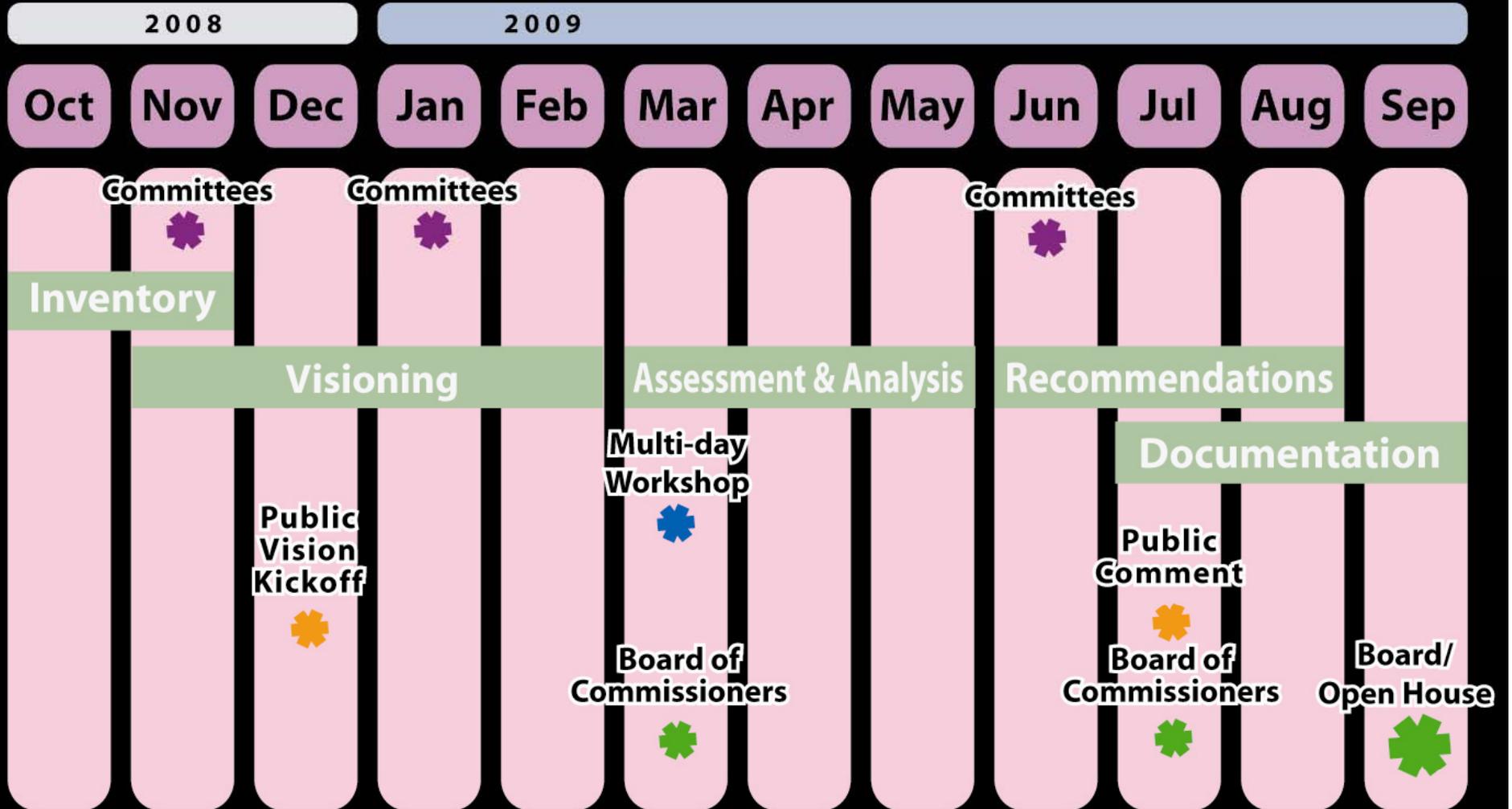


# Fayette Transportation Initiative

Integrating Transportation Decisions



# Process and Schedule



Tonight

- Round 1 Re-Cap
- Technical Issues
- Potential Approaches
- Workshop Agenda and Approach

Round 1

Transportation investments are powerful and far-reaching.

Transportation accounts for **19 percent** of spending by the average household in America - as much as for food and health care combined.



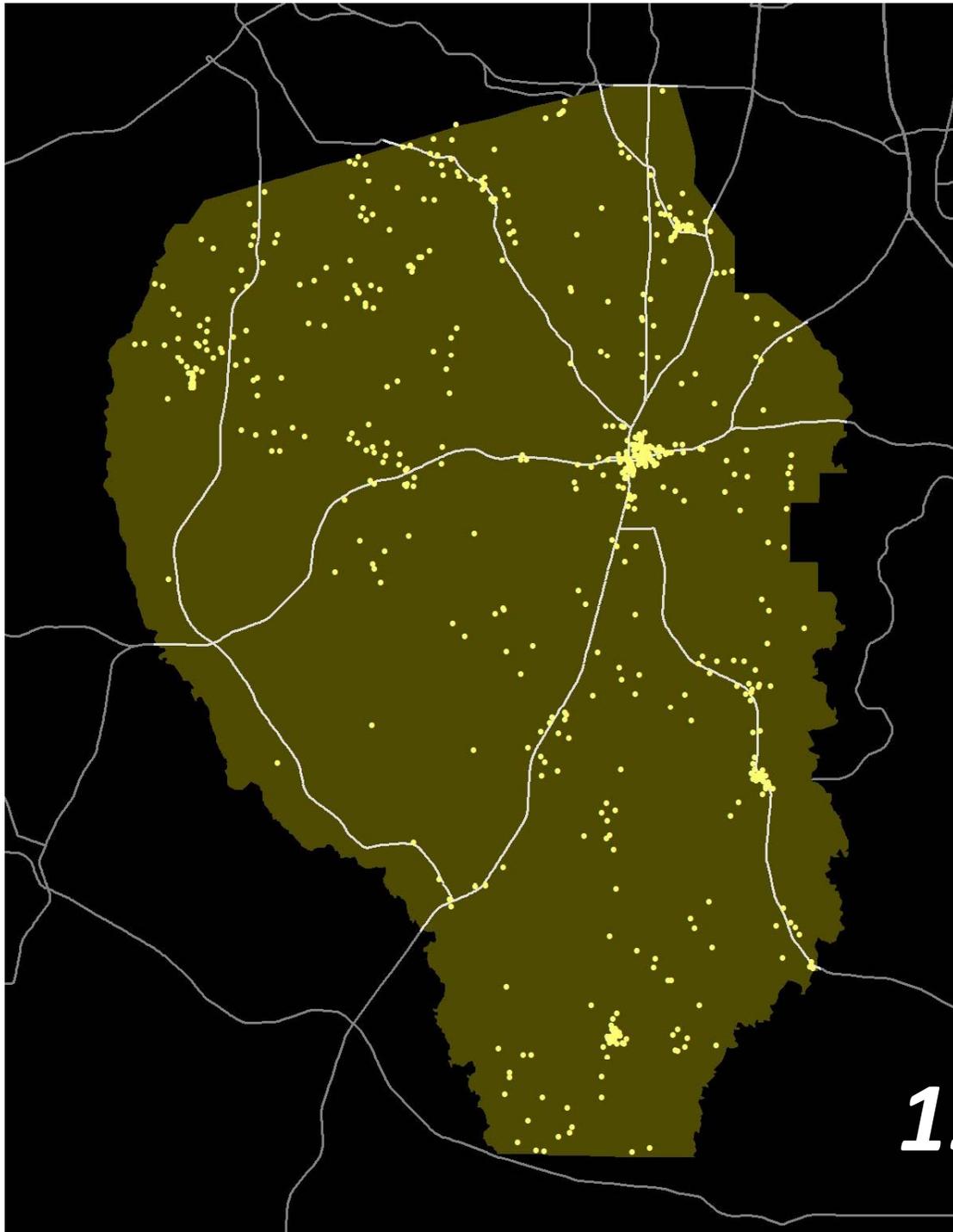
## Bone Structure



# Bone Structure



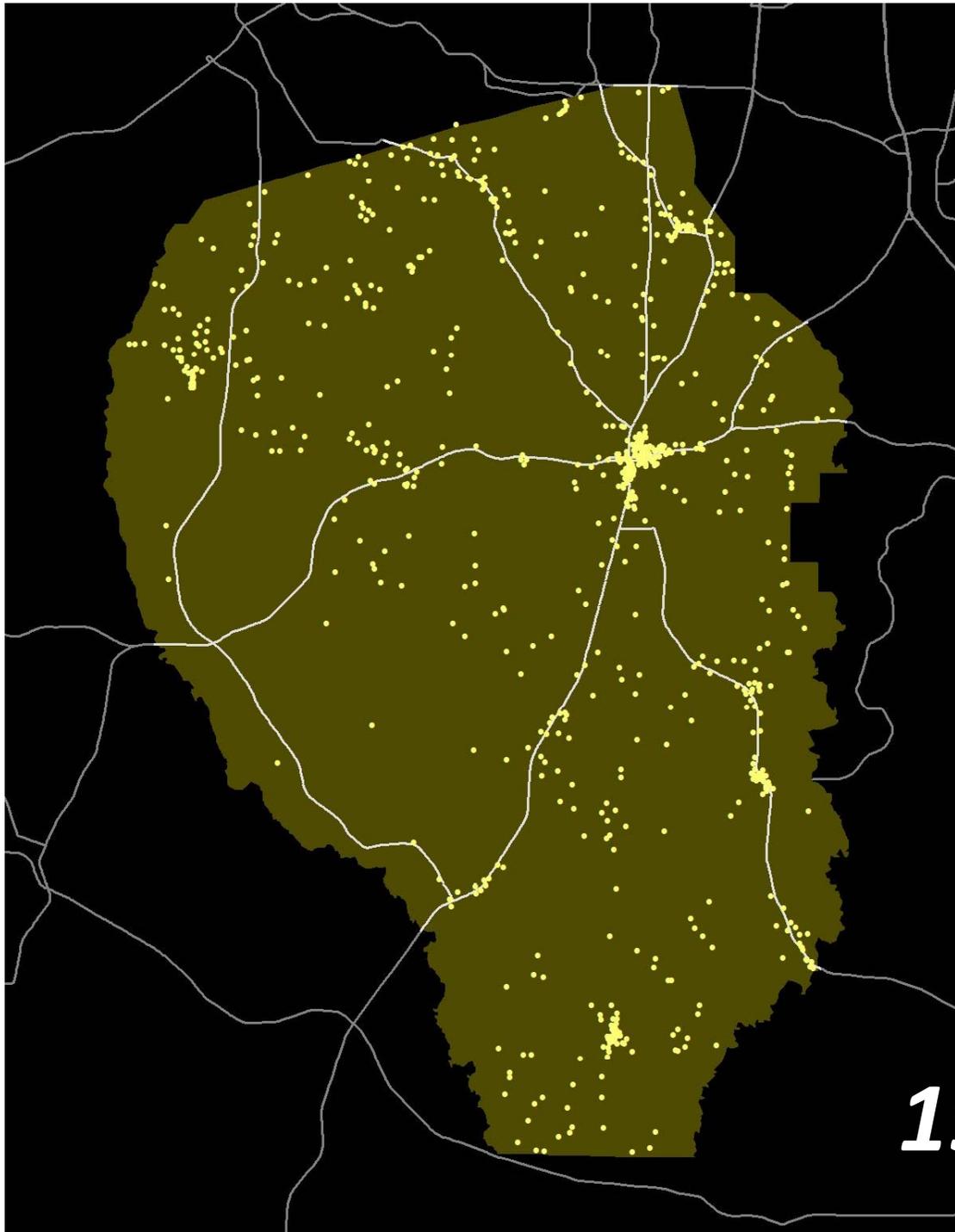
# Fayette County's Growth



**1945**

Population  
**8,170**

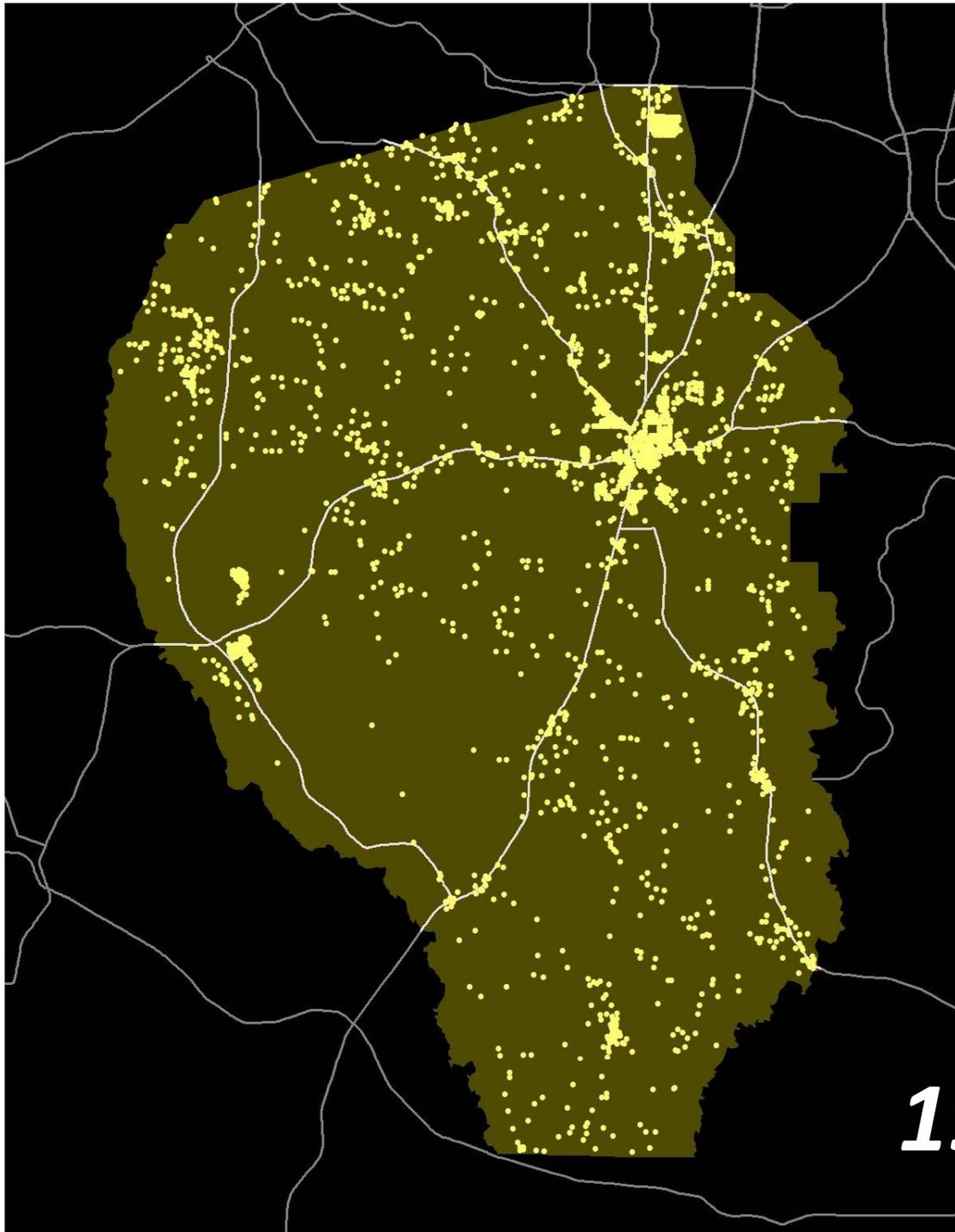
# Fayette County's Growth



**1956**

Population  
**7,978**

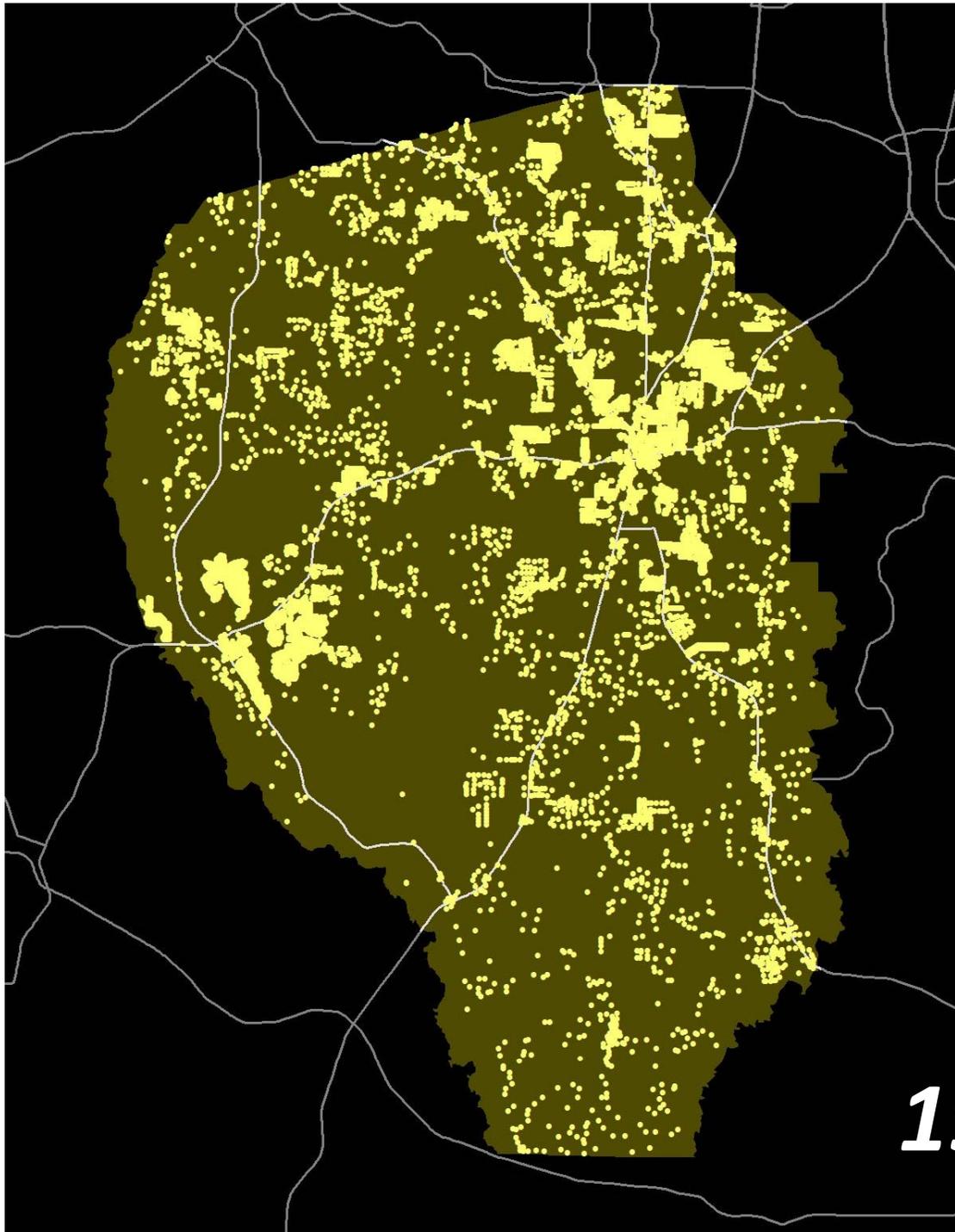
# Fayette County's Growth



**1970**

Population  
**11,364**

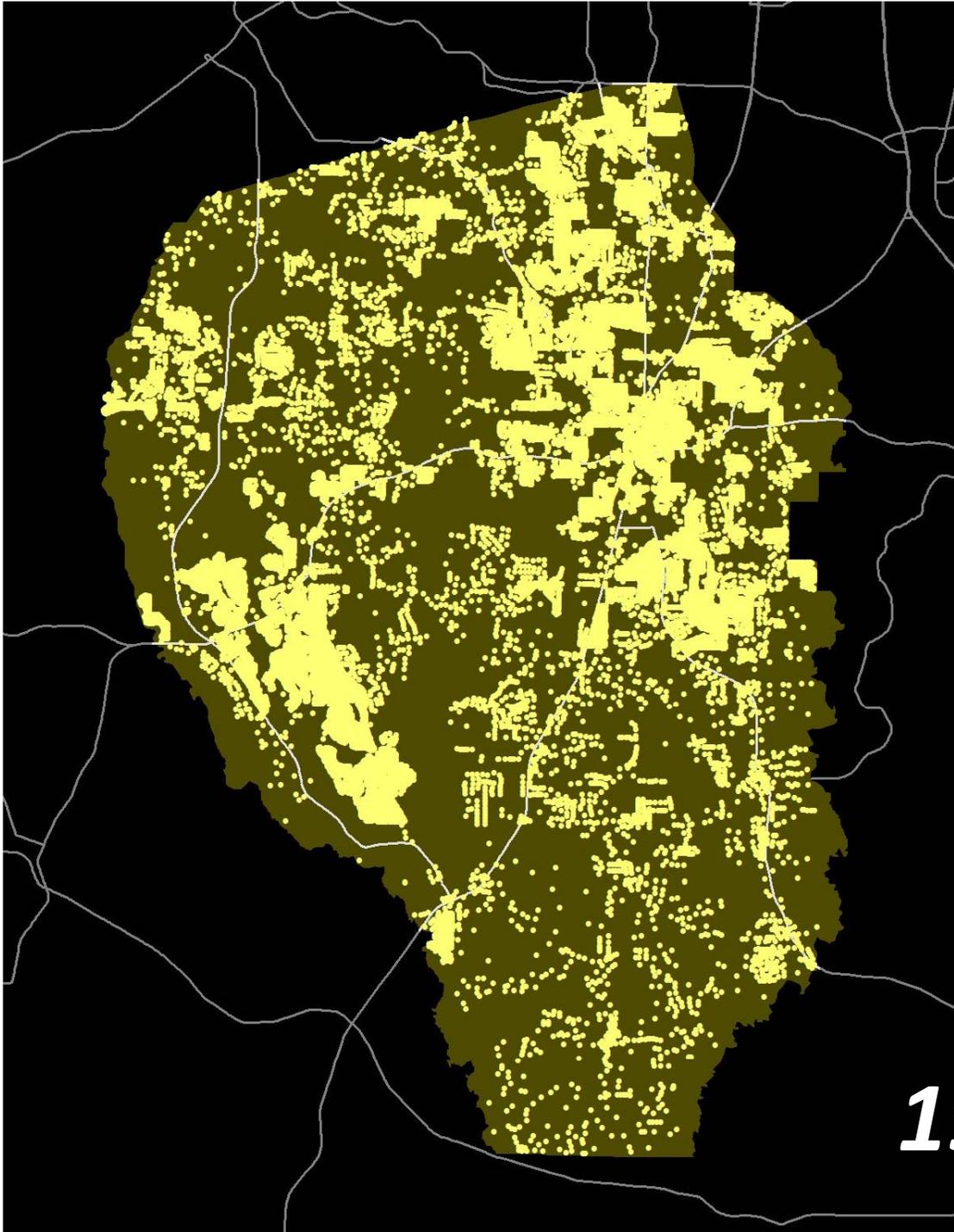
# Fayette County's Growth



**1980**

Population  
**29,043**

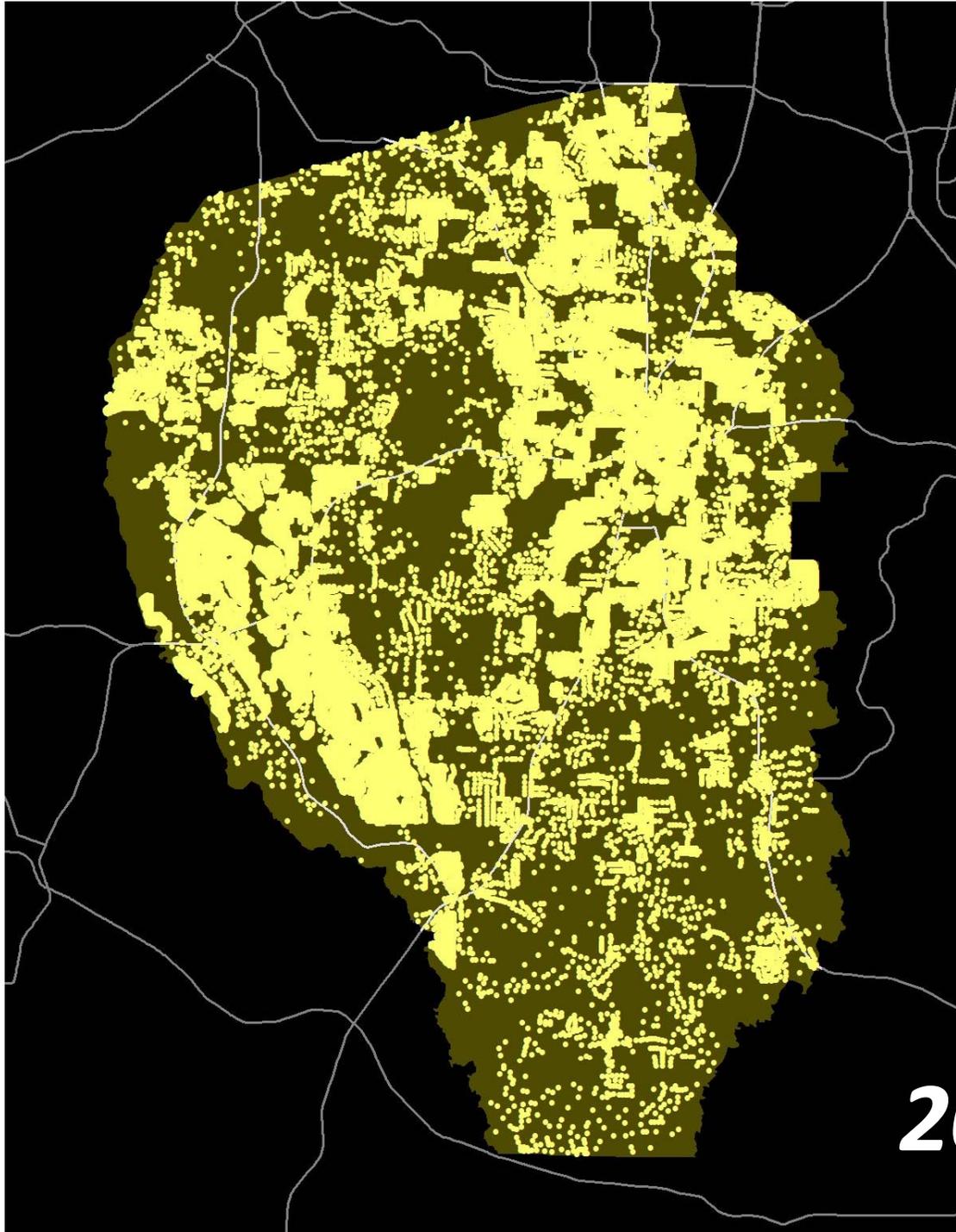
# Fayette County's Growth



**1990**

Population  
**62,415**

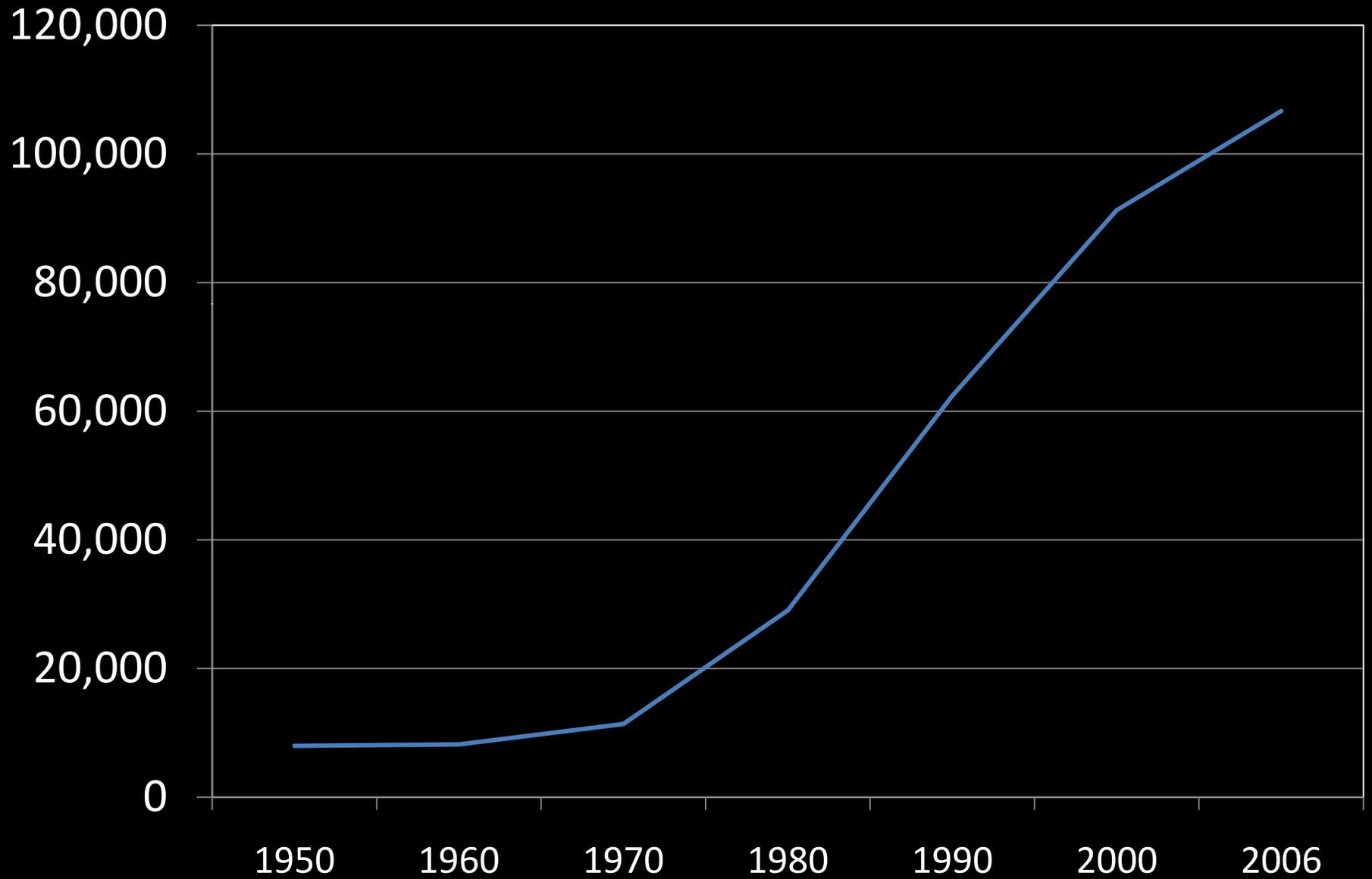
# Fayette County's Growth



**2000**

Population  
**91,263**

# Fayette County Population Growth



“...preserve rural  
character while  
allowing for  
reasonable and  
compatible growth...”

## Fayette Forward Mission

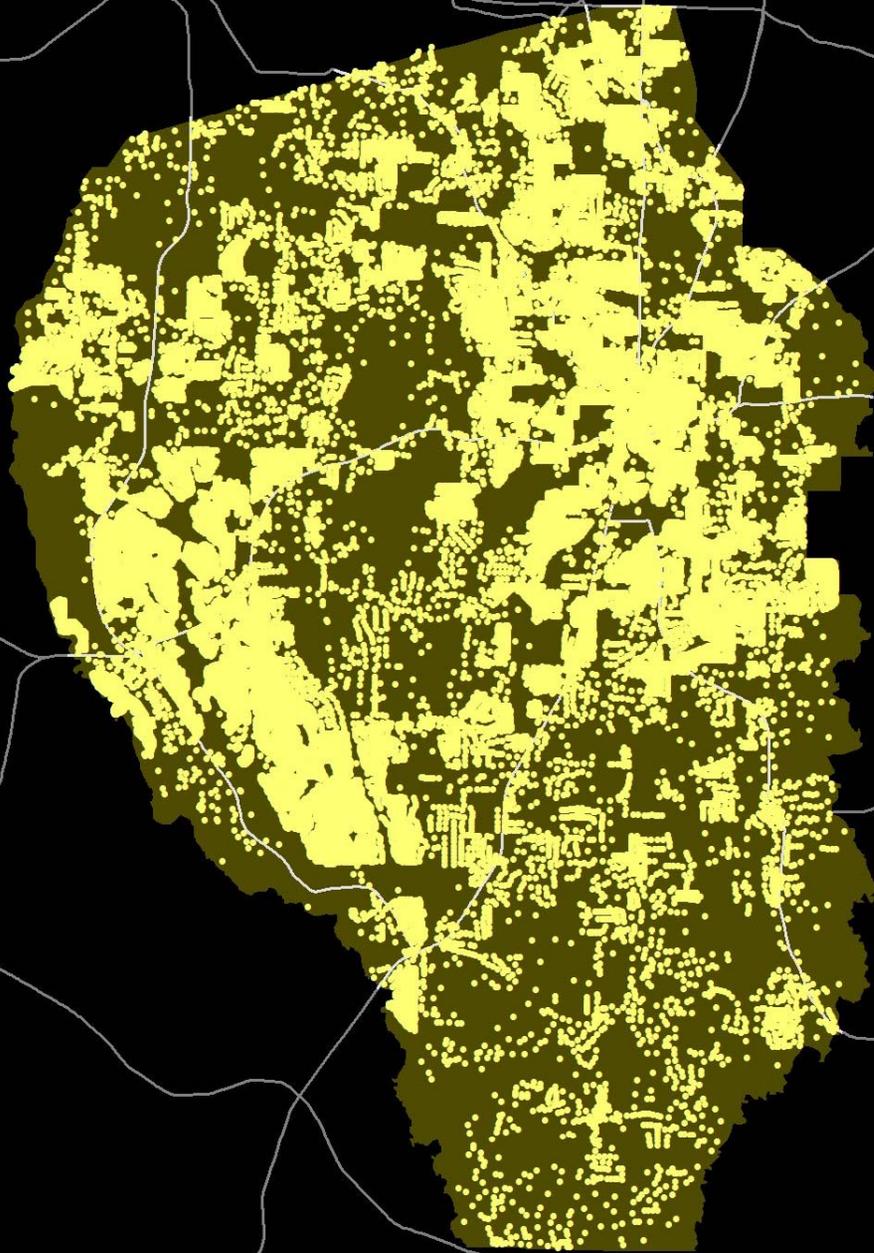
To Develop a Comprehensive  
Mobility Plan That Preserves Our  
Rural Character and Accommodates  
Our Future Needs

TABLE L-1  
 EXISTING LAND USE DISTRIBUTION, SUMMER 2003  
 UNINCORPORATED FAYETTE COUNTY

Land Use	Acres	Percent of Area
Residential	42,990	45.61%
Commercial & Office	516	.55%
Industrial	581	.62%
Public/Institutional	2,048	2.17%
Transportation/Communication/Utilities	92	.10%
Park/Recreation/Conservation	1,466	1.55%
Agriculture & Forestry	24,701	26.20%
Undeveloped	21,870	23.20%
Total Acreage	94,264	100.00%

Source: Fayette County Planning Department

# Fayette County's Future?



**2030**

Population  
**150,000+**

# Etris Road & Hardscrabble Road (1993)



# Etris Road & Hardscrabble Road (1993)



# Etris Road & Hardscrabble Road (2003)



## Preliminary County Goals

provide **Safe and Balanced Choices**

develop **Regional Strategies**

support vision for **Positive Growth**

maintain **Fiscal Sustainability**

preserve **Community Character**

create **Desirable Places for All Citizens**

# What We Heard

# Major Themes from Public Visioning Workshops

- Take care of **seniors**
- Balance the transportation system for **all users**
- **Rural** character is a primary desire
- Focus on maintaining and improving **existing infrastructure**
- Tie plan's recommendations to **Comp Plan strategies**
- Address public **health and safety**

# Preliminary County Goals

provide Safe and Balanced Choices

~~develop~~ ~~Regional Strategies~~

support vision for Positive Growth

maintain Fiscal Sustainability

preserve ~~Community~~ Rural Character

create Desirable Places for All Citizens ~~and~~  
~~Stages of Life~~

# Technical Issues



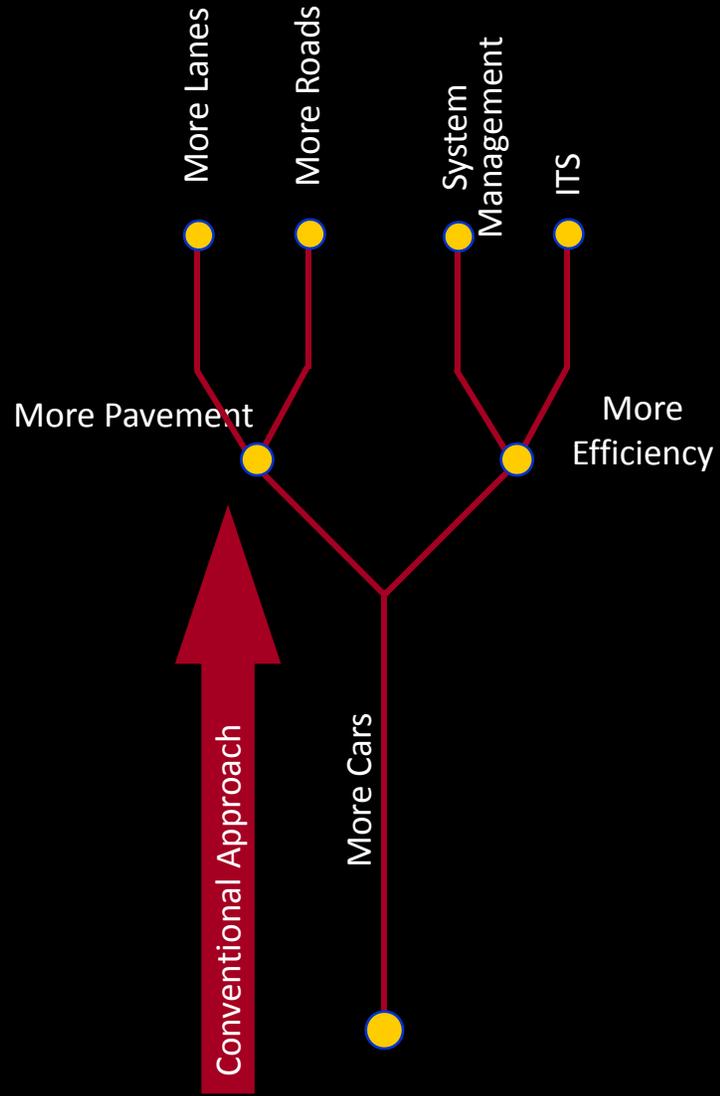
**High Standard of Living**



**Low Quality of Life**

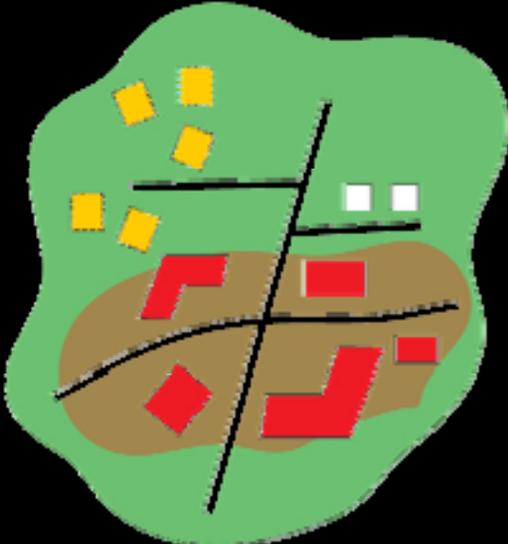
# 20<sup>th</sup> Century Approaches

# Conventional Approach



# Traditional Regional Model Use

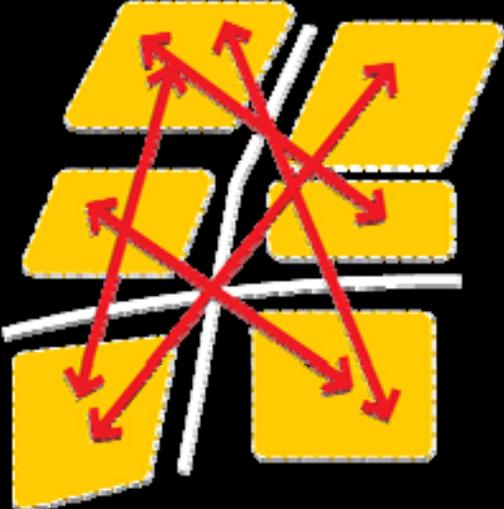
Land Use



Anticipate

generates

Travel



Forecast  
(Based on Speed)

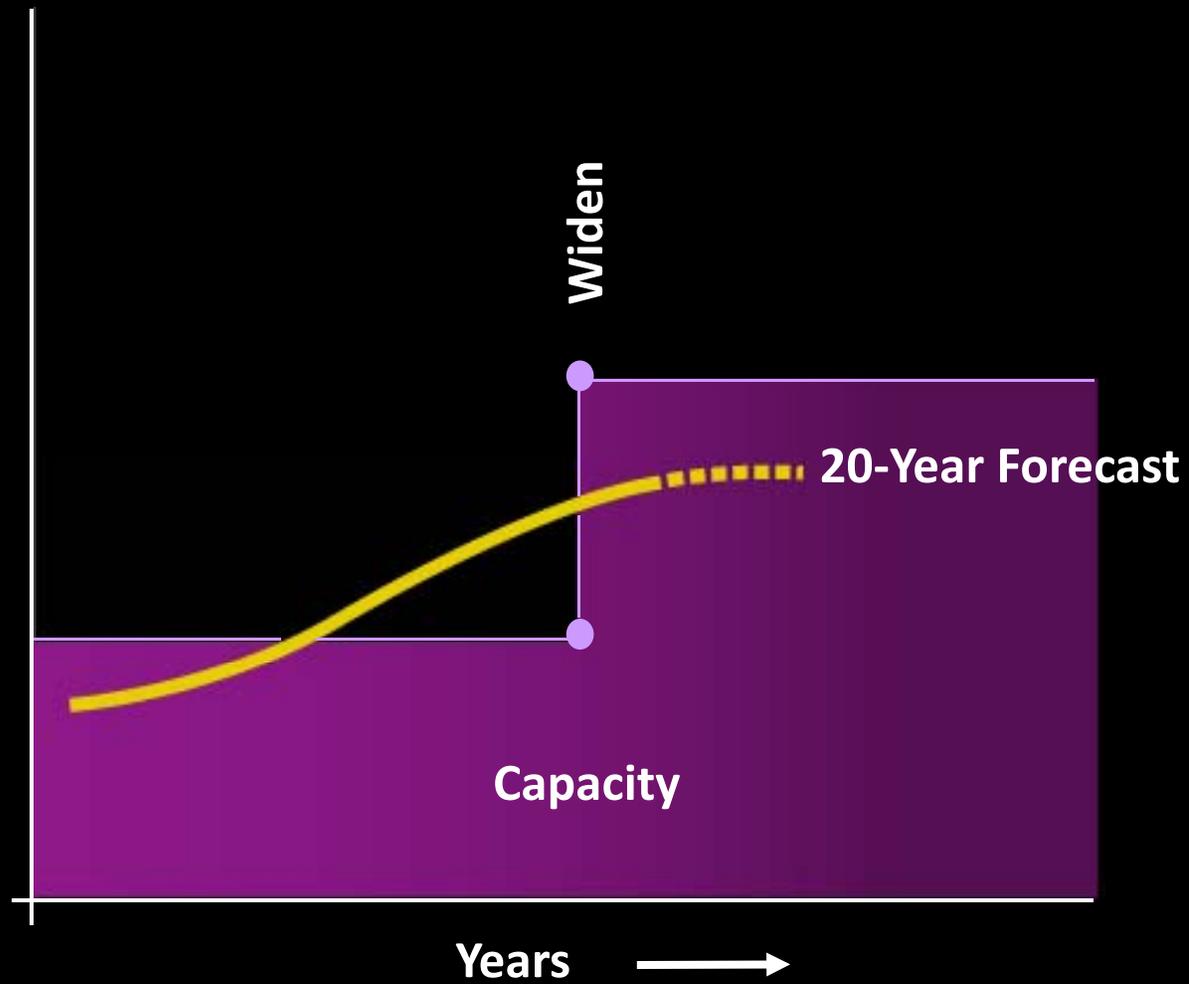
demands

Road Capacity

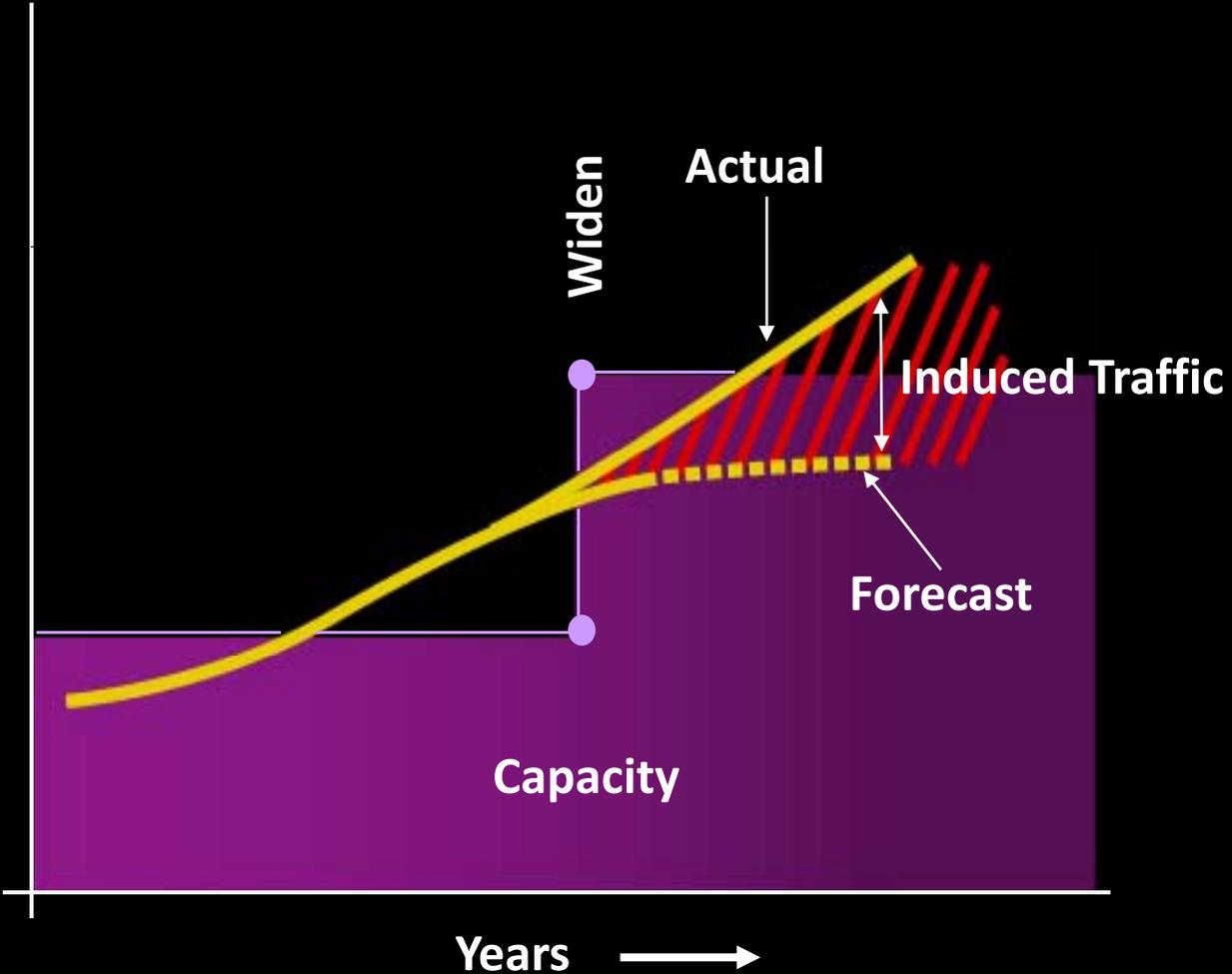


Accommodate

# Land Use & Transportation – Ideal Traffic Planning



# Land Use & Transportation – The Reality



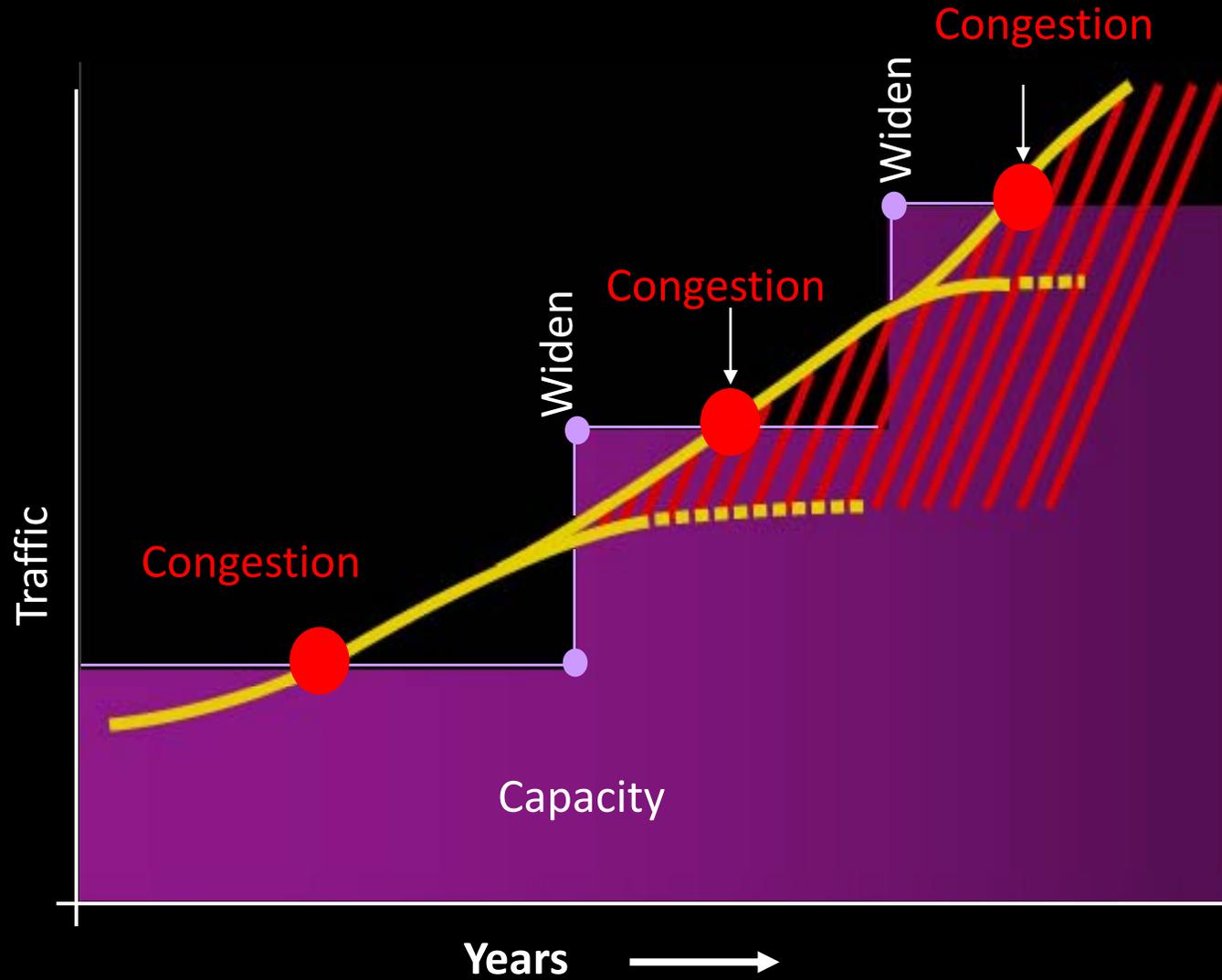
## Transportation Investment Change Land Use Patterns



# Transportation Investment Change Land Use Patterns



# Land Use & Transportation – “Induced Demand”



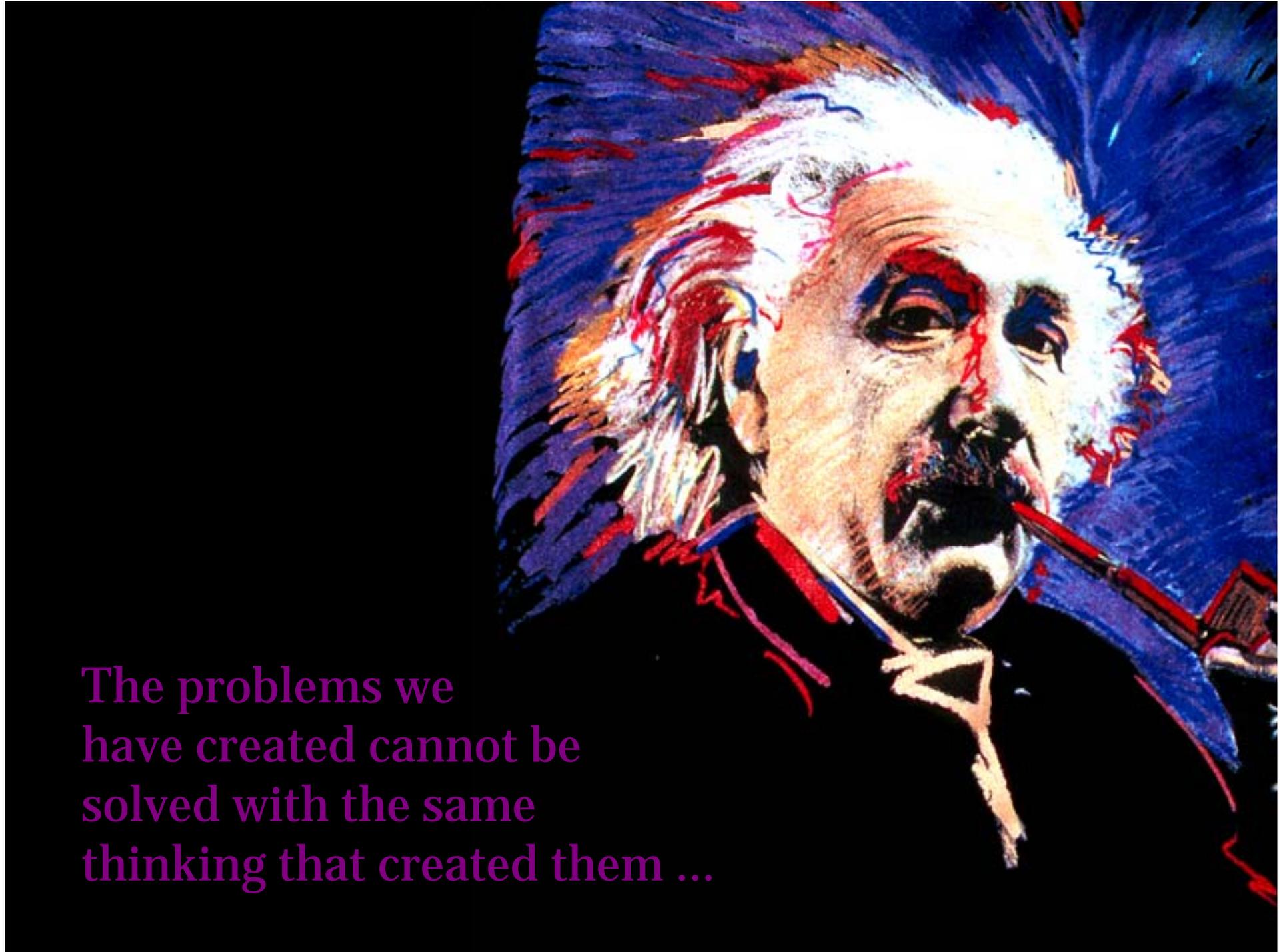
2005

	Population	VMT	VMT per Capita
ARC Region	4,702,113	144,103,673	30.6
Fayette County	100,615	2,839,196	28.2
Fayetteville	12,995	649,148	50.0
Peachtree City	24,559	794,103	32.3

# Transportation Statistics

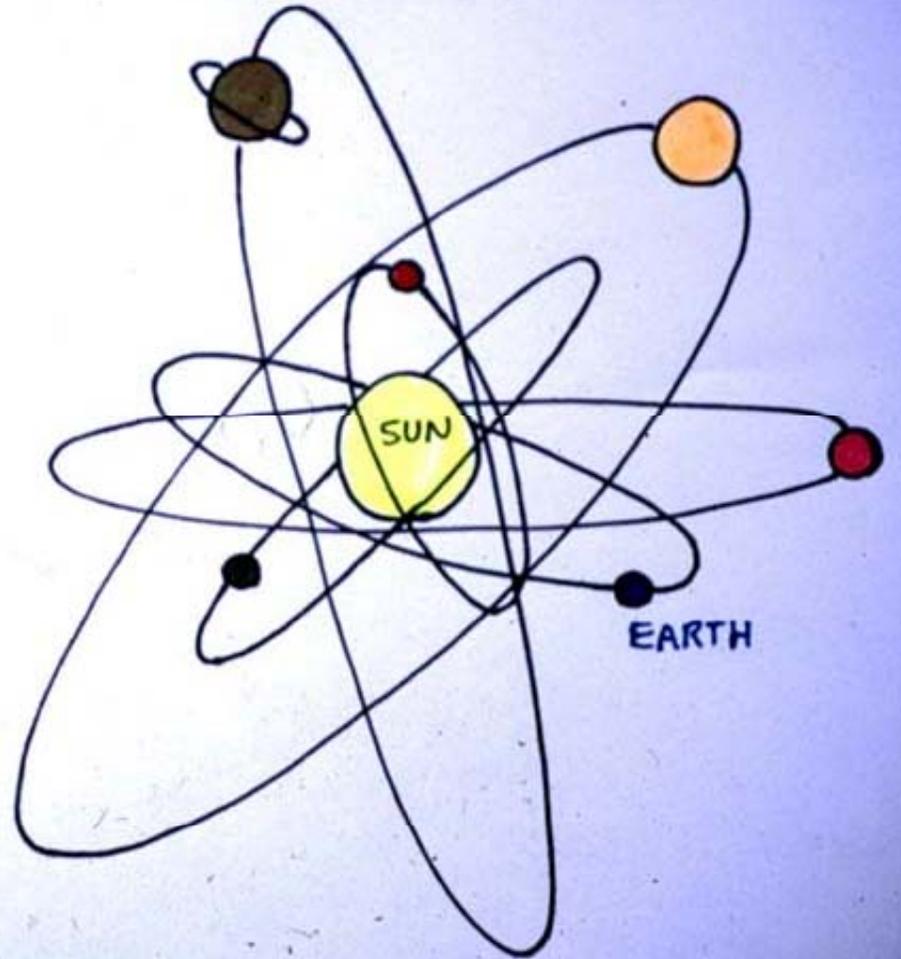
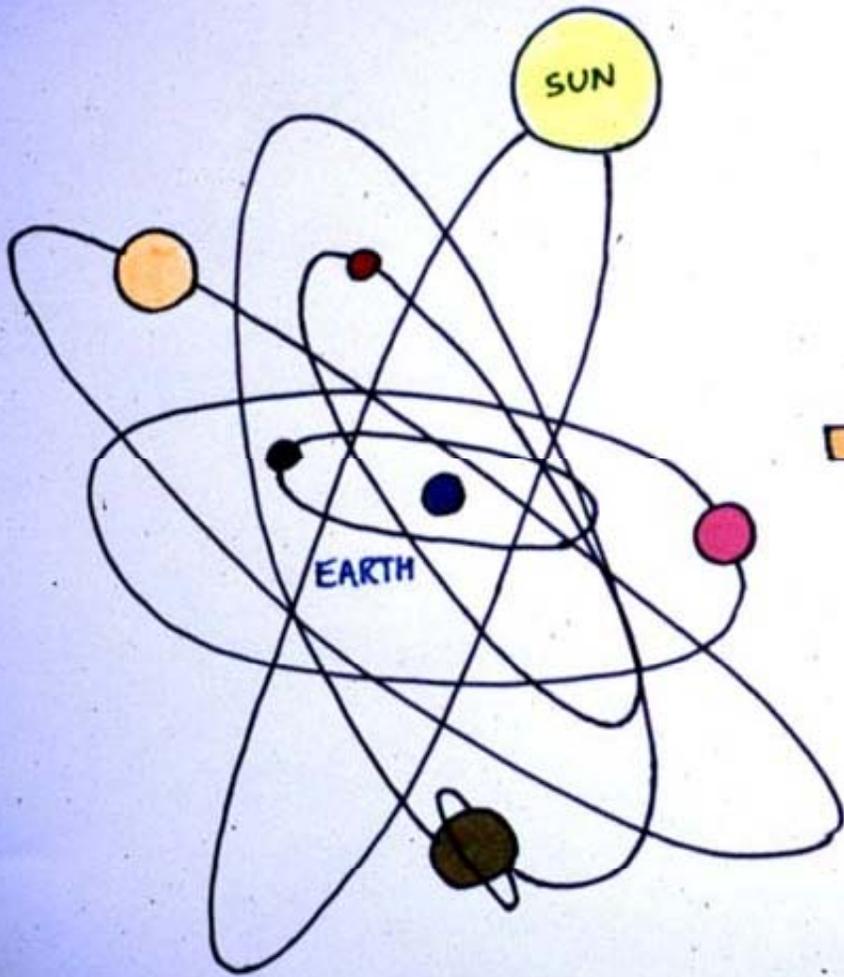
## Results Over the Last 50-Years

- 1) Vehicle Miles of Travel (VMT) Growing Faster Than Population Growth
- 2) Longer Commute Lengths and Times
- 3) Decreased Air Quality



The problems we  
have created cannot be  
solved with the same  
thinking that created them ...







“...the possible benefits of required seat belts would not justify the costs to the manufacturers and the public.”

1970

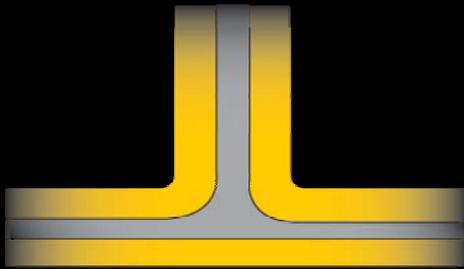
“...the possible benefits of required seat belts would not justify the costs to the manufacturers and the public.”

National Highway Traffic Safety Administration, 1970

# Potential Approaches

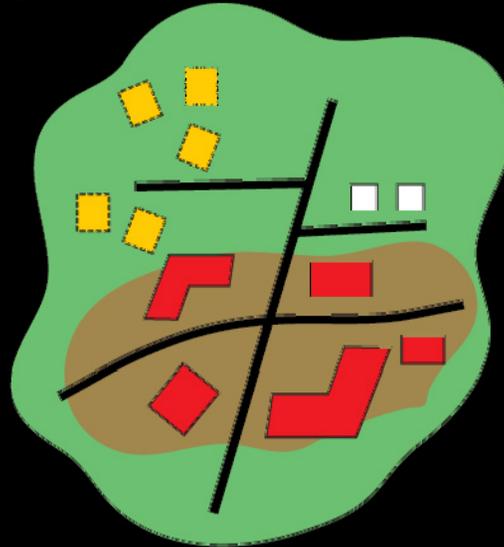
# Land Use/Transportation

Road Design



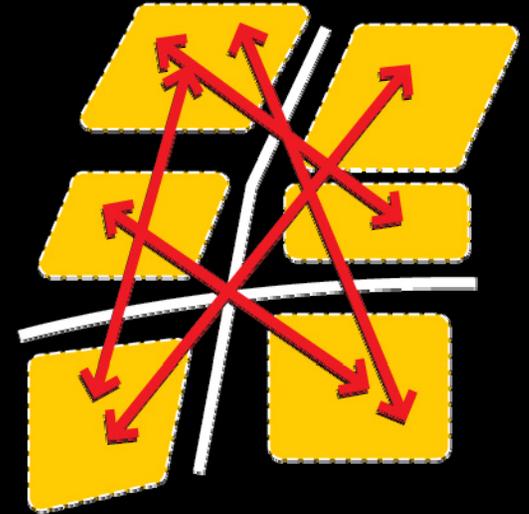
manages

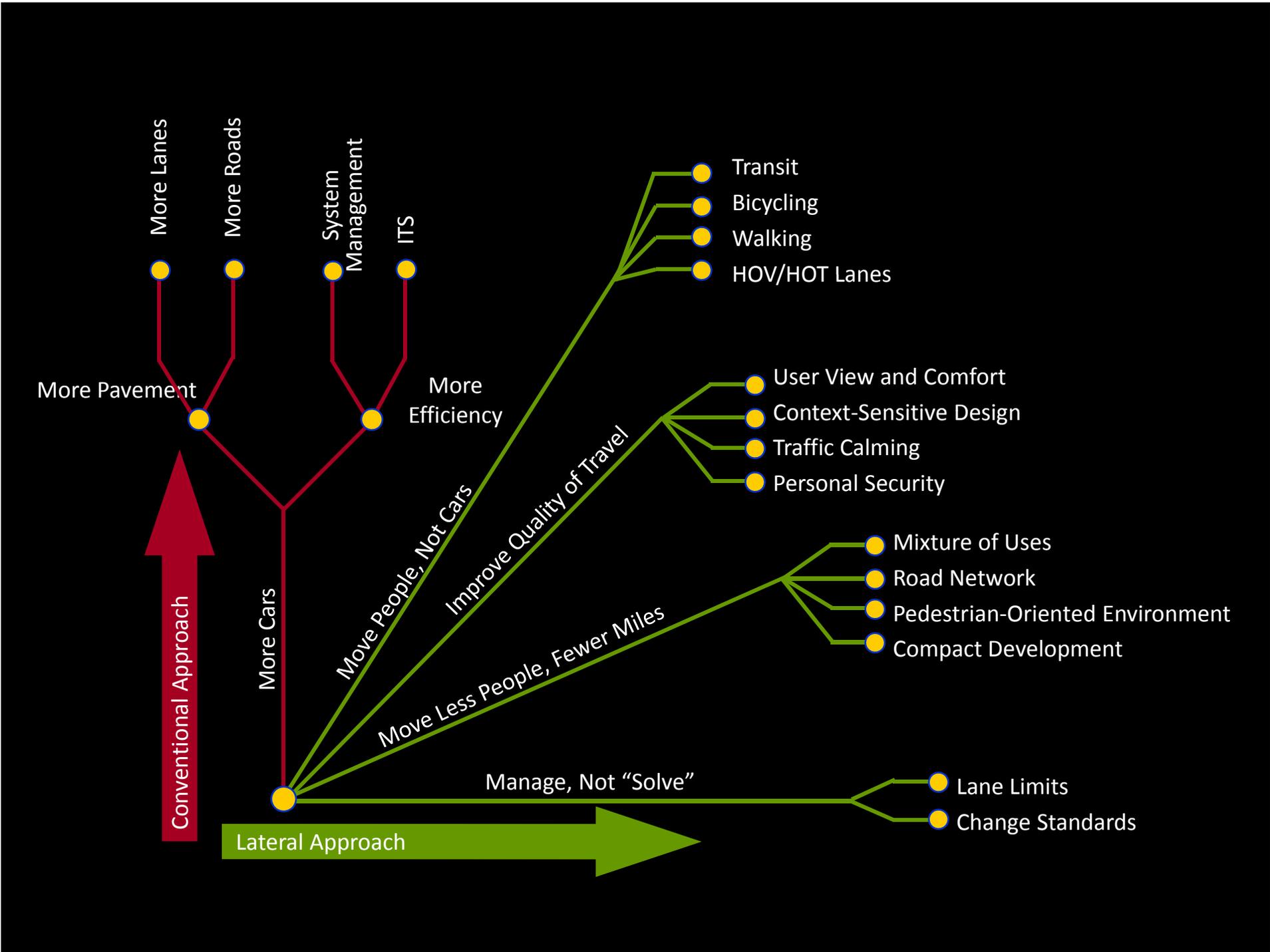
Travel



influences

Land Use





## Fayette Commute Patterns

Live and Work in Fayette	16,997
Live Elsewhere, Work Here	18,059
Live Here, Work Elsewhere	28,254

## Travel Demand Model

**37%** of all Fayette-originating trips do not leave the County

**0.5%** of all Fayette trips do not stop in the County

# Approaches To Short and Long Trips

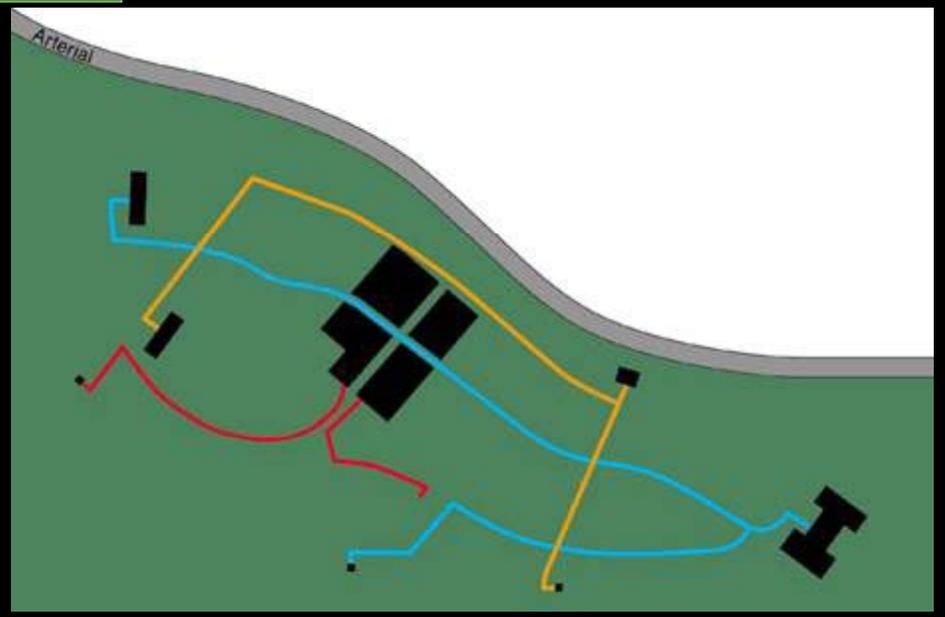
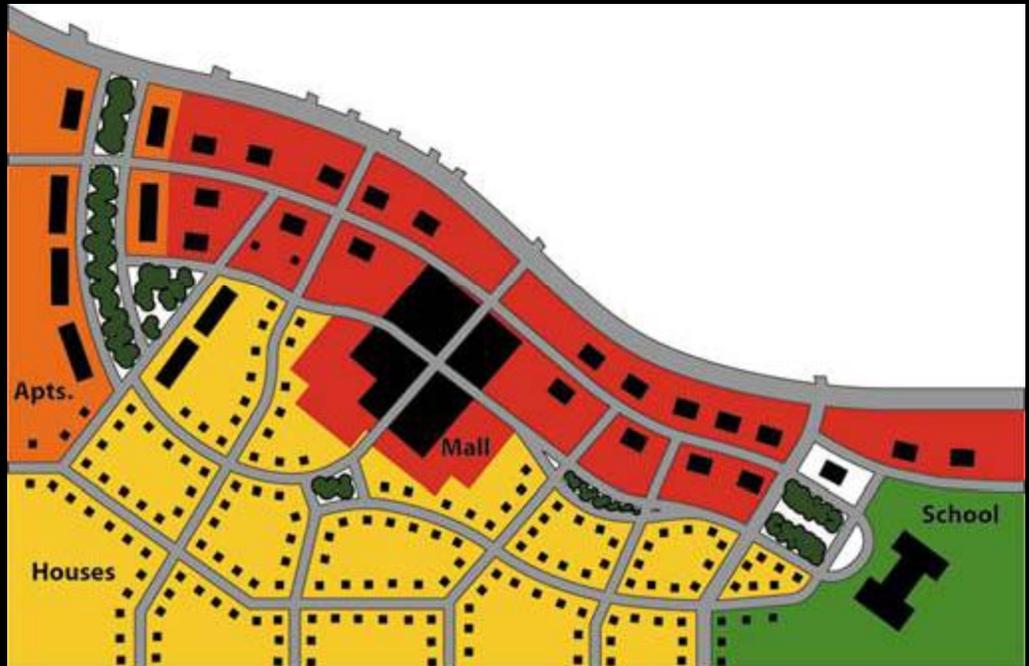
## Enable Short Trips – They Can Make a Big Difference

Trip Type	% By Trip Type	
-----	-----	
Work	18.0%	
Work Related	2.6%	
Shopping	20.2%	"Errandsville"
Doctors & Dentist	1.5%	approximately
Family & Personal	24.2%	70% of all trips
Church & School	8.8%	occur within 3
Social Recreational	24.5%	miles of the
Other	0.2%	household
	100.0%	

Source:1995 NPTS: Federal Highway Administration & New York Times

# 1. Short Trips = Connectivity

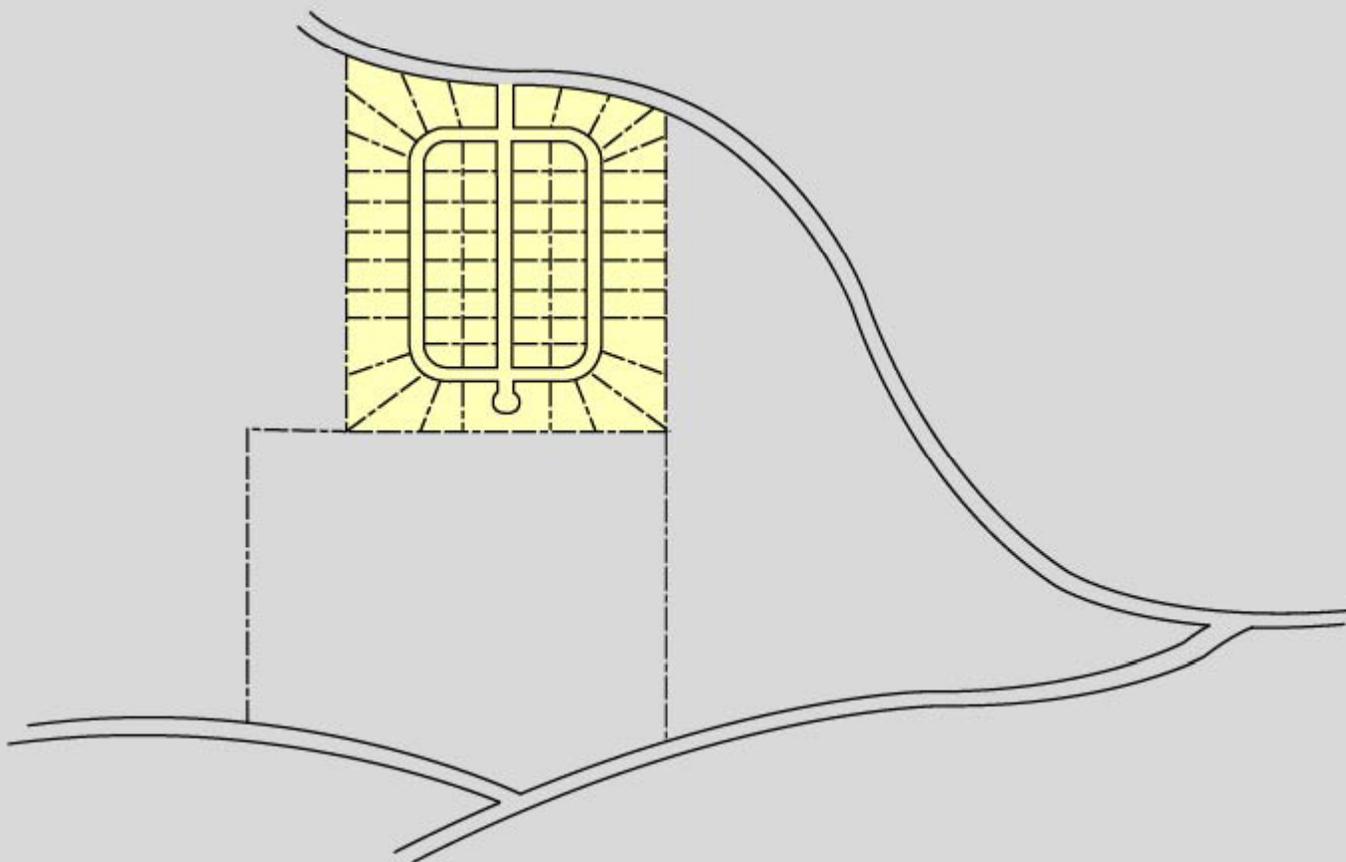
# Connected Network – SMALL ROADS



**“Protect and enhance existing neighborhoods** by ensuring that infill development is of compatible use, density/intensity, and that adverse impacts on public facility and transportation systems, the environment, and the surrounding area will not occur.”

Create network and create capacity

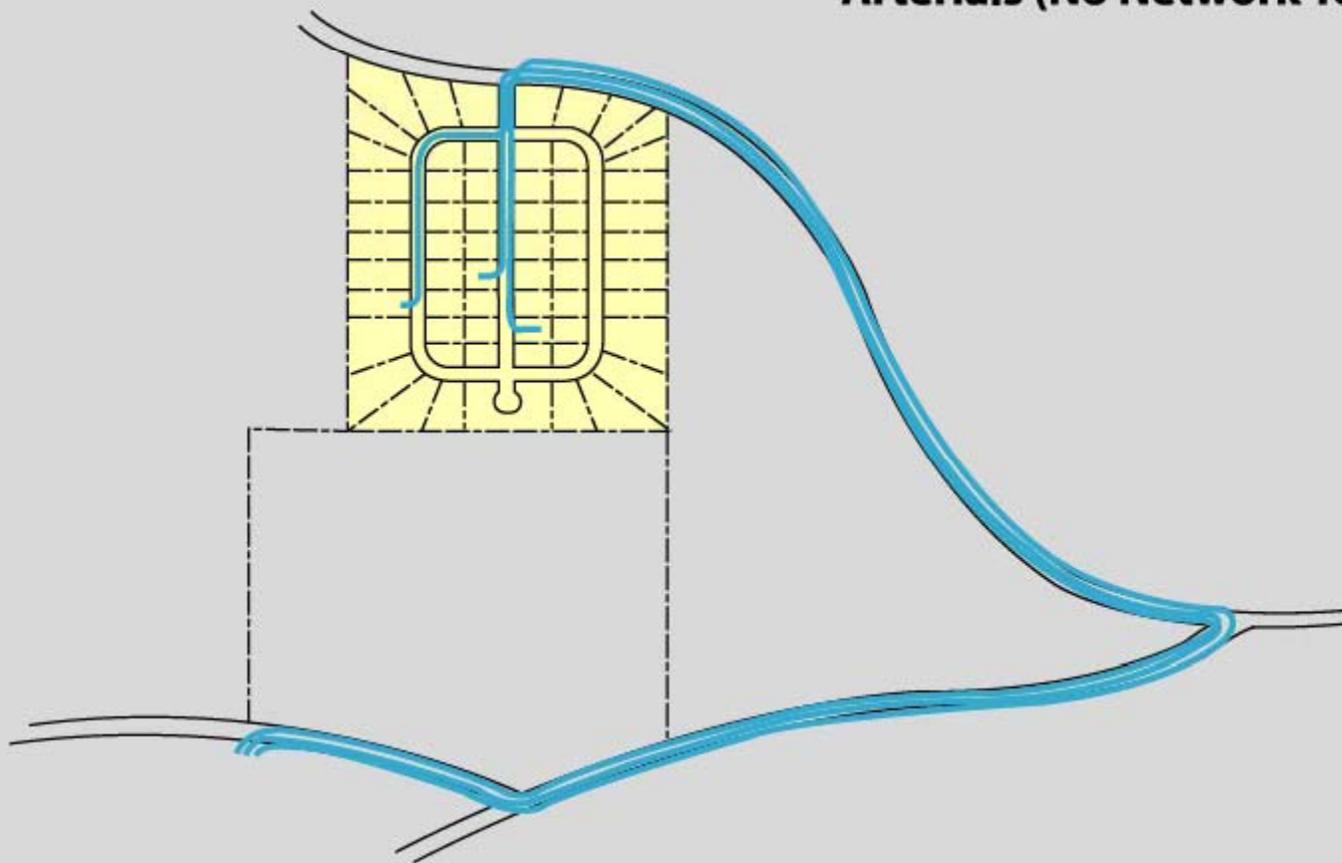
**1. First Project Stubs Out**



Strengthen and direct development towards existing communities

## Create network and create capacity

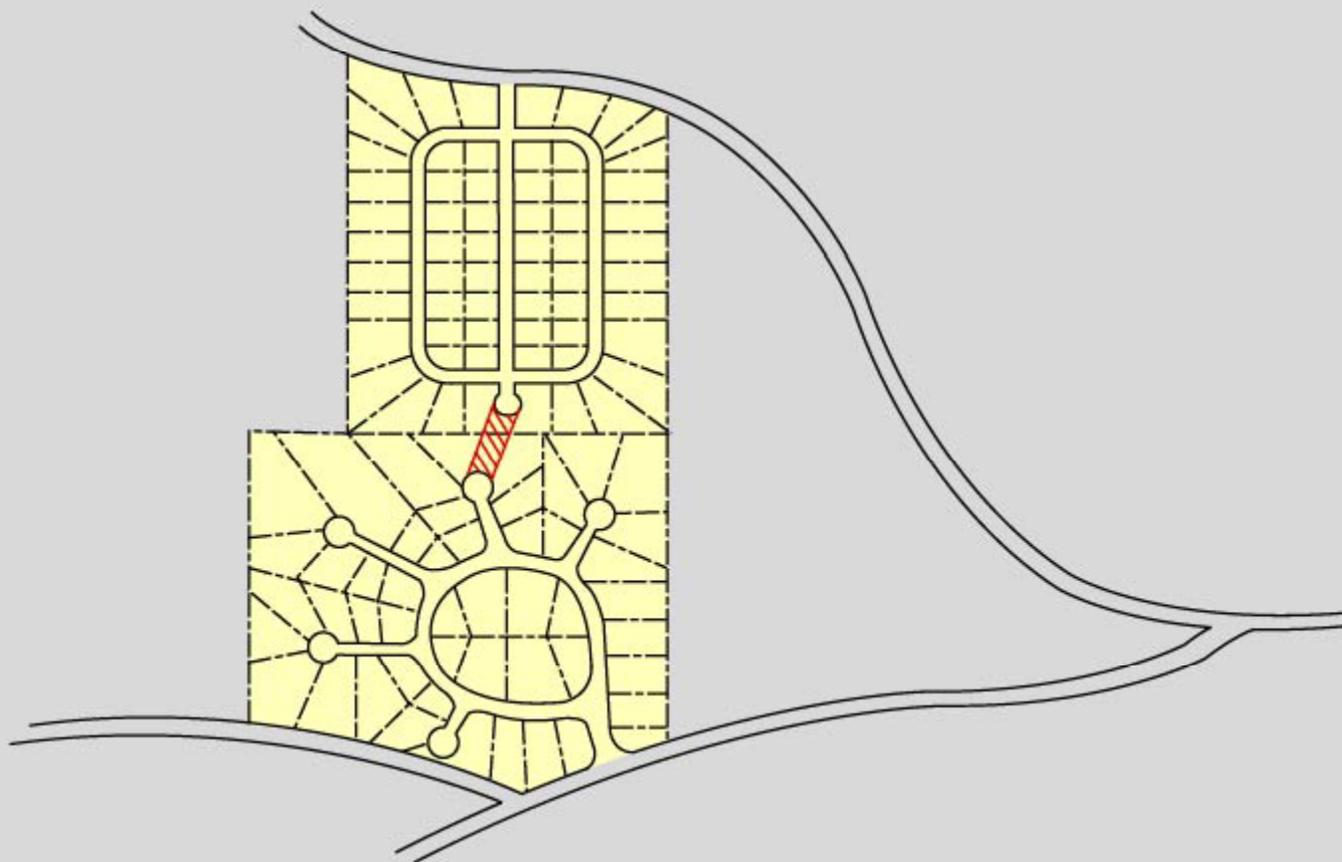
### 2. All Traffic Forced Onto Arterials (No Network Yet)



Strengthen and direct development towards existing communities

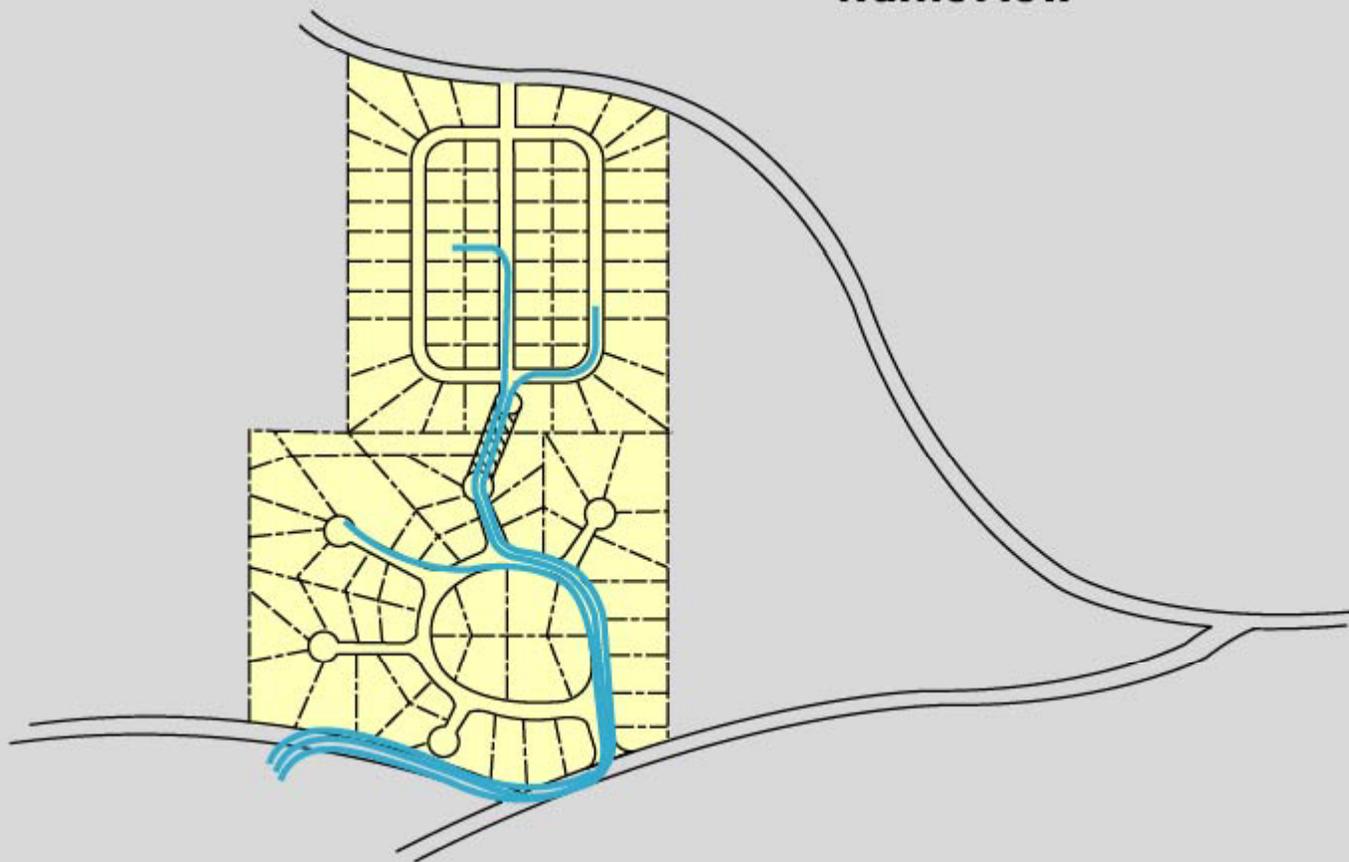
Create network and create capacity

### 3. Second Project Built



Strengthen and direct development towards existing communities

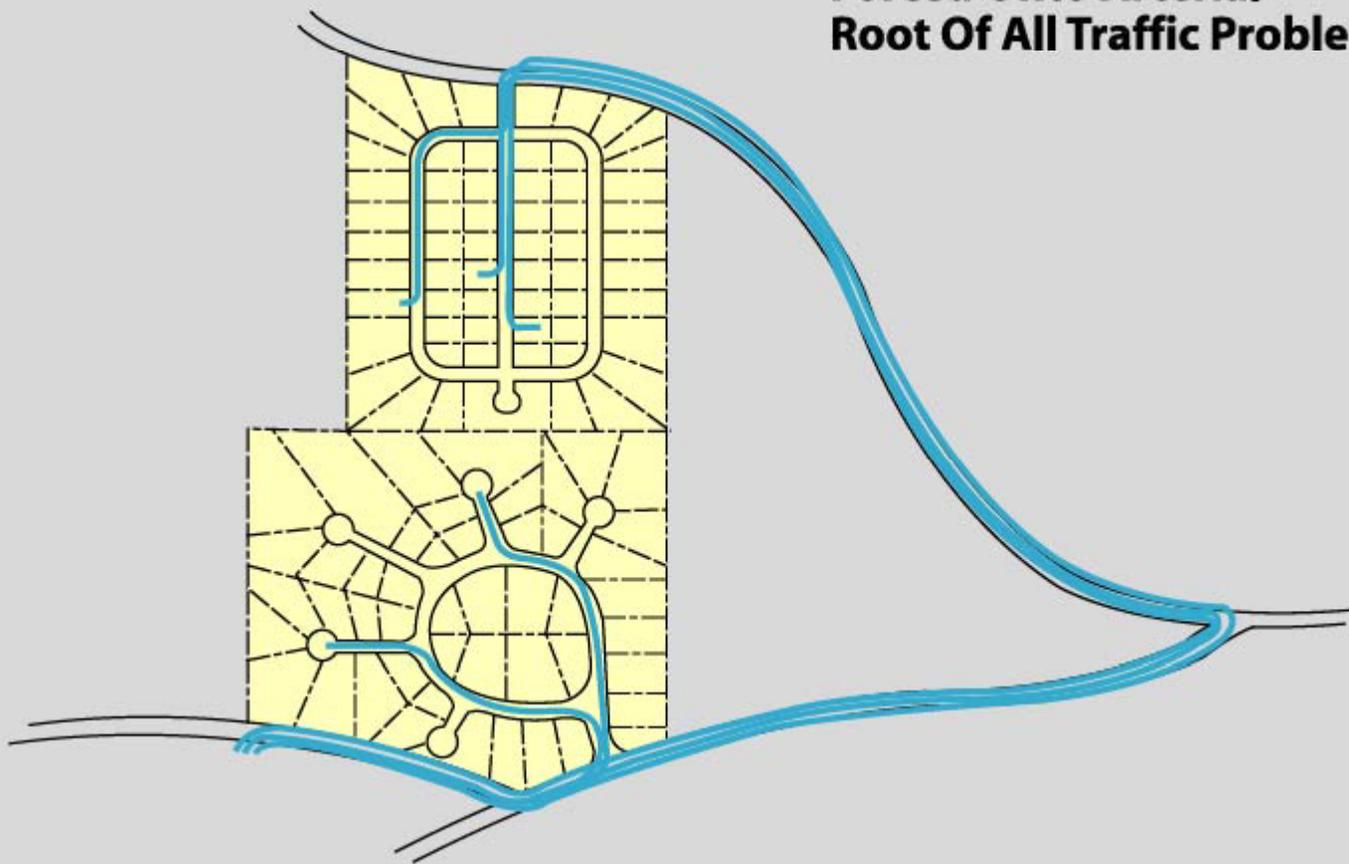
**4. Planned But Unacceptable  
Traffic Flow**



Strengthen and direct development towards existing communities

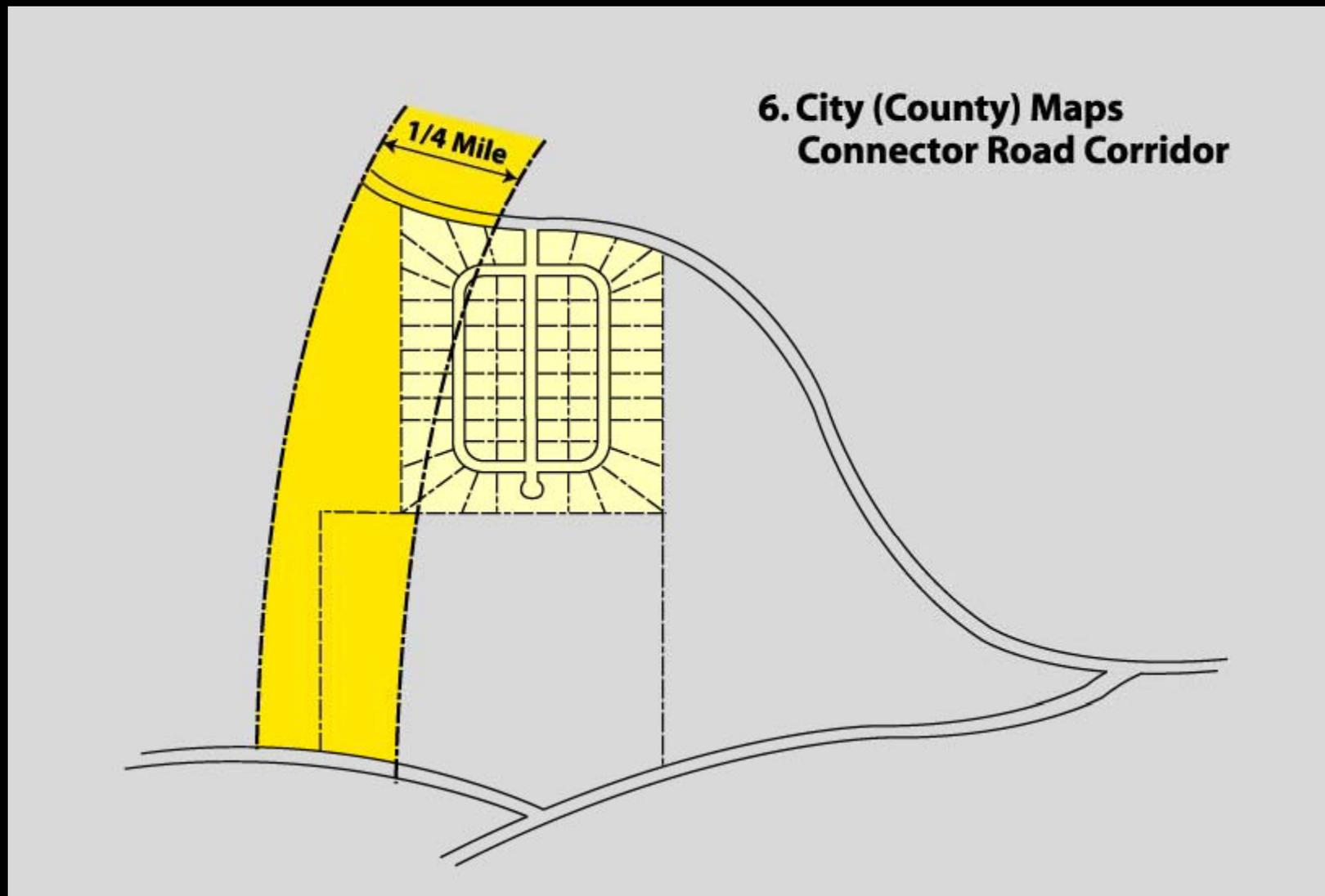
## Create network and create capacity

### 5. All Traffic (Both Projects ) Forced Onto Arterial - Root Of All Traffic Problems



Strengthen and direct development towards existing communities

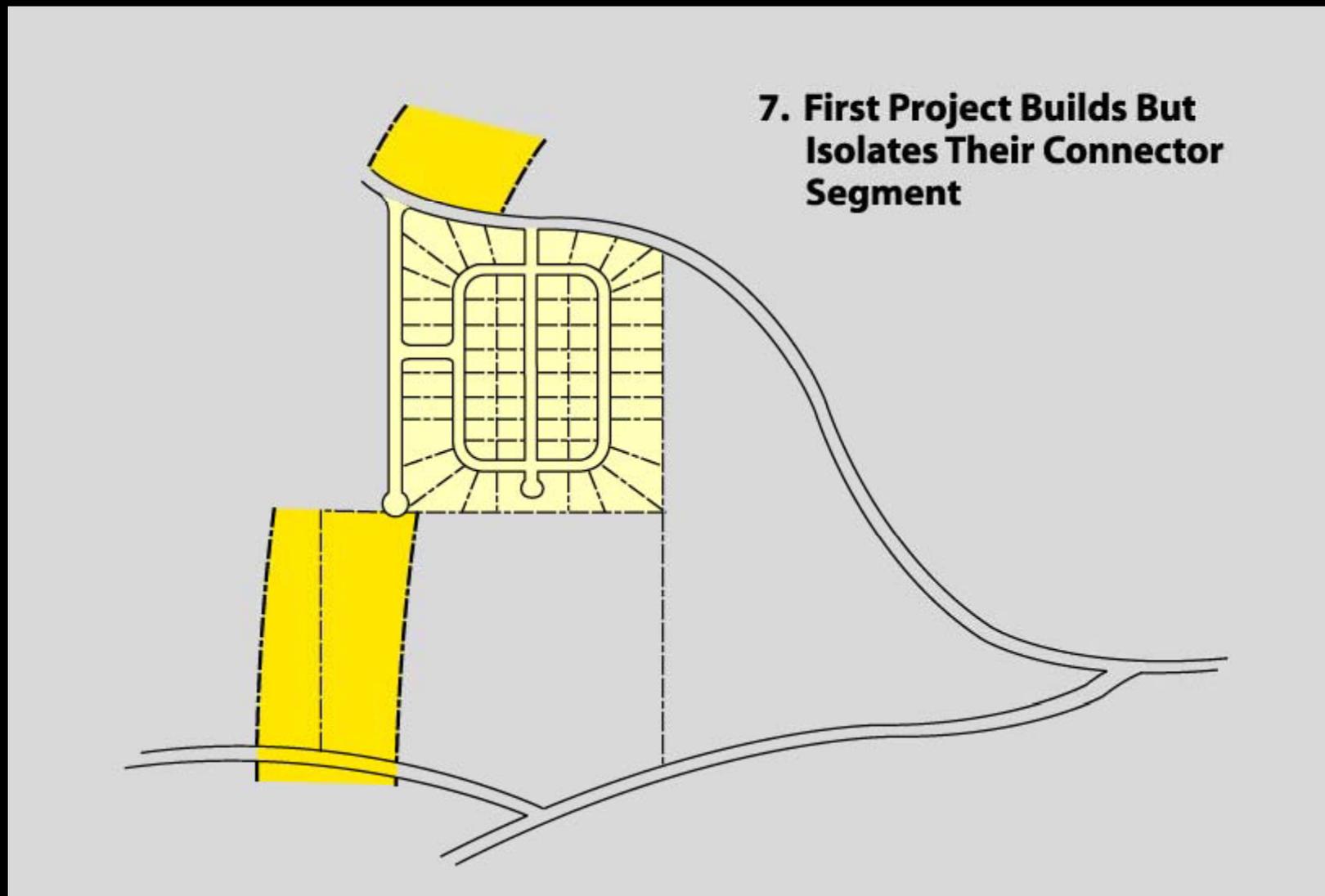
Create network and create capacity



**6. City (County) Maps  
Connector Road Corridor**

Strengthen and direct development towards existing communities

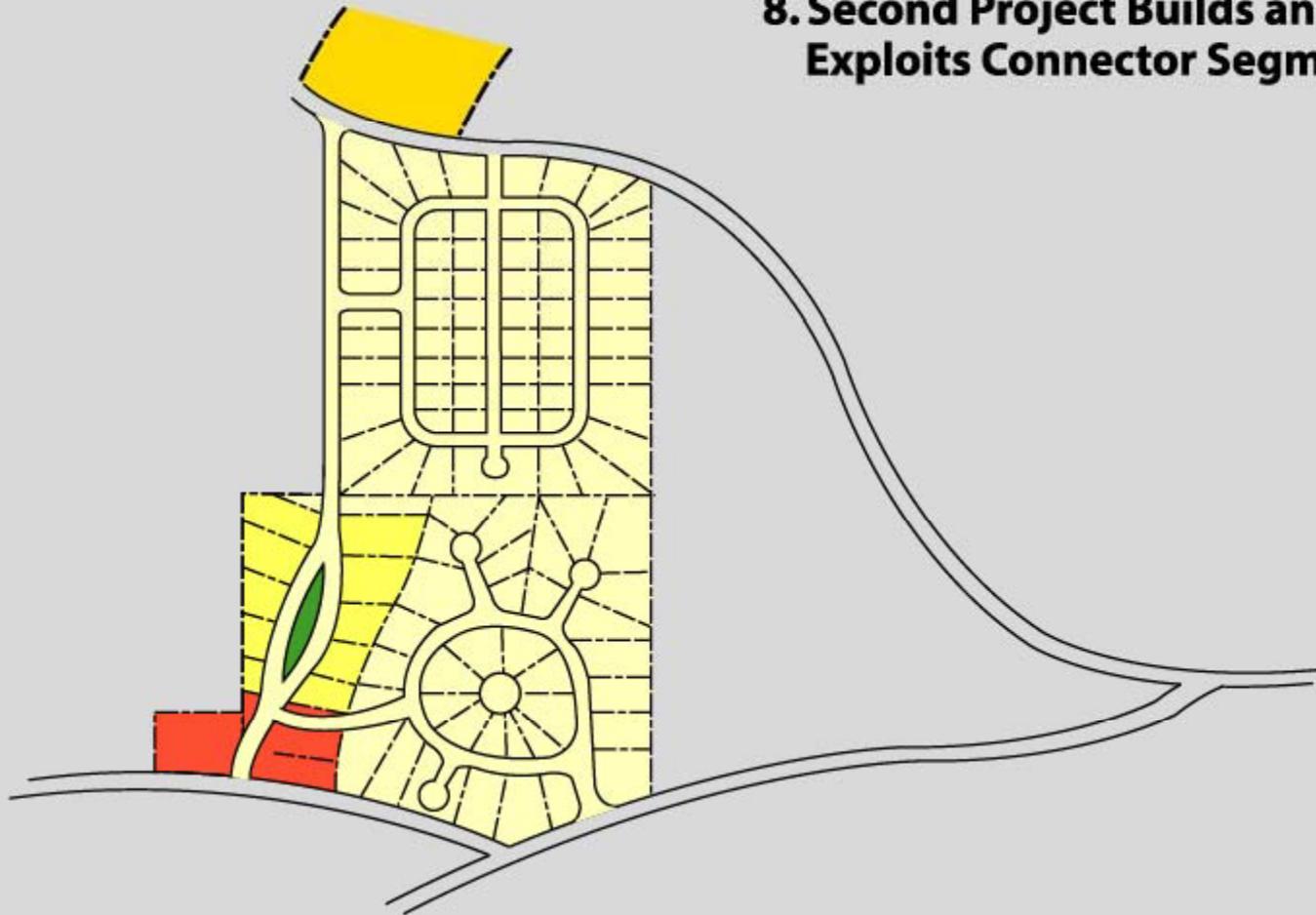
## Create network and create capacity



Strengthen and direct development towards existing communities

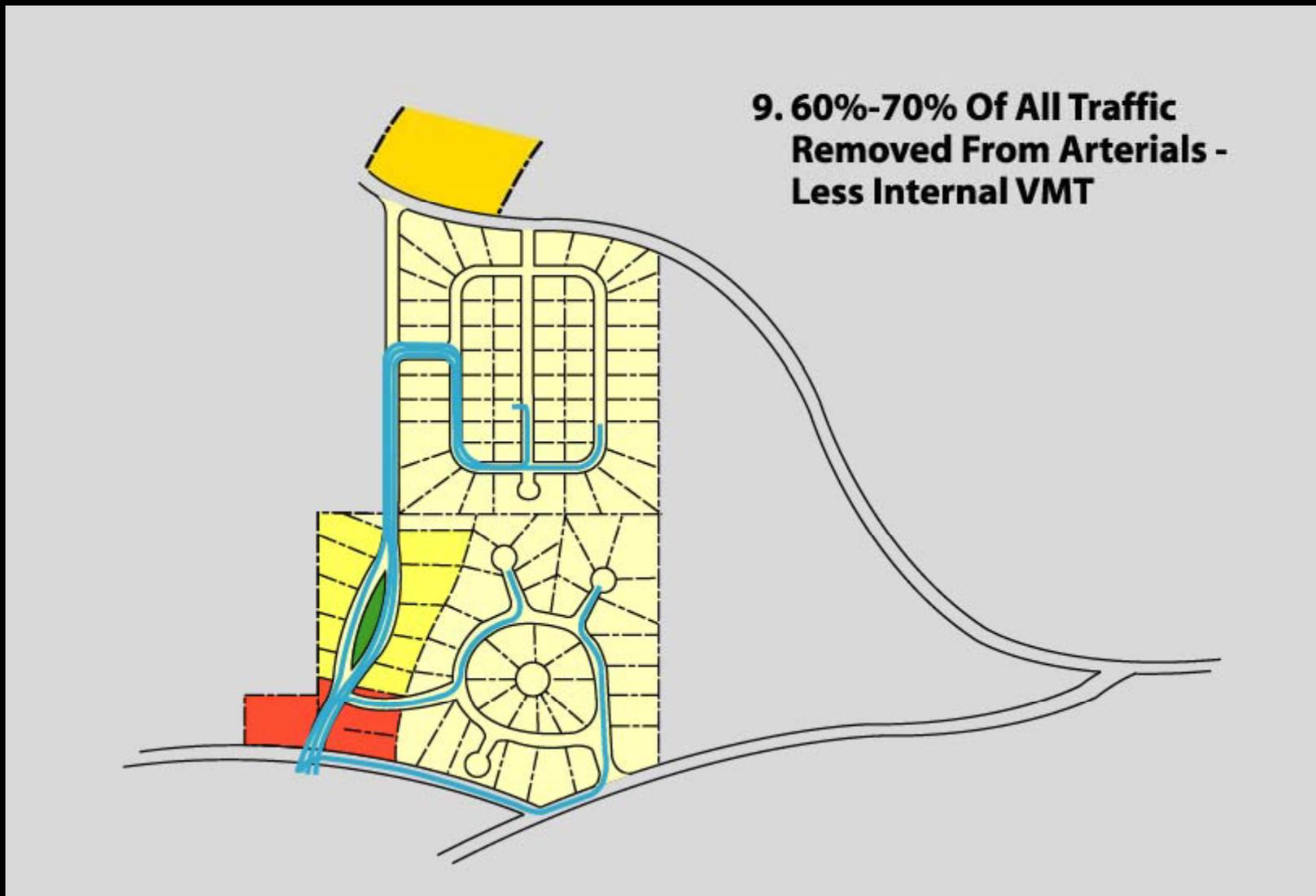
Create network and create capacity

**8. Second Project Builds and Exploits Connector Segment**



Strengthen and direct development towards existing communities

## Create network and create capacity

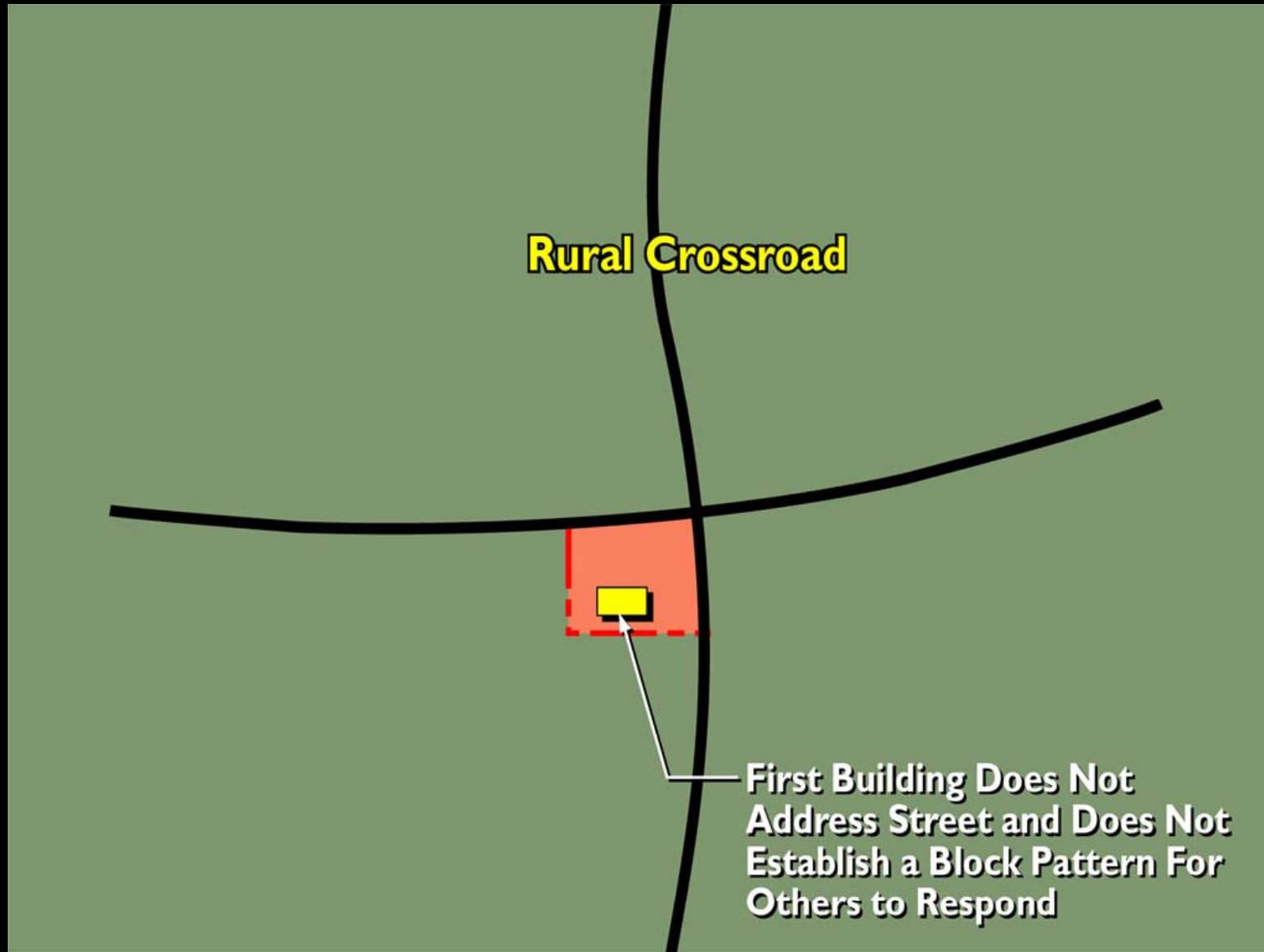


**9. 60%-70% Of All Traffic  
Removed From Arterials -  
Less Internal VMT**

Strengthen and direct development towards existing communities

“The county should attempt to discourage additional commercial development along major roadways, as strip commercial development is neither desirable from a safety standpoint nor attractive.”

# Lack of street network strings out development



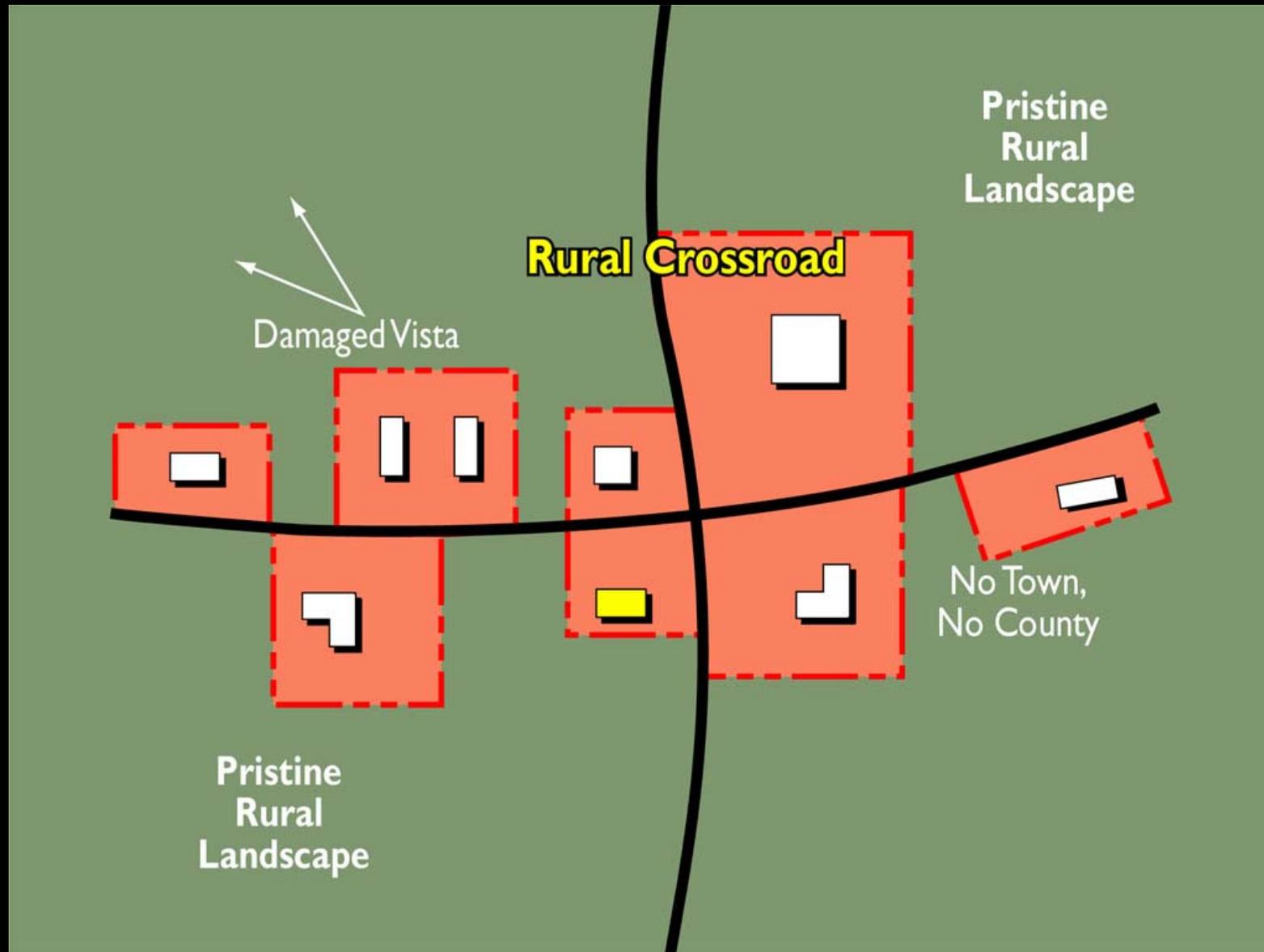
Preserve open space and farmland

Street network creates a rural place



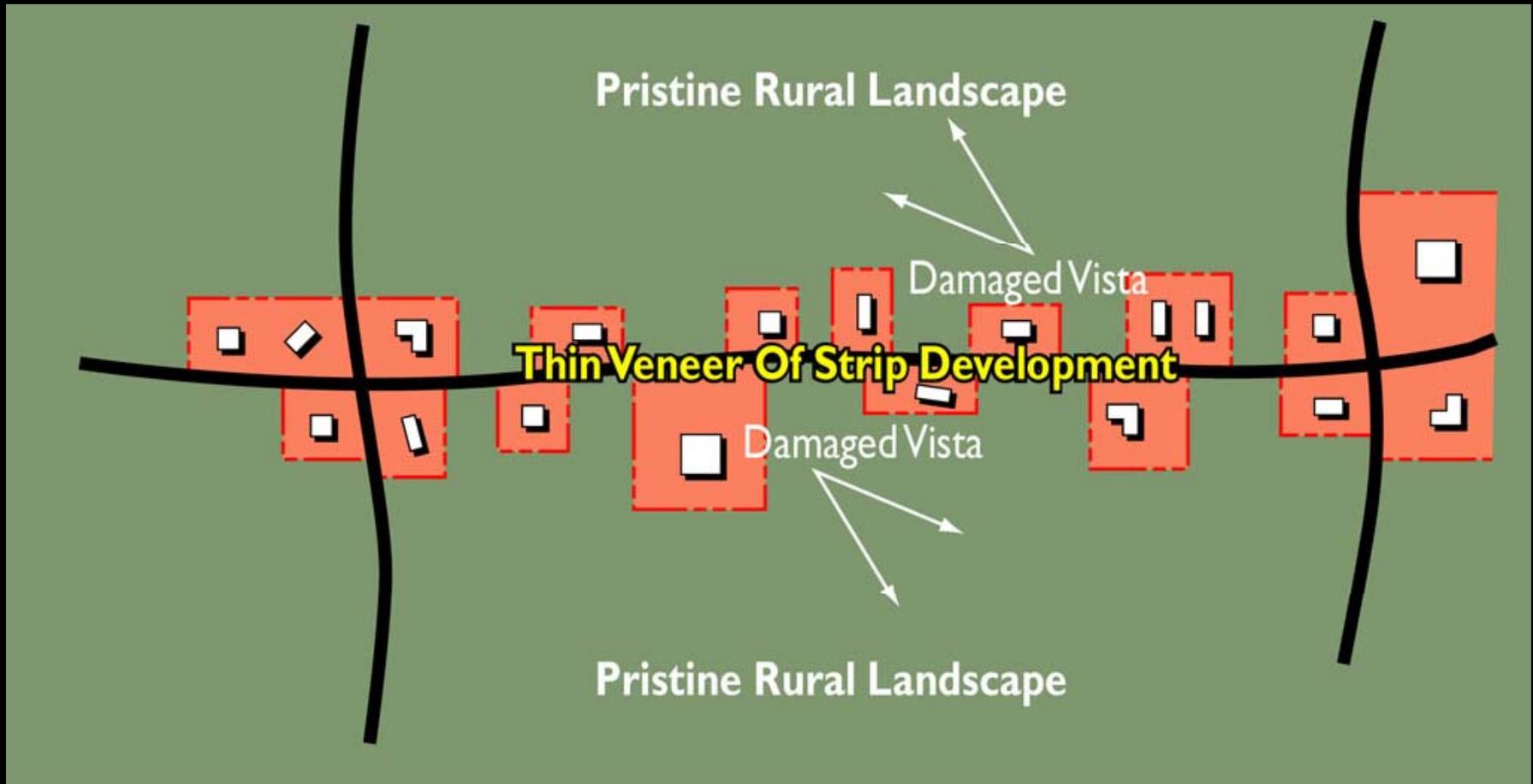
Preserve open space and farmland

# Lack of street network strings out development



Preserve open space and farmland

## Lack of street network strings out development



“The county should attempt to discourage additional commercial development along major roadways.”

*Fayette County Comprehensive Plan*

Preserve open space and farmland

## Street network creates a rural place



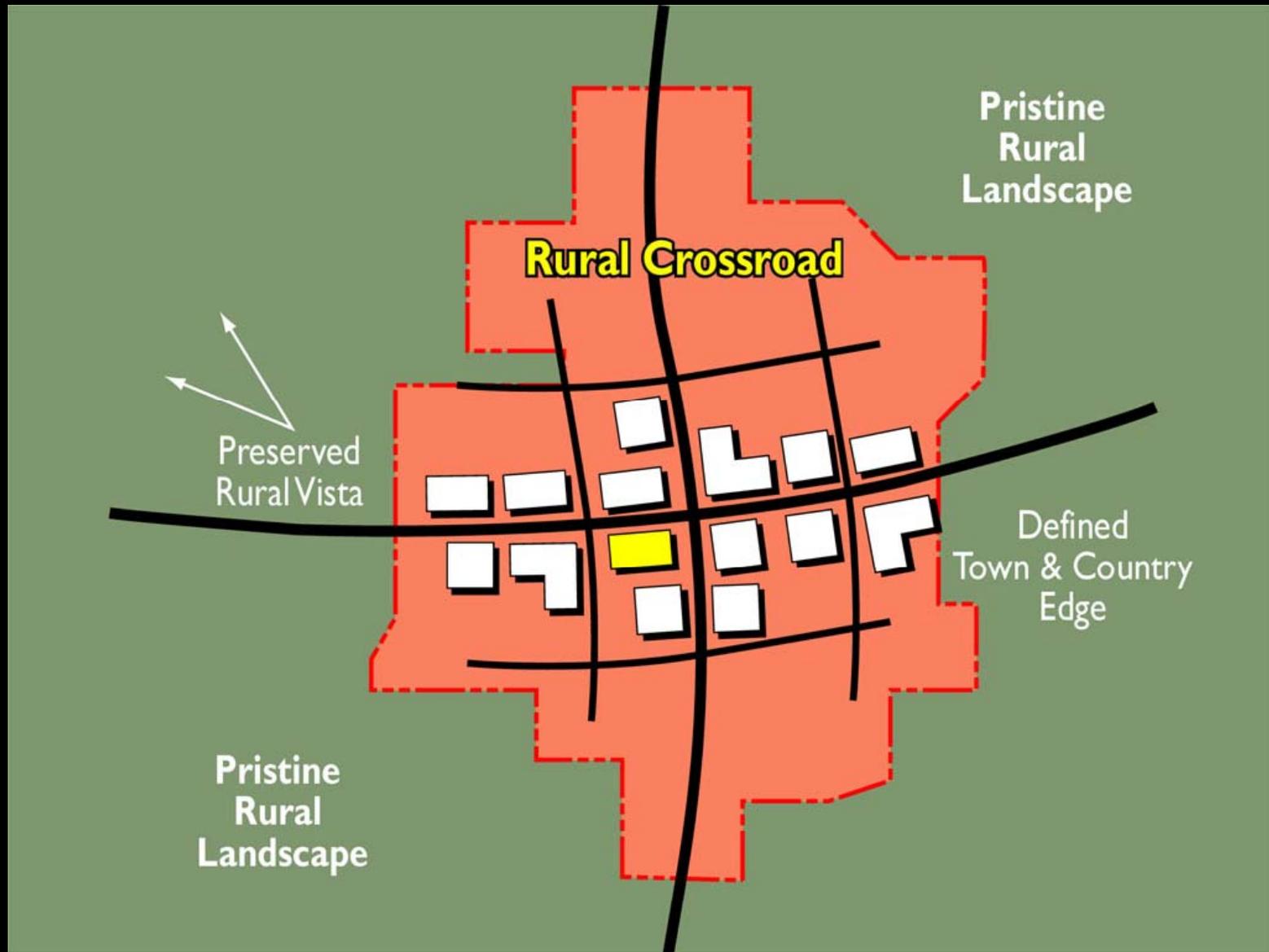
Preserve open space and farmland

Street network creates a rural place



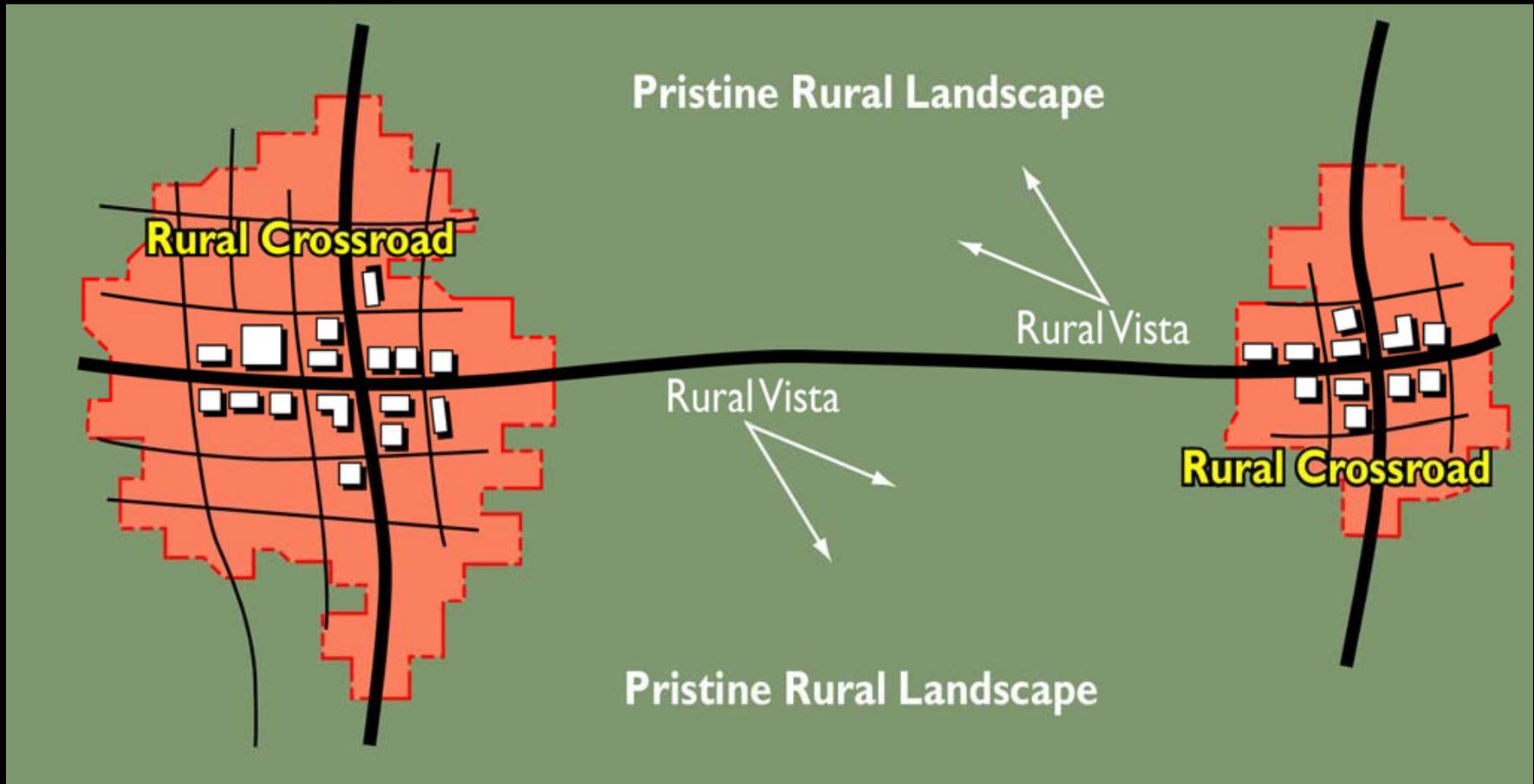
Preserve open space and farmland

# Development drawn to rural crossroads



Preserve open space and farmland

## Rural development in defined places preserves vistas



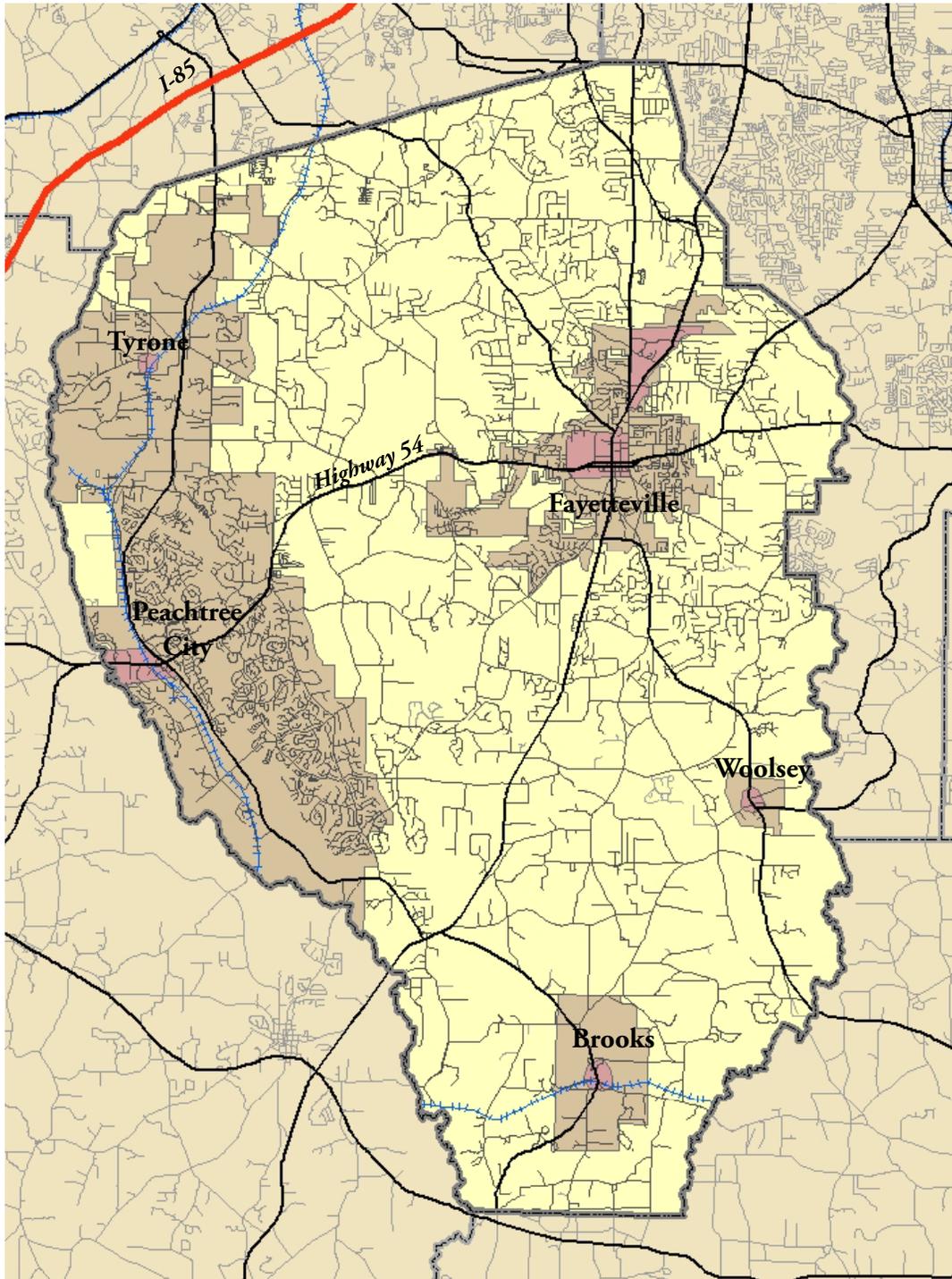
“Identify the location of nodes to accommodate nonresidential development and prevent the sprawl of strip development.”

*Fayette County Comprehensive Plan*

Preserve open space and farmland

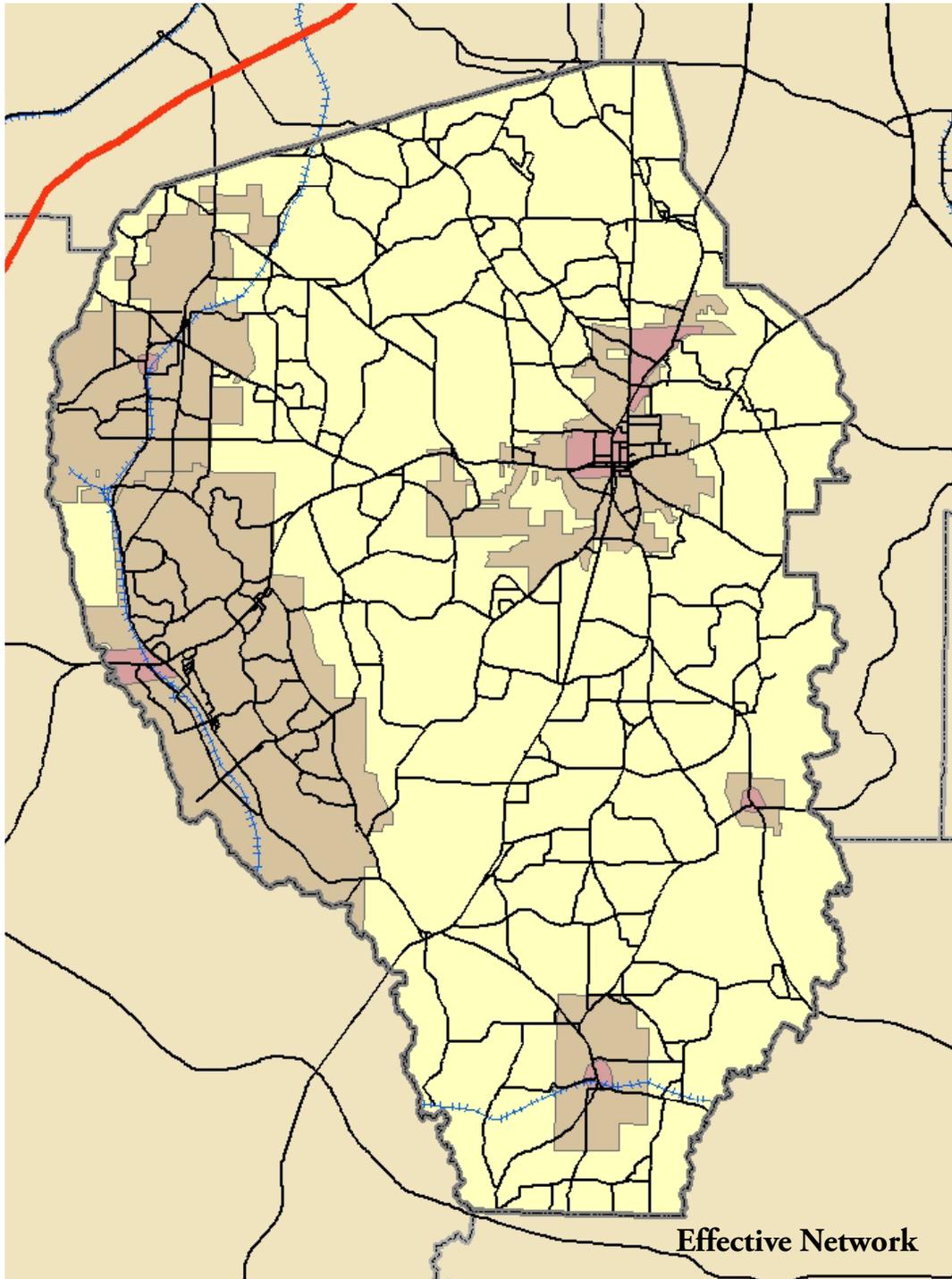
1. Short Trips = Connectivity
2. Long Trips Require Options

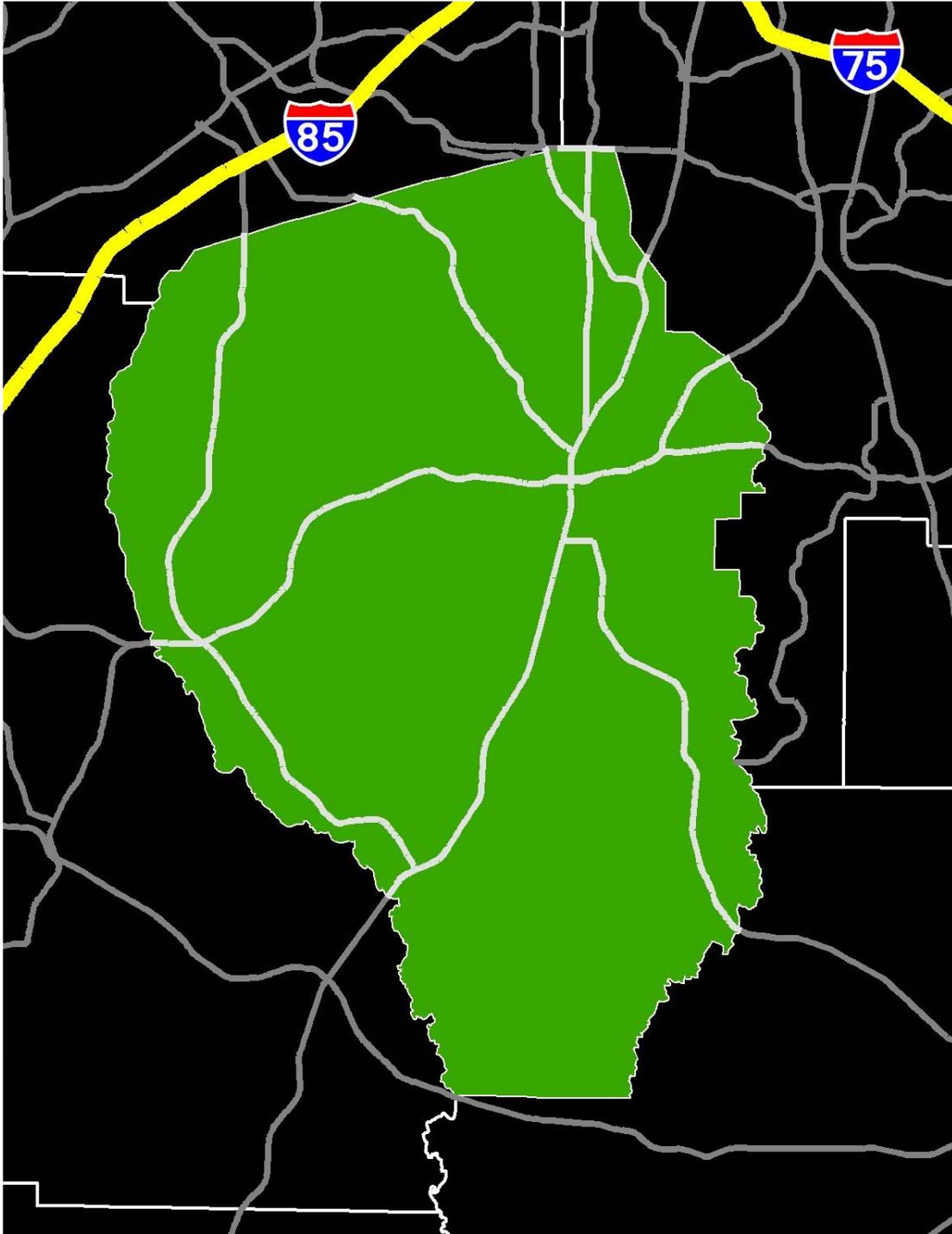
# Fayette County



# Fayette County

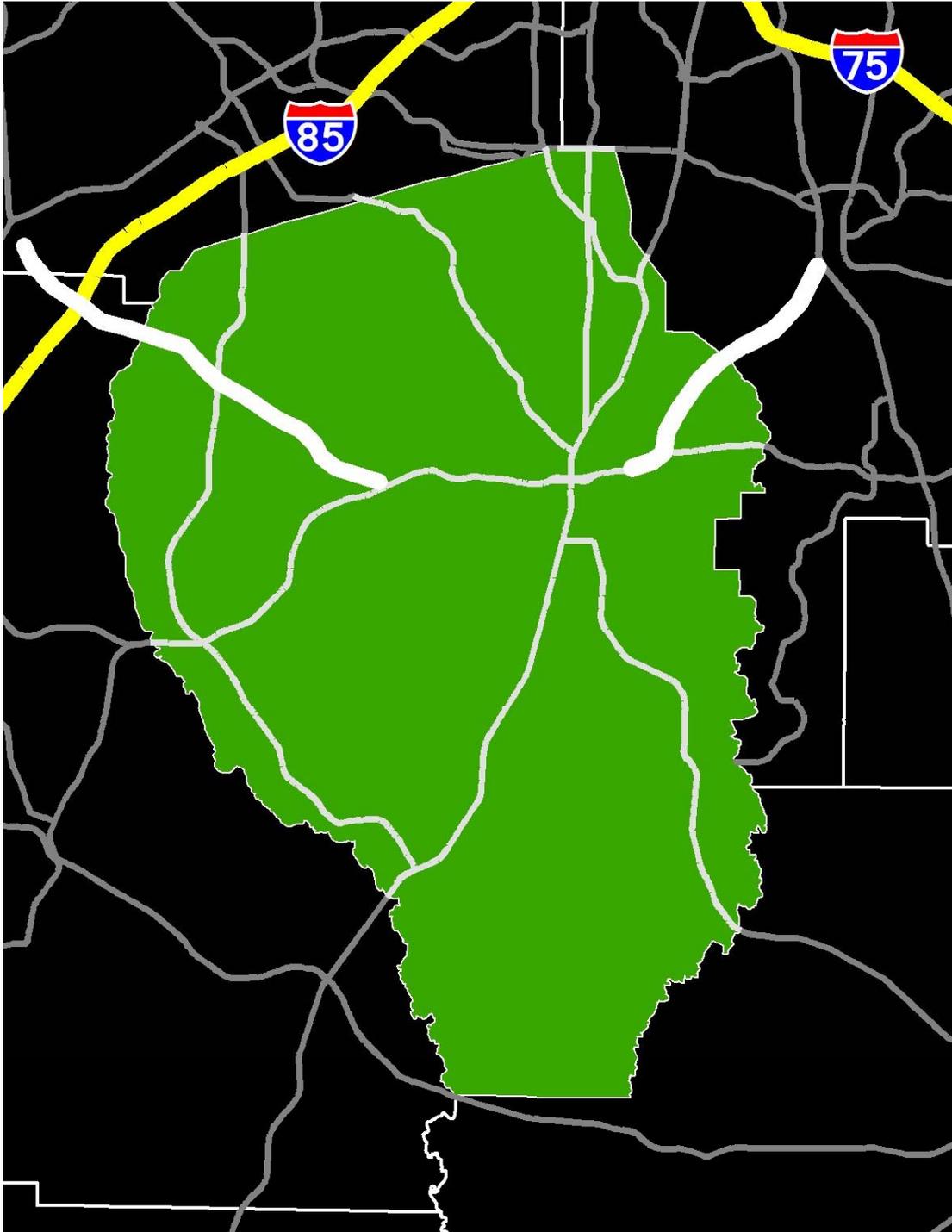
Only 42% of the network is effective





No Interstates in  
County

More access to  
interstates eases  
congestion in short  
term



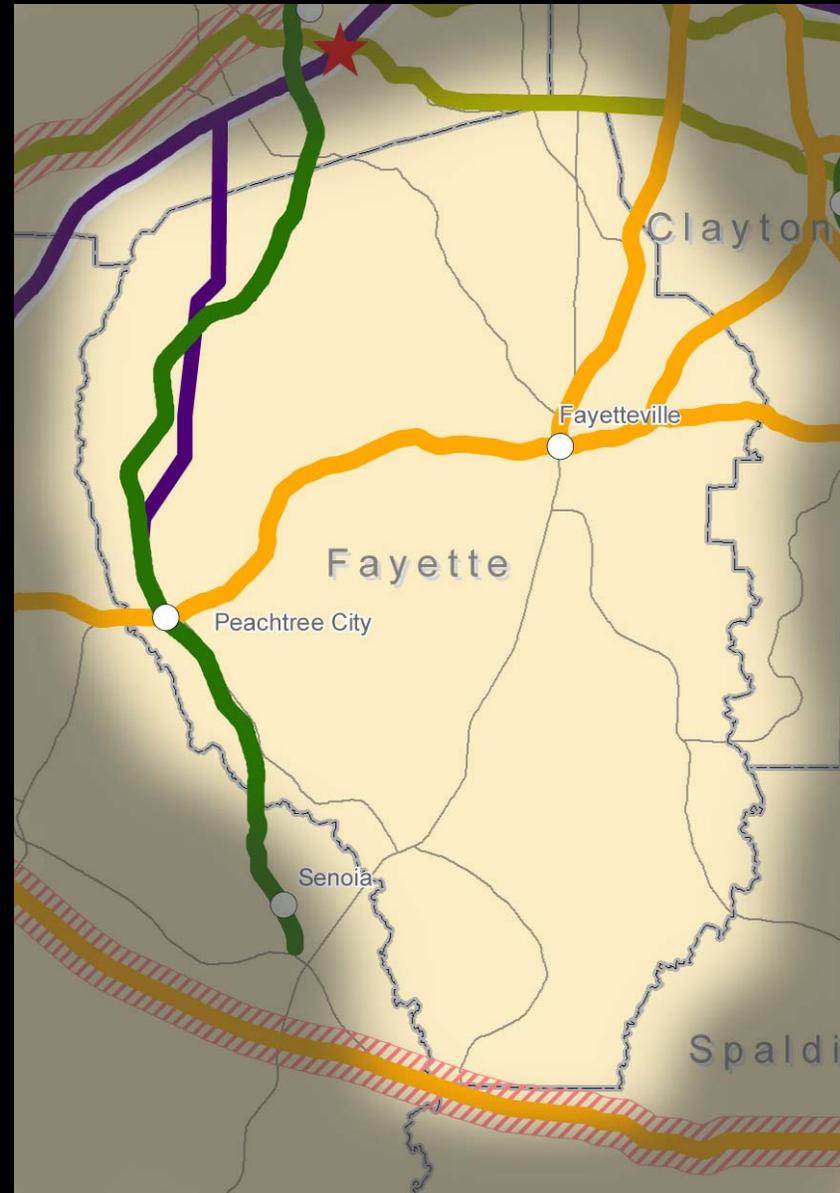
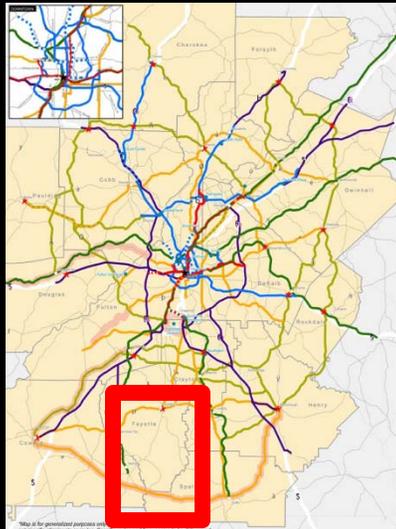
No Interstates in  
County

More access to  
interstates eases  
congestion in short  
term

What are land use  
consequences on  
these corridors?

## The Concept 3 Vision

- Region-wide transit for Metro Atlanta
- Modes/technologies need to fit into context
- In Fayette, primarily regional bus service



# Commuter Rail



Chicago



Pennsylvania



Ohio



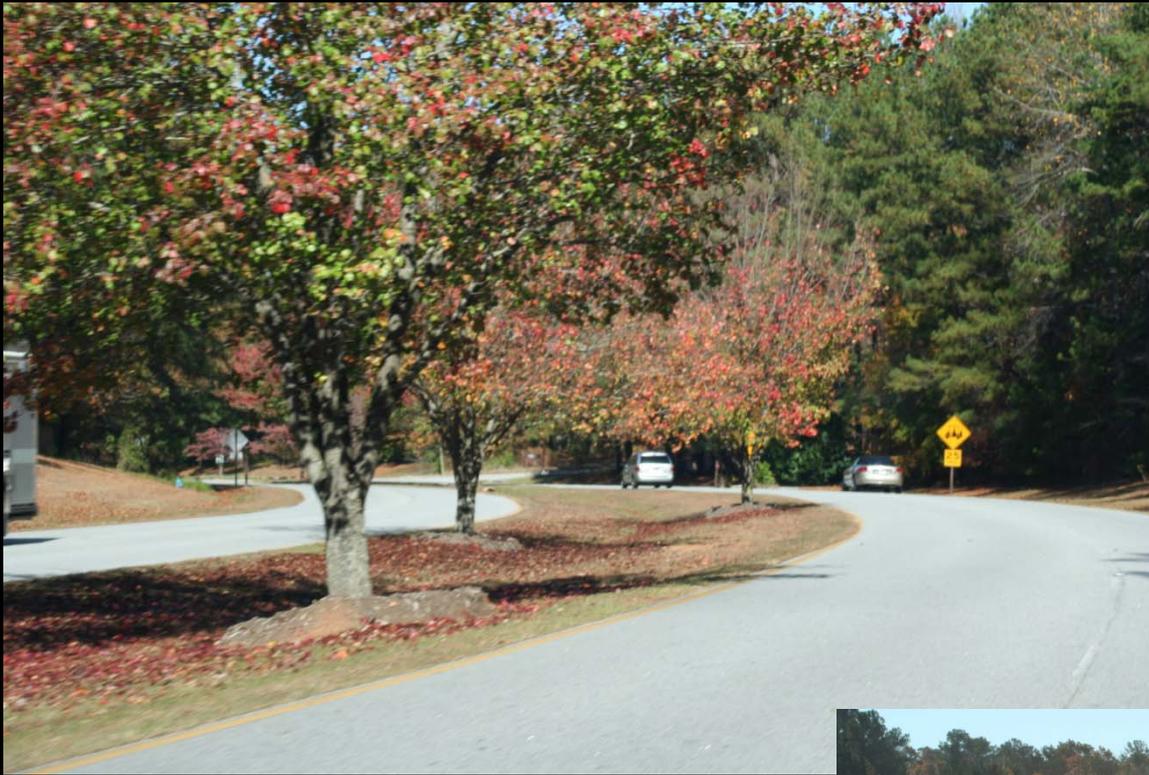
New Jersey



Chicago

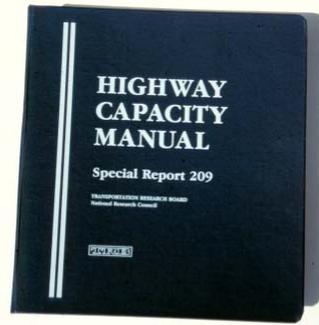
1. Short Trips = Connectivity
2. Long Trips Require Options
3. All Trips Require Safe Design





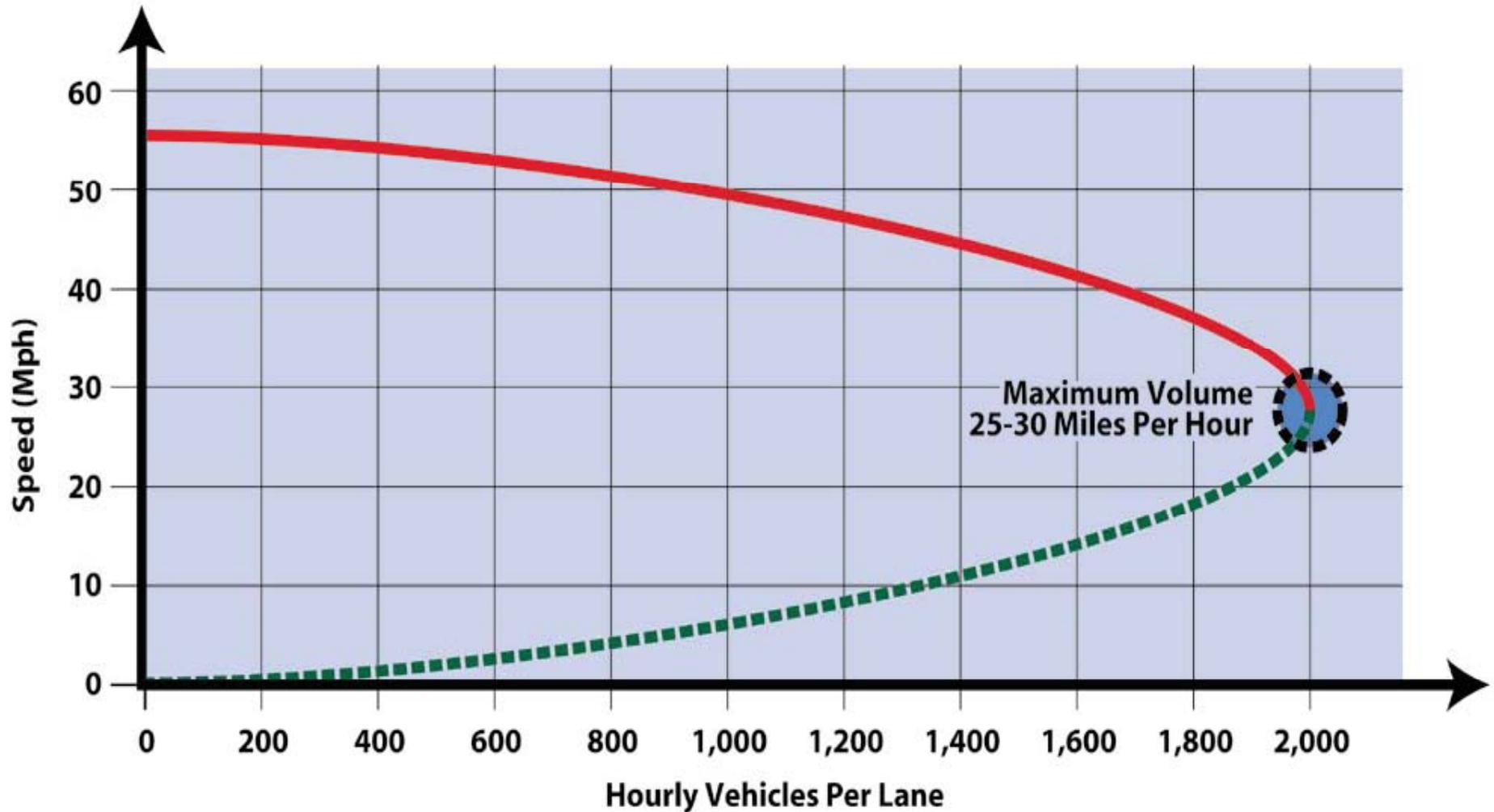
A speed limit sign on a highway with a military helicopter in the background. The sign is rectangular with a black background and white text. The helicopter is a large, multi-rotor aircraft with a radar dome on top, flying over a dense forest. The highway has a metal guardrail and a yellow double line on the road surface.

**SPEED LIMIT  
ENFORCED BY  
AIRCRAFT**



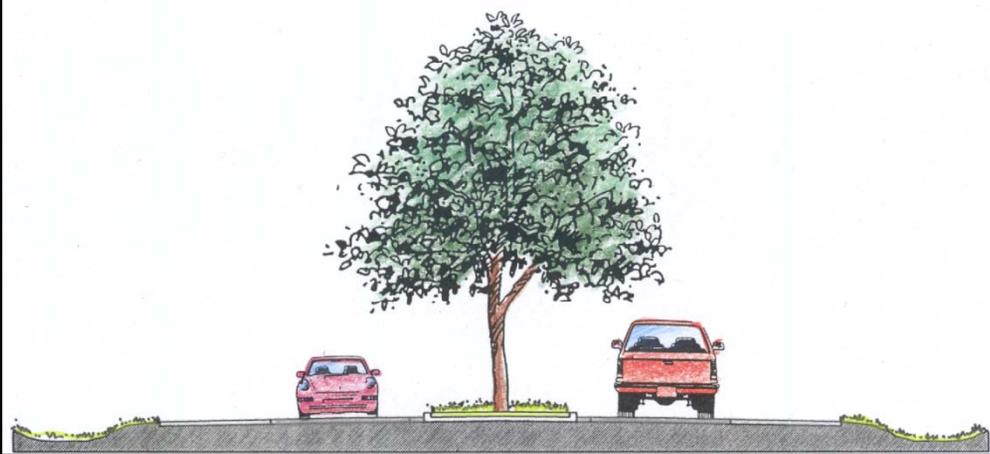
# Reframing Transportation Conventions

## DESIGN TRAFFIC – Speed / Flow Relationship



<b>Vehicle Speed</b>	<b>Percentage of Pedestrian Fatalities in accidents</b>
15 Mph	3.5%
31 Mph	37.0%
44 mph	83.0%

*Source: National Highway Traffic Safety Administration  
Federal Highway Administration*



Zone 3

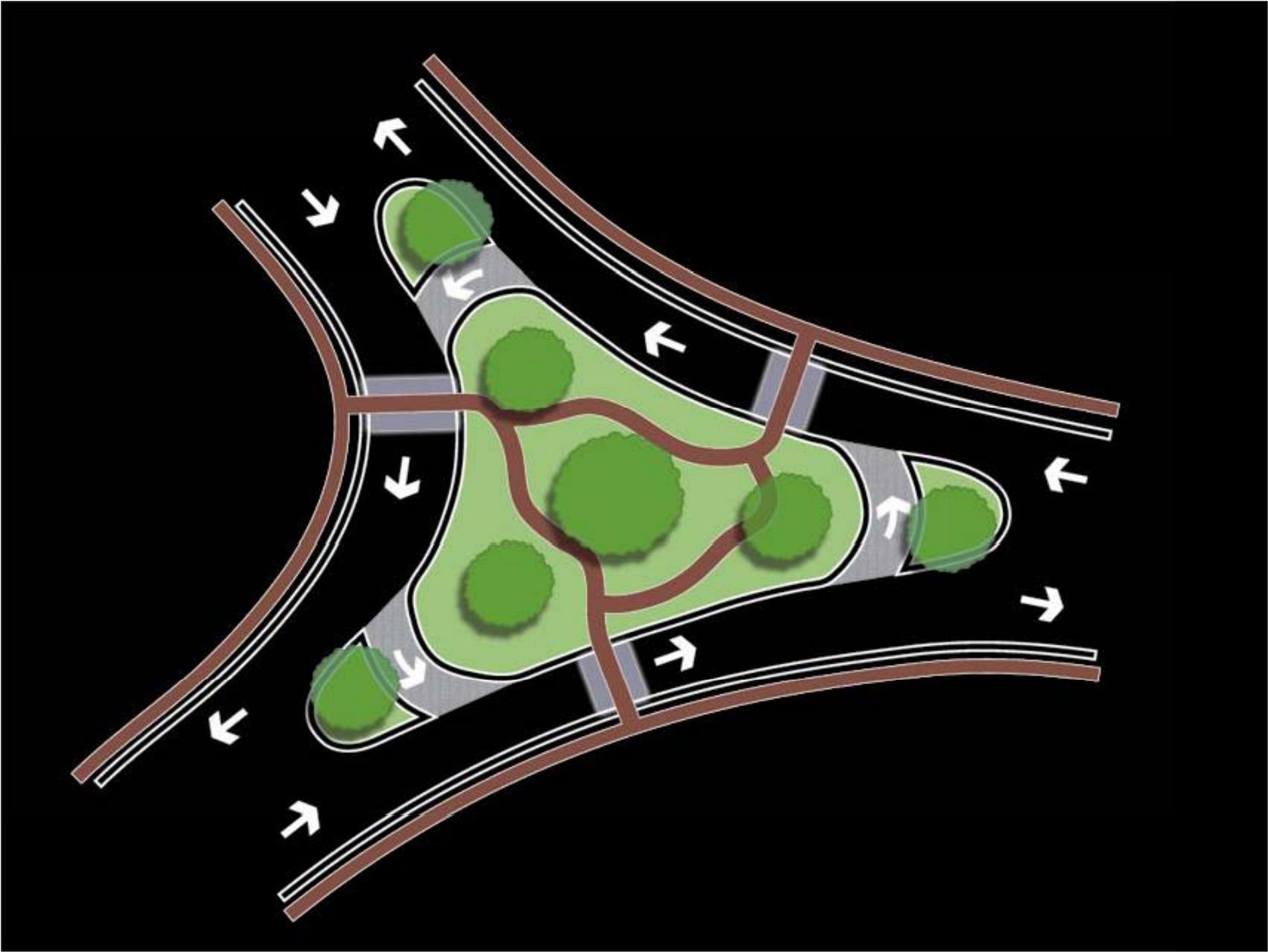


Zone 2

Zone 1







1. Connectivity and Options
2. Safety and Health
3. Character and Design

## Meeting The Goals



Preserve open space and farmland

# Workshop Agenda and Approach

Thank You