Moving Ahead for Progress in the 21st Century Act (MAP-21) requires a Transportation Management Area (TMA) to develop and implement a Congestion Management Process (CMP).

1. Develop Regional Objectives for Congestion Management
2. Define the CMP Network
3. Develop Performance Measures
4. Collect Data/Monitor System Performance
5. Analyze Congestion Problems and Needs
6. Identify and Assess CMP Strategies
7. Program and Implement CMP Strategies
8. Evaluate Strategy Effectiveness
NWARPC REGIONAL OBJECTIVES

• Objective One: Develop procedures for evaluating the relative congestion of facilities;

• Objective Two: Develop procedures to determine if congestion mitigation strategies should be implemented for a particular facility;

• Objective Three: Develop a procedure or procedures for evaluating the effectiveness of congestion mitigation strategies implemented.
The adopted NWARPC CMP network is approximately 160 centerline miles for data collection, congestion analysis, and system performance and reliability.

The adopted NWARPC CMP Network contains all roadways as shown on the October 2012 National Highway System Map plus several additional facilities as approved by the NWARPC Policy Board.
Northwest Arkansas Congestion Management Process Facilities

Note: Facilities Described from North to South and from West to East

### US 71/I-540

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>US71/I-540</td>
<td>I-540 - Springdale</td>
<td>AR112/Razorback</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Freeway</td>
<td>45</td>
<td>From</td>
</tr>
<tr>
<td>US71/I-540</td>
<td>I-540 - Fayetteville</td>
<td>I-540</td>
<td>3.45</td>
<td>Operating</td>
<td>Freeway</td>
<td>70</td>
<td>To</td>
</tr>
<tr>
<td>US71/I-540</td>
<td>US71B - Fulbright South Fayetteville</td>
<td>US71B - Fulbright South Fayetteville</td>
<td>45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
</tr>
<tr>
<td>US71/I-540</td>
<td>US71B - Bentonville</td>
<td>US71B - Bentonville</td>
<td>45</td>
<td>Posted Speed</td>
<td>Urban Street</td>
<td>45</td>
<td>To</td>
</tr>
</tbody>
</table>

### US 71/Bentonville

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>US71B/Walton Blvd/Walnut/Jonesboro/Thompson</td>
<td>US71B Walnut Blvd</td>
<td>AR112/Razorback</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Uninterrupted</td>
<td>45</td>
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</tr>
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</table>

### AR 265/Old Wire

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR265/Old Missouri</td>
<td>AR265</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
<td></td>
</tr>
</tbody>
</table>

### AR 62/622/Texarkana Blvd/ 14th/Robinson

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR62/622</td>
<td>US62/AR180/Main /AR102/14th</td>
<td>US62/AR180/Main /AR102/14th</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
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</table>

### AR 102/Main/14th/Huntsville

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR102/Main</td>
<td>AR102</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
<td></td>
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</table>

### Wagon Wheel Road

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wagon Wheel Road</td>
<td>3.45</td>
<td>AR112/15th</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
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</table>

### 14th/Robinson

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th/Robinson</td>
<td>14th/Robinson</td>
<td>AR45</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
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</table>

### UA Boundary - Greenland

<table>
<thead>
<tr>
<th>Segment</th>
<th>From</th>
<th>To</th>
<th>Length</th>
<th>Operating</th>
<th>Facility Type</th>
<th>Posted Speed</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>UA Boundary - Greenland</td>
<td>UA Boundary - Greenland</td>
<td>3.45</td>
<td>Interrupted</td>
<td>Urban Street</td>
<td>45</td>
<td>From</td>
<td></td>
</tr>
</tbody>
</table>

### Northwest Arkansas Congestion Management Process Facilities

Note: Facilities Described from North to South and from West to East

- US 71/I-540
- US 71/Bentonville
- AR 265/Old Wire
- AR 62/622/Texarkana Blvd/14th/Robinson
- Wagon Wheel Road
- 14th/Robinson
- UA Boundary - Greenland

January 16, 2014
CONGESTION MEASURES - NWARPC AVERAGE TRAVEL TIME DATA

• Policy Committee approved consultant services to acquire average travel time data (2012) (e.g. Inrix, Navteq/Nokia) and develop the NWARPC CMP methodology and associated documentation for the CMP report.

• Travel time Congestion and Reliability measures will be developed for the a.m. and p.m. peak travel times and will include:
  • Delay Rate Per Mile
  • Travel Time Index – Observed to Posted Speed – Observed to 85th Percentile Speed
  • Planning Time Index

• The average travel speed will be used to compare the a.m. and p.m. peak period travel speeds to posted speed limit and/or 85 percentile speed. The delay in speed, based on the data, will then be used to identify congested freeway and arterial facilities. This type of data and analysis is currently being used in Kansas City and Austin and is being considered by Oklahoma City as part of their CMP process.
NWARPC Consultant Selection

• Staff drafted and presented the Letters of Interest and Scope of Work to the CMP Committee on June 11, 2013 with a submittal LOI deadline of July 29, 2013 at 4 pm.

• Three firms submitted LOI’S – Alliance, Cambridge Systematics, and CoPLAN LLC.

• The CMP LOI Committee met on August 1, 2013 and scored the LOI’s. All three firms were sent the RFP and two firms submitted proposals.

• The RFP deadline was August 23, 2013

• The CMP RFP Committee met on September 4, 2013 and selected CoPLAN LLC.

• The draft contract with CoPLAN LLC was sent to AHTD for review on October 17, 2013.
The Interstate I-540 Improvement Study prepared by Parsons Transportation Group in 2006 considered the needed Interstate widening and focused on an analysis of nineteen interchanges.

The study developed the following:

• 2024 travel demand forecast for I-540
• Identified Congestion Segments
• Calculated 2006 and 2024 Level of Service
• Recommended Interstate widening
• Analyzed nineteen interchanges
FOR IMMEDIATE RELEASE

Researchers: Traffic Congestion Costs Northwest Arkansas $103 million annually

ROGERS, Ark. — Oct. 9, 2012 — The nation’s premiere traffic researchers announced today that Northwest Arkansas traffic congestion costs drivers about $103 million each year.

The finding by David Schrank and Tim Lomax of the Texas A&M Transportation Institute is another example of the need for congestion-relieving road projects. Local officials say the findings by TTI illustrate the need for roadway improvements.

“Our findings show traffic congestion here is far worse than what we’d expect to see in regions of comparable size,” Schrank said. “Some of the highways and streets we studied would be among the worst in the entire state of Texas.”

The Texas A&M Transportation Institute produces the Urban Mobility Report, the nation’s most thorough assessment of congestion. TTI also produces an annual review of every Texas highway and major street for the Texas Department of Transportation.

TTI researchers David Schrank and Tim Lomax based their research of eight road segments in Northwest Arkansas on the method used in the Texas-only study, and then they estimated overall traffic congestion in Benton and Washington counties to arrive at the $103 million figure.

“If these eight road segments we studied were in Texas, four of them would be among the worst 100 in all of Texas,” Lomax said. “Regions with twice as many people as Northwest Arkansas, such as El Paso and McAllen in Texas, didn’t have as many roads in what we call the Texas 100.

“Our research shows highway infrastructure investment is critical to areas like Northwest Arkansas. Removing traffic bottlenecks reduces travel time between neighborhoods, jobs and markets, and it enhances the ability to attract new companies to the region, create jobs, increase the region’s economic competitiveness and improve quality of life. Companies want to know that they can move freight without major traffic delays and that their workers will have reasonable commute times.”
<table>
<thead>
<tr>
<th>Rank</th>
<th>Roadway</th>
<th>County</th>
<th>From</th>
<th>To</th>
<th>Delay per Mile</th>
<th>Travel Time Index</th>
<th>Planning Time Index</th>
<th>Annual Congestion Cost ($mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>US-412</td>
<td>Washington</td>
<td>SH-112</td>
<td>Thompson</td>
<td>136,900</td>
<td>1.41</td>
<td>8.35</td>
<td>12.6</td>
</tr>
<tr>
<td>2</td>
<td>US-71B</td>
<td>Benton</td>
<td>Central</td>
<td>Moberley</td>
<td>130,200</td>
<td>1.10</td>
<td>2.80</td>
<td>11.2</td>
</tr>
<tr>
<td>3</td>
<td>College</td>
<td>Washington</td>
<td>Lafayette</td>
<td>Main</td>
<td>107,100</td>
<td>1.23</td>
<td>4.14</td>
<td>10.9</td>
</tr>
<tr>
<td>4</td>
<td>Walnut</td>
<td>Benton</td>
<td>I-540</td>
<td>W. Hudson</td>
<td>99,600</td>
<td>1.08</td>
<td>2.70</td>
<td>10.6</td>
</tr>
<tr>
<td>5</td>
<td>US71</td>
<td>Benton</td>
<td>SH-340</td>
<td>N Walton</td>
<td>62,000</td>
<td>1.28</td>
<td>3.87</td>
<td>6.2</td>
</tr>
<tr>
<td>6</td>
<td>Thompson</td>
<td>Washington</td>
<td>Main</td>
<td>County Line</td>
<td>58,500</td>
<td>1.13</td>
<td>4.82</td>
<td>6.5</td>
</tr>
<tr>
<td>7</td>
<td>I-540</td>
<td>Washington</td>
<td>US-62</td>
<td>SH-112</td>
<td>24,700</td>
<td>1.08</td>
<td>1.63</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>I-540</td>
<td>Washington/ Benton</td>
<td>Pleasant Grove</td>
<td>Elm Springs</td>
<td>17,900</td>
<td>1.07</td>
<td>1.70</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Non-study Roadways</td>
<td></td>
<td></td>
<td></td>
<td>17,050</td>
<td>1.08</td>
<td>2.02</td>
<td>40.8</td>
</tr>
<tr>
<td></td>
<td>Total or Average</td>
<td></td>
<td></td>
<td></td>
<td>32,200</td>
<td>1.10</td>
<td>2.35</td>
<td>103.2</td>
</tr>
</tbody>
</table>

1. Delay Per Mile—Extra travel time during the year due to congestion, divided by the corridor length. Primary measure used to rank roadway segments in this analysis.
2. Cost of congestion—Value of time delay and excess fuel consumption based on an hourly rate of $20.50 per hour of delay.
3. Travel Time Index—A ratio of travel time in the peak period to the travel time at free—flow conditions. A value of 1.30 indicates that a 20—minute free—flow trip takes 26 minutes in the peak period.
4. Planning Time Index—Represents the total travel time that should be planned for a trip. A PTI of 2.50 means that for a 30—minute trip in light traffic, 75 minutes should be planned to reach a destination on time.
5. These roadways include freeway, major arterial and minor arterial roadway segments in Benton and Washington counties that were not analyzed in the 8 study segments.

Source: Texas AM Transportation Institute, 2012
Northwest Arkansas Eastern North-South Corridor Study
Benton and Washington Counties

July 2011
Highway 112 (Razorback Road and Maple Street) Improvement Study

Fayetteville
Washington County
July 2010

ARKANSAS STATE HIGHWAY COMMISSION

MINUTE ORDER

District: Four
County: Washington
Category: Miscellaneous

WHEREAS, IN WASHINGTON COUNTY, Minute Order 2007-131 authorized a study to determine the appropriate cross section for improvements to Highway 112 between Highway 180 and Garland Avenue in the City of Fayetteville; and

WHEREAS, the Highway 112 (Razorback Road and Maple Street) Improvement Study has been completed and has identified the most appropriate cross section for improvements.

NOW THEREFORE, this study is adopted for use as a planning guide for scheduling future improvements in the area, and the Director is authorized to proceed with environmental studies, surveys, design, right-of-way acquisition, and construction as funds become available.

scheduled by:

Arkansas Chief Engineer - Planning

Approved:

2010 109

Dated:

JUL 18 2010
ACCESS MANAGEMENT PLAN AGREEMENT
For
HIGHWAY 265 IN FAYETTEVILLE

I. PARTIES – This agreement is made between the City of Fayetteville (the City), the Arkansas State Highway Commission (the Commission) acting through the Arkansas State Highway and Transportation Department (the Department) and the Northwest Arkansas Regional Planning Commission as the designated metropolitan planning organization for Northwest Arkansas under federal transportation regulations (the MPO). Although a very short portion of the east side of the corridor north and south of Clear Creek Drive is in the City of Springdale, Springdale is not a formal party to the agreement. However, Springdale officials have been consulted during the Plan development and will be consulted on the rare occasion that Springdale property may be impacted.

II. ROUTE – This access management agreement pertains to Highway 265, also known as Crossover Road south of Clear Creek Drive and Old Missouri Road to the north, from the intersection with Township Street north to the intersection with Ivey Lane, (the Roadway). See Appendix A, Figure 1.

III. STATEMENT OF PURPOSE – Highway 265 is a principal arterial on the City master street plan and serves as an intra-regional arterial roadway connecting the City to its economic region. The primary purpose for this agreement is to protect the capacity of the roadway to carry significant local and intra-regional traffic while increasing the safety for drivers, bicyclists, and pedestrians that use this facility. It is the intent of this agreement to provide access to abutting properties consistent with this objective.

IV. AUTHORITY – Both the City and the Commission have specific legal authority to regulate access to public roads. In the case of the City, it is found in Arkansas Code Annotated 14-56-419. In the case of the Commission, it is found in Arkansas Code Annotated 27-65-107. The MPO is hereby granted standing in this access management agreement by the City and the Commission in recognition of its role in transportation planning within the metropolitan area.

V. ACCESS PLAN – Management of access to the roadway is necessary to achieve the primary purpose of the agreement. The access management plan (the Plan) is detailed in Appendix A. The Plan is a Specific Access Management Plan in which all median breaks are specifically identified. Standards for driveways are also established to be applied during plat review.
Congestion Management Process Network Corridor Studies

NWA/RPC Congestion Management Corridors
Corridor Studies
- Adaptive Traffic Signal Study
- Highway 72 (Washington Rd) and Maple St Improvement Study
- Interstate 49 Corridor Study
- NWA Eastern North-South Corridor Study 2011
- NWA Green Corridor Study
3. TRAFFIC ANALYSIS

Key Findings:

This chapter of the report discusses the impacts of existing and future traffic demand on Fayetteville’s major street system, as well as recommendations for mitigating traffic impacts.

- County population and employment are projected to grow by 45 percent in the next 20 years contributing to increased traffic congestion.
- Approximately 10 percent of the major intersections in the City suffer traffic congestion.
- Approximately 25 percent of the major intersections in the City will suffer traffic congestion in 20 years.
- In the next 20 years, traffic demand will exceed roadway capacity on more than 20 miles of major streets in the City.
- 35 short range traffic improvement projects and 22 long range traffic improvement projects have been identified for construction over the next 20 years.
STP-A Project Selection

Projects will be evaluated and scored based on the six categories listed below:

A. Congestion Management
B. Regional Significance/Connectivity
C. Safety
D. Overall Improvement to the Transportation System
E. Project Design
F. Project Continuation, Partnership, Cost-Sharing
STP-A 2013 and 2014 Funded Projects
“Advancing Metropolitan Planning for Operations – An Objectives-Driven, performance –Based Approach” the factors that impact traffic congestion and reliability have been grouped into six categories. Of the six factors, 60% of congestion is caused by other factors other than bottlenecks.
NWARPC Congestion Management Process Network
Razorback Rd. and Maple St. Improvements Projects

Statewide Improvement Program (STP)

NWARPC Congestion Management Process - January 16, 2014