



CONNECT NORTHWEST ARKANSAS

10-Year Transit Development Plan



INTRODUCTION

Connect Northwest Arkansas (NWA) is a 10-Year Transit Development Plan (TDP) that will serve as a “Blueprint” for improving and expanding transit in the NWA region. The Northwest Arkansas Regional Planning Commission (NWARPC), Ozark Regional Transit (ORT) and Razorback Transit (RT) are committed to ensuring that this plan improves transit by connecting NWA at the regional and local levels, saves people time and ultimately provides the community with greater mobility and freedom.

PROJECT VISION

If you **connect** people and save them **time**, you give them **freedom**.

Transportation opportunities and challenges are regional and cannot be defined by one jurisdiction. NWA is a massive region and spans over 40 miles from south to north with transit needs that vary throughout the linear corridor. Connect NWA focuses on how to improve fixed route transit and builds upon the recent and ongoing success both ORT and RT have had coordinating and expanding service in the four main urban areas and surrounding communities that include (from south to north) Fayetteville, Springdale, Rogers and Bentonville.

WHY TRANSIT?

Connect NWA establishes a shared understanding of what successful transit looks like, how to design effective service and ultimately how to implement it regionally and locally. Transit may not seem like the optimal or most popular mode of travel in the NWA region since the 420,455 people who live in the area only average 8,000 transit boardings a day. However, something is missing from this statistic and the conversation in general: the potential for transit in the region is great and these numbers reflect a transit system that is underfunded and not designed to meet the transit potential of the region. It is critical that the NWA Community understands the following about transit:

- The benefits of transit (why does transit matter)?
- What makes transit effective?
- What supports transit?
- How do you design transit?

Before proceeding it is important to establish a shared understanding about what a transit network is and its most basic components. A transit network is a set of routes that follow specific alignments with stops along the way that operates during certain times of the day and at various service levels. From the time it starts in the morning to the time it stops in the evening is known as its **span**. How often a bus or train arrives at a given stop or departs from a terminal is known as its **frequency**.

Why does transit matter?



Save Money

A household can save \$10k by living with one less car.



Reduce Congestion

Congestion costs Northwest Arkansas residents \$103M per year. Transit helps reduce the number of vehicles on roadways.



Environment Friendly

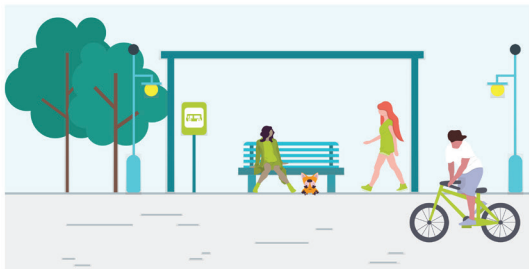
Public transit saves the country 4.16 billion gallons of fuel per year.



Travel Safely

Transit is 10x safer than traveling by automobile.

What is effective transit?



Effective Transit...

TAKES ME WHERE I
WANT TO GO

...WHEN I WANT TO GO
THERE

IT IS
RELIABLE

IT SAVES
ME TIME

IT GIVES ME
FREEDOM

What supports transit?

Density



Transit works best when stops are located near a variety of destinations where people want to go such as job centers, schools, medical facilities, & housing complexes.

Connectivity



Transit should provide seamless transitions to other routes, park & rides, sidewalks, and bicycle routes. This ensures ease and comfort for passengers navigating the system.

Ease of Use



Transit should be easy to navigate and convenient to use. Great transit is integrated with technology to make taking transit an easy choice for travel.

Community Support



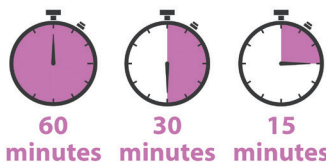
Whether you advocate for transit at city hall or simply choose to ride the bus, support from the community encourages local leaders to invest in great transit.

How do you design transit?

Improving transit is often a balancing act of deciding where the bus picks you up, how often the bus comes, and when service runs. In other words, frequency, span of service, and route design are all important aspects of delivering effective transit service.

Frequency

How often the bus comes



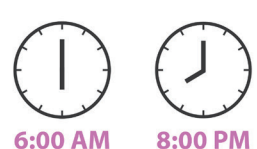
Route Design

Where the bus goes and how it gets there



Span of Service

How early service starts & how late service runs



PROJECT OVERVIEW

The study began in January 2019 with a technical analysis that looked at ridership, travel patterns, travel time and on-time performance for the entire NWA study area. The first major milestone of the project was to develop a Public Engagement Plan that would ensure the entire study area had an opportunity to learn about transit and provide input to directly inform the recommendations of the Connect NWA TDP.

Parallel to the public engagement effort was the existing conditions analysis that consists of the following technical analyses:

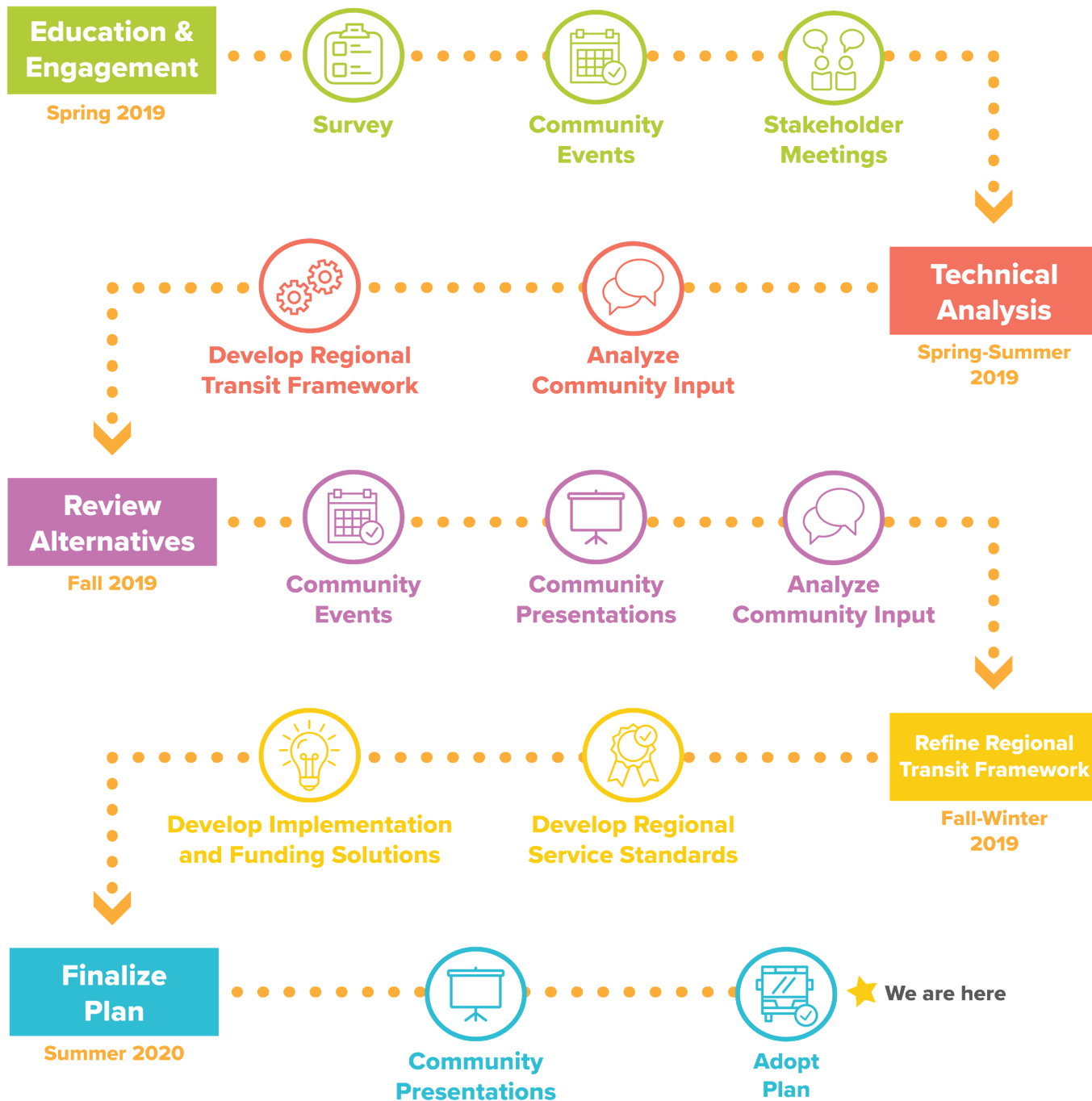
- Benchmarking Review
- Market Analysis
- Fixed Route Transit Operational Analysis

The next steps in the process involved the development of a Regional Transit Framework that included recommendations for regional and local transit solutions with service level and route alignment modifications and additions. The project team organized and hosted two major events in each of the counties in the study area that provided an opportunity for the community to give input on the recommendations. The project team used this input to develop a Preferred Alternative (PA) for both the region and each individual community.

The final steps of the TDP included the development of three critical elements to help guide and implement Connect NWA:

- Regional Service Standards
- Detailed implementation plan with prioritized routes and phasing
- Funding recommendations on allocating Federal and Local funds.

Connect NWA represent a complete 10-Year TDP for region and is made up of many individual components that can stand on their own and serve as tools to help advance and implement the plan.



PUBLIC ENGAGEMENT

The Connect NWA public engagement effort revealed that the NWA community supports transit and wants more of it. Public engagement is one of the most critical components of Connect NWA and will need to remain constant as the plan is implemented over the next 10 years.

PHASE I

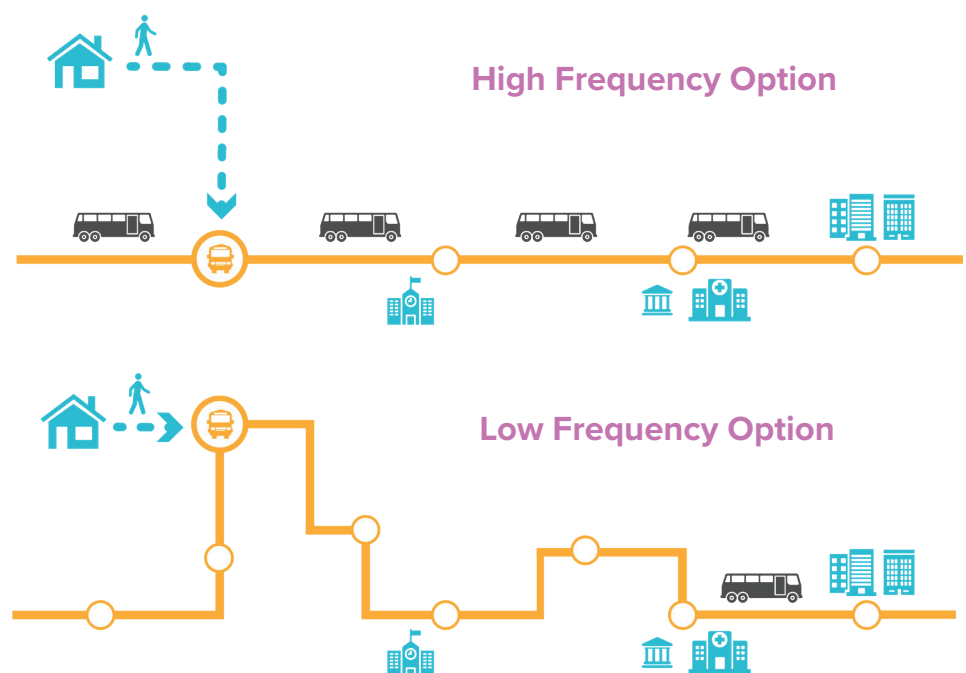
The public engagement effort consisted of two main phases. The first phase consisted of a week-long series of public engagement opportunities from April 2-6, 2019. The project team coordinated nine public events throughout the region in a wide variety of locations meant to capture all types of transportation users (e.g. Fayetteville Farmers Market, Springdale Walmart, NWACC). A public input survey was administered both in hard copy and online from April through May.

A total of 1,299 surveys were received by the project team. The survey revealed critical findings from the public and used these discoveries to align recommendations with the discussion about what makes transit effective.

PHASE II

Phase two involved two major community outreach events and a survey that enabled the team to capture detailed feedback on the recommendations in the Regional Transit Framework. What was important about this process was that the community did not have to choose between alternatives. Instead, they were able to provide input about what they did and did not like about the recommendations. The project team was able to isolate the strengths and eliminate the weaknesses of the recommendations to determine the Preferred Alternative (PA) that has community support and will help shape the future of transit in the region.

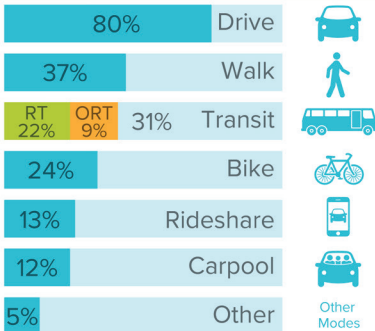
The entire public engagement effort revealed that NWA wants a transit system that is reliable, allows for spontaneous travel, saves them time and gives them freedom.



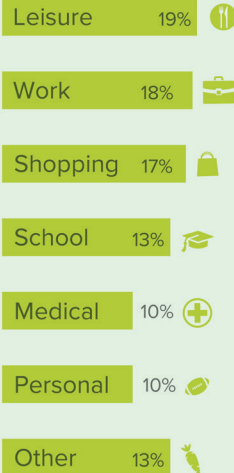
Public Survey Results for NWARPC 10-Year TDP

WHICH MODE(S) DO RESPONDENTS USE TO GET AROUND?

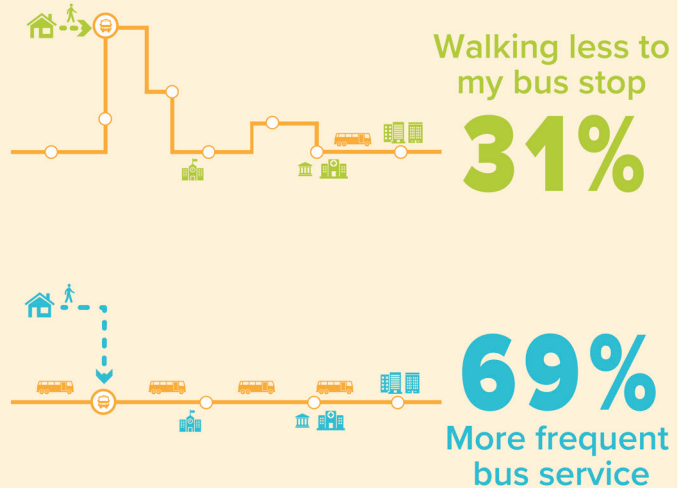
Respondents could choose multiple modes so totals do not equal 100%



TYPE OF BUS TRIPS



SURVEY RESPONDENTS PREFER...



RESPONDENT CONCERNS



Have trouble planning around bus schedules

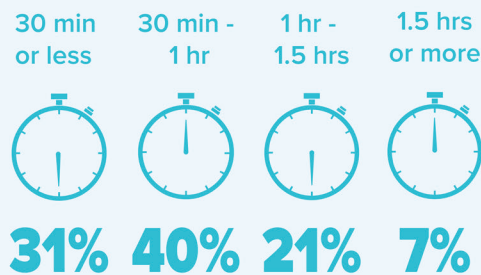


Routes are not close enough to desired destination



Bus trips take too long

TIME SPENT TRAVELING

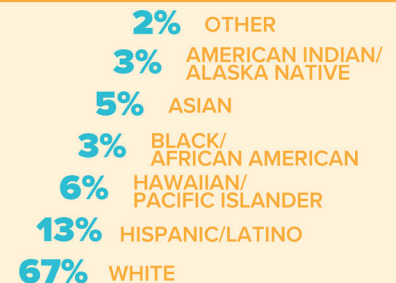


69% SAY THE BUS IS RELIABLE

12% of passengers do NOT have a **DRIVERS LICENSE**

9% of passengers experience a **DISABILITY**

WHAT IS YOUR RACE or ETHNICITY?



EXISTING CONDITIONS

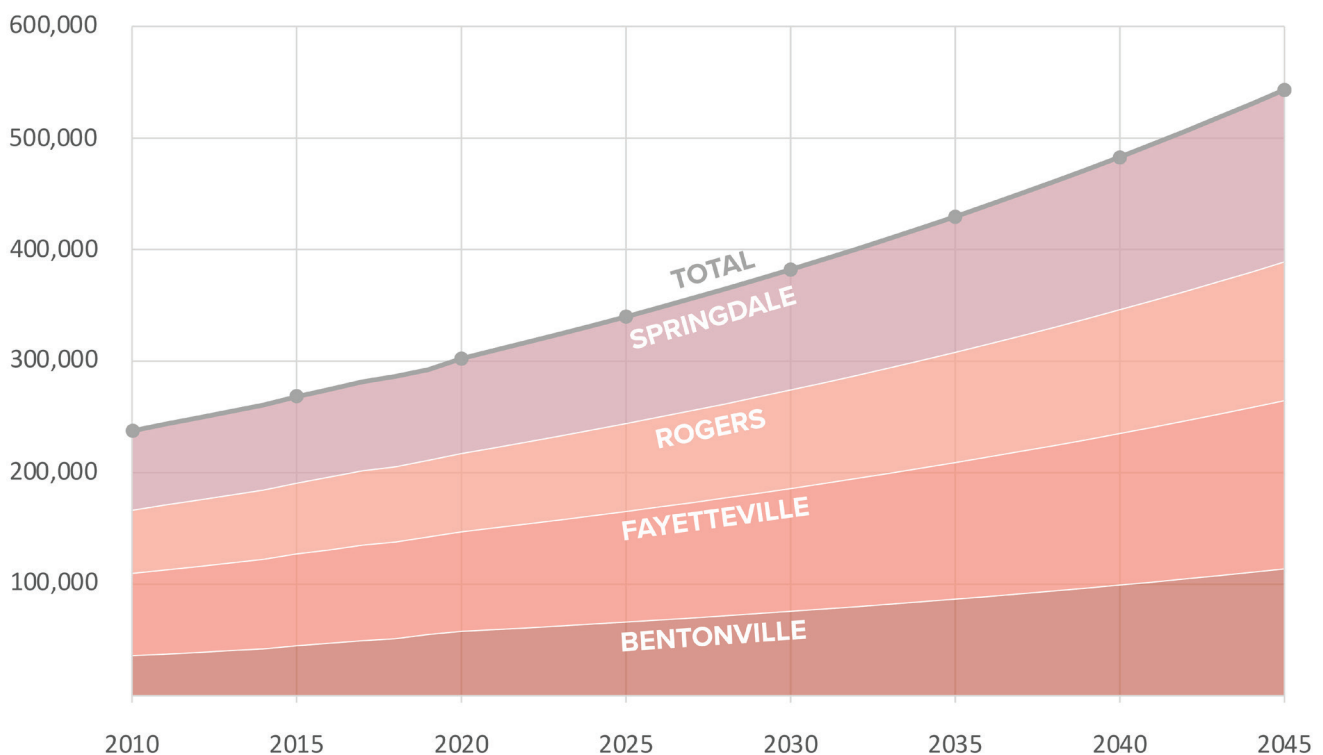
The Market and Operational analyses provided an in-depth and detailed review of the existing conditions under a 'transit lens' in NWA. However, this section is intended to highlight some of the broad takeaways that the project team discovered to date.

REGIONAL GROWTH

In order to understand future growth in the NWA region and align Connect NWA recommendations with the direction in which the community is growing, the project team utilized data from the 2019 Arkansas Economic Development Institute (AEDI) State Cohort Component Model to visualize population growth. With a 2005 base year and 2045 horizon year, the NWA region is estimated to nearly double in size by 2045. This means nearly 500 thousand residents living in Bentonville, Rogers, Springdale, and Fayetteville in roughly 25 years.

This growth supports the need for expanded and improved transit solutions to help prepare the region as transportation demand increases in tandem with estimated population growth.

Regional Population Growth



THE STATE OF TRANSIT

The review of past plans and ongoing studies that both directly and indirectly relate to transit ensured that the project team respected existing planning processes underway for the area and captured insight from the ongoing community dialogue. The review included plans and programs across a variety of disciplines including land use, economic development and other relevant topics.

From this review the project team concluded that transit improvements are needed, and that Connect NWA's vision and goals align with the previous and ongoing studies, plans and initiatives of the region. The following excerpts help capture the shared understanding of the important role that transit will play in NWA:

*“**Build better connectivity** among regional employers, the University of Arkansas, and entrepreneurial support organizations to capitalize on the organic growth potential of the region's three Fortune 500 companies and a Class I Carnegie research institution.”*

*“Access to people, places, products, and services fosters economic and social mobility. The Northwest Arkansas Council should **ensure that the services and funding of Razorback Transit and Ozark Regional Transit keep up with rapid population growth and the long-term needs of Northwest Arkansas.** That includes assisting both systems as they explore ways to provide more trips.”*

— Greater Northwest Arkansas Development Strategy,
Northwest Arkansas Council

Guiding Principles of the Northwest Arkansas Design Excellence Program:

*“**Strengthen Public Life:** Create opportunities for people to spend quality time in public – moving or staying, alone or with others.*

***Elevate Standards of Sustainability and Resilience:** Adhere to standards of sustainability, elevate ambitions and demonstrate relation of resilience to people and place.*

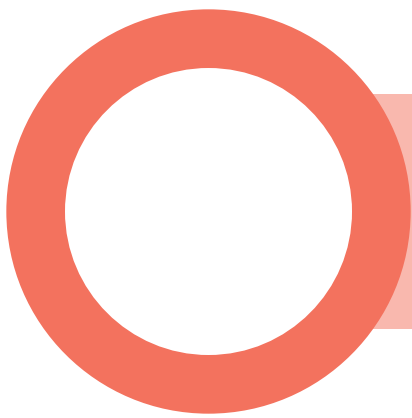
***Celebrate Local Cultures and Place:** Enhance and respond to local social history and cultures as well as climate and geography.*

***Build Regional Capacity:** Raise local ambitions and build knowledge and skills among design community and public.”*

— Northwest Arkansas Design Excellence Program,
Walton Family Foundation

*“Northwest Arkansas communities should work with NWARPC to **improve its existing public transit service and to get ‘Transit Ready.’**”*

— Northwest Arkansas Transportation Alternatives Analysis



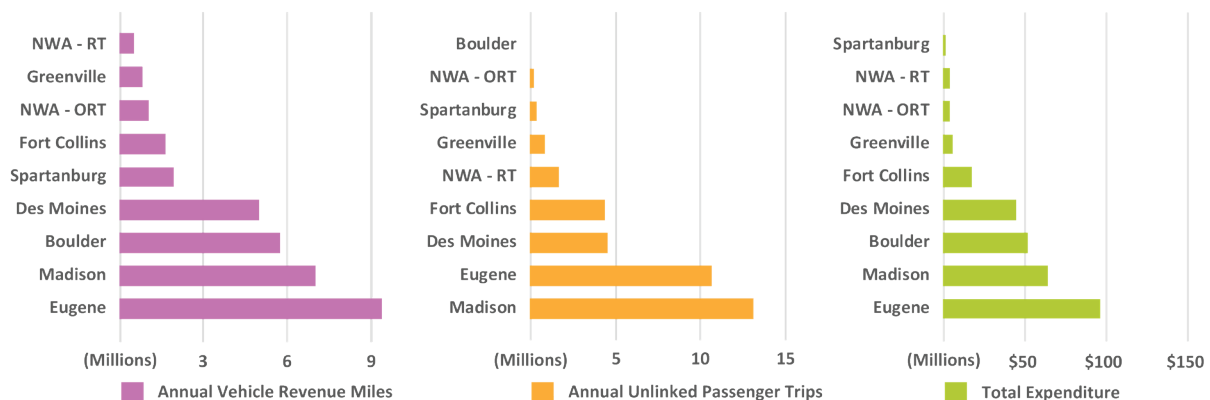
BENCHMARKING ANALYSIS

The Benchmarking Review observes how cities and agencies who face similar challenges and opportunities as NWA are providing and funding transit for the communities they serve and how NWA can use these examples and strategies to create their own, homegrown service delivery options and strategies.

Key findings

- **Ridership and Funding** – In order for transit to work efficiently and effectively it must be properly funded. The cities with the highest expenditures also have the highest ridership.
- **Innovation and Transit** – Agencies should use technology and innovation to create a toolbox of transit service provision solutions in order to customize transit for the varied communities and populations they are serving.

Comparison of Ridership & Expenditures

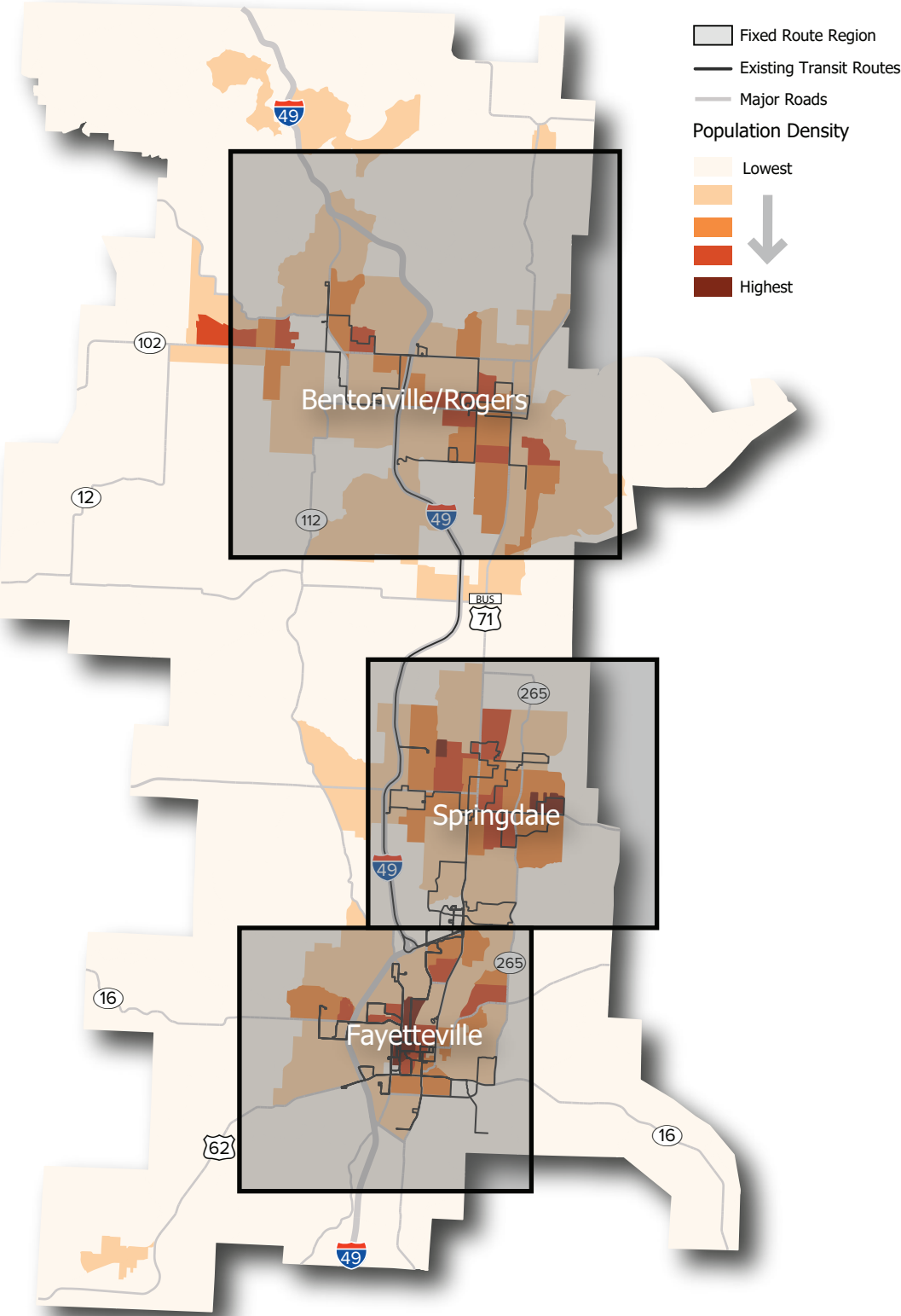


MARKET ANALYSIS

The market analysis revealed the locations of the existing and future markets that currently support or will support transit due to demand and potential. The region is host to many large institutions and employers such as the University of Arkansas in Fayetteville, Walmart's Headquarter (HQ) in Bentonville, Tyson Foods' HQ in Springdale, and JB Hunt's HQ in Lowell. Many areas are undergoing a transformation and cities like Rogers have begun to support and invest in transit supportive land use that can be seen in the development occurring at the AMP or in downtown Rogers.

The market analysis identified both transit potential and need and ensured that while Connect NWA would work towards improving transit for everyone in the region, the study must take measures to maintain and improve connectivity for the most vulnerable populations of the region. This transit need is characterized by identifying areas with greater portions of the population who are low income, minorities, elderly, disabled, and others and may face challenges related to transportation.

NWA Transit Service Region & Population Density

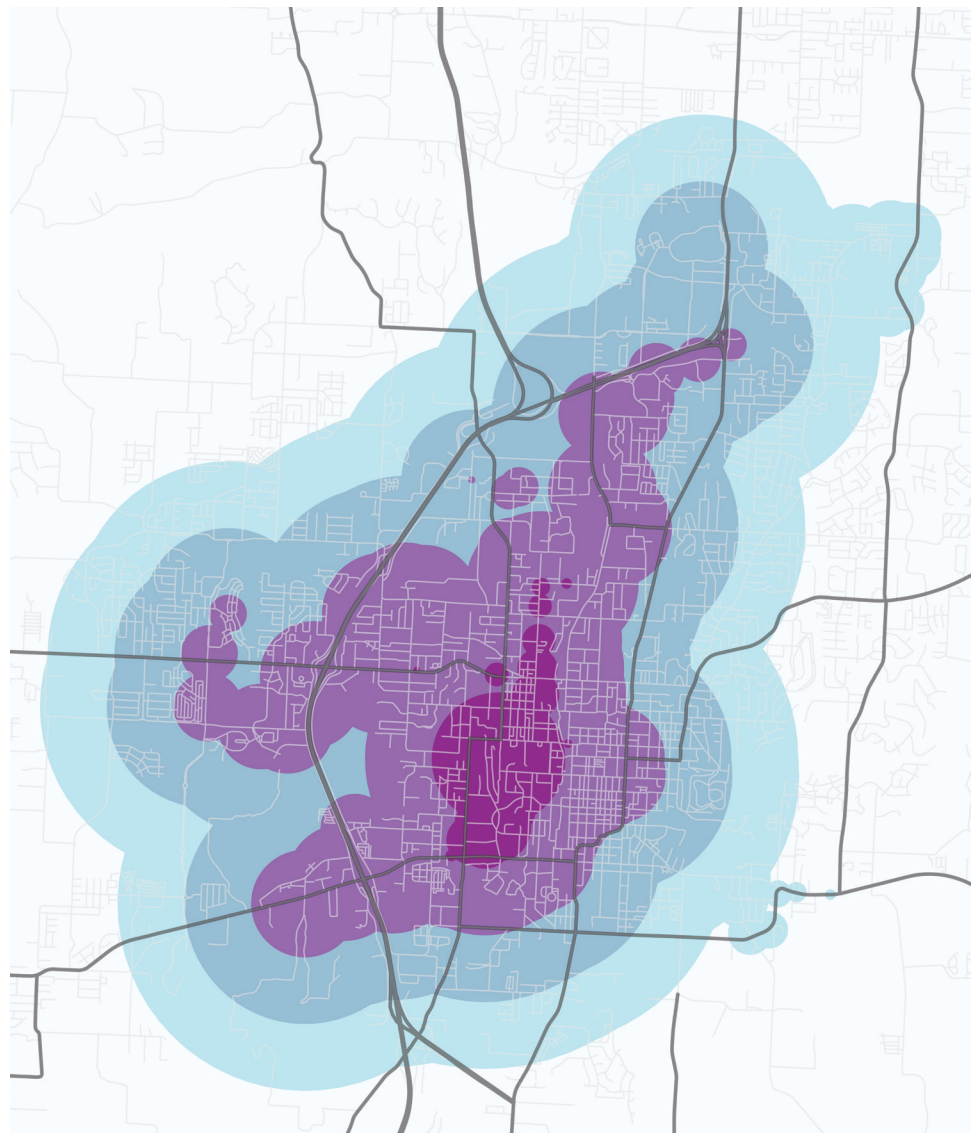


OPERATIONAL ANALYSIS

The NWA region is served by two separate transit providers (Ozark Regional Transit and Razorback Transit) that work in conjunction with each other to move people safely and efficiently throughout the area. The operational analysis explores how both services provide regional and local connectivity and provides both system- and route-level analysis to generate a better understanding of the NWA region's existing transit service. In addition to a technical analysis, the project team rode the individual routes throughout the regional transit network. The project team made important discoveries during these analyses that will help shape the recommendations in ways that build upon the strengths of the existing transit network.

The operational analysis provided benchmarks for each agency, route and community in terms of Key Performance Indicators (KPI) such as travel time, level of service, reliability, ridership, connectivity, funding, population and employment served and travel patterns. These KPIs established a baseline that the project team will use in the development of both regional and local service standards.

Travel Time Areas



RECOMMENDATIONS

REGIONAL TRANSIT FRAMEWORK SUMMARY

The Regional Transit Framework takes the shape of customized route and network recommendations built upon the technical analysis and informed by the public engagement process. The project team identified key transit corridors that provided enhanced connectivity and direct routing focused on moving NWA residents in an intuitive, time efficient manner that was not restricted by political boundaries. The draft recommendations were provided to the public for comment through both a series of community events and online and paper surveys to obtain public feedback about the proposed changes. Following the public outreach phase of the alternatives development, feedback was incorporated back into the draft recommendations to create a locally preferred alternative (LPA) truly supported by the community. The results shown in below are a product of the final recommendations comprised of level of services, route modifications, new routes, new mobility zones and proposed mobility hub locations.

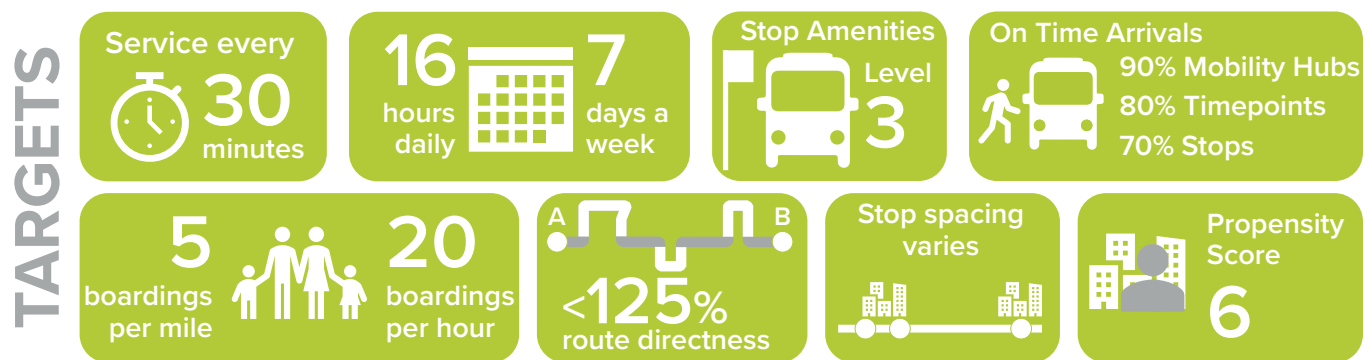
REGIONAL TRANSIT BENEFITS OF CONNECT NWA											
Bentonville		Fayetteville		Rogers		Springdale		Region			
Existing	Future	Existing	Future	Existing	Future	Existing	Future	Existing	Future		
System Characteristics											
Transit Routes #	1	6	15	15	3	9	4	6	19	29	
	Peak Buses #	1	12	27	39	4	21	5	15	32	75
Service Coverage											
# People & Jobs	31,823	51,328	73,230	81,553	27,082	43,687	47,454	59,007	179,589	235,575	
Frequent Service Coverage (30 minutes or better)											
1/4 mile Walkshed	0	36,466	59,459	67,439	0	23,450	0	37,038	59,459	164,393	
Travel Time to Mobility Hubs											
60 Minutes People & Jobs	61,000	125,827	80,646	129,189	23,859	113,578	68,727	155,710	234,233	524,305	
45 Minutes People & Jobs	44,247	81,604	47,290	76,793	14,787	45,767	45,507	98,931	151,831	303,094	
30 Minutes People & Jobs	33,580	41,908	24,886	37,189	8,042	12,860	23,562	38,614	90,069	130,571	
15 Minutes People & Jobs	13,009	14,739	6,408	6,474	2,533	2,583	8,686	9,916	30,636	33,712	

REGIONAL SERVICE STANDARDS

As the NWA area continues to grow, it is important that transit providers understand how to allocate resources effectively, and which markets will utilize the provided services. The regional service standards offer a unique set of service provision types, technology standards, and system designs for the NWA region to use for ongoing operation, expansion and the implementation of transit services. They are intended to serve as a living tool that both compliments Connect NWA and stands on its own. Regional Service Standards will serve as both an internal and external resource that will explain how and why transit is delivered in NWA.

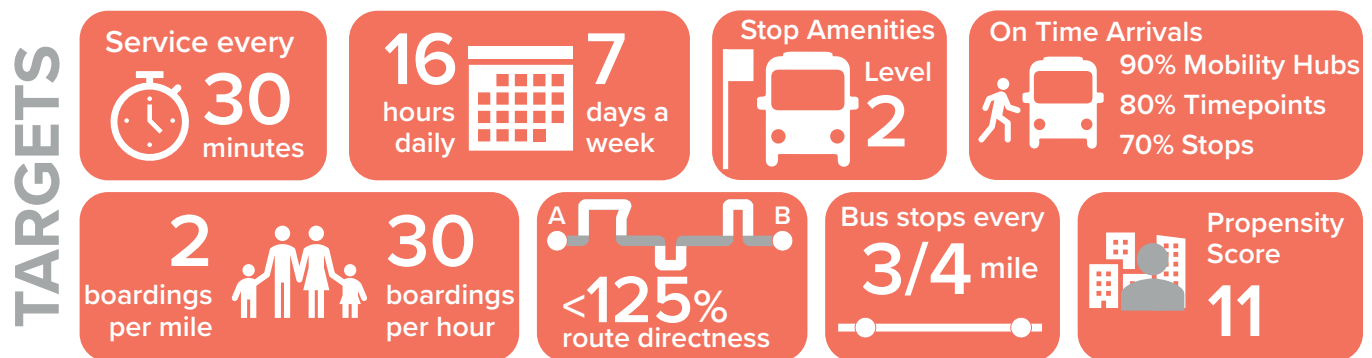
Regional Service Standards

Regional Connectors are a fixed route transit service that provide service from city to city along a major arterial at high frequencies with limited stops. These routes cover key areas and give users increased accessibility and connectivity to multiple urban areas in a region.



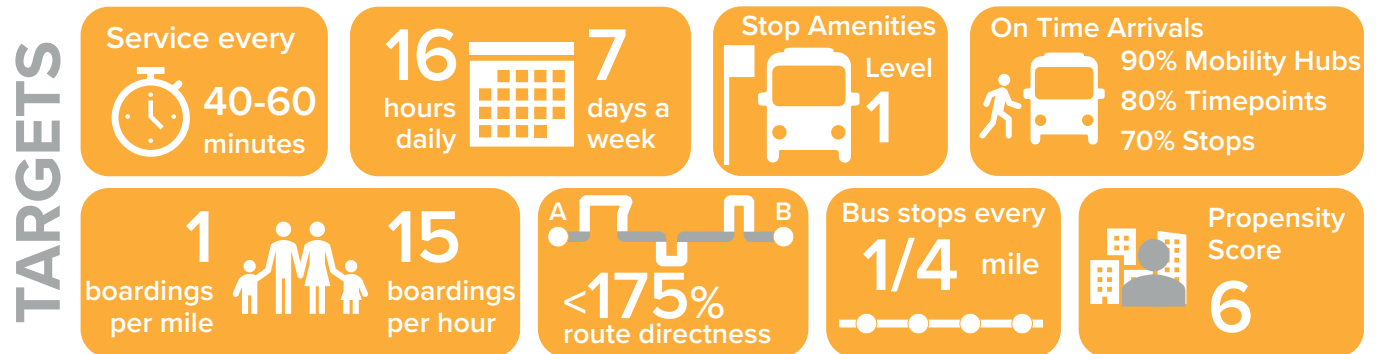
Frequent Service

Fixed route service that has demand for more frequent service due to destinations and/or ridership. Accordingly, frequent fixed route service refers to transit that stays within denser, more urban areas where transit demand tends to be concentrated.



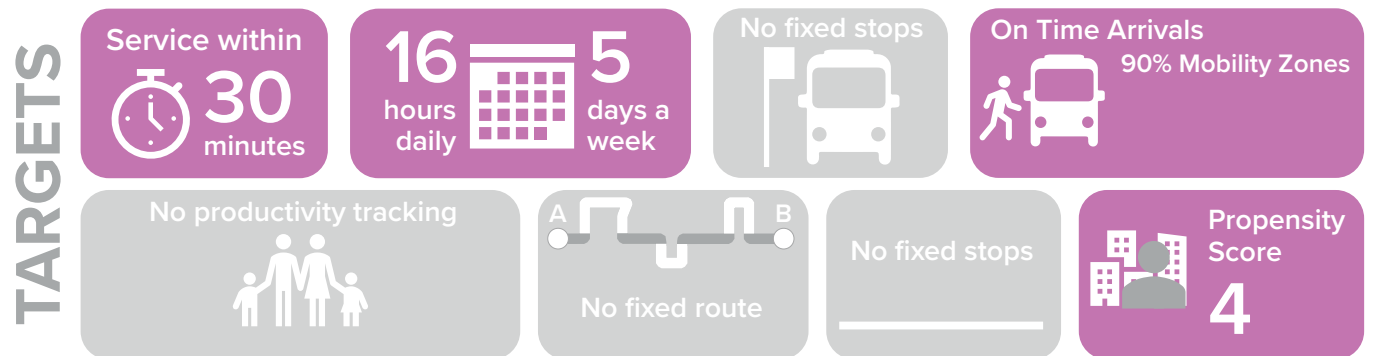
Coverage Service

Coverage service refers to transit with a set route alignment, designated stops, and a fixed operating schedule.



Mobility Zones

Mobility zones are designated areas with demand response service available to help provide first-last mile solutions for system users. Mobility zones are coverage areas set in the place of unproductive fixed routes/deviations. This allows for the provider to maintain market coverage in an efficient, cost effective way.





USER PROFILES

Bentonville Resident

Connect NWA cuts my trip from Point A to Point B (S. Walton Dr. Walmart) by **40 minutes (83% decrease)**. Compared to Route 11, Connect NWA provides **15 minute frequency**, and also serves me **Monday through Sunday**. The new system even connects me to Downtown Rogers with no transfers.

BEFORE

Travel Time
48 min



Span
M - F



Frequency
60 min



7:04 ☀
to
5:04 ☾

AFTER

Travel Time
8 min



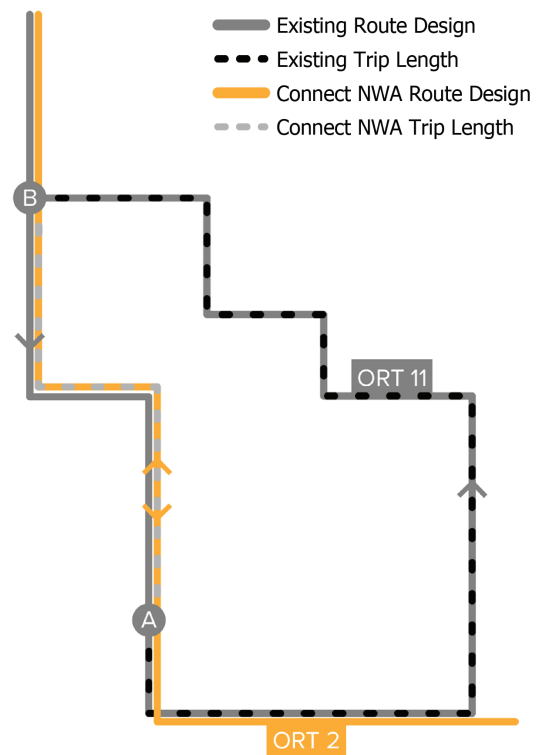
Span
M - Sun



Frequency
15 min



6:00 ☀
to
10:00 ☾



Rogers Resident

Route 51 used to provide service no later than 5 pm. As an NWACC student, this allowed me to only take public transportation to class. I then had to rely on rideshare or taxi service to get home. Connect NWA now provides **high quality transit** until **10 pm**, allowing me to use **ORT** for both trips.

BEFORE

Travel Time
33 min



Span
M - F



Frequency
60 min



7:04 ☀
to
5:04 ☾

AFTER

Travel Time
15 min



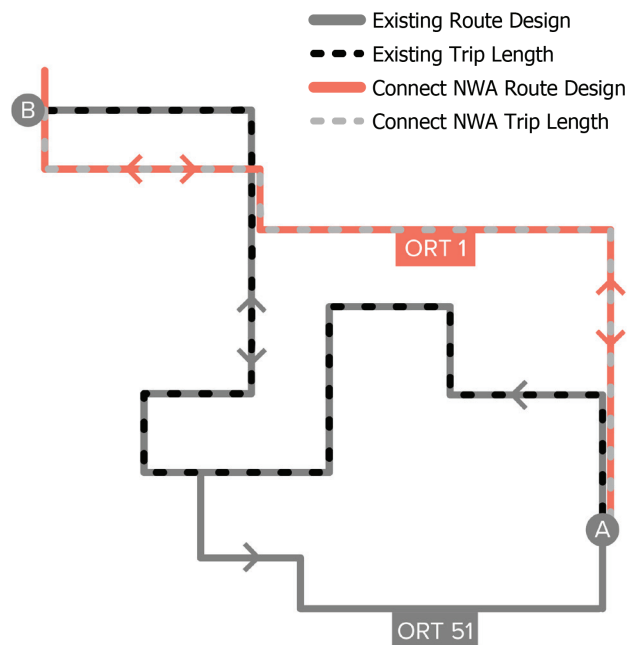
Span
M - Sun



Frequency
15 min



6:00 ☀
to
10:00 ☾



Springdale Resident

Before Connect NWA, I had to transfer twice, using three routes to get from Downtown Springdale to Downtown Fayetteville. Now Route 102 gets me from Point A to Point B in **35 minutes** with **no transfers**. Connect NWA also provides convenient routes in between which help me get around the NWA region more **efficiently**.

BEFORE

Travel Time
>60 min



Frequency
30/60 min



Span
M - F



6:00 ☀
to
7:00 ☾

AFTER

Travel Time
35 min



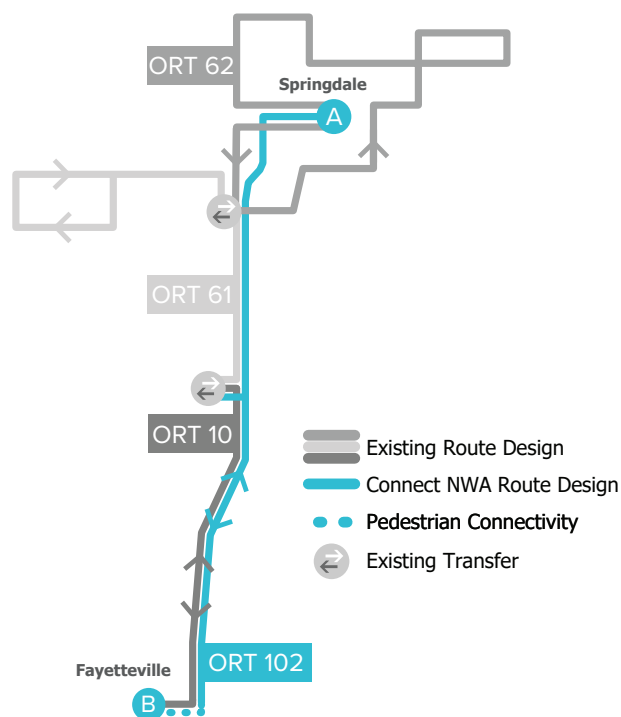
Frequency
20 min



Span
M - Sun



6:00 ☀
to
10:00 ☾



Fayetteville Resident

If I missed Route 20 on my way to the Arkansas Research and Technical Center, I would have to wait an entire hour before getting picked up. Connect NWA provides me a **direct route** with a **quick travel time**, with a **high frequency**. Now if I'm not on time, it isn't a big deal because service is **frequent** and **reliable**.

BEFORE

Travel Time
74 min



Frequency
60 min



Span
M - F



6:00 ☀
to
7:00 ☾

AFTER

Travel Time
24 min



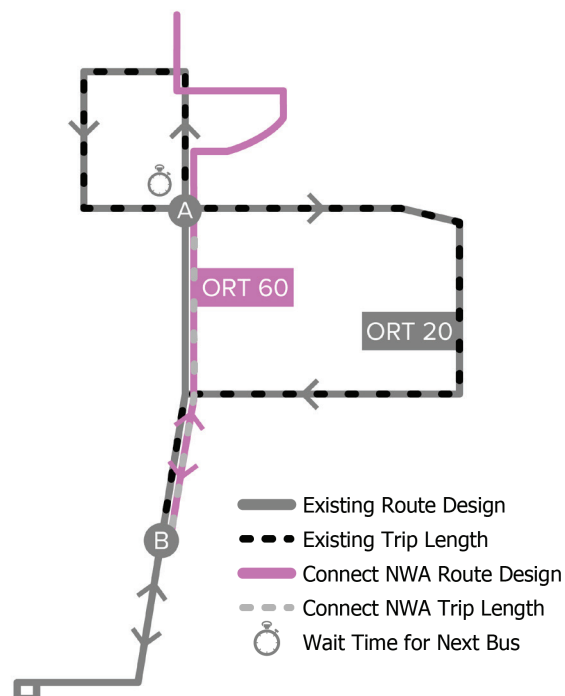
Frequency
15 min



Span
M - Sun



6:00 ☀
to
10:00 ☾

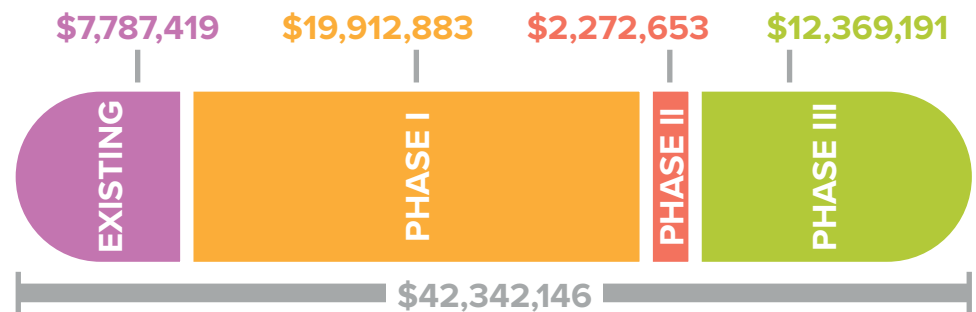


IMPLEMENTATION & FUNDING

Connect NWA recommendations take the shape of a phased implementation plan derived from previous technical analyses, proven transit concepts, and public and staff input. This implementation plan will work in tandem with the Regional Service Standards to successfully and sustainably implement the recommendations that will create high quality transit throughout the entire NWA region. The implementation plan is separated into three phases:

- Phase I: 1 to 2 years
- Phase II: 2 to 5 years
- Phase III: 5 to 10 years

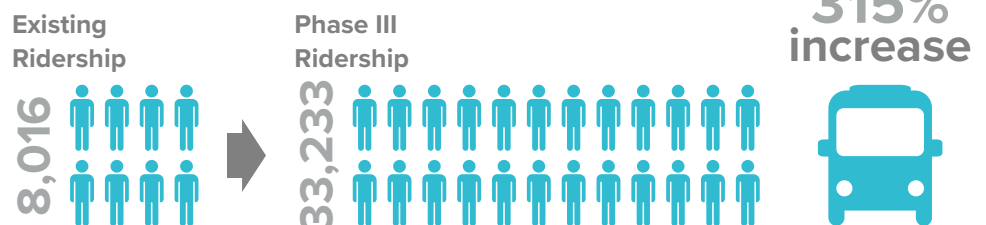
Phased Transit Investment



Each phase is further prioritized to provide a more detailed structure for future implementation. Three main components informed the prioritization and ensured that the process supports the vision of this plan by connecting people and saving them time.

- Transit Propensity: Where will transit work? Transit propensity represents the sum of population and employment within a quarter mile route buffer of each route.
- Transit Needs: Who depends on Transit? Transit needs population represents the sum of Transit-Dependent Population and Target Transit Rider Population totals (refer to Chapter 2) found within the same quarter mile route buffer used to capture transit propensity.
- Ridership: How many people will be using the service on an average weekday? Ridership estimates were generated through the Federal Transit Administration (FTA) Simplified Trips On Project Software (STOPS) modeling, which compares ridership generated for base (existing routes) and future (implemented route recommendations) scenarios.

Ridership Increase



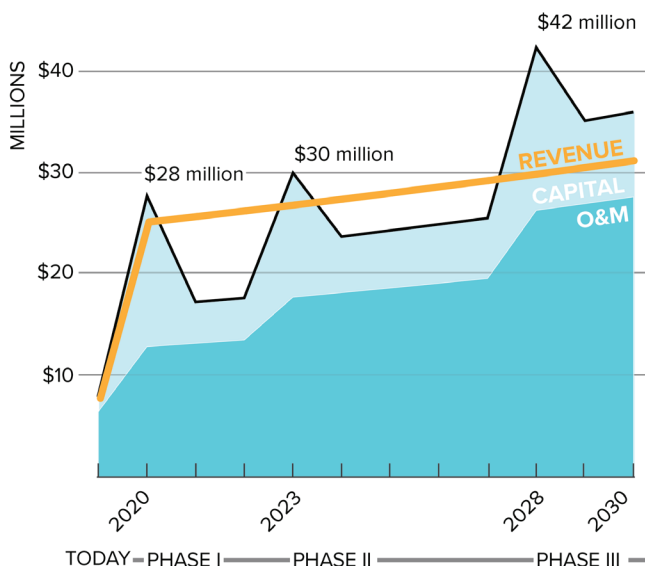


FUNDING SOURCES

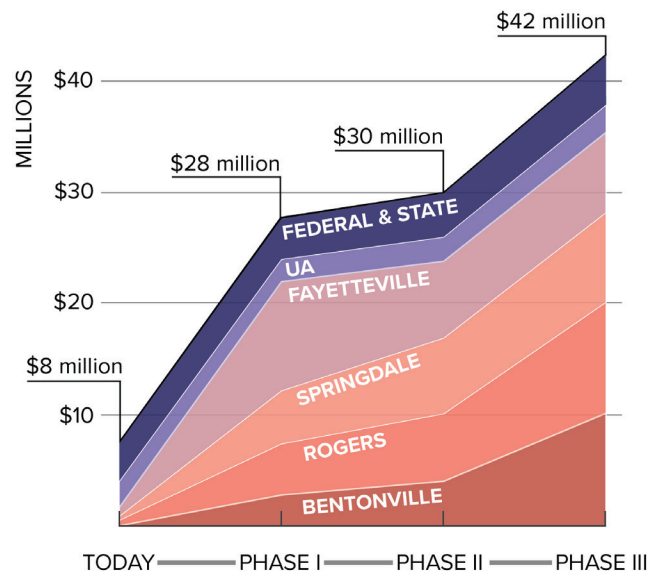
The identification of sustainable funding sources to support transit system costs is critical to the success of transit operations. To achieve the Connect NWA vision of full mobility for all travelers, the region must invest in transit at a significantly higher rate than it currently does and must work to identify a dedicated local funding source that does not completely rely on Federal and State funding.

The Transit Investment Chapter of Connect NWA provides the region with recommendations that layout a set of financial projections showing anticipated revenue sources and total system expenditures for a three phased implementation plan. The recommendations provide information that will help ORT and RT to implement service changes in a fiscally responsible manner throughout all three of the project's phases.

Regional Transit Costs and Revenues



Funding Contributions by Phase



In order to implement and successfully operate Connect NWA, the urbanized region made up of the four major cities will need to identify a dedicated local funding source. To achieve the funding levels necessary to implement a service investment of this magnitude, the urbanized region will need to implement a ¼ cent sales tax under the Special Local Sales and Use Tax – Election (ACA 26-73-111) for the residents within the boundaries of the four major urban cities in the region. This funding mechanism would provide fiscal capacity to operate and maintain the system through Phase II. After the implementation of Phase II the project partners will also be able to better evaluate the projected Phase III shortfall and decide, on the basis of observed results, whether to supplement the funding, implement only the fiscally sustainable parts of Phase III, or delay Phase III until revenues reach a level when implementation is feasible. Chapter 7 provides a detailed breakdown of all the assumptions used in the development of this transit investment recommendation.

Connect NWA Full Implementation

