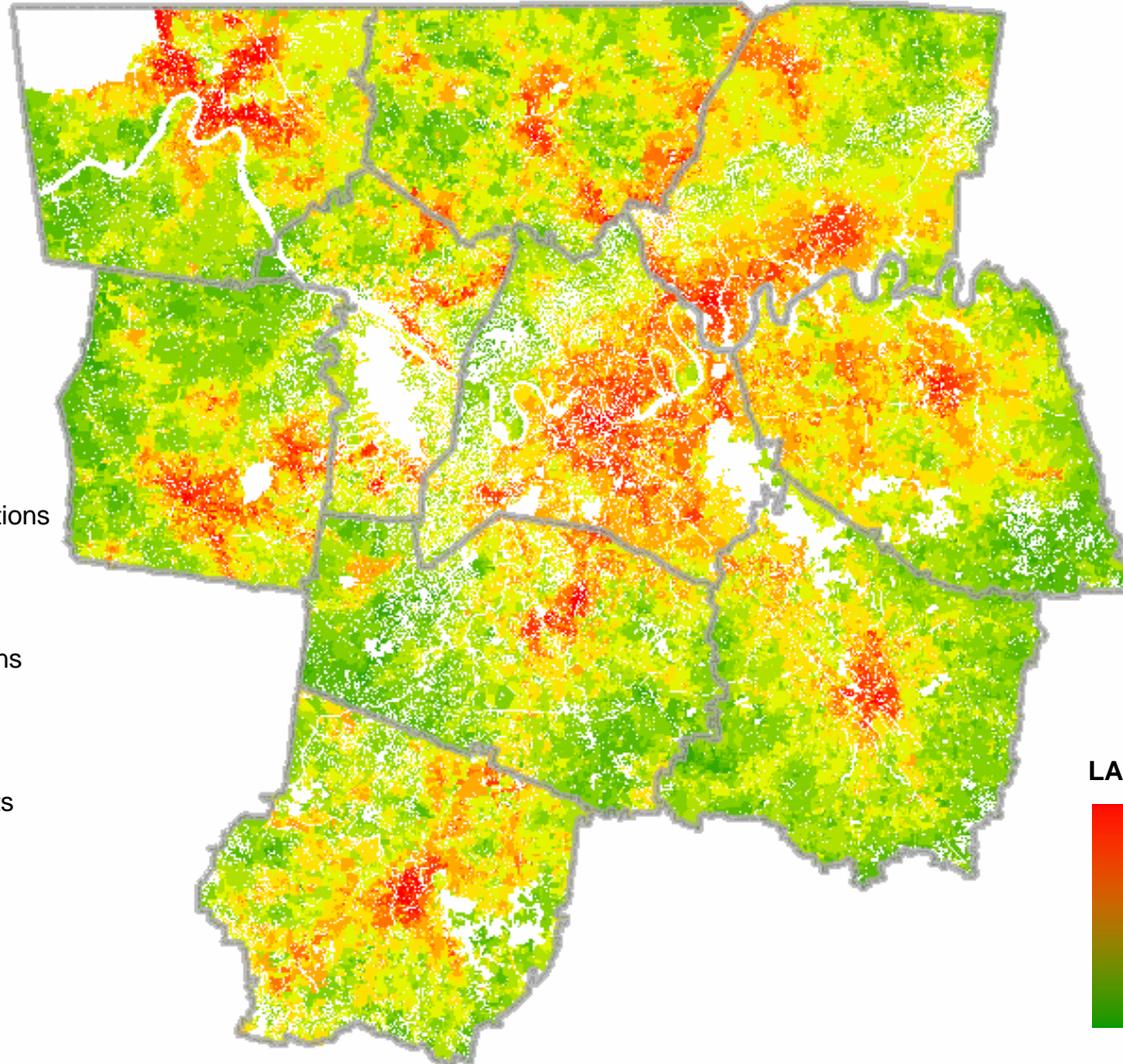


Land available for new development

Land Suitability – Attractiveness for Development

Defining Suitability:

- Land Values
- Water/ Sewer
- Schools
- Major Roads/ Intersections
- Retail Opportunities
- Traffic Congestion
- Transit Service/ Stations
- Hospitals
- Parks & Recreation
- Environmental Conflicts



LAND SUITABILITY



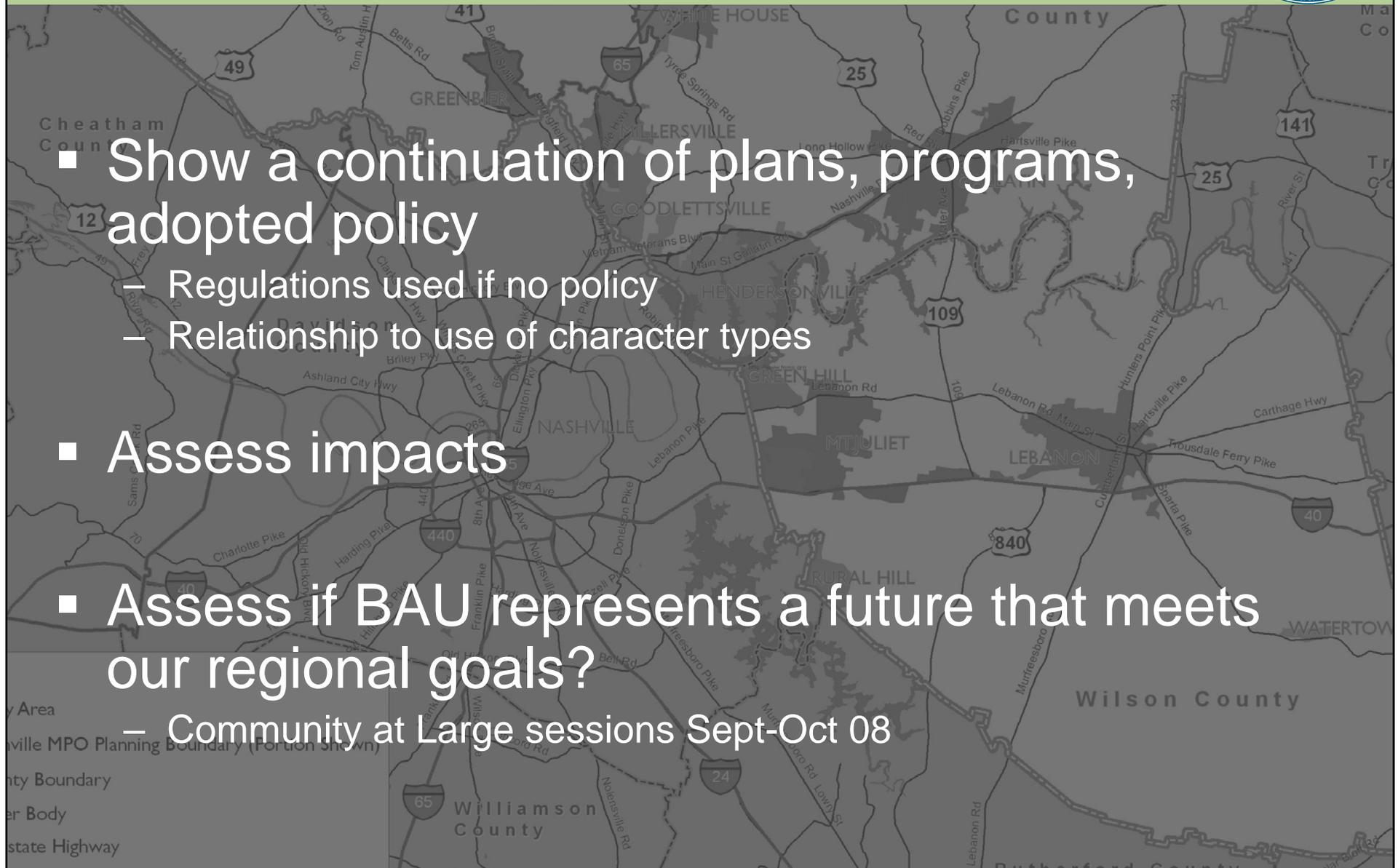
More Suitable

Less Suitable



Purpose of BAU in Tri-County Study

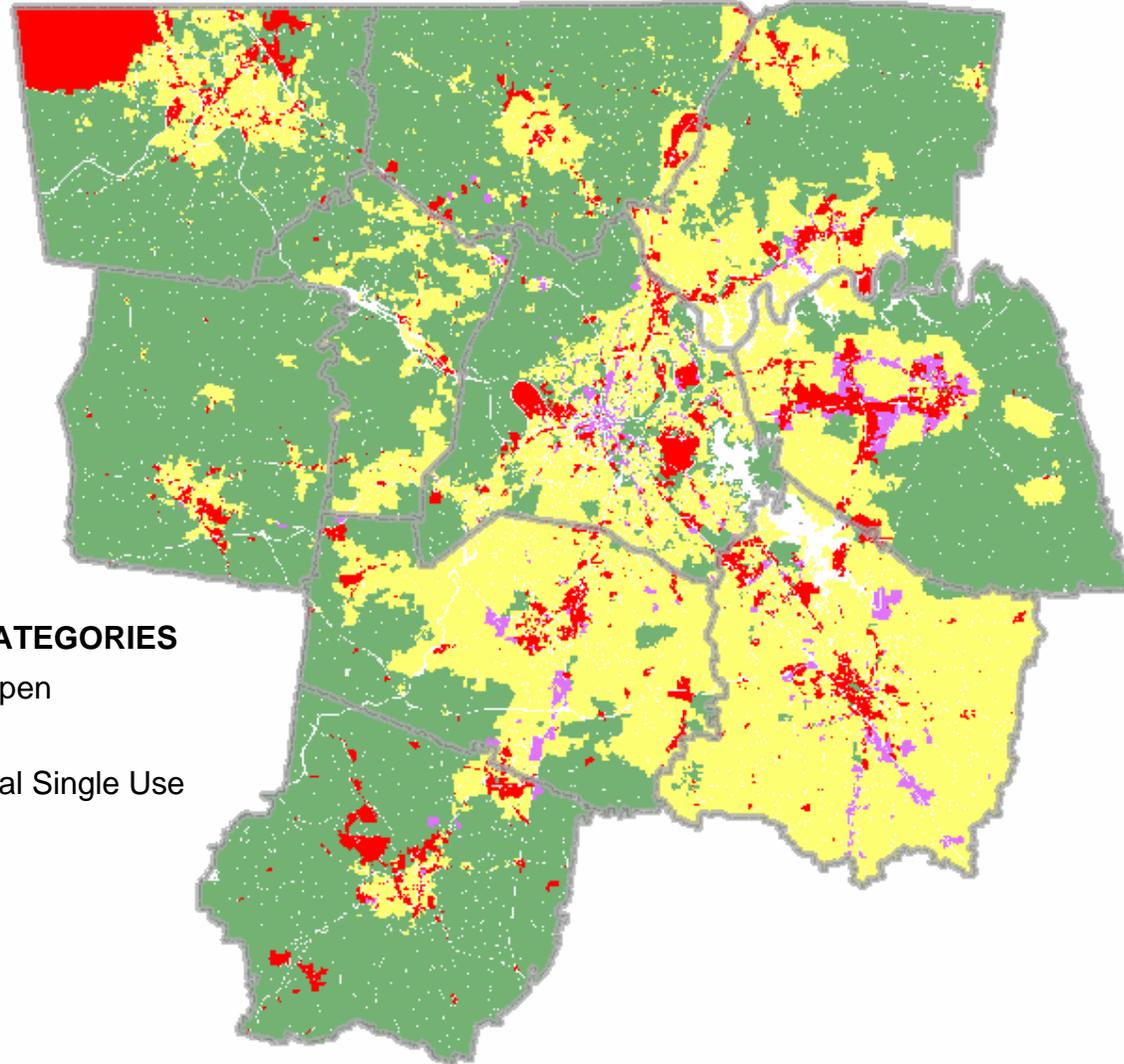
- Show a continuation of plans, programs, adopted policy
 - Regulations used if no policy
 - Relationship to use of character types
- Assess impacts
 - Assess if BAU represents a future that meets our regional goals?
 - Community at Large sessions Sept-Oct 08



Generalized Land Use Policy

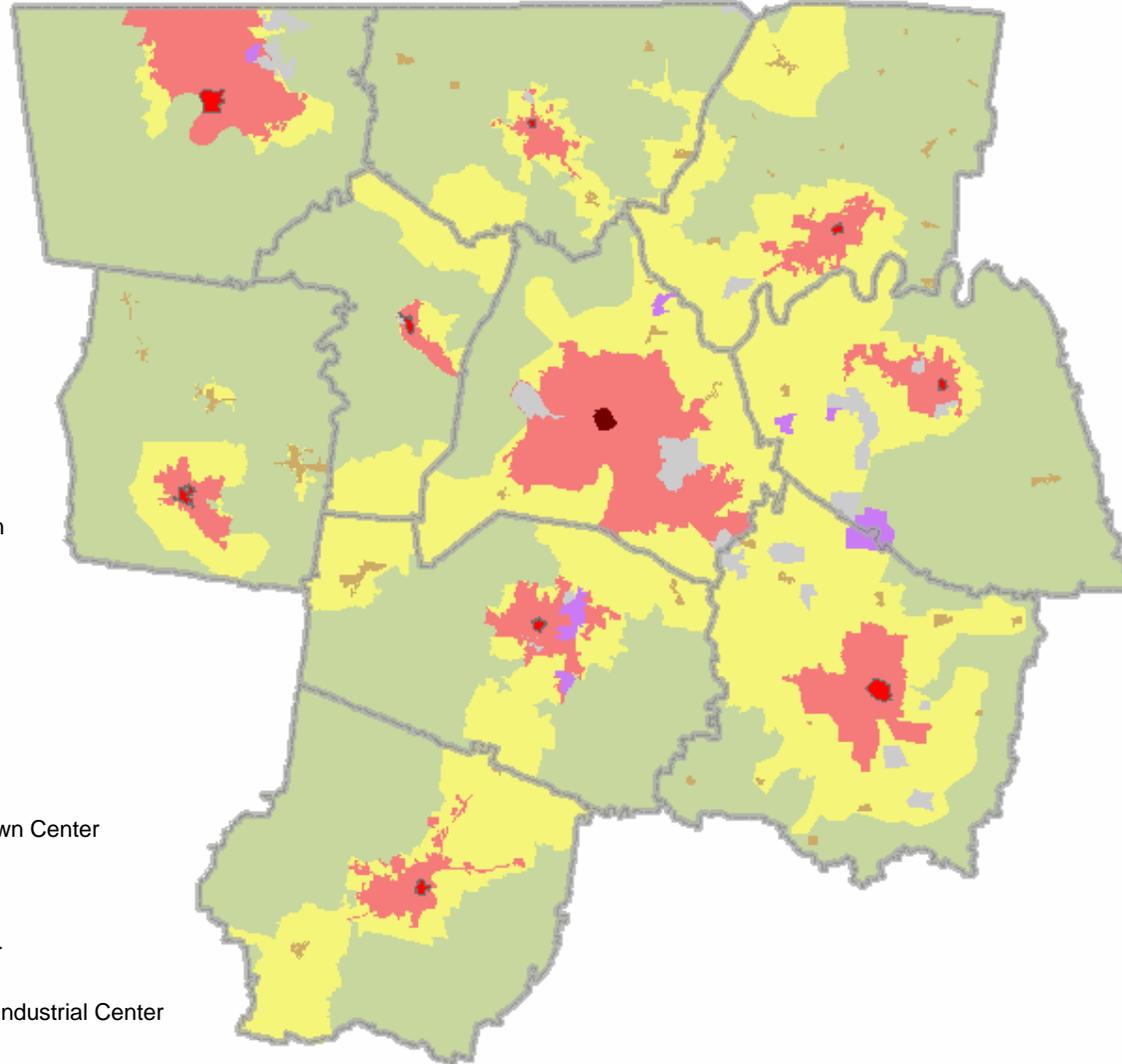
GENERALIZED CATEGORIES

-  Agricultural, Open
-  Residential
-  Non-Residential Single Use
-  Mixed-Use

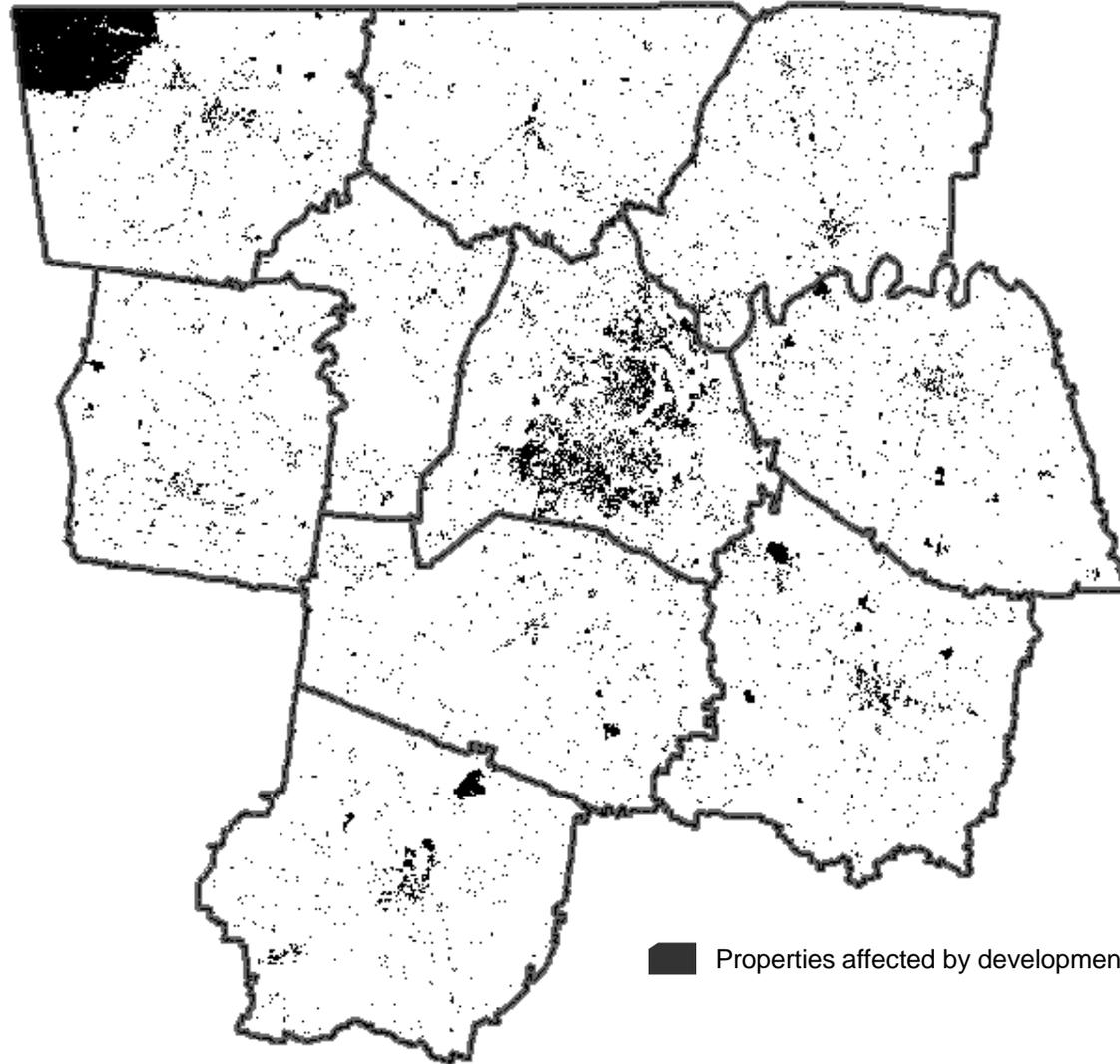


Growth Policy – Character Areas

- General Urban
- Suburban
- Rural
- Urban Core
- Traditional Town Center
- Village Center
- Activity Center
- Employment/ Industrial Center

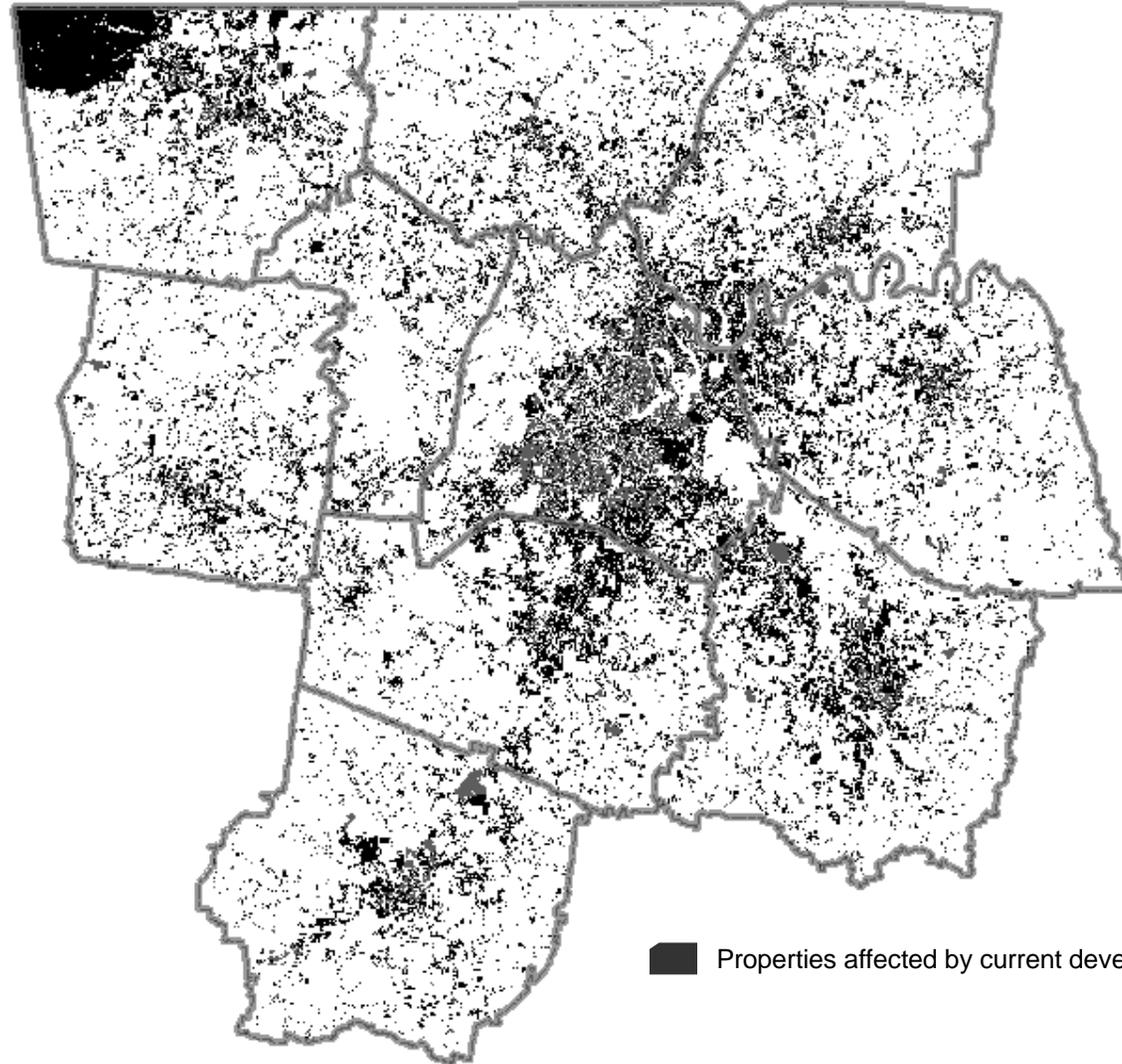


1965 Development Pattern



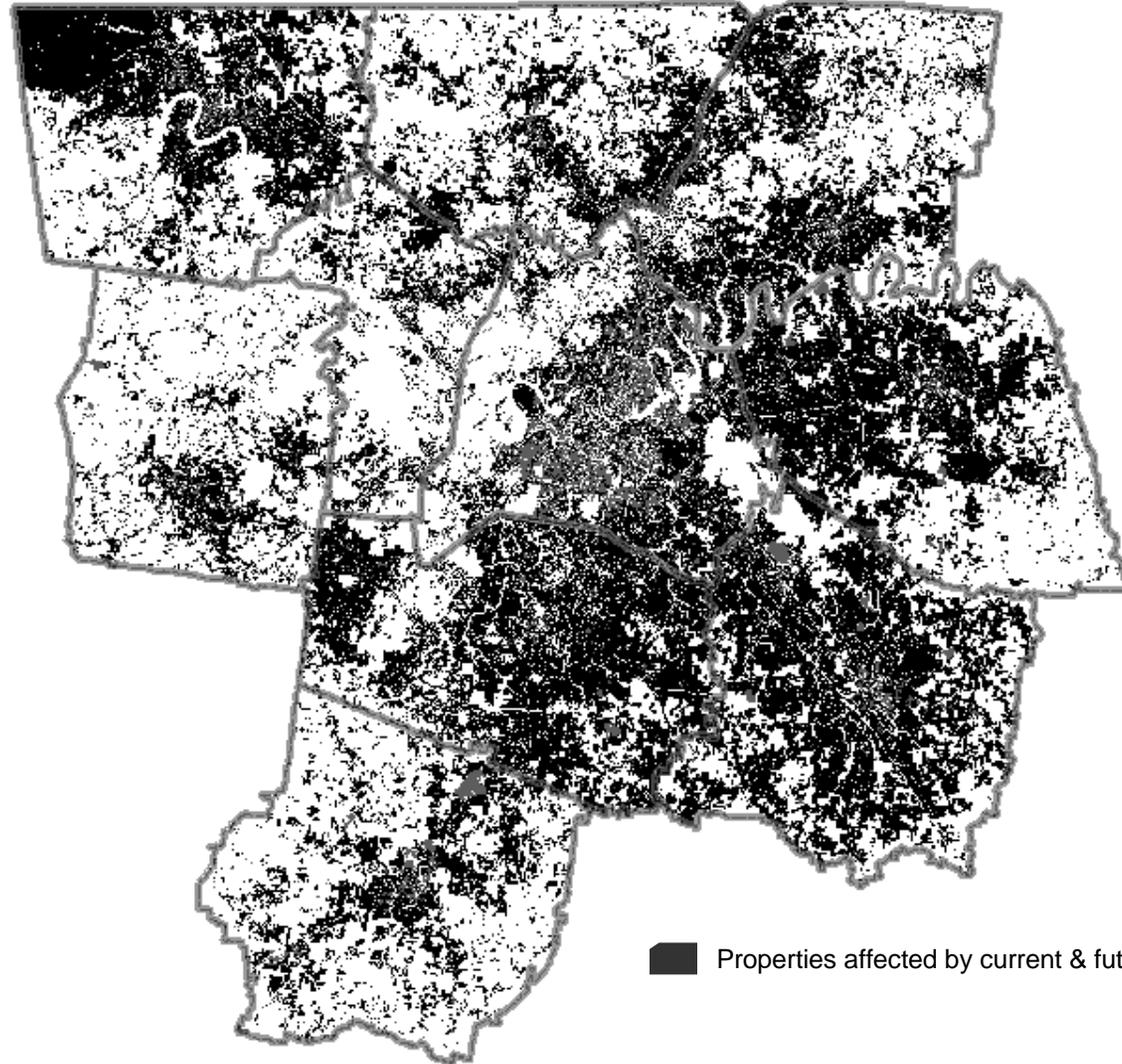
■ Properties affected by development in 1965

2008 Development Pattern



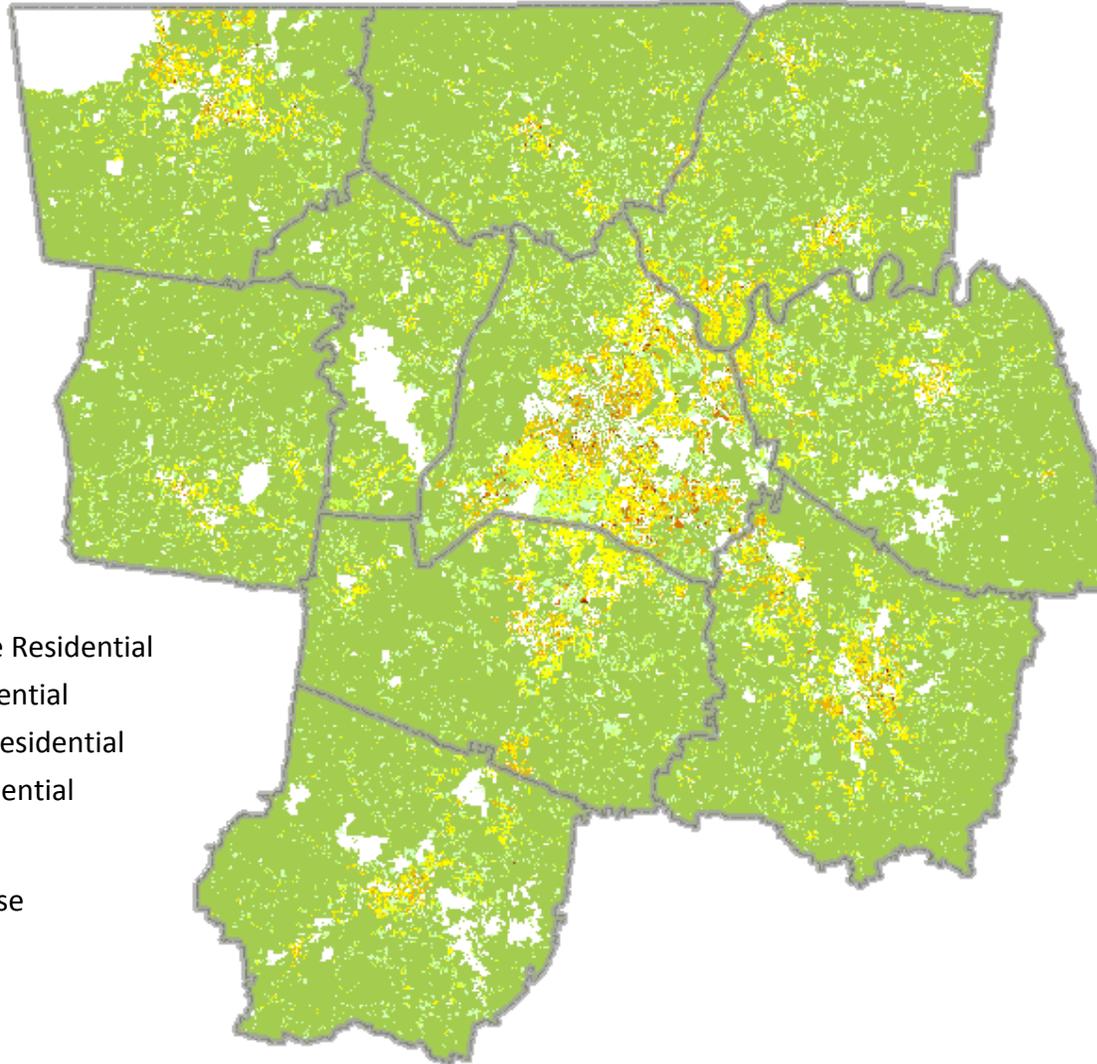
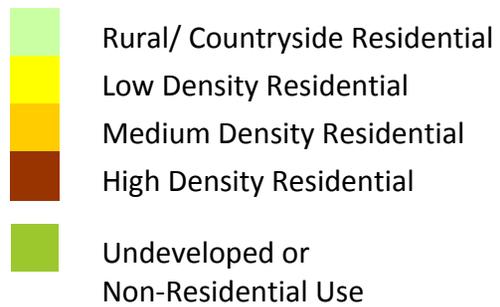
■ Properties affected by current development

2035 BAU Development Pattern

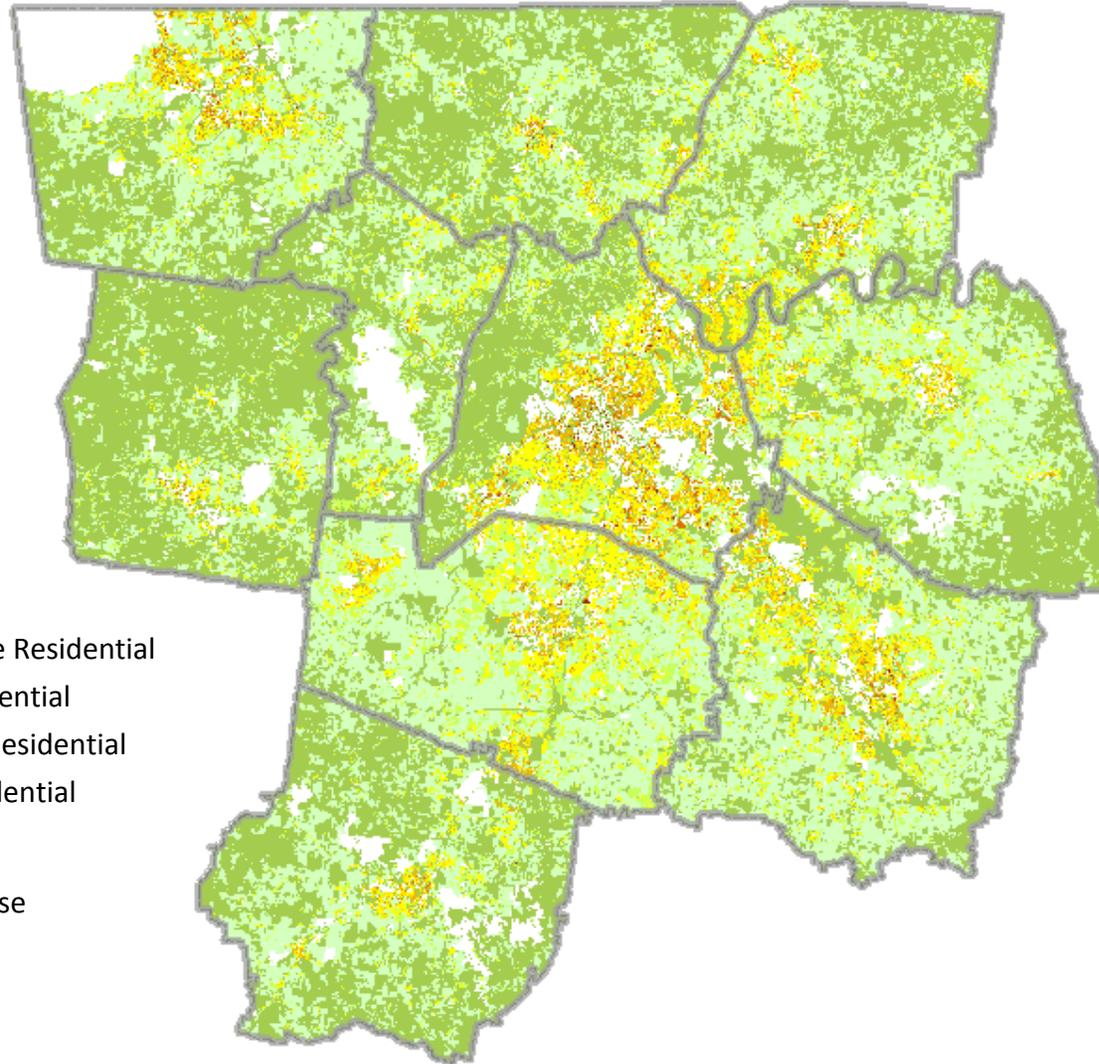
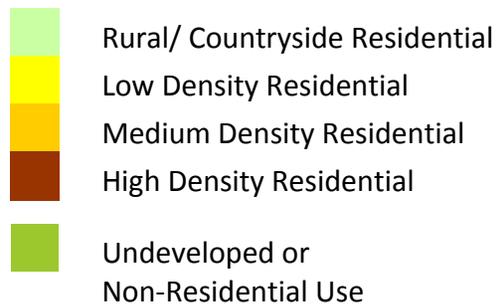


■ Properties affected by current & future development

2008 Residential Density



2035 BAU Residential Density

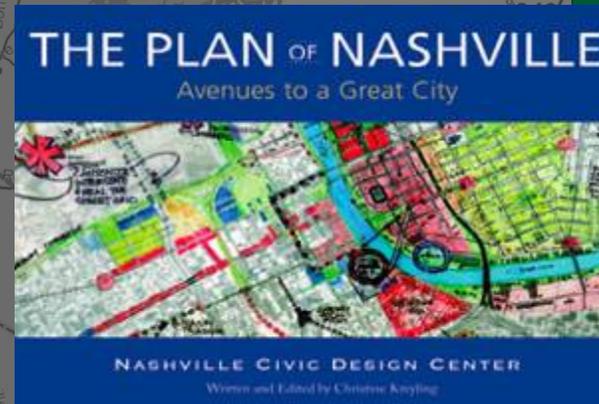


Growth Scenarios: Alternatives



Across the Region

- Pierce Report (1999)
- Regional Planning Summit Proceedings (1999)
- Cumberland Region Tomorrow
 - Report to the Region (2003); Lincoln Institute of Land Policy Report (2006)
 - Quality Growth Toolbox (2006)
- TDOT PlanGo (2005)
- Nashville Civic Design Center
 - The Plan of Nashville



Across the Region

- Tennessee Growth Readiness
- Cumberland River Compact
- AIA 150 Blueprint for America

— Visioning workshops in Lebanon, Robertson County

TENNESSEE GROWTH READINESS PROGRAM

Water Quality Matters

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**THE A.I.A. 150 BLUEPRINT FOR AMERICA
VISIONING WORKSHOP FOR ROBERTSON COUNTY**

ON PRESERVING RURAL OPEN SPACE AND REVITALIZING HISTORIC TOWN CENTERS
SUMMARY REPORT

A Partnership of Robertson County, City of Springfield, AIA Middle Tennessee, Cumberland Region Tomorrow, the Greater Regional Council, the Nashville Civic Design Center and the University of Tennessee College of Architecture + Design

April 27-28, 2007
Held at First United Methodist Church in Springfield, Tennessee



Springfield Historic Courthouse Square



Historic Barn Structure in Robertson County

This report was produced by T. K. Davis, Associate Professor at the University of Tennessee College of Architecture + Design and Design Director at the Nashville Civic Design Center.

**THE A.I.A. 150 BLUEPRINT FOR AMERICA
ASSESSMENT AND VISIONING WORKSHOP FOR LEBANON**

LEBANON'S TOWN CENTER AND ITS NEIGHBORHOODS
STRENGTHENING VIABLE OPPORTUNITIES AND THREATS
AND THE POTENTIAL OF TRANSIT-ORIENTED DEVELOPMENT IN LEBANON

FINAL REPORT

A Partnership of AIA Middle Tennessee, Cumberland Region Tomorrow, the Greater Nashville Regional Council, the Nashville Civic Design Center and the University of Tennessee College of Architecture + Design



Lebanon's Historic Town Square



The Plaza City Car

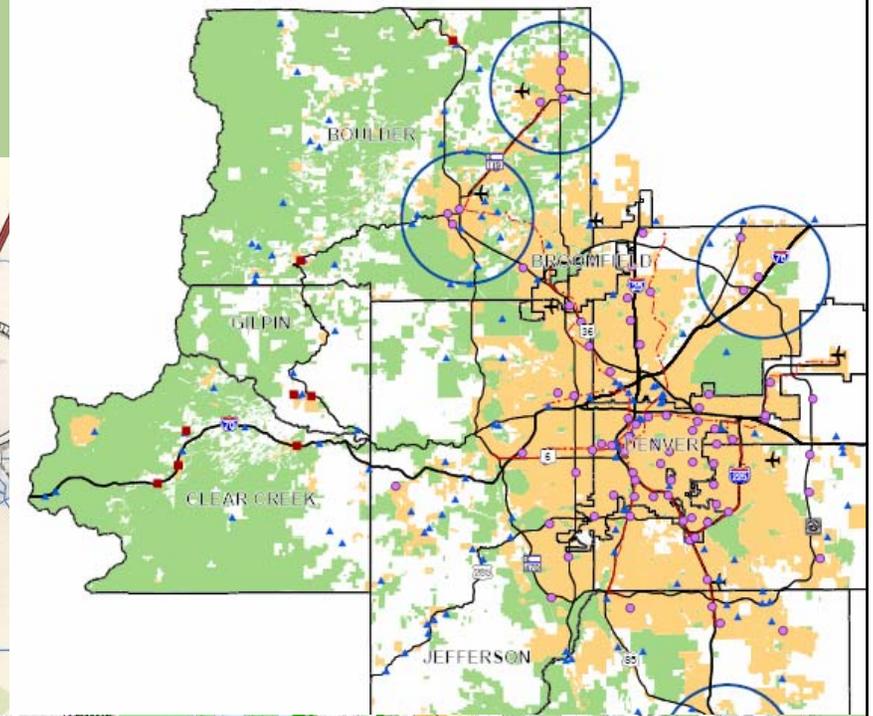
This report was produced by T. K. Davis, AIA, Design Director at the Nashville Civic Design Center and Associate Professor at the University of Tennessee College of Architecture + Design.



Area
ville MPO Planning Boundary (Portion Shown)
nty Boundary
er Body
state Highway

Across the US

THE CHOICE

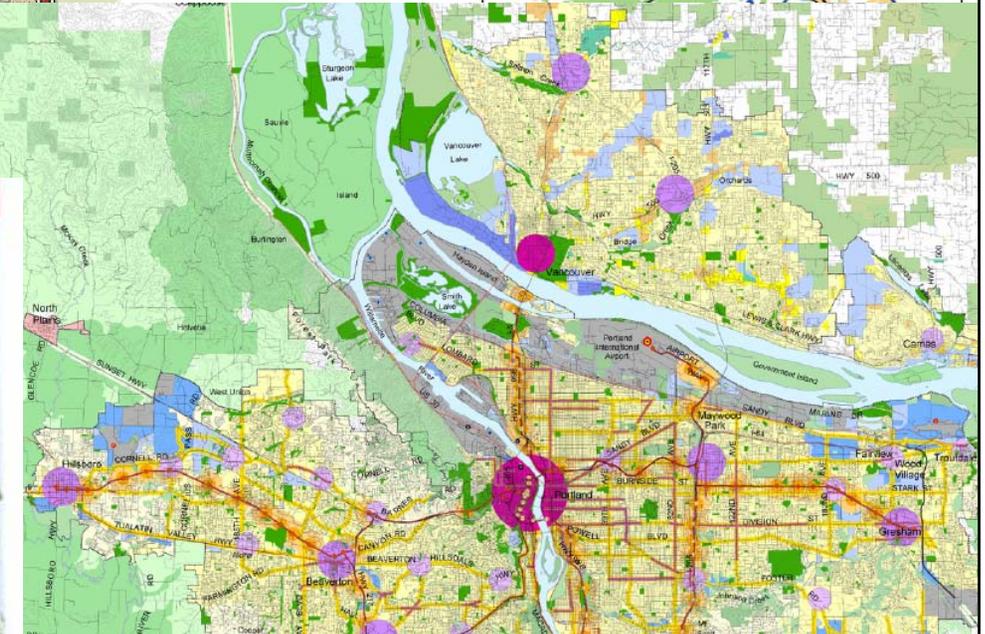
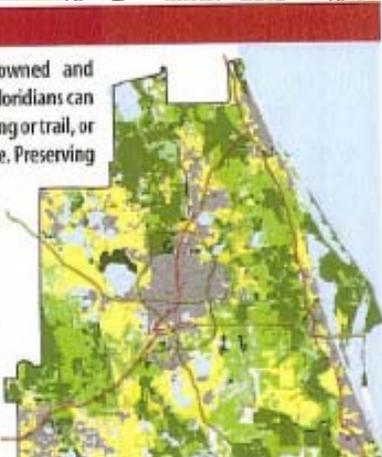


Choice A - Green Areas

Central Florida's natural setting is world-renowned and precious to all of us. Within an hour's drive, Central Floridians can enjoy the beach, canoeing or hiking at a natural spring or trail, or riding a bike on the most challenging hills in the state. Preserving access to the outdoors and maintaining the many "globally" significant animals, plants and critical ecosystems in our region is crucial.

What will this future look like?

- Additional environmentally sensitive lands (2,483 sq. miles) are preserved to maintain connectivity between key environmental areas in the region.
- The additional environmental lands will create many new spaces for outdoor recreation, wildlife and ground water recharge.

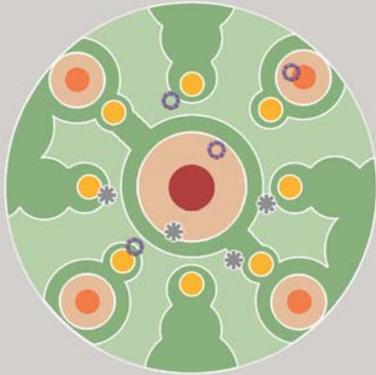




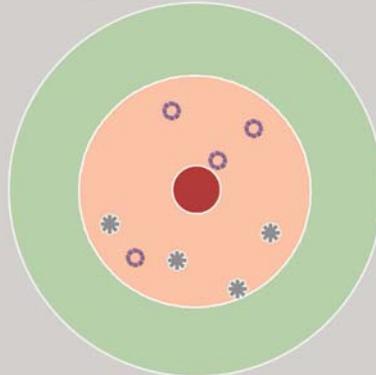
Alternative Scenario Concepts

- Four alternative scenario “themes”
 - Conservation
 - Compact Development
 - Centers & Corridors
 - Centers

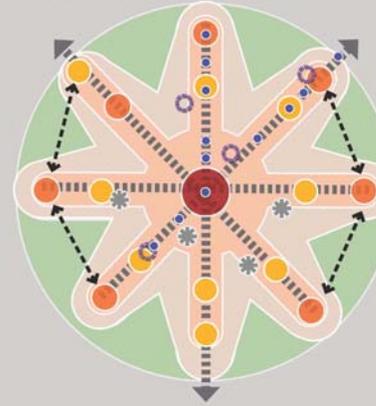
conservation



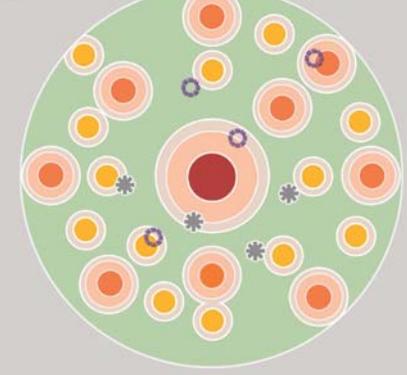
compact development



centers and corridors



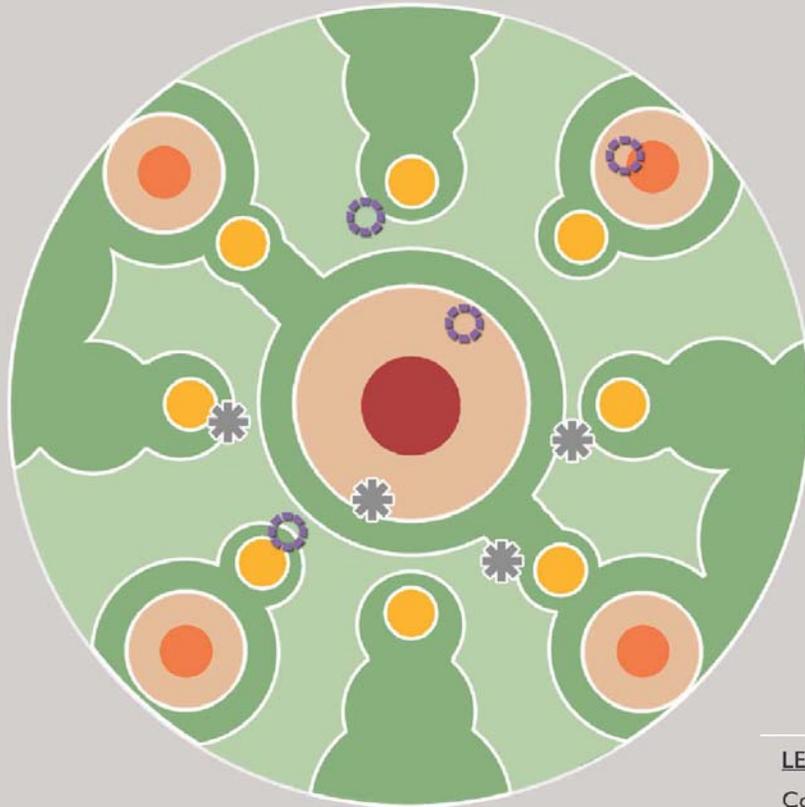
centers



Conservation



conservation



- Emphasis on set asides including open space and environmental assets forming contiguous greenbelts that may extend within and surround a regional center,
- Growth lies within remaining areas

LEGEND

Conservation



Rural



Centers

-Urban Core



-Traditional Town Centers



-Village Centers



General Urban



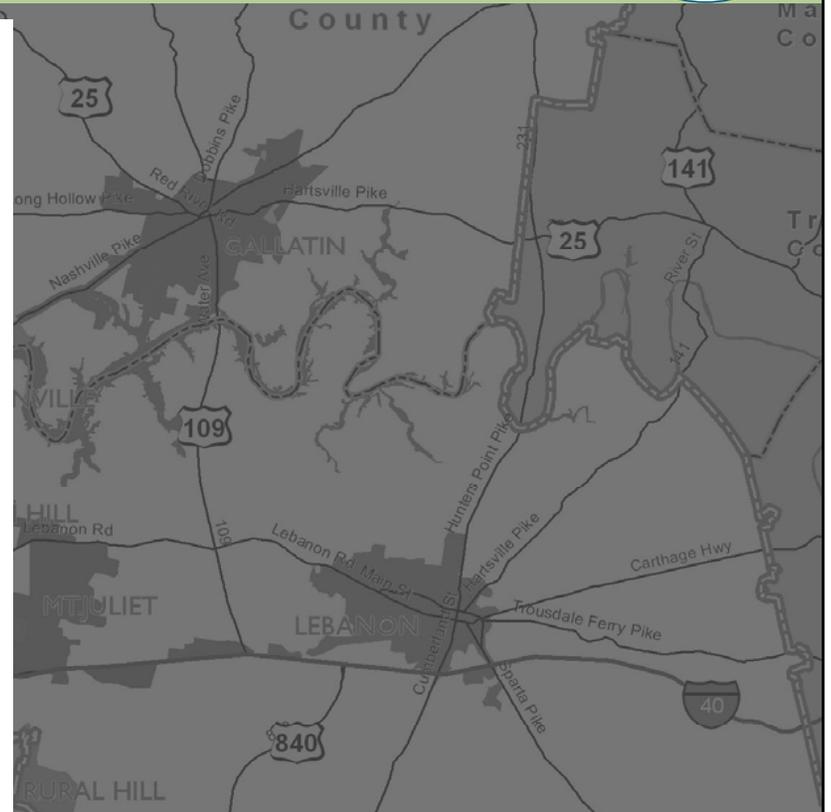
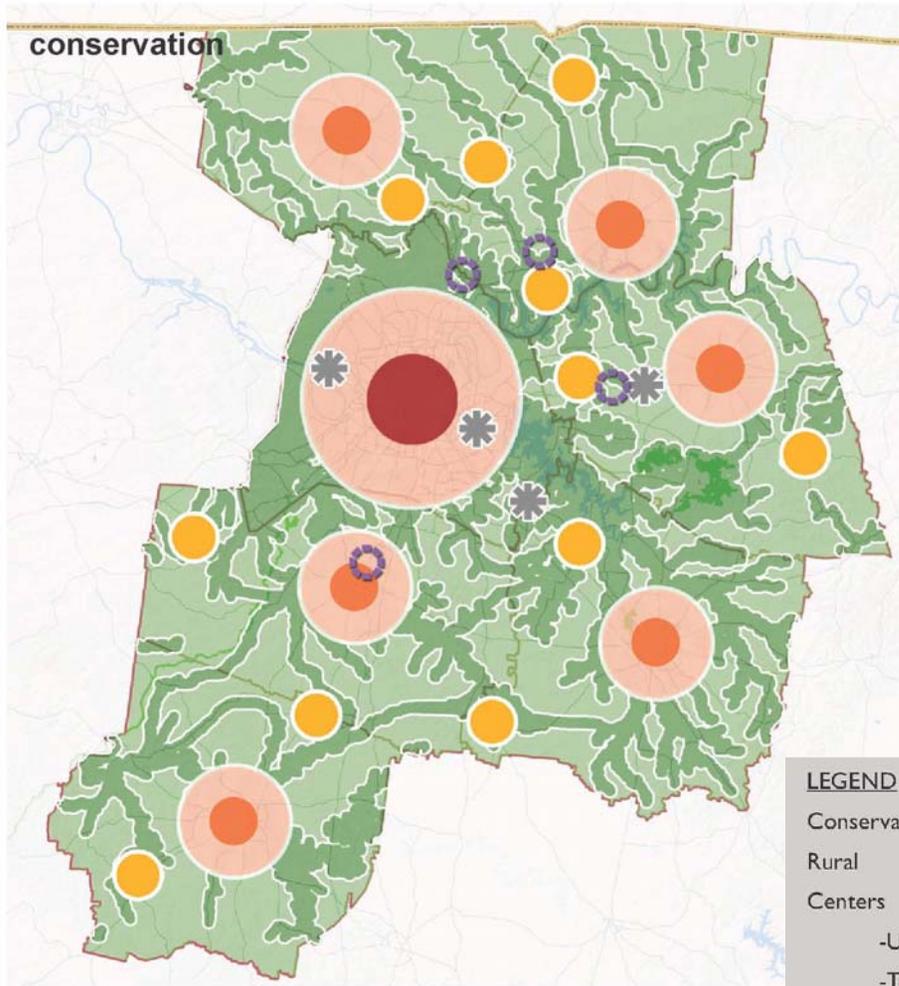
Special Use



Special Activity Centers



Conservation



LEGEND

Conservation



Rural



Centers

-Urban Core



-Traditional Town Centers



-Village Centers



General Urban



Special Use



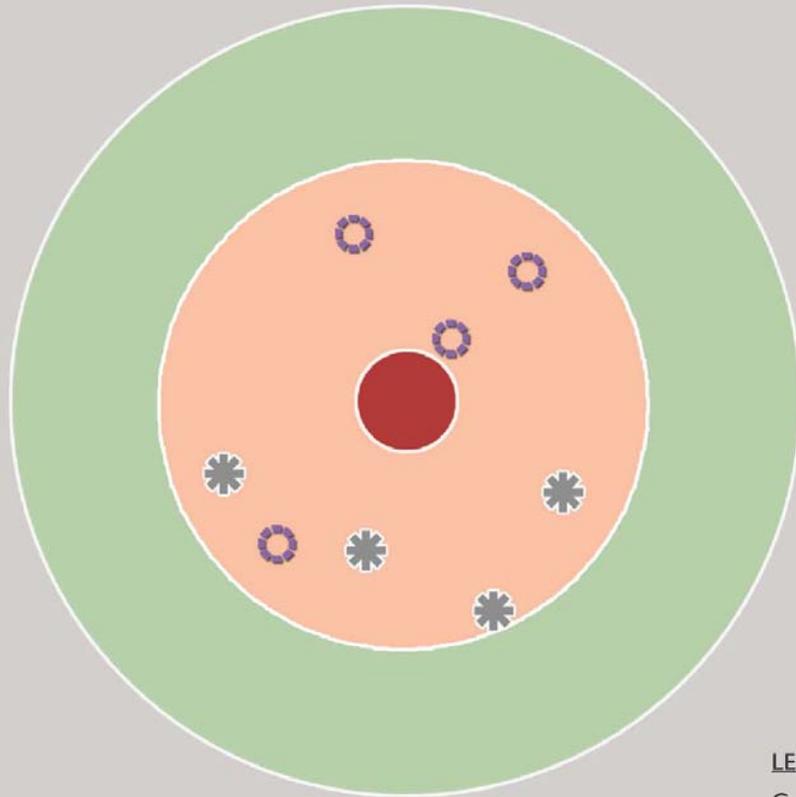
Special Activity Centers



Compact Development



compact development



- Urban growth boundary or service boundary, directing growth toward regional center (Nashville)
- Reinforces established regional center
- Leapfrog development in neighboring counties

LEGEND

Conservation / Rural



Centers



-Urban Core

General Urban



Special Use



Special Activity Centers

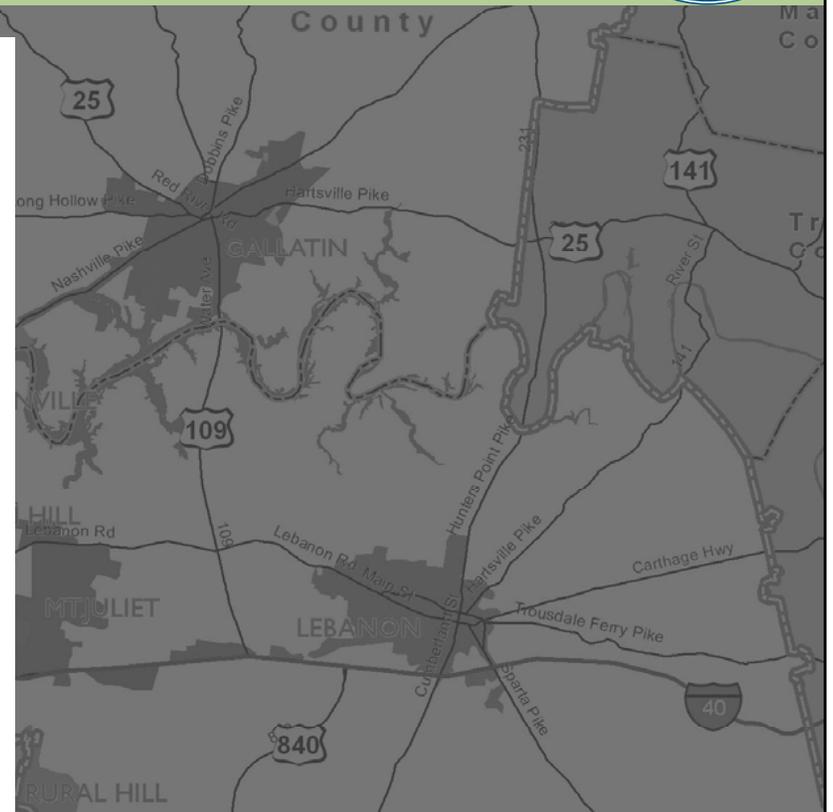
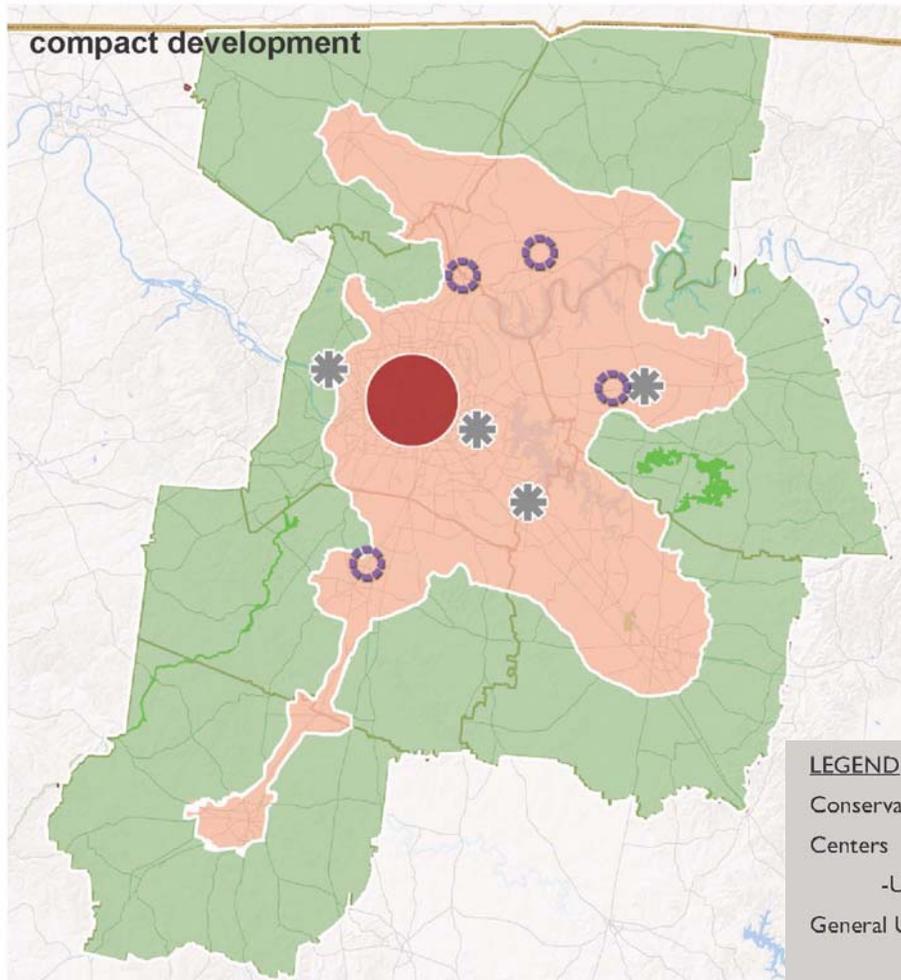


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state Highway



Rutherford County

Compact Development



LEGEND

- Conservation / Rural Centers
- Urban Core
- General Urban

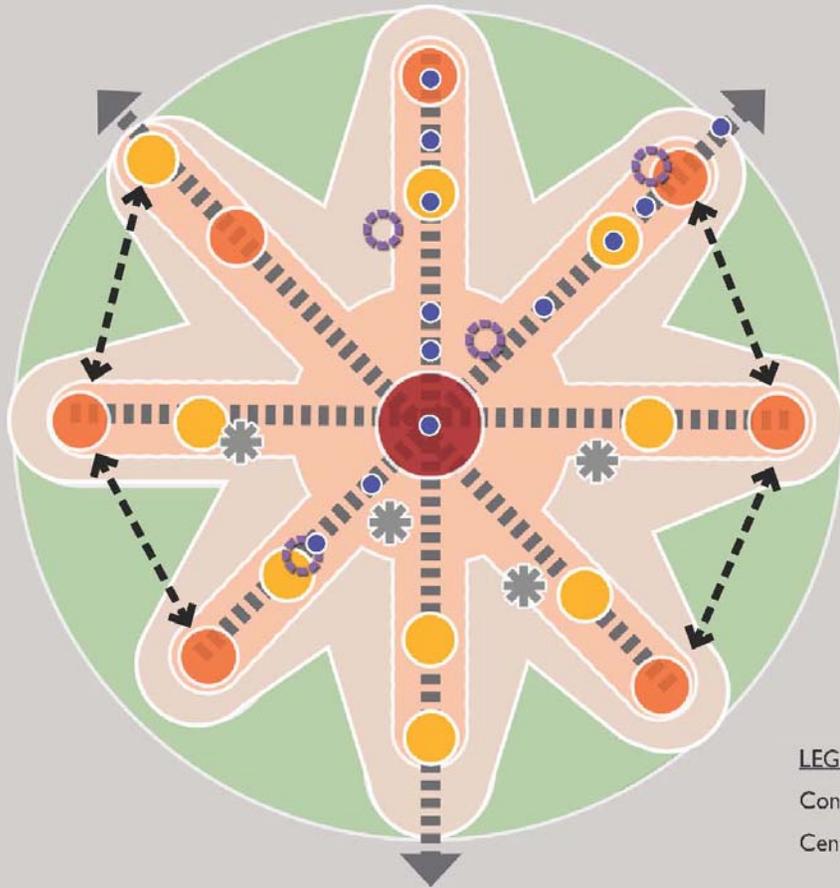


- Special Use
- Special Activity Centers



Centers and Corridors

centers and corridors



- Growth concentrated into regional, urban and outlying village centers and corridors with remnant countryside areas outside centers and corridors
- Supports multiple transportation modes
- Utilizes infrastructure

LEGEND

Conservation / Rural



Centers

-Urban Core



-Traditional Town Centers



-Village Centers



-TOD



Corridors

-General Urban



-Suburban



Special Use



Special Activity Centers



Primary Linkages



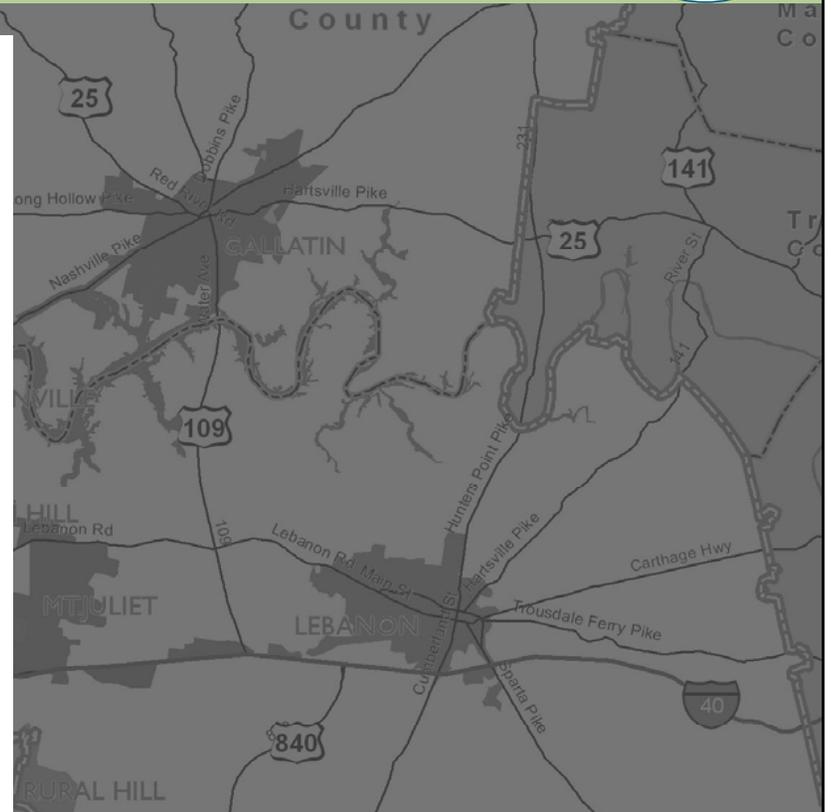
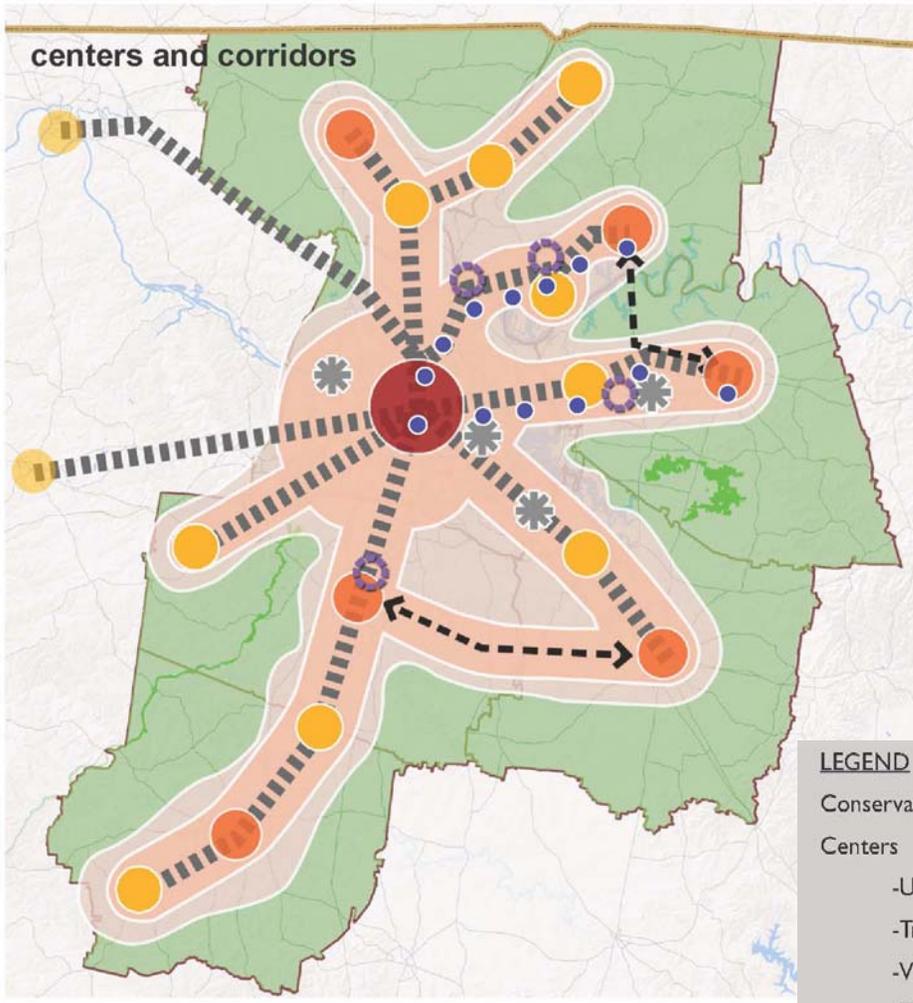
Secondary Linkages



County Boundary
 City Body
 State Highway



Centers and Corridors



LEGEND

Conservation / Rural



Centers

-Urban Core



-Traditional Town Centers



-Village Centers



-TOD



Corridors

-General Urban



-Suburban



Special Use



Special Activity Centers



Primary Linkages



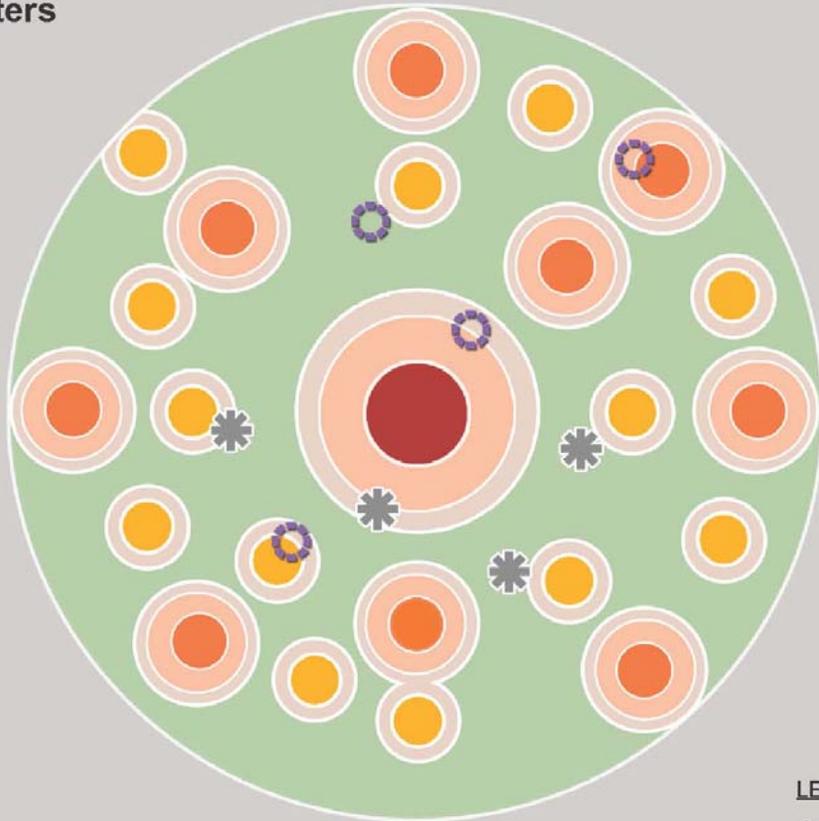
Secondary Linkages



Centers



centers



- Growth concentrated into regional, urban and outlying village centers with remnant countryside areas forming greenbelts surrounding centers
- Distinct places (identity)
- Duplication of services

LEGEND

Conservation / Rural		Future Centers	
Centers		-Traditional Town Centers	
-Urban Core		-Village Centers	
-Traditional Town Centers		Future Suburban	
-Village Centers		Special Use	
General Urban		Special Activity Centers	
Suburban			

Williamson County MPO Planning Boundary (Portion Shown)

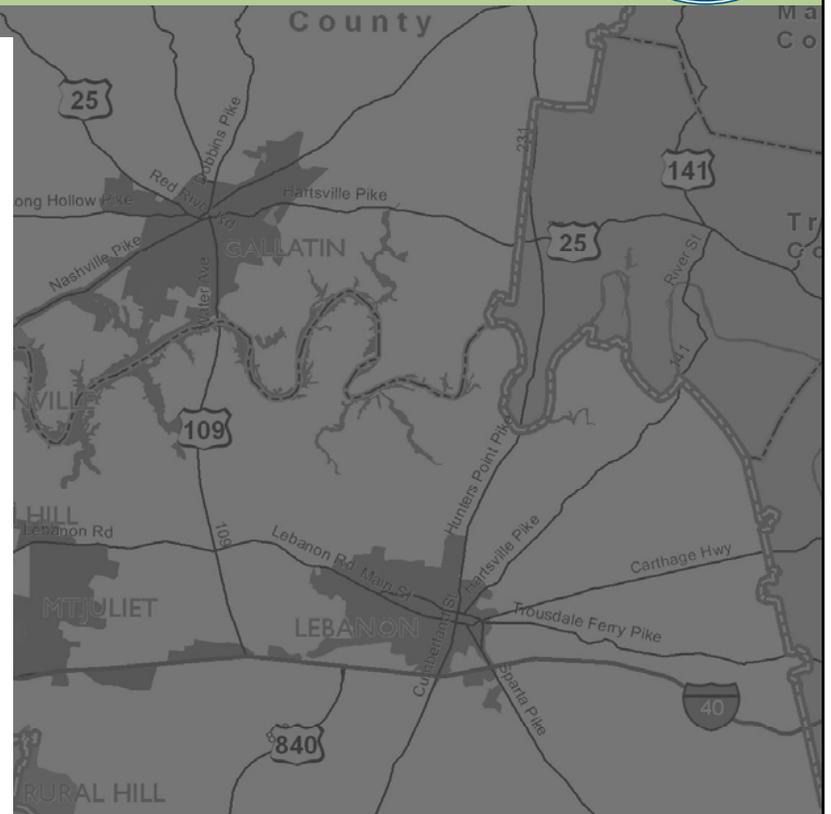
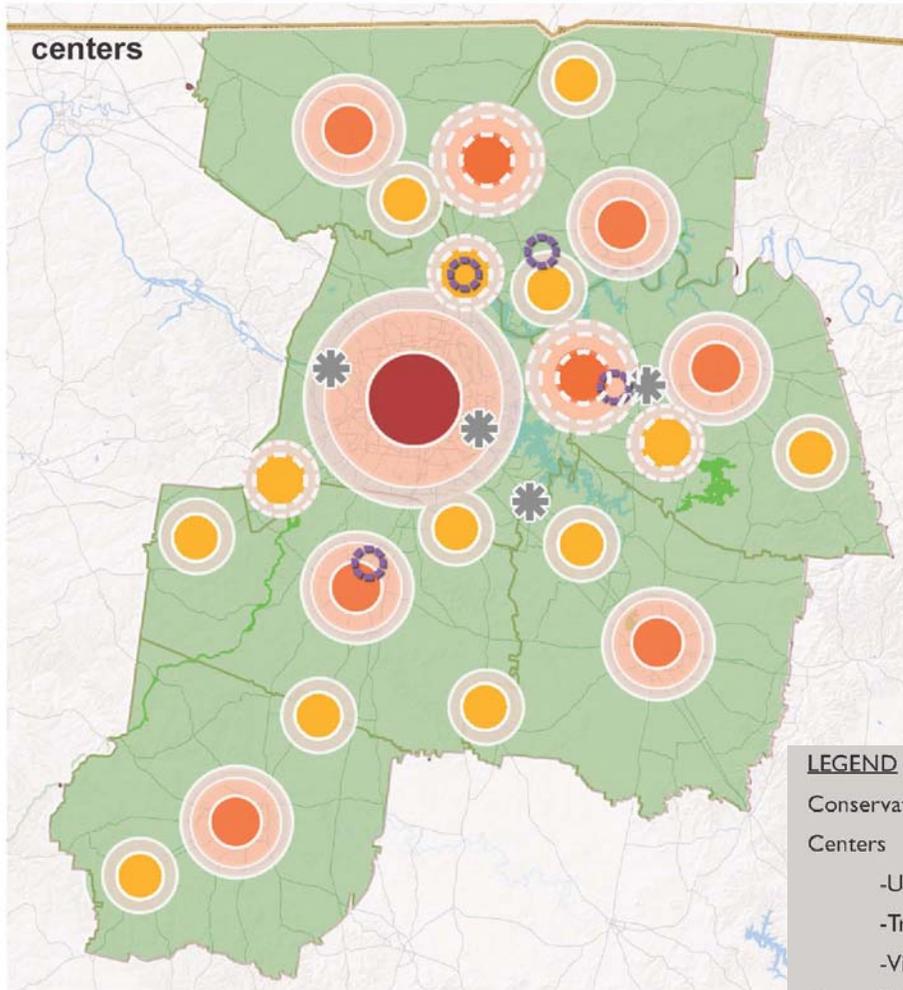
County Boundary

County Body

State Highway



Centers



LEGEND

Conservation / Rural



Centers



-Urban Core

-Traditional Town Centers



-Village Centers



General Urban



Suburban



Future Centers

-Traditional Town Centers



-Village Centers



Future General Urban



Future Suburban



Special Use

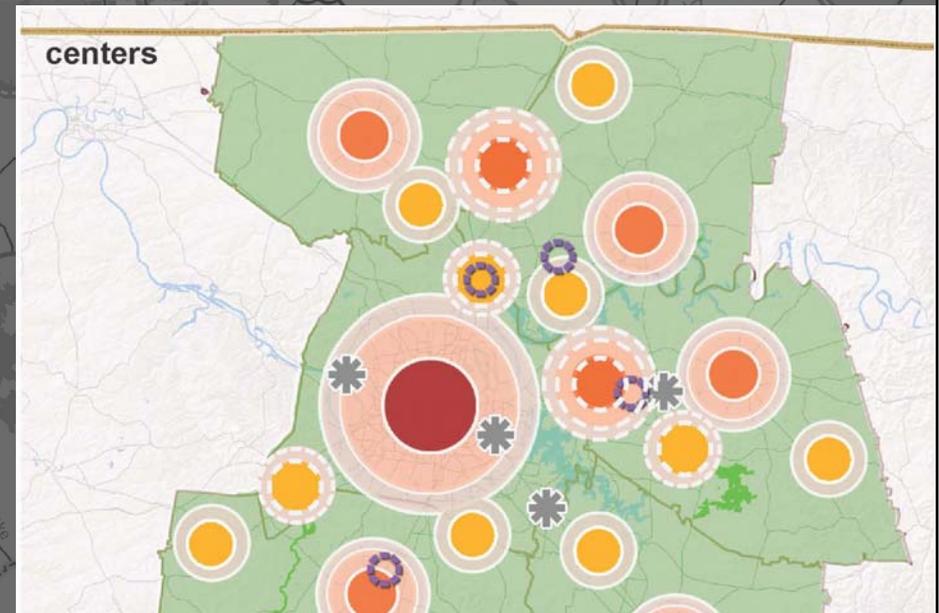
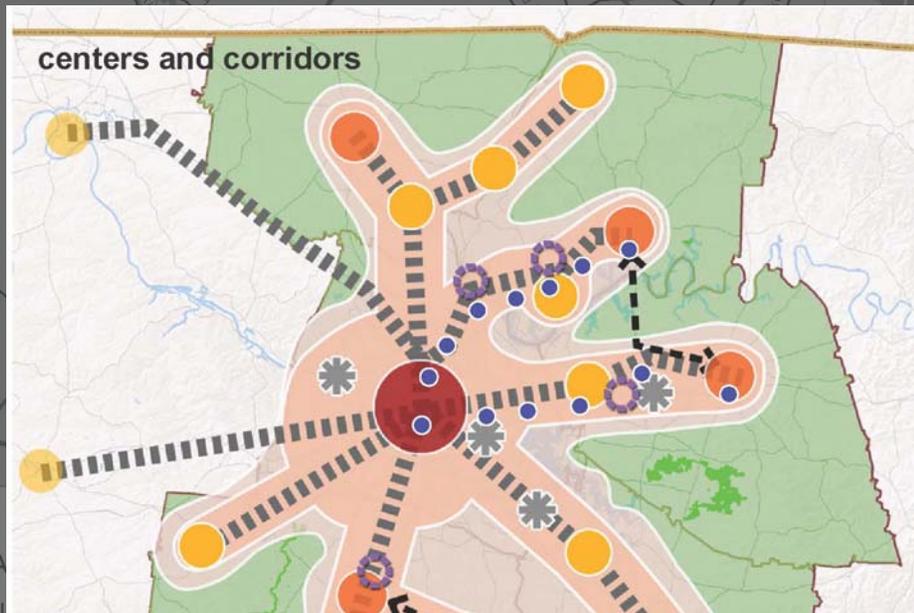


Special Activity Centers

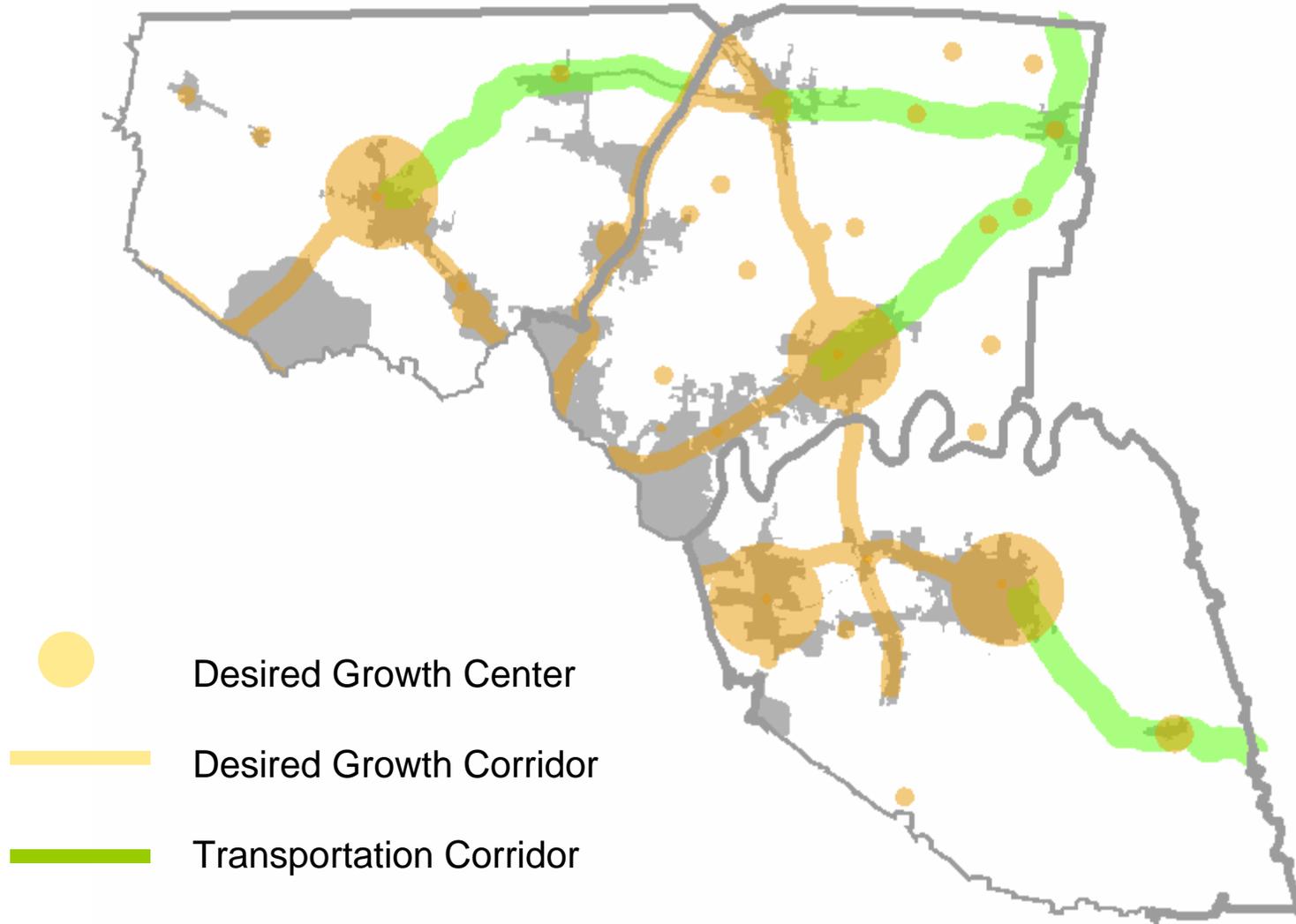


Alternative Scenario Concepts

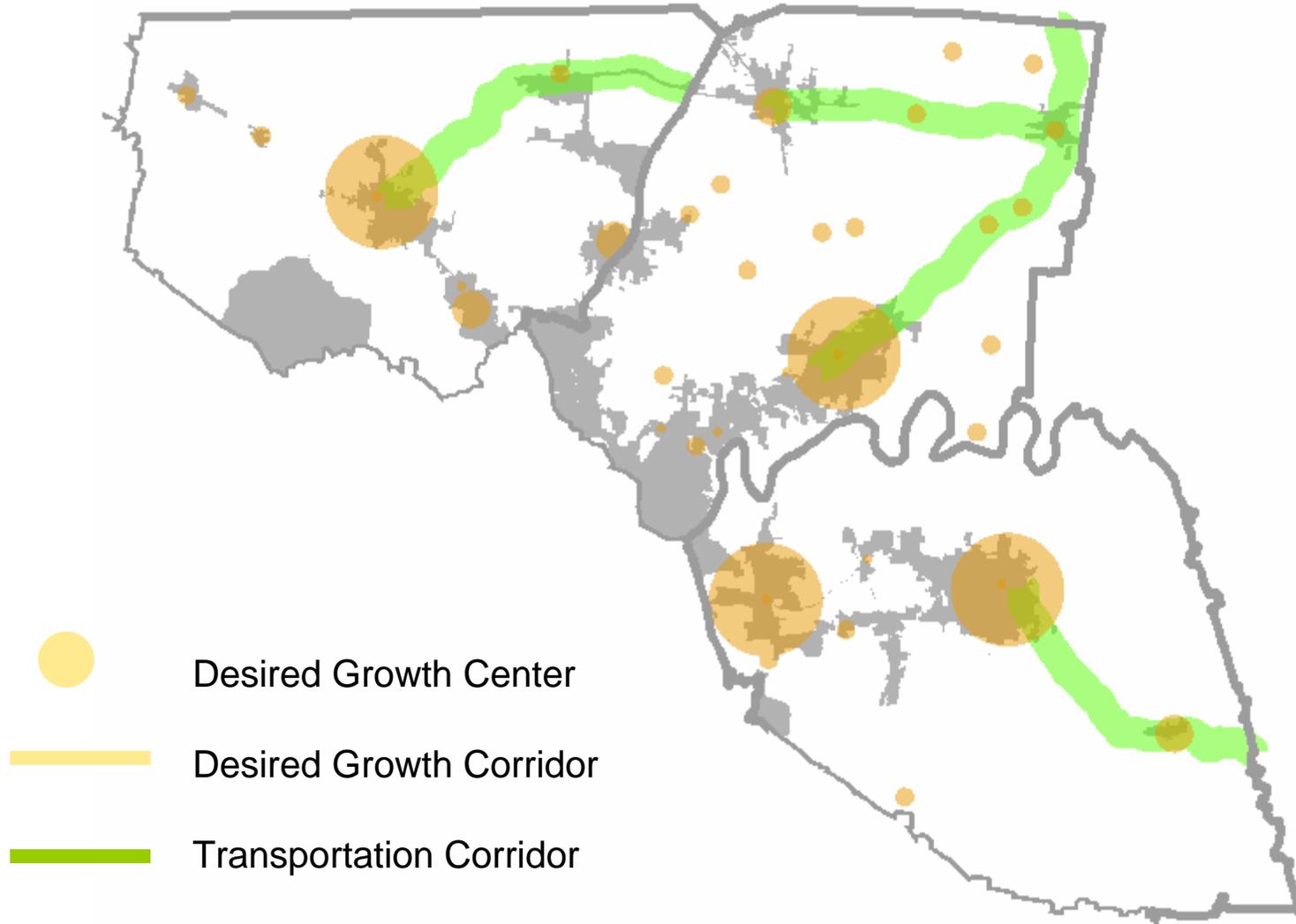
- Selected Centers & Corridors (1) and Centers (2)
 - Efficient use of infrastructure and resources
 - Supportive of existing development pattern (recent investments)



(1) Centers & Corridors: Desired Growth Areas



(2) Centers: Desired Growth Areas



Alternative Tests – What If....

What if 80% of all new growth went within a preferred growth areas....

HH Distribution

2008

2035 BAU

2035 ALT

Robertson County

Centers & Corridors

58.55%

54.97%

67.78%

Centers

44.78%

40.29%

59.94%

Sumner County

Centers & Corridors

40.42%

36.35%

55.82%

Centers

25.23%

22.53%

46.54%

Wilson County

Centers & Corridors

52.16%

46.26%

65.63%

Centers

44.08%

37.34%

61.46%

Tri-County Area

Centers & Corridors

47.75%

43.49%

61.68%

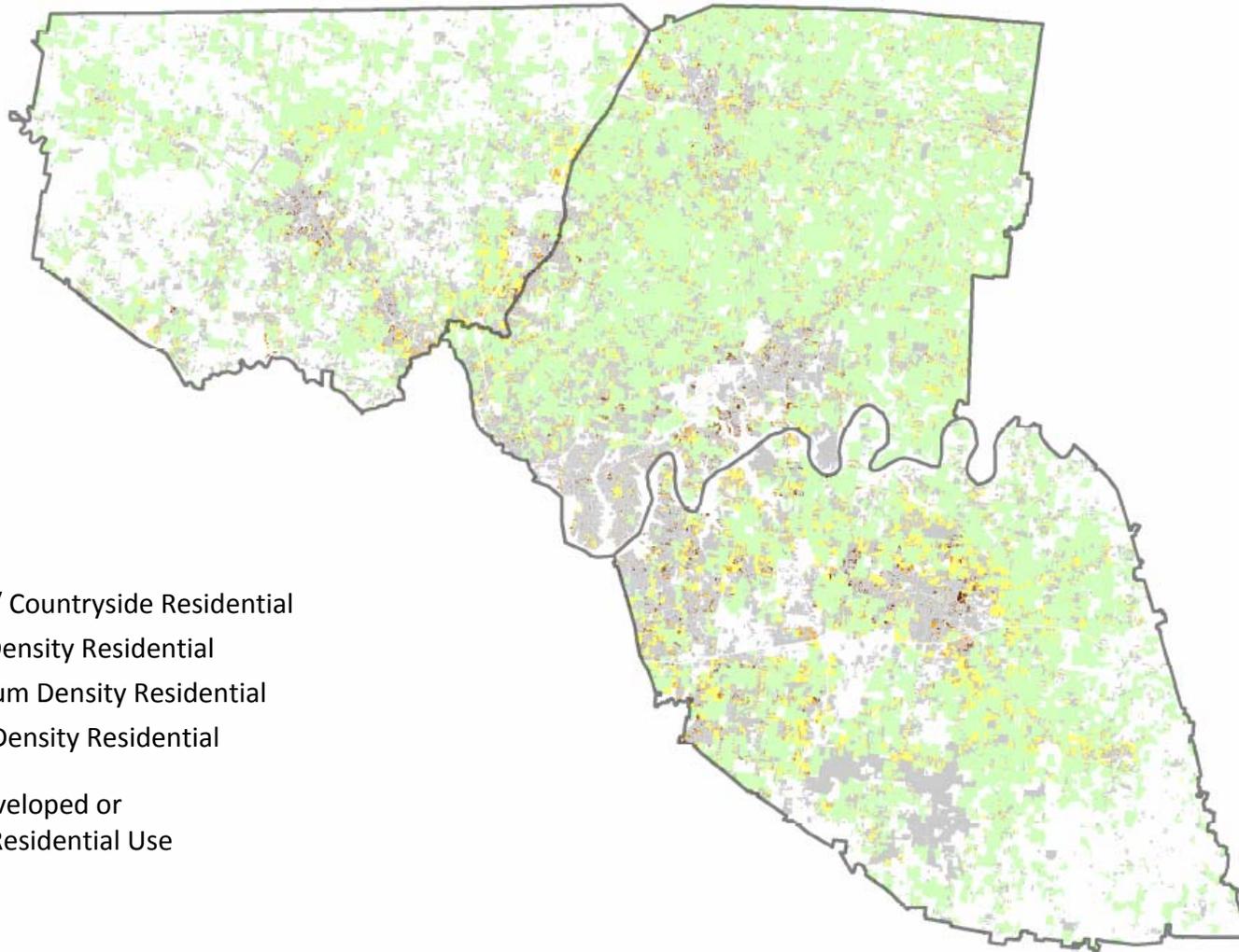
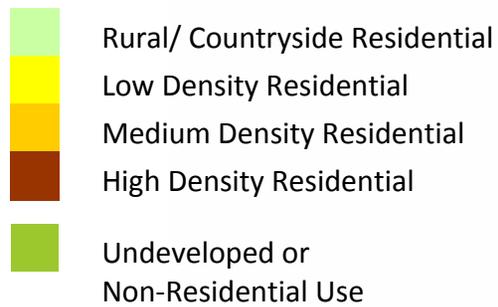
Centers

35.22%

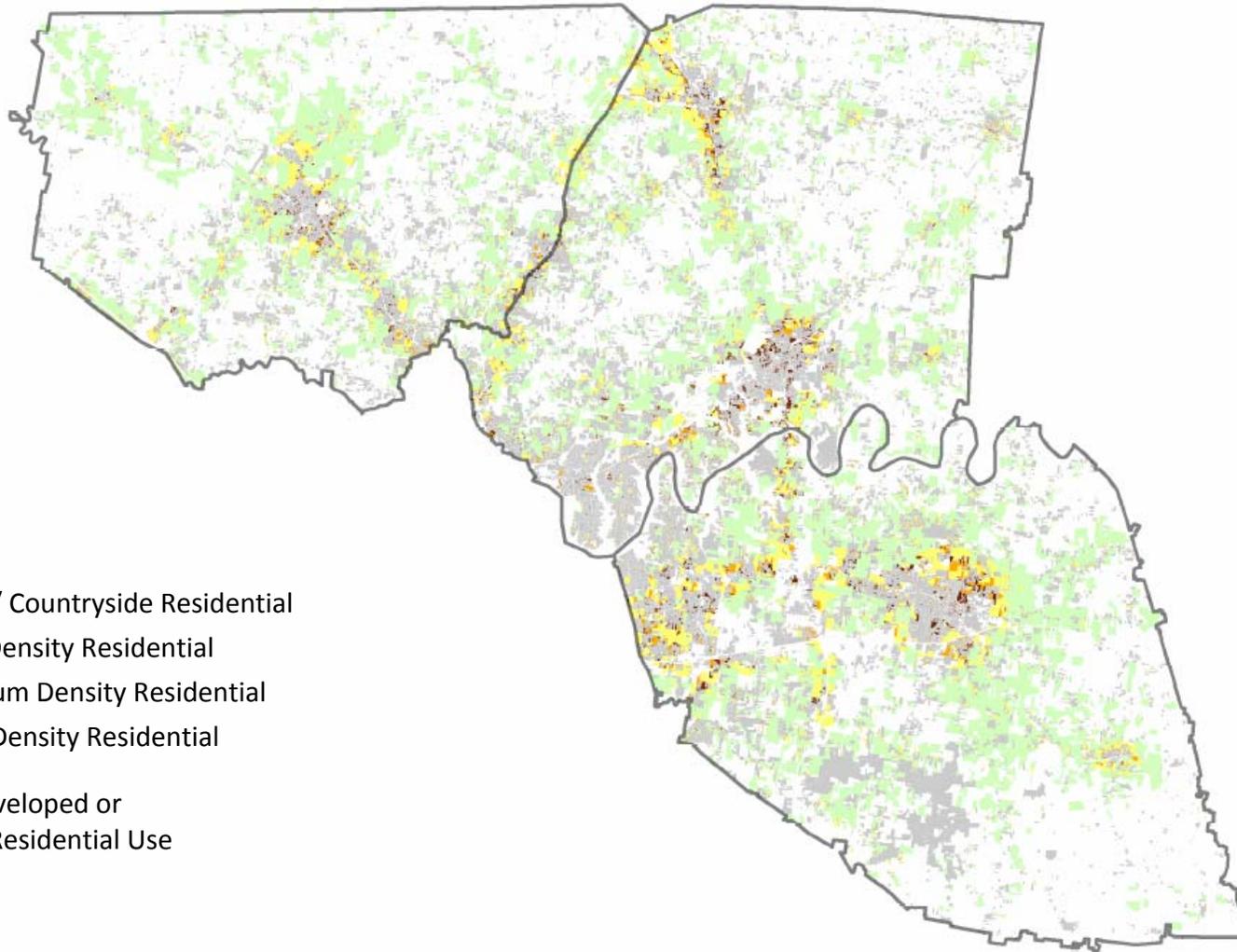
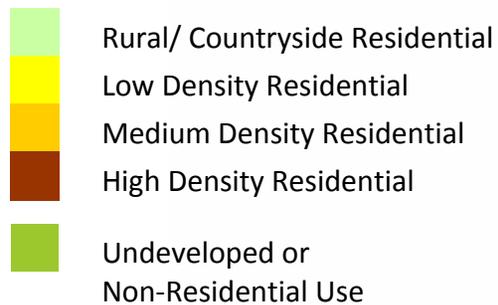
31.31%

54.56%

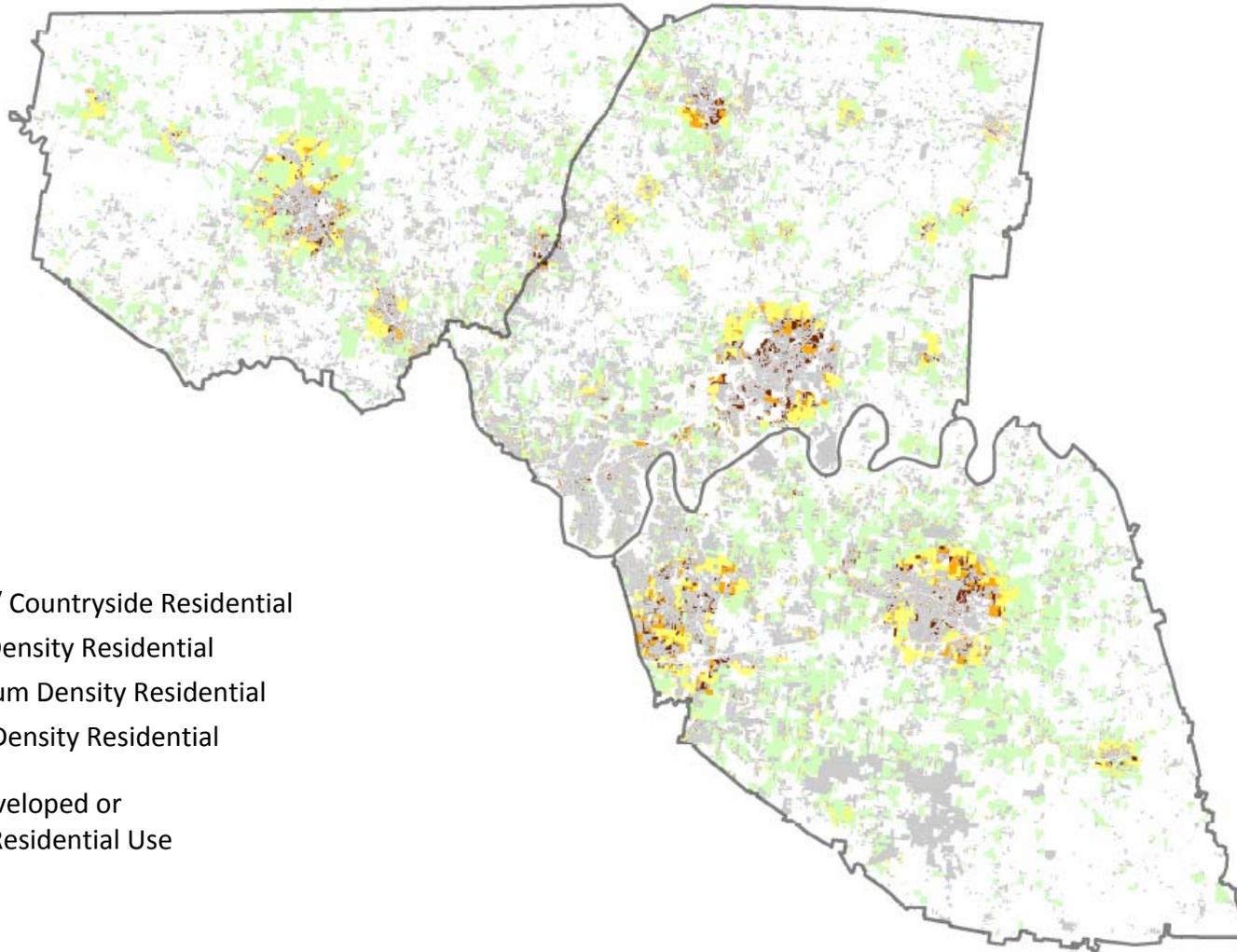
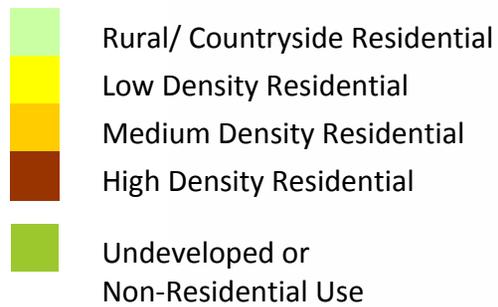
2035 BAU Residential Density



2035 Alternative 1 Residential Density



2035 Alternative 2 Residential Density



Model Results



MOEs



- Measures of Effectiveness (MOEs)

- Based on regional goals

- Purpose

- More detailed assessment of alternatives

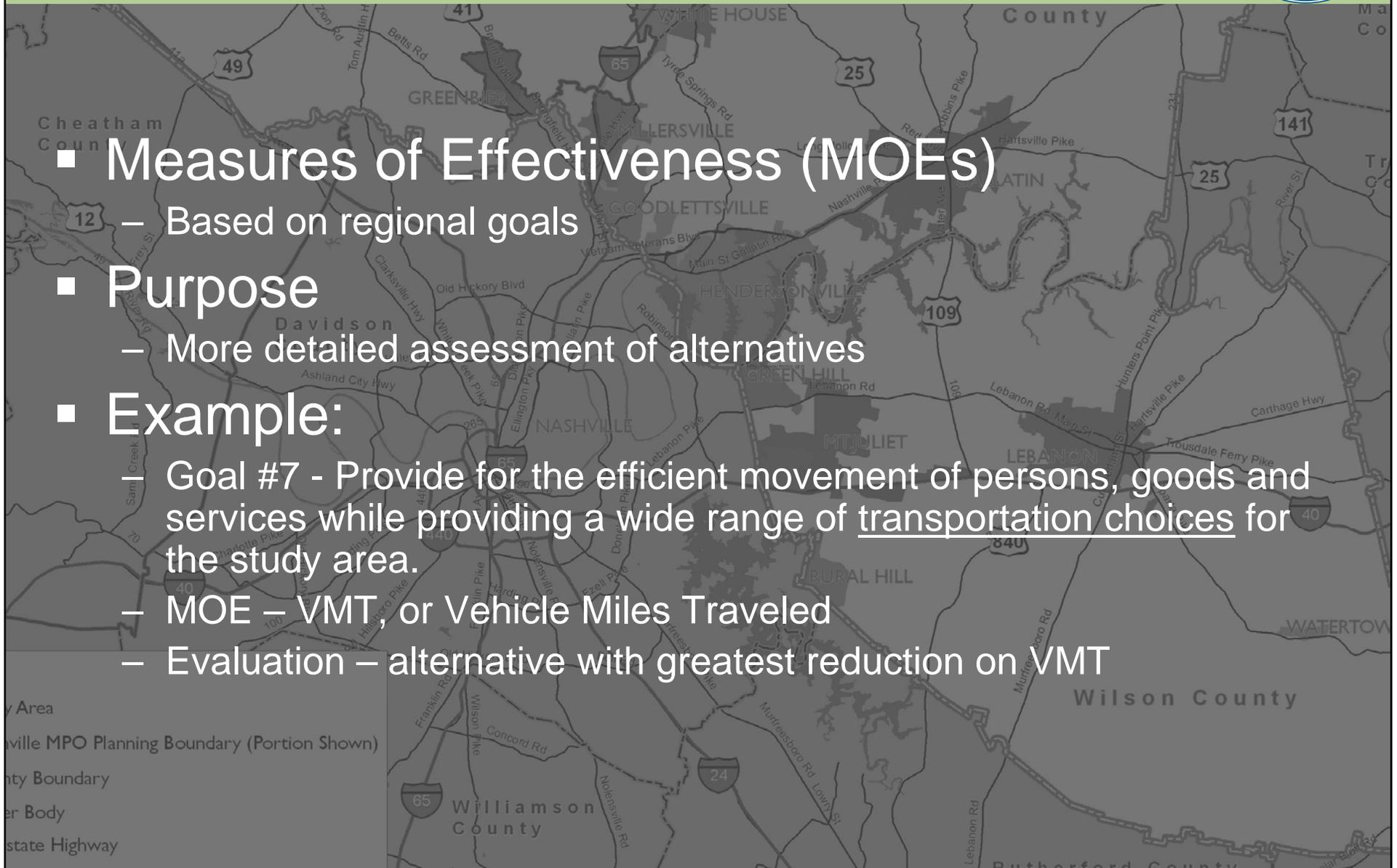
- Example:

- Goal #7 - Provide for the efficient movement of persons, goods and services while providing a wide range of transportation choices for the study area.

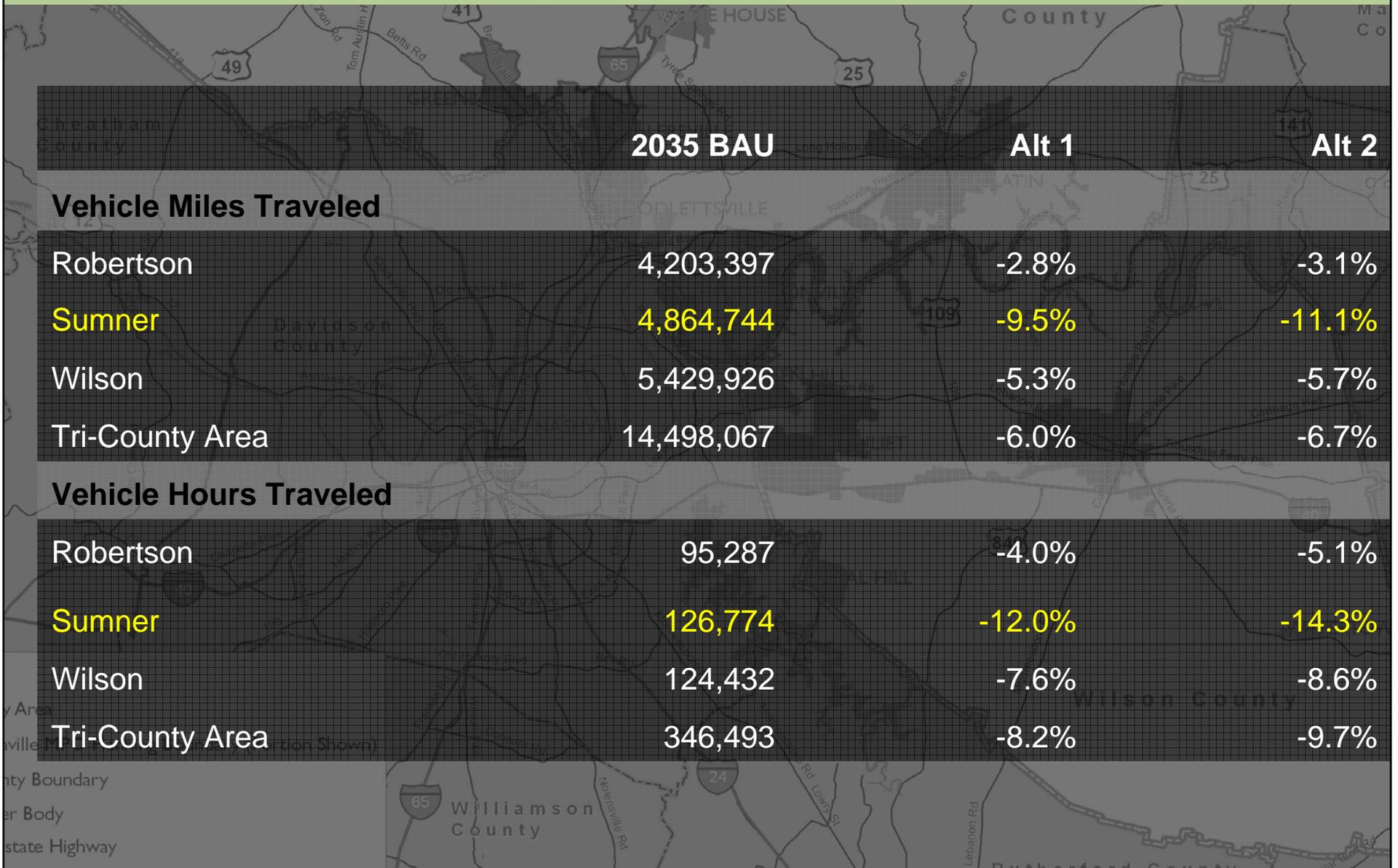
- MOE – VMT, or Vehicle Miles Traveled

- Evaluation – alternative with greatest reduction on VMT

y Area
ville MPO Planning Boundary (Portion Shown)
nty Boundary
er Body
state Highway



Travel Demand Measures



Comparison of Alternatives - Summer



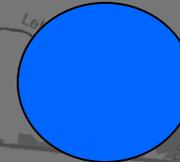
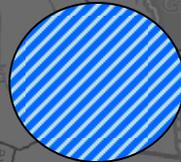
Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT)

BAU

Alt 1

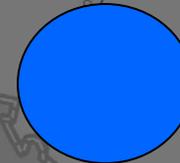
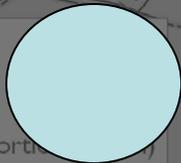
Alt 2

VMT

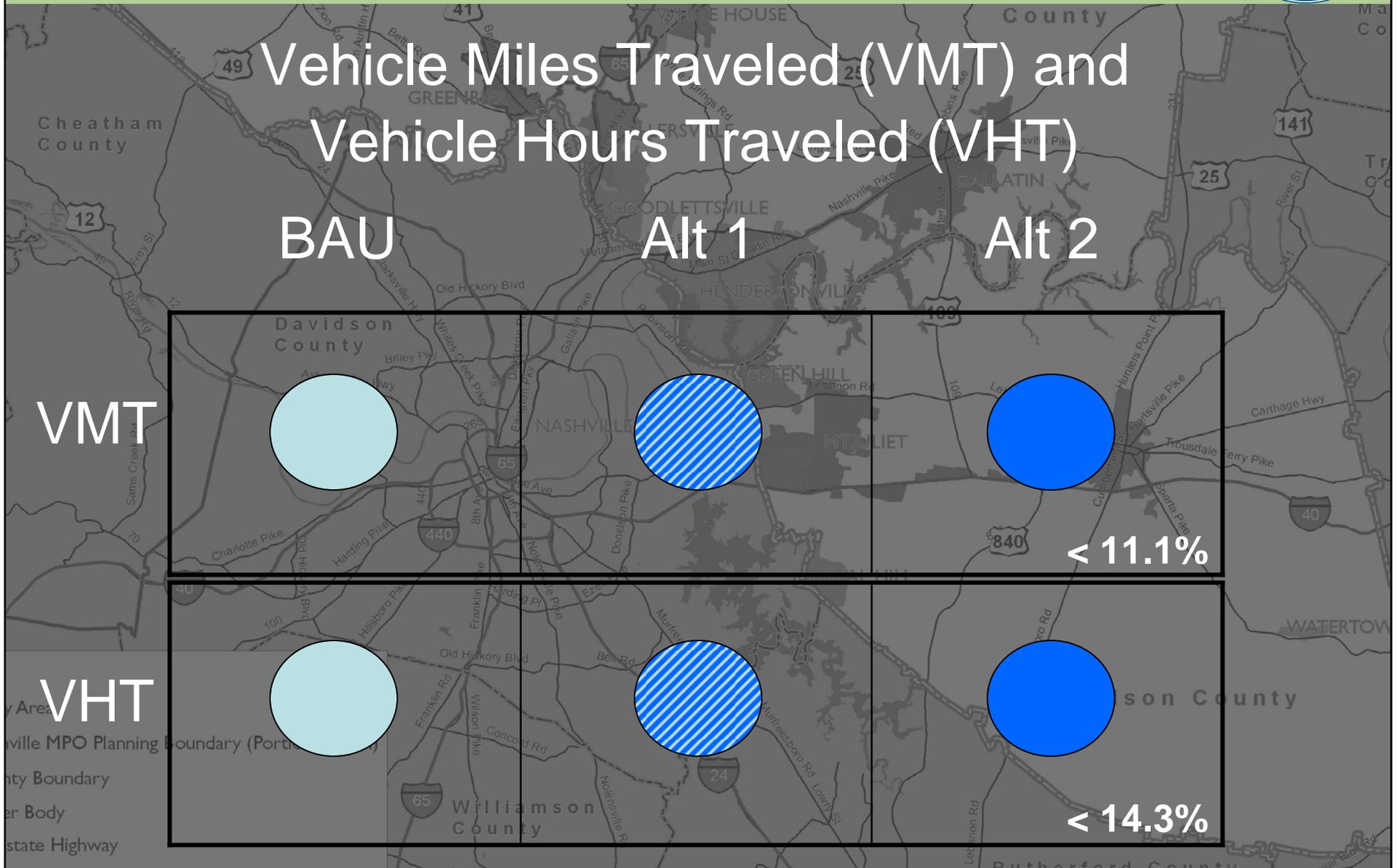


< 11.1%

VHT



< 14.3%



Comparison of Alternatives - Sumner



Urban & Rural Footprint

BAU

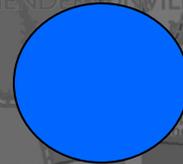
Alt 1

Alt 2

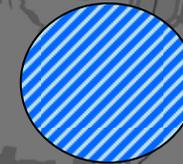
Urban



5,147



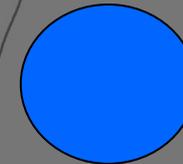
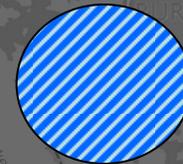
5,976



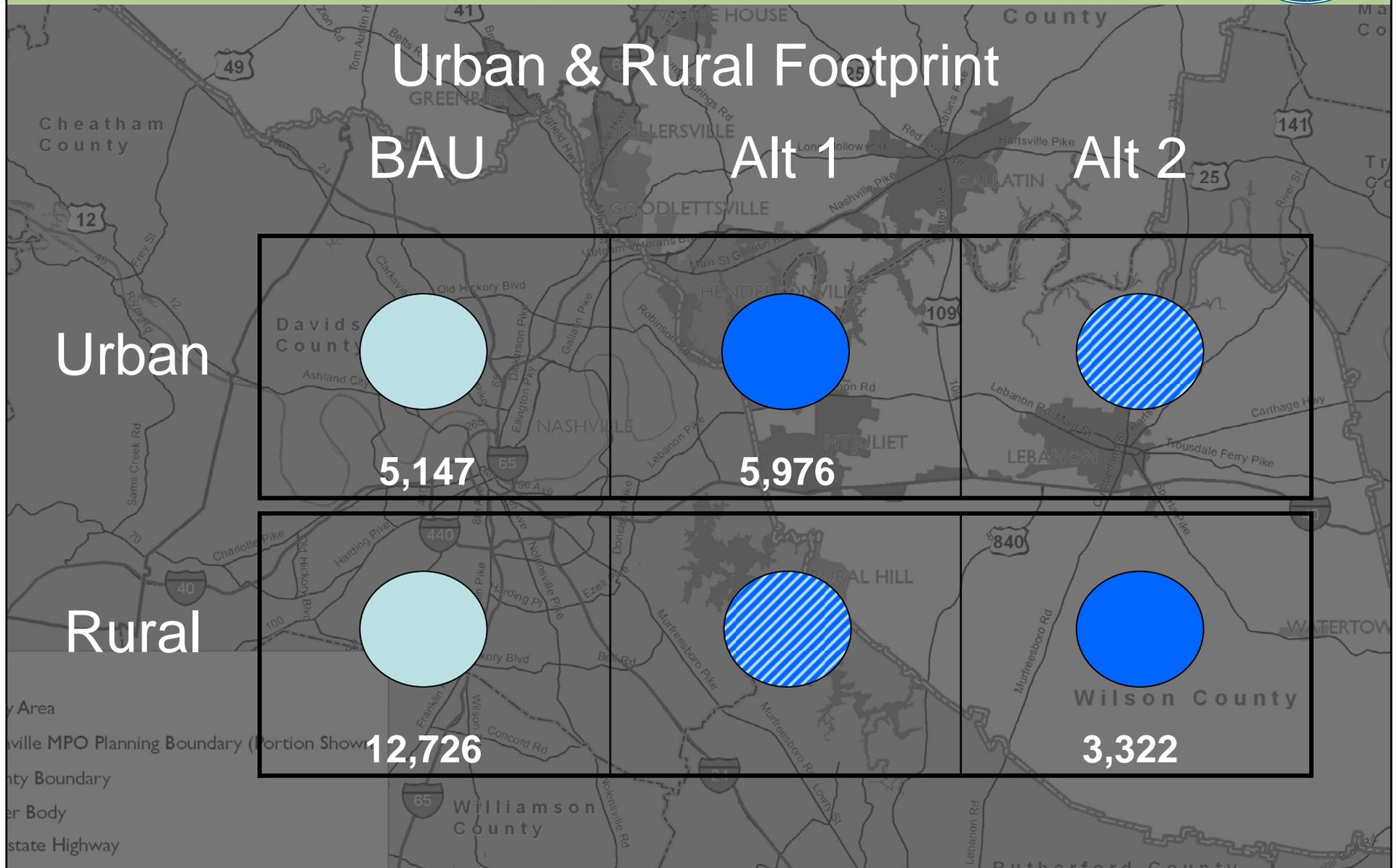
Rural



12,726



3,322



Comparison of Alternatives - Sumner



of People per Allocated Acre

BAU

Alt 1

Alt 2



.39

1.80

City Area
Nashville MPO Planning Boundary (Portion Shown)

County Boundary
Water Body
State Highway

Comparison of Alternatives - Sumner

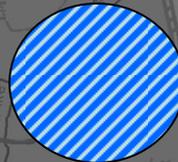
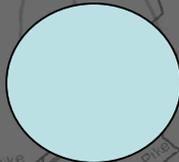


Average Residential Lot Size (new lots)

BAU

Alt 1

Alt 2



.27

.18

City Area
Nashville MPO Planning Boundary (Portion Shown)
County Boundary
Water Body
State Highway

Williamson County

Wilson County

Comparison of Alternatives - Sumner

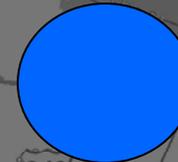
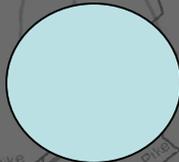


% Multifamily Households Allocated (new growth)

BAU

Alt 1

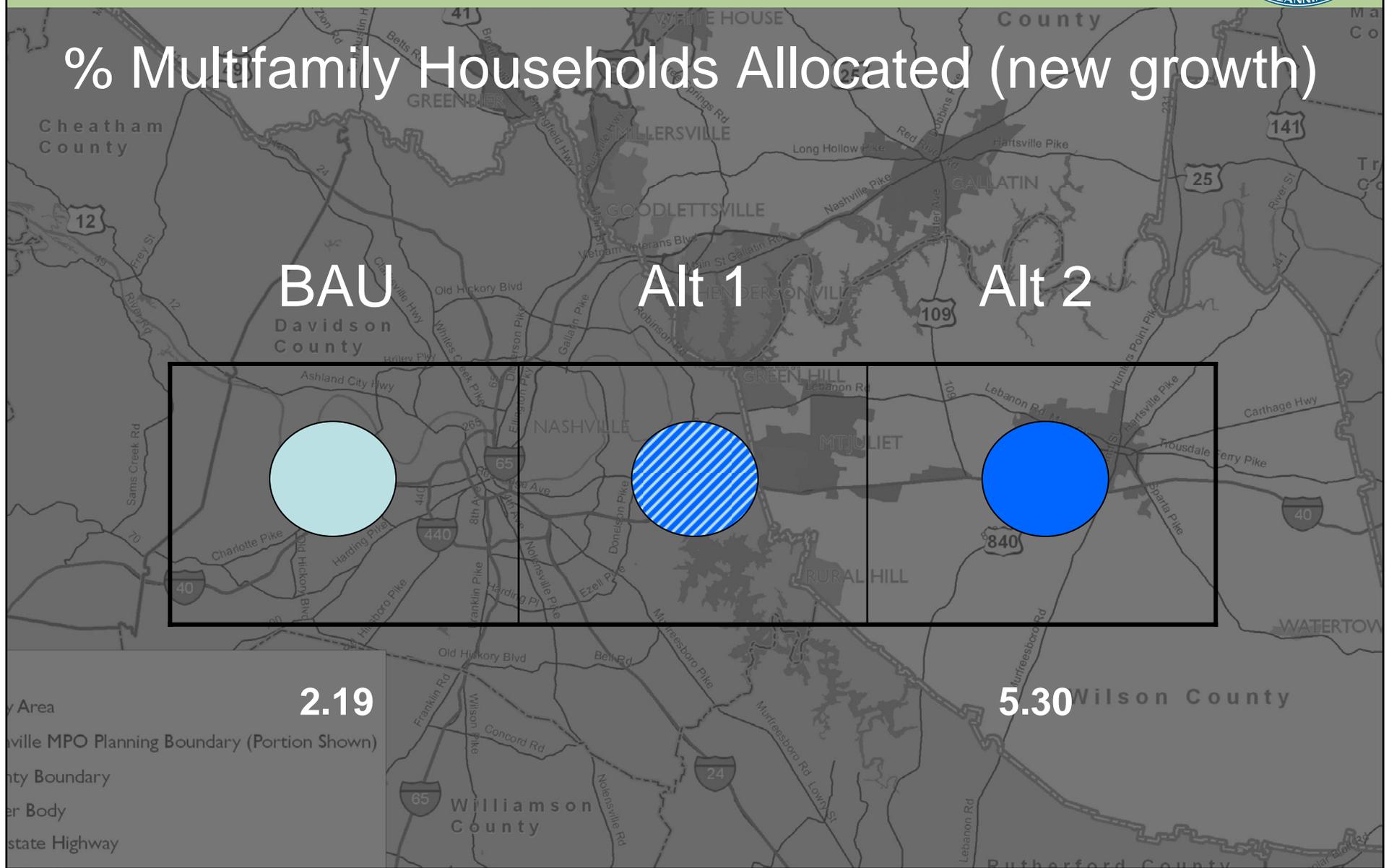
Alt 2



2.19

5.30

City Area
Nashville MPO Planning Boundary (Portion Shown)
County Boundary
Water Body
State Highway



Comparison of Alternatives - Sumner

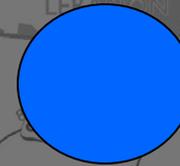
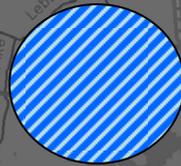
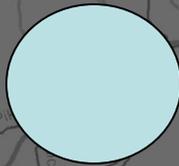


% of People (Pop & Emp) within 1/4 Mile of Transit Stations (Rail Stations & Express Bus Stops) (new growth)

BAU

Alt 1

Alt 2



3.30

5.60

y Area
Nashville MPO Planning Boundary (Portion
County Boundary
Water Body
State Highway

Williamson County

Wilson County

Rutherford County

Comparison of Alternatives - Sumner

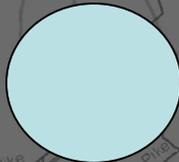


Prime Agricultural Land Consumed (acres)

BAU

Alt 1

Alt 2

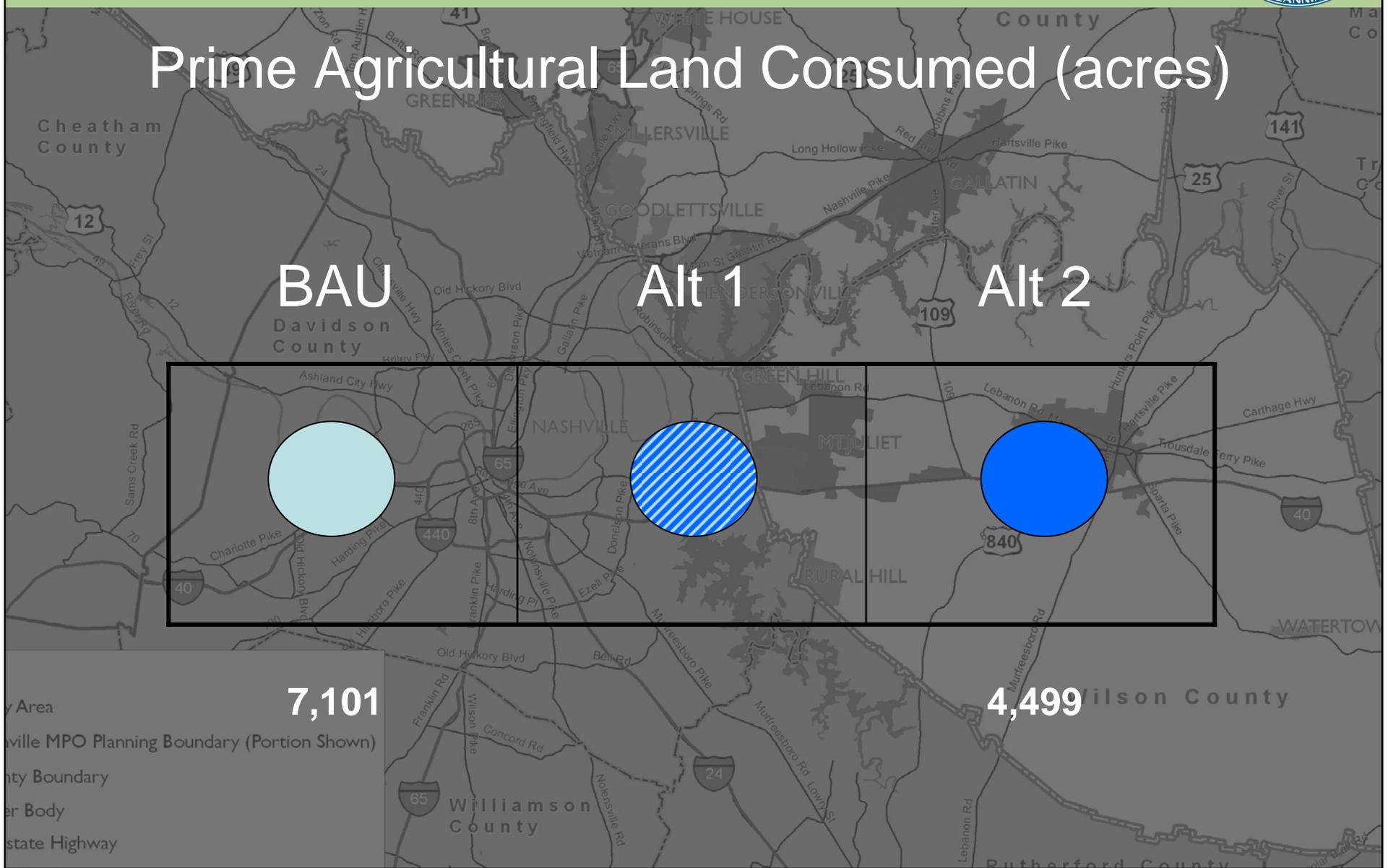


7,101

4,499

Sumner Area
Nashville MPO Planning Boundary (Portion Shown)

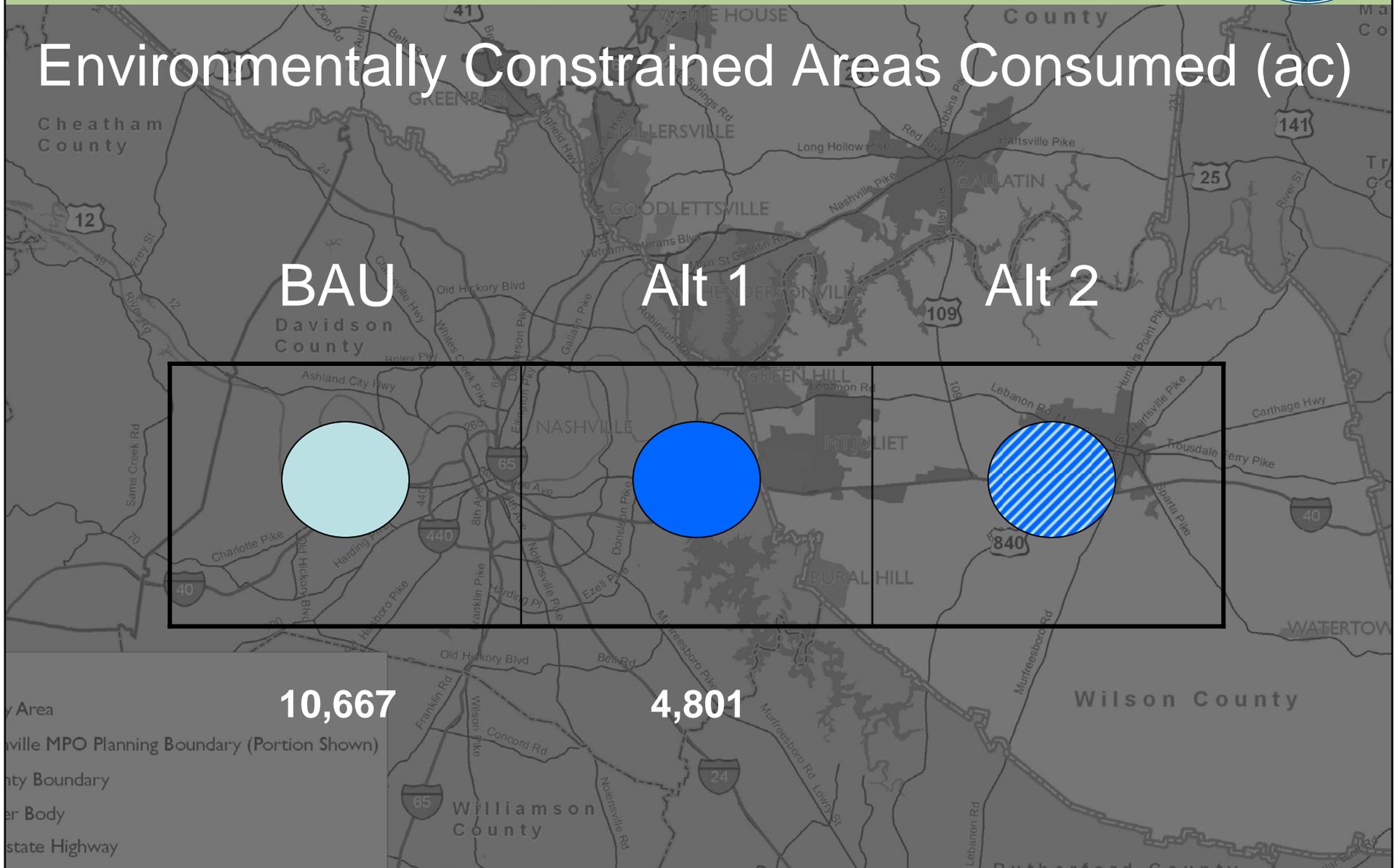
County Boundary
Water Body
State Highway



Comparison of Alternatives - Sumner



Environmentally Constrained Areas Consumed (ac)



Comparison of Alternatives - Sumner

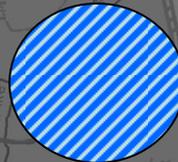
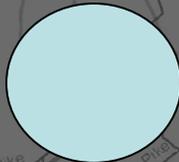


% Income Spent on Transportation (fuel, \$2.50/g)

BAU

Alt 1

Alt 2



3.00%

2.67%

City Area
Nashville MPO Planning Boundary (Portion Shown)
County Boundary
Water Body
State Highway

Williamson County

Wilson County

Rutherford County

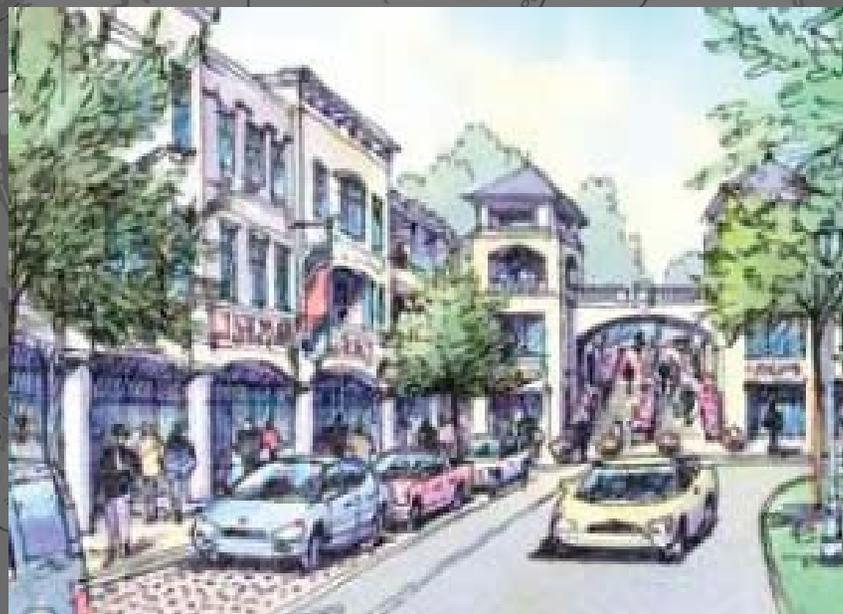
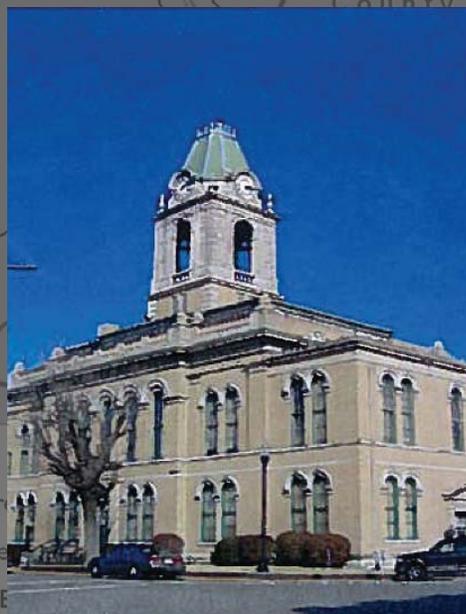
Policy Implications



Potential Policy Implications

■ Both Alternatives

- Encourage redevelopment and infill in Traditional Town Centers
- Reinforce existing centers by directing growth toward them
- Create new centers with higher densities (TOD) along primary corridors where transit stops are likely to occur



Potential Policy Implications

- Both Alternatives

- Maintain areas identified as activity and employment centers, ensuring continued economic vibrancy
- Allow activity centers to expand modestly to accommodate demand while minimizing encroachment into neighboring areas



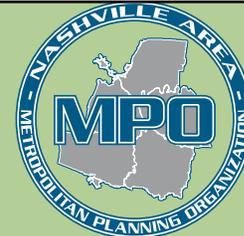
Potential Policy Implications



■ Both Alternatives

- Protect Conservation areas to preserve valuable natural resources and maintain function of natural systems
- Discourage growth in rural areas where such areas

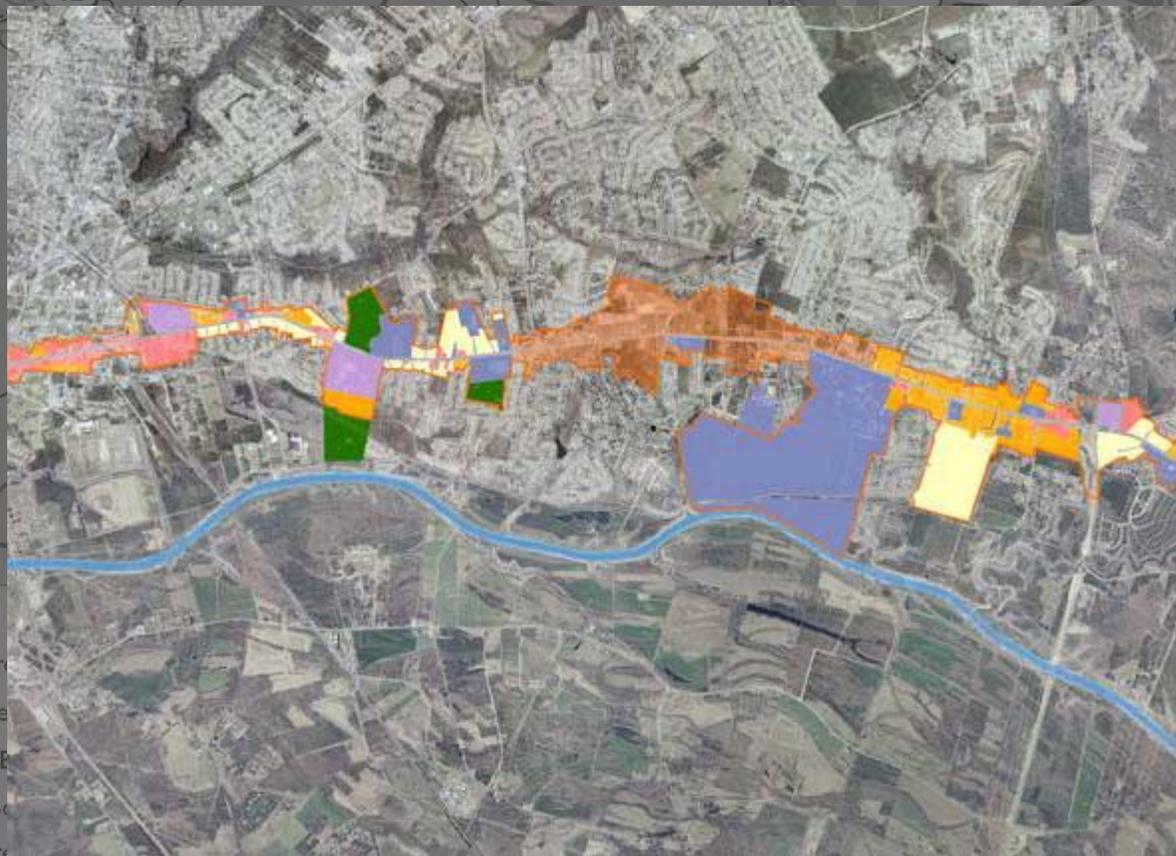




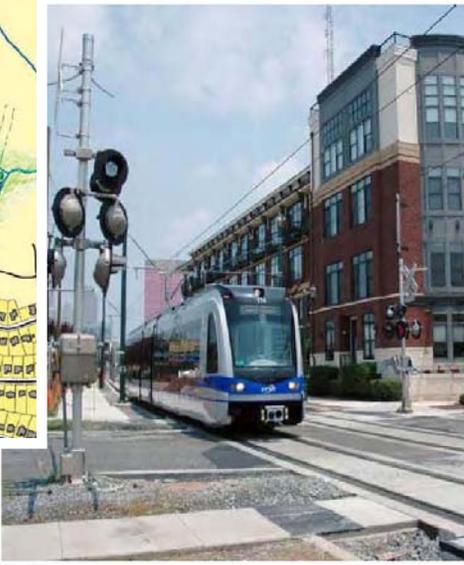
Potential Policy Implications

■ Centers & Corridors

- Allow development along key transportation corridors, where access would support additional growth



Mass Transit Viability



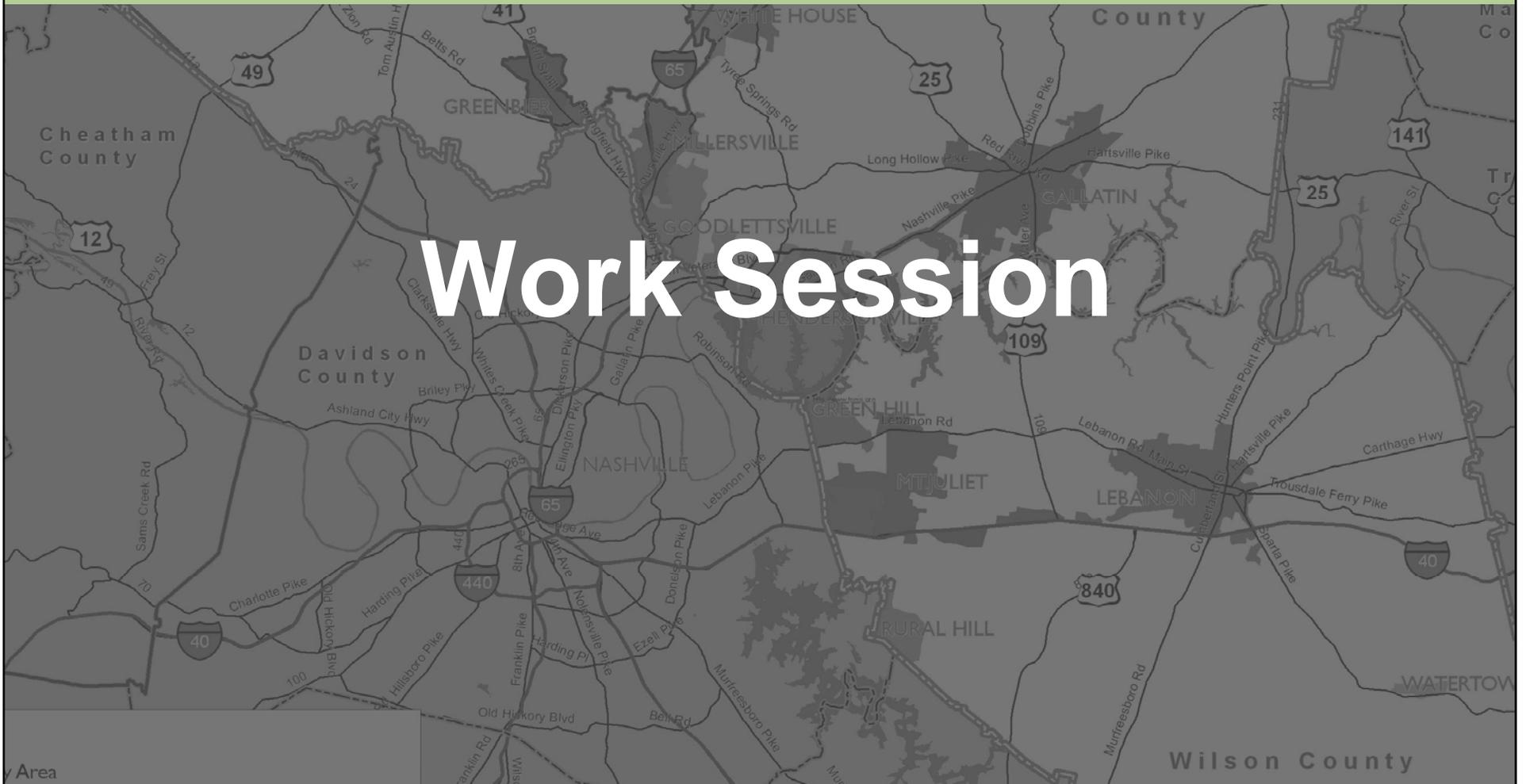
- Urban revitalization
- “Use urban land most efficiently.”
- “Cities and developers around the country are realizing the long-term benefits of mixed-use neighborhoods that combine housing, employment, retail, cultural and recreational activities in a walkable environment that is well-served by transit.”
- “High-quality development in centers and along transit corridors is key to maintaining the livable communities and natural beauty.”



Light Rail Transit – Denver



Work Session

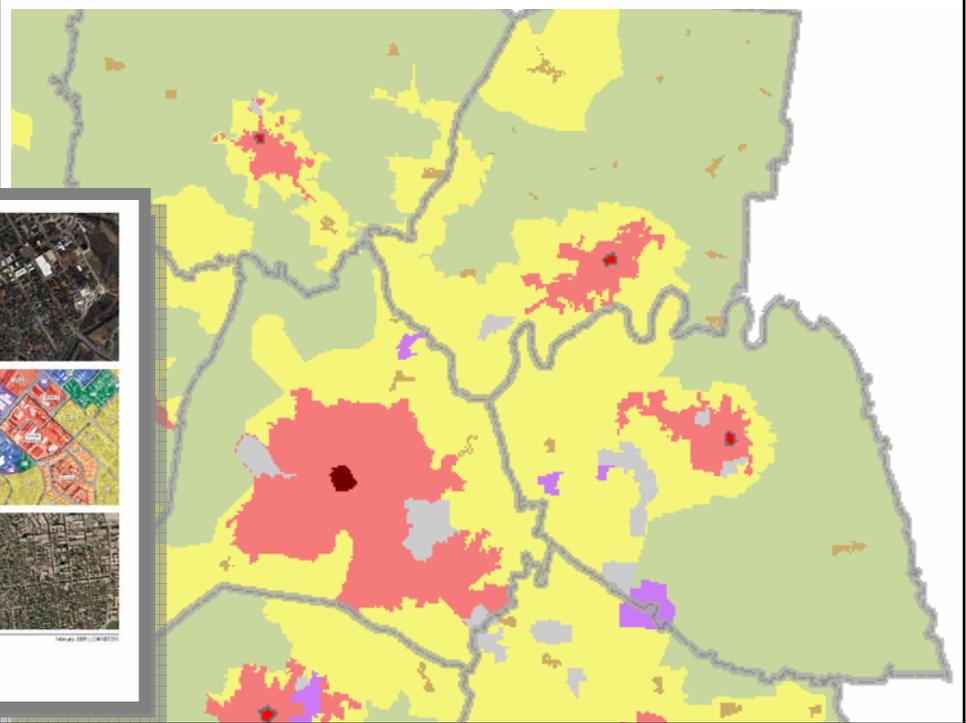


Work Session Questions

Based on the alternatives and how they perform relative to the goals...

- Are there areas where you would prefer growth?
- Are there areas where you would not support more growth?

Land Use Type	Definition	Typical Density	Typical Structure	Typical Street Pattern	Typical Transportation Mode	Typical Land Use Intensity				
Residential
Commercial
Industrial



General Urban

- Definition**
 - Areas where a variety of land uses occur at medium to high densities, having a well-connected pattern within the landscape
 - Areas generally within current city limits of county seats
 - Generally comprised of established residential neighborhoods found near historic core areas
- Local Examples**
 - Franklin
 - Gallatin
 - Markleboro
- Examples Elsewhere**
 - Savannah GA
 - Charleston SC
- Uses/Intensity**
 - Predominantly small lot and attached residential, multi-family
 - Medium to high density residential > 5 du/ac
 - Civic parks and open space, limited retail and office uses
 - Non-residential FAR > 0.9
- Structure Heights**
 - 2-3 Stories
- Street Pattern (typical)**
 - Connected street network in grid pattern
 - On-street parking
 - 750 feet for smaller (D-lane) collectors and arterials
 - 3,000 - 6,000 feet for larger (4-lane) collectors and arterials
- Multi-modal Accommodations**
 - Typically sidewalks supplemented by multi-use trails
 - Bicycle accommodations
 - A moderate level of transit accommodations in larger cities with buses or trains running every 15 to 30 minutes. Smaller cities may have limited trolley or local circulator service with connections to an express bus or rail route to the central city
 - Access to carpool or vanpool park-in-lots

LandDesign. CHARACTERS - GENERAL URBAN

County Boundary
 City Body
 State Highway



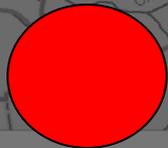
Work Session Questions

Based on the alternatives and how they perform relative to the goals...

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- Are there areas where you would not support more growth?



Preferred growth area

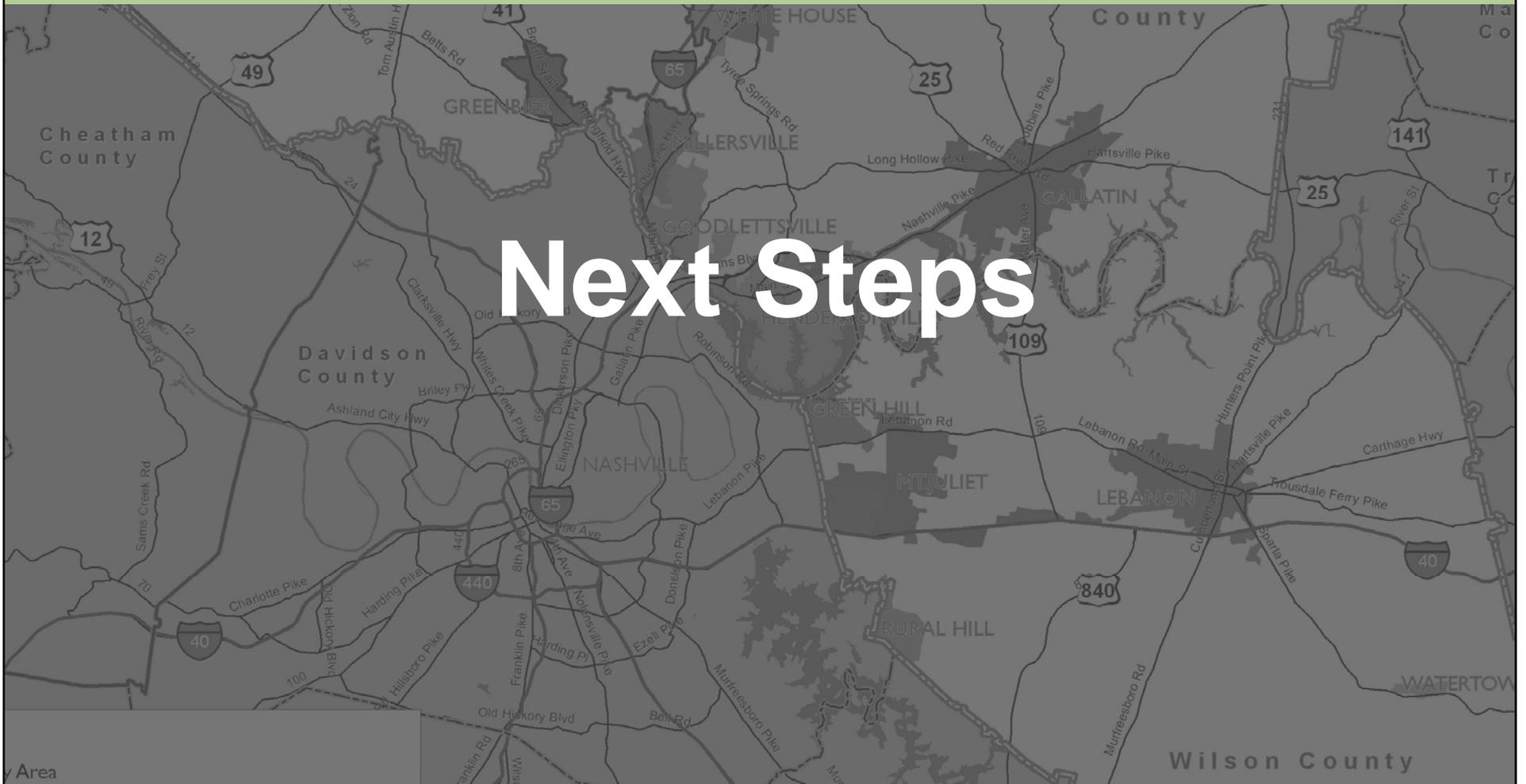


Less or no growth area

notes

Comments, ideas, suggestions, etc.

Next Steps



Preferred Growth Scenario



- Solicit feedback at community workshops
- Conduct work session with Steering Committee to develop “preferred”





Focus Areas and Strategic Corridors

Based on Preferred Scenario...

- Policies and implementation strategies to consider
- Focus Areas (4)
 - 4 conceptual plans
 - Different character areas
 - Different policies



y Area
ville MPO Planning Boundary (Portion Shown)
nty Boundary
er Body
state Highway

Williamson County



Focus Areas and Strategic Corridors

Based on Preferred Scenario...

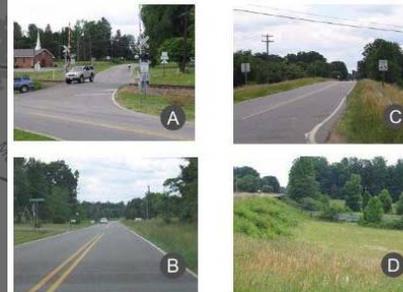
- Strategic Corridors (10 one-mile segments)
 - Represent critical areas of concern and/or locations where changes in land use intensity or traffic appears eminent
 - Variety: cross-sections, land use contexts, geography



Corridor Recommendations

Number of lanes 6
Median Divided
2030 Daily Volume
2030 Daily Capacity

Proposed Cross Section



Corridor Description and Issues Identified

- Two-lane cross section
- New diamond interchange with I-77 (TIP I-4411) to be let on November 2006
- Signal will be constructed at NC 115 and Langtree Road (2007)
- Proposed development is expected to cause congestion on this corridor
- See Mt. Mourne area plan

Data to KHA to begin field work
Field work scheduled for Dec 1-3
Report end of December

