

NORTHWEST ARKANSAS REGIONAL PLANNING COMMISSION 2045 METROPOLITAN TRANSPORTATION PLAN

Prepared by the Northwest Arkansas Regional Planning Commission in cooperation with the Arkansas Department of Transportation, Missouri Department of Transportation, Federal Highway Administration and Federal Transit Administration

Metropolitan Transportation Plan

NWARPC

NWARPC

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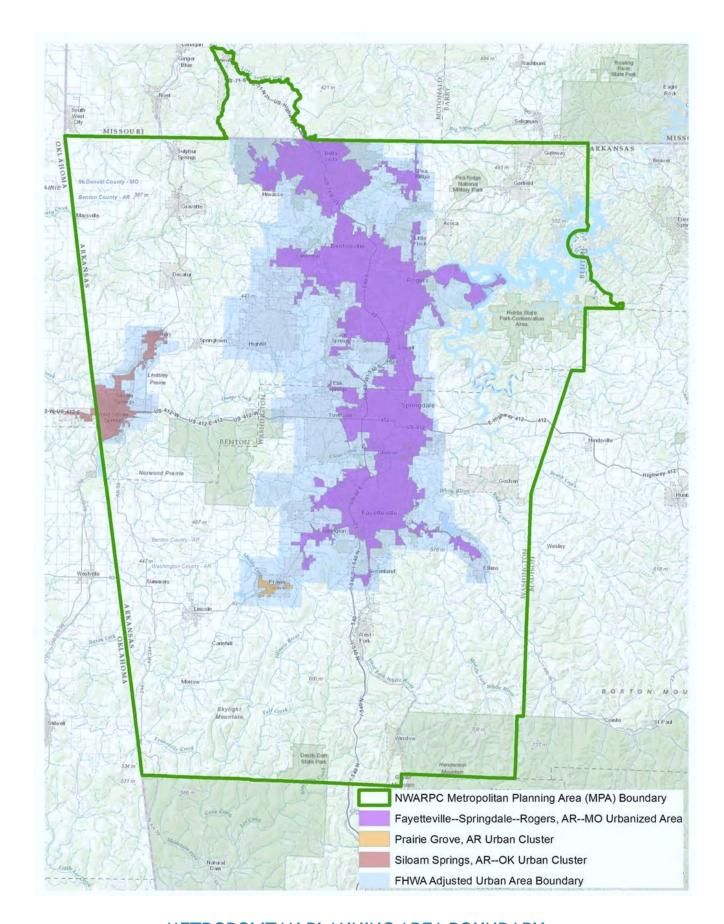
Ozark Regional Transit Authority

Razorback Transit at the University of Arkansas

Northwest Arkansas National Airport Authority

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METROPOLITAN PLANNING AREA BOUNDARY

NARTS MISSION AND GOAL

The mission of the Northwest Arkansas Regional Transportation Study (NARTS) is to develop and maintain a metropolitan transportation plan for the Metropolitan Planning Area (MPA).

The metropolitan transportation plan goal is to provide a comprehensive multi-modal transportation system which most efficiently serves the human and economic needs of the metropolitan area and the Northwest Arkansas region.

LOCAL AUTHORITY

This plan was developed to provide a regional transportation plan for Northwest Arkansas. Part of the plan includes recommendations for transportation improvements and infrastructure. Local development requirements and transportation decisions will be the responsibility of the applicable governing authority.

PUBLIC PARTICIPATION PLAN (PPP) PROCEDURE

The NWARPC 2045 MTP was developed using the procedures outlined in Chapter X. of the Public Participation Plan (see 2045 MTP Chapter 4 Public Involvement and Input for more details). Due to the ongoing Covid-19 health emergency and pandemic, all public events between March 2020 and March 2021 were conducted virtually.

The Draft MTP was presented virtually to the Technical Advisory Committee and the public on December 17, 2020.

A legal notice was published in the Democrat Gazette on January 10, 2021 announcing the Final Public Forum/Open House, the Public Comment Period and how to comment, and the TAC and NWARPC/Policy Committee meetings where the Draft MTP would be discussed. The same legal notice was published in the La Prensa Libra and the McDonald County, MO Press on January 14, 2021. A Display Ad was published on January 17, 2021 in the Democrat Gazette containing the same information. Flyers were placed on public transit buses announcing the Draft MTP virtual Final Public Forum/Open House and the Public Comment Period, and how to comment. Emails were sent to all interested parties, and a notice was posted on social media and the NWARPC web site.

The TAC met virtually on January 21, 2021 and recommended the Draft MTP to the NWARPC/Policy Committee for consideration at its next meeting.

A Final Public Forum/Open House was held virtually during the NWARPC/Policy Committee on January 27, 2021. The NWARPC/Policy Committee approved the Draft MTP to go a Public Comment Period.

A 30-day Public Comment Period was held from January 28, 2021 through February 28, 2021. A Public Comment Report was developed and supplied to the TAC and NWARPC/Policy Committee. ARDOT and MoDOT also provided comments. Appropriate comments and suggestions were incorporated into the Draft MTP.

A Legal Notice was published in the Arkansas Democrat Gazette on March 7 and March 14, 2021 announcing virtual TAC and NWARPC/Policy Committee meetings in which each committee would vote on approval of the Draft NWARPC 2045 Metropolitan Transportation Plan. A legal notice containing the same information was published on March 11, 2021 in the La Prensa Libra and the McDonald County, MO Press.

This notice is in accordance with the 2045 NWARPC Metropolitan Transportation Plan, the Moving Ahead for Progress in the 21st Century (MAP-21) Act and Fixing America's Surface Transportation (FAST) Act, in cooperation with local agencies, the Arkansas Department of Transportation, the Missouri Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration. This report was funded in part through grant(s) from the Federal Highway Administration, the Federal Transit Administration, and/or the U.S. Department of Transportation. The views and opinions of the agency expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

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The Northwest Arkansas Regional Planning Commission (NWARPC) complies with all civil rights provisions of federal statues and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the NWARPC does not discriminate on the basis of race, sex, color, age, national origin, religion or disability, in the admission, access to and treatment in NWARPC's programs and activities, as well as the NWARPC's hiring or employment practices. Anyone with special communication or accommodation needs may contact Celia Scott-Silkwood at (479) 751-7125 ext.106 or email cscott-silkwood@nwarpc.org. For complaints of alleged discrimination and inquiries regarding the NWARPC's nondiscrimination policies contact Celia Scott-Silkwood, AICP, Regional Planner – EEO/DBE (ADA/504/TitleVI Coordinator), 1311 Clayton, Springdale, AR 72762, (479) 751-7125 ext. 106, (Voice/TTY 7-1-1 or 1-800-285-1131) or the following email address: cscott-silkwood@nwarpc.org. This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille. If information is needed in another language, contact Celia Scott-Silkwood. Si se necesita informacion en otro idioma, comuniqese Celia Scott-Silkwood, cscott-silkwood@nwarpc.org.

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ACRONYMS USED IN THIS PLAN

AADT Average Annual Daily Traffic
A&M Arkansas and Missouri Railroad
ACS American Community Survey

ADA Americans with Disabilities Act of 1990
ADAAG Disabilities Act Accessibility Guidelines

ADT Average Daily Traffic

ALOP Annual Listing of Obligated Projects
ARDOT Arkansas Department of Transportation

ASSHTO American Association of State Highway and Transportation Officials

ATRI American Transportation Research Institute

BFC Bicycle Friendly Community
BMP Best Management Practices
BPR Bureau of Public Roads
BRT Bus Rapid Transit

CAP Connecting Arkansas Program

CI Congestion Index

COP Community Outreach Plan

CMAQ Congestion Mitigation and Air Quality Improvement Program

CMP Congestion Management Process

CSDC Census State Data Center

CSS Context Sensitive Solutions (aka as Context Sensitive Design)

CTTP Census Transportation Planning Package

DA Drive Alone

DOT Department of Transportation
DMVT Daily Vehicle Miles Traveled
EJ Environmental Justice

E's (5) Engineering, Enforcement, Education, Evaluation, Encouragement

EPA Environmental Protection Agency FARS Fatality Analysis Reporting System

FAST ACT Fixing America's Surface Transportation Act

FFY Federal Fiscal Year

FHWA Federal Highway and Transportation Administration

FTA Federal Transit Administration
GIS Geographic Information System
HBO Home-Based Other Trips
HBW Home-Based-Work Trips

HBSB Home-Based-Shop/Personal Business Trips

HBSC Home-Based School Trips

HBU Home-Based-University/College Trips

HCM Highway Capacity Manual HHTS Household Travel Survey

HSIP Highway Safety Improvement Program

HTP Heritage Trail Plan

IPF Iterative Proportional Fitting
IRP Interstate Rehabilitation Program

ISTEA Intermodal Surface Transportation Efficiency Act

ITS Intelligent Transportation System

KNR Kiss-and-Ride/drop-off
KSC Kansas City Southern Railroad

LB Local bus

LEP Limited English Proficiency Plan

LOS Level of Service

LPA Locally Preferred Alternative

LR Light Rail
LRP Long Range Plan

MAP-21 Moving Ahead for Progress in the 21st Century

MODOT Missouri Department of Transportation

MPA Metropolitan Planning Area

MPO Metropolitan Planning Organization

MS4 Municipal Separate Storm Sewer Systems

MSA Metropolitan Statistical Area MTP Metropolitan Transportation Plan

NARTS Northwest Arkansas Regional Transportation Study

NBI National Bridge Inventory

NBIS National Bridge Inspection Standards

NHB Non-Home-Based Trips
NHBW Non-Home-Based Work Trips
NHS National Highway System

NHPP National Highway Performance Program
NHTS National Household Travel Survey
NLCD National Land Cover Database
NTD National Transit Database
NWA Northwest Arkansas

NWADG Northwest Arkansas Democrat Gazette

NWARPC Northwest Arkansas Regional Planning Commission

ORT Ozark Regional Transit

PNR Park-and-Ride
POP Program of Projects
PPP Public Participation Plan

PRMSE Percent Root Mean Square Error

PRT Personal Rapid Transit

ROW Right of Way

RMSE Root Mean Square Error
RPC Regional Planning Commission

RT Razorback Transit

RTP Recreational Trails Program

SAFEEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SH State Highway SR2 Shared ride of two

SR3+ Shared ride of three or more SRTS Safe Routes to School Program

STIP Statewide Transportation Improvement Program

STP Surface Transportation Program

STP-A Surface Transportation Program – Attributable Funds
STBGP Surface Transportation Block Grant Program

STBGP-A Surface Transportation Block Grant Program - Attributable

TAC Technical Advisory Committee
TAP Transportation Alternatives Program

TAD Traffic Analysis Districts
TAZ Traffic Analysis Zone

TCSP Transportation, Community, and System Preservation Program
TDM Transportation Demand Management (aka Mobility Management)

TDP Transit Development Plan

TIP Transportation Improvement Plan

TIGER II Transportation Investment Generating Economic Recovery Grant Program

TLFD Trip Length Frequency Distributions
TOD Transit Oriented Development
TMA Transportation Management Area
TMIP Travel Model Improvement Program
TRB Transportation Research Board

TEA-21 Transportation Equity Act for the 21st Century

UACES University of Arkansas, Division of Agriculture Cooperative Extension Service

UALR University of Arkansas at Little Rock
UPWP Unified Planning Work Program

U.S.DOT United States Department of Transportation

UZA Urbanized Area

VDF Volume Delay Function
VHT Vehicle Hours Traveled
VMT Vehicle Miles Traveled

RESOLUTION #2021-02

A RESOLUTION APPROVING THE NORTHWEST ARKANSAS REGIONAL PLANNING COMMISSION 2045 METROPOLITAN TRANSPORTATION PLAN

WHEREAS, the Northwest Arkansas Regional Planning Commission (NWARPC), as the designated Metropolitan Planning Organization (MPO) for the Fayetteville-Springdale-Rogers, AR-MO urbanized area, is responsible for the development of a long-range, multi-modal transportation plan for the area and its future environs; and

WHEREAS, said plan must be kept up-to-date on a continuing basis; be updated at least every five (5) years; and have a planning horizon of at least 20 years; and

WHEREAS, after extensive public input and involvement, and multi-jurisdictional and modal agency input, an update of the 2040 plan is ready for Commission approval consideration.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE NORTHWEST ARKANSAS REGIONAL PLANNING COMMISSION/POLICY COMMITTEE:

THAT the Northwest Arkansas Regional Planning Commission 2045 Metropolitan Transportation Plan be, and is hereby, approved.

PASSED AND APPROVED THIS 24 DAY OF MARCH, 2021.

NWARPE CHAIR, MAYOR CHRIS KEENEY

ATTEST:

NWARPC EXECUTIVE DIRECT

JEFF HAWKINS

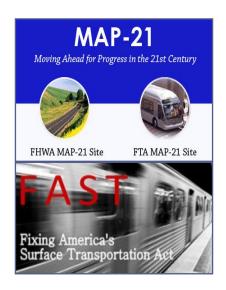


CHAPTER 1. INTRODUCTION

OVERVIEW OF TRANSPORTATION LEGISLATION

The Moving Ahead for Progress in the 21st Century (MAP-21) transportation bill was signed into law on July 6, 2012 and was the first long-term highway authorization enacted since 2005. A key feature of MAP-21 was the establishment of a performance- and outcome-based program. The objective of this program was for the metropolitan transportation planning process to provide for the establishment and use of a performance-based approach to transportation decision-making.

President Obama signed the Fixing America's Surface Transportation (FAST) Act on December 4, 2015, building upon MAP-21. The 2040 NWA Metropolitan Transportation Plan (MTP) was developed under MAP-21/FAST Act guidance.





NATIONAL GOALS AND PERFORMANCE MANAGEMENT MEASURES

MAP-21/FAST Act establishes a national policy in support of performance management and establishes national performance goals for the Federal-aid highway program in seven areas:

GOAL AREA	NATIONAL GOAL
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
Infrastructure condition	To maintain the highway infrastructure asset system in a state of good repair.
Congestion reduction	To achieve a significant reduction in congestion on the National Highway System.
System reliability	To improve the efficiency of the surface transportation system.
Freight movement and economic vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional eco-nomic development.
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment.
Reduced project delivery delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

23 U.S.C. & 150(b)

METROPOLITAN TRANSPORTATION PLANNING FACTORS

MAP-21/FAST Act requires that the metropolitan planning process for a metropolitan planning area shall provide for consideration of projects and strategies that will:

- (A) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- (B) Increase the safety of the transportation system for motorized and nonmotorized users;
- (C) Increase the security of the transportation system for motorized and nonmotorized users;
- (D) Increase the accessibility and mobility of people and for freight;
- (E) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- (F) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (G) Promote efficient system management and operations;
- (H) Emphasize the preservation of the existing transportation system;

The FAST Act has added two additional planning factors:

- (I) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater im- pacts of surface transportation; and
- (J) Enhance travel and tourism.

These factors and the manner in which they have been addressed in the MTP are presented as follows:

(A) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency:

- Infrastructure that supports a high level of service for mobility.
 - 1) Hwy. 412 Northern Bypass (Hwy. 612) Interstate-type facility will aid in alleviating congestion on Hwy. 71B in Springdale and I-49 by providing a controlled-access highway for freight to by-pass the business corridors of Springdale.
 - 2) Continue the widening of Hwy. 265 from Hwy. 412 (Springdale) to Hwy. 62 (Rogers) This transportation improvement will provide better north-south movement for freight by adding lanes to an existing federal highway that connects the industrial parks of Fayetteville, Springdale, and Rogers.
 - 3) Airport Access Road will provide more efficient access to the Northwest Arkansas National Airport.
 - 4) I-49 (Hwy. 549) will provide interstate access connecting the region to I-40 to the south and I-49 to the north.
 - 5) Hwy. 112 will provide north-south regional mobility west of I-49 from Fayetteville to Bentonville.

(B) Increase the safety of the transportation system for motorized and non-motorized users; and

(C) Increase the security of the transportation system for motorized and non-motorized users:

- Improvements to traffic signalization/pavement markings.
- Use of cable median barrier systems, rumble strips, and pavement surfaces to reduce fatality and serious injury crash rates on interstates/freeways.
- Use of congestion management techniques, including access management and ITS.
- Bicycle/pedestrian facilities maintain a regional commitment to bicycle and pedestrian facilities through implementation of the Northwest Arkansas Regional Bicycle and Pedestrian Master Plan.
- Public Transportation maintain a regional commitment to public transit service.
- Widening of congested arterial roads, and improving the rural county road network.
- Bridge improvements.

(D) Increase the accessibility and mobility for people and freight:

- Airport Access Road.
- Establish a regional arterial network.
- Maintain a regional cohesiveness and unity by requesting Federal funding for these specific corridor projects:
 - 1) Hwy. 412 Northern Bypass
 - 2) I-49 Improvements
 - 3) Hwy. 112 Improvements
 - 4) Hwy. 265 Improvements
- Investigate innovative funding mechanisms.



US 612- the Future US 412

(E) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns:

- Consider environmental factors, both natural and cultural, as transportation projects are developed.
- Bicycle/pedestrian trail and sidewalk improvements in the region.
- Maintain and expand a regional commitment to public transit service.
- Encourage and explore all modes of transit alternatives.
- Design, manage, and operate transportation facilities that improve system reliability and safety for all modes.

(F) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight:

- Establish a regional arterial network, including improving east/west connections and new north/south arterials.
- Airport Access Road.
- Bicycle/pedestrian facilities.
- Public Transportation support public transit integration and connectivity.
- I-49 improvements, including improvements to interchanges, improvements to existing grade separations, and widening the mainline.
- Utilize ITS technologies to maximize infrastructure efficiency.

(G) Promote efficient system management and operation:

- Signalization improvements.
- Utilize ITS technologies to maximize infrastructure efficiency.
- Improve and expand existing transit services.
- Encourage and explore all modes of transit alternatives.

(H) Emphasize the preservation of the existing transportation system:

- I-49 improvements, including improvements to interchanges, improvements to existing grade separations, and widening the mainline.
- Strong financial commitment to maintenance of existing roadways.
- Maintain public transit busses and facilities.
- Upgrade and maintain existing bridges.
- Improve the rural county road network.

(I) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and

- Continue implementation of the Cave Springs Karst Conservation Study.
- Continue implementation of the NWA MS4 Requirements and the MS4 Stormwater Compliance Group.

(J) Enhance travel and tourism.

- NWA Razorback Regional Greenway and wayfinding system
- NWA roadway uniform wayfinding system



Hwy. 112 Proposed Improvements

METROPOLITAN PLANNING ORGANIZATION (MPO)

The Northwest Arkansas Regional Planning Commission (NWARPC) was formed in 1966 through a cooperative agreement between Benton County, Washington County, and the cities of Bentonville, Fayetteville, Rogers, Siloam Springs, and Springdale. In 1983, NWARPC was designated as the Metropolitan Planning Organization (MPO) under U.S. DOT regulations for transportation planning purposes. The MPO is designated by the Governor to conduct the Federally mandated 3C (Comprehensive, Continuing and Cooperative) planning process necessary for transportation projects to qualify for Federal transportation funds.

Transportation Management Area (TMA) status was recognized after 2010 Census Bureau data indicated the Fayetteville-Springdale-Rogers, AR-MO Urbanized Area (UZA) had grown from 172,585 in 2000 to 295,083 in 2010. The 200,000-population mark is the threshold for an area to become a TMA. With the new UZA boundary extending into Missouri, the Metropolitan Planning Area (MPA) for transportation planning now extends into McDonald County, Missouri. Today, NWARPC's membership includes 35 units of government in Benton, Madison, and Washington Counties, Arkansas; McDonald County and Pineville, Missouri; the Arkansas Department of Transportation (ARDOT); the Missouri Department of Transportation (MoDOT). Other members include Ozark Regional Transit Authority, Razorback Transit, the NWA National Airport and Beaver Water District.

A primary planning activity of NWARPC is serving as the MPO and managing TMA functions. The MPO has two permanent committees, the Northwest Arkansas Regional Planning Commission/Policy Committee (RPC/Policy Committee) and the Technical Advisory Committee (TAC). The RPC/Policy Committee is the chief decision-making body for the MPO and consists of the member jurisdictions' chief elected official and/or other appointed representatives. The TAC develops the technical aspects of plans and reports and makes recommendations to the RPC/Policy Committee. The TAC and RPC/Policy Committee make up the Northwest Arkansas Regional Transportation Study (NARTS).

Three documents are the major NARTS products:

- The Unified Planning Work Program (UPWP)
- The Transportation Improvement Program (TIP)
- The Metropolitan Transportation Plan (MTP)



Hwy. 265

The **UPWP** outlines the MPO's annual work activities. Each year the TAC and RPC/Policy Committee reviews and approves proposed planning activities to submit to ARDOT, MoDOT and FHWA/FTA for approval for Federal planning funds.

The **TIP** contains all short-term commitments for State and Federal transportation funding in the metro area. Beginning with Federal Fiscal Year (FFY) 2021 this document covers a five-year period (FFY 2021-2024). No Federal expenditures can be made on transportation facilities within the MPA unless they are listed in the TIP. The TIP is a major tool for shaping the region's transportation infrastructure.

NWARPC prepares the **Metropolitan Transportation Plan (MTP)**, with updates every five years. It is a Federal requirement that the long-range transportation plan cover at least a period of 20 years into the future. This document is in its sixth update, and is titled the NWARPC 2045 NWA Regional Metropolitan Plan. The MPA for the Plan consists of Washington and Benton Counties, and a portion of McDonald County, Missouri, including the towns of Jane and Pineville.

In the years since the last regional transportation plan update the Northwest Arkansas region continues to see a significant amount of growth and development, including a continuing increase in population. With that growth comes many challenges to the area's transportation system, such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, improving transit service, and protecting the environment. As evidenced by responses to the 2045 MTP Transportation Survey (see Chapter 4), the top two transportation issues identified by respondents were 1) the flow of traffic on streets during peak times of the day (77% were dissatisfied with the flow of traffic at peak times), and 2) the availability of public transit (74% were dissatisfied

with the availability of public transit). As growth and development continues, it is clear that the current transportation system will not be sufficient to accommodate future needs. Consequently, a long-range plan is necessary to effectively integrate citizen and business needs and wants and the circulation system that will efficiently carry them through the region on their various trips.

In 1995, the 2020 Regional Transportation Plan was developed to address transportation planning for our region. The 2025 Regional Transportation Plan was adopted in 2000 as an update of the previous Plan. The 2030 Northwest Arkansas Regional Transportation Plan was developed in 2005. The 2035 Northwest Arkansas Regional Transportation Plan was approved in April 2011. The 2040 MTP was approved in March 2016. The NWARPC 2045 NWA MTP continues the process of addressing the need for appropriate planning to assist in the region's preparation for continued growth. The MTP functions as a framework for continued regional awareness and cooperation between the region's governments.

It is imperative that the MTP is viewed not as the end of a process, but a continuation of a process that must be on-going in its implementation. Now, more than ever, it is important for the governments of Northwest Arkansas to consider transportation issues on a regional basis, and to cooperate in meeting the demands of accelerating growth. The fact that previous plans have been developed and adopted by the RPC/Policy Committee is evidence that area governments are committed to approaching transportation challenges in Northwest Arkansas on a united front.

2045 METROPOLITAN TRANSPORTATION PLAN RECOMMENDATIONS

The TAC and RPC/Policy Committee advanced the following Recommendations as a result of technical evaluation and community input throughout the 2045 MTP update process. Many of the Recommendations/Implementation actions from the 2040 Plan are being carried forward into the 2045 MTP.

- 1. Continue to establish a Regional Arterial Network.
- 2. Continue the regional goal of promoting parkways/boulevards.
 - Access Management.
 - Context Sensitive Solutions.
 - Complete Streets.

3. Adhere to Cross-Section Guidelines.

- The Northwest Arkansas Regional Bicycle and Pedestrian Master Plan offers cross-sections that conform to acceptable AASHTO standards and may be applied within the recommended standard right-of-way and curb-to-curb dimensions for Minor and Collector Streets, and Minor and Major Arterials.
- The Connect NWA-TDP offers bus stop standards, street cross-sections and guidelines for the application of transit Mobility Hubs.

4. Update the 2015 Congestion Management Process.

- The NWARPC CMP Report was approved in May 2015. This is the first phase, or step, in the congestion management process. The following outlines the Tasks in the Congestion Management Process:
 - **Task 1.** Develop Regional Objectives for CM Complete.
 - Task 2. Define CMP Network
 - **Task 3.** Develop Multimodal Performance Measures This involved developing performance measures that will be used to measure congestion on a regional and local scale and should relate and support the regional objectives.
 - **Task 4.** Collect Data/Monitor System Performance Data is collected and analyzed to determine how the transportation system performs. Data collection is on-going and may involve a wide range of data sources and partners.
 - **Task 5.** Analyze Congestion Problems and Needs Using data and analysis techniques, the CMP should address what congestion problems are present or anticipated and what are the sources of unacceptable congestion. The CMP Committee decided the time periods when congestion was the worst (7:00 to 9:00 AM and 4:30 to 6:30 PM); what was congested versus unacceptable; and decided to use the top fifteen percent of the worst

routes as a screening/priority tool for funding for CM mitigation.

Task 6. Identify and Assess Strategies – This involves identifying and assessing potential strategies appropriate to mitigating congestion. Common mitigation categories include: Access Management / Signal Timing / Planned Improvements / Acceptable Delays / Intersection Geometry / Stop Signs / Added Capacity. Some MPOs have established "regional initiatives" to address operation deficiencies such as signal timing.

Task 7. Program and Implement Strategies – These are items that need to be addressed going forward – how and when will solutions be implemented.

Task 8. Evaluate Strategy Effectiveness – What has been learned about implemented strategies? This action may be tied to monitoring system performance under Task 4. It should inform future decision making about the effectiveness of transportation strategies.

- Assessment of implemented strategies including before/after analysis of recent projects such as:
 - Springdale and Rogers Adaptive Signal Control.
 - > Hwy. 265 Access Management Plan.
 - ➤ I-49 Capacity and Interchange Improvements.
- Increase focus on management and operations of the traffic signals on the CMP network.

5. Update the 2007 ITS Plan and ITS technologies to maximize infrastructure efficiency.

• Work toward implementation of the Regional ITS Architecture and Deployment Plan, with a priority to be dynamic message signs.

6. Examine use of Alternative Traffic Controls.

- Roundabouts: Hwy. 112 and Pleasant Grove Road; Rupple Road; Gene George Blvd.; N. Futrall Drive and Fulbright Exp. at the Washington Regional Medical Center.
- Single Point Urban Interchanges: I-49 and N. Walton Blvd.; I-49 and S. Walton Blvd.; and I-49 and MLK
- Diverging Diamond Interchange.

7. Begin a regional discussion on electric and self-driving vehicles (cars, buses, trcuks), and the impact this technology may have on transportation infrastructure in the future.

- As companies begin to move into the electric car and truck market, with indicators that renewable-powered vehicles will be widely available in the near future, keep abreast of this industry and its impact on transportation and transportation policies.
- Become more knowledgeable about connected/automated and autonomous vehicles, such as how services like driverless vehicles rollout and how soon this will begin to unfold.
- Envision the role that public transit, local buses, active transportation and private cars play in the region. Refer to the Connect NWA-TDP plan for an implementation schedule for public transit improvements.

8. Cities, counties, ARDOT, and MoDOT are encouraged to apply techniques of access management.

- Tri-party access management agreements with a local jurisdiction, State highway department, and NWARPC have proved very successful in the past and should continue to be employed.
- In applying access management, the use of the jurisdiction's ordinance is preferred, if one exists. If one does not exist, the highway department policy should be adhered to.
- Refer to the Highway 112 Access Management Regional Vision document, which was adopted by the RPC/Policy Committee by Resolution #2019-02, January 23, 2019.

9. Continue funding of the Eastern North-South corridor (Hwy. 265).

- Implement access management strategies as recommended in the ARDOT corridor study.
- Continue to fund recommended phases based on the ARDOT corridor study.

10. Complete the Northwest Arkansas National Airport access road.

• Continue to work with ARDOT, the Federal government and private partners to identify funding opportunities.

11. Explore funding options for bus and fixed guideway service.

• Look into the grant program FTA Ladders of Opportunity Initiative. These funds may be used to modernize and expand transit bus service specifically for the purpose of connecting disadvantaged and low-income individuals, veterans, seniors, youths, and others with local workforce training, employment centers, health

NWARPC 2045 Metropolitan Transportation Plan

care, and other vital services.

• Encourage local transit agencies to work with major employers in the region to explore opportunities to partner in the funding of commuter transit services.

12. Continue to pursue the Connect NWA-Transit Development Plan recommendations.

- Develop a Regional Transit Framework that takes the shape of customized route and network recommendations built upon the technical analysis and informed by the public engagement process.
- Use key transit corridors that were identified to provide enhanced connectivity and direct routing focused on moving NWA residents in an intuitive, time efficient manner that is not restricted by political boundaries.
- Allocate resources effectively by implementing regional service standards for ongoing operation, expansion and the implementation of transit services.
- Offer frequent fixed route service, along with coverage service.
- Consider Mobility Zones designated areas with demand response service available to help provide first-last mile solutions for system users.
- Use a phased implementation plan to fund fixed route transit system growth and sustainability to achieve
 full mobility for all travelers, the region must invest in transit at a significantly higher rate than it currently
 does and must work to identify a dedicated local funding source that does not completely rely on federal,
 state, and local funding.

> Alternative Analysis Study:

- The Northwest Arkansas region should create and adopt an integrated land use and transportation plan that is based on promotion of mixed-use development patterns.
- Communities in Northwest Arkansas can become "transit ready" ahead of a system being built.
- Keep the development focused in the corridor.
- Look for ways to add energy and developer interest in the communities and downtowns.
- When feasible, in addition to the commuter rail Locally Preferred Alternative (LPA) along the A&M railroad, begin a phased development of high-quality Bus Rapid Transit (BRT) along Hwy. 71B.

13. Promote the use of public transit as an alternative to the automobile.

- Support a regional public relations campaign to educate the public.
- Support a study to identify potential transit markets with Northwest Arkansas businesses and municipalities.

14. Encourage Transit Oriented Design practices.

- Coordinate regional land use and transportation systems to serve existing and future transit markets.
- Use Complete Street principles to create a connected sidewalk, bicycle, and roadway system.
- Encourage land use policies that promote the use of other-than-auto modes of transportation.

15. Cities, counties, ARDOT, MoDOT and the Federal government are encouraged to install signs naming waterways at road crossings and trail crossings.

16. Continue a regional commitment to bicycle and pedestrian facilities.

- Apply program and policy recommendations as outlined in the Northwest Arkansas Regional Bicycle and Pedestrian Master Plan.
- Support extended development of the Razorback Regional Greenway to the north and south.
- Seek out and use alternative funding for construction and maintenance of existing and new trail facilities.

RELATED PLANS AND STUDIES

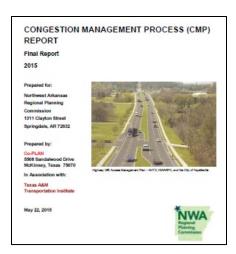
Cave Spring Area Karst Resource Conservation Study (Fall 2014-Spring 2016)

The Cave Springs Area Karst Resource Conservation Study (Karst Study) incudes specific objectives such as analyzing existing water quality and species population data, working with the scientific community to determine appropriate actions necessary to ensure adequate protection of local karst recharge zones and also working with local, county and State officials and other stake- holders to determine the best conservation actions and mechanisms for the karst area. More information can be found at: https://www.nwarpc.org/datacatalog/cave-springs-area-karst-resource-conservation-study/.



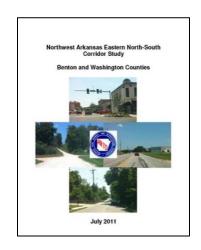
Congestion Management Process Report (May 2014-May 2015)

The Congestion Management Process (CMP) objectives are to develop procedures for evaluating the relative congestion of facilities, develop procedures to determine if congestion mitigation strategies should be implemented for a particular facility, and develop a procedure or procedures or evaluating the effectiveness of congestion mitigation strategies implemented. More information can be found at: https://www.nwarpc.org/datacatalog/congestion-management-process-cmp-final-report/. The NWARPC approved the first phase of the CMP on May 27, 2015. A second phase is set to get underway in spring 2021.



Eastern North/South Corridor Study (July 2011)

At the request of the NWARPC, the Arkansas State Highway Commission passed Minute Order 2009-093, which authorized AHTD to conduct a study of an eastern North-South corridor from Hwy. 16 in Fayetteville to Hwy. 62 in Rogers with considerations of possible connections and alternatives. The purpose of the study was to determine the need for improvements to the eastern North-South corridor with a possible extension to Bentonville. The Study includes a traffic analysis, safety analysis, pavement analysis, and environmental considerations, as well as a discussion of alternatives to existing Hwy. 265 and possible extensions. More information found can be at: https://www.nwarpc.org/datacatalog/northwest-arkansas-eastern-nscorridor-study/.



AR Hwy. 112 Corridor Study (June 2015)

At the request of the NWARPC, the Arkansas State Highway Commission passed Minute Order 2012-027, which authorized a study of Hwy. 112, from Fayette-ville to Bentonville, a total length of approximately 20 miles. The purpose of the study was to determine the feasibility of improvements to Hwy. 112 to address capacity and safety needs. The Study includes a traffic analysis, safety analysis and an analysis of alternatives. Additionally, the Study points out environmental concerns, such as the Cave Springs Recharge Area, and recommends implementing access management strategies in order to preserve corridor capacity and protect transportation investments. The Study can be found at https://www.nwarpc.org/datacatalog/highway-112-corridor-study/.

Highway 112 Corridor Study Benton and Washington Counties July 2015

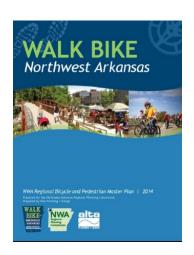
NWA Regional ITS Architecture and Deployment Plan (Spring 2007)

Intelligent transportation system (ITS) is the application of electronic technologies and communications to increase the safety and efficiency of the transportation system. The development of the NWA ITS provides a framework for implementing ITS projects, encouraging inter-operability and resource sharing among agencies, identification of applicable standards to apply to projects, and allowing for cohesive long-range planning among regional stakeholders. A list of recommended ITS projects was developed through input from stakeholders, and grouped into timeframes for deployment based on priority, dependence on other projects, technology, and feasibility. As part of the ITS maintenance, and the MTP update, the ITS Architecture and Deployment Plan has recently been updated. More information can be found at https://www.nwarpc.org/datacatalog/northwest-arkansas-regional-its-architecture-and-deployment-plan/.



• NWA Regional Bicycle and Pedestrian Regional Master Plan (2014-2015)

A major Plan goal was for each city with a population of over 1,000 to have a unique individual Master Trail Plan and for the area to work towards linking all these communities through a regional trail system. Individual city plans were adopted by fall 2015 for 25 cities. Extensive public input was sought for the Regional Master Plan, as well as the individual plans. The Plan was adopted by the RPC/Policy Committee on December 1, 2015. The Plan was utilized as the cornerstone of the bicycle and pedestrian component of the MTP. More information can be found at http://www.nwabikepedplan.com/.



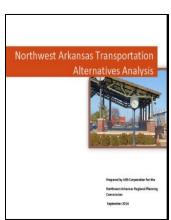
• NWA Open Space Plan (Fall 2014-Winter 2015)

The purpose of this Plan was to develop a coordinated, voluntary program to protect and promote the region's most valued natural landscapes and open spaces. The goal is to preserve these assets, thereby maintaining a high quality of life as the region continues to grow and prosper. The Plan was utilized as the basis of the environmental component of the MTP. More information can be found at: http://www.nwaopenspace.com/.



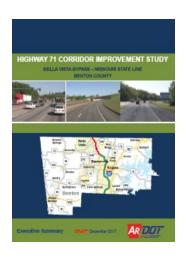
• NWA Transportation Alternatives Analysis Study (2014)

The Study approach followed the planning guidelines of the FTA, especially those that apply to New Starts and Major Capital Investment funding. The purpose of the project was to carry out a transportation alternatives analysis concentrating on three major alternatives: Light Rail (new location on I-49 corridor), Commuter Rail (on A&M Railroad Corridor), and Bus Rapid Transit (on Hwy. 71B). In September 2014 the RPC/Policy Committee accepted the Alternatives Analysis Study with the understanding that none of the alternatives considered are financially feasible at this time based on low ridership forecasts, high capital costs, and did not meet the FTA threshold to receive Federal funding, and that the A&M Railroad has the most potential for a future fixed guide way commuter rail information More can be found https://www.nwarpc.org/datacatalog/northwest-arkansas-alternatives-analysisfinal-report/.



Highway 71 Corridor Improvements Study – Bella Vista Bypass to Missouri State Line (2017)

Because of the congestion due to the rapid growth in the NWA region, local officials requested a study to evaluate the need for intersection improvements along the Highway 71 corridor through Bella Vista to enhance safety and improve traffic flow. As a result, the Arkansas State Highway Commission adopted Minute Order 2014-050, authorizing a study to identify needed improvements to Highway 71 between the I-49 interchange and the Missouri State Line. More information can be found at: https://www.nwarpc.org/wp-content/uploads/2021/01/Hwy-71-Executive-Summary FINAL DRAFT-2.pdf.



• Arkansas Statewide Transit Coordination Plan (2018)

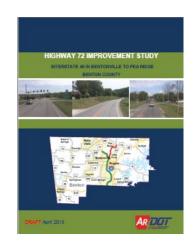
The Federal transportation legislation under Moving Ahead for Progress in the Twenty-First Century (MAP-21) and the Fixing America's Surface Transportation Act (FAST Act), requires that projects for certain FTA programs be derived from a locally developed, coordinated public transit-human services transportation plan. ARDOT's updated plan is intended to satisfy the federal requirements of Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities Program. These requirements are aimed at improving transit services for persons with disabilities, older adults and individuals with low incomes and ensuring that communities are coordinating transit resources provided through multiple federal programs.



The overall objective of the Arkansas Statewide Transit Coordination Plan is to determine where there are gaps in public transit and human services transportation service in Arkansas and develop coordination strategies and identify projects to address identified gaps. For additional information on this plan go to the ARDOT's publications page.

Highway 72 Improvement Study – I-49 in Bentonville to Pea Ridge (2019)
 At the request of local officials, the Arkansas State Highway Commission adopted Minute Order 2016-008, authorizing a study of needed improvement to Highway between I-49 in Bentonville and Pea Ridge.

Highway 72 is an east-west minor arterial that connects Bentonville and Pea Ridge in NWA, a distance of approximately 7.6 miles. As part of the Arkansas Primary Highway Network (APHN), Highway 72 serves as the primary route for commuters between the two cities, and travel delay induced by rapid growth in the area has raised concerns. For more information go to: https://www.nwarpc.org/wp-content/uploads/2021/01/Hwy-72-Improvement-Study-I-49-to-Pea-Ridge-Commission-1.pdf.

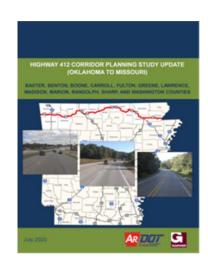


• Highway 62 and Highway 102 Study – Highway 102B to Highway 94 (2019)
ARDOT, in cooperation with FHWA, conducted a study to assess safety and congestion along Highway 62 and 102 in Centerton, Bentonville, and Rogers between Highway 102B and Highway 94. The study focused on several intersections along the study alignment, while also considering improving reliability, balancing access and mobility, and improving safety. The study considered anticipated land use changes in the study area as well as all modes of transportation while developing improvement alternatives. More information can be found at: https://www.nwarpc.org/wp-content/uploads/2021/01/Hwy-62-Hwy-102-Fact-Sheet Final.pdf.



Highway 412 Corridor Planning Study Update (Oklahoma to Missouri) (2020)
 Highway 412 is the only continuous principal arterial parallel to, and north of, I-20 in Arkansas. As a Congressionally-designated High Priority Corridor and an element of the National Highway System, Highway 412 is part of a strategic network of highways that support the Nation's economy, defense, and mobility.

In February 2017, Governor Asa Hutchinson signed House Concurrent Resolution 1007, encouraging the expansion of the Highway 412 corridor to improve accessibility and create economic prosperity in northern Arkansas. In October 2017, the Arkansas State Highway Commission adopted Minute Order 2017-101 authorizing a study to update and expand the *US 412 Corridor Planning Study* from the Oklahoma State line to the Missouri State Line. https://www.nwarpc.org/wp-content/uploads/2021/01/Hwy-412-Executive-Summary-2020-4.pdf.



• Western North-South Connector Study

As authorized by Minute Order 2019-011, the purpose of this study is to determine the need for and feasibility of a new highway connection from Highway 612 (Highway 412 Northern Bypass) to Highway 549 (future I-49, formerly known as the Bella Vista Bypass) west of I-49 in NWA. An evaluation of existing and future traffic operations, historical crashes, infrastructure conditions, and other considerations will lay the foundation for the development of solutions that are in line with the goals of this study and the overarching goals established in the Arkansas Long Range Intermodal Transportation Plan (LRITP) and the Arkansas State Freight Plan (SFP).

