

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 points within northern Pulaski County and to connect northern Pulaski County to Interstate 40 and Highway 67/167.

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

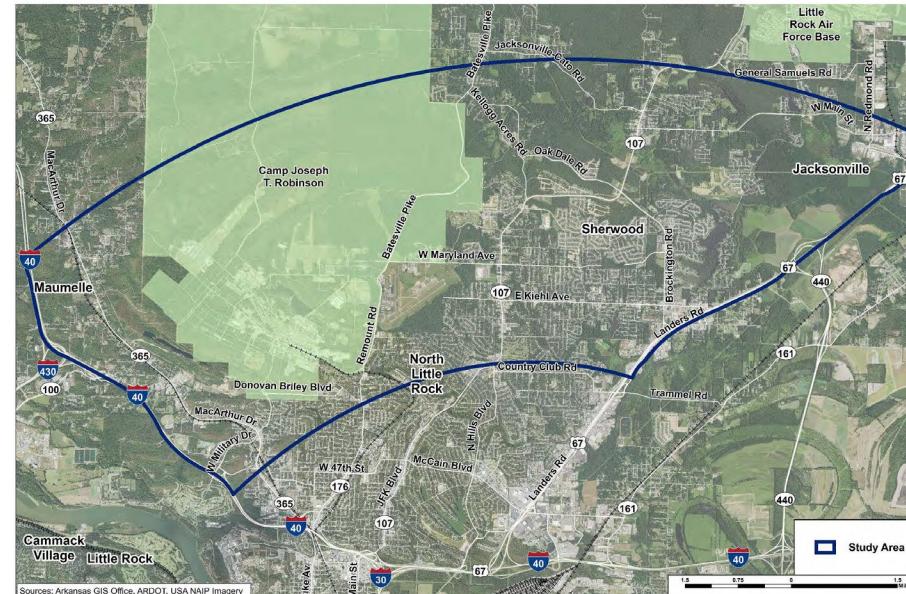
Perform a comprehensive and technical evaluation of potential solutions against selected performance measures.

PUBLIC INVOLVEMENT OPPORTUNITY

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

STUDY CONCLUDES LATE 2021

STUDY AREA MAP



STUDY SPONSORS



STUDY PARTNER

STUDY TEAM



STUDY MOTIVATIONS

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 between destinations in northern Pulaski County, while relieving congestion on Highway 107 and other North-South routes in the study area.
- 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).
- Provide information in a timely manner to support funding decisions.



STUDY GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

GOALS AND OBJECTIVES



Congestion Reduction, Mobility, and System Reliability

Objective:
Reduce travel time and delay and improve level of service



Multimodal Transportation System

Objective:
Improve safety, accessibility, and connectivity for people and goods



Economic Competitiveness

Objective:
Support and strengthen local economic markets



Safety and Security

Objective:
Reduce the number and severity of crashes

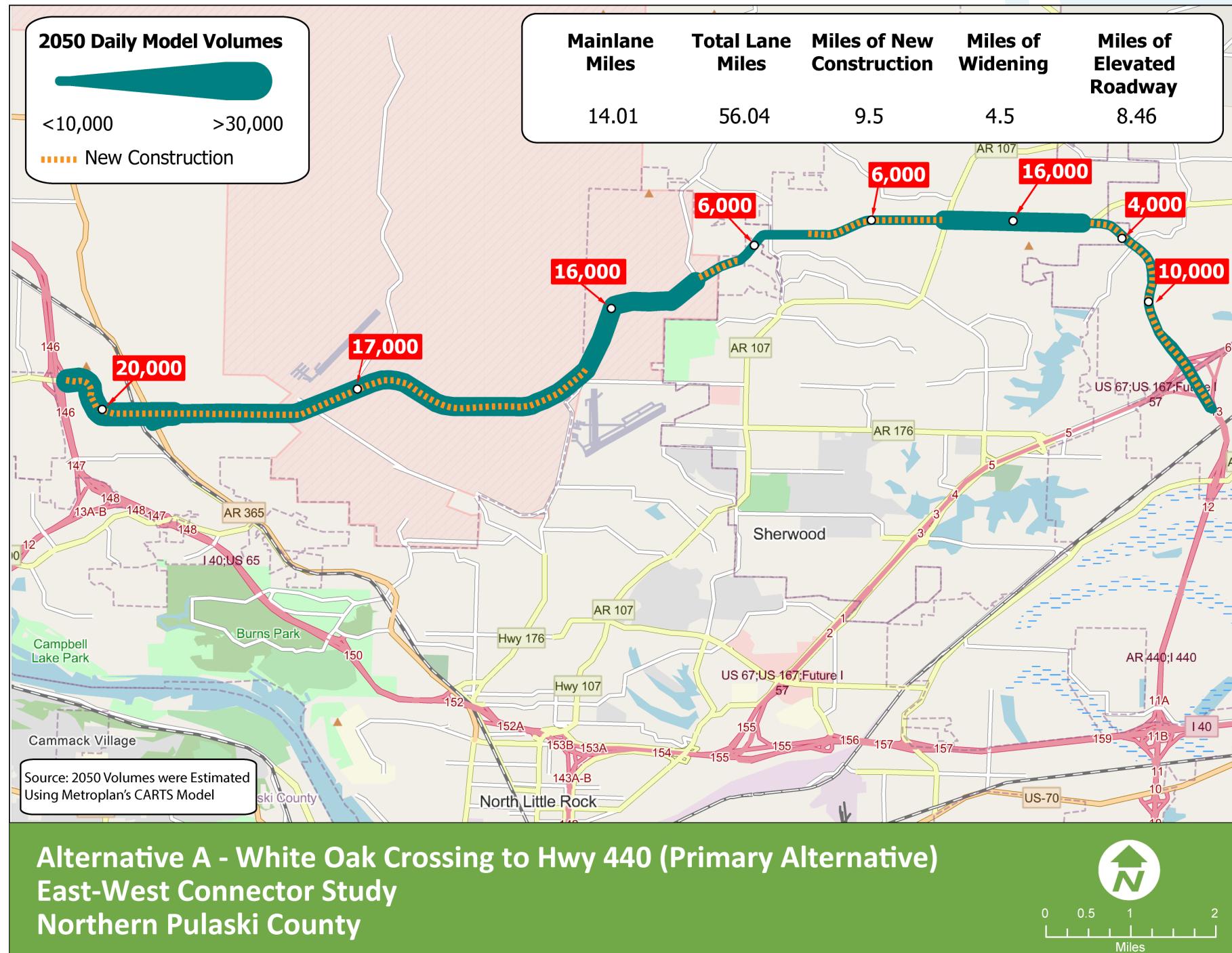


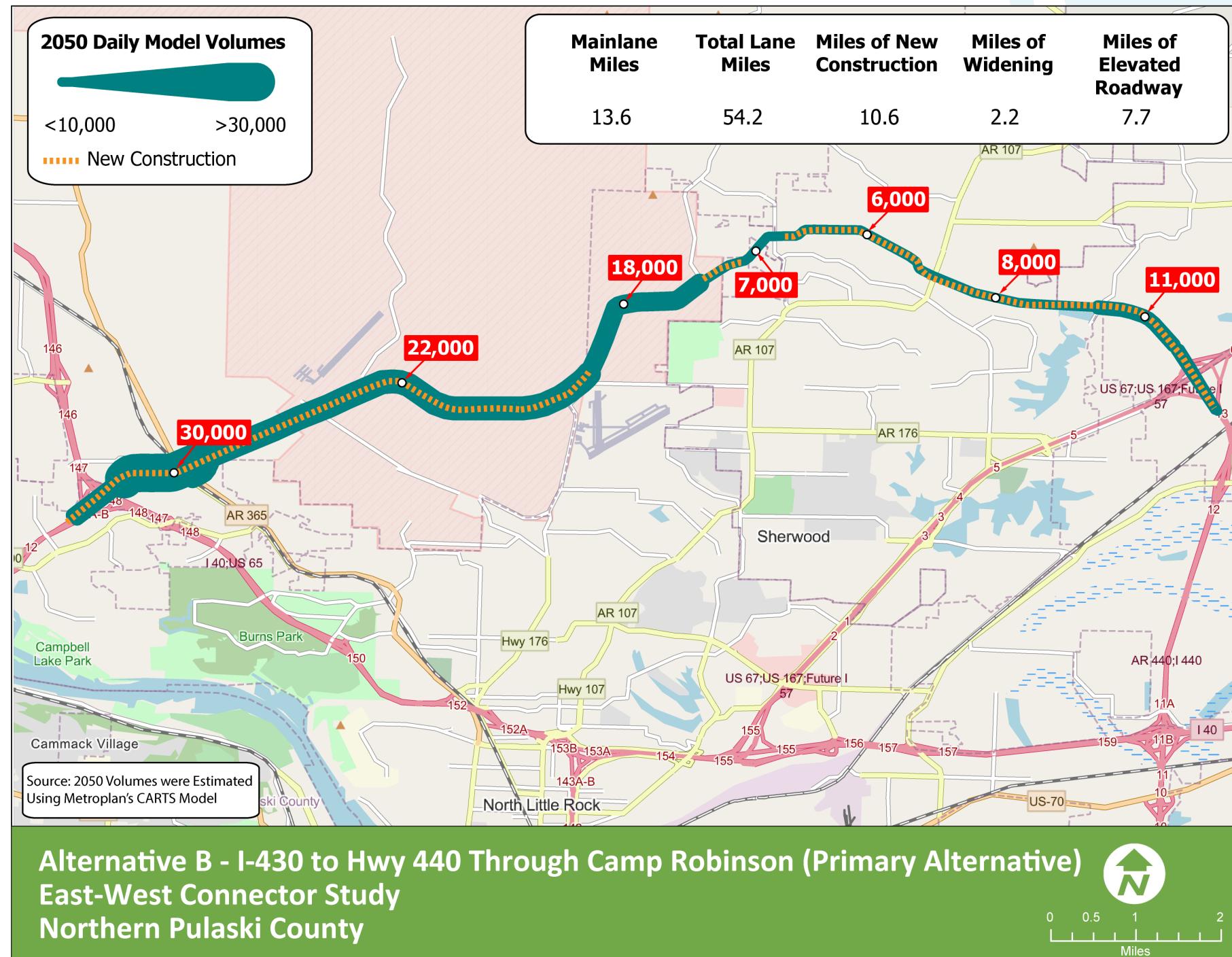
Environmental Sustainability

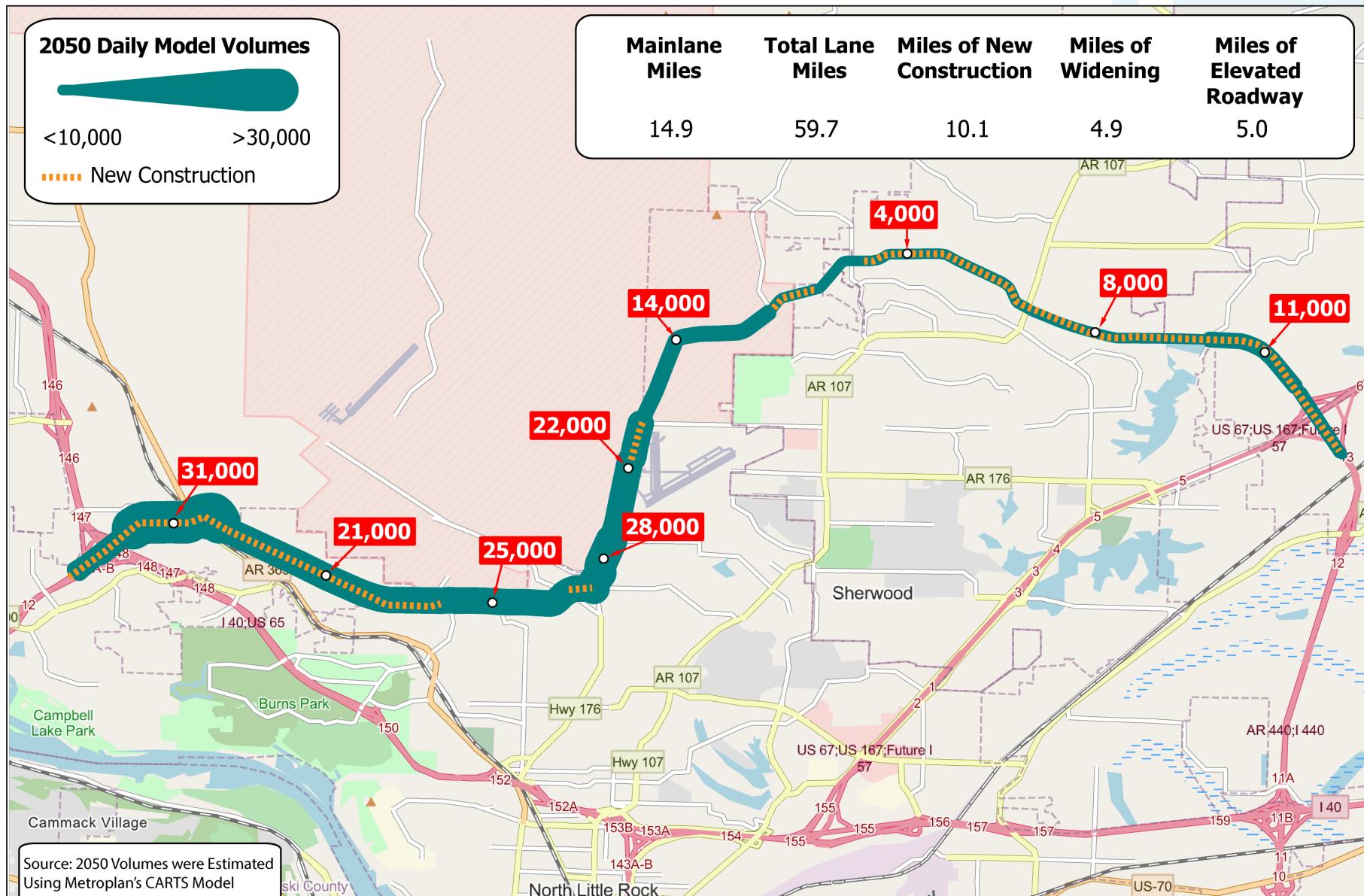
Objective:
Minimize potential impacts on natural and cultural resources

PERFORMANCE MEASURES

- Travel Time between Selected Origin and Destination Pairs
- Daily Volume on the New East-West Connector
- Net New Traffic on East-West Connector Segments
- Delay Reduction (*Improvement to the total time lost for all vehicles traveling on studied roadway segments*)
- Level of Service (*Measure used to relate the quality of intersection operating conditions and the flow of traffic*)
- Crash Rates on Facilities and VMT Diverted from High Crash Rate Locations
- Potential Impact on Natural and Cultural Resources
- Construction Costs on Existing Roadways and New Roadway Segments



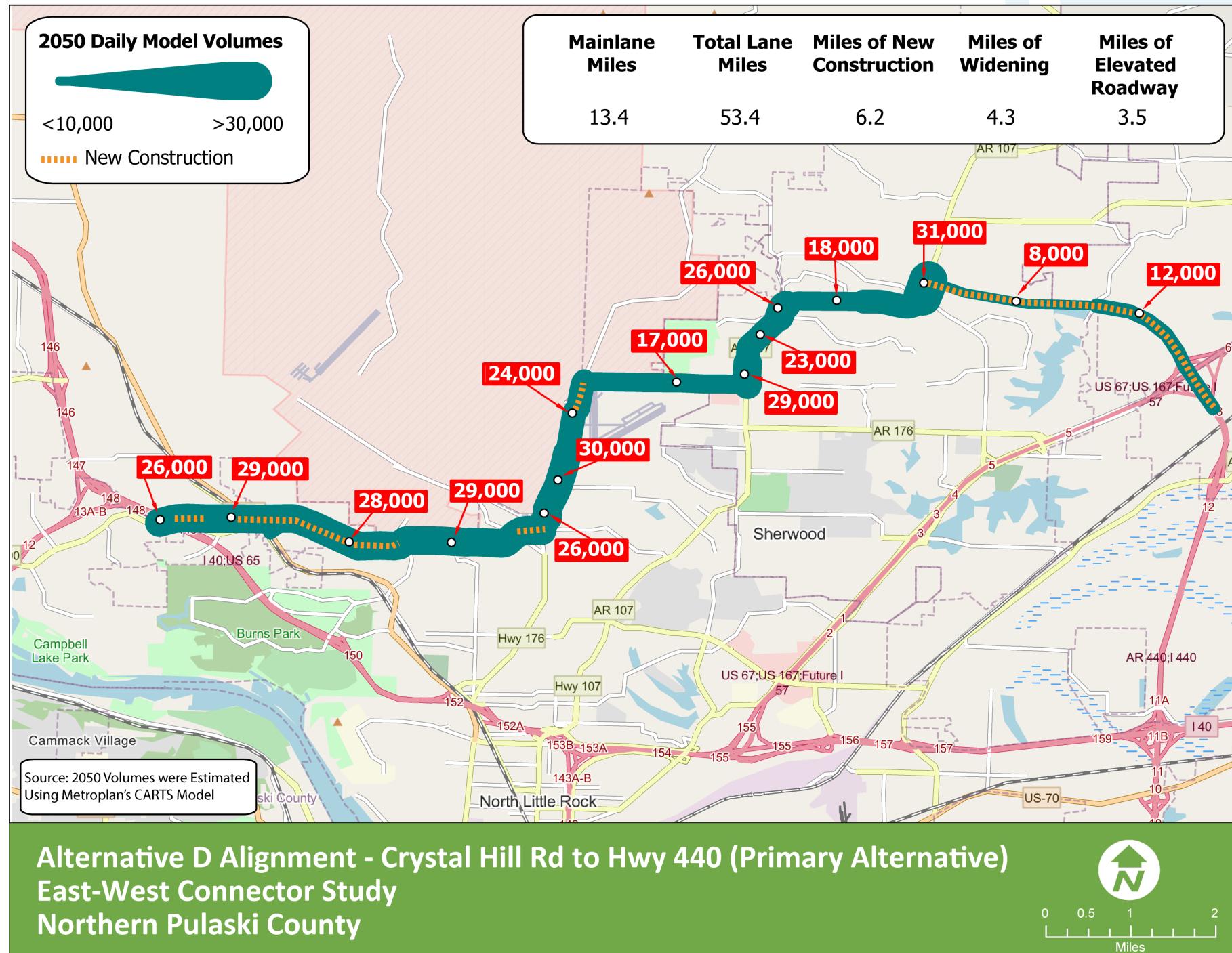


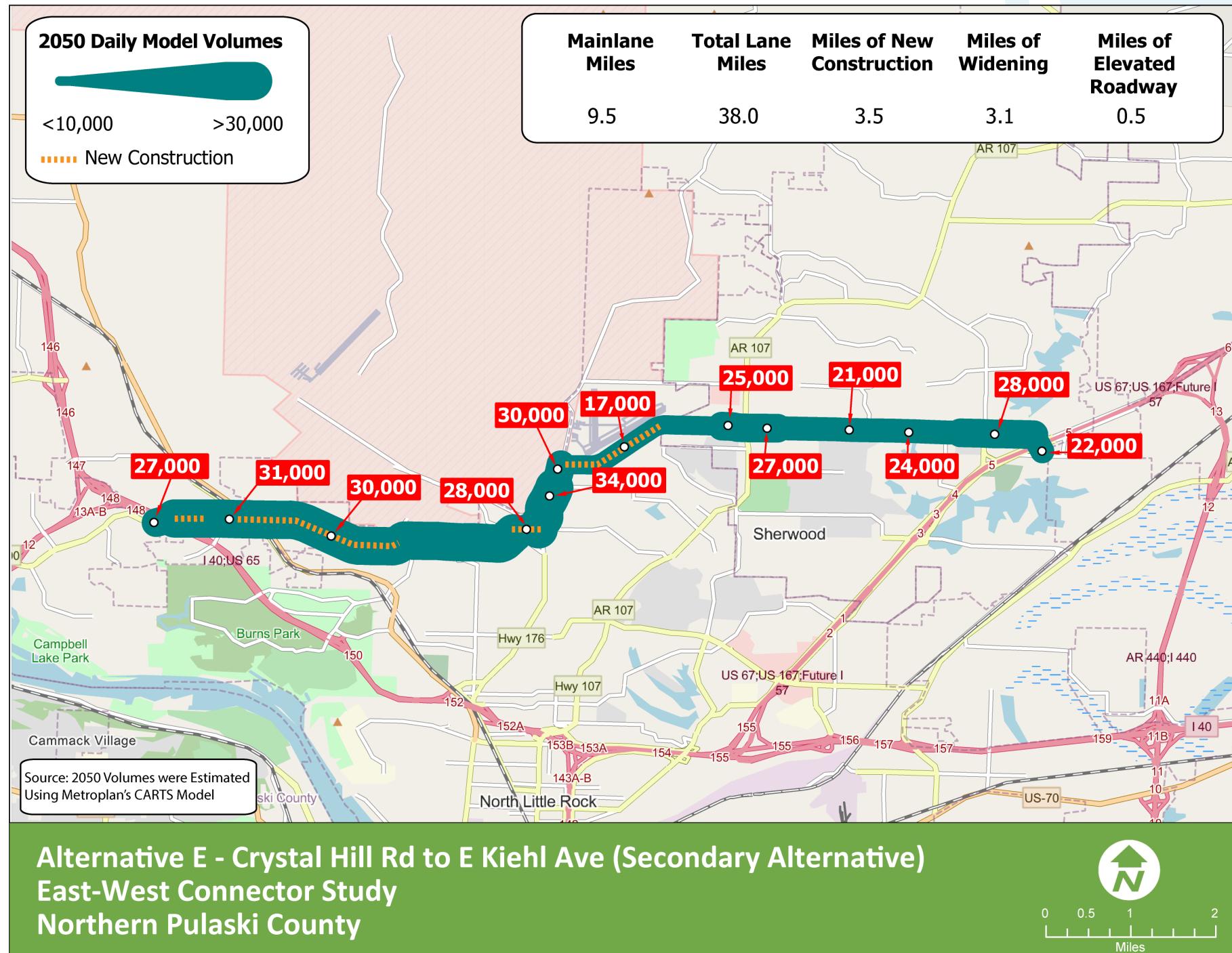


Alternative C - I-430 to Hwy 440 Outside Camp Robinson (Primary Alternative)
East-West Connector Study
Northern Pulaski County



A horizontal number line starting at 0 and ending at 2. There are 8 tick marks labeled 0, 0.5, 1, and 2. The distance between each tick mark is 0.25 miles.





Preliminary Evaluation Results - Scores

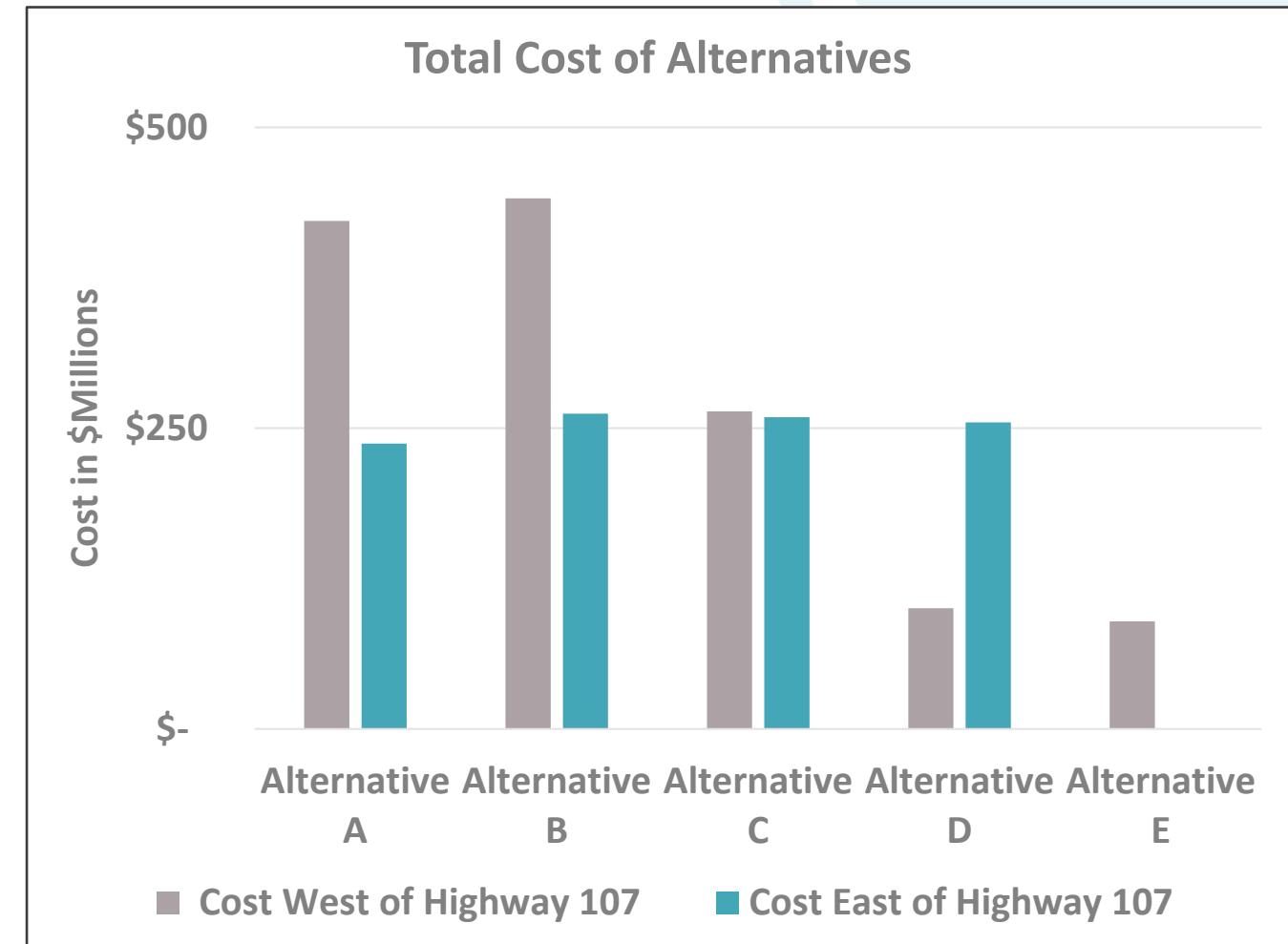
Alternative	Goes Through Camp Robinson	Length	Net New Traffic	Travel Time Savings	Arterial Delay Reduction	Safety (KA Crash Rate)	Environmental / Community Impacts	Total Cost
Primary Alternatives								
A - White Oak Crossing to HWY 440 - Through Camp	Yes	14.02	10,367	46.31	22.1%	5.56	1.6	\$ 538 M - \$ 807 M
B - IH 430 to HWY 440 - Through Camp	Yes	13.49	13,061	48.96	23.5%	5.53	1.6	\$ 573 M - \$ 859 M
C - IH 430 to HWY 440	No	14.86	11,526	32.62	23.5%	5.52	1.4	\$ 429 M - \$ 643 M
D - Crystal Hill Rd to HWY 440	No	13.36	13,349	35.13	19.1%	5.61	2.4	\$ 294 M - \$ 441 M
Secondary Alternative								
E - Crystal Hill Rd to Kiehl Ave	No	9.93	17,802	27.13	18.6%	5.67	1.7	\$ 77 M - \$ 116 M

Preliminary Evaluation Results - Ratings

Alternative	Goes Through Camp Robinson	Net New Traffic	Travel Time Savings	Arterial Delay Reduction	Safety (KA Crash Rate)	Environmental/Community Impacts
Primary Alternatives						
A - White Oak Crossing to HWY 440 - Through Camp	Yes	78	95	94	99	92
B - IH 430 to HWY 440 - Through Camp	Yes	98	100	100	100	92
C - IH 430 to HWY 440	No	86	67	100	100	100
D - Crystal Hill Rd to HWY 440	No	100	72	81	98	58

Total Cost of Alternatives

Alternative	Total Cost
Primary Alternatives	
A - White Oak Crossing to HWY 440 - Through Camp	\$ 538 M - \$ 807 M
B - IH 430 to HWY 440 - Through Camp	\$ 575 M - \$ 862 M
C - IH 430 to HWY 440	\$ 421 M - \$ 632 M
D - Crystal Hill Rd to HWY 440	\$ 295 M - \$ 442 M
Secondary Alternative	
E - Crystal Hill Rd to Kiehl Ave	\$ 77 M - \$ 116 M



- Not elevating the roadway for the full extent of Camp Robinson could potentially save \$30-60 million in cost for Alternatives A and B.