

## STUDY OVERVIEW

The Arkansas Department of Transportation (ARDOT) and Metroplan in cooperation with Federal Highway Administration (FHWA) and local governments, are conducting a study of potential improvements to connect Interstate 40 and Highway 67 through northern Pulaski County.

STUDY BEGAN DECEMBER 2019

### PUBLIC INVOLVEMENT OPPORTUNITY

Introduce the purpose and process of the study and provide an opportunity for public input on the goals, objectives, and potential alternatives for the study.

### ALTERNATIVE DEVELOPMENT

Develop alternatives to connect arterials in the northern Pulaski County region by using existing roadways where possible.

### ALTERNATIVES ANALYSIS

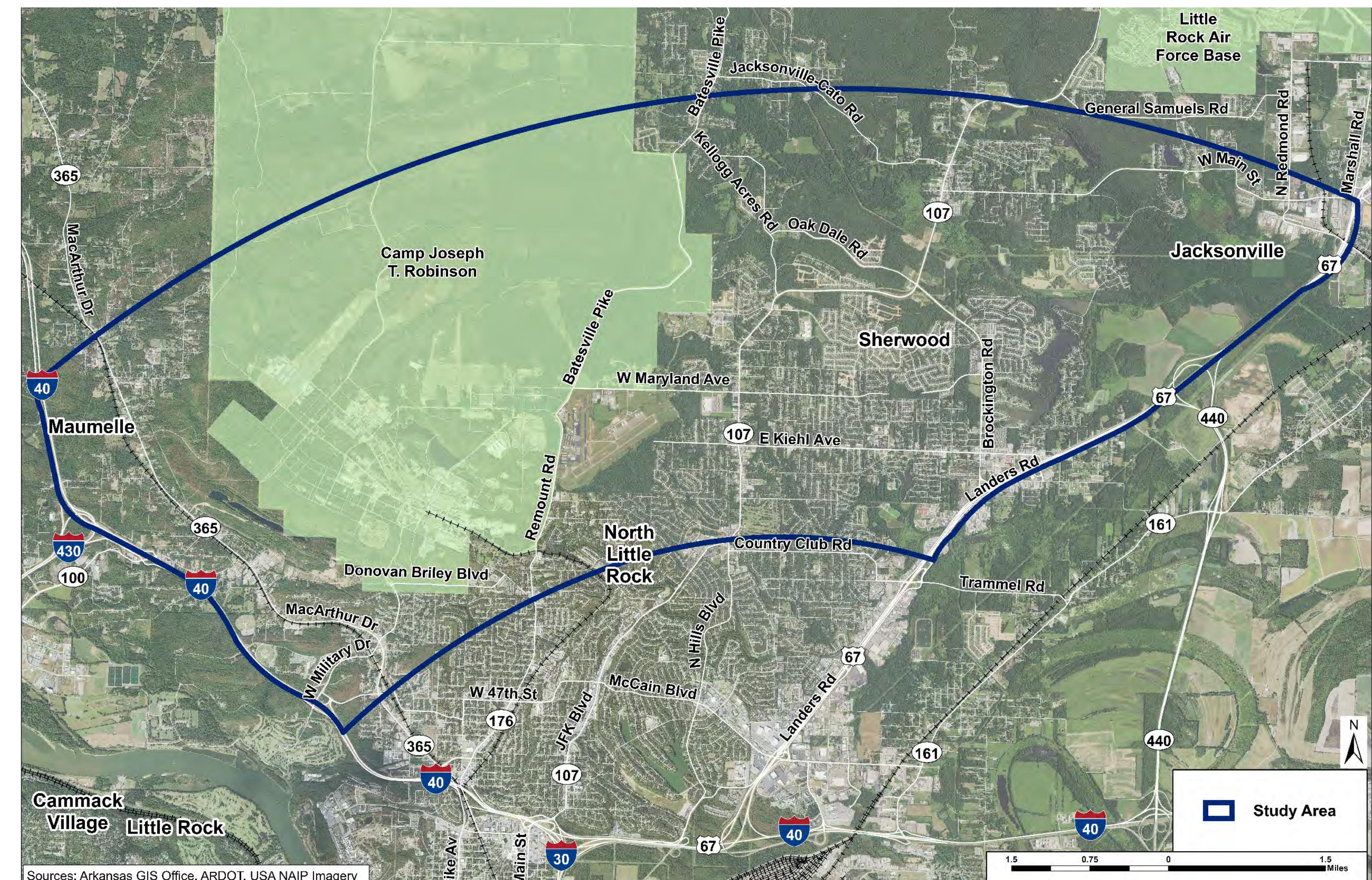
Perform a comprehensive and technical evaluation of potential solutions against selected performance measures.

### PUBLIC INVOLVEMENT OPPORTUNITY

Public input on the evaluated alternative alignments and whether they serve as appropriate solutions.

STUDY CONCLUDES LATE 2021

## STUDY AREA MAP



### STUDY PARTNERS



### SUPPORT PARTNERS



### STUDY TEAM



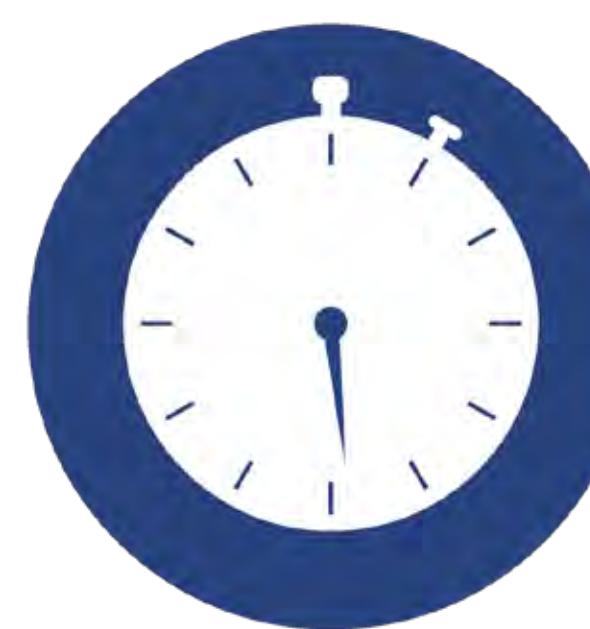
## STUDY MOTIVATIONS, GOALS, AND PERFORMANCE MEASURES

The study will determine effective solutions that agree with the goals of the Arkansas Long Range Intermodal Transportation Plan (LRITP) and Metroplan's Metropolitan Transportation Plan (MTP) by improving mobility and safety, minimizing environmental impacts, and supporting a quality of life that is valued by residents and business owners alike. The study will explore new alignments that may use existing roadways as a means to increase connectivity.

### MOTIVATIONS FOR THE STUDY

- Identify a cost-effective alternative that serves and meets the needs of the state and local communities.
- Decrease travel time within the study area and on Highway 67 and Interstate 40
- Improve connectivity in the study area to better accommodate and promote growth and development.
- Develop context sensitive alternatives that minimize negative impacts to the community and the environment and maximize the use of available land for right-of-way (ROW).
- Support funding decisions with timely information.

### GOALS AND PERFORMANCE MEASURES



#### Congestion Reduction, Mobility, and System Reliability

Performance Measures:  
Travel Time, Delay, and Level of Service



#### Safety and Security

Performance Measures:  
Crash by Severity and Facility



#### Environmental Sustainability

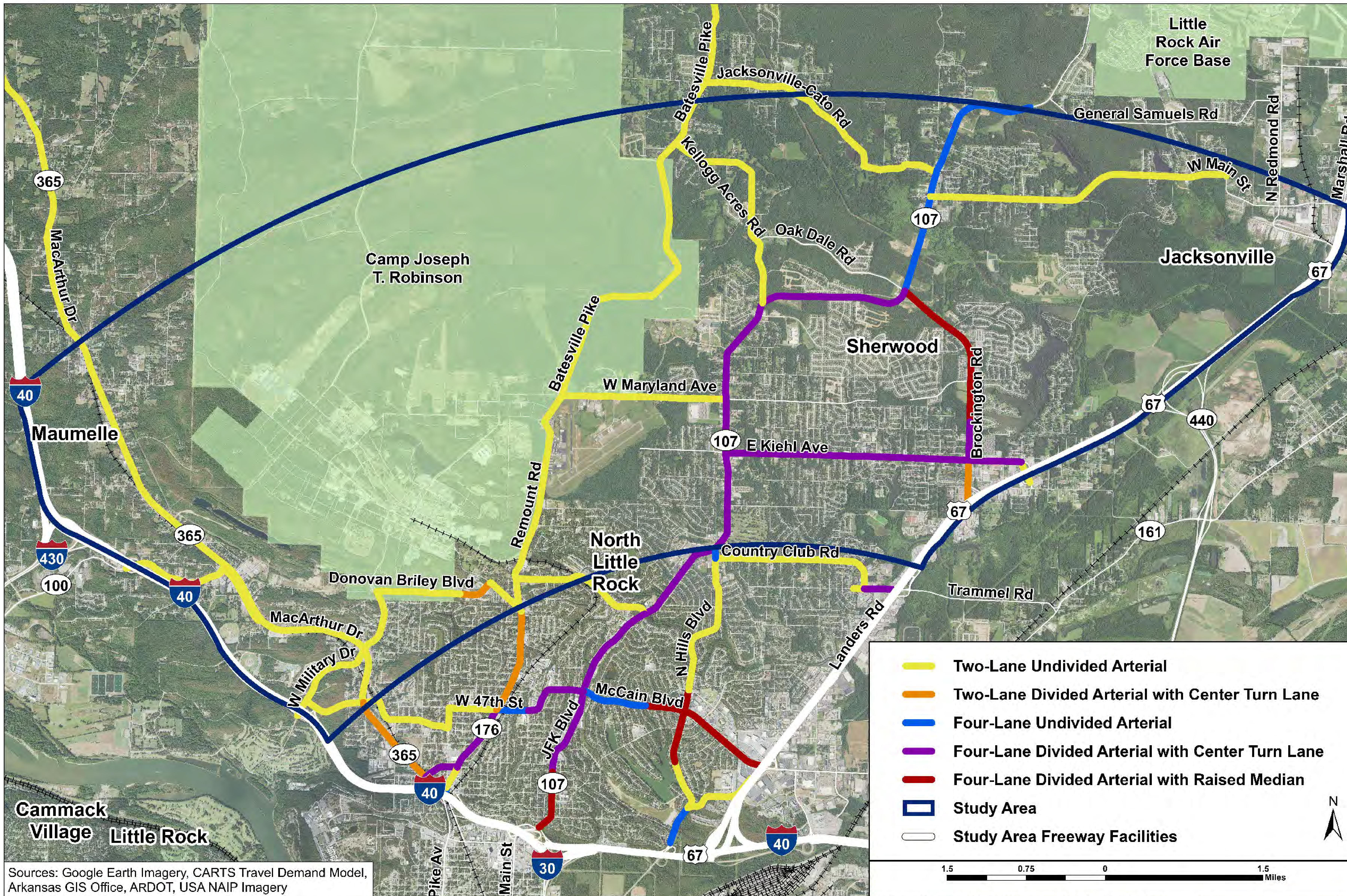
Performance Measures:  
Potential Impacts on Natural and Cultural Resources



#### Infrastructure Condition

Performance Measure:  
Construction Costs

## STUDY AREA ROADWAY CHARACTERISTICS



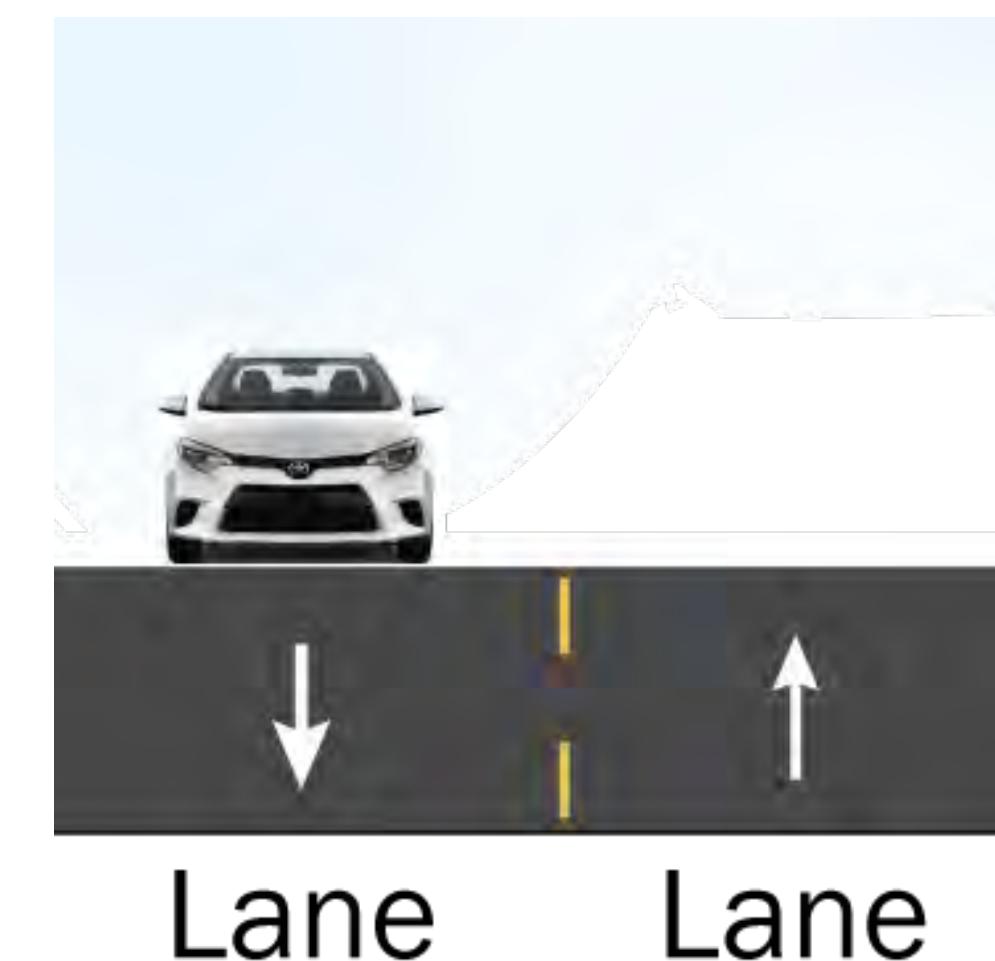
### Key Characteristics

- Four-lane roadways primarily run North-South and feed into the freeway system.
- No continuous four-lane roadways traveling East-West

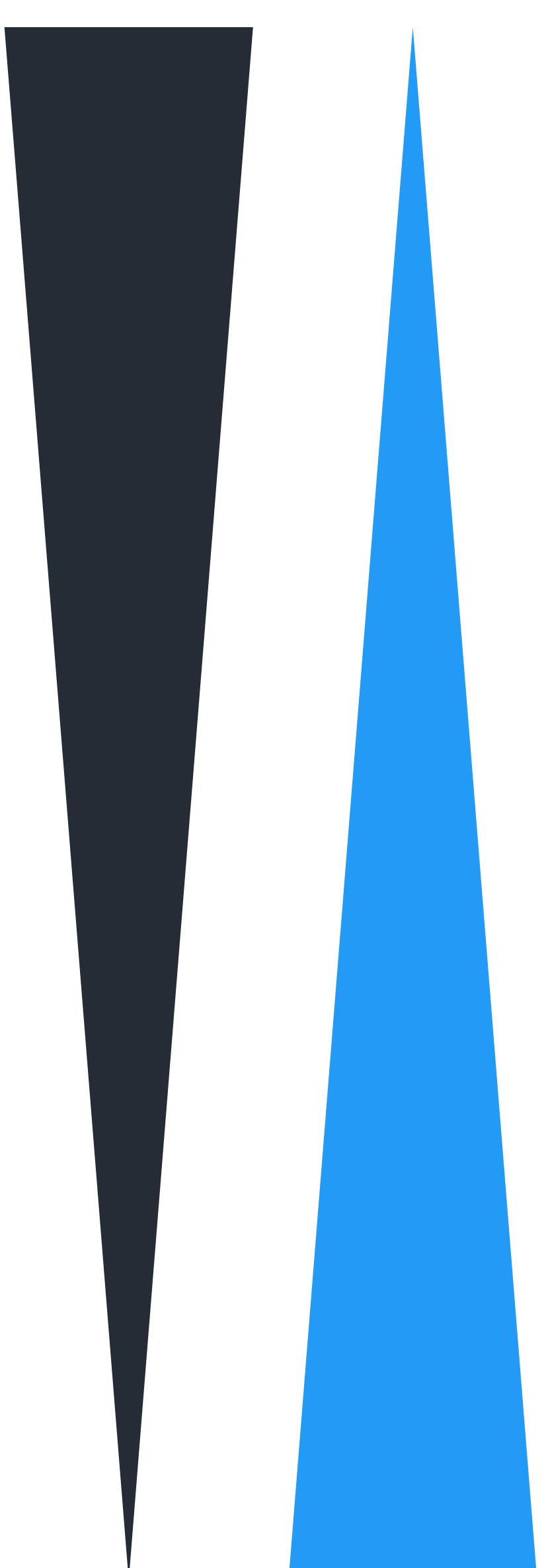
## TYPICAL ROADWAY CROSS SECTIONS

There are two primary travel needs served by roadways mobility and access. Mobility is the ability to move people or goods efficiently between locations. Access is the ability to reach numerous desired destinations. While all roadways serve these two needs to at least some degree, by design, certain type of roadways serve one need better than the other.

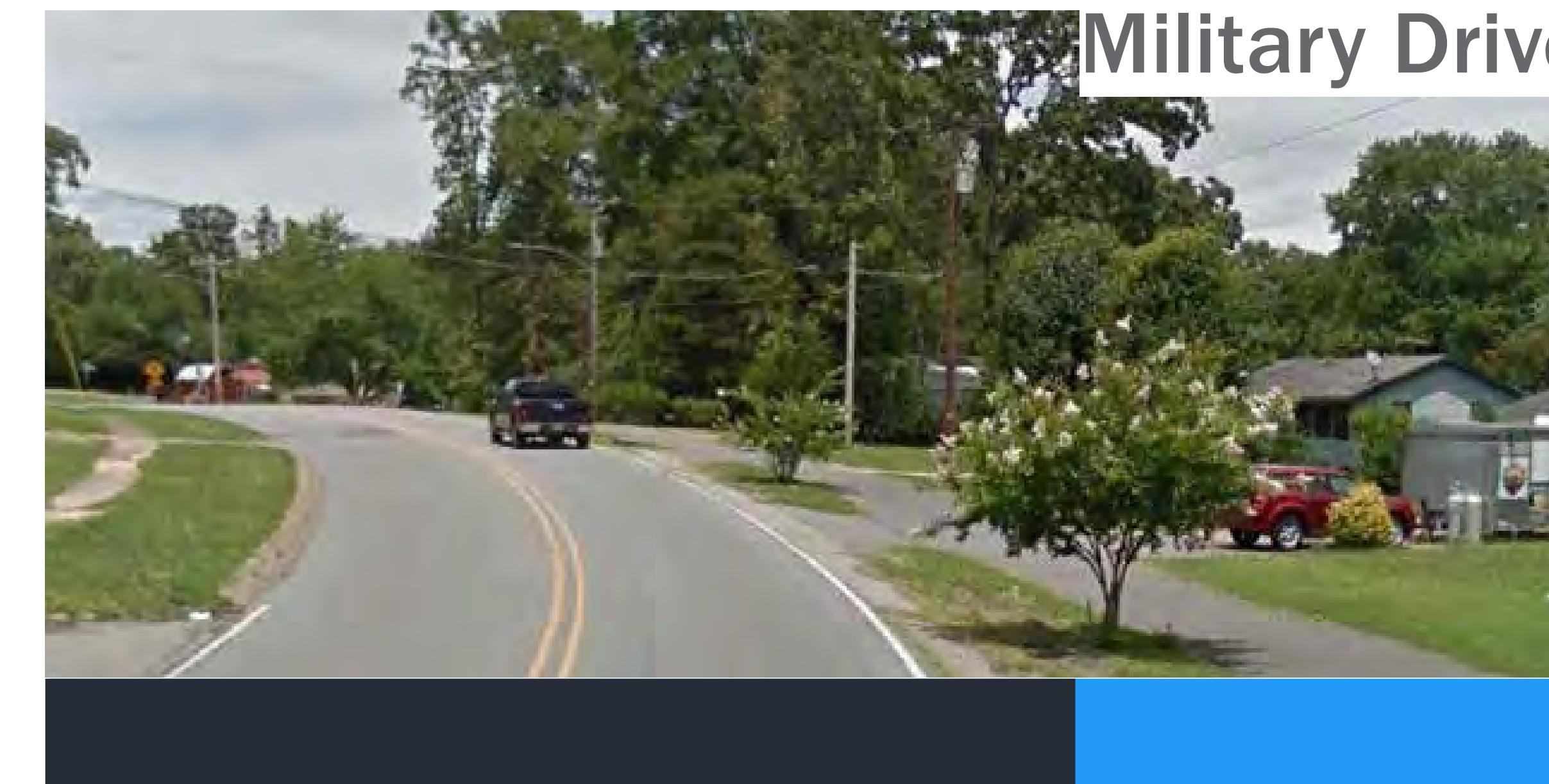
### Two-LANE UNDIVIDED ARTERIAL NOT Access CONTROLLED



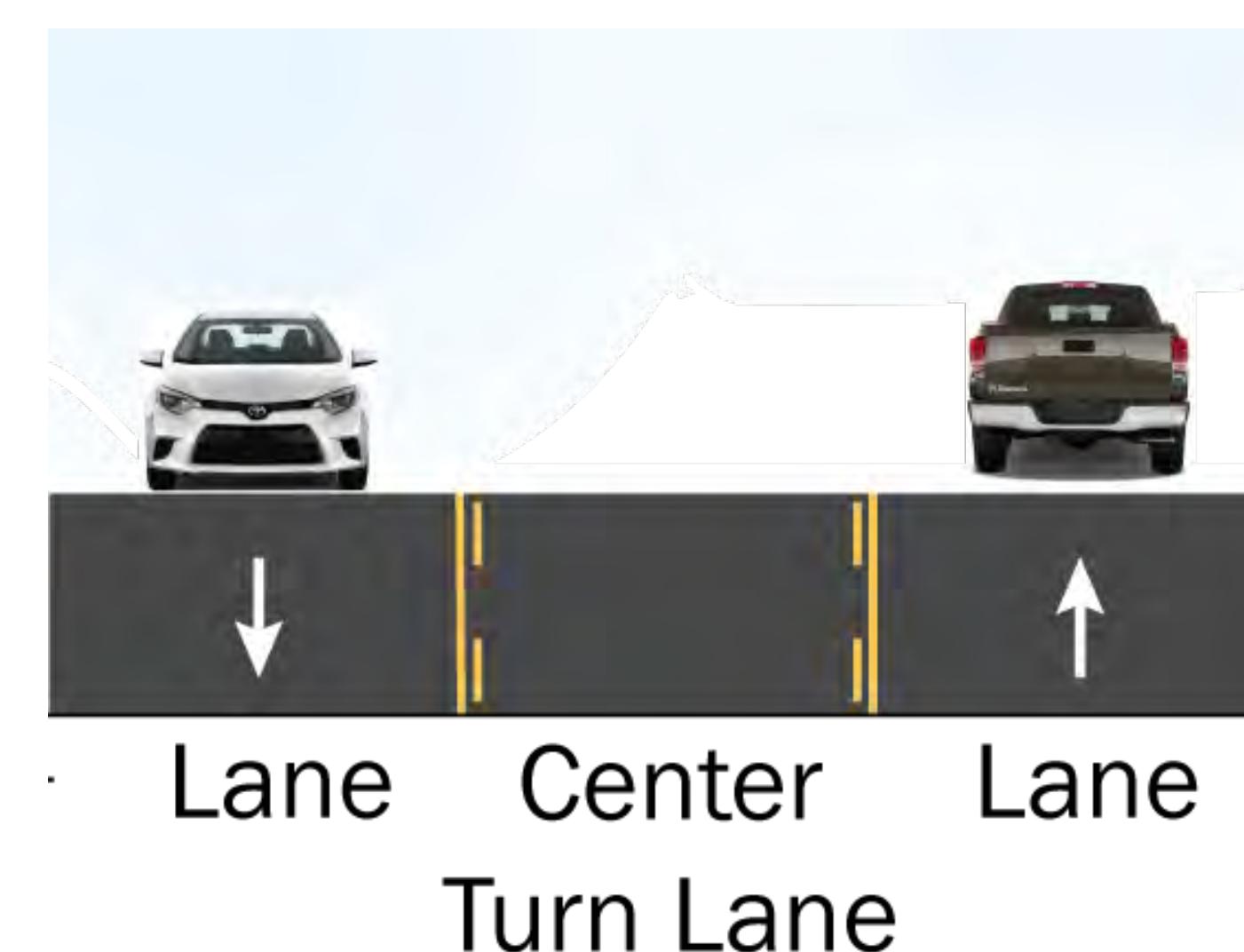
HIGH ACCESS



### Two-LANE UNDIVIDED ARTERIAL Access CONTROLLED



### Two-LANE DIVIDED ARTERIAL WITH CENTER TURN LANE

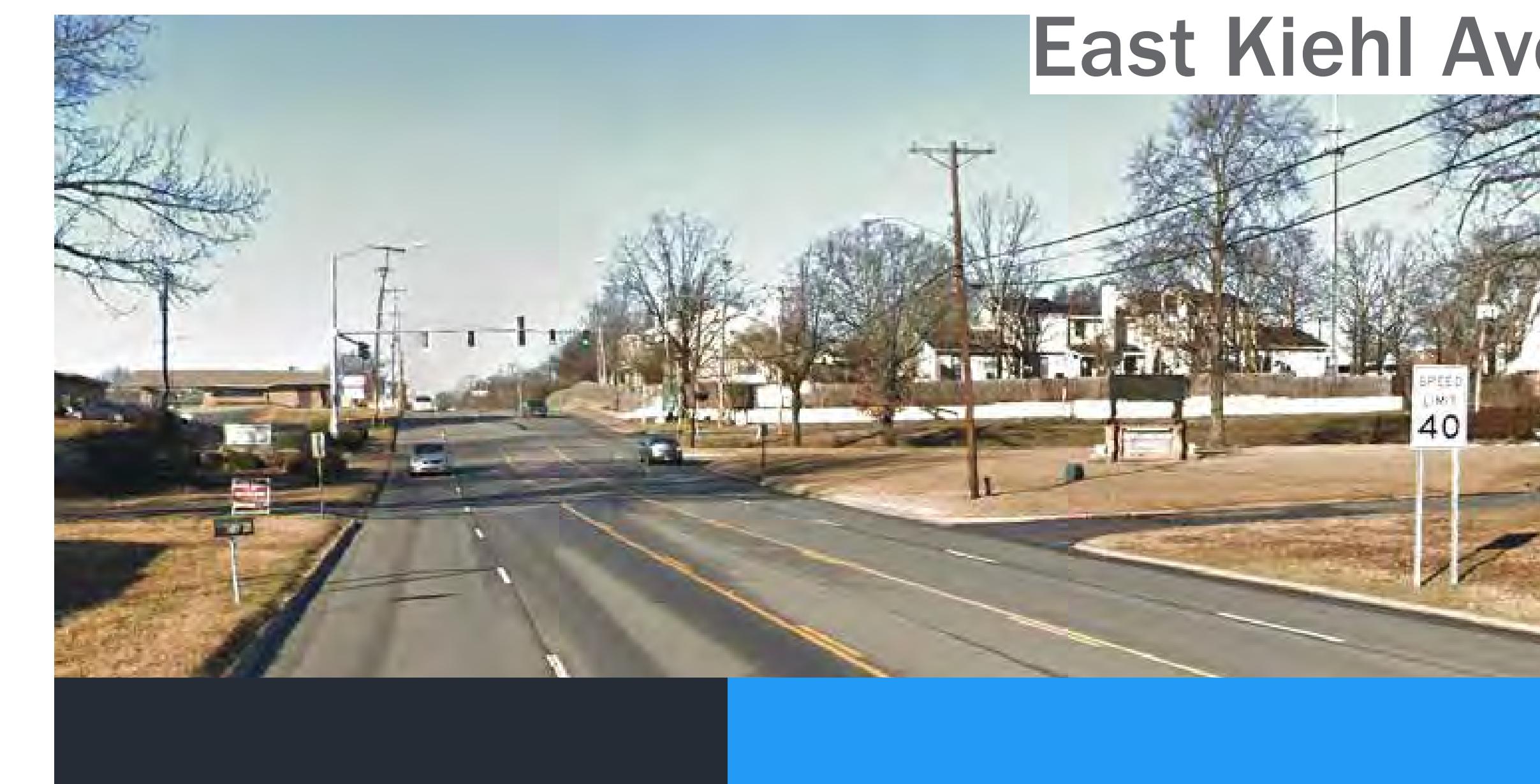
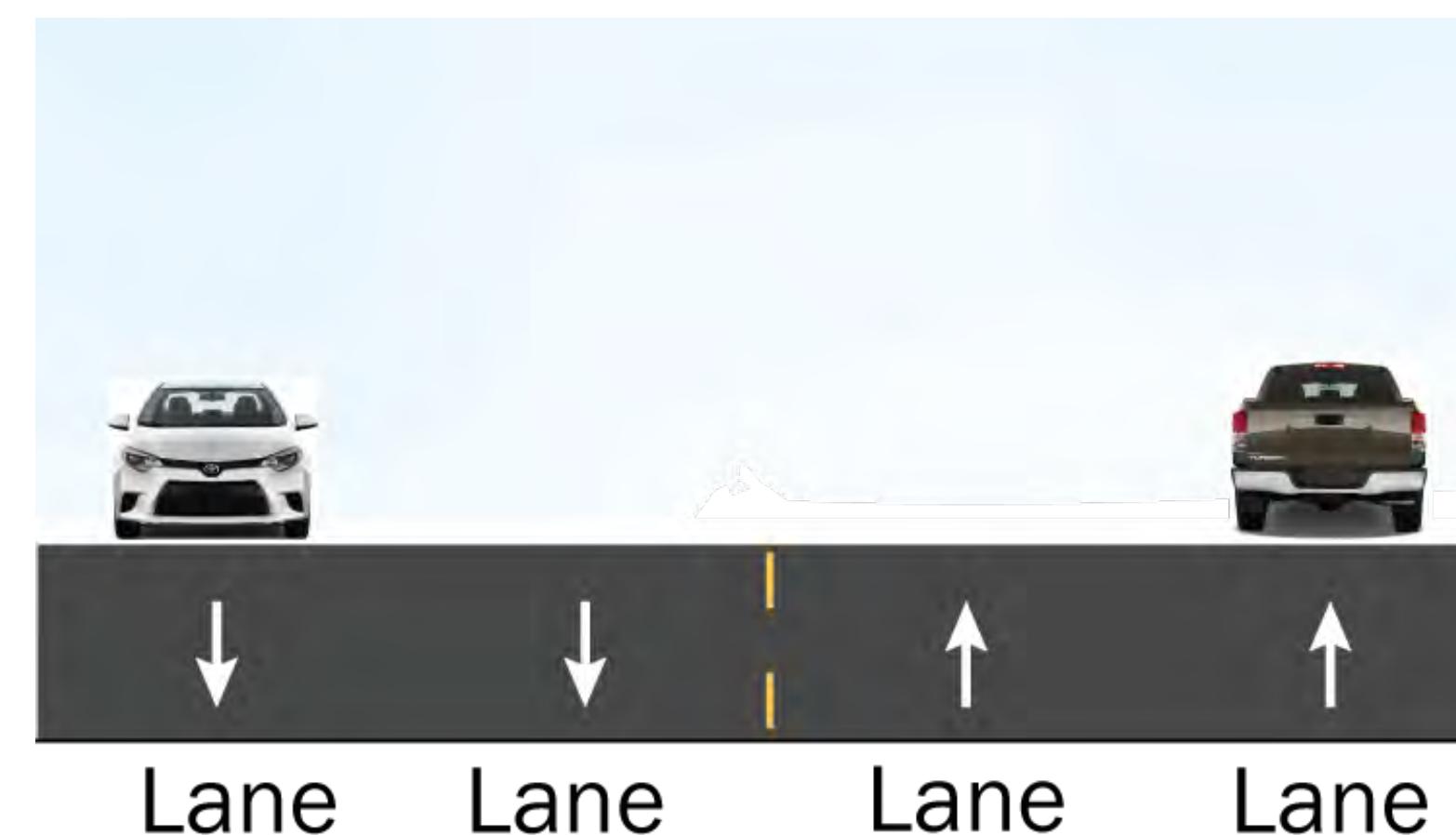


HIGH MOBILITY

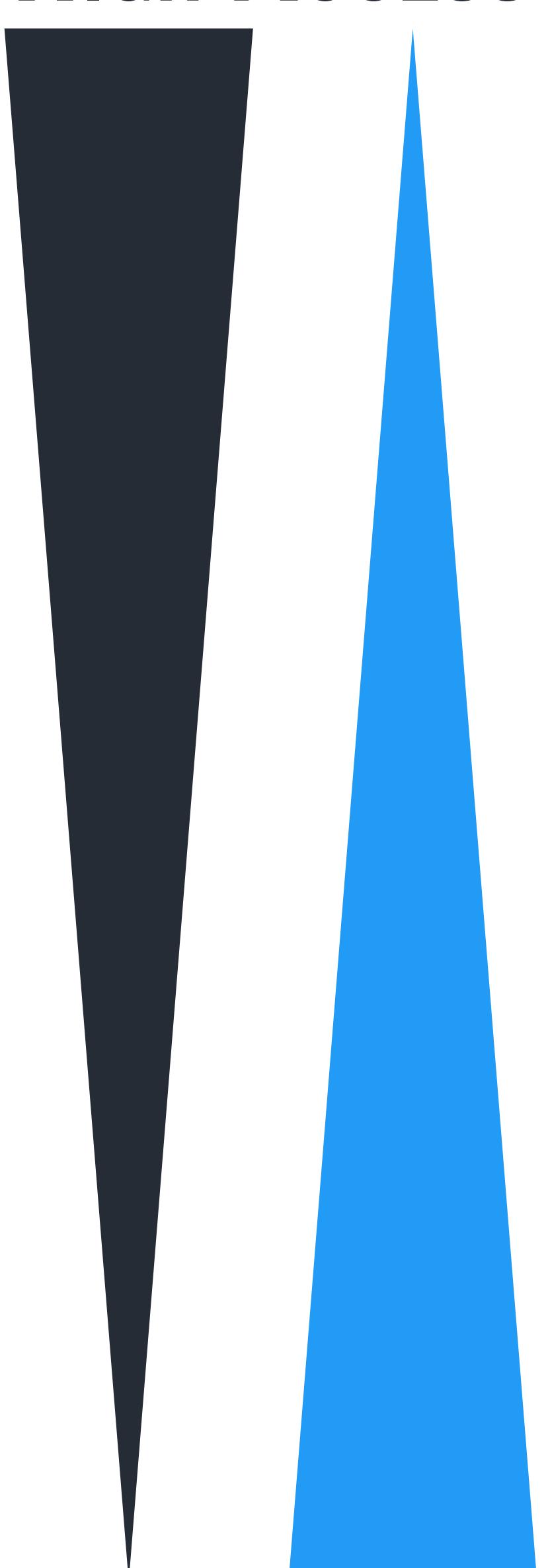
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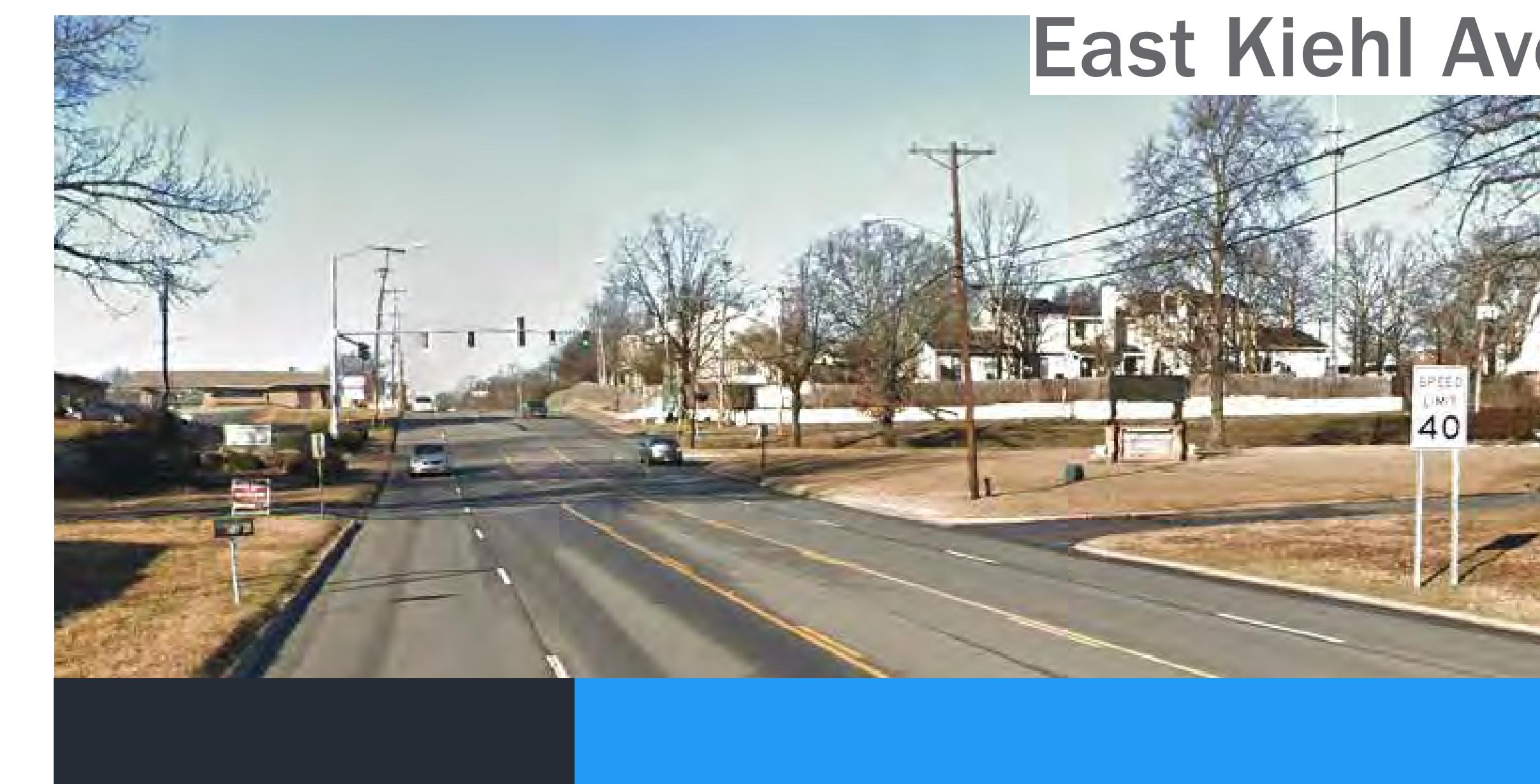
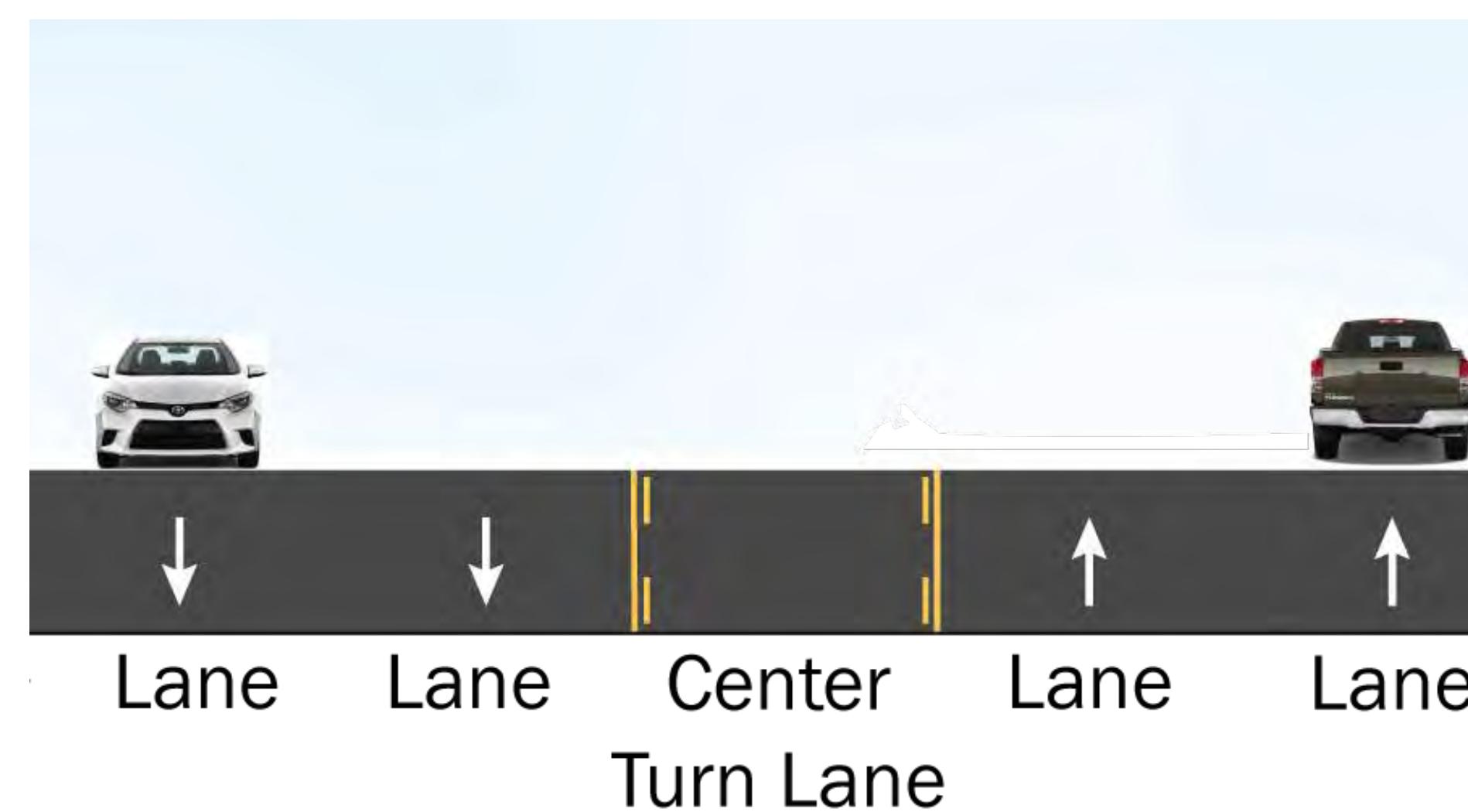
### FOUR-LANE UNDIVIDED ARTERIAL



**HIGH ACCESS**

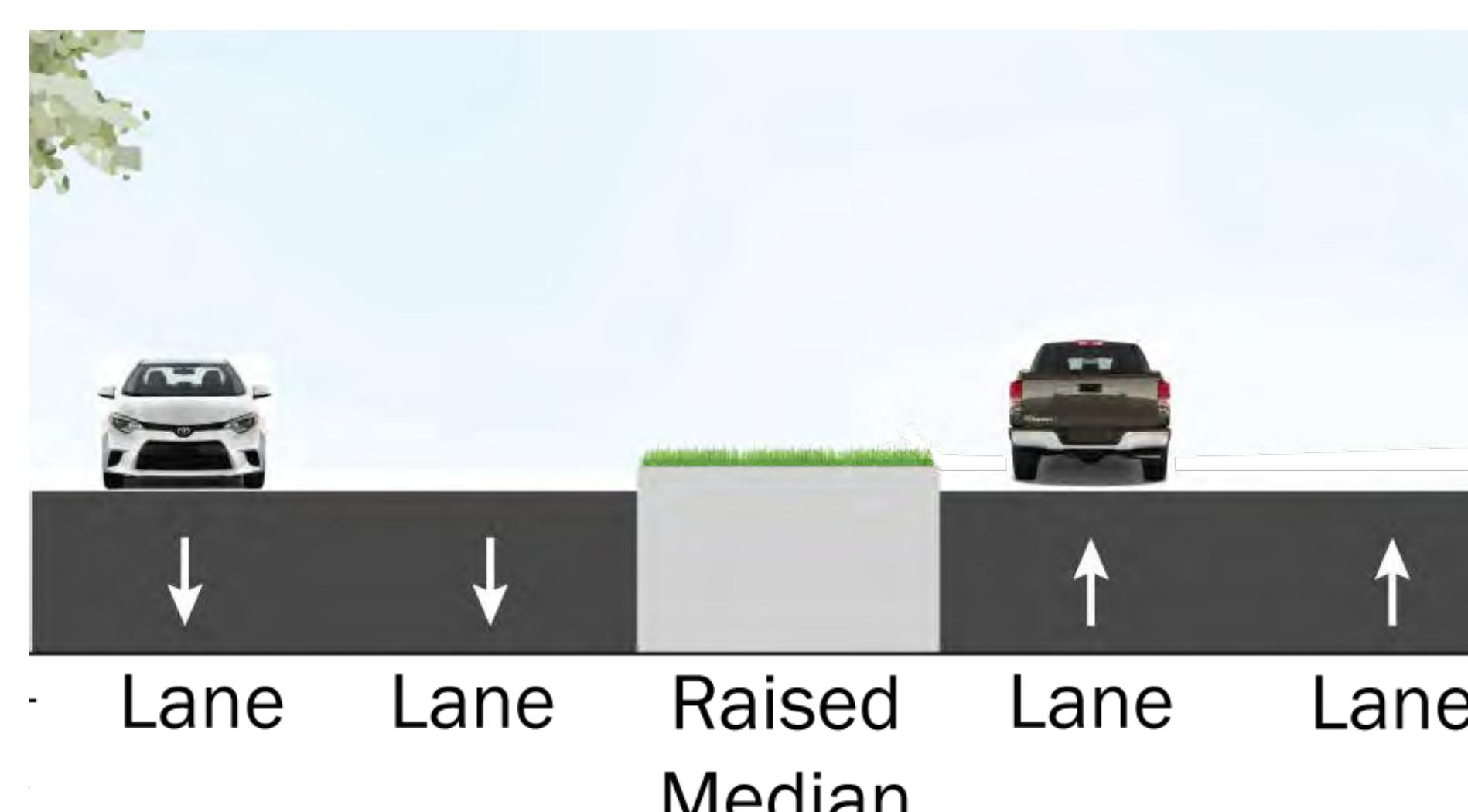


### FOUR-LANE DIVIDED ARTERIAL WITH CENTER TURN LANE

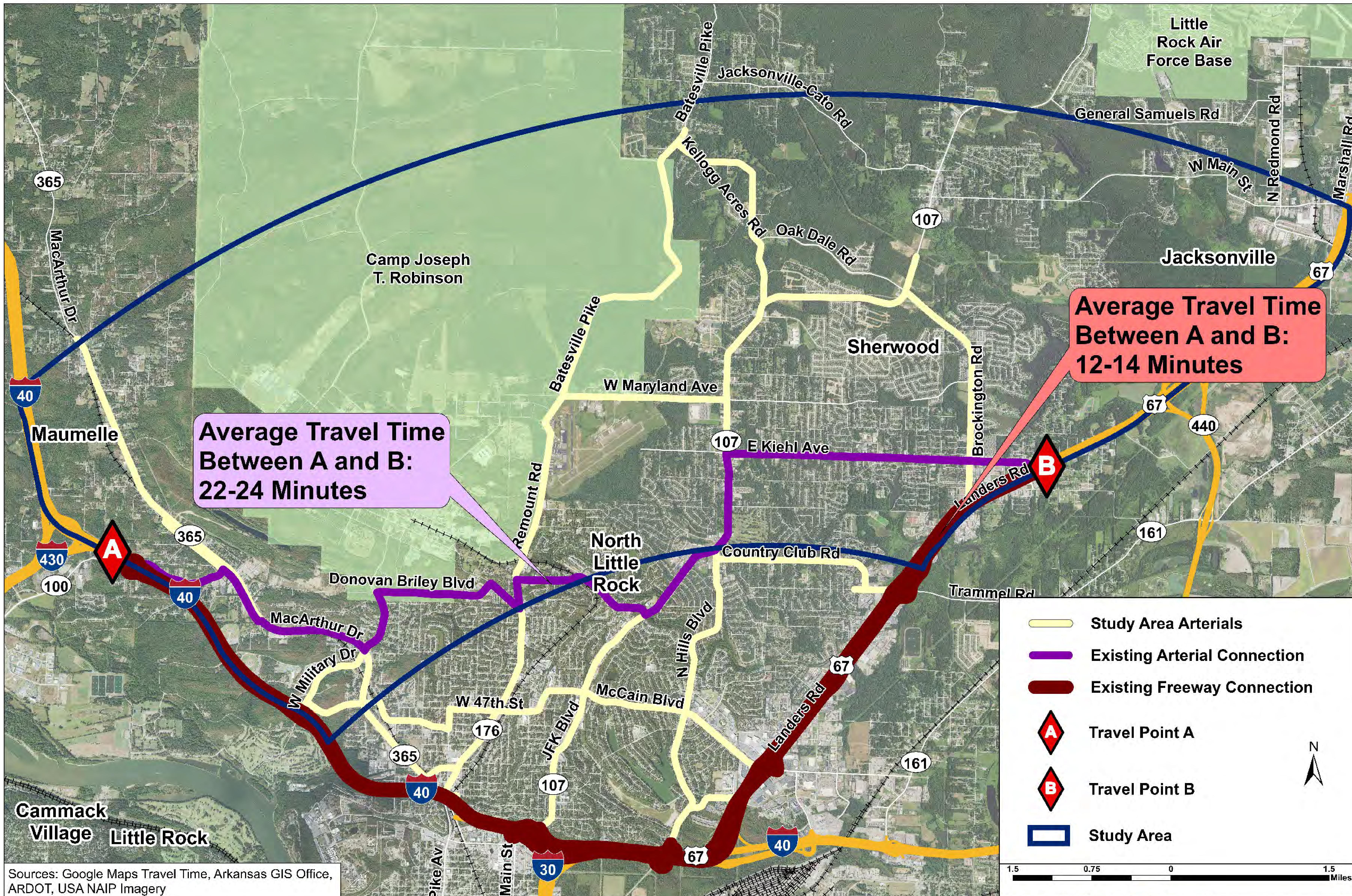


**HIGH MOBILITY**

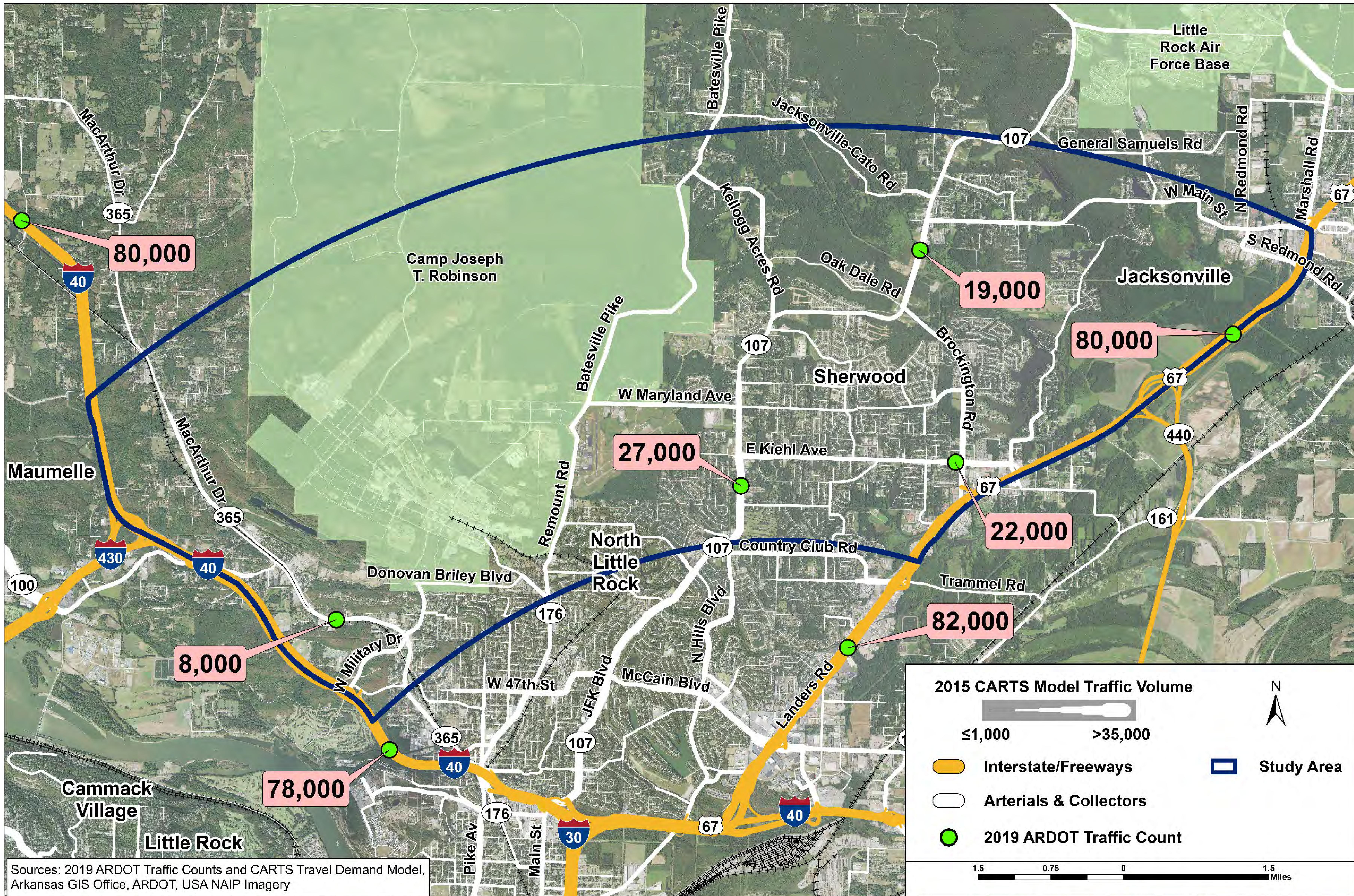
### FOUR-LANE DIVIDED ARTERIAL WITH RAISED MEDIAN



## EXISTING TRAVEL TIME AND DELAY



## CURRENT AND FUTURE VOLUMES- AVERAGE DAILY TRAFFIC (ADT)



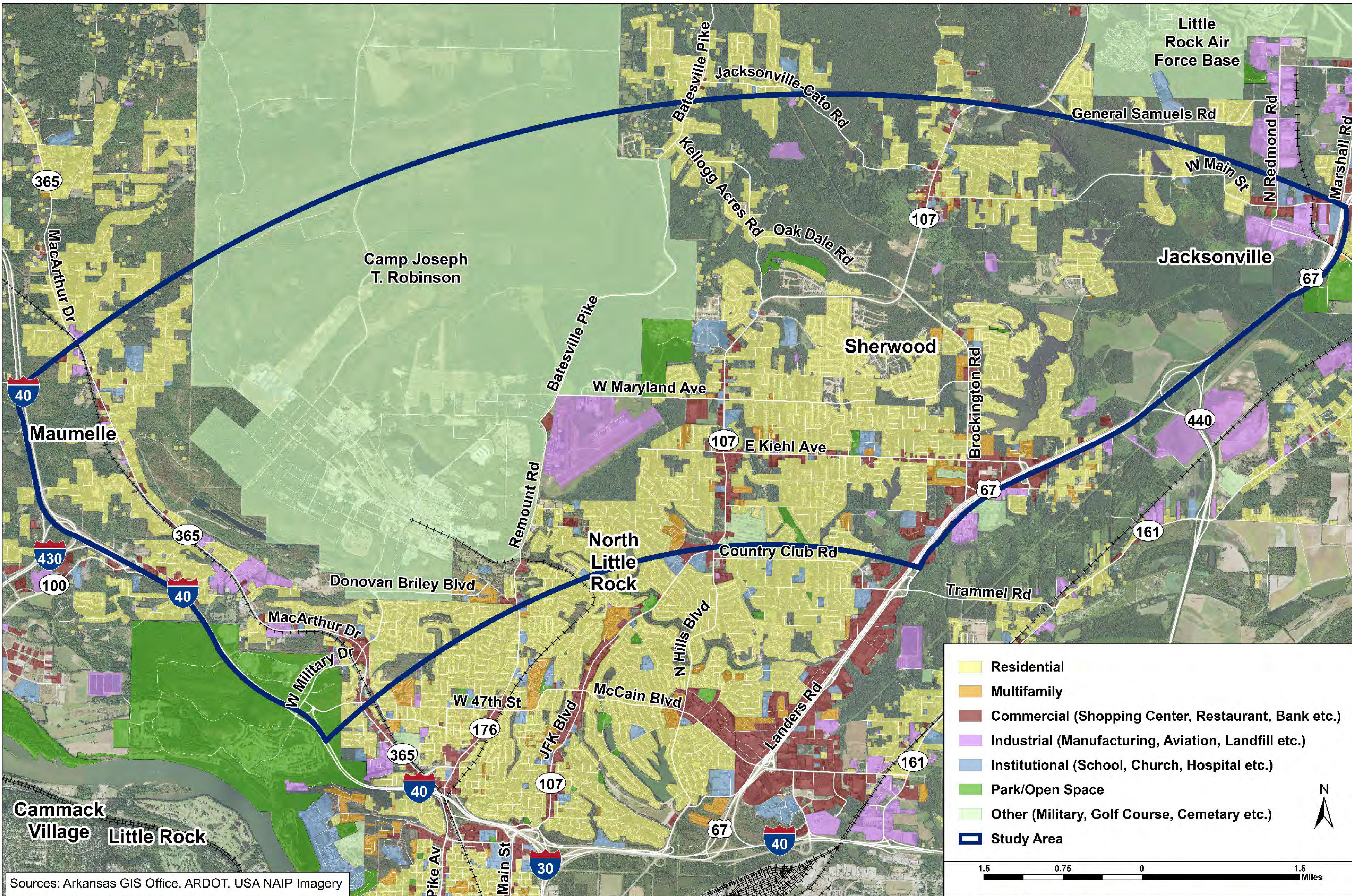
### Historical Trends

- Volumes may reach over 100,000 on freeways
- Nearly 40,000 on arterials in the east side of the study area

### 2019 Volume

- Heavy North-South travel in study area
- East-West travel feed onto North-South routes

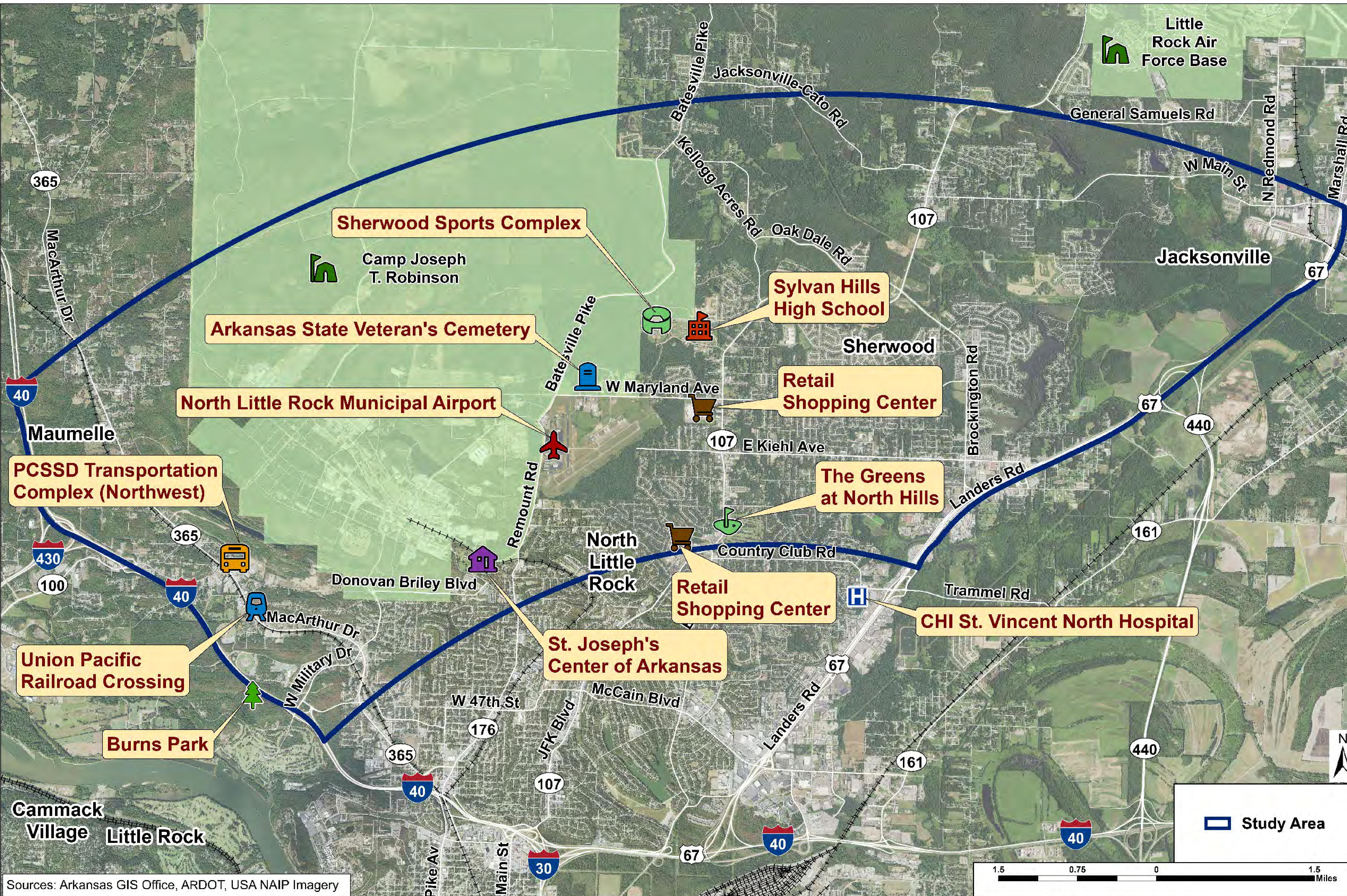
## LAND USES



### Prevalent Land Uses

- Residential Neighborhoods are prevalent in the study area
- Commercial and Institutional buildings are located along major established roadways such as Highway 107, E Kiehl Avenue, and US Highway 67
- Industrial uses exist in the western study area.

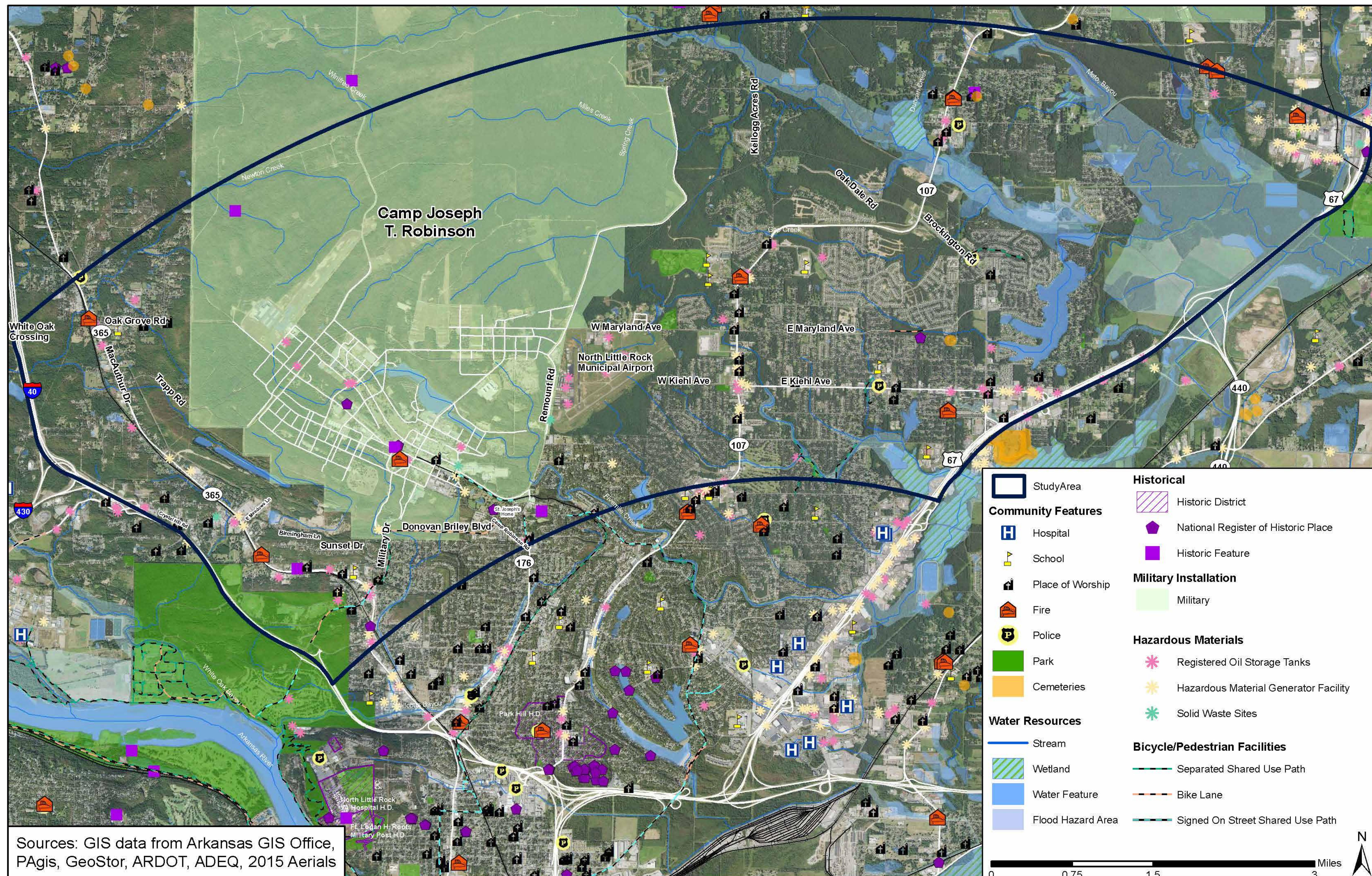
## LANDMARKS



## Unique Challenges

- The study area has several landmarks that may serve as unique challenges or constraints in determining potential roadway alternatives.

## ENVIRONMENTAL AND HISTORIC FEATURES



### Environmental Constraints

- Water related constraints and hazards in the eastern side of the study area
- Constraints can influence selecting a cost-effective solution in undeveloped regions
- Most constraints in the study area are in close proximity to established four-lane roadways (Hwy 107 and E Kiehl Ave) and would not impact an East-West connection