Table of Contents

Introduction.............................................................................................................................................................................. 4
Overview of Coordination........................................................................................................................................................................... 6
History of Coordination in Arkansas........................................................................................................................................................................... 10
Arkansas Coordination Planning Process........................................................................................................................................................................... 11
Transportation Needs and Gap Analysis........................................................................................................................................................................... 13
Coordination Strategies........................................................................................................................................................................... 30

Figures

Figure 1: Arkansas Planning and Development Districts........................................................................................................ 5
Figure 2: Provider Survey Results - Major Barriers to Improving Transportation Services........................................................................................................... 9
Figure 3: County Transportation Needs Index......................................................................................................................................................... 14
Figure 4: Provider Survey Results - Service Needs........................................................................................................................................ 16
Figure 5: Provider Survey Results - Coordination Effort........................................................................................................................................ 16
Figure 6: User Survey Results - Info. Sources......................................................................................................................................................... 17
Figure 7: User Survey Results - Transportation Needs..................................................................................................................................................... 17
Figure 8: Active Public Transit and Human Services Transportation Providers........................................................................................................... 19
Figure 9: Arkansas Counties Not Served by General Public Transit (Urban 5307 & Rural 5311)......................................................................................................................................................... 20
Figure 10: Transportation Providers and Needs Index............................................................................................................................................................ 22
Figure 11: General Public Transit (Urban 5307 & Rural 5311) Vehicles per 10,000 Persons......................................................................................................................................................... 23
Figure 12: Human Services Transportation (5310) Vehicles per 10,000 Persons - Seniors and PWDs......................................................................................................................................................... 24
Tables

Table 1: Transportation Needs Index Calculation Example................................................................. 15
Table 2: Potential Transit Demand (Trips) Estimates.................................................................................. 15
Table 3: County Transportation Gap Indicators..................................................................................... 25-27
Table 4: Transit Trip Demand Met......................................................................................................... 27
Table 5: Key Destinations Served .......................................................................................................... 28
Table 6: Performance Measure Results.................................................................................................. 29
Table 7: Coordination Strategy Prioritization Results.............................................................................. 32

Glossary

**ARDOT** - Arkansas Department of Transportation

**FTA** - Federal Transit Administration

**General Public Transit** - transit service for the general public with no eligibility requirements to ride; funded under FTA’s Section 5307 or 5311 program

**Human Services Transportation** - transportation service for seniors and persons with disabilities; funded under FTA’s Section 5310 program

**PWDs** - Persons with Disabilities

**Section 5307 Program** - FTA transit funding program for urban areas

**Section 5311 Program** - FTA transit funding program for rural areas

**Section 5310 Program** - FTA transit funding program for specialized transportation services for seniors and persons with disabilities

**Seniors** - individuals age 65 or older
The overall goal of the Arkansas Statewide Transit Coordination Plan is to improve the availability, quality, and efficiency of transportation services for seniors, persons with disabilities (PWDs), those with low income, and other population groups with limited mobility options. The Arkansas Department of Transportation (ArDOT) Public Transportation Programs Section works to achieve this goal through coordination among transportation service providers and human services agencies and through better allocation and management of transportation resources. This update of the Arkansas Statewide Transit Coordination Plan is intended to provide a path forward for transportation service coordination efforts throughout Arkansas and to provide analysis findings that support more effective matching of transportation resources to needs. Information presented in this Transit Coordination Plan will also serve as a baseline for measuring the performance of Arkansas’ coordinated transportation system and effectiveness of coordination efforts. This Transit Coordination Plan, along with the coordination activities performed during the coordination planning process, is meant to satisfy federal law under the Fixing America’s Surface Transportation (FAST) Act that requires the development of a coordinated public transit-human services transportation plan to receive funding under the Enhanced Mobility of Seniors and Individuals with Disabilities - Section 5310 program.

Arkansas, located in the southeastern United States, is the 32nd most populous state in the country with a population of nearly 3 million. Arkansas ranks 34th in the United States in terms of population density (persons per square mile) and is considered to be relatively rural. Only eight cities throughout Arkansas have a population greater than 50,000. The City of Little Rock is the largest city with a population of roughly 197,000 (6.7% of the state population). Arkansas has diverse topography, with the Ozark and Ouachita Mountains located in the northwest and the lowlands consisting of the Gulf Coastal Plain and Arkansas Delta located in the southeast. Agriculture and forestry are major industries within the state, and it is the headquarters for several large companies such as Walmart, Tyson Foods, and Dillard’s. Arkansas is also home to over 60 state parks and National Park Service properties.

Statewide population forecasts estimate population growth of 26% between 2020 and 2040, bringing total population to approximately 3.7 million. Arkansas is separated into 75 counties and eight planning and development districts (Figure 1). The Northwest and Central districts are the most populous with 45% of the entire state’s population living in these districts combined. In terms of forecasted growth, these two districts are also expected to experience the largest population increases, 37% and 25% respectively, between 2020 and 2040. The Southeast and Southwest districts have the lowest population totals and are not expected to experience significant increases in population.

The goal of this plan is to improve the availability, quality, and efficiency of transportation services for seniors, persons with disabilities, those with low income, and others with limited mobility options through coordination and more efficient use of limited transportation resources.
Figure 1: Arkansas Planning and Development Districts
Overview of Coordination

Federal Regulations and Requirements

In 2004, President George W. Bush signed Executive Order 13330, which established the Coordinating Council on Access and Mobility (CCAM) to “promote interagency cooperation and the establishment of appropriate mechanisms to minimize duplication and overlap of federal programs and services so that transportation-disadvantaged persons have access to more transportation services.” In August 2005, Congress passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which included a requirement that projects selected for funding under the New Freedom (Section 5317), Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310), and Job Access and Reverse Commute (JARC – Section 5316) programs “must be derived from a locally developed, coordinated public transit-human services transportation plan” beginning in 2007.

The New Freedom program has since been consolidated into the Section 5310 program and the JARC program has been consolidated into the urban transit (Section 5307) and rural transit (Section 5311) programs. However, the requirement for Section 5310 funding recipients to certify that projects are included in a coordinated transportation plan has continued through both the Moving Ahead for Progress in the Twenty-first Century (MAP-21) Act and now the FAST Act. Additionally, the Federal Transit Administration (FTA) requires that projects identified for funding in a coordinated transportation plan be included in the Statewide Transportation Improvement Program (STIP) and in the local Transportation Improvement Program (TIP) for urbanized areas with populations over 50,000.

Note that throughout this document, agencies that primarily receive funding under FTA’s urban transit (Section 5307) or rural transit (Section 5311) programs are referred to as general public transit providers, as they operate transit services with no eligibility requirements that are typically available to all potential customers. Agencies receiving funding through the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program are referred to as human services transportation providers, because many provide specialized transportation services for seniors or PWDs. When discussing coordination in general, though, all public, private, and nonprofit transportation providers and all human services agencies are included.

Though the coordinated transportation plan requirement only applies to communities and organizations applying for Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program funding, FTA expects that other federally-funded programs—specifically the urban transit (Section 5307) and rural transit (Section 5311) programs—be included in the coordination planning process and coordination activities. In addition, FTA requires that projects identified for funding in a coordinated transportation plan be included in the Statewide Transportation Improvement Program (STIP) and in the local Transportation Improvement Program (TIP) for urbanized areas with populations over 50,000.

Note that throughout this document, agencies that primarily receive funding under FTA’s urban transit (Section 5307) or rural transit (Section 5311) programs are referred to as general public transit providers, as they operate transit services with no eligibility requirements that are typically available to all potential customers. Agencies receiving funding through the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program are referred to as human services transportation providers, because many provide specialized transportation services for seniors or PWDs. When discussing coordination in general, though, all public, private, and nonprofit transportation providers and all human services agencies are included. 

Federal Regulations and Requirements

In 2004, President George W. Bush signed Executive Order 13330, which established the Coordinating Council on Access and Mobility (CCAM) to “promote interagency cooperation and the establishment of appropriate mechanisms to minimize duplication and overlap of federal programs and services so that transportation-disadvantaged persons have access to more transportation services.” In August 2005, Congress passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which included a requirement that projects selected for funding under the New Freedom (Section 5317), Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310), and Job Access and Reverse Commute (JARC – Section 5316) programs “must be derived from a locally developed, coordinated public transit-human services transportation plan” beginning in 2007.

The New Freedom program has since been consolidated into the Section 5310 program and the JARC program has been consolidated into the urban transit (Section 5307) and rural transit (Section 5311) programs. However, the requirement for Section 5310 funding recipients to certify that projects are included in a coordinated transportation plan has continued through both the Moving Ahead for Progress in the Twenty-first Century (MAP-21) Act and now the FAST Act. Additionally, the Federal Transit Administration (FTA) requires that any coordinated plan be “developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers, and other members of the public.” The FTA also requires all coordinated transportation plans to include the following elements:

- An assessment of available services that identifies current transportation providers (public, private, and nonprofit);
- An assessment of transportation needs for individuals with disabilities and seniors. This assessment can be based on the experiences and perceptions of the planning partners or on more sophisticated data collection efforts, and gaps in service;
- Strategies, activities, and/or projects to address the identified gaps between current services and needs, as well as opportunities to achieve efficiencies in service delivery; and
- Priorities for implementation based on resources (from multiple program sources), time, and feasibility for implementing specific strategies and/or activities identified.

Though the coordinated transportation plan requirement only applies to communities and organizations applying for Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program funding, FTA expects that other federally-funded programs—specifically the urban transit (Section 5307) and rural transit (Section 5311) programs—be included in the coordination planning process and coordination activities. In addition, FTA requires that projects identified for funding in a coordinated transportation plan be included in the Statewide Transportation Improvement Program (STIP) and in the local Transportation Improvement Program (TIP) for urbanized areas with populations over 50,000.

Note that throughout this document, agencies that primarily receive funding under FTA’s urban transit (Section 5307) or rural transit (Section 5311) programs are referred to as general public transit providers, as they operate transit services with no eligibility requirements that are typically available to all potential customers. Agencies receiving funding through the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program are referred to as human services transportation providers, because many provide specialized transportation services for seniors or PWDs. When discussing coordination in general, though, all public, private, and nonprofit transportation providers and all human services agencies are included.
What is Coordination?

Transportation service coordination is the ongoing process of transportation providers and human services agencies communicating and working together to more efficiently manage limited transportation resources. Coordination is about building trust relationships among organizations and fostering a willingness to share power, responsibility, funding, and benefits in order to eliminate service duplication, deliver more cost-effective service, address service gaps, and improve information communication.

Coordination happens at three different levels: federal, state, and local. At the federal level, CCAM is the leading agency and works “to address inconsistent, duplicative, and often restrictive federal program rules and regulations that cause transportation services to be fragmented, underutilized, or difficult to navigate.” Coordination at the state level can happen in several ways. For instance, the various state agencies that are responsible for distributing transportation funding (e.g. ArDOT and Arkansas Department of Human Services) may collaborate to remove barriers to coordination and sharing of resources created by agency regulations and funding/eligibility requirements. As designated recipients for Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program funding, many state departments of transportation (DOTs) are responsible for certifying that projects selected for funding are included in a coordinated public transit-human services transportation plan. Going a step further, some DOTs such as ArDOT prepare these plans. Additionally, many state DOTs play a supportive role, fostering local coordination through facilitation of coordination meetings among transportation providers and human services agencies, as well as through implementation of statewide coordination strategies.

On a day-to-day basis, most coordination happens at the local level. Whether it is a simple daily activity such as referring a client to another service or a more complex activity like establishing centralized dispatching among transportation providers, there are a wide variety of activities that fall under the umbrella of coordination. For local transportation providers, coordination activities can include:

- Cross-training of staff;
- Workforce and equipment sharing;
- Centralized maintenance;
- Standardized data collection and reporting;
- Joint marketing campaigns;
- Regional transit fare structures;
- One-call/one-click transportation service centers;
- Schedule and driver assignment coordination; and
- Group emergency planning.

Benefits of Coordination

Outside of compliance with federal law, there are many coordination benefits, both for providers and users of transportation services. For providers, benefits can include access to a wider range of funding, staff, and resources; increased productivity; reduced operating costs; and more streamlined processes for reporting, funding application, and data collection. For users of the various transportation services, benefits may include expanded service areas and hours of operation; increased number of options; smoother connections; information that is easier to understand; and more affordable service. Most importantly, coordination improves access to goods, services, and job sites for the target populations that rely on these services.

Barriers to Coordination

Coordination can be a challenging process. Coordination requires commitment and compromise from a variety of people and organizations, each with their own needs, constraints, and responsibilities. This dynamic can sometimes make it difficult for participants in the coordination planning process to realize the benefits of coordination. This is especially true considering coordination benefits are not always enjoyed by those who sacrifice the most time and
resources. For these reasons, it is crucial that the coordination planning process identifies win/win strategies and fosters a sense of camaraderie and teamwork among involved individuals and their agencies.

While there are many barriers to coordination, this Transit Coordination Plan aims to address unique barriers specific to the transportation providers and human services agencies of Arkansas. To do this, ArDOT hosted and facilitated eight coordination meetings throughout the state where transportation providers, human services agencies, and other groups (e.g. workforce development board) discussed their efforts to coordinate transportation services and the barriers they faced when coordinating.

The barriers mentioned most frequently throughout the meetings included:
- Regulatory and funding restrictions;
- Riders do not like using other services with which they are not familiar;
- Jurisdictional limitations (i.e. not being able to provide service in other counties or outside of defined service areas);
- Different communications technology;
- Unique rider needs that require special assistance or equipment; and
- Providers acting as competitors.

The barrier mentioned most at these workshops was regulatory restrictions. At nearly every one of these eight meetings, an attendee noted that they had available resources but could not provide additional services because of restrictions to what services they were allowed to provide. For example, several human services transportation providers (i.e. 5310 providers serving seniors or PWDs) commented that many of their vehicles would go unused throughout the day during off-peak hours, and because they were restricted from using the buses for any other purpose than transporting seniors or PWDs, they could not offer other services with those vehicles. These providers also noted that they did not have the staff available to provide additional trips throughout the day, as drivers often had multiple duties (e.g. teaching or providing food).

A general issue among human services transportation providers is that the agencies’ primary responsibilities are often not to provide transportation. Many of the human services agencies that provide this service only do so to get their clients to and from their facilities. Transportation resources available to these agencies are often underutilized.
Attendees of the coordination meetings also identified general barriers to providing and improving transportation services. These barriers include difficulty finding a local match for funding; the rural environment and long trip distances; and difficulty attracting qualified bus drivers. In a survey distributed by ARDOT to transportation service providers (described more fully in later sections of this plan), respondents confirmed that funding, rural environment, and lack of drivers were the largest barriers to improving transportation services. Figure 2 shows the survey results for a question asking providers what major obstacles or concerns need to be addressed to improve transportation services. Though coordinated public transit-human services transportation plans are typically focused on the needs of the public, the Arkansas Statewide Transit Coordination Plan also strives to address issues identified by local transportation providers and human services agencies. These issues may include barriers to coordination or barriers to the improvement of transportation services in general.

Figure 2: Provider Survey Results - Major Barriers to Improving Transportation Services

[Diagram showing survey results for major barriers to improving transportation services, with 'Funding' being the most cited barrier.]
Transportation service coordination in Arkansas dates back to 1993 when state legislation enacted the Arkansas Public Transportation Coordination Act (§27-3-101) establishing the Arkansas Public Transportation Coordination Council (APTCC). The purpose of this council, in conjunction with ARDOT, was to “accomplish the coordination of transportation services provided to the general public, particularly the transportation-disadvantaged.” The responsibilities of the APTCC included, and still include, the following:

- Serve as a clearinghouse for information relating to public transportation services, funding sources, innovations, and coordination efforts;
- Establish statewide objectives for providing public transportation services for the general public, particularly the transportation disadvantaged;
- Develop policies and procedures for the coordination of federal, state, and local funding for public transportation facilities and services;
- Identify barriers prohibiting the coordination and accessibility of public transportation services and aggressively pursue the elimination of these barriers;
- Assist communities in developing public-transportation systems available for public use, with special emphasis on serving the transportation disadvantaged;
- Assure that all procedures, guidelines, and directives issued by state agencies are conducive to the coordination of public transportation services and facilities;
- Develop standards covering coordination, operation, costs, and utilization of public-transportation services;
- Review, monitor, and coordinate all funding requests for state and federal grants to be used for the provision of public-transportation services; and

- Coordinate all public-transportation programs with the appropriate local, state, and federal agencies and public-transit agencies to ensure compatibility with existing transportation systems.

The 12-member council, which is comprised of members of various state agencies, officials, and appointees, remains active and has worked with ARDOT over the years to promote transportation coordination in Arkansas. Activities carried out by the APTCC include adoption of the Arkansas Statewide Public Transit Needs Assessment, adoption of the 2012 Arkansas Statewide Transit Coordination Plan, and administration of a non-emergency medical transportation study. Prior to the development of the Arkansas Statewide Transit Coordination Plan, coordination plans were developed locally. In 2007 and 2008, 16 local Transit Coordination Plans were developed by various Metropolitan Planning Organizations (MPOs), planning and development districts (PDDs), and counties. This Transit Coordination Plan considers the recommendations and strategies identified in those plans as potential coordination opportunities in the development of coordination strategies.

Currently, ARDOT requires Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program funding applicants to confirm what coordination activities they have recently pursued and to answer questions about leasing/coordination agreements.
The Arkansas Statewide Transit Coordination Plan is more than just a planning document. It is a process through which ARDOT, human services agencies, transportation providers, the APTCC, the public, and other stakeholders collectively identify public transportation resources and needs throughout the state and develop strategies to address those needs. The following explains the process by which this Transit Coordination Plan was developed and provides information about different components of the process.

Public and Stakeholder Outreach

Perhaps the most important part of the coordination planning process is outreach to the public and stakeholders. Engaging these groups provides invaluable knowledge that ensures outcomes cater to the unique needs and challenges of those who are most impacted by the results of the process. The Arkansas Statewide Transit Coordination Plan included two major outreach efforts: coordination workshop meetings and surveys. The first step for the outreach efforts was to identify who to include in the process. Again, FTA regulations require that the coordination planning process include seniors; individuals with disabilities; representatives of public, private, and non-profit transportation and human services providers; and other members of the public. FTA also provides further guidance on who to involve in the planning process, which includes area transportation planning agencies (e.g. MPOs and regional councils), transit providers, human services agencies, transit users, and community/faith-based organizations, among others.

For the eight coordination meetings, ARDOT invited regional planning councils, MPOs, transportation providers, workforce development agencies, and various human services agencies. 115 participants attended the meetings. Together, participants identified barriers to coordination and challenges to providing better transportation services. Participants also provided examples of their coordination efforts and told success stories of how coordination has helped their agencies improve the services they offer. The meetings also served as a venue for providers to get to know one another and begin coordinating.

Several transportation providers even solicited discounted maintenance or training opportunities at these meetings. A survey was made available to agencies that could not attend these meetings to collect their feedback on coordination and their experiences providing transportation services.

Feedback from the public was also gathered through a survey. The public feedback user survey was distributed online through ARDOT’s and other agencies’ websites, but the majority of feedback was collected through in-person outreach to clients by local transportation providers and human services agencies. The outreach included a fairly large sample of the target population groups that are the focus of the Transit Coordination Plan. 20% of respondents were 65 years old or older, 48% indicated that their household income is less than $10,000 annually, and 57% have some type of disability. This effort received 1,025 responses providing feedback on travel behavior, transportation needs, and perception of the quality of transportation services offered throughout Arkansas. The information collected from these surveys was used to determine what additional transportation services are needed in Arkansas and what barriers exist to accessing these services.

Identify Resources and Needs

The next step in the coordination planning process was to assess available transportation resources (e.g. providers, funding, vehicles) and transportation needs. This was partially done in the public outreach process as providers were identified for participation and both the public and providers gave feedback on local transportation needs of the community. In this Transit Coordination Plan, however, additional analysis was performed using available data sources to cultivate a more complete assessment of available transportation resources and community needs. These assessments started with collection of available data from reliable and readily-available sources. The resources and needs data were then aggregated and mapped using GIS tools for comparison. Observing and analyzing the resources and needs data together, the Transit Coordination Plan identified where gaps in transportation services, or mismatches between
transportation resources and needs, exist. More detailed information about this portion of the process is included in the Gap Analysis section of this document.

**Develop Strategies to Address Gaps**

After identifying gaps in transportation service, the next step in the process was to develop strategies and identify projects that address these gaps or take advantage of opportunities to improve transportation services. Strategies refer to specific coordination activities, such as establishing a centralized maintenance structure or developing a pooled insurance program. Coordination strategies were developed based on information gathered from outreach meetings, which often included recommendations for addressing coordination barriers or discussions about potential coordination opportunities. Additional strategies were recommended based on local knowledge, gap analysis findings, and suggestions from other coordination efforts. This plan also includes projects (e.g. vehicles) for which local agencies are requesting Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310) program funding, as required by federal regulations. These projects are evaluated for how well they are anticipated to address transportation service gaps.

**Prioritize Strategies**

Once recommended strategies and projects were identified, they were prioritized based on available resources, time, implementation feasibility, and anticipated effectiveness. APTCC and ARDOT prioritized recommended strategies by scoring prioritization criteria for each strategy. In accordance with FTA requirements, ARDOT will ensure that the prioritized strategies and projects seeking Section 5310 funding are included in the STIP and that the coordination process is appropriately incorporated into metropolitan and statewide transportation planning processes.

**Establish Performance Measures and Monitor Progress**

The final step in the coordination planning process was to develop performance measures to monitor progress in achieving the goals of this Transit Coordination Plan (i.e. to improve quality of and accessibility to transportation services for target populations through coordination) and to evaluate the effectiveness of coordination strategies. The performance measures are intended to be a baseline for comparing the quality and availability of transportation services throughout Arkansas over time. By monitoring performance over time, ARDOT can identify what coordination strategies and improvement projects are most impactful and can adjust its priorities and strategies to establish a more coordinated and efficient transportation system.
Transportation Needs and Gap Analysis

Assessments of available transportation resources and transportation needs of target populations residing in Arkansas are the foundation of this Transit Coordination Plan. The results of the gap analysis included in this plan indicate where there are mismatches between transportation resource allocation and transportation needs and where there are overlaps in transportation services. In other words, gap analysis reveals where there are not enough (or too many) transportation resources (e.g. providers and vehicles) to match demand, particularly from transportation-disadvantaged population groups. While it is difficult for transportation service providers to satisfy all transportation demand, especially in more rural environments like Arkansas, ongoing coordination efforts can improve providers’ capabilities to better serve their communities. Ultimately, the findings from this analysis inform decision-making in regard to public transportation investment by identifying where additional services are needed.

The following sections describe the methodology and data used for various components of the Arkansas Transit Coordination Plan gap analysis. The results indicate how well public transit and human services transportation providers are meeting the transportation needs of Arkansas communities and what transportation service gaps may exist. Due to unavailability of statewide data for all public, private, and nonprofit transportation and human services providers, this analysis focuses on FTA-funded general public transit (urban 5307 or rural 5311) and human services transportation (5310) providers. Data for FTA-funded providers is readily available through the National Transit Database (NTD), ArDOT’s Public Transportation Directory, and ArDOT’s data collection efforts under the Section 5310 program. Though transportation providers and human services agencies not funded by FTA are absent from the gap analysis, they are included in the coordination planning process and are discussed further in the Transportation Resources subsection. More detailed gap analysis that includes these other transportation service providers may be achieved at the local level.

Transportation Needs Assessment

Federal regulations require that coordination plans identify the transportation needs of seniors, those with disabilities, and those with low income. In this analysis, transportation need is expressed as an indicator of potential demand for public transit or human services transportation.* This indication is based on the assumption that certain population groups (e.g. seniors, PWDS, and those with low income) have limited mobility options resulting in some level of unmet travel demand and require transportation services to travel on a day-to-day basis. The Arkansas Statewide Transit Coordination Plan identified transportation needs of target populations, as well as minorities and those with no vehicle access (i.e. the transportation-disadvantaged), in two ways: analysis of demographic data and analysis of survey feedback.

Transportation Needs Index and Demand

Transportation needs index is designed to indicate which counties throughout Arkansas have higher concentrations of transportation-disadvantaged population groups and, as a result, potentially higher needs for public transit and human services transportation. To calculate needs index, county-level demographic data from the United States Census Bureau was used to calculate county population percentages of the specified population groups and compare them to statewide population percentages. The ratio of county percentage to statewide percentage represents an index for that population group, where a value of 1 indicates that a county’s population percentage is equal to the state percentage. Values below 1 indicate that there is a lower percentage of that population group (i.e. less need) in a particular county compared to the state, and values greater than 1 indicate a higher percentage (i.e. more need). For each county the index values of each population group were combined to create a total needs index, where higher values indicate more potential need for public transit and human services transportation (i.e. larger percentages of target, transportation-disadvantaged population groups compared to the rest of the state).

*Note: This assessment of transportation needs does not reflect absolute values of trips needed; it simply provides an indication of relative unmet trip demand for context and evaluation.
Figure 3: County Transportation Needs Index

Transportation Needs Index

- 3.5 or less (low need)
- 3.5 - 4.0
- 4.0 - 4.8
- 4.8 or more (high need)
Table 1 shows an example calculation of transportation needs index. Figure 3 shows the needs index for each county and reveals the highest need for public transit and/or human services transportation is in counties located along the Mississippi River in eastern Arkansas and in southern Arkansas. Phillips, Chicot, Monroe, Lee, and Desha counties have the highest needs index and have higher percentages of all target population groups compared to the state as whole. Note that needs index only indicates potential demand for public transit or human services transportation. There are many other factors that affect transportation demand to consider. Though the index reflects likely customer base for public transit and human services transportation, not every transportation-disadvantaged person would use these services if provided.

This plan attempts to quantify Arkansas transportation needs by estimating potential transit demand in terms of trips. To estimate potential transit demand, this analysis assumes that persons living in households without a vehicle would take the same number of daily trips as those with vehicle access if a comparable level of transit was available. This level of transit may be unrealistic, but this approach provides a simple, replicable method for estimating potential transit demand. It is also assumed that additional trip demand, or the gap in trips taken between those with and those without vehicle access, would be served by public transit. In reality additional trip demand would likely be satisfied by a variety of other transportation providers (e.g. volunteer drivers or churches) or means of transportation (e.g. walking or biking). The result of this analysis is a relatively high estimate of potential transit trip demand that is intended to represent an approximation of transportation needs. This estimate does not indicate an exact calculation of additional transit trips to be served and is only meant to be used as a planning tool to quantify potential transportation service demand for purposes of performance evaluation and tracking.

Calculating transit trip demand starts with collecting household trip data from the National Household Travel Survey (NHTS) and household vehicle access data from the U.S. Census Bureau. This analysis uses a sample of the NHTS data for the “South” region, which includes Arkansas and other states located in southeastern United States. The next step is to calculate daily trip rates (i.e. how many trips household residents make each day) for households with no vehicle access and households with vehicle access. The difference between the two trip rates results in a trip rate that quantifies the daily additional trip demand for households with no vehicle access. The trip demand rate is then multiplied by the number of Arkansas households with no vehicle access. The result is the number of additional daily transit trips needed for transportation-disadvantaged persons living in Arkansas to have comparable levels of transportation as those with vehicle access. Daily trip demand was multiplied by 260 to convert this value to annual weekday transit trip demand. Table 2 shows estimates of potential annual transit demand in Arkansas.

Table 1: Transportation Needs Index Calculation Example

<table>
<thead>
<tr>
<th></th>
<th>% Seniors or PWDs</th>
<th>Seniors or PWDs Index</th>
<th>% in Poverty</th>
<th>Poverty Index</th>
<th>% Minority</th>
<th>Minority Index</th>
<th>% Households with No Vehicle Access</th>
<th>No Vehicle Access Index</th>
<th>Needs Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>25.6%</td>
<td>-</td>
<td>18.7%</td>
<td>-</td>
<td>26.4%</td>
<td>-</td>
<td>6.3%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ashley County</td>
<td>31.5%</td>
<td>1.23</td>
<td>20.5%</td>
<td>1.10</td>
<td>32.1%</td>
<td>1.22</td>
<td>5.2%</td>
<td>0.82</td>
<td>4.36</td>
</tr>
</tbody>
</table>

Table 2: Potential Transit Demand (Trips) Estimates

<table>
<thead>
<tr>
<th>Daily Trip Rate - Vehicle Access</th>
<th>Daily Trip Rate - No Vehicle Access</th>
<th>Transit Gap Trip Rate</th>
<th>Households with No Vehicle Access</th>
<th>*Potential Transit Trip Demand (Daily)</th>
<th>*Potential Transit Trip Demand (Annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0</td>
<td>3.6</td>
<td>4.4</td>
<td>71,684</td>
<td>316,460</td>
<td>82,279,506</td>
</tr>
</tbody>
</table>

*Potential transit demand estimates are not exact calculations of transit trips to be served; they are meant to represent transportation service needs for high-level planning purposes only.
Survey Results

In addition to quantitative analysis, the Arkansas Transit Coordination Plan also uses feedback from transportation service providers and the public to identify additional transportation needs. The information provided in these two surveys provides another way to measure performance of transportation service providers and how well they are coordinating.

Transportation Providers

The provider survey received 105 unique responses from public transit and human services transportation providers in Arkansas. Through this survey, providers reported information about service areas and hours of operation that was used to determine available transportation resources. Several of the survey responses provided a way to measure and monitor how well services are being provided and how well agencies are coordinating services. In regard to needs, however, 70% of respondents indicated that additional transportation services were needed within the counties they served. Figure 4 shows which services transportation providers indicated were needed the most, with service for the seniors and PWDs being the most needed services, followed by weekend service.

41% of providers responded that they did not apply for federal transit funding every year. This may indicate that providers have difficulty with the funding application process or they do not have funds to meet match requirements. In response to questions regarding providers’ coordination efforts, only 56% indicated that they coordinate with other local providers (Figure 5). For providers who pick up or drop off customers within other providers’ service areas, 70% answered that they did not coordinate connections between services. These responses reveal a substantial lack of coordination, which is a concern considering nearly every public transit and human services transportation provider can benefit from coordinating with other providers, especially for those who operate in the same service area.

Additionally, 70% of responding providers reported that they did not use any scheduling or data collection technology. Many providers who responded are small human services agencies that may not have enough ridership to require these tools. However, this may be an opportunity for improving transportation services as specialized scheduling software exists for smaller, rural transportation providers that can help maximize productivity.

In regard to needs, however, 70% of respondents indicated that additional transportation services were needed within the counties they served. Figure 4 shows which services transportation providers indicated were needed the most, with service for the seniors and PWDs being the most needed services, followed by weekend service.

41% of providers responded that they did not apply for federal transit funding every year. This may indicate that providers have difficulty with the funding application process or they do not have funds to meet match requirements. In response to questions regarding providers’ coordination efforts, only 56% indicated that they coordinate with other local providers (Figure 5). For providers who pick up or drop off customers within other providers’ service areas, 70% answered that they did not coordinate connections between services. These responses reveal a substantial lack of coordination, which is a concern considering nearly every public transit and human services transportation provider can benefit from coordinating with other providers, especially for those who operate in the same service area.

Additionally, 70% of responding providers reported that they did not use any scheduling or data collection technology. Many providers who responded are small human services agencies that may not have enough ridership to require these tools. However, this may be an opportunity for improving transportation services as specialized scheduling software exists for smaller, rural transportation providers that can help maximize productivity.

In regard to needs, however, 70% of respondents indicated that additional transportation services were needed within the counties they served. Figure 4 shows which services transportation providers indicated were needed the most, with service for the seniors and PWDs being the most needed services, followed by weekend service.

41% of providers responded that they did not apply for federal transit funding every year. This may indicate that providers have difficulty with the funding application process or they do not have funds to meet match requirements. In response to questions regarding providers’ coordination efforts, only 56% indicated that they coordinate with other local providers (Figure 5). For providers who pick up or drop off customers within other providers’ service areas, 70% answered that they did not coordinate connections between services. These responses reveal a substantial lack of coordination, which is a concern considering nearly every public transit and human services transportation provider can benefit from coordinating with other providers, especially for those who operate in the same service area.

Additionally, 70% of responding providers reported that they did not use any scheduling or data collection technology. Many providers who responded are small human services agencies that may not have enough ridership to require these tools. However, this may be an opportunity for improving transportation services as specialized scheduling software exists for smaller, rural transportation providers that can help maximize productivity.
Transportation Service Users

Responses from the user survey included information about transportation needs, travel behavior, and satisfaction with transportation services. The majority of this analysis focuses on those who take public transit or human services transportation. For several questions, results were differentiated between those who are seniors or PWDs and those who are not, in order to assess the difference in travel experience and behavior between the groups. For the nearly 500 people who responded to the survey who never take public transit or human services transportation, about a third noted that they simply chose not to use these services or preferred to use their car. Nearly a quarter indicated that transportation services were not available where they lived.

For regular users of transportation services, 42% indicated that they need to travel on the weekends. However, data shows that only 22% of transportation providers that provide schedules or hours of operation information provide service on the weekends. When looking at what time of day respondents need to travel, the average time to leave their home was 7:30 AM and the average time they need to be back home is 4:00 PM. Provider schedule information indicates that the average service start time for providers is 7:00 AM and average end time is 5:00 PM. These findings indicate that transportation services are provided at the appropriate times of day but there may be gaps in service on weekends. This observation is supported in other responses to this survey where respondents were asked what would make them likely to use public transit or human services transportation more.

In response to a question regarding how easy it is to find and understand transportation service information, 74% of respondents indicated that it was easy to find and understand. Figure 6 shows what sources riders use to get information about transportation services. Although the majority of people note that it is easy to find and understand information, there may be opportunity for improvement of information materials and marketing considering the most popular source for data is through word of mouth.

To help determine where transportation services could improve, respondents who indicated that they regularly took public transit or human services transportation were asked to complete the following sentence: “I would likely use public transit more if…” Figure 7 shows the responses to this question and reveals that transportation service users would most prefer expanded services that better serve their places of residence, or door-to-door service. The second biggest need provided in response to this question was more weekend

0% 5% 10% 15% 20%

transportation.
service, which supports earlier analysis asking riders when they need to travel and comparing results to providers’ days of operation. Interestingly, the next biggest need is later evening services, which does not necessarily support previous observations that indicate that hours of operation are sufficient for riders’ needs. It may be the case that respondents indicated an earlier time that they need to be home because that is when transportation services are available. Other needs identified by this question were more frequent and reliable services.

Over 350 public transit or human services transportation users who reported to be a senior or PWD responded to the survey. When asked what type of assistance was needed when traveling, 40% indicated that they did not require any special assistance. Others noted that they required assistance loading/unloading items (16%) and help getting into and out of vehicles (13%). The remaining survey responses regarding transportation service user satisfaction are provided in the Performance Measures section.

### Transportation Resources

This plan identifies public transit and human services transportation resources by observing how active transportation providers are distributed throughout Arkansas. It also assesses the number of vehicles available to these providers and where they provide service. Additional provider information is also used to determine performance. ARDOT maintains a public transportation directory that provides information about active public transit and human services transportation providers that receive FTA funding and the areas they serve.

32% of user survey respondents indicated that, at least once a week, they were NOT able to reach destinations due to a lack of public transportation services.

Additional information was gathered from the National Transit Database (NTD) and provider surveys distributed by ARDOT.

Figure 8 shows all 171 active FTA-funded public transit and human services transportation providers throughout Arkansas, where larger dots represent agencies with more vehicles. Figure 8 also indicates which counties do not have an active transportation providers located and providing service within that county. This map reveals that providers are concentrated in just a few counties, particularly the ones with larger urbanized areas (e.g. Pulaski). Outside of these select few counties, there is a lack of transportation providers, especially in south central and northeast Arkansas.

While Figure 8 highlights where providers are located throughout Arkansas, it does not take into account that many providers operate in multiple counties outside of where they are headquartered. In fact, about 49% of providers reported in ARDOT’s Public Transportation Directory or provider survey that they provide service in multiple counties. Taking this into account reveals that every county in Arkansas is served by human services transportation (5310) and 62 counties are served by general public (urban 5307 and/or rural 5311) transit. Note that even though a county may be served by a transportation provider, it is difficult to determine the actual quality of service being provided, especially considering some providers serve large areas of five counties or more. Information from providers and general reasoning suggests that it is likely that services provided to counties outside of the county the provider is located in may exhibit reduced levels of service. Figure 9 shows the 13 counties with no access to general public transit (urban 5307 and rural 5311) service.

### Additional Transportation Resources Considerations

The analysis in this plan focuses on FTA-funded transit and human services transportation providers. However, it is important to consider the many other public, private, and nonprofit transportation providers and human services agencies operating within Arkansas. These other agencies and organizations can include churches, nursing homes, child services agencies, veterans affairs organizations, workforce development boards, volunteer drivers, intercity bus companies, taxi companies, and transportation network companies.
Figure 8: Active Public Transit and Human Services Transportation Providers

Vehicles

1 ➩ 180

Providers by Service Type

- General Public (5307/5311)
- Human Services (5310)
- No Providers in County

*Does not include temporarily reassigned vehicles
Figure 9: Arkansas Counties Not Served by General Public Transit (Urban 5307 & Rural 5311)
Of particular note are Arkansas’ non-emergency medical transportation (NEMT) providers, which provide transportation services to/from doctors appointments for Medicaid recipients and other qualified individuals. This service is a vital link for those with low-income or certain medical conditions to access health care. In Arkansas, this service is coordinated by six brokerage agencies throughout the state who match clients with transportation providers in their area. In 2015, NEMT providers in Arkansas provided over 1.9 million trips to Medicaid recipients or those determined to be medically frail.

These various other transportation service providers and agencies play an important role in the provision and coordination of transportation services throughout the state. However, these organizations are often difficult to track and collect data for, particularly at the state level. Identifying these agencies and determining what resources they have available to provide service can greatly improve the transportation coordination process. When possible, lead agencies at the local level should work to identify all providers and agencies, including but not limited to those mentioned above. The lead agencies should also work to engage them in the local transportation service coordination process. The result is a more inclusive process that takes advantage of all available resources.

**Gap Identification**

The maps identifying transportation service needs and resources provide an initial assessment of where gaps in public transit and human services transportation services may exist throughout Arkansas. For instance, counties that are only served by providers from other counties or do not have access to general public transit (urban 5307 and rural 5311) services do not have the transportation resources available to serve potential riders. Comparing available transportation resources to needs provides a more robust picture of potential gaps. Figure 10 shows active public transit and human services transportation providers overlaid on the needs index map. This figure reveals that many of the areas with relatively high transportation needs are not served by public transit or human services transportation providers. Though some of these counties are served by providers from other counties, this service is likely limited. General areas where significant transportation gaps appear to be present are in the northeast bordering the Mississippi River (Mississippi, Crittenden, Lee counties) and throughout the southern portion of the state (Dallas, Nevada, Lafayette, Bradley counties).

Conversely, the map also indicates where there are potential overlaps in service by highlighting where multiple providers operate within close proximity of one another. Boone, Washington, Sebastian, Jefferson, Craighead, and Pulaski counties are all served by more than five transportation providers. It is crucial that providers within these counties coordinate to ensure they do not have overlaps or duplication of service. While the relatively high number of providers for these counties may be appropriate due to their larger populations, both Boone and Jefferson counties have comparatively smaller populations (under 75,000 people). Boone also has a very low transportation needs index compared to other counties. For these counties, it is important to consider how to best maximize resources and potentially provide services to other areas.

Comparing the number of available public transit or human services transportation vehicles to population in each county provides an even more detailed assessment of potential transportation gaps. This measure (i.e. vehicles per person) provides a quantifiable indicator of available resources relative to the number of potential riders. Figure 11 shows the number of general public transit (urban 5307 and rural 5311) vehicles available within each county per 10,000 people. Figure 12 shows the number of human services transportation (5310) vehicles relative to the number of seniors or PWDs living in each county. Note that providers’ vehicles are assigned to counties where the provider is located and does not consider that providers operate across county borders.
Figure 10: Transportation Providers and Needs Index

Transportation Needs Index

- 3.5 or less (low need)
- 3.5 - 4.0
- 4.0 - 4.8
- 4.8 or more (high need)

Vehicles

1 - 180
Figure 11: General Public Transit (Urban 5307 & Rural 5311) Vehicles per 10,000 Persons

General Public Transit (5307/5311) Vehicles per 10,000 Persons
- 2 or less
- 2 - 5
- 5 - 15
- 15 - 26
Figure 12: Human Services Transportation (5310) Vehicles per 10,000 Persons - Seniors and PWDs

Human Services Transportation (5310) Vehicles per 10,000 Persons - Seniors and PWDs

- 5 or less
- 5 - 10
- 10 - 20
- 20 - 49
Compared to other counties with urban (5307) and rural (5311) providers, Garland and Craighead counties have very few resources to serve their residents. Both counties have populations around 100,000 but have less than 20 available transit vehicles, indicating a gap in general transit service. Looking at human services transportation (5310) vehicles per person who are seniors or PWDs, the counties with the fewest resources compared to population are Izard, Ashley, and Sharp. Although these counties have fairly small populations (under 25,000), nearly a third of each county’s population is either a senior or PWD, and there are five human services transportation (5310) vehicles combined to serve these target groups. Relatively large transportation service gaps exist in these counties for seniors and PWDs, as well as other counties with similar levels of available vehicles per person.

These various comparisons provide different indications of transportation service gaps. Table 3 (sorted by highest needs index; pages 25-27) summarizes all of the findings from the county transportation resources and needs assessments and comparisons in order to better visualize which counties are being underserved (i.e. have the biggest transportation service gaps). Monroe and Lee counties have some of the highest need for transportation services, but there are no public transit or human services providers located within those counties. These counties are primarily served by providers located in other counties serving larger regions. Lafayette and Nevada counties are both in the highest quartile (top 25%) of needs index but have no transportation providers located within the county and are not served by general public transit providers from other counties. The only service provided to residents of these counties are from several human services agencies that serve large areas of four counties or more, making it difficult to determine the quality of transportation provided to these areas. These counties have small populations (<10,000 people) compared to other counties, but the lack of service in this area results in transportation service gaps.

Crittenden County is the fourteenth most populous county in the state and has the seventh highest needs index; however, there are no providers located within the county and only a small rural transit (5311) provider from another county offers limited service. The county is served by three human services transportation (5310) providers that are located in other counties. However, two of these providers have few available resources, and one is responsible for serving multiple other counties in northeast Arkansas. Bradley County, though smaller in population, has a similar gap in service but is included in the service area of one of the largest rural transit (5311) providers, in terms of number of vehicles, in the state. St. Francis County, the twenty-fourth most populous county, has the sixth highest needs index and a high percentage of households with no vehicle access, but the only general public transit service available to residents is from a small rural transit (5311) provider (<5 vehicles) located several counties away. Counties mentioned in this gap analysis are shown to have significant transportation service gaps. Future resource allocation and coordination activities should address the gaps identified for these counties.

Table 3: County Transportation Gap Indicators

<table>
<thead>
<tr>
<th>County</th>
<th>Needs Index</th>
<th>Providers in County</th>
<th>Served by General Transit</th>
<th>5307/5311 Vehicles per 10k Persons</th>
<th>5310 Vehicles per 10k Persons*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillips</td>
<td>7.93</td>
<td>2</td>
<td>Yes</td>
<td>25.50</td>
<td>6.13</td>
</tr>
<tr>
<td>Chicot</td>
<td>7.59</td>
<td>4</td>
<td>Yes</td>
<td>-</td>
<td>44.53</td>
</tr>
<tr>
<td>Monroe</td>
<td>7.47</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lee</td>
<td>7.27</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Desha</td>
<td>7.12</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>21.94</td>
</tr>
<tr>
<td>St. Francis</td>
<td>6.12</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>7.26</td>
</tr>
<tr>
<td>Crittenden</td>
<td>6.11</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Woodruff</td>
<td>6.04</td>
<td>3</td>
<td>Yes</td>
<td>-</td>
<td>20.48</td>
</tr>
<tr>
<td>Bradley</td>
<td>6.03</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lafayette</td>
<td>5.81</td>
<td>0</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jefferson</td>
<td>5.80</td>
<td>8</td>
<td>Yes</td>
<td>17.81</td>
<td>11.70</td>
</tr>
<tr>
<td>Dallas</td>
<td>5.73</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ouachita</td>
<td>5.63</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>27.46</td>
</tr>
</tbody>
</table>

*Persons = only seniors and PWDs
<table>
<thead>
<tr>
<th>County</th>
<th>Needs Index</th>
<th>Providers in County</th>
<th>Served by General Transit</th>
<th>5307/5311 Vehicles per 10k Persons</th>
<th>5310 Vehicles per 10k Persons*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hempstead</td>
<td>5.45</td>
<td>3</td>
<td>No</td>
<td>-</td>
<td>24.52</td>
</tr>
<tr>
<td>Nevada</td>
<td>5.42</td>
<td>0</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mississippi</td>
<td>5.39</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Howard</td>
<td>4.98</td>
<td>1</td>
<td>No</td>
<td>-</td>
<td>29.80</td>
</tr>
<tr>
<td>Columbia</td>
<td>4.97</td>
<td>4</td>
<td>Yes</td>
<td>-</td>
<td>21.39</td>
</tr>
<tr>
<td>Arkansas</td>
<td>4.83</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>6.85</td>
</tr>
<tr>
<td>Lincoln</td>
<td>4.69</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>21.10</td>
</tr>
<tr>
<td>Union</td>
<td>4.66</td>
<td>2</td>
<td>Yes</td>
<td>2.23</td>
<td>9.49</td>
</tr>
<tr>
<td>Pulaski</td>
<td>4.66</td>
<td>26</td>
<td>Yes</td>
<td>2.23</td>
<td>9.49</td>
</tr>
<tr>
<td>Drew</td>
<td>4.59</td>
<td>3</td>
<td>Yes</td>
<td>-</td>
<td>27.37</td>
</tr>
<tr>
<td>Miller</td>
<td>4.47</td>
<td>5</td>
<td>Yes</td>
<td>4.58</td>
<td>18.56</td>
</tr>
<tr>
<td>Sebastian</td>
<td>4.46</td>
<td>7</td>
<td>Yes</td>
<td>2.04</td>
<td>6.95</td>
</tr>
<tr>
<td>Sevier</td>
<td>4.45</td>
<td>1</td>
<td>No</td>
<td>-</td>
<td>5.53</td>
</tr>
<tr>
<td>Cross</td>
<td>4.40</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>3.91</td>
</tr>
<tr>
<td>Ashley</td>
<td>4.36</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>2.99</td>
</tr>
<tr>
<td>Calhoun</td>
<td>4.33</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jackson</td>
<td>4.29</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>12.68</td>
</tr>
<tr>
<td>Poinsett</td>
<td>4.29</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Little River</td>
<td>4.27</td>
<td>0</td>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Prairie</td>
<td>4.19</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Garland</td>
<td>4.18</td>
<td>4</td>
<td>Yes</td>
<td>1.13</td>
<td>3.50</td>
</tr>
<tr>
<td>Clark</td>
<td>4.15</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>6.60</td>
</tr>
<tr>
<td>Scott</td>
<td>4.12</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>3.20</td>
</tr>
<tr>
<td>Yell</td>
<td>3.99</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>10.68</td>
</tr>
</tbody>
</table>

*Persons = only seniors and PWDs
Table 3: County Transportation Gap Indicators (continued)

<table>
<thead>
<tr>
<th>County</th>
<th>Needs Index</th>
<th>Providers in County</th>
<th>Served by General Transit</th>
<th>5307/5311 Vehicles per 10k Persons</th>
<th>5310 Vehicles per 10k Persons*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin</td>
<td>3.28</td>
<td>2</td>
<td>Yes</td>
<td>-</td>
<td>9.64</td>
</tr>
<tr>
<td>Newton</td>
<td>3.27</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>7.15</td>
</tr>
<tr>
<td>Boone</td>
<td>3.25</td>
<td>6</td>
<td>Yes</td>
<td>16.92</td>
<td>23.20</td>
</tr>
<tr>
<td>White</td>
<td>3.21</td>
<td>3</td>
<td>No</td>
<td>-</td>
<td>4.02</td>
</tr>
<tr>
<td>Crawford</td>
<td>3.12</td>
<td>3</td>
<td>Yes</td>
<td>-</td>
<td>8.63</td>
</tr>
<tr>
<td>Madison</td>
<td>3.11</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Perry</td>
<td>3.06</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>3.18</td>
</tr>
<tr>
<td>Faulkner</td>
<td>3.03</td>
<td>4</td>
<td>No</td>
<td>-</td>
<td>7.17</td>
</tr>
<tr>
<td>Greene</td>
<td>2.85</td>
<td>1</td>
<td>Yes</td>
<td>-</td>
<td>49.19</td>
</tr>
<tr>
<td>Lonoke</td>
<td>2.76</td>
<td>3</td>
<td>Yes</td>
<td>-</td>
<td>9.04</td>
</tr>
<tr>
<td>Benton</td>
<td>2.75</td>
<td>4</td>
<td>Yes</td>
<td>-</td>
<td>9.04</td>
</tr>
<tr>
<td>Saline</td>
<td>2.65</td>
<td>5</td>
<td>Yes</td>
<td>15.72</td>
<td>5.41</td>
</tr>
<tr>
<td>Cleburne</td>
<td>2.64</td>
<td>2</td>
<td>No</td>
<td>-</td>
<td>10.26</td>
</tr>
<tr>
<td>Grant</td>
<td>2.38</td>
<td>0</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Persons = only seniors and PWDs

The comparisons between transportation needs and resources highlight what counties have transportation service gaps relative to one another. Additionally, this Transit Coordination Plan estimates the transportation service gap for Arkansas by calculating the percentage of total transit demand met by current levels of service. Transit demand is the sum of the current number of transit trips provided (i.e. 2016 transit ridership) and potential transit trip demand (as calculated in the Transportation Needs Assessment section). Current service levels are represented as transit trips provided. Table 4 shows the estimated percentage of transit demand met in Arkansas.

Table 4: Transit Trip Demand Met

<table>
<thead>
<tr>
<th><strong>Potential Transit Trip Demand (Annual)</strong></th>
<th><strong>Transit Trips Provided (2016)</strong></th>
<th><strong>Total Transit Demand</strong></th>
<th><strong>% Transit Demand Met</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>82,279,506</td>
<td>8,550,049</td>
<td>90,829,555</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Additional Capital Equipment & Service Assessment

Potential transit trip demand estimates, as shown in Table 2, can provide a basis for assessing what additional capital equipment and services are needed to satisfy transit demand in excess of current service levels. Note, though, that additional transit trips are calculated based on the assumptions that there is easily accessible, high-quality transit comparable to having access to a personal vehicle and that any trips taken by those without vehicle access beyond current travel would be via public transit. In reality it is unlikely that this level of transit could be achieved and that all individuals with additional transportation needs would exclusively take public transit, even if it was available. Therefore, the potential transit demand calculated for this plan is overstated and not appropriate for estimating the number of additional vehicles and service hours needed. To assess additional capital equipment and service needs, more refined information on actual transit demand is required. With this information and data on how many trips are being provided under current levels of service, additional transportation resource needs can be determined.

Key Destinations Analysis

Key destination analysis is meant to evaluate the distribution of transportation providers and how many important destinations throughout the state fall within providers’ service areas. The most important aspect of this analysis is determining service areas for providers. While urban transit (5307) providers typically have well-defined service areas, rural transit (5311) providers and those who provide transportation services for seniors or PWDs (i.e. 5310 providers) often operate anywhere within the county they are located and adjacent counties. In order to roughly approximate service areas for rural...
Performance Measures

Performance measures for the Arkansas Transit Coordination Plan evaluate how well Arkansas public transit and human services transportation providers are meeting the demands of their communities. They also reveal how well providers are coordinating amongst one another. Tracking the measures over time allows ArDOT to monitor the effectiveness of transportation investments and coordination strategies. The performance measures for this plan were calculated using data and results from the various analyses described in previous sections, as well as information from the provider and user surveys. Performance measures established for this plan include:

- **Ridership** – 2016 ridership by service type which is a measure of transportation service provided; an increase over time generally indicates that transportation services are being provided more effectively or more services are being offered; note that not all human services transportation (5310) providers collect ridership data, so an increase may indicate an increase in reporting

- **Community Satisfaction** – a community satisfaction rating between 1 and 5, where 1 is "Very Unsatisfied" and 5 is "Very Satisfied"; results are collected from the user survey, where respondents are asked, “How satisfied are you with public transit in your community?”

- **Vehicles per 10,000 Persons** – indicates the amount of resources available relative to population being served; calculated separately for general public transit (5307 and 5311) and human services transportation (5310) providers; an increase in this measure over time indicates that more transportation resources are being made available to serve Arkansas communities

- **Percent of Transit Demand Met** – the percentage of annual ridership compared to total transit trip demand; total transit demand is equal to the current number of transit trips taken plus potential transit demand; an increase over time indicates that need for transit is decreasing or providers are better serving their communities by providing more trips

Once service areas were approximated for each provider, they were overlaid onto key destination points. Key destinations in this analysis include medical facilities, employment centers, and schools/universities. The number of points that fell within provider service areas were summed and defined as destinations served by transportation services. This process was performed separately between general public transit (urban 5307 and rural 5311) and human services transportation (5310) providers. Table 5 shows the estimated percentage of key destinations in Arkansas served by public transit and human services transportation providers. This analysis is a rough approximation of transportation service coverage across the state, but with more detailed service area information, it can highlight key destinations that are not served by transportation services, particularly at the local level.

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Destinations Served</th>
<th>Percentage of Destinations Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Public (5307 &amp; 5311)</td>
<td>16,157</td>
<td>59.7%</td>
</tr>
<tr>
<td>Human Services (5310)</td>
<td>18,467</td>
<td>68.3%</td>
</tr>
</tbody>
</table>
• **Average Cost per Trip** – measure of cost-effectiveness in providing public transit service; collected from NTD and only for urban (5307) and rural (5311) transit providers; a decrease over time indicates providers are reducing operating costs or picking up more passengers with similar service levels

• **Productivity** – total trips per vehicle revenue hour; data collected from NTD and only for urban (5307) and rural (5311) transit providers; calculated by dividing the total number of trips provided by the total number of vehicle revenue hours; an increase over time indicates that providers are picking up more passengers with similar levels of service, either through more transit demand or reconfiguration of services

• **Percent of Key Destinations Served** – percentage of employment centers, medical facilities, or schools/universities within specified distances of transportation providers; a rough estimation of area and destinations served; an increase over time indicates that providers are distributed more effectively

• **Coordination Workshop Attendees** – number of participants attending transportation coordination workshops; an increase over time indicates that more providers and agencies are getting involved in the coordination process and providing valuable feedback

• **Percent of Providers Coordinating** – percentage of public transit and human services transportation providers who reported that they coordinate with other providers; results are collected from the transportation provider survey; an increase indicates that more providers are participating in coordination efforts

Table 6 shows the baseline performance measures calculated for this plan. These measures should be monitored over time to evaluate the effectiveness of public transit and human services transportation resource allocation and coordination efforts.

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership</td>
<td>-</td>
</tr>
<tr>
<td>General Public Transit (5307/5311)</td>
<td>6,735,229</td>
</tr>
<tr>
<td>Human Services Transportation (5310)</td>
<td>1,814,820</td>
</tr>
<tr>
<td>Community Satisfaction Rating</td>
<td>3.74</td>
</tr>
<tr>
<td>Vehicles per 10,000 Persons</td>
<td>-</td>
</tr>
<tr>
<td>General Public Transit (5307/5311)</td>
<td>2.4</td>
</tr>
<tr>
<td>Human Services Transportation (5310)</td>
<td>9.1</td>
</tr>
<tr>
<td>Percent of Transit Demand Met</td>
<td>9.4%</td>
</tr>
<tr>
<td>Average Cost per Trip</td>
<td>$17.52</td>
</tr>
<tr>
<td>Productivity (Trips per Vehicle Revenue Hour)</td>
<td>6.2</td>
</tr>
<tr>
<td>Percent of Key Destinations Served</td>
<td>-</td>
</tr>
<tr>
<td>General Public Transit (5307/5311)</td>
<td>59.7%</td>
</tr>
<tr>
<td>Human Services Transportation (5310)</td>
<td>68.3%</td>
</tr>
<tr>
<td>Coordination Workshop Attendees</td>
<td>115</td>
</tr>
<tr>
<td>Percent of Providers Coordinating</td>
<td>56%</td>
</tr>
</tbody>
</table>

Performance measures help evaluate how well Arkansas public transit and human services transportation providers are meeting the demands of their communities and how well they are coordinating transportation services amongst one another and with other agencies.
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 to develop coordination strategies and projects to address these gaps. This objective reflects the intentions of FTA, CCAM, and the requirement for coordinated transportation plans. For the Arkansas Transit Coordination Plan to be successful, it must also coincide with the overall statewide transportation goals and planning processes. One of the main strategies developed from the Arkansas Long Range Intermodal Transportation Plan is to “implement a comprehensive set of rural transportation regions to ensure that there is a regional entity responsible for addressing the needs in all areas of the state.” This Transit Coordination Plan supports this strategy and is meant to complement the overall direction of transportation planning and decision-making in Arkansas. All strategies and projects identified in this plan and selected for funding will be incorporated into the STIP.

Coordination Strategies

One of the main strategies developed from the Arkansas Long Range Intermodal Transportation Plan is to “implement a comprehensive set of rural transportation regions to ensure that there is a regional entity responsible for addressing the needs in all areas of the state.” This Transit Coordination Plan supports this strategy and is meant to complement the overall direction of transportation planning and decision-making in Arkansas. All strategies and projects identified in this plan and selected for funding will be incorporated into the STIP.

Coordination Opportunities and Recommendations

The coordination strategies presented in this plan were intended to build off previous coordination efforts and to take advantage of opportunities that currently exist among Arkansas transportation providers. Previous strategies provided in the 2012 Arkansas Transit Coordination Plan include the following:

- Preserve and maintain existing vehicles and equipment.
- Maximize the use of existing fleets operating within the same city or county, especially for agencies who provide services to the same types of clientele.
- Continue to support vehicle and operating needs of transportation providers presently receiving assistance under FTA programs.
- Coordinate the development of model contracts or agreements for sharing vehicles, personnel, joint supply purchasing, group maintenance and insurance, etc.
- Support the development of mobility managers, other coordination programs or one-call centers at the regional level. This includes developing marketing tools which identifies regional providers and website development.
- Encourage regional services to employment, shopping, medical and social centers through several communities.
- Obtain software and/or hardware for system operations and grant management. The software and/or hardware should include, at a minimum, scheduling, dispatching, vehicle tracking modules, financial, National Transit Database Reporting, asset management modules and geographic information systems interoperability.
- Expand service through existing transit providers. This means expanding current routes, extending hours of service or increasing demand response times.
- Invest in new transit service where none presently exists.
- Bring new funding partners such as the Arkansas Department of Workforce and Area Agencies on Aging to public transit and human service transportation.

ARDOT identified existing coordination opportunities during the coordination workshops. At these meetings transportation providers and human services agencies provided examples of local coordination activities and what has or has not worked in the past. Providers also discussed what support they needed and provided state level coordination strategy recommendations. ARDOT also received additional feedback for recommended strategies at the 2017 Arkansas Public Transportation Conference, where ARDOT presented findings from the coordination workshops and preliminary gap analysis. For example, one specific recommendation from attendees was for ARDOT to provide information on coordination examples and best practices. Another
recommendation was to start a social media page to spotlight coordination efforts. Suggestions were also provided by the APTCC during the strategy prioritization process (described later). With the information gathered from these meetings and previous coordination strategies as a foundation, ArDOT developed the coordination strategies listed below to address transportation service gaps throughout Arkansas:

- Establish a one-call/one-click transportation service center.
- Identify and contact agencies that could provide transportation in areas where transportation service gaps exist and provide support to secure funding and establish service.
- Identify and appoint statewide and/or regional mobility managers.
- Develop an online directory of services (e.g. maintenance) and trainings offered by transportation providers to other providers.
- Develop informational materials to provide coordination examples and best practices to transportation providers.
- Coordinate development of model contracts or agreements for sharing resources.
- Establish a centralized volunteer driver program.
- Develop an online map version of the public transportation directory.
- Coordinate partnerships between providers to offer free/reduced transfers between services.
- Establish regional coordination districts to lead local coordination efforts.
- Establish a qualified driver application and job opening directory.
- Organize reoccurring coordination work sessions that providers are required to attend.

**Strategy Prioritization**

FTA requires that all coordinated transportation plans include priorities for implementation based on resources, time, and feasibility. The Arkansas Transit Coordination Plan employed the APTCC and ArDOT staff to execute the prioritization of recommended strategies. The prioritization process involved participants scoring each strategy based on the FTA prioritization criteria (i.e. resources, time, and feasibility). Participants also scored each strategy based on overall perceived effectiveness in addressing identified transportation gaps or improving transportation services. Each participant’s scoring for each strategy was added together to create a total score for a particular strategy. These scores were then averaged together, resulting in an average prioritization score for each strategy. Coordination strategies with higher scores are strategies that require higher prioritization, as they are near-term strategies that likely require fewer resources, are more feasible, and are more effective in addressing transportation service gaps. Table 7 shows the results of the prioritization process and lists the recommended strategies from highest to lowest priority.
Table 7: Coordination Strategy Prioritization Results

<table>
<thead>
<tr>
<th>Coordination Strategy</th>
<th>Prioritization Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and contact agencies that could provide transportation in areas where transportation service gaps exist and provide support to secure funding and establish service.</td>
<td>11.0</td>
</tr>
<tr>
<td>Develop informational materials to provide coordination examples and best practices to transportation providers.</td>
<td>10.8</td>
</tr>
<tr>
<td>Develop an online directory of services (e.g. maintenance) and trainings offered by transportation providers to other providers.</td>
<td>10.4</td>
</tr>
<tr>
<td>Develop an online map version of the public transportation directory.</td>
<td>10.4</td>
</tr>
<tr>
<td>Coordinate development of model contracts or agreements for sharing resources.</td>
<td>10.0</td>
</tr>
<tr>
<td>Identify and appoint statewide and/or regional mobility managers.</td>
<td>9.6</td>
</tr>
<tr>
<td>Establish regional coordination districts to lead local coordination efforts.</td>
<td>8.6</td>
</tr>
<tr>
<td>Organize reoccurring coordination work sessions that providers are required to attend.</td>
<td>8.6</td>
</tr>
<tr>
<td>Coordinate partnerships between providers to offer free/reduced transfers between services.</td>
<td>8.4</td>
</tr>
<tr>
<td>Establish a one-call/one-click transportation service center.</td>
<td>8.0</td>
</tr>
<tr>
<td>Establish a centralized volunteer driver program.</td>
<td>7.8</td>
</tr>
<tr>
<td>Establish a qualified driver application and job opening directory.</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Conclusion

The transportation services provided by Arkansas’ public transit providers and human services agencies provide a vital connection to goods, services, and employment, particularly for those who are transportation-disadvantaged (e.g. seniors, PWDs, and those with low income). These services not only get people from place to place, but they provide opportunities for those who may not otherwise have the freedom that often comes with having a personal vehicle. The agencies who provide these transportation services are valuable assets to their communities. These transportation providers and agencies operate in rural environments with limited resources which makes it difficult to serve all who need transportation service. Despite these limitations, ongoing coordination and more informed resource allocation can help maximize the transportation services being offered throughout Arkansas. Through the adoption of this Transit Coordination Plan and implementation of its coordination strategies, Arkansas will make progress toward providing more accessible, higher quality services for the transportation-disadvantaged.
Notice of Nondiscrimination

The Arkansas Department of Transportation (Department) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore, the Department does not discriminate on the basis of race, sex, color, age, national origin, religion (not applicable as a protected group under the Federal Motor Carrier Safety Administration Title VI Program), disability, Limited English Proficiency (LEP), or low-income status in the admission, access to and treatment in the Department’s programs and activities, as well as the Department’s hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department’s nondiscrimination policies may be directed to Joanna P. McFadden Section Head - EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501)569-2298, (Voice/TTY 711), or the following email address: joanna.mcfadden@ardot.gov

Free language assistance for Limited English Proficient individuals is available upon request.

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.