

SELECTION OF ALTERNATIVES TO EVALUATE

Based on a review of current conditions and needs and early input from stakeholders and the public, 22 potential alignments were identified during the summer of 2020. A preliminary screening of these potential alignments was conducted by the study team using the performance measures identified for the study. Four alternatives having the highest potential value (Alternatives A, B, C, and D in the figures below) were identified as potential “primary alternatives”, and these alternatives were recommended for a more detailed evaluation.

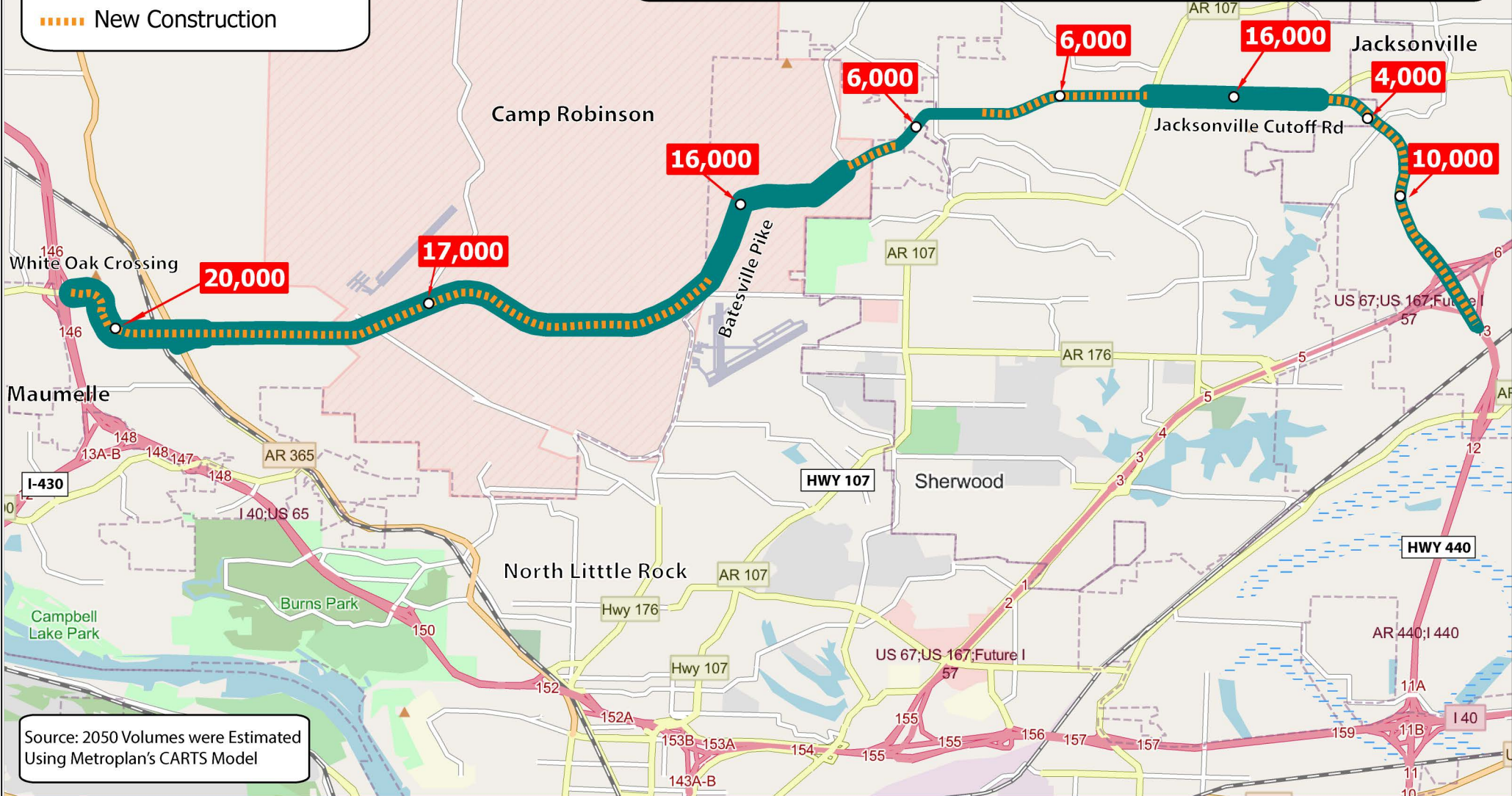
A fifth alternative (Alternative E) was also recommended for further evaluation as a “secondary alternative” that should be considered as a potential supplement to a “primary alternative”. The alternative considered as a “secondary alternative” did not appear to fully meet the purpose and need of the study but appeared to provide significant benefit at a low incremental cost.

As shown in the figures below, three different connection points to Interstate 40 are used by the alternatives on the west side of the study area – the interchanges with White Oak Crossing, Interstate 430, and Crystal Hill Road. All the “primary alternatives” connect to the Highway 67/167 and Highway 440 interchange on the east side because that connection point showed the greatest benefit. The “secondary alternative”, Alternative E, connects at the interchange with East Kiehl Avenue. For the purpose of this study, all of the alternatives have been evaluated as an assumed four-lane divided arterial (not freeway) with a center median except where the alternatives use an existing four-lane arterial with a center turn lane (Highway 107 in Alternative D and East Kiehl Avenue in Alternative E).

2050 Daily Model Volumes



Mainlane Miles	Total Lane Miles	Miles of New Construction	Miles of Widening	Miles of Elevated Roadway
14.01	56.04	9.5	4.5	8.46



Source: 2050 Volumes were Estimated Using Metroplan's CARTS Model

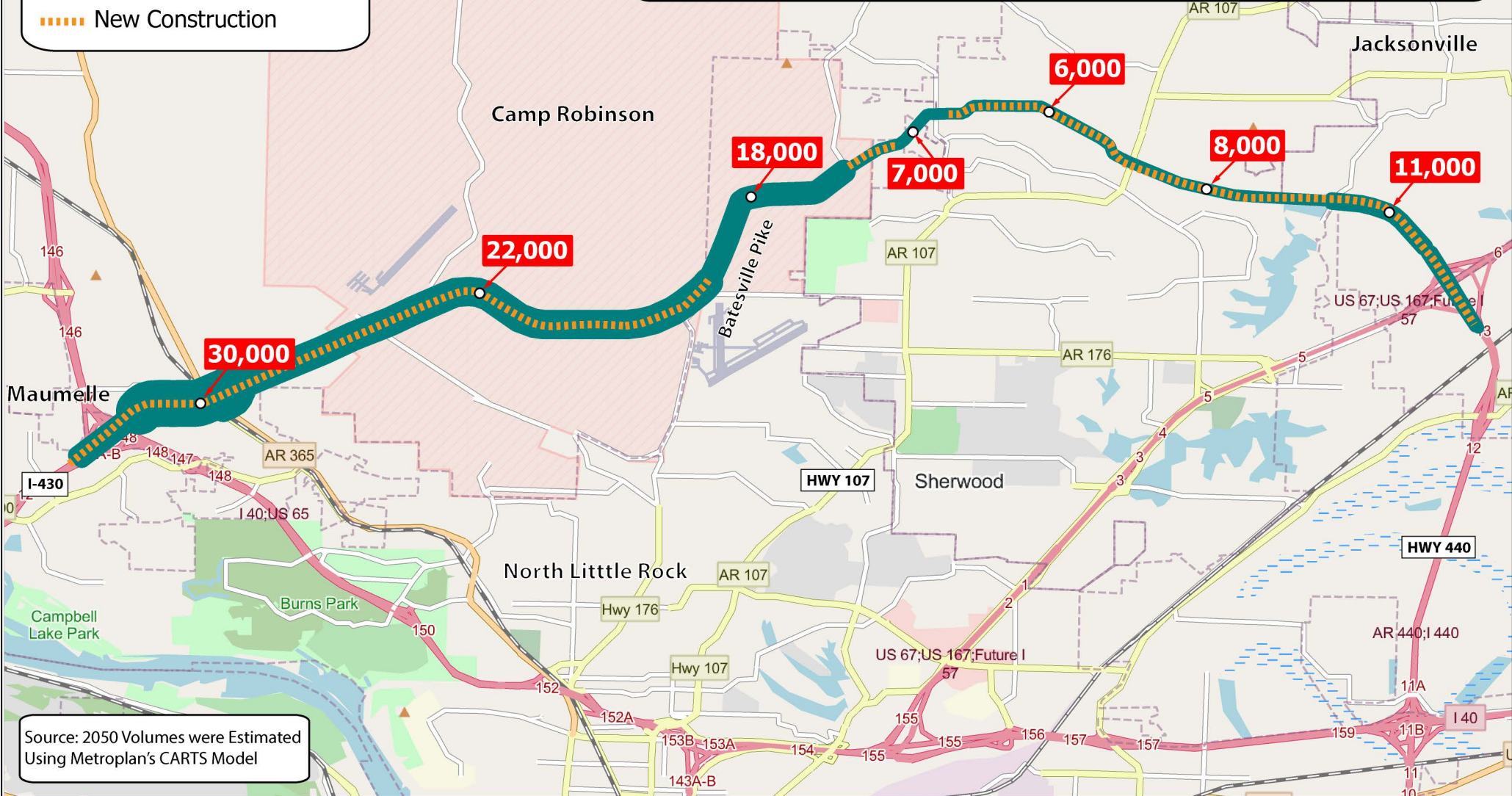
Alternative A - White Oak Crossing to Hwy 440 (Primary Alternative)
East-West Connector Study
Northern Pulaski County



2050 Daily Model Volumes



Mainlane Miles	Total Lane Miles	Miles of New Construction	Miles of Widening	Miles of Elevated Roadway
13.6	54.2	10.6	2.2	7.7



Source: 2050 Volumes were Estimated Using Metroplan's CARTS Model

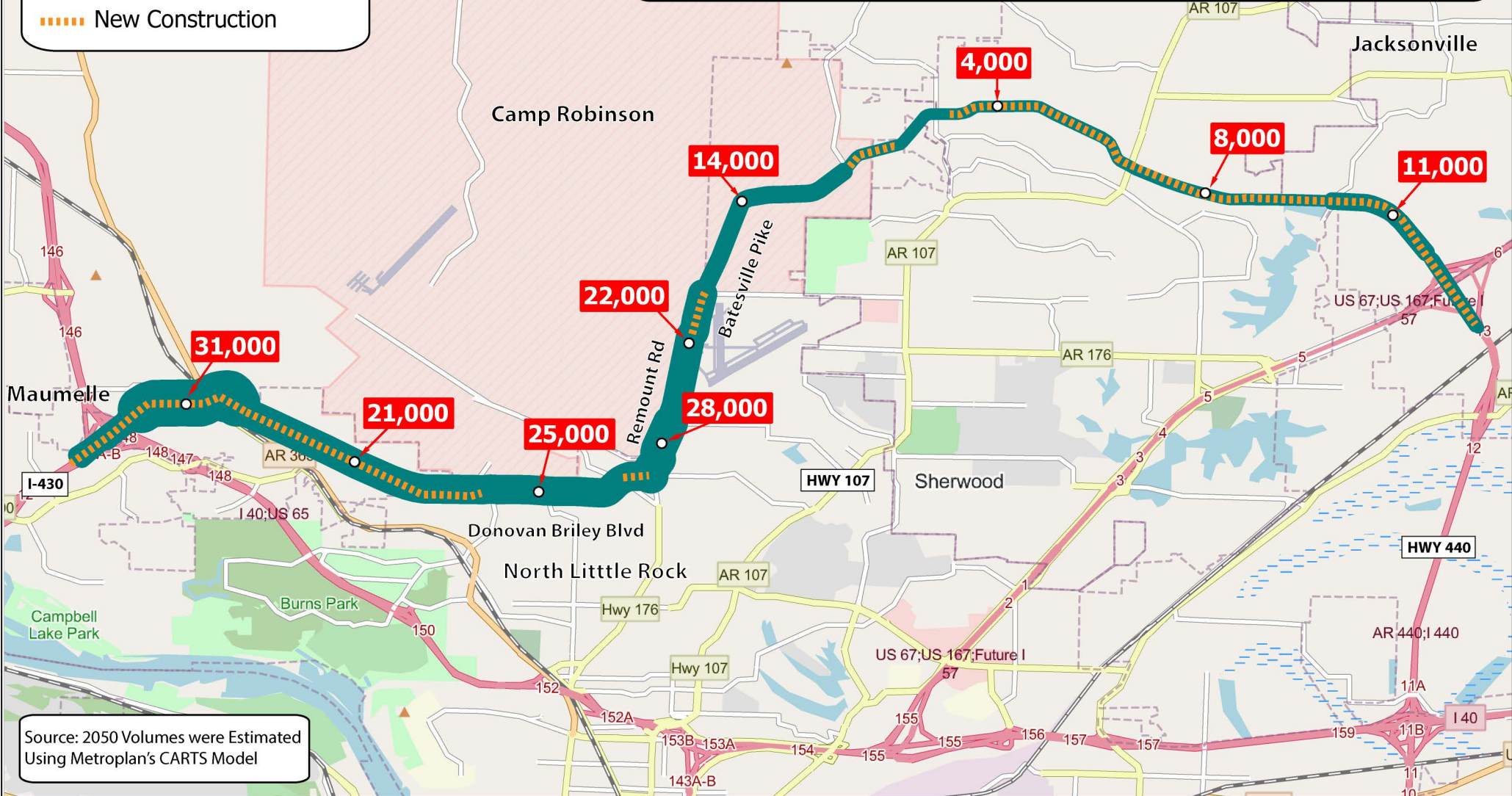
Alternative B - I-430 to Hwy 440 Through Camp Robinson (Primary Alternative) East-West Connector Study Northern Pulaski County



2050 Daily Model Volumes



Mainlane Miles	Total Lane Miles	Miles of New Construction	Miles of Widening	Miles of Elevated Roadway
14.9	59.7	10.1	4.9	5.0



Source: 2050 Volumes were Estimated Using Metroplan's CARTS Model

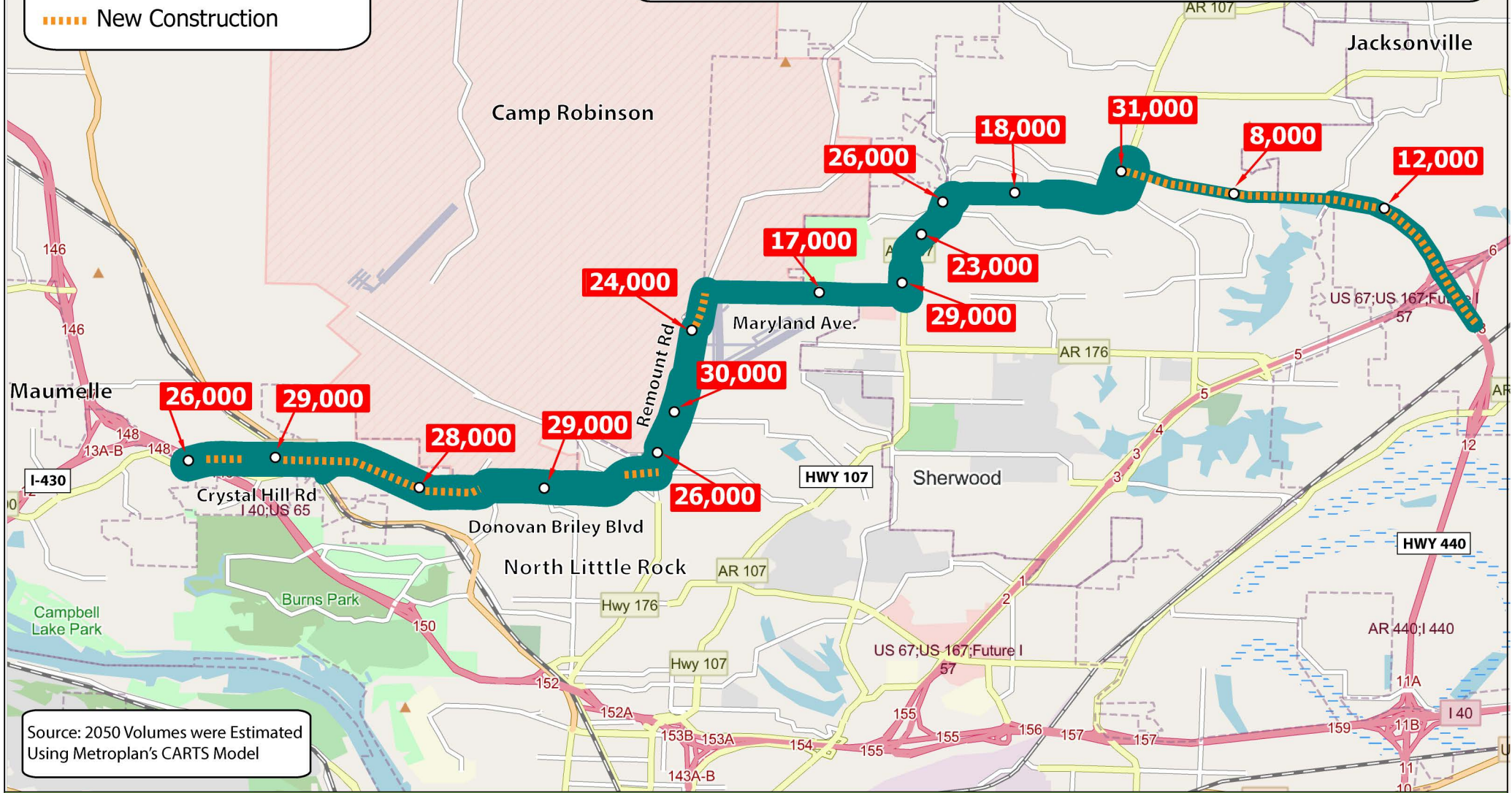
Alternative C - I-430 to Hwy 440 Outside Camp Robinson (Primary Alternative)
East-West Connector Study
Northern Pulaski County



2050 Daily Model Volumes



Mainlane Miles	Total Lane Miles	Miles of New Construction	Miles of Widening	Miles of Elevated Roadway
13.4	53.4	6.2	4.3	3.5



Source: 2050 Volumes were Estimated Using Metroplan's CARTS Model

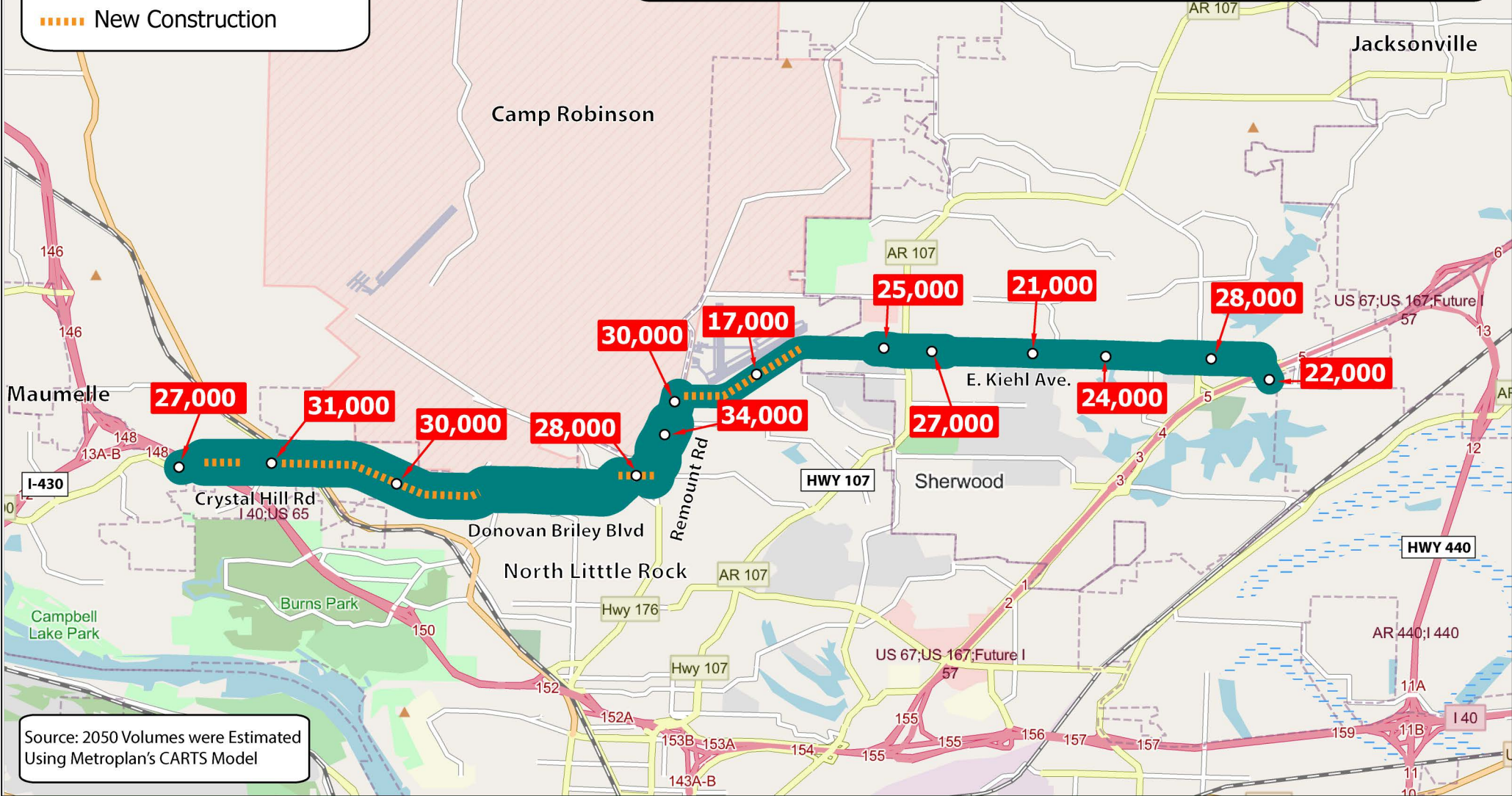
Alternative D Alignment - Crystal Hill Rd to Hwy 440 (Primary Alternative)
East-West Connector Study
Northern Pulaski County



2050 Daily Model Volumes



Mainlane Miles	Total Lane Miles	Miles of New Construction	Miles of Widening	Miles of Elevated Roadway
9.5	38.0	3.5	3.1	0.5



Alternative E - Crystal Hill Rd to E Kiehl Ave (Secondary Alternative)
East-West Connector Study
Northern Pulaski County

