Conway Transit Feasibility Study

Final Report

Prepared for

metroplan
A Council of Local Governments

on behalf of

SEAL OF THE CITY OF CONWAY ARKANSAS

TSC
TRANSPORTATION CONSULTANTS, INC.

Conway Transit Feasibility Study

Final Report

Prepared for:

METROPLAN
501 West Markham, Suite B
Little Rock, AR 72201
(501) 372-3300

On behalf of:

City of Conway
1201 Oak Street
Conway, AR 72032

Prepared by:

LSC Transportation Consultants, Inc.
516 North Tejon Street
Colorado Springs, CO 80903
(719) 633-2868

In association with:

VHB
8300 Boone Boulevard, Suite 700
Vienna, VA 22182
(703) 847-3071

LSC #084600

March 3, 2010

TABLE OF CONTENTS

LIST OF TABULATIONS

LIST OF ILLUSTRATIONS

Chapter I

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER I

Introduction

Metroplan, the Metropolitan Planning Organization for the greater Little Rock area, contracted with LSC Transportation Consultants, Inc. to complete a public transit feasibility study for Conway, Arkansas. The focus of this study was to determine the feasibility of providing public transit service in Conway, and if transit was determined to be feasible, to develop an implementation plan.

This Final Report was preceded by four technical memoranda, a Phase I Draft Report, and a Phase II Draft Report, all submitted as part of the feasibility study. Technical Memorandum #1 described the transit demand analysis. Several transit service options were presented with various estimates of potential demand for each option. A strategic transit plan and a transit vision were first drafted as part of Technical Memorandum #2. Technical Memorandum #3 further developed the vision for transit in Conway and presented a range of service options. Technical Memorandum #4 presented the preferred service option and discussed the feasibility of providing public transit service in Conway. The four technical memoranda were revised and consolidated into a Phase I Draft Report. A Phase II Draft Report was subsequently prepared, adding a proposed implementation plan and operations plan to the Phase I work. The Phase II Draft Report went before the City Council on February 23, 2010 for review and comment on the implementation schedule.

This Final Report completes revisions to the implementation schedule and operations plan. It is submitted as the final record for the study.

REPORT CONTENTS

Chapter II describes the community demographic and economic characteristics. These characteristics provide the basis for developing estimates of transit demand.

Conway's population determination by the US Census in 2010 will have a bearing on the types of federal funding Conway can receive.

Chapter III describes the existing human services transportation programs serving Faulkner County and Conway. Also described are regional-intercity services run by private operators and student/employee shuttles run by the University of Central Arkansas (UCA).

Chapter IV builds on information from Chapters II and III and presents a transit needs assessment. This is approached from several different viewpoints of "need." The chapter begins by looking at the distribution of college students in the community relative to the UCA shuttle service. Need is also reviewed from the perspective of persons without the ability to drive a car, whether too young to be licensed, having some disability or mobility limitation that prevents driving, or living in a household with fewer vehicles than drivers. Peer city trip-making and ridership estimates are reviewed to describe the needs of the general population beyond students and transit dependents. Finally, building on the various viewpoints of "need," a preliminary range for demand is presented.

Chapter V presents a description of land uses and land use policies. Chapter V describes current land uses, policies, and the areas of Conway that are currently supportive of transit service. Future land use policies needed to facilitate greater and more effective transit use are also described.

Chapter VI describes the vision for transit. Goals and objectives are discussed in the light of the preferred vision service plan. This includes some policy issues that frame decisions about the cost and phasing of the potential service options.

Chapter VII expands on the vision for transit, delving into cost estimates, ridership forecasts, and performance measures. Several service options which could be implemented in the near future (i.e., 2010) as steps toward the greater transit vision are discussed.

Chapter VIII describes the community telephone survey which was conducted by ETC Institute and the results. The survey assessed the level of support for public transit service within the community.

Chapter IX provides a summary of key person interviews which were conducted by LSC. Key individuals were selected by the Steering Committee, and LSC conducted a structured interview with those selected individuals. This effort complemented the community survey in assessing the level of support for public transit service.

Chapter X provides a discussion of the institutional and financial options which are available to Conway. The institutional structure will have a bearing on some of the funding sources which are available.

Chapter XI presents the discussion of feasibility. Based on the identified needs for public transportation, the costs of the preferred service plan, and the level of community support, it was determined that implementing a new public transit service in Conway would be feasible.

Chapter XII presents a detailed Implementation Plan. The Implementation Plan provides a detailed operations plan including draft schedules. As compared to Chapters VII through XI, the Implementation Plan supplies more information about vehicle requirements and facility requirements, and expands on operating and capital budgeting needs. It provides a marketing program to implement the service and provides a monitoring program to assess performance after implementation.

Chapter II

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER II
Existing Conditions

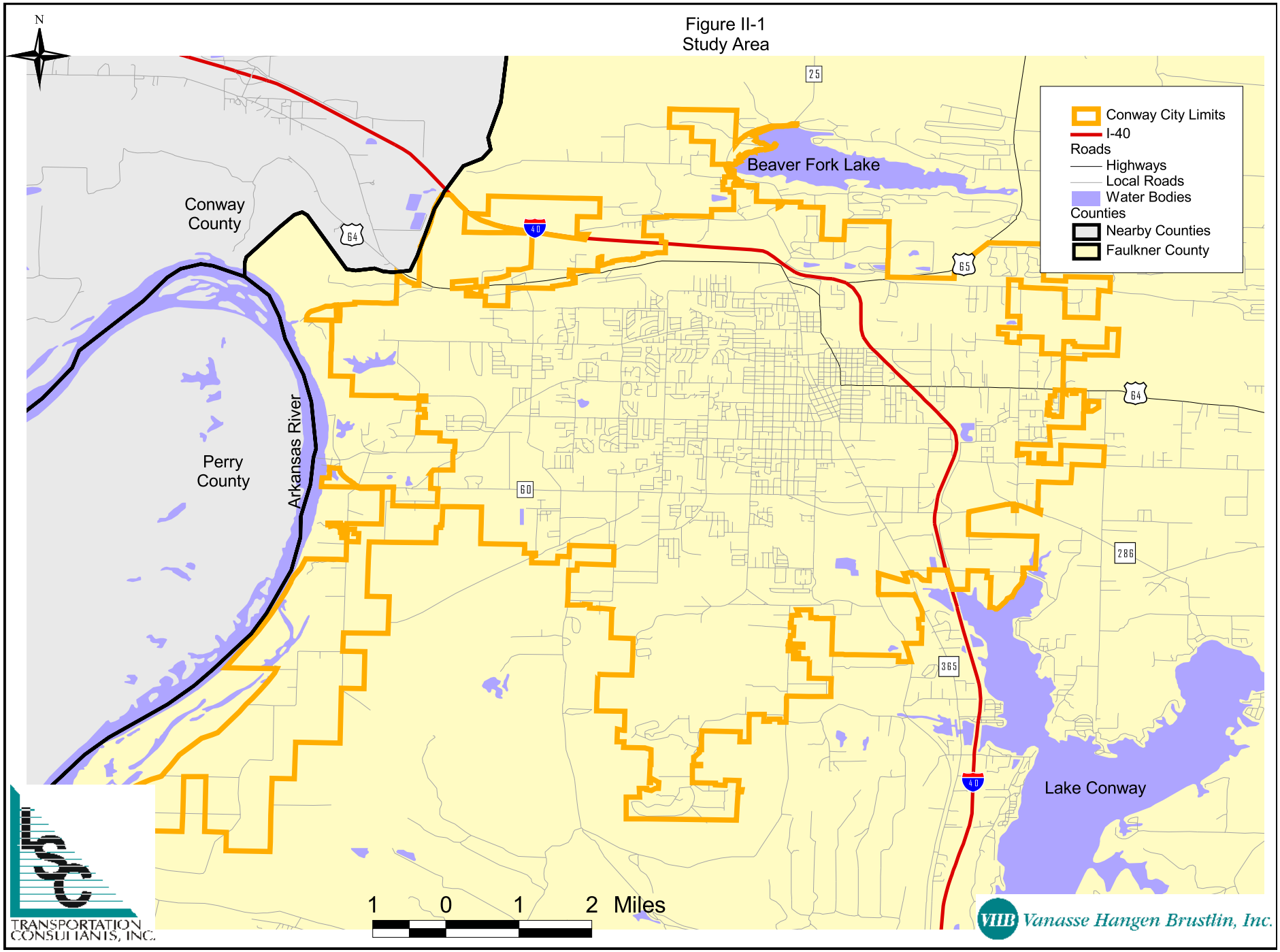
INTRODUCTION

The City of Conway, Arkansas is located in Faulkner County near the geographic center of the state. Conway is approximately 30 miles north of Little Rock. The city is the seventh largest city in the state and has experienced steady growth in the past decade. Much of this growth and positive outlook for the city can be attributed to being the home of three institutions of higher learning (University of Central Arkansas, Hendrix College, and Central Baptist College) and a strong industrial base.

Conway is approximately 25,000 acres and continuing to grow through annexation. By 2030, Conway is expected to grow to approximately 71,000 acres. Accordingly, the population will grow from 43,199 in 2000 to almost 100,000 people in 2030. Conway is easily accessible thanks to the numerous major routes connecting the city to the surrounding area. Interstate 40 (I-40), US Highway 64, US 65, and State Routes 25, 60, 286, and 365 all pass through Conway. The study area is shown in Figure II-1.

As Conway has grown and developed, its transportation system has remained focused on the automobile as the main form of transportation. While there are some paratransit service providers in Conway and Faulkner County, they cater only to specific groups and not the entire population. The creation of a public transit network could provide an alternative to the citizens of Conway, as well as visitors to the area. The goal of this system would be to efficiently connect people with goods, services, and jobs. This study has examined the feasibility of transit as a travel alternative. In addition, potential routes and ridership figures have been produced.

Figure II-1
Study Area



DEMOGRAPHIC ANALYSIS OF THE CITY OF CONWAY STUDY AREA

As part of a transit feasibility study, it is important to develop a geographically-based understanding of the demographic patterns of the study area. These data are collected from the 2000 US Census SF3, and then mapped using Geographic Information Systems (GIS) software. This analysis includes a mapping of the population and household densities, along with demographic attributes that are linked to transit dependency. These attributes are: persons 65 and older, persons that fall below the poverty line, persons with a mobility limitation, households with no vehicle available, and households with one vehicle available. The ability to identify higher concentrations geographically allows for the identification of potential areas where transit service should be focused.

Area-Wide Characteristics

Table II-1 shows the specific demographic characteristics for the City of Conway that are important to understand the spatial distribution of people and households. A number of these characteristics also help identify populations who are more inclined to use transit. Through the graphical representation of these characteristics, a spatial comprehension of where higher concentrations of these populations lie aids in determining where transit service would be more successful. The combination of this information with travel patterns, the locations of shopping centers, employment centers, and services allows for a determination of where transit would operate best, and what the most effective routing could be.

Table II-1 shows that the population for the City of Conway was 43,199 in 2000 according to the US Census. Further analysis reveals that 95 percent of the population, or 40,871, are considered to live in an urban area. Figure II-2 is a population density map for the City of Conway. The highest concentration of persons can be found in an area bounded by Donaghey Avenue and Ash Street and including the campuses of the University of Central Arkansas and Hendrix College. Immediately outside this area is a second area which is slightly less dense, and then moving further away, the density decreases even more. Figure II-3 shows a similar pattern of density for households. This relationship is not surprising because higher concentrations of people lead to a higher concentration of households.

There are certain age groups that in general depend on alternative forms of transportation, such as public transit, more than other groups. These two groups are persons age 10 to 15 and persons age 65 and over. The first group has not reached an age where driving an automobile is possible, and the second may not feel comfortable driving a car or has physical impediments that may prohibit them or make it difficult to drive. Figure II-4 shows the density of persons age 10 to 15 for the city. There is a moderate density of these individuals throughout most areas of the city, with the highest concentrations falling in two areas—around the campus of Hendrix College and near the Central Arkansas campus. Concentrations of the 65 and over population start to show a slightly different pattern. Instead of running north/south, like most of the other populations, the area of highest concentration of persons age 65 and over runs east/west between Salem Road and Interstate 40 (see Figure II-5).

Table II-1
Census Characteristics for the City of Conway, Arkansas

	City of Conway	Percent
Total Population	**43,199**	
Urban Population	40,871	95%
Rural Population	2,328	5%
Age 10 - 15	3,328	8%
Age 16 - 64	30,317	70%
Age 65 and over	3,790	9%
Mobility Limited		
16 - 64	1,276	3%
65 and over	807	2%
Person below the Poverty Line		
Below 18	1,528	4%
18 - 64	4,573	11%
65 and over	375	1%
Total Households	**16,057**	
Households with No Vehicle Available	1,118	7%
Households with One Vehicle Available	5,762	36%
Median Household Income	$37,063	

Source: 2000 US Census SF3.

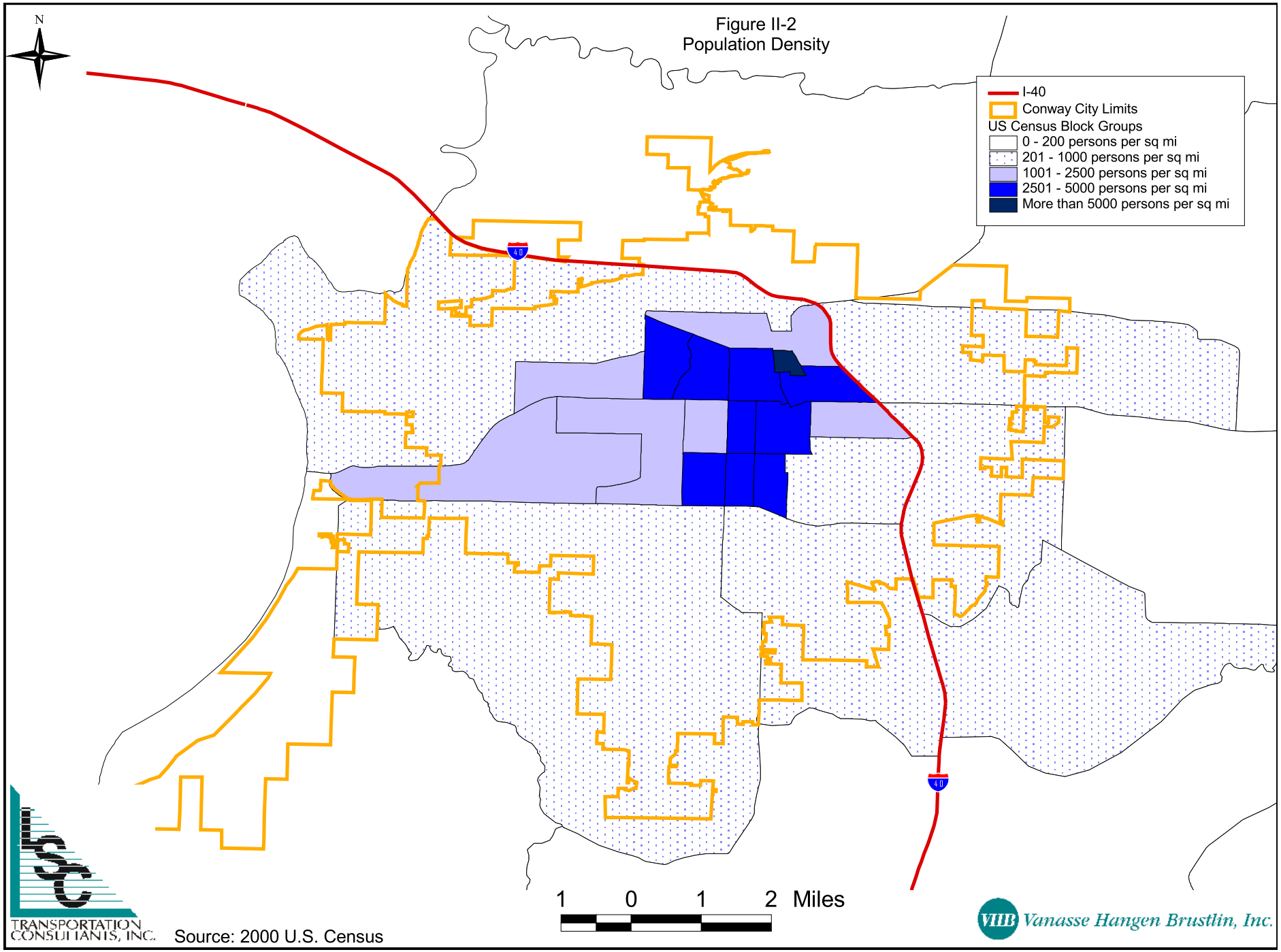

N
Figure II-2
Population Density
I-40
Conway City Limits
US Census Block Groups
0 - 200 persons per sq mi
201 - 1000 persons per sq mi
1001 - 2500 persons per sq mi
2501 - 5000 persons per sq mi
More than 5000 persons per sq mi
40
40
1 0 1 2 Miles
TRANSPORTATION CONSULTANTS, INC.
Source: 2000 U.S. Census
Vanasse Hangen Brustlin, Inc.

Figure II-3
Housing Density

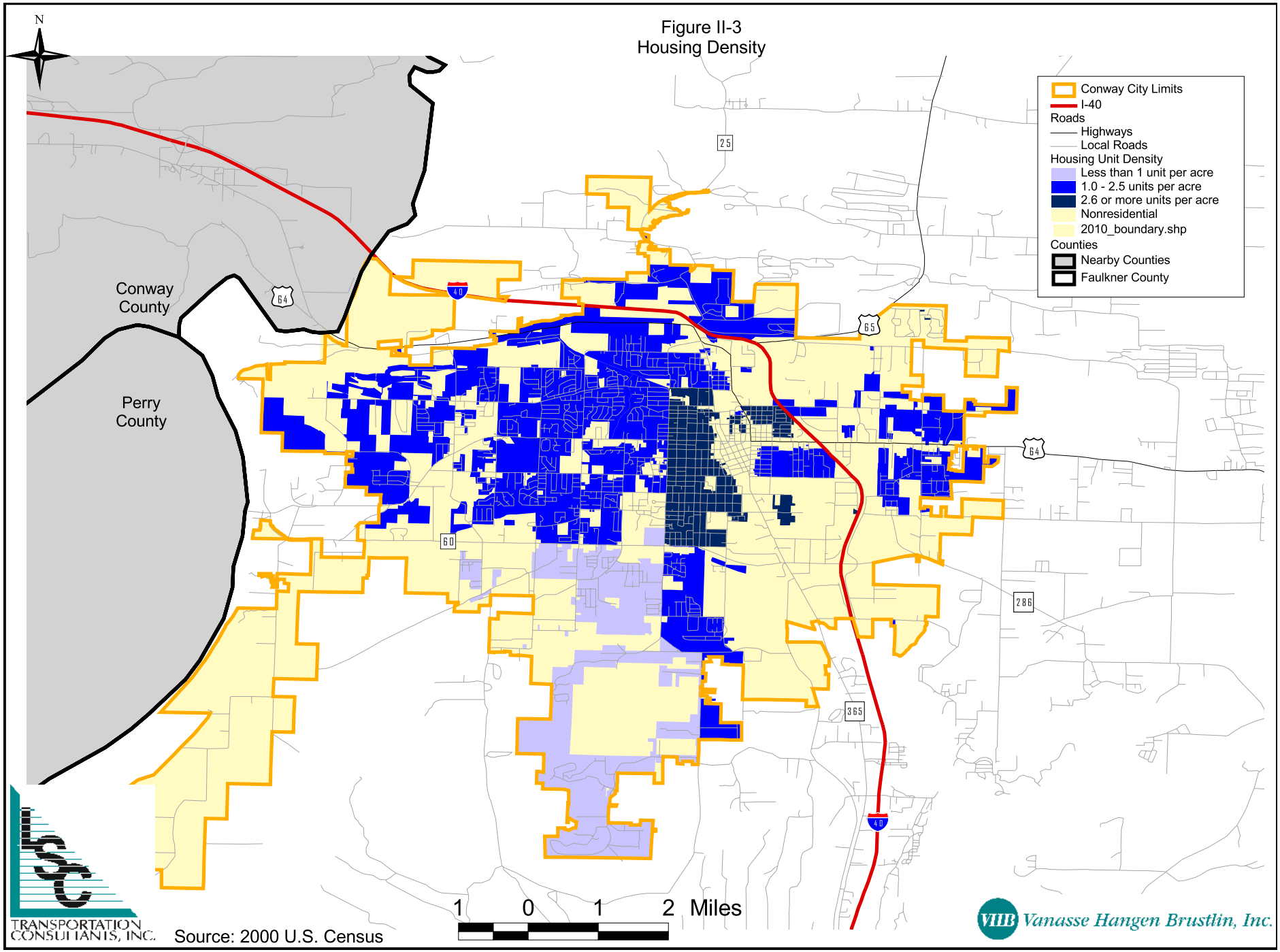
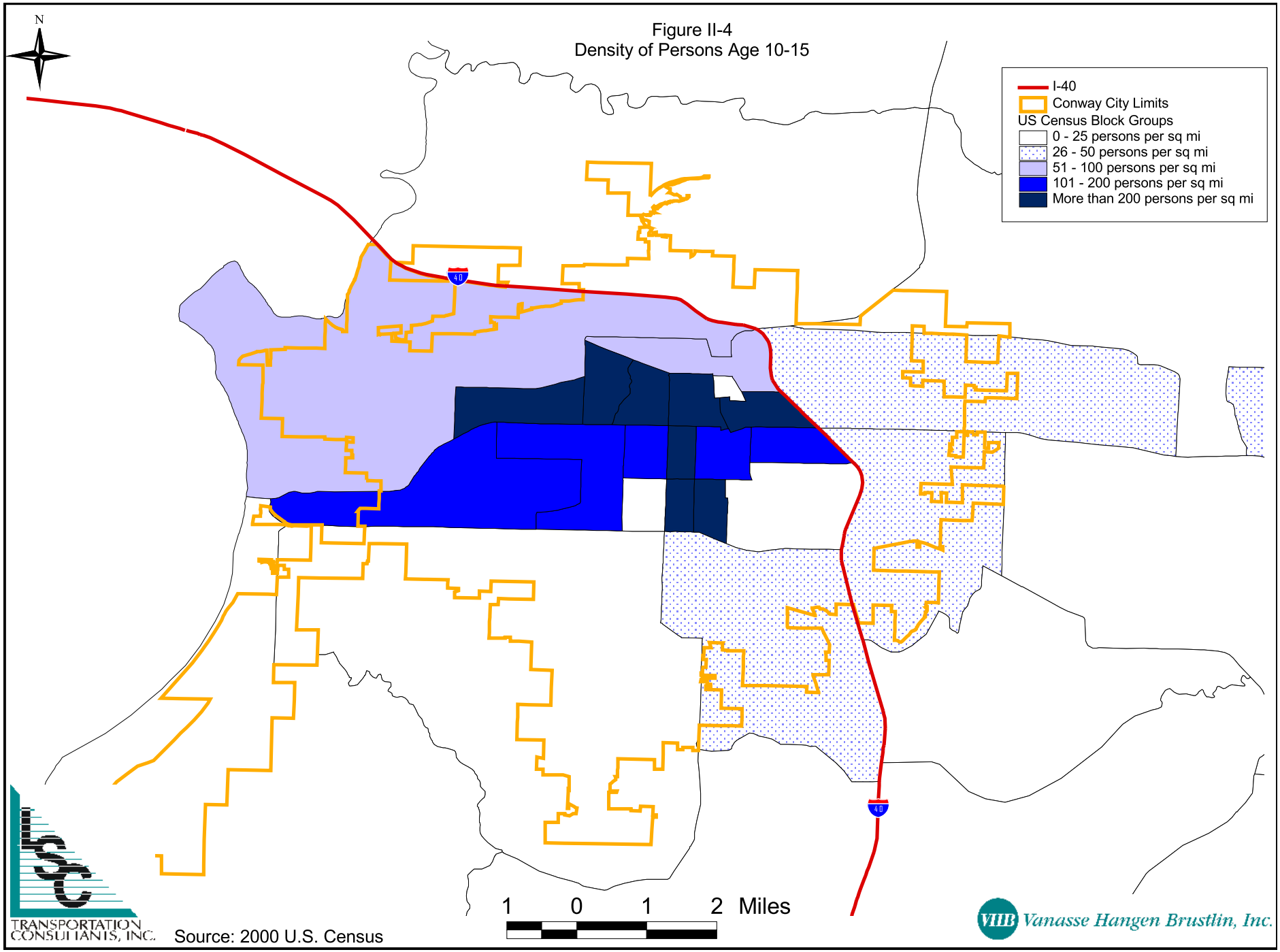


Figure II-4
Density of Persons Age 10-15

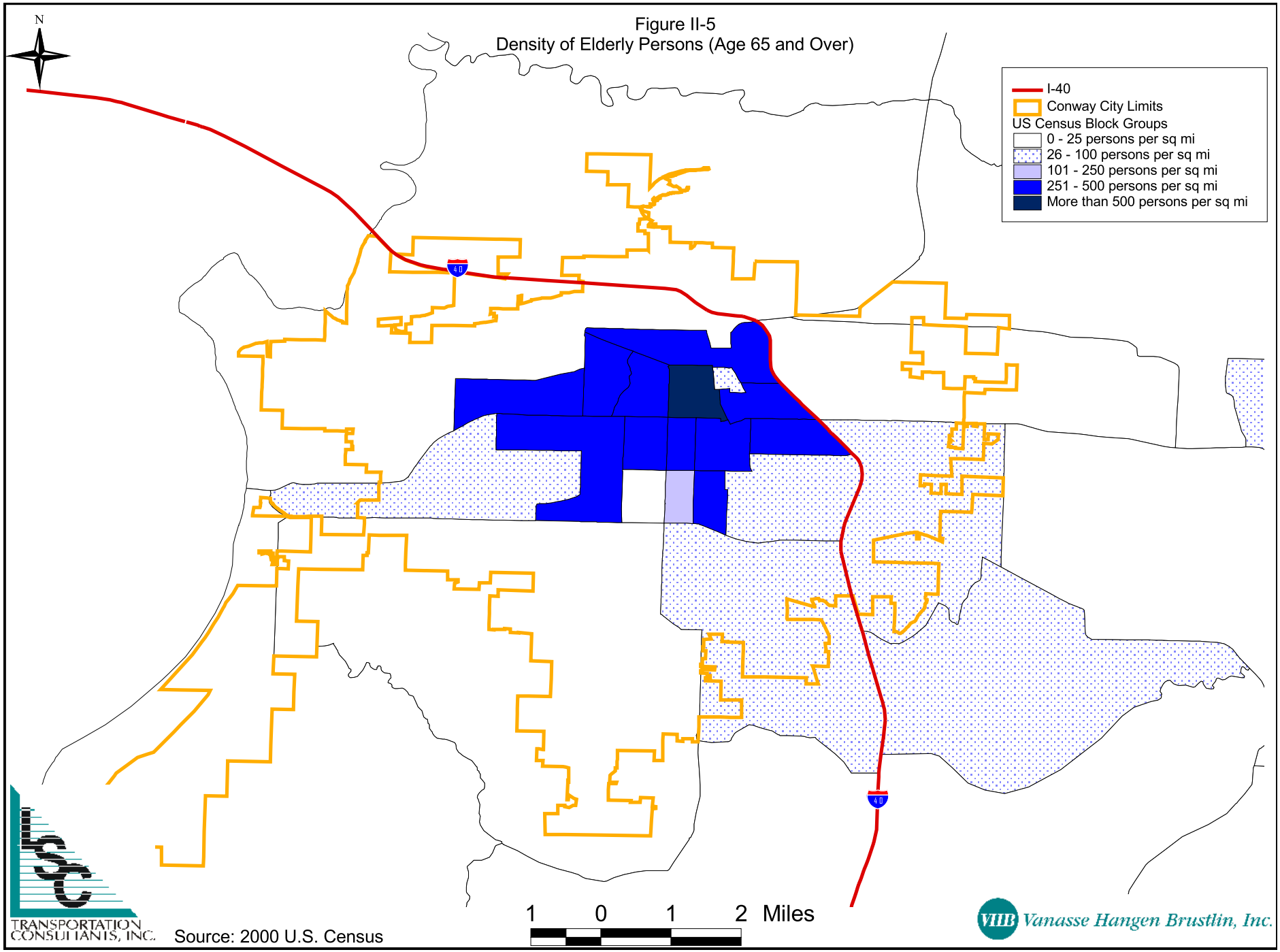


Source: 2000 U.S. Census

LSC TRANSPORTATION CONSULTANTS, INC.

Vanasse Hangen Brustlin, Inc.

Figure II-5
Density of Elderly Persons (Age 65 and Over)



TRANSPORTATION CONSULTANTS, INC.

Source: 2000 U.S. Census

Vanasse Hangen Brustlin, Inc.

Other populations who have difficulty operating vehicles or gaining access to private automobiles are those with a mobility limitation and individuals who fall below the poverty line. In order to determine the population who has a mobility limitation, the "going outside the home disability" classification was used over any of the other disability classifications because it includes individuals who have difficulty going outside the home to perform daily trips and is broader than the disability definition used by the Americans with Disability Act. The highest concentration of individuals with a mobility limitation can be found in two areas near the center of the city (see Figure II-6). One is near the University of Central Arkansas and the other is near Hendrix College near the railroad. Concentrations of persons who fall below the poverty line follow the same trend as the other populations studied (see Figure II-7). The highest concentration is in the city center near the two centers of higher education located within Conway.

Households with no access to a vehicle or access to one vehicle also demonstrate a higher likelihood of using transit because of their limited access to private travel options. It is not uncommon to find the highest concentration of these households in areas where there are high concentrations of people living below the poverty line because of the added cost required to own and operate a private automobile. Additionally, higher concentrations of these households are typically found near locations where shopping, employment, and other services can be found. This is because of their proximity and ease of access without using an automobile. Figure II-8 shows this is the case for households with no vehicle. The areas of highest concentration are located by the University of Central Arkansas as well as Hendrix College and extending out toward Interstate 40. Similarly, Figure II-9 shows that households with one vehicle available are concentrated around the city center in a much larger area than those with no vehicle available. Additionally, there is a second area of slightly less density that extends west from the city center.

Figure II-6
Density of Mobility-Limited Persons

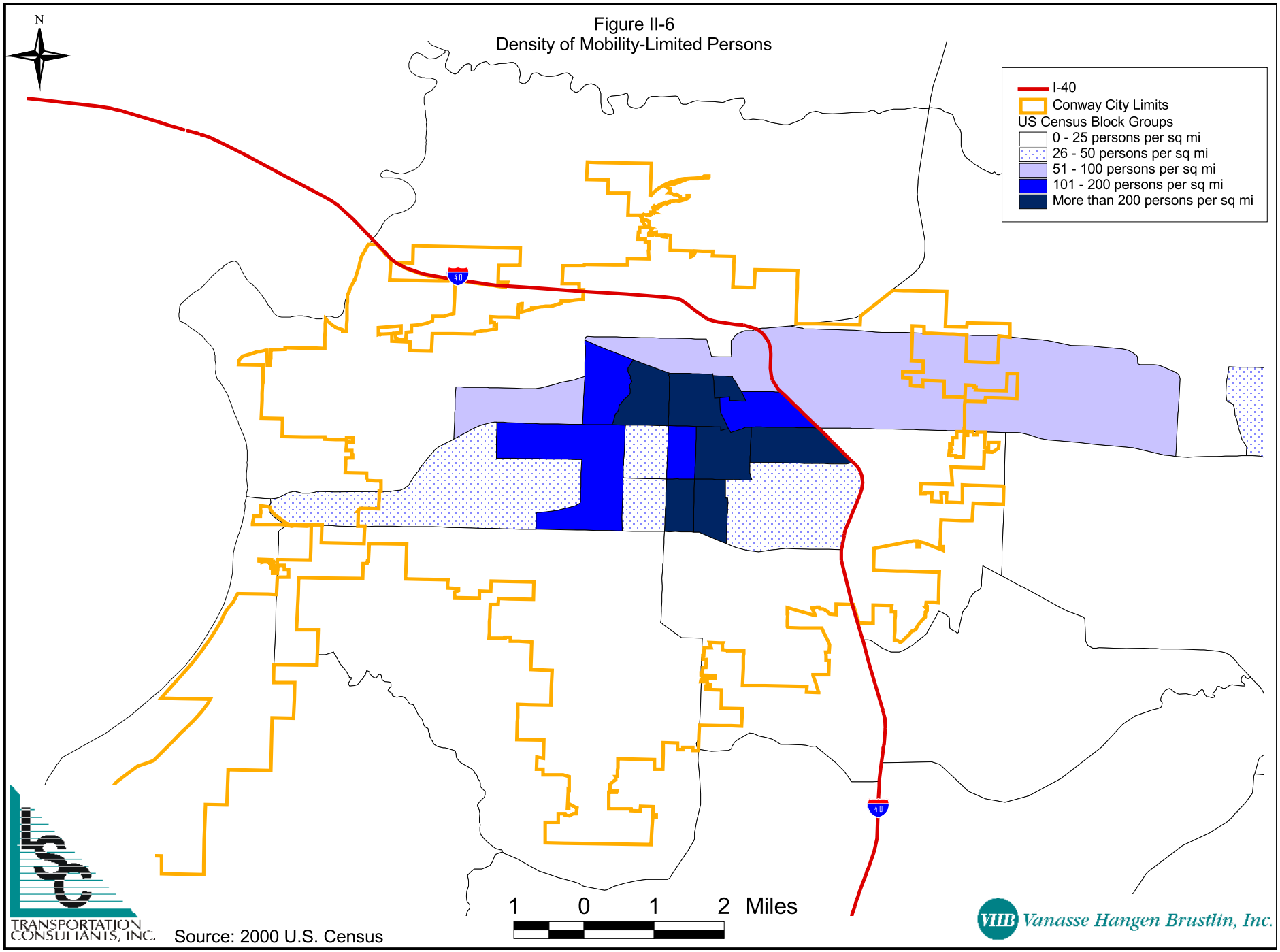


Figure II-7
Density of Low-Income Persons

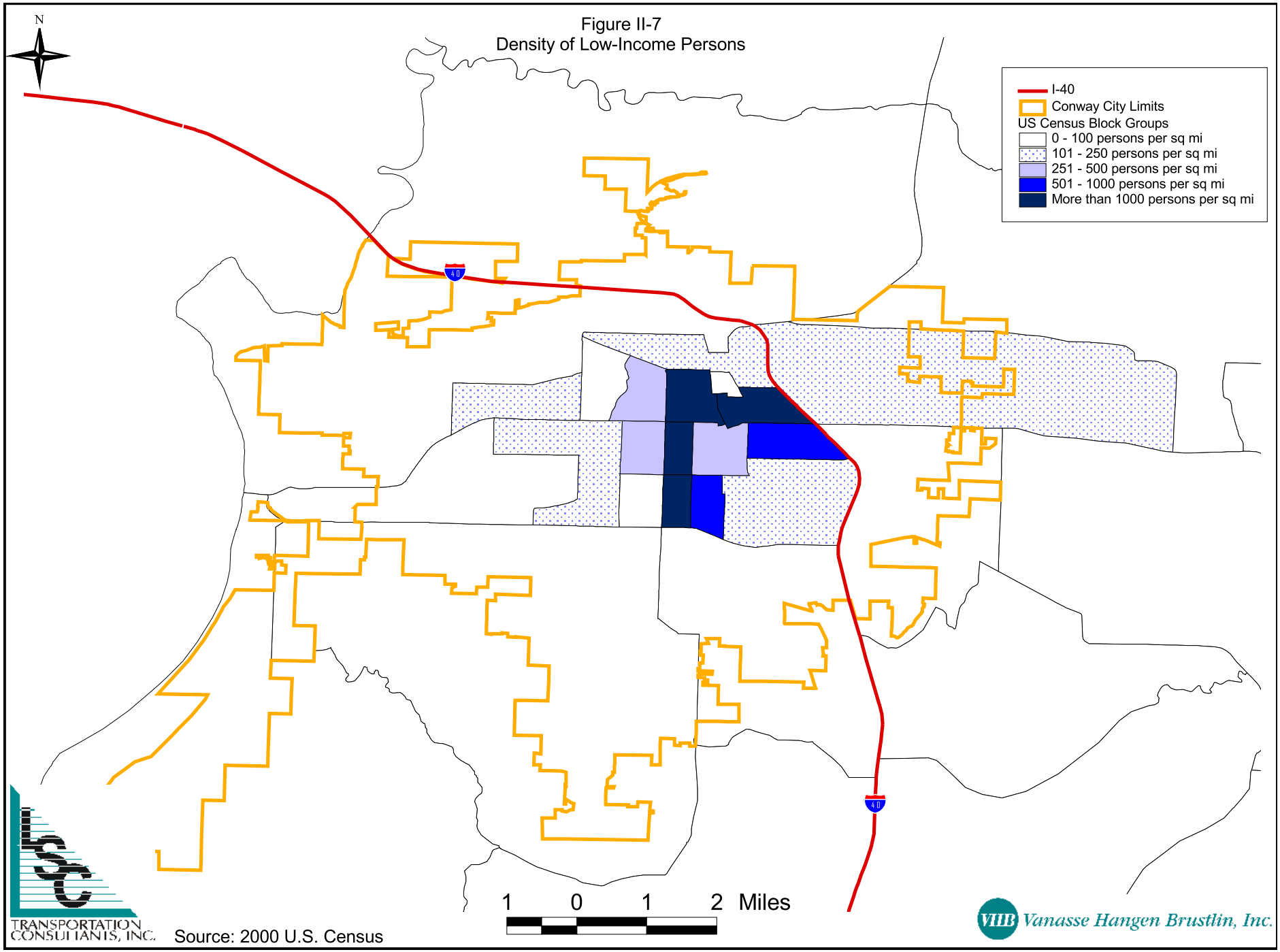
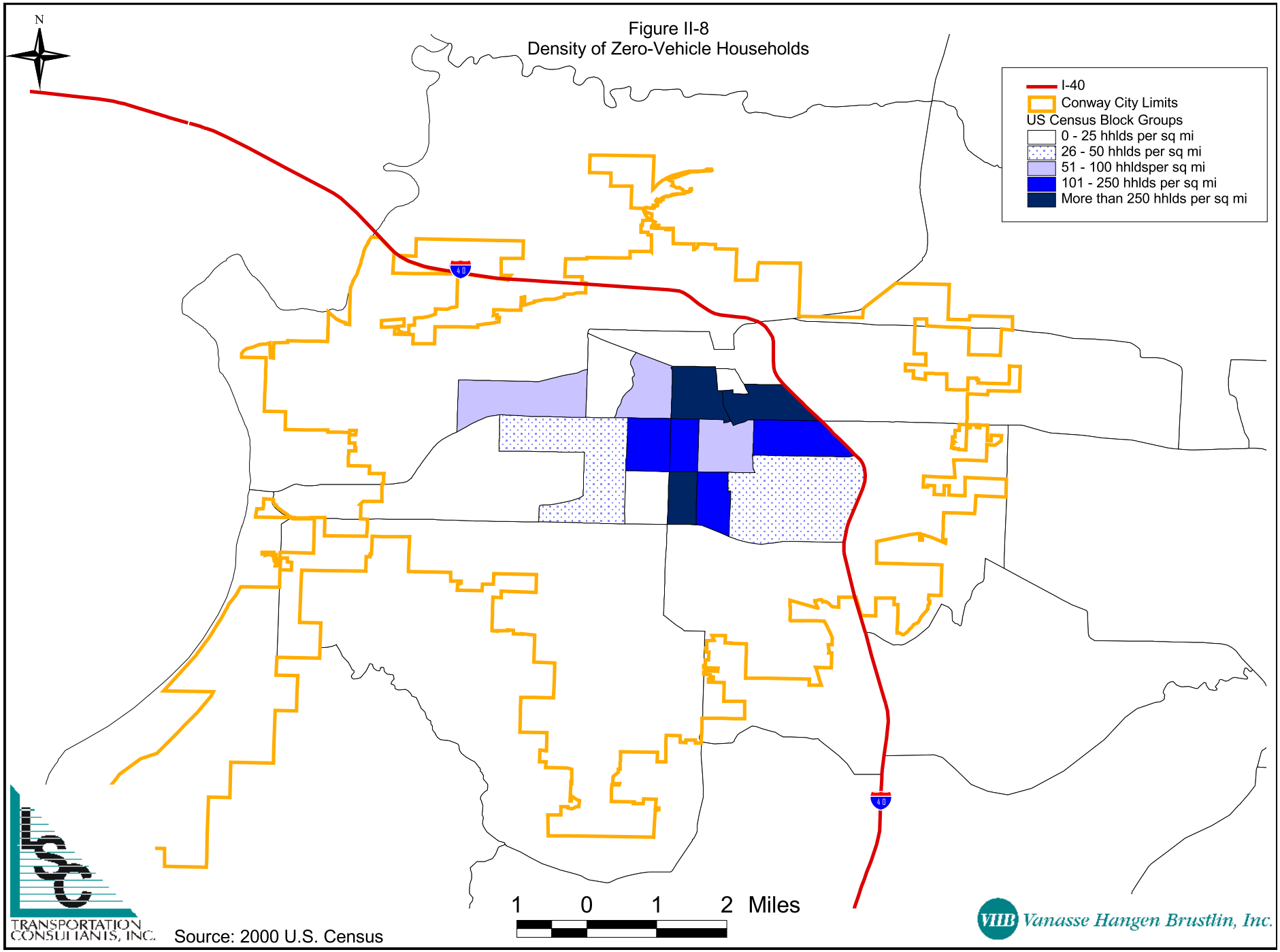


Figure II-8
Density of Zero-Vehicle Households

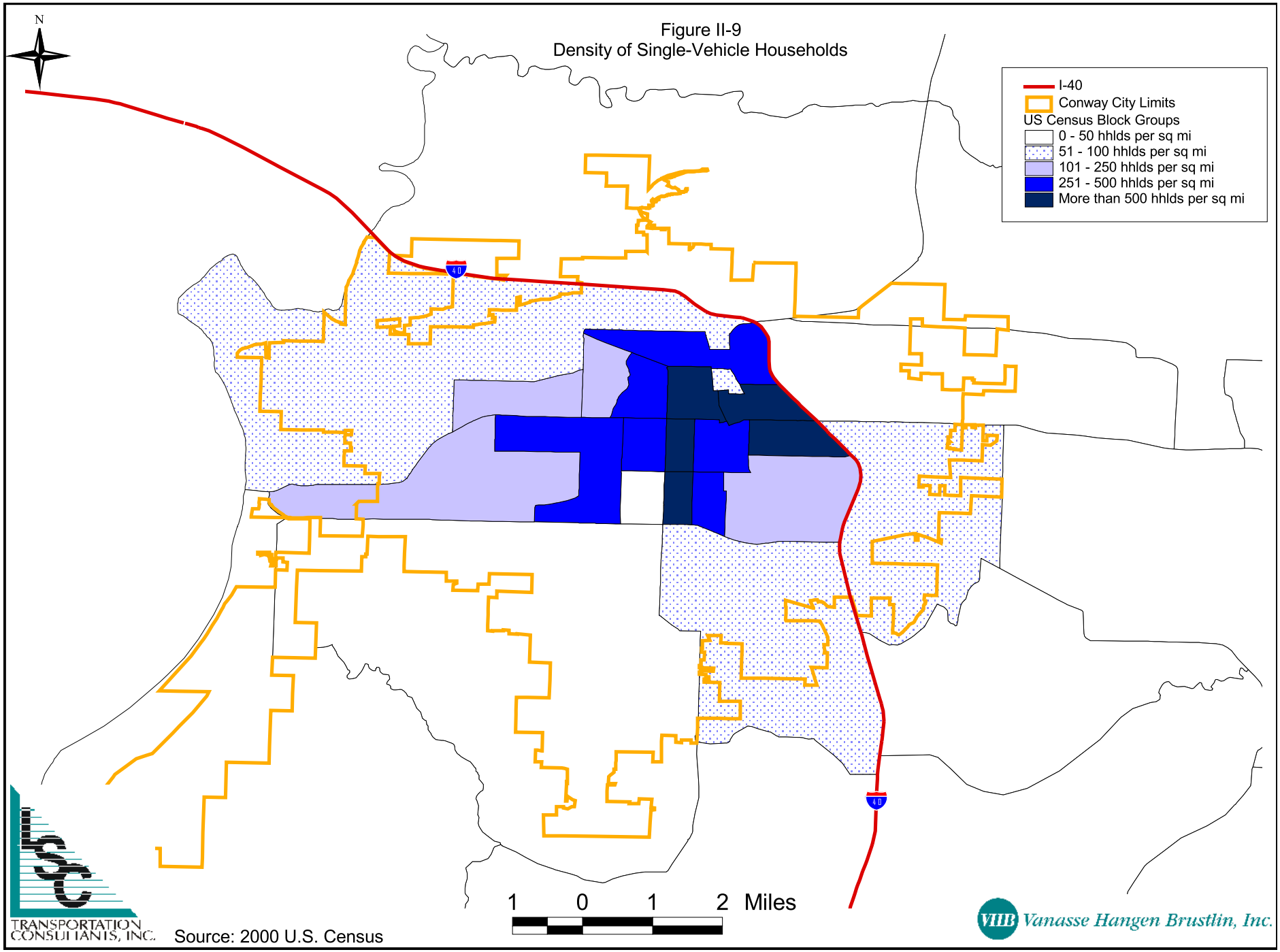


TRANSPORTATION CONSULTANTS, INC.

Source: 2000 U.S. Census

Vanasse Hangen Brustlin, Inc.

Figure II-9
Density of Single-Vehicle Households



EMPLOYMENT CENTERS

It is important to understand where concentrations of employment are located in order to better serve the travel needs for those in the community. Figure II-10 shows employers in the City of Conway with a graphical representation for the number of employees for each. Key locations for high concentrations of employers as well as large employers are as follows and in Table II-2:

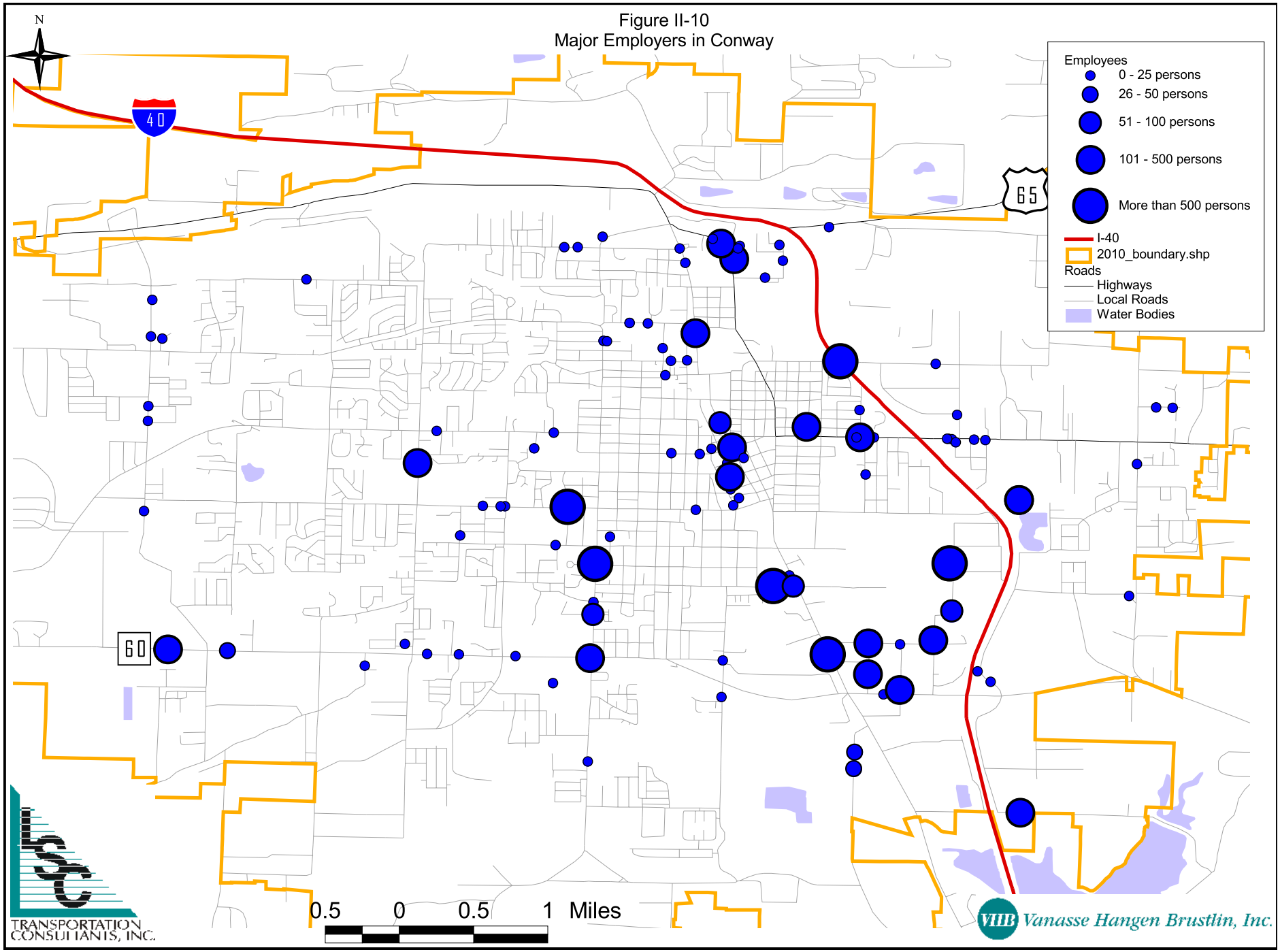
- Donaghey Avenue corridor around the University of Central Arkansas
- Intersection of Industrial Boulevard and Harkrider Drive
- Area around the Conway Municipal Airport along Commerce Drive and Exchange Avenue
- Intersection of Robins Street and Harkrider Drive
- Downtown Conway around Front and Main Streets
- East Oak Street Corridor out to Elsinger Boulevard
- Intersection of Siebenmorgen Road and Interstate 40 near Hendrix College, Conway Human Development Center, and The Village at Hendrix
- Intersection of Old Morrilton Highway, Skyline Drive, and Harkrider Drive

Table II-2
Major Employers

Employer Name	Employment Sector	Number of Employees
Acxiom Corporation	Information Technology	1,850
University of Central Arkansas	Education	1,330
Conway Regional Medical Center	Health Care	1,300
Conway Human Development Center	Institutional Care	1,200
Conway Public School District	Education	900
Nabholz Companies	Construction	500
City of Conway	Government	415
Hewlett Packard	Information Technology	400
Hendrix College	Education	350
Faulkner County	Government	250
Conway Corporation	Utility	200
American Management Corporation	Insurance	180
Arkansas Educational Television Network	Educational Television	92
Arkansas Dept. of Emergency Management	Government	65
Log Cabin Democrat	Newspaper	65
AFL Telecommunications	Wireless Support	60

Source: Conway Chamber of Commerce, www.conwayarkcc.org/work.php?id=2 , Aug. 2009.

Figure II-10
Major Employers in Conway



Using this information in conjunction with travel patterns gathered from the Census Transportation Planning Package will allow for the successful design of transit routes to serve the City of Conway by creating direct connections between both residential areas and employment centers.

UNIVERSITIES AND COLLEGES

In determining the feasibility for transit service, it is always important to consider the need for colleges and universities to have access to public transit. While many college campuses are pedestrian-friendly and compact, the ability to travel outside of the campus can be restricted. In many instances students do not have access to privately owned vehicles. This poses a challenge when trying to access potential employment of retail opportunities off campus. Conway is home to three institutions of higher learning—the University of Central Arkansas, Hendrix College, and Central Baptist College.

The University of Central Arkansas (UCA) is centrally located within Conway. UCA is the second largest institution of higher learning in Arkansas with an estimated 12,000 students. It is also estimated that the University attracts nearly 45,000 visitors annually for sporting events, conferences, and camps (Arkansas, 2008). UCA is growing and is projected to continue growth over the next few years.

Hendrix College is a small, private, liberal arts school located near the intersection of US 65 Business and Siebenmorgen Road. The campus occupies 160 acres and is home to approximately 1,200 students and 92 faculty members. The college is growing and expanding with construction currently taking place for a Student Life and Technology Center, and the recent completion of Hendrix Corner, a 72-unit townhome complex, and the 100,000-square-foot Aquatics and Wellness Center. In addition to growth of the academic campus, Hendrix is involved in the construction of a new mixed-use, walkable community called the Village at Hendrix. This development is open not only to students, but alumni and others are expected to live here.

Central Baptist College (CBC), also located near downtown Conway, is a small, private Bible college of about 600 students (College Board). According to the

Central Baptist College website, CBC saw a 27.5 percent increase in enrollment in the fall of 2006 (Central Baptist College, 2006).

COMMUTING PATTERNS

Using the Census Transportation Planning Package (CTPP) for 2000, an understanding of the commuting patterns and behaviors for the City of Conway can be gathered. Table II-3 shows that the majority of workers in the City of Conway drive alone (70 percent). Only 3,082 (13 percent) carpooled. The remainder walked, biked, took transit, or worked from home. The average commute time for persons working in Conway was 19.5 minutes. Considering the size of Conway, this time seems to indicate that a number of people are traveling beyond the city for work. Conway's proximity to Little Rock (approximately 30 minutes) could be contributing to this higher average commute time.

Table II-3
Conway Mode Split and Commute Time

Population	43,199
Persons in the Workforce	23,864
Commute to Work (16+)	
Drove Alone	16,725
Carpool	3,082
Public Transit	45
Walked	741
Other Means	211
Work at Home	470
Average Commute Time (minutes)	19.5

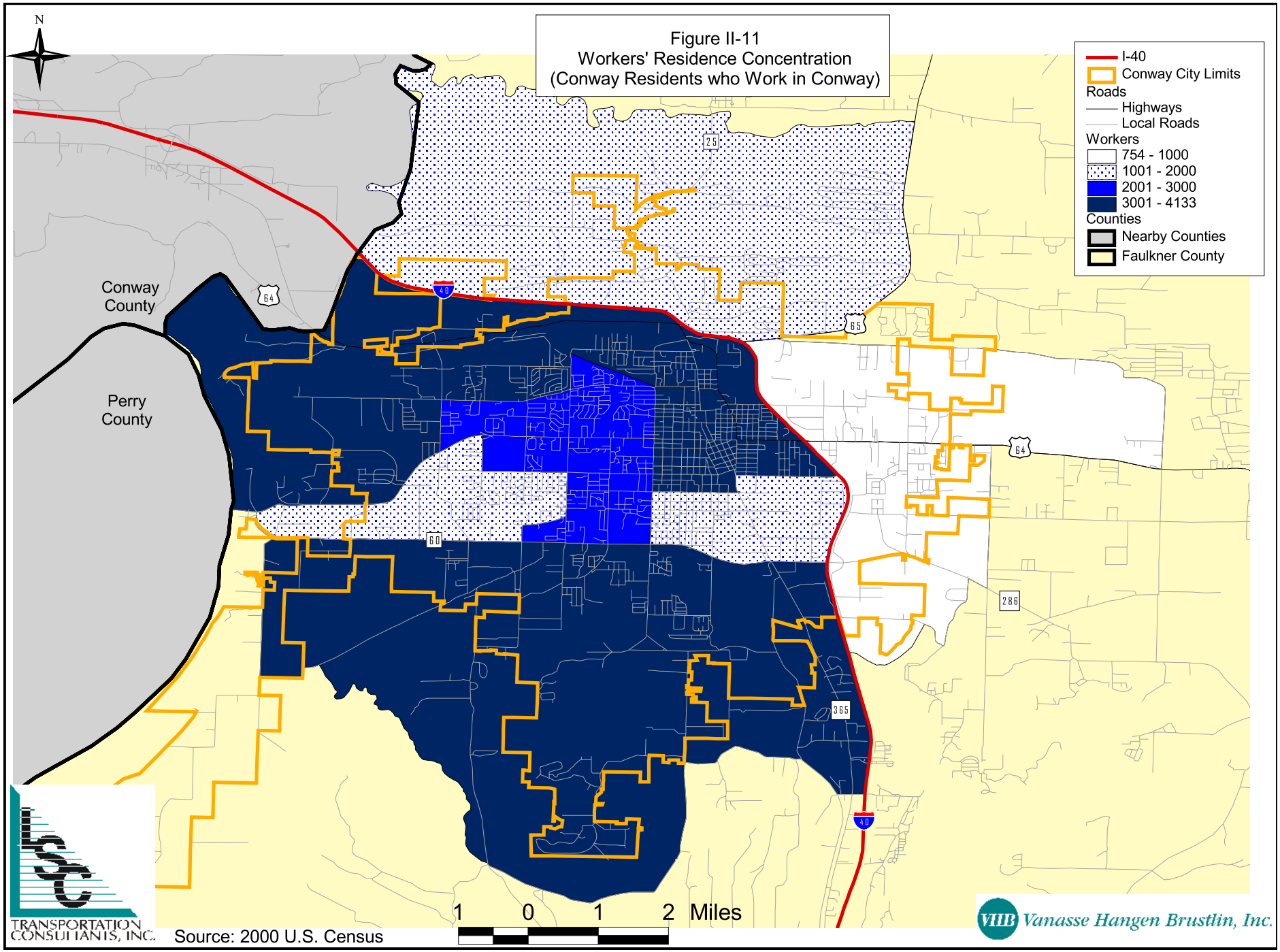
Source: 2000 Census Transportation Planning Package - Part 1.

Using the Journey to Work data from Part 3 of the 2000 CTPP, a general understanding of where concentrations of people are commuting from and to can be gained. The limitation of these data is that they are totaled by census tract. For a city the size of Conway, census tracts can be rather large areas, making it difficult to pinpoint exactly where these concentrations of employers are. When combined with the location of known major employers for Conway, the data can help determine areas where people are commuting for work. Figures II-11 and II-12 below show the concentration of workers' residences and destinations for work. Figure II-11 shows that the highest concentration of

workers' residences is concentrated around the core of the city. There are two outlying areas—one to the northwest and the other to the south of the city center—where a larger concentration of employees reside. It should be noted that these two outliers are larger tracts and would inherently include more people than the smaller tracts located closer to the city center.

The tracts with the highest number of employee destinations are more concentrated around the city center and along major transportation routes. One tract includes the University of Central Arkansas and Conway Regional Medical Center. These two locations are major employers for the city, employing approximately 1,600 people combined[1]. The tracts just to the west of I-40 include employers like Hendrix College, Conway City Hall, Virco, Acxiom, and IC Corporation. Any transit recommendations should seek to connect the key residential areas with key worker destinations.

[1] City of Conway website – www.cityofconway.org/working


N
Figure II-11
Workers' Residence Concentration
(Conway Residents who Work in Conway)
I-40
Conway City Limits
Roads
Highways
Local Roads
Workers
754 - 1000
1001 - 2000
2001 - 3000
3001 - 4133
Counties
Nearby Counties
Faulkner County
Conway County
Perry County
25
64
40
65
60
286
365
1 0 1 2 Miles
TRANSPORTATION CONSULTANTS, INC.
Source: 2000 U.S. Census
Vanasse Hangen Brustlin, Inc.

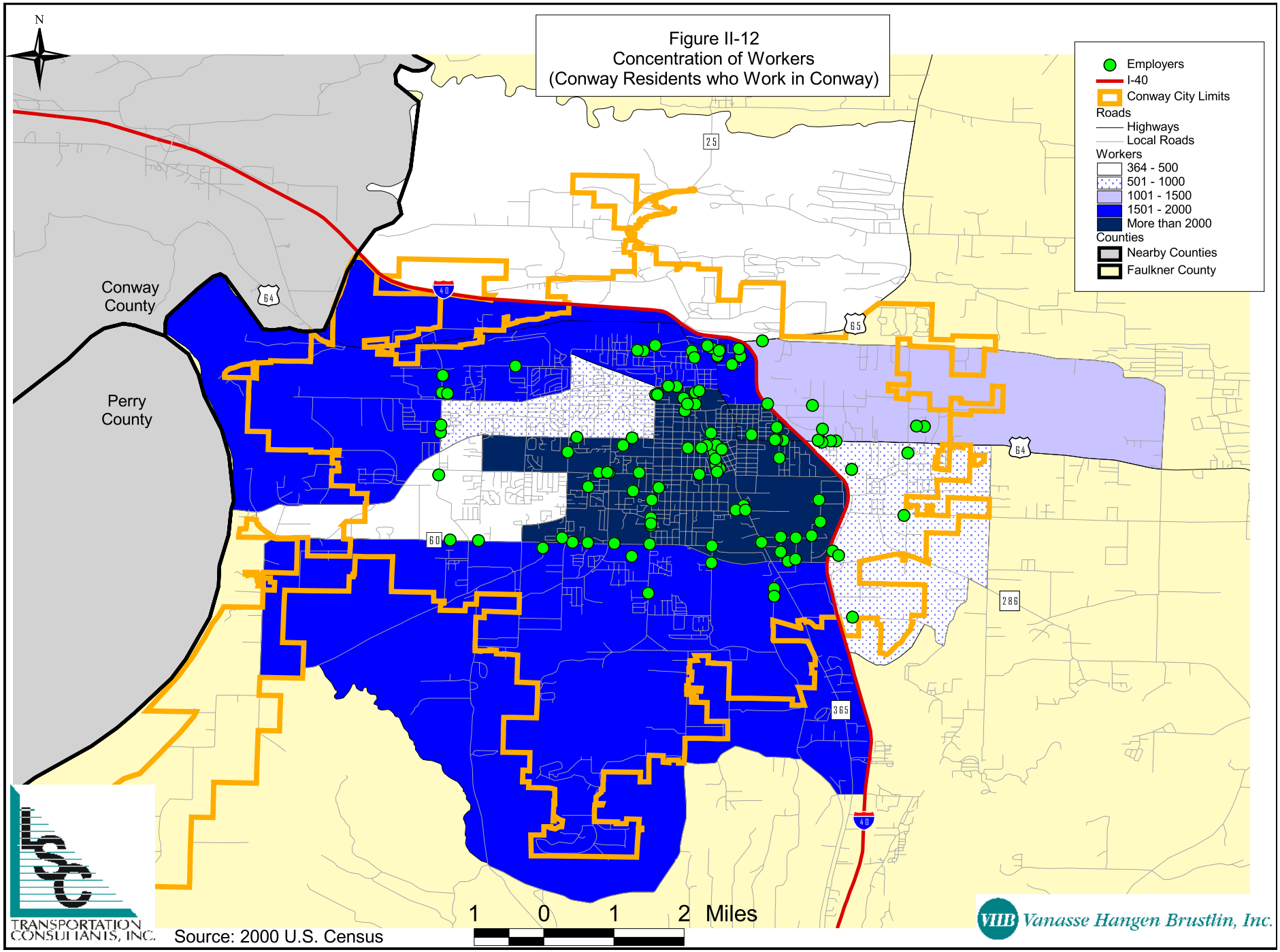


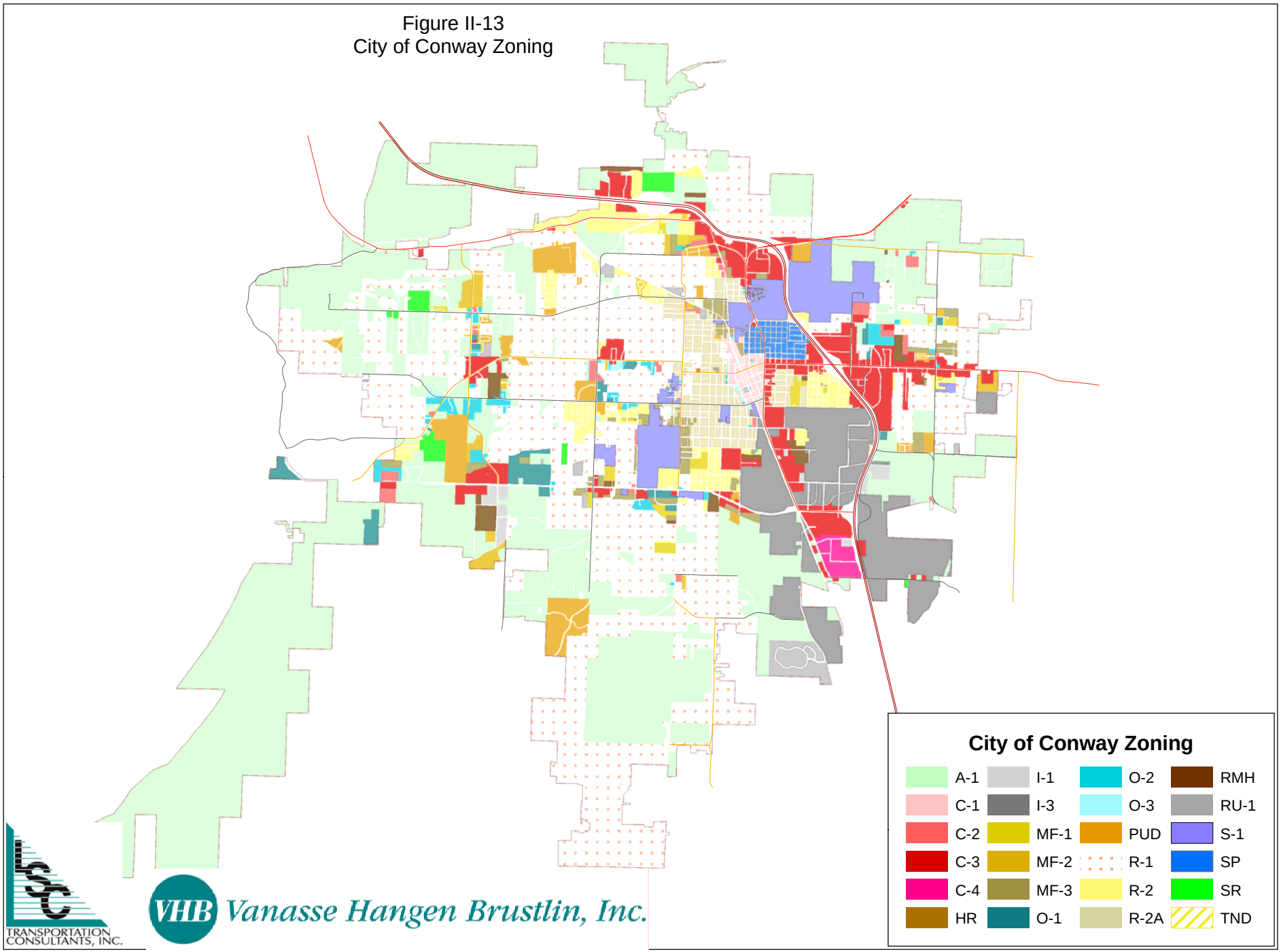
Figure II-12
Concentration of Workers
(Conway Residents who Work in Conway)
N
Employers
I-40
Conway City Limits
Roads
Highways
Local Roads
Workers
364 - 500
501 - 1000
1001 - 1500
1501 - 2000
More than 2000
Counties
Nearby Counties
Faulkner County
Conway County
Perry County
25
64
40
65
60
286
365
1 0 1 2 Miles
TRANSPORTATION CONSULTANTS, INC.
Source: 2000 U.S. Census
Vanasse Hangen Brustlin, Inc.

LAND USE AND ZONING

A thorough knowledge of the zoning classifications helps to identify areas of potential intense development or concentrations of land uses that could be attractors or generators of transit passengers. Figure II-13 shows the zoning classifications for Conway. Areas that are of note are concentrations of commercial, office, and industrial uses, large institutional uses, and areas of multi-family housing. Some important corridors begin to emerge through an analysis of the zoning. They are:

- Dave Ward Drive (State 60)
- Hogan Lane
- Prince Street
- Donaghey Avenue
- College Avenue
- Harkrider Drive (US Bus 65 and State 365)
- Oak Street (US 64)
- Front Street
- Siebenmorgen Road (State 264)
- Industrial Boulevard (US Bus 65 and State 286)
- Amity Road

Figure II-13
City of Conway Zoning



TRANSPORTATION CONSULTANTS, INC.

VHB Vanasse Hangen Brustlin, Inc.

FUTURE GROWTH AND DEVELOPMENT

The City of Conway Comprehensive Plan discusses future and proposed land uses and developments. According to the plan, development will continue to push toward the western boundary of the city and the Arkansas River. As the city grows in this direction, it will continue to annex land into the city. As development grows in the west and south, new roads are being proposed including a parkway connecting Skunk Hollow Road with I-40 and continuing west to connect with Hogan Lane. Larger commercial shopping areas are proposed around the intersections of Hogan Lane and Dave Ward Drive, as well as Skunk Hollow Road and Oak Road. A new interchange on I-40 is shown to connect with an extension of Hogan Lane. This improvement will undoubtedly increase traffic volumes along Hogan Lane. Lastly, the plan calls for the construction of a new airport near the southwest boundary of Conway and the Arkansas River. This proposed development places a potential trip attractor and generator further away from the dense urban core of the city.

There are a couple of large developments being proposed for Conway. At this point, these developments are contingent on the current economic outlook improving prior to construction, but should be considered as areas of new growth for Conway. The first is a 900-unit multi-family housing development and golf course under construction and partially occupied to be located in the southwestern area of the city. The second is a technical support facility for Hewlett Packard that would employ approximately 1,300 people and is located in the south along the western side of I-40. Lastly is the development of a major retail center near the intersection of I-40 and Dave Ward Drive. This development has the potential to include a mixed-use component with housing and office. These developments point to a trend of growth in two areas of Conway. Both the southwest and eastern areas of Conway are showing a trend for new growth and development (Patrick, 2008).

The City of Conway has used US Census information to forecast population growth for the city (Planning Department, May 2002). Based on different methods—as well as low, medium, and high growth rates—the 2010 population is forecast to be between 53,880 and 60,523 persons. By 2030 the population is forecast to grow to between 83,725 and 121,976 persons. If the City of

Conway's current estimates of population (52,430 to 55,334) are confirmed to be above 50,000 by the 2010 census, and current federal policies and definitions remain in place, Conway will be reclassified as an urbanized area. Given the lag-time from the census count to actual reporting dates, this determination may not be made until 2011 or 2012. This potential reclassification would change Conway's eligibility and local matching dollar requirements for federally funded transit programs.

Chapter III

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER III

Existing Transportation Services

INTRODUCTION

This chapter reviews the existing transportation providers within Conway, Arkansas. These agencies and organizations represent myriad nonprofit, for-profit, private, and public agencies. A brief summary of each provider is presented. This information is critical in determining what transportation resources exist in the study area. The main objective of this effort was to determine the extent to which these transportation providers serve the residents of Conway.

AGENCIES LOCATED WITHIN CONWAY

The following section provides information on each of the agencies located within the City of Conway, most of which were identified as part of the *Faulkner County Transportation Coordination Plan*. Information regarding number of vehicles, number of trips provided, and type of market segment served was provided by most of the agencies. There are 15 human services agencies and one transportation provider, as well as one university that provides shuttle services to its students in the Conway area. Most of the human service agencies are private nonprofit agencies. Table III-1 shows the transportation services provided in the Conway area.

Table III-1
Transportation Services in Conway

	Provider	Annual Trips Provided	Service Area
1	Bethlehem House		Faulkner County
2	Boys and Girls Club of Faulkner County		Faulkner County
3	Conway Housing Authority	6,240	Conway
4	Conway Human Development Center		Conway
5	Conway Regional Health System		Faulkner, Conway, Perry, Van Buren, and Cleburne Counties
6	Conway Taxi	12,000	Conway, Little Rock (Faulkner County)
7	Your Local Taxi (also called Conway Yellow Cab and City Cab of Conway)	16,000-20,000	Faulkner County
8	Counseling Associates		Conway, Faulkner, Johnson, Perry, Pope, and Yell Counties
9	Faulkner County Council on Aging	26,832	Faulkner County
10	Faulkner County Council on Developmental Disabilities	8,216	Faulkner County
11	Faulkner County Day School	43,160	Faulkner County
12	HAVEN	6,552	Faulkner County
13	Independent Living Services	107,224	Faulkner County
14	Jefferson Lines		Interstate and intercity
15	Leap Into Learning	9,360	Faulkner County
16	My House Inc.		Faulkner County
17	Unity Adult Day Care Center	4,888	Faulkner County
18	University of Central Arkansas (UCA) Campus Shuttle		Conway
19	University of Central Arkansas (UCA) International Program		Conway
20	Women's Shelter of Central Arkansas	1,560	Faulkner County
	TOTALS	**242,032-246,032**	

**Note = Van for My House Inc. is shared with Bethlehem House and the Women's Shelter of Central Arkansas*

Source: Transportation Coordination Plan for Faulkner County, and LSC.

Bethlehem House

The Bethlehem House, Inc. is a nonprofit organization located in Conway that provides services for homeless citizens within Faulkner County. The agency's mission is to "encourage, equip and motivate homeless individuals and families to take the necessary steps to change their life situations." In addition to transportation, the agency provides services such as case management, employment assistance, life skills training, education, and vocational counseling. Transportation is provided for daily services, work and medical purposes, and occasionally for personal needs. The agency is funded by Faulkner County United Way. The agency employs one van which is shared by My House and the Women's Shelter of Central Arkansas.

Boys and Girls Club of Faulkner County

This agency is located in Conway and provides transportation for low-income youth. The agency's mission is "to enable all young people especially those who need it the most to reach their full potential as productive, caring, and responsible citizens." The club is open every day after school and on weekends. The agency shares transportation with the Conway School District. The agency provides approximately 800 miles per year. The agency employs a 1995 Ford van with a 15-passenger seating capacity. The agency has three drivers that drive a total of 10 hours per week. The agency does not charge any fees for providing transportation services. The agency is funded by Community Development Block Grant (CDBG).

Conway Housing Authority

The Conway Housing Authority offers affordable rental apartments and Section 8 rental voucher program for low-income households in the Conway area. Transportation is a demand-response type of service and is provided for shopping and recreation purposes. The agency provides 6,000 vehicle-miles of service per year. The agency does not charge any fees for providing this transportation service. The agency has one driver that drives a total of three hours per week. The agency employs a 1993 Ford ElDorado which has a 20-passenger seating capacity and is wheelchair accessible. The agency provides approximately 6,240 annual trips and costs the agency approximately $15,400. Funding for transportation services comes from the agency's general budget.

Conway Human Development Center

The Conway Human Development Center (CHDC) is a residential facility for people with developmental disabilities. The agency provides comprehensive services such as medical, nursing, physical therapy, occupational therapy, speech therapy, and orthotics. Transportation services are available for work, medical services, recreation, and personal needs.

Conway Regional Health System

Conway Regional Health System is a health care system which includes a medical center, four health clinics, a health and fitness center, home health agency, therapy clinics, and inpatient rehabilitation. The health system's facility—Conway Regional Medical Center—is a not-for-profit hospital serving the five-county area of Faulkner, Conway, Perry, Van Buren, and Cleburne Counties. The agency provides 3,000 vehicle-miles of service per year. The agency's annual operating cost is $3,950 which comes from the general budget. Transportation is provided for clients to/from the facility.

This agency's unmet transportation need is for patients that are discharged from the emergency room and have no transportation home. They also see a need for transportation of patients visiting the clinic and the outpatient department.

Conway Taxi

This is a taxi service that provides transportation services in the Conway area.

Counseling Associates

Counseling Associates is a nonprofit mental health center serving the counties of Conway, Faulkner, Johnson, Perry, Pope, and Yell. The agency provides a total of 15,000 annual vehicle-miles of service. Transportation services are primarily for medical services, followed by trips for work and recreation purposes. One of the biggest transportation need for the agency is a wheelchair-accessible van. The agency's total annual operating cost is approximately $7,700 which is funded by the mental health block. The agency uses two vehicles to provide transportation services. One is a 1997 Ford van and the other is a 2002 Dodge Maxiwagon. Both these vehicles have a 12-passenger capacity.

Faulkner County Council on Aging

The agency primarily serves elderly individuals within Faulkner County and provides approximately 105,000 vehicle-miles of service per year. Transportation services are provided mainly for daily services, medical, recreation, and personal needs. The agency provides approximately 26,850 annual trips with an operating cost of $152,900. The agency's funding sources are from the City of Conway, the cigarette tax, CDBG, United Way, clients, Title XIX Medicaid, and state funding. The agency has five drivers that drive 30 to 40 hours a week. The agency has a fleet of 16 vehicles. They range from 7-passenger capacity to 21-passenger capacity and are from model years 1992 to 2007. Five of the 16 vehicles are used for Meal-on-Wheels delivery program. Approximately 60 percent of the vehicles are wheelchair accessible. The biggest unmet transportation need identified by this agency was transporting clients to out-of-town medical facilities. Currently, the agency transports clients to medical facilities in the town where they reside. However, there is a need for transportation from the communities of Greenbrier, Vilonia, Mt. Vernon, Twin Groves, and Mayflower into Conway. Lack of employees and funding restricts the agency to provide transportation into Conway and between towns.

Faulkner County Council on Developmental Disabilities

Faulkner County Council on Developmental Disabilities is a nonprofit organization that provides transportation services for individuals with developmental disabilities within Faulkner County. The agency provides approximately 50,000 vehicle-miles per year. The agency provides transportation services primarily for work purposes. The agency has three drivers that drive a total of 75 hours per week. The agency provides 8,200 annual trips with three vehicles—a 2001 Dodge conversion van, a 2004 Ford Taurus, and a 2005 Ford Taurus. These vehicles have a 5- to 8-passenger capacity. The annual operating cost for this transportation service is $46,900. Funding sources for transportation services are CDBG, the City of Conway, and United Way.

Faulkner County Day School

This is a private company located in Conway that provides elementary and secondary school daycare services for individuals with developmental disabilities within Faulkner County. The Faulkner County Day School shares some

split routes with My House and transports Faulkner County Council of Developmental Disabilities clients to work. The agency provides approximately 297,000 annual vehicle-miles of service. Transportation services are primarily for work and medical services. The agency provides approximately 43,200 annual trips. The agency has eight drivers that drive 20 to 40 hours per week and uses 10 vehicles with an annual operating cost of $409,800. The vehicles range from a 9-passenger van to a 22-passenger bus. The agency is required to have one or more attendants in addition to the driver on every run, making the cost of salaries very high. The agency is funded through general budget, Title XIX Medicaid, and United Way.

HAVEN

HAVEN provides transportation services for low-income individuals within Faulkner County. Transportation services are primarily for medical services, recreation, and personal needs. The agency uses a 1993 Buick Roadmaster which seats up to six passengers. The agency provides approximately 6,600 annual trips. The agency hires one driver that works for 11 hours a week. The agency's annual operating cost is $13,400. Funding sources for transportation services include United Way and the agency's general budget. One transportation need identified by the agency is a 12-passenger van.

Independent Living Services

Independent Living Services is a nonprofit agency that provides transportation for individuals with developmental disabilities within Faulkner County. The agency offers services to individuals in Independent Living Services operated by group homes, Conway apartments, Greenbrier apartments, and Creative Living (a facility for persons with special medical needs). The agency provides approximately 200,000 annual vehicle-miles of service and 107,200 annual one-way trips. The agency hires a total of eight drivers and has a vehicle fleet of 26 vehicles. The agency is funded by Title XIX Medicaid. The biggest need identified by this agency was that the growth in services requires more vehicles.

Jefferson Lines

Jefferson Lines is a private motorcoach operator that provides service from Kansas City, Missouri to Fayetteville, Fort Smith, and Little Rock, Arkansas. There is also a service connecting Pine Bluff and Little Rock. This service is paid

for through Section 5311 funds as well as fares collected. Certain routes pass through Conway, allowing citizens there an alternative to traveling by automobile to any of the destinations along the route. In addition, Jefferson Lines provides similar services to areas of Minnesota, Missouri, Oklahoma, Texas, Iowa, South Dakota, and certain locations in Kansas and Wisconsin.

Leap Into Learning

This agency is located in Conway and serves low-income and disabled individuals. The agency service area includes Falkner County. Transportation services provided are primarily for medical services. The agency has three drivers that drive a total of 40 hours per week. The agency uses three vehicles to provide approximately 9,400 annual trips. The agency has been operating for just a few months as a Medicaid paratransit provider and, therefore, information regarding the Medicaid trips they provide is limited.

My House, Inc.

My House is a rural community-based group home for adults with developmental disabilities that also provides transportation service for their clients. As mentioned above, the agency shares a van with the Women's Shelter of Central Arkansas and Bethlehem House. The agency employs three drivers that work a total of 40 hours per week. The van is a 15-passenger 1999 Dodge. Funding sources include Title XIX Medicaid (which reimburses $0.27 per trip-mile) and United Way. The agency's total annual operating cost is approximately $33,500. The agency provided 200,000 vehicle-miles of service, which includes the mileage for Women's Shelter of Central Arkansas and Bethlehem House.

Unity Adult Day Care Center

Unity Adult Day Care Center—located in Conway—provides adult day services. This agency provides approximately 312,642 vehicle-miles of service. Transportation services are primarily for daily services and medical services. Unity Adult Care Center primarily provides transportation to low-income/disabled individuals within Faulkner County. The agency provides transportation Monday through Saturday and uses 14 vehicles ranging from a 5-passenger van to a 12-passenger van. The agency has a total of 10 drivers that work from 15 to 40 hours a week. The agency provides approximately 4,900 annual trips.

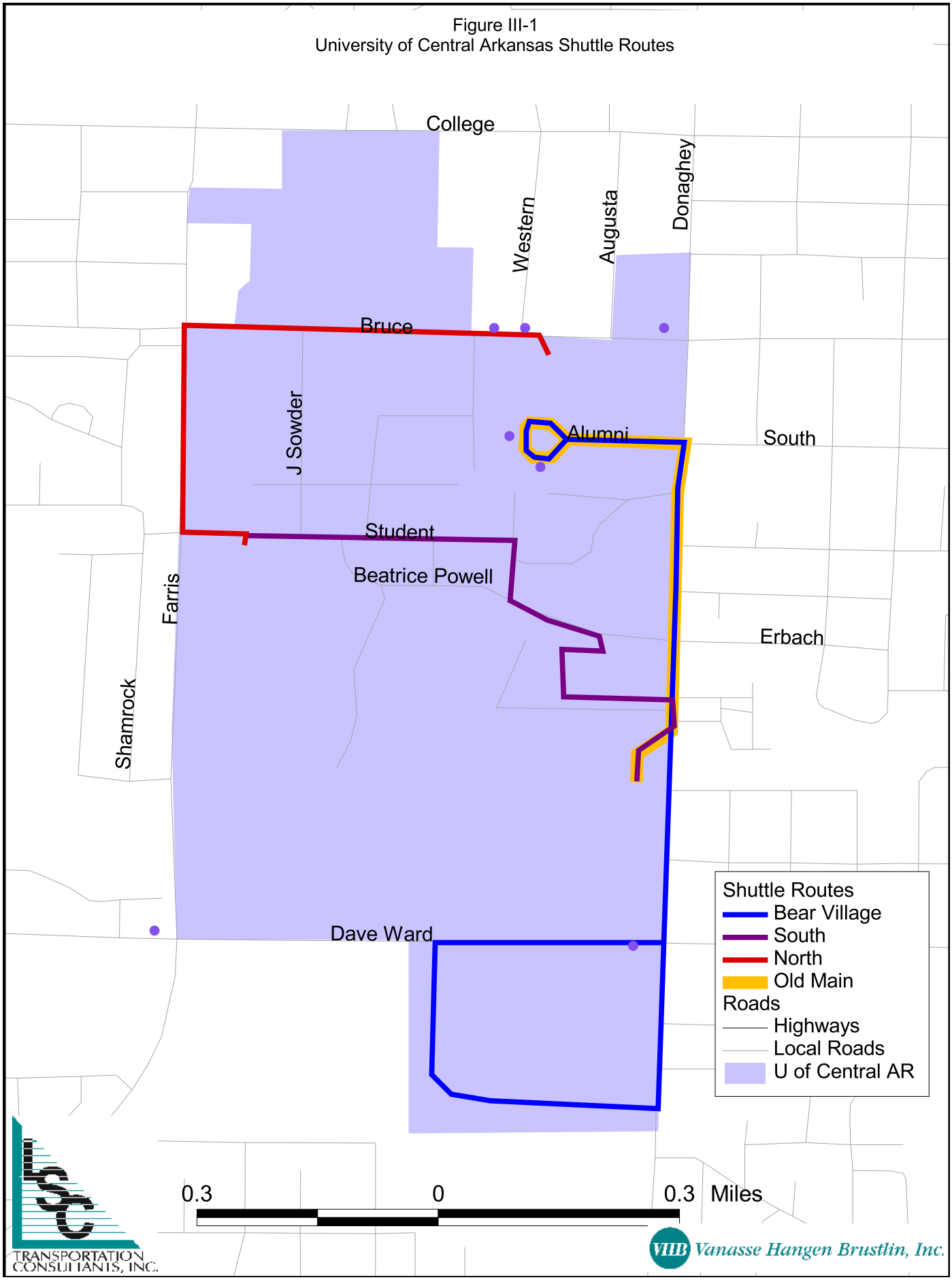
University of Central Arkansas (UCA)

The university has two transportation programs. One program is a campus shuttle system for students and faculty, serving parking areas and providing transportation between different parts of the campus. The second program serves international students, providing some off-campus transportation and service beyond the campus shuttle operating hours.

UCA Shuttle

The University of Central Arkansas provides shuttle service to students, faculty, and staff of the University. There are four route options available (see Figure III-1): the Purple Route – Bear Village, Purple Route – North, Gray Route – South, and Gray Route – Old Main. The Bear Village line connects the Bear Village Apartment Complex to the Alumni Circle by way of Donaghey Drive. The North line links the HPER parking lot to the New Hall/Hughes parking lot, Prince Center, and Burdick. The South line connects the softball complex parking lot to Brewer-Hegeman Stanley Russ Hall and the HPER complex. The Old Main line provides connections between Alumni Circle and the softball complex parking lot. The service is operated from 7:00 a.m. to 5:00 p.m. Monday-Friday, except for the Bear Village line, which operates from 7:00 a.m. to 7:00 p.m. Monday-Friday.

Figure III-1
University of Central Arkansas Shuttle Routes



UCA International Program

The university has approximately 250 enrolled international students. Since these students have no personal vehicles and there is no public transportation in the area, the university sees a responsibility to provide transportation services. The agency provides approximately 5,000 vehicle-miles of service per year. Transportation services are mainly for medical services and personal needs, followed by recreation and other needs. The biggest transportation need identified by the agency is that the number of enrolled international students is expected to double next year, which is going to increase the demand for transportation services. The agency uses one vehicle, which has an annual operating cost of $7,000.

Women's Shelter of Central Arkansas

Women's Shelter of Central Arkansas provides transportation to their clients within Faulkner County. Transportation services are primarily for work, medical services, and grocery shopping. The agency provided approximately 1,560 annual trips. Funding sources include CDBG and United Way. Transportation is provided with one vehicle which is shared by My House and Bethlehem House. The unmet transportation need identified by the agency was that clients working nights and weekends cannot get transportation.

ANNUAL TRIPS PROVIDED

Based on the information received from the transportation provider and human service agencies, nine of the 17 agencies provided information about the annual trips provided. Since most of the human service agencies serve Faulkner County with trips concentrated in the Conway area, we assumed that 70 percent of the total trips provided by these human service agencies whose service area is Faulkner County were within the Conway area. Based on the information available and the service area, the Conway area receives 151,700 annual program trips. Additionally, there are a number of agencies that have not reported any ridership information, most of which provide program trips and belong to private and/or human service agencies. The only agencies that do not provide program trips are Conway Taxi and the University of Central Arkansas (UCA) International Program, neither of which provided any ridership information.

TRANSIT DEMAND

Transit demand in any area can be categorized into two main categories:

- "Program demand" which is generated by transit ridership to and from specific social service programs, and
- "Non-program demand" generated by other mobility needs of elderly persons, persons with disabilities, and low-income population. Examples of non-program trips may include shopping, employment, and medical trips.

Note that the annual trips provided in this chapter are mostly program trips (except Conway Taxi, Jefferson Lines, and the UCA services) which are generated to/from specific social service programs. Human service agency transportation in Conway is provided to persons that are clients of human service agencies (having met the eligibility requirements of the agency or program). Often trip purposes or destinations are restricted. Most of these services are provided by the agencies themselves, although in some cases they may be provided under contract by a public transportation provider or other agencies.

The presence of a public transportation service may reduce the demand for specialized transportation services as clients are able to travel using the public transit system to access some programs. This relationship depends on the specific public transit service which is implemented.

Chapter IV

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER IV

Transit Needs Assessment

INTRODUCTION

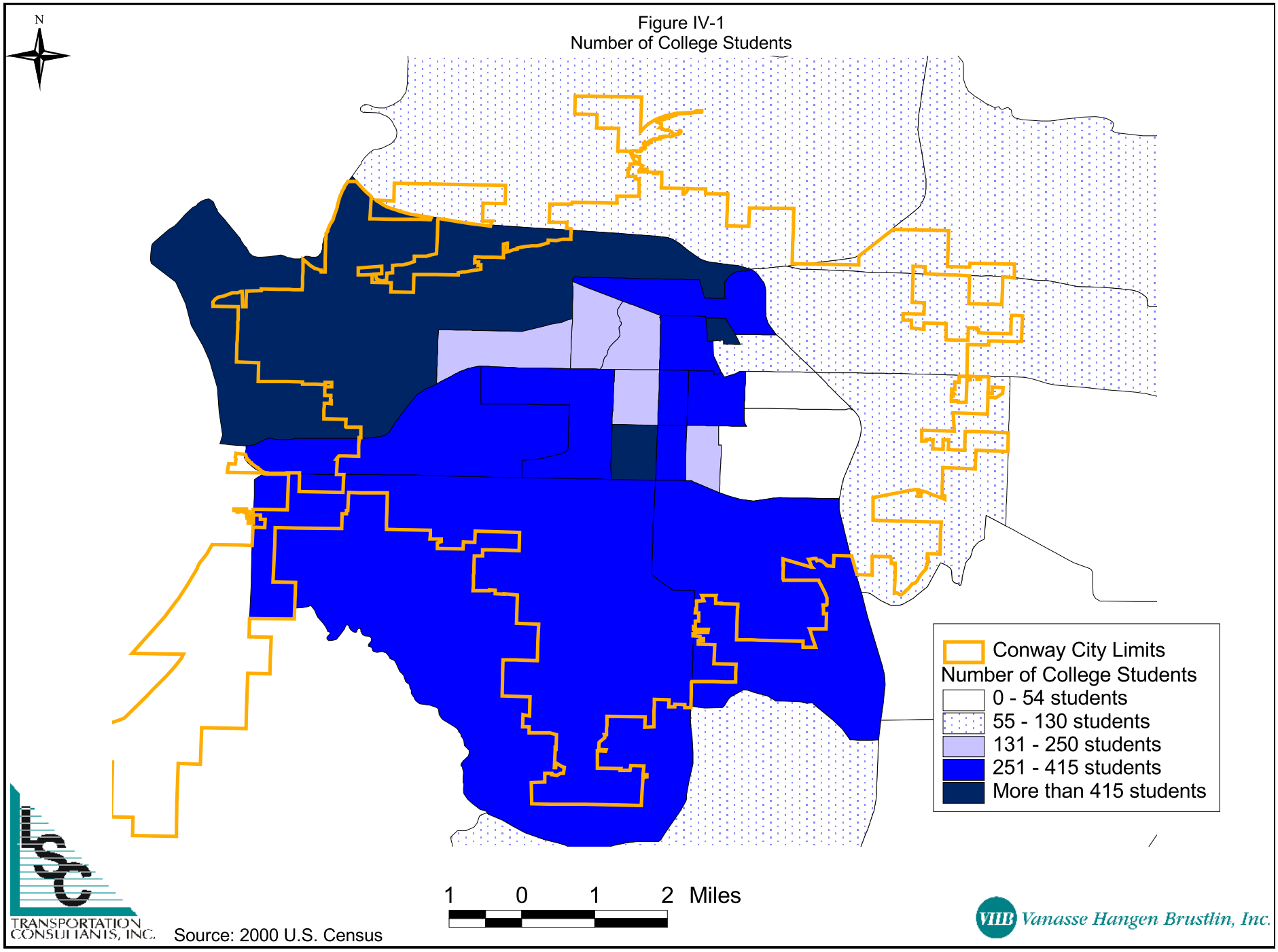
This chapter approaches transit need from several perspectives. First the location of college students is discussed. As noted in previous chapters, the student population is an existing transit service market, so it is important to understand the geographic distribution of students as prospective users of a general public transit service. Second, based on community demographics, need is reviewed from the perspective of persons without the ability to drive a car, whether too young to be licensed, having some disability or mobility limitation that prevents driving, or living in a household with fewer vehicles than drivers. Third, peer city information is presented to show what other cities of a similar size generate in transit demand. Finally, a preliminary range of demand for Conway is discussed.

COLLEGE STUDENT LOCATION

There is a large proportion of college students attending both undergraduate and graduate programs in Conway. The students are often willing to ride and in need of public transit. Figures IV-1 and IV-2 show the location of college students by block group throughout the City of Conway in two different formats. Figure IV-1 represents the raw number of students that are within a particular block group. This map is effective at showing which block groups have the most students, but since the block groups in Conway represent a large geographic area, they do not show specifically where they live within the block group.

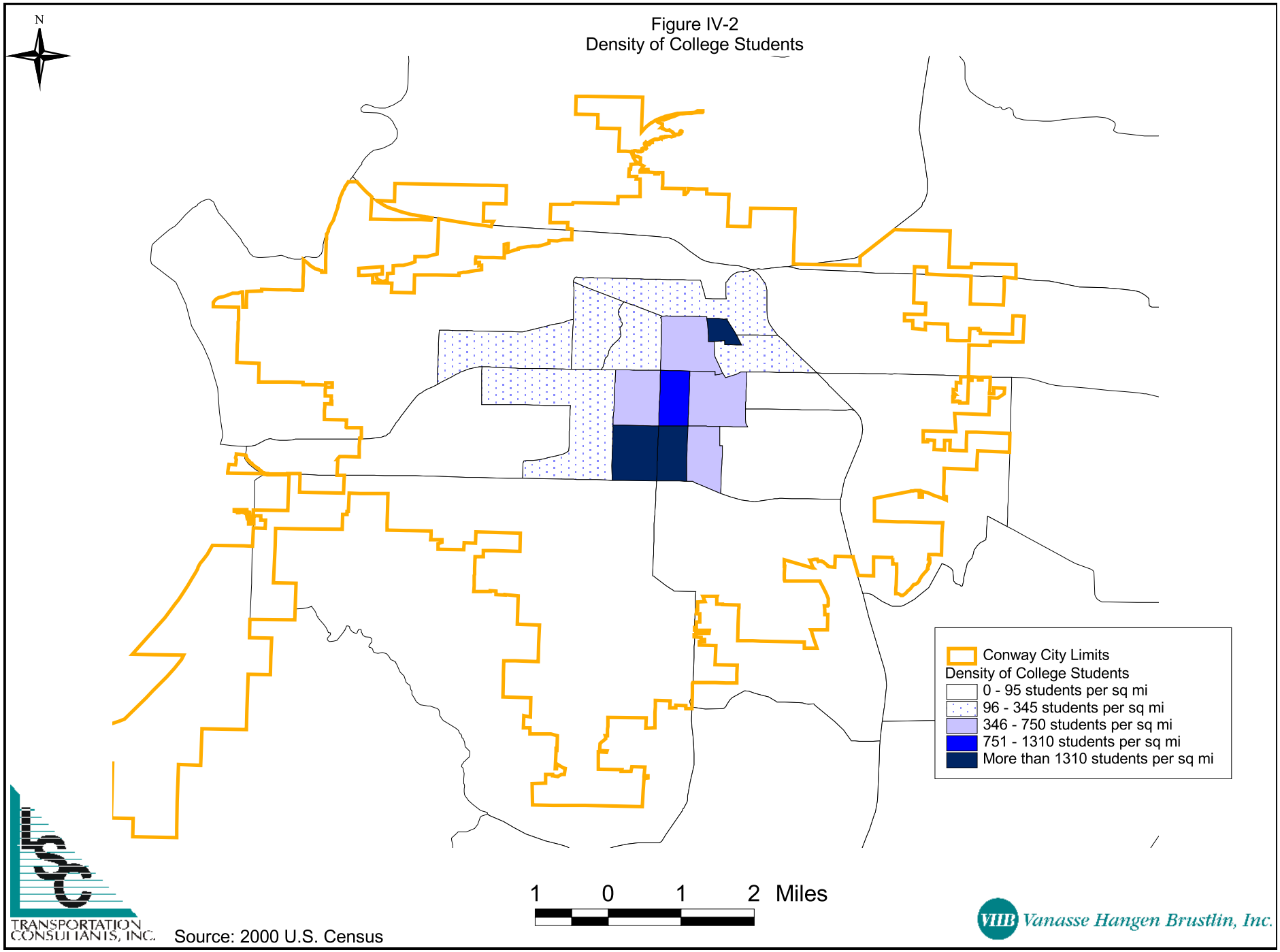
The second map, Figure IV-2, shows the density of the student populations within the block groups. This map shows the regions that have the most students per square mile. This map is important because it depicts where students are concentrated the most heavily.

Figure IV-1
Number of College Students



Source: 2000 U.S. Census

Figure IV-2
Density of College Students



LSC TRANSPORTATION CONSULTANTS, INC.

Source: 2000 U.S. Census

VHB Vanasse Hangen Brustlin, Inc.

The majority of students within the city are located on the campuses of the University of Central Arkansas or Hendrix College. Not surprisingly, there are also large numbers of college students surrounding the two campuses. A high concentration of students resides in the neighborhoods just east of South Donaghey Avenue.

GREATEST TRANSIT NEEDS INDEX

"Greatest transit need" is defined as those areas in Conway with the highest density of zero-vehicle households and elderly, disabled, and below-poverty populations.

Methodology

The US Census data were used to calculate the greatest transit need. The categories used for the calculation were zero-vehicle households, elderly population, disabled population, and below-poverty population. Using these categories, LSC developed a "transit need index" to determine the greatest transit need. The density of the population for each US Census block group within each category was calculated, placed in numerical order, and divided into six segments. Six segments were chosen in order to reflect a reasonable range. Each segment contained an approximately equal number of US Census block groups in order to provide equal representation.

Census block groups in the segment with the lowest densities were given a score of 1. The block groups in the segment with the next lowest densities were given a score of 2. This process continued for the remainder of the block groups. The block groups in the segment with the highest densities were given a score of 6. This scoring was completed for each of the categories (zero-vehicle households, elderly population, disabled population, and below-poverty population). After each of the block groups was scored for the four categories, the four scores were added to achieve an overall score. Table IV-1 presents the ranked scores for each block group in the service area. The scores range from 4 (lowest need) to 24 (highest need).

Table IVI-1
Greatest Transit Needs Index

Census Tract	Census Block Group	Land Area sq. ml.	Total Population 2000	Total Number of Households 2000	Zero-Vehicle Households 2000			Total Number of Elderly 60 & Over 2000			Mobility-Limited Population 2000			Below-Poverty Population 2000			Overall Score (4-36)	Final (1-9)
				#	#	Density	Rank	#	Density	Rank	#	Density	Rank	#	Density	Rank		
304.01	1	17.6	2,286	797	9	0.5	1	333	18.9	2	38	2.2	1	149	8.5	1	5	1
304.02	1	20.7	2,916	1,030	18	0.9	1	322	15.5	1	46	2.2	1	104	5.0	1	4	1
304.03	1	6.4	2,285	609	15	2.3	2	111	17.3	1	302	47.1	5	814	127.0	4	12	3
304.04	1	5.0	1,891	774	19	3.8	3	259	51.9	3	8	1.6	1	141	28.3	2	9	2
305	1	11.1	5,928	2,455	62	5.6	3	373	33.6	2	121	10.9	3	729	65.8	3	11	2
305	2	1.0	1,990	847	16	16.6	4	321	332.3	4	19	19.7	4	183	189.4	4	16	4
306	1	0.8	2,033	759	63	74.6	5	341	403.6	5	9	10.7	3	146	172.8	4	17	4
306	2	0.5	1,630	604	4	7.7	3	353	680.2	6	32	61.7	5	27	52.0	3	17	4
306	3	0.4	1,309	530	34	75.9	5	203	453.1	6	39	87.1	5	170	379.5	5	21	5
307	1	0.4	1,899	957	129	294.5	6	356	812.8	6	104	237.4	6	503	1148.4	6	24	6
307	2	0.1	841	6	0	0.0	1	4	41.2	3	21	216.5	6	0	0.0	1	11	2
307	3	0.4	1,235	513	115	261.4	6	201	456.8	6	33	75.0	5	450	1022.7	6	23	6
307	4	0.5	1,109	489	77	150.7	6	180	352.3	4	71	138.9	6	263	514.7	6	22	6
307	5	0.5	1,207	465	45	95.3	5	181	383.5	5	52	110.2	6	221	468.2	5	21	5
307	6	0.3	1,031	453	42	168.0	6	120	480.0	6	0	0.0	1	335	1340.0	6	19	5
308	1	1.4	3,230	1,243	64	45.6	4	591	421.5	5	44	31.4	4	340	242.5	5	18	4
308	2	0.4	829	383	40	103.4	5	165	426.4	6	0	0.0	1	158	408.3	5	17	4
308	3	0.4	1,886	4	0	0.0	1	0	0.0	1	18	46.9	4	2	5.2	1	7	1
309	1	0.3	1,180	551	102	406.4	6	72	286.9	4	78	310.8	6	530	2111.6	6	22	6
309	2	0.3	1,028	444	57	179.8	6	115	362.8	5	90	283.9	6	271	854.9	6	23	6
309	3	1.8	917	365	76	43.1	4	98	55.6	3	69	39.2	4	330	187.3	4	15	3
310.01	1	2.8	3,420	1,174	22	7.7	3	318	111.6	4	50	17.6	3	202	70.9	3	13	3
310.02	1	17.7	4,397	1,631	62	3.5	2	331	18.7	1	87	4.9	2	504	28.4	2	7	1
310.02	2	6.3	3,091	1,246	112	17.7	4	259	40.9	3	100	15.8	3	414	65.4	3	13	3
311.01	1	7.4	1,690	664	0	0.0	1	301	40.5	2	55	7.4	2	254	34.2	2	7	1
311.01	2	21.9	2,623	1187	65	3.0	2	636	29.0	2	123	5.6	2	229	10.4	1	7	1
311.02	2	14.1	1,891	714	23	1.6	2	267	19.0	2	91	6.5	2	192	13.7	2	8	2
Total			55,772	20,894	1,271			6,811			1,700			7,661				

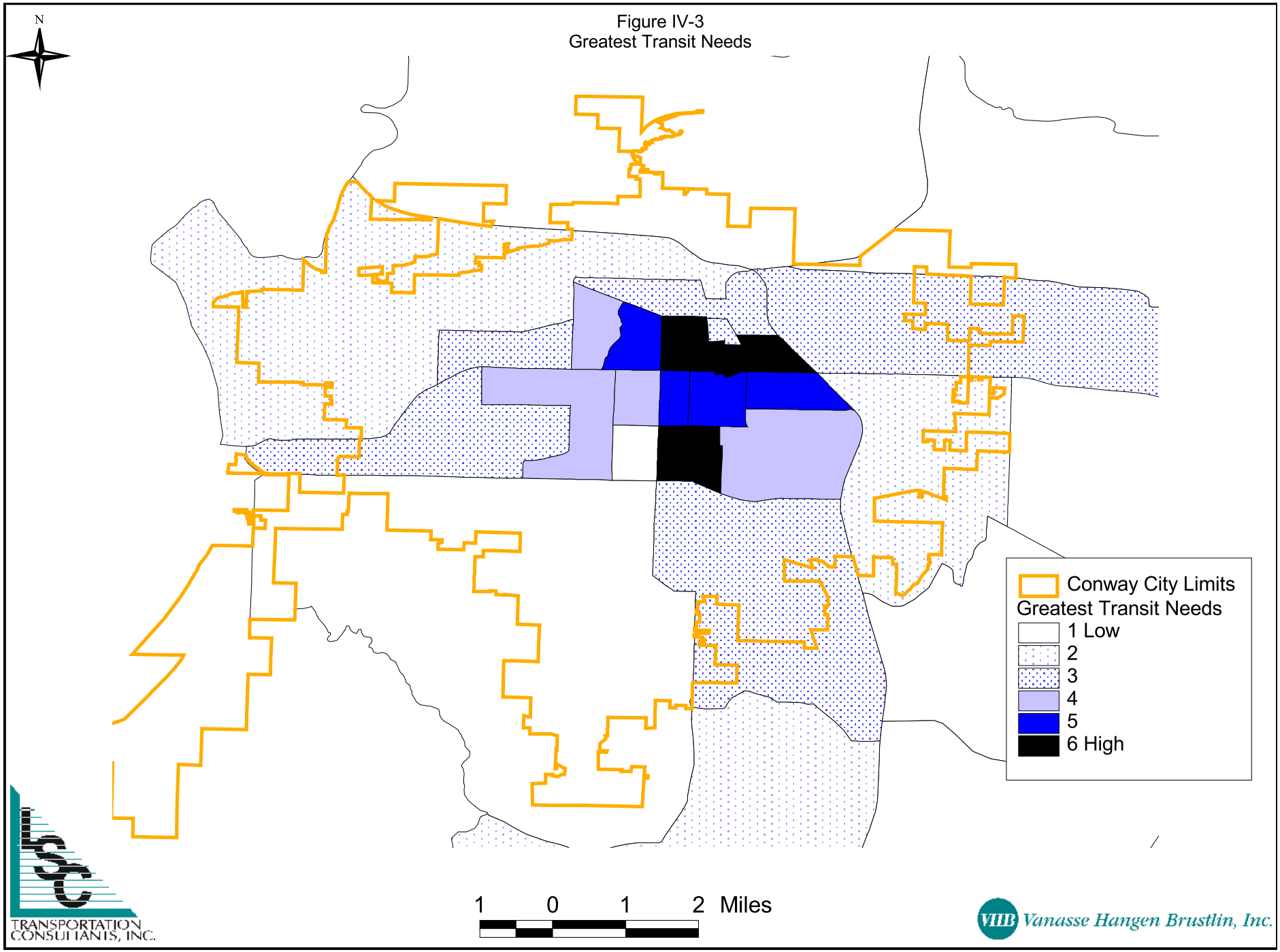
Source: US Census, 2000.

Results

Figure IV-3 presents block groups with the greatest transit need along with the transit need index. Five block groups were determined to have the greatest transit needs based on the zero-vehicle households, elderly population, disabled population, and below-poverty population. As shown in Figure IV-3, the greatest transit need is mainly in the areas that are located just east of the University of Central Arkansas and to the south and west of Hendrix College.

By identifying those areas with a high need for public transportation, LSC was able to uncover a pattern for the areas with the highest propensity to use transit service. Those US Census block groups not scoring in the highest category, but still having a high score (5 or 4), could still be considered a high priority for transit service.

Figure IV-3
Greatest Transit Needs



PEER CITY DEMAND ESTIMATE

One of the most important steps in developing new public transit systems is a basic estimation of the type of service, operating budget, and performance measures that need to be met based on peer systems in other communities. Data for the analysis were obtained from communities with similar characteristics. These data were obtained from the National Transit Database (NTD), with the exception of JETS (Jonesboro, Arkansas) which was obtained through AHTD. The National Transit Database requires transit agencies to report specific data about their operations. The following peer locations were selected for analysis—Mountain Line (Missoula, Montana), Logan Transit District (Logan, Utah), BAT Community Connector (Bangor, Maine), North Star Transit (Fairbanks, Alaska), Rome Transit Department (Rome, Georgia), Pocatello Regional Transit (Pocatello, Idaho), Cities Area Transit (Grand Forks, North Dakota), Wausau Area Transit (Wausau, Wisconsin), and Jonesboro Economical Transit System (Jonesboro, Arkansas).

The communities selected for comparison were chosen using general criteria. The characteristics that were considered in this selection were the presence of existing transit systems, similar population, and the presence of colleges and universities with similar enrollments as those of Conway. The performance measures presented provide a model depicting the approximate levels of service that need to be met for a new transit system to provide public transportation in a cost-effective way.

Even though care was taken to find the closest matching peer communities, no two systems are exactly alike. Factors such as the type of service (modified fixed-route, demand-response, etc.), local fare policies, and quality of capital equipment can substantially impact the performance of the individual systems. This peer analysis, therefore, should be viewed as a rough gauge of a representative sample of similar systems rather than an exact reporting.

Peer Statistics

Table IV-2 shows the compilation of data from the peer communities. The averages for each of the categories are listed at the bottom of the table. The average population for the eight peer communities was approximately 61,800

Table IV-2
Peer Community Analysis
Performance Measures

Transit System - Location	Area Population	No. of Vehicles	Annual Miles	Annual Hours	Annual Ridership	Operating Budget	Farebox Recovery	Farebox Recovery Ratio	Pass per Hour	Pass per Mile	Cost per Pass	Cost per Hour	Cost per Mile	Trips per Capita
Mountain Line (Missoula, MT)	69,491	16	596,310	39,506	735,243	$2,786,551	$341,195	12%	18.61	1.23	$3.79	$70.53	$4.67	10.58
Logan Transit District (Logan, UT)	76,187	16	574,672	37,009	1,102,479	$1,964,397	$0	0%	29.79	1.92	$1.78	$53.08	$3.42	14.47
BAT Community Connector (Bangor, ME)	59,983	12	542,530	41,305	780,250	$1,641,404	$536,652	33%	18.89	1.44	$2.10	$39.74	$3.03	13.01
North Star Transit (Fairbanks, AK)	51,926	7	353,005	18,076	294,718	$2,217,713	$214,900	10%	16.30	0.83	$7.52	$122.69	$6.28	5.68
RTD (Rome, GA)	58,287	24	486,912	37,376	630,094	$2,359,971	$459,793	19%	16.86	1.29	$3.75	$63.14	$4.85	10.81
PRT (Pocatello, ID)	62,496	9	266,436	22,645	409,200	$763,427	$47,907	6%	18.07	1.54	$1.87	$33.71	$2.87	6.55
Cities Area Transit (Grand Forks, ND)	56,573	6	353,701	23,136	231,296	$1,493,009	$135,786	9%	10.00	0.65	$6.45	$64.53	$4.22	4.09
Jonesboro Economical Transit System (JETS)	55,515	10	360,052	23,408	70,755	$1,201,262			3.02	0.20	$16.98	$51.32	$3.34	1.27
WATS (Wausau, WI)	66,221	22	578,288	40,766	648,753	$3,119,589	$386,263	12%	15.91	1.12	$4.81	$76.52	$5.39	9.80
AVERAGE	**61,853**	**14**	**456,878**	**31,470**	**544,754**	**$1,949,703**	**$265,312**	14%	**17.31**	**1.19**	**$3.58**	**$61.95**	**$4.27**	**8.81**

Sources: NTD 2007, LSC 2008, JETS/AHDT 2009.

residents. The populations ranged from Fairbanks, Alaska with the lowest population of 51,926 people to Logan, Utah which had the highest population with approximately 76,187 people.

Figure IV-4 presents the comparison of the annual ridership for the peer communities. The average of the eight agencies was 545,000 annual trips. The highest annual ridership was Logan Transit District with 1,102,500 annual passengers. The lowest annual ridership occurred on the Jonesboro, Arkansas system, with around 70,755 riders. The Logan system has high ridership partly because no fare is charged.

Figure IV-5 shows the comparison of passenger-trips per hour by agency. Passenger-trips per hour were calculated for each of the eight agencies, with an average of 17.3 passengers per hour. It is generally held that a productivity measure of around ten passengers per hour is the threshold for providing fixed-route services. If the passenger-trips provided per revenue-hour are below ten, flex routes or deviated routes may be necessary. All of the agencies that were examined for the peer community analysis have at least ten passengers per hour. A fairly wide range of passengers per hour was reported, with Cities Area Transit and Jonesboro representing the lowest performance measure, recording ten passengers and three passengers per hour, respectively. The Logan Transit District was the highest, serving almost 30 passengers per hour. Though this represents a wide range, the majority of transit systems had values between 16 and 19.

The cost per passenger was calculated for each of the agencies, with an average of $3.58. Figure IV-6 shows the comparison of the cost per passenger. The most cost-effective transit system of the peer systems was Logan Transit District with a $1.78 cost per passenger. The most costly peer systems were North Star Transit with a $7.52 cost per passenger and Jonesboro with a $16.98 cost per passenger.

Figure IV-4
Annual Passenger-Trips

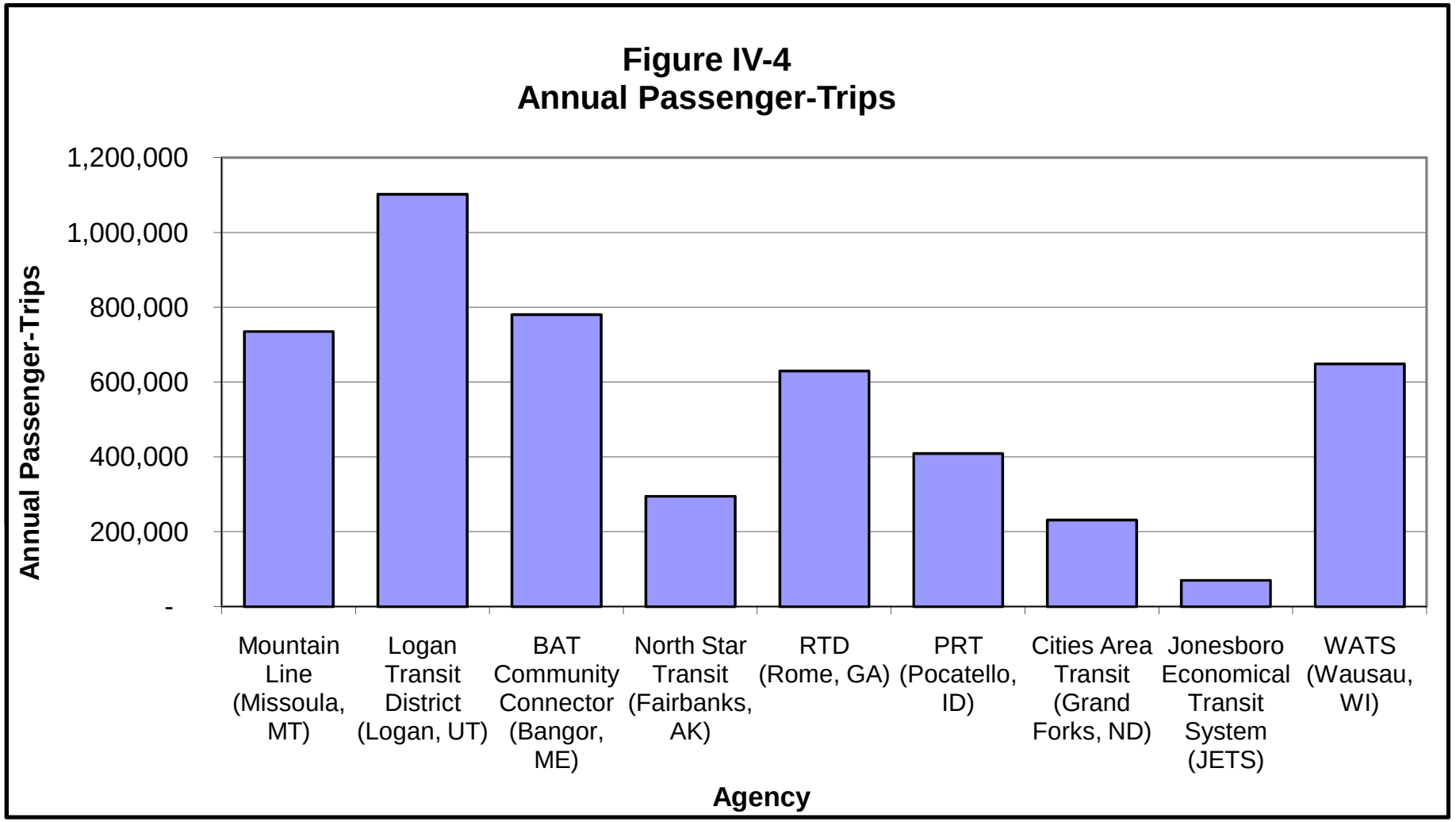


Figure IV-5
Passengers Per Hour

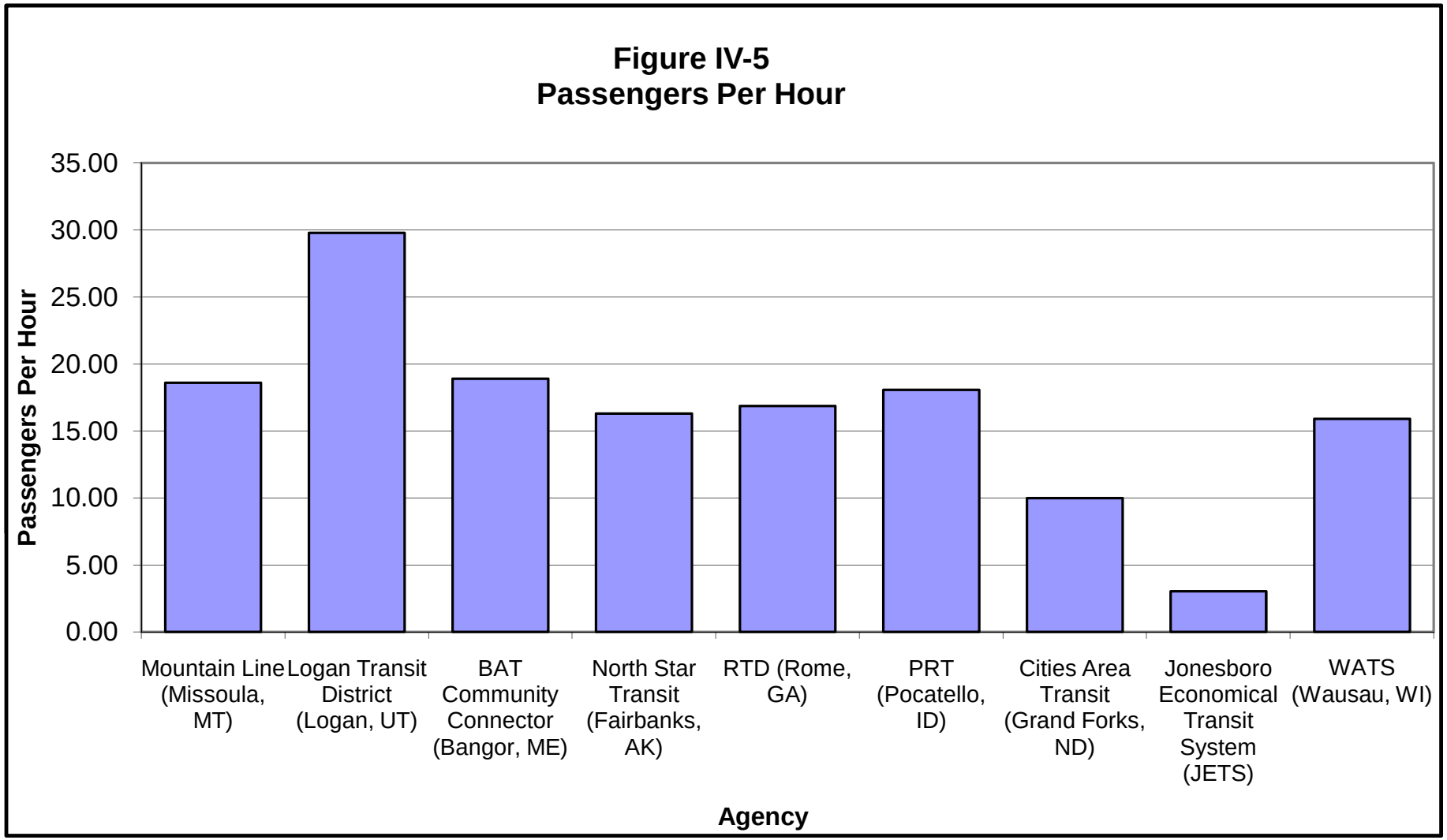
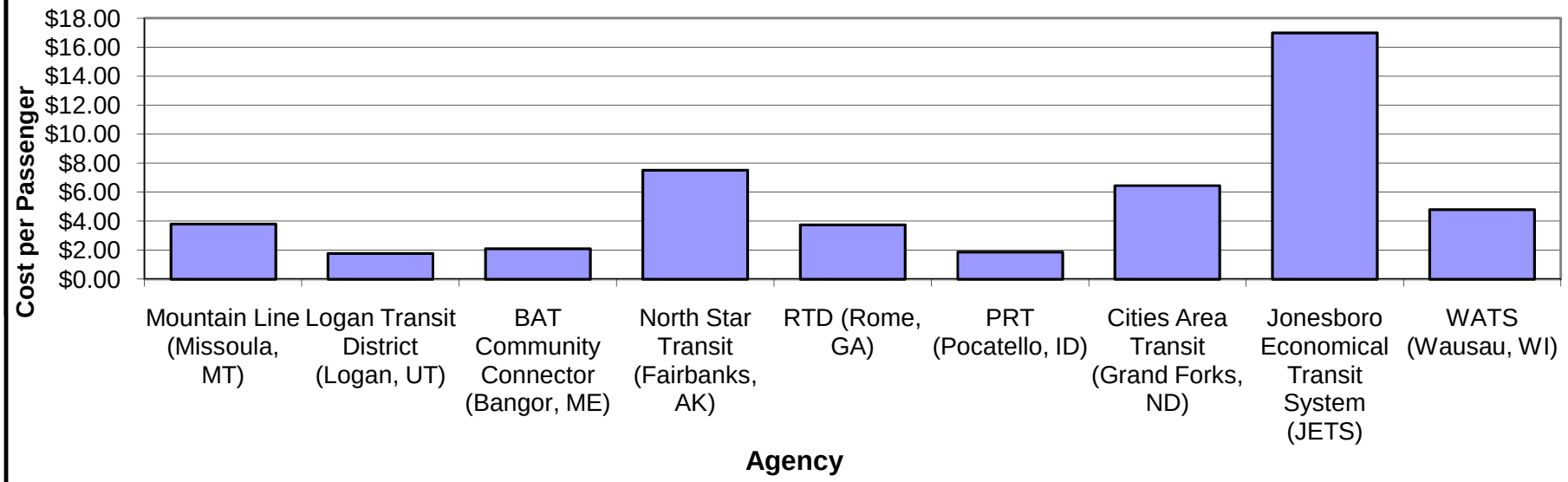


Figure IV-6
Cost Per Passenger



Other averages calculated were the passengers per mile (at 1.19 passengers), the trips per capita (at 8.81 trips), the average cost per vehicle-hour ($61.95), and the average cost per vehicle-mile at $4.27.

The operating budget was also reported by each agency, with an average of $1,949,703. There was, however, a large range in the operating budgets of the peer communities that were selected. The agency that had the lowest operating budget is Pocatello Regional Transit with $763,000, while Wausau Area Transit had the highest with $3,120,000.

As stated before, costs and performance measures vary greatly based on service parameters and location cost variation. Looking at the averages of the nine selected peer communities allows for rough estimates of costs and performance to be made, based on service levels. These statistics provide a better understanding of the costs Conway can expect for various levels of service and provide a comparison of appropriate transit system characteristics.

CONWAY DEMAND ESTIMATE

A preliminary "ballpark" demand estimate for Conway was created based on 2000 Census information from Chapter II, existing service provider descriptions from Chapter III, and information in earlier sections of this chapter. This was done by using GIS to estimate a population of persons that might be within a one-quarter mile walk distance of a major street and assuming transit would operate only on some of those streets for an initial transit system. Major streets considered were: Dave Ward Drive, College, Prince, Donaghey, Harkrider, Oak, and the downtown couplet of Oak/Main. This process estimated that there would be 8,730 to 13,850 persons served on a daily basis. See Table IV-3.

Once the number of persons were estimated, various annualized per-capita trip rates were applied to estimate annual ridership demand. The first trip rate is taken from a public transportation needs assessment done for the entire State of Arkansas in 1992. The trip rate used is five trips annually per capita.

The second trip rate is from a public transportation plan done for the State of Minnesota in 2001. This plan gave estimated trip rates for different sized communities. A trip rate of 11 trips annually per capita was used for communities between 18,000 and 50,000 residents. This trip rate provides a point-of-reference for smaller cities approaching 50,000 residents.

The third trip rate of 8.8 trips per person per year was derived from work earlier in this chapter. It was based on averaging ridership per capita on peer systems in North America, with urban populations of 52,000 and 76,000 and an average of 62,000. This trip rate provides a point-of-reference for cities slightly larger than 50,000.

The last trip rate method used is a variation on the first method. This method uses trip rates calculated for specific populations (persons 65 and older, below the poverty line, and disabled) who show a stronger need for public transportation. These populations were subtracted from the population within the proposed service area and then multiplied by their respective trip rate. The remaining population was multiplied by the original trip rate of five, and then all the populations were added together. This method should give a more accurate picture of potential ridership because it accounts for the fact that certain populations have a higher need for public transit.

All of these methods together provide an experience-based range of transit demand specific to Conway. The estimated demand range is 44,500 to 152,000 trips per year *after the system is established and in full operation*. Based on other system start-ups that operate either for a partial year and/or take some time (i.e., six months to two years) to grow awareness, initial ridership could be half that estimate (or 22,250 to 76,000).

Chapter V

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER V

Transit and Land Use Planning

INTRODUCTION

Land use planning is a critical element in the function of any transportation system—whether it involves automobiles, buses, bicycles, or pedestrians. While land use planning is often associated with governmental entities, land use planning should more appropriately be viewed as the process of setting goals and pursuing these goals in order to achieve certain ends from the use of parcels of land. Private developers often use such words as "access" and "amenities" to describe the manner in which they want their parcels of land to relate with the transportation system.

The goal of land use planning as it relates to transportation is to make sure the supply of transportation (the number and size of roads, the frequency of transit service, etc.) is adequate to meet the demand (the number of people going from one point to another). Without having a "plan" or knowledge of what to expect from any given parcel of land, it is very difficult to achieve the balance where supply meets demand.

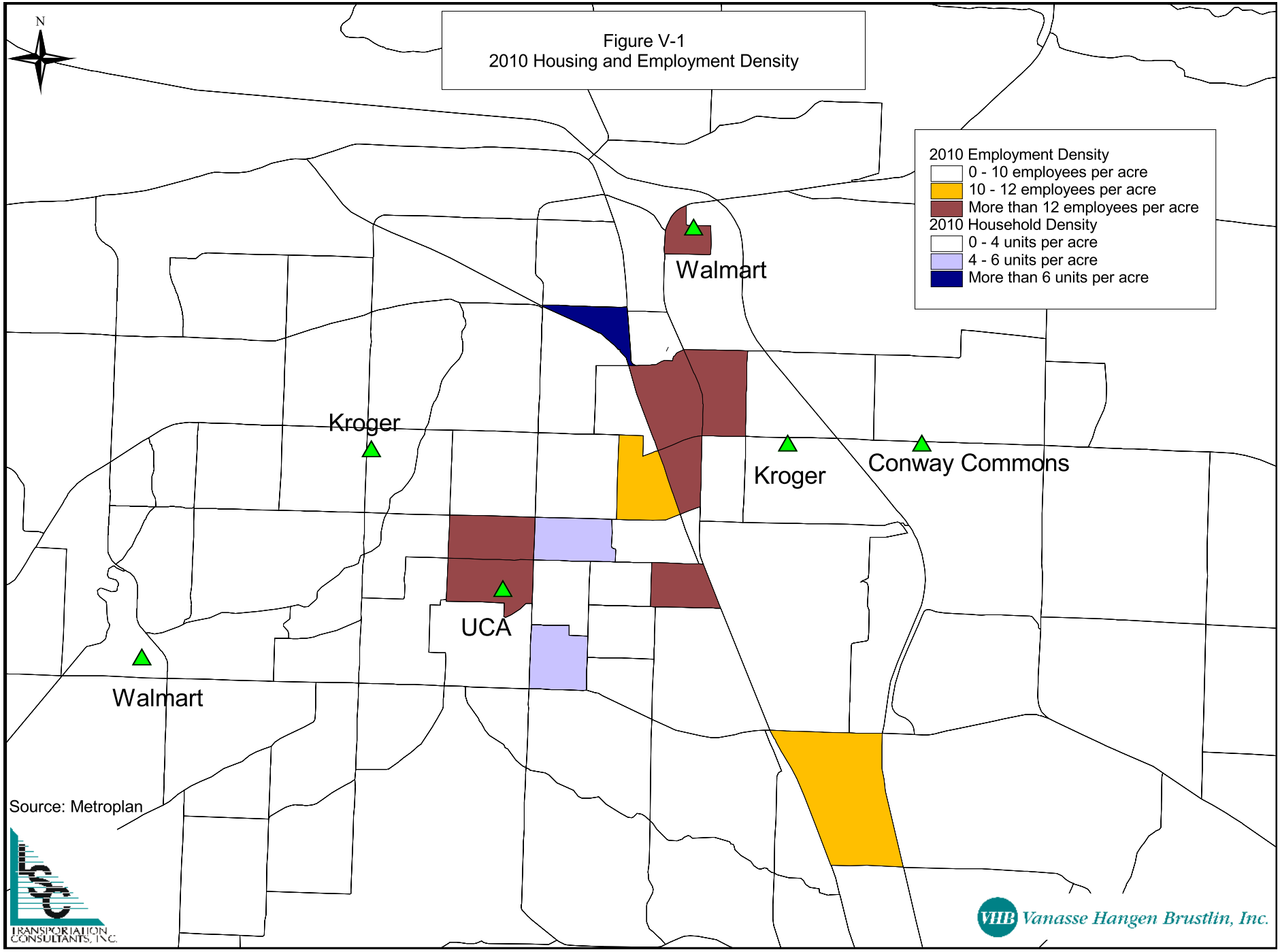
When combining land use planning and transit, many people remember only the transit advocate's point of view—which is more buses, fewer cars. In some cases, this point of view may be appropriate, but it is not the only point of view. The cost-conscious taxpayer should consider the argument that land use planning can help minimize the cost of providing essential public transit service. The feasibility of transit as an alternate mode of transportation in a community is linked directly to the land use patterns in that community.

POPULATION AND EMPLOYMENT DENSITY

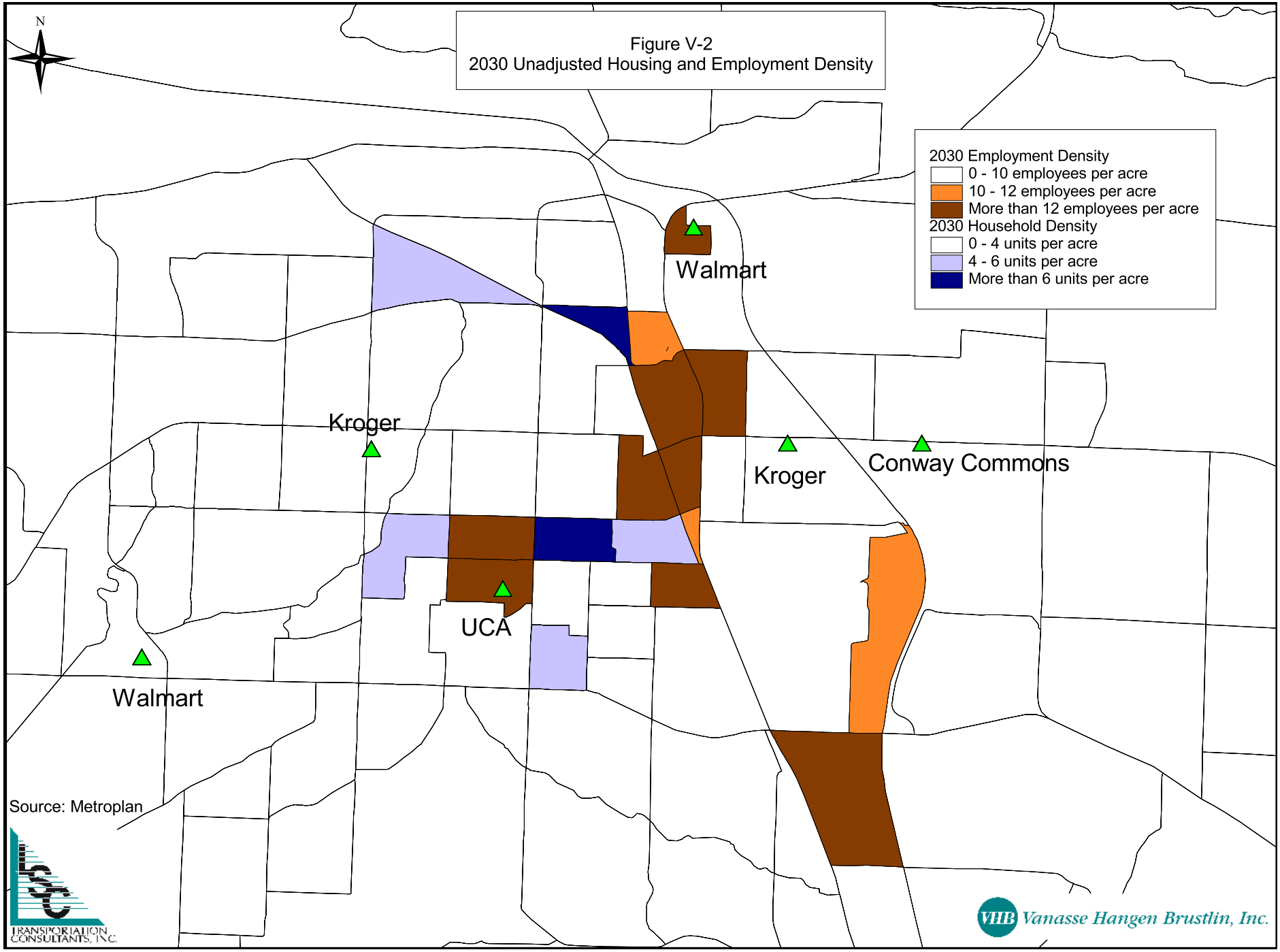
Nationally, many communities agree that a "high density" of persons is defined as greater than 12 persons per acre, while a housing density supportive of fixed-route transit is typically seen as greater than six households per acre. Nationally, many communities have found that where the combined densities of both population and employment exceed six dwelling units per acre and 12 jobs per acre, transit services are highly used and may operate efficiently.

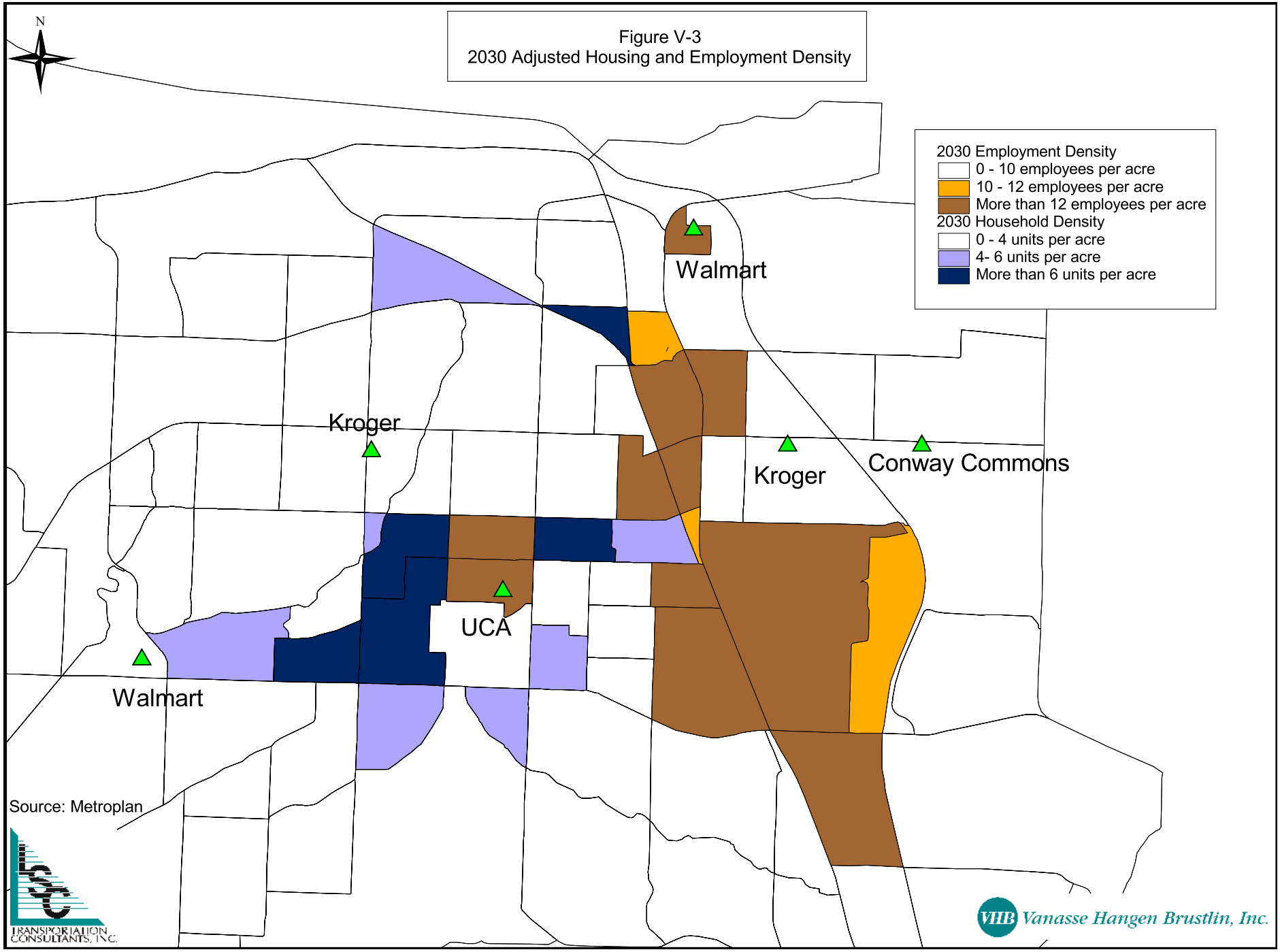
Areas with a high density of persons per acre, combined with households per acre, tend to be composed of lower-income persons who rely on transit as an effective means of transportation. These areas are generally comprised of apartments and areas of smaller, compact housing. Higher density generally reflects greater need for transit and has the potential for producing the greatest number of transit trips than those areas with a lower density.

Figure V-1 shows the 2010 combined housing and employment density by Traffic Analysis Zone for the Conway area. Housing densities are indicated by less than four units per acre, four to six units per acre, and more than six units per acre. Similarly, employment densities have been mapped indicating less than 10 employees per acre, 10 to 12 employees per acre, and more than 12 employees per acre. As can be seen from Figure V-1, there are few areas with densities supportive of public transit service.

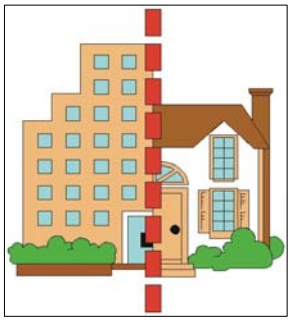

N
Figure V-1
2010 Housing and Employment Density
2010 Employment Density
0 - 10 employees per acre
10 - 12 employees per acre
More than 12 employees per acre
2010 Household Density
0 - 4 units per acre
4 - 6 units per acre
More than 6 units per acre
Walmart
Kroger
Kroger
Conway Commons
UCA
Walmart
Source: Metroplan
LSC
TRANSPORTATION CONSULTANTS, INC.
VHB Vanasse Hangen Brustlin, Inc.

Although the current land use patterns may not be supportive of high quality public transit service, future development may occur to support transit in the community. Figure V-2 shows the projected 2030 housing and employment densities based on the travel demand model for the region. As seen in the figure, few zones have future densities which would be supportive of public transit. In order to determine the future feasibility of transit service, future growth was reallocated to zones within the core area of Conway. By allocating the growth to areas within the core of the community, many more zones could have development densities supportive of public transit. Figure V-3 shows the densities of housing and employment when growth is concentrated in the central area rather than continuing the current pattern of low-density development and sprawl.


N
Figure V-2
2030 Unadjusted Housing and Employment Density
2030 Employment Density
0 - 10 employees per acre
10 - 12 employees per acre
More than 12 employees per acre
2030 Household Density
0 - 4 units per acre
4 - 6 units per acre
More than 6 units per acre
Walmart
Kroger
Kroger
Conway Commons
UCA
Walmart
Source: Metroplan
LSC
TRANSPORTATION CONSULTANTS, INC.
VHB Vanasse Hangen Brustlin, Inc.


N
Figure V-3
2030 Adjusted Housing and Employment Density
2030 Employment Density
0 - 10 employees per acre
10 - 12 employees per acre
More than 12 employees per acre
2030 Household Density
0 - 4 units per acre
4- 6 units per acre
More than 6 units per acre
Walmart
Kroger
Kroger
Conway Commons
UCA
Walmart
Source: Metroplan
LSC TRANSPORTATION CONSULTANTS, INC.
VHB Vanasse Hangen Brustlin, Inc.

DESIGN STRATEGIES



In recent years, there has been a strong interest in the planning profession regarding the strategies by which rural and urban development can be shaped to maximize the efficiency of alternate transportation modes, particularly transit. This field of study has taken on different names in various parts of the country. On the east coast, this field of study is commonly referred to as the "Neo-Traditional Neighborhood Development" (TND) movement. This movement has been championed by academics such as Andreas Duany and Elizabeth Plater-Zyberk. It is evidenced in such places as the new town of Seaside, Florida and the extensive Kentlands development near Washington, DC.

In the west, this field of study has typically been labeled "Transit Oriented Design" (TOD). The leading figure in this field is Peter Calthorpe, who has been instrumental in the development of the extensive Laguna West project on the southern edge of the Sacramento metropolitan area. There are a number of similarly planned new towns in the San Diego, San Francisco, Portland, and Seattle metropolitan areas. The TOD concept is the focus of this discussion as it is most common to the western United States.

There are a number of common design strategies that have been identified through this field of planning research. A key element in the design strategies presented below is an acceptance that automobile use will remain a key part of our transportation system. To that end, the strategies do not strive to eliminate all auto traffic. Rather, the goal is to make transit and other alternative transportation modes as attractive as possible. Each strategy is discussed below.

Cluster Land Use Densities Close to Major Transit Stops

A vital rule of thumb in transit planning is that the potential for transit ridership drops off dramatically with increased distance from the nearest transit stop. Research consistently shows that the proportion of persons willing to use transit drops dramatically beyond a one-quarter mile walking distance to the bus stop (7.5-minute walk at two miles per hour). It therefore follows that the more trip origins and destinations that can be concentrated within approximately one-quarter mile of a major

transit stop, the greater the potential for transit usage. Land use codes which support higher-density development in the core transit service area and discourage low-density development will increase the feasibility of public transit in Conway.

The Calthorpe school of planners has dubbed this land use cluster a "pedestrian pocket." The leading proponent defines this term to mean "a simple cluster of housing, retail space, and offices within a quarter-mile walking radius of a transit system" *(The Pedestrian Pocket Book: A New Suburban Design Strategy).* Other characteristics of a "pedestrian pocket" include a residential density of approximately 12 dwelling units per acre and a commercial development at a floor-to-area ratio of at least 0.25. Other studies have found that the recommended minimum densities of development to support public transportation are seven dwelling units per acre for residential developments and a floor-area-to-property-area ratio of 1.0 for commercial and office development *(Guidelines for Transit-Sensitive Suburban Land Use Design,* US DOT, p. 42: 1991).

Street Network Should Be Developed to Allow Efficient Transit Service

In order to reduce traffic volumes near residences and avoid the potential for "cut-through" traffic, traffic and land use planners in the period since roughly World War II have commonly designed residential areas with a curvilinear, disconnected street system so common today in suburban areas. While a bus can be routed along the curvilinear collector or arterial street close to the residences within a subdivision, the walking distance may be excessive because there is no direct access. Connected streets should be provided to permit bus routes into residential neighborhoods. This is difficult to accomplish because many of new areas being developed have only one access/egress road. Many streets wind through residential neighborhoods and then end in a cul-de-sac.

Convenient Pedestrian and Bicycle Connections to Transit Stops

A key strategy in the TOD design is to ensure that transit passengers can quickly access a bus stop from their trip origin or destination. This strategy recognizes the fact that transit patrons are pedestrians as soon as they leave the bus. To this end, special emphasis is placed upon providing direct and attractive pedestrian and bicycle ways between residential and employment areas and the transit stops, often including pedestrian paths linking cul-de-sacs with nearby transit stops on collector and arterial streets.

Site Design That Serves Both Auto and Transit Users

A quick drive to the nearest big box retail center (i.e., a large-scale warehouse-style retail chain such as Wal-Mart, Lowe's, Home Depot, Super Target, Best Buy, or similar) shows the result of current commercial site design practices. Auto drivers are provided with a relatively short walk to the front door after parking. The transit passenger is typically dropped off at the street edge, enduring a long walk to and across the parking lot, unprotected from the weather. Current site design of this type rewards auto use and penalizes transit use. Redesigned to cluster the commercial uses near major intersections, however, both auto and transit users could be provided with convenient walking access to the site. In addition, the "clusters" formed by this site plan would encourage increased walking between buildings for meals, business, errands, etc.

Other site design issues relate to the geometry of streets, bus turnouts, shelters, and park-and-ride facilities. Streets which will be designated as bus routes must have adequate turning radii at the intersections. Bus turnouts should be designed with a pavement composition that resists damage by buses. In addition, bus turnouts should be sited in locations that minimize traffic flow interruptions (especially at intersections) and maximize pedestrian access. Bus shelters should be placed approximately four to five feet from the curb edge, and should be located where there is efficient pedestrian access and/or neighborhood commercial nodes. When possible, turnouts and shelters should not be sited on major arterials with high travel speeds. Instead, a nearby collector should be utilized. Park-and-ride facilities should provide an adequate number of bus berths, easy pedestrian access from the parking lots, and a separation of bus and automobile traffic flows.

Buildings, especially commercial and institutional ones, should be constructed to provide access for transit vehicles. Common examples of such buildings are hospitals and local hotels/condominiums. The access that is needed consists of overhead clearance and pull-through driveways. Without these, the transit vehicle must either stop further from the front door of such buildings or be at risk of backing out of dead-end driveways. Poor vehicle access also contributes to a loss of efficiency.

ACTIONS TO BE ADDRESSED IN CONWAY

Land use planning and design has a strong relationship with transportation demand and travel patterns. It plays an important role in determining the viability of public transportation and the feasibility of serving portions of the community. Recognizing this important relationship, below is a list of particular enhancements to existing design and land use planning concepts. These enhancements positively impact land use decisions on transportation needs within the local area and support transit within the community.

- Revise the Conway Comprehensive Plan to emphasize public transportation as a viable alternate mode of transportation and that development patterns will be supportive of public transportation.

- Provide incentives to develop at higher densities within the core transit service area. In areas outside the core service area, limit development to very low densities.

- Adopt transit-oriented development design guidelines for the core transit service area. Each transit patron is a pedestrian as soon as the individual leaves the bus, so the pedestrian facilities should be emphasized. There should be a relatively small setback from the transit corridor. Ordinances should require that parking be provided at the rear or side of buildings. The front of the buildings should be oriented to the street with maximum setbacks which are close to the street and oriented to transportation corridors and pedestrians. Incorporate pedestrian-friendly design guidelines in street design manuals for all new developments. Pedestrian access (paths, trails, or sidewalks) should be provided in the proximity of bus stops to residential developments. Bus stops and sidewalks should connect with other walkways or paths to provide easy access to the residential and commercial development.

- Provide access for transit vehicles to major transit destinations. This may include a street near the storefront for large retail developments.

- Promote mixed-use development in the core transit service area.

- Emphasize pedestrian orientation with minor or no building setbacks.

- Provide pedestrian walk signals with call buttons at all signalized intersections along proposed transit corridors.

- Provide pedestrian refuges in raised medians on all streets with five or more lanes.

- Provide comfortable transit facilities. Make bus stops and bus waiting areas attractive through high-quality design and construction and pedestrian amenities such as lighting, seating, and weather protection.

- Promote a complete network of sidewalks throughout the area. As an example, the university housing located south of Dave Ward Drive does not have a pedestrian connection to the campus. Pedestrians have worn a path adjacent to the roadway.

- Require all public and private development projects in the area to include sidewalks on both sides of the roads.

- Encourage in-fill and redevelopment within the core transit service area.

- Provide incentives such as density bonuses or reduced parking requirements for developers who design pedestrian-friendly projects within the core transit service area.

- In area master plans, prioritize new and maintenance road projects based upon how well they serve in-filling development and include transit- friendly infrastructure (bike lanes, sidewalks, bus pullouts, bus pads, and bus stops).

Appendix A provides two transit-friendly checklists that should be considered for development review. The checklists should be given to developers and any other entity submitting plans for construction of major facilities in the area.

Appendix B provides common bus stop design standards which should be incorporated into future bus stop placement.

Chapter VI

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER VI

Strategic Transit Plan

INTRODUCTION

The basis for any transit plan is the careful consideration of realistic service options. Passenger needs, travel patterns, and funding often dictate the type of service to be provided in an area. The goals and priorities of the local community are significant factors to determine the level and quality of service to be provided. The following discussion outlines the vision, goals, and objectives for transit service, and provides analysis of the preferred options.

VISION OF TRANSIT SERVICE

The City of Conway recognizes that a multimodal transportation system is necessary to provide its citizens a variety of transportation choices, to increase overall mobility and access to central Arkansas and the world, and to maintain the city's high quality of life.

The development of a multimodal transportation system, at a minimum, involves the following modes: 1) Pedestrian, 2) Bicycle, 3) Vehicular, and 4) Transit. Pedestrian, bicycle, and vehicular modes of travel have traditionally been handled through the adoption and implementation of the city's master street plan via the subdivision development and platting process, whereas the provision of transit options has not been considered to date.

While language in the 2004 *Comprehensive Plan for the City of Conway* goals and objectives does not specifically address transit issues, several objectives clearly support the linkages with land use, provision of public services, and quality of life issues that make consideration of public transit for Conway currently necessary.

The goal to "Provide a logical pattern of land uses throughout the community, incorporating an efficient relationship between transportation, public services, residential, commercial, industrial, and business areas" clearly states the desire

to link the provision of transportation to land uses. And, the goal to "Provide the citizens of Conway with a high quality environment, one conducive for living, working, and pursuing leisure time activities" clearly states the basis upon which the City can actively pursue development of all transportation mode choices to achieve that goal.

The vision for transit service in the Conway area consists of a vision statement, a set of five action goals, and basic objectives for each goal. The vision statement, goals, and objectives typically form a hierarchical structure with the vision statement being the most general. Goals support the achievement of the vision, and objectives support the goals. The vision statement establishes the overall direction of the city and enumerates the most generalized set of actions to be achieved in the area.

Transit Vision Statement

Safe, reliable, and convenient public transportation is necessary to create a high-quality urban environment for living, working, and pursuing leisure activities in the 21st century. To that end, the City of Conway now declares it to be a "transit-friendly community" and chooses to pursue policies and practices that:

- Enhance the potential for and successful implementation of appropriate transit options;
- Increase modal choices for all residents, students, and workers;
- Minimize energy consumption, reduce air pollution, and congestion; and
- Contribute to the city's overall economic vitality.

Transit Goals and Objectives

1. Public transportation service is widely available to the general public within the Conway urbanized area.
    a. Those areas exhibiting the greatest transit needs are priorities.
        - Initial service concentrates on those who are most dependent—elderly, disabled, low-income, and student communities.
    b. Service adjustments determined by the city's evolving travel needs.

2. Effectively implement and operate transit services within the community.

a. Roadway network and infrastructure conducive to the provision of safe and efficient transit services.
    - Roads incorporate bus bays, dedicated bus travel lanes, dedicated signal phases, and other such facilities that help expedite service and contribute to a travel time comparable to automobile travel.
        - New roadways or roads that undergo major reconstruction incorporate transit-friendly aspects.
        - Older facilities retrofitted to extent practicable.
        - Sidewalks provided as integral to "complete street" design.

b. Frequent and dependable service to key destinations.

c. Land use, zoning, and platting practices supportive of transit-oriented developments and transit-friendly design.

d. Multimodal connections for pedestrians and bicyclists.
    - This includes, but is not limited to, the city's existing trail network and connections to major parking areas.

e. Street furniture and amenities, including but not limited to:
    - Sheltered bus stops with benches.
    - Bike racks.

3. Public transit service that supports and enhances the environment.
    a. Use of alternative fuel sources, to both minimize energy consumption and reduce pollutants.
    b. Reduce air pollution caused by vehicle travel.
    c. Increase travel choice.
4. Adequacy of funds to properly operate and maintain services.
    a. Identify and secure available federal, state, local, and private sources.
    b. Secure a long-term funding source, in order to ensure stability of services offered.

Land Use Development Patterns

Nationally, many communities agree that a "high density" of persons is defined as greater than 12 persons per acre, while a housing density supportive of fixed-route transit is typically seen as greater than six households per acre. Nationally, many communities have found that where the combined densities of both population and employment exceed six dwelling units per acre and 12 jobs per acre, transit services are highly used and may operate efficiently.

By following the concept of Goal 2(c) for transit-supportive land use practices and allocating the growth to areas intended for fixed-route transit service, a core transit service area is established. Figure VI-1 presents the proposed core transit service area with two potential extensions of the core concept.

Comprehensive Plan changes that would need to be made to fulfill transit-supportive Goals 2(a) and 2(c) include the following:

- The transportation element of the comprehensive plan should identify which streets in the transportation network will have a cross-section with "transit-supportive" and "complete streets" elements to support efficient flows of autos and buses together, and to provide superior pedestrian access to/from transit along these streets.
- The land-use element of the comprehensive plan should reflect and support higher densities in core areas to be served by fixed-route transit and limit densities in other areas not intended for fixed-route transit service.

Zoning regulations and design standards then should be revised accordingly. These tools should provide the details necessary for developers, businesses, and investors to have confidence that their site plans, plats, and building designs will pass with predictability and efficiency through the development review process. Incentives should be provided to encourage higher density, transit-supportive development within the core transit service area.

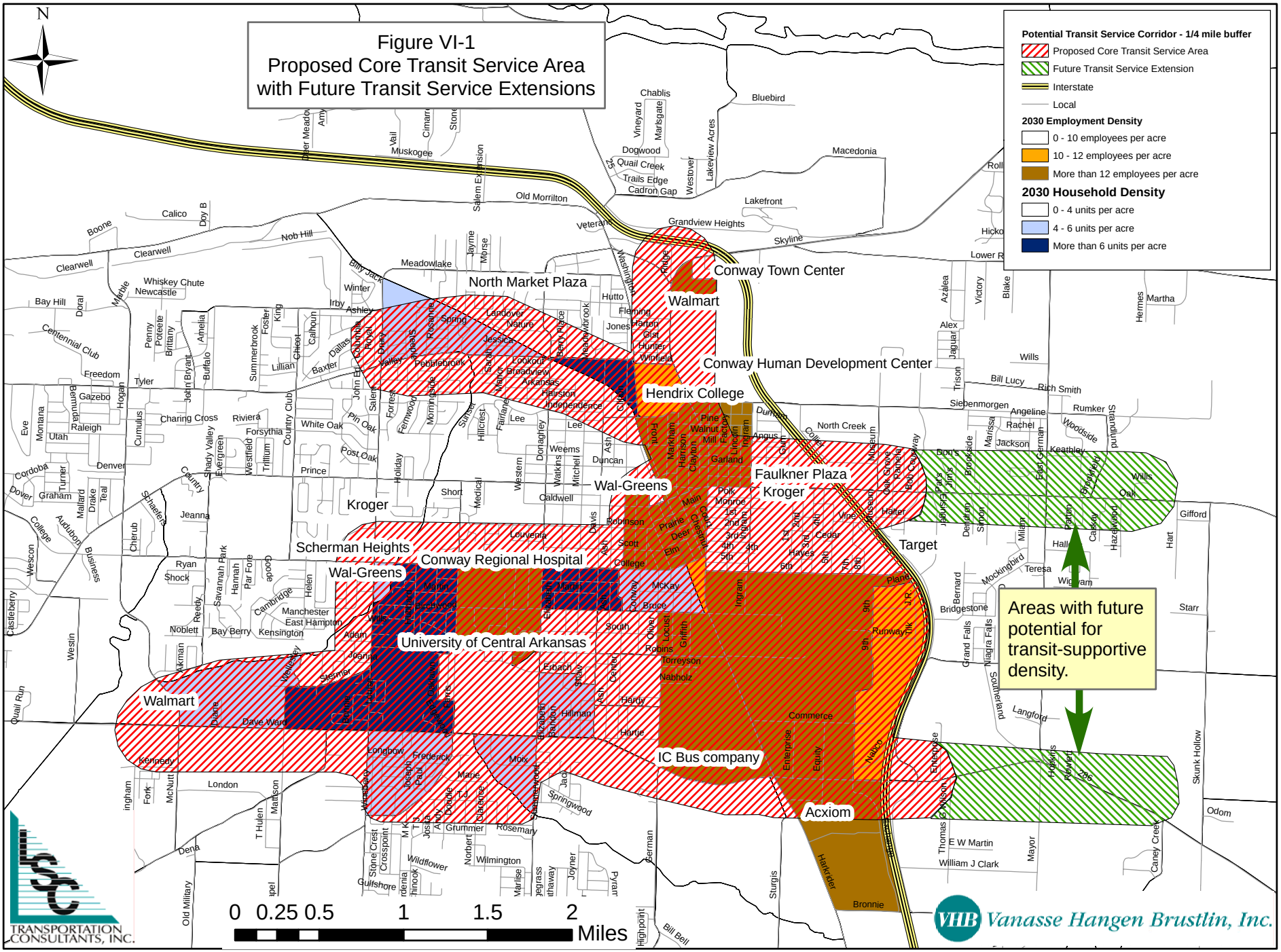


Figure VI-1
Proposed Core Transit Service Area
with Future Transit Service Extensions
N
Potential Transit Service Corridor - 1/4 mile buffer
Proposed Core Transit Service Area
Future Transit Service Extension
Interstate
Local
2030 Employment Density
0 - 10 employees per acre
10 - 12 employees per acre
More than 12 employees per acre
2030 Household Density
0 - 4 units per acre
4 - 6 units per acre
More than 6 units per acre
Conway Town Center
Walmart
North Market Plaza
Conway Human Development Center
Hendrix College
Faulkner Plaza
Kroger
Wal-Greens
Kroger
Target
Scherman Heights
Conway Regional Hospital
Wal-Greens
University of Central Arkansas
Walmart
IC Bus company
Acxiom
Areas with future potential for transit-supportive density.
0 0.25 0.5 1 1.5 2
Miles
TRANSPORTATION CONSULTANTS, INC.
VHB Vanasse Hangen Brustlin, Inc.

Transit Service Vision

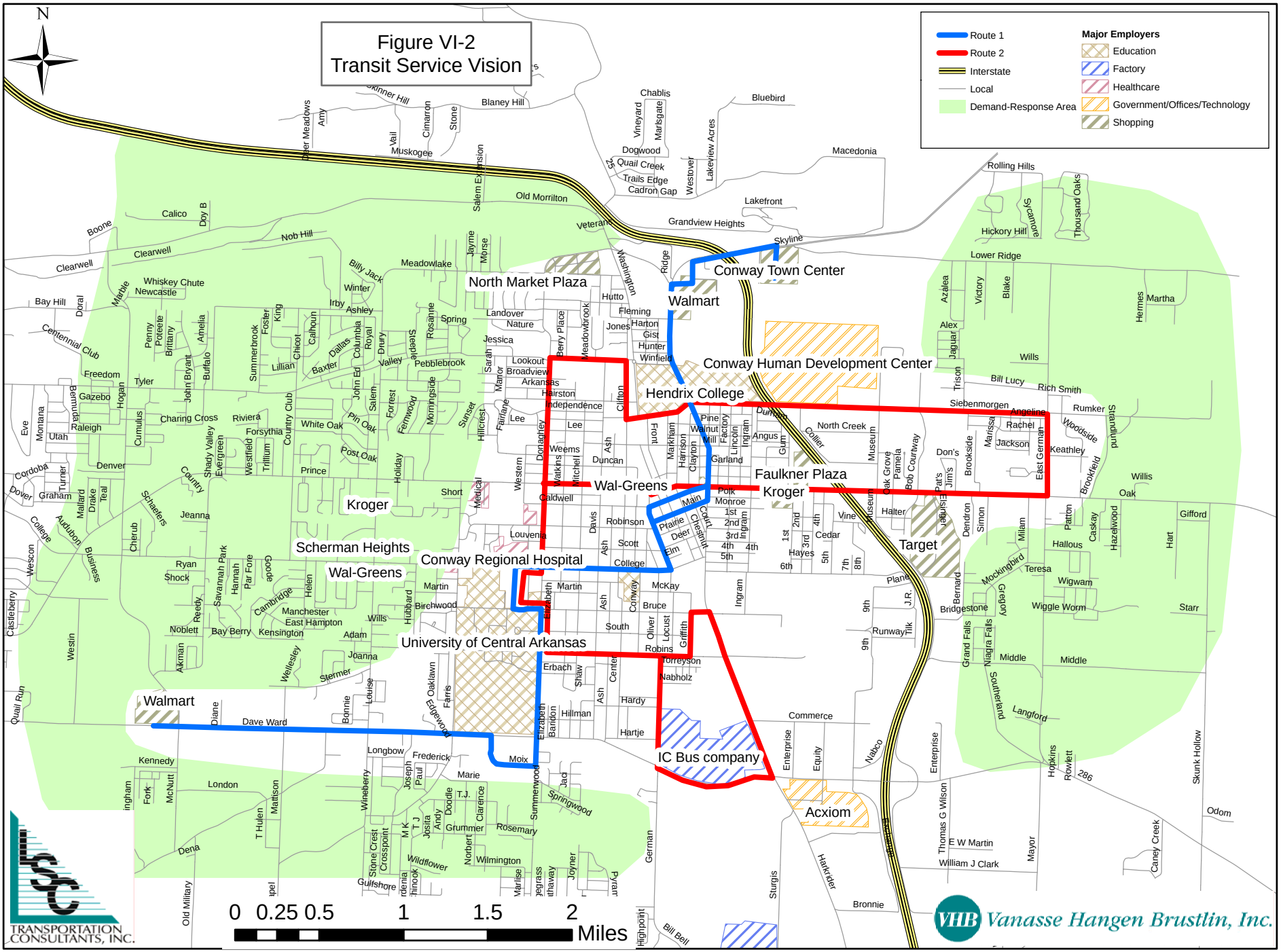
Figure VI-2 shows the routes in the transit service vision that would meet the needs of the proposed core transit service area. Route 1 (in blue) would travel from northwest to southeast with 15-minute headways. Route 2 (in red) would travel from west to east with 15-minute headways.

Under the Americans with Disabilities Act (ADA), fixed-route transit funded with federal dollars requires the operation of complementary paratransit service within three-quarters of a mile either side of the fixed route. The purpose of this is to provide service to those unable to access fixed-route services because of a certifiable disability.

In the green shaded area, demand-responsive service would provide drop-off or pick-up windows of 60 minutes or less. In contrast to the paratransit service described above, the demand-responsive service is intended to serve all segments of the population in that area, general public, elderly, students, and persons with a disability. Meet or pulse points established in two or three locations will allow convenient transfers between the demand-responsive service and the two fixed routes. Central and southern transfer location examples might include Wal-Mart on Dave Ward Drive, College Avenue between the hospital and UCA, or near the intersection of Salem Road/Prince Street. More northern and eastern transfer location examples might include: Skyline Drive/Harkrider (Wal-Mart and Conway Center area), Harkrider/Siebenmorgen (Hendrix College area where red and blue routes intersect), or Donaghey Avenue south of Tyler Street (away from the intersection with the railroad tracks).

Specifics about each of the three components of the vision plan services are provided in Chapter VII for the 2030 horizon year. Included are estimates of ridership demand, operating hours and costs, and capital (vehicle) costs. The information can be compared and contrasted to the subsequent options.

Figure VI-2
Transit Service Vision



Several caveats about the vision are important. Growing the transit system in Conway from start-up frequencies of 30- or 60-minutes in 2010 to 15-minute frequencies in 2030 will take time and financial commitment. As the transit system grows, the two routes proposed in the vision do not necessarily have to operate with the same frequencies. Their frequencies should be adjusted as needed according to actual utilization.

Chapter VII

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER VII

Transit Service Options

INTRODUCTION

The following discussion outlines the vision, goals, and objectives for transit service, and provides analysis of the preferred options. This discussion expands upon Chapter VI – Strategic Transit Plan, delving into cost estimates, ridership forecasts, and performance measures. Most of the services discussed here use 2010 population and employment data as the basis for the ridership estimates. The one exception is the Vision Plan which uses 2030 population and employment forecasts inclusive of land use policies that focus development along the proposed transit routes. All costs discussed in this chapter are in current 2009 constant dollars (2009$).

VISION OF TRANSIT SERVICE

The following text describes a citywide vision service plan for the horizon year 2030. In the next section, the initial service options describe near term, 2010 horizon "building blocks" toward the vision service.

All of the service options assume a 13-hour span of service Monday through Thursday, a 16.5-hour span of service on Fridays, a 14.5-hour span of service on Saturdays, and a 7-hour span of service on Sundays (see Table VII-1). Services are proposed to operate 350 days per year, with 14 holidays observed throughout the year.

Table VII-1
Proposed Service Plan

Days of the Week	Hours of Operation	Total Span
Monday – Thursday	6:30 a.m. – 7:30 p.m.	13 hrs
Friday	6:30 a.m. – 11:00 p.m.	16.5 hrs
Saturday	8:30 a.m. – 11:00 p.m.	14.5 hrs
Sunday / Holiday	9:00 a.m. – 4:00 p.m.	7 hrs

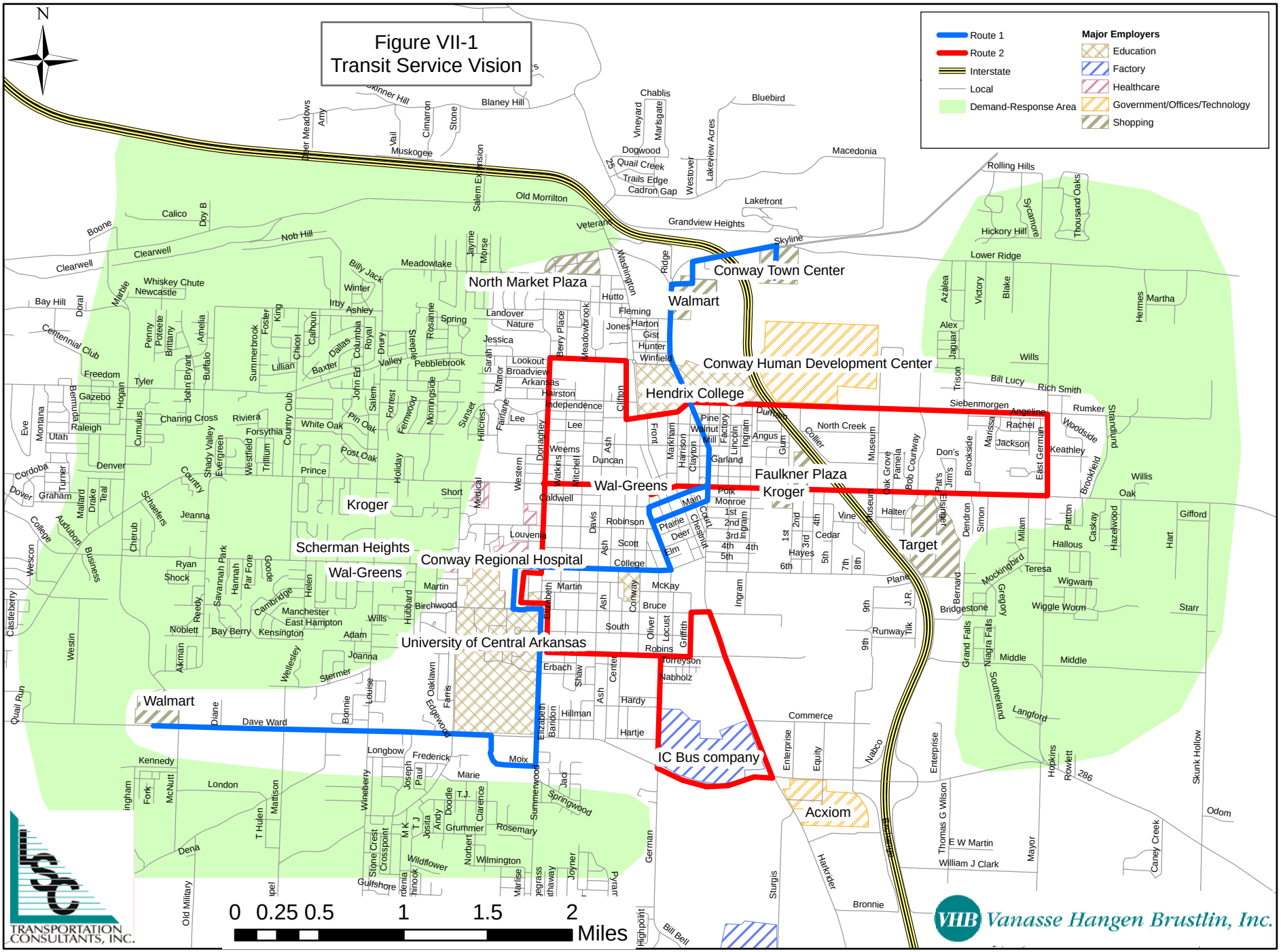
Figure VII-1 shows the routes in the transit service vision that would meet the needs of the proposed core transit service area. Route 1 (in blue) would travel from northwest to southeast with 15-minute headways. Route 2 (in red) would travel from west to east with 15-minute headways.

Under the Americans with Disabilities Act (ADA), fixed-route transit funded with federal dollars requires the operation of complementary paratransit service within three-quarters of a mile either side of the fixed route. The purpose of this is to provide service to those unable to access fixed-route services because of a certifiable disability.

In the green shaded area, demand-responsive service would provide drop-off or pick-up windows of 60 minutes or less. In contrast to the paratransit service described above, the demand-responsive service is intended to serve all segments of the population in that area, general public, elderly, students, and persons with a disability. Meet or pulse points established in two or three locations will allow convenient transfers between the demand-responsive service and the two fixed routes. Central and southern transfer location examples might include Wal-Mart on Dave Ward Drive, College Avenue between the hospital and the University of Central Arkansas (UCA), or near the intersection of Salem Road/Prince Street. More northern and eastern transfer location examples might include: Skyline Drive/Harkrider (Wal-Mart and Conway Center area), Harkrider/ Siebenmorgen (Hendrix College area where red and blue routes intersect), or Donaghey Avenue south of Tyler Street (away from the intersection with the railroad tracks).

Specifics about each of the three components of the vision plan services are provided for the 2030 horizon year. Included are estimates of ridership demand, operating hours and costs, and capital (vehicle) costs. The information can be compared and contrasted to the subsequent options. As demand-responsive zone service is a large cost component of the vision, it will be important to consider call-in-advance time requirements and the goal for 90 percent versus 100 percent of calls served.

Figure VII-1
Transit Service Vision



Several caveats about the vision are important. Growing the transit system in Conway from start-up frequencies of 30 or 60 minutes in 2010 to 15-minute frequencies in 2030 will take time and financial commitment. As the transit system grows, the two routes proposed in the vision do not necessarily have to operate with the same frequencies. Their frequencies should be adjusted as needed according to actual utilization. With 15-minute frequencies, buses operating on the red route should alternate directions on the eastside loop.

Table VII-2
Operating and Capital Costs Associated with 2030 Transit Service
(Current Dollars)

	Annual Operating Costs (1)	Capital Costs (2,3)
Two Fixed Routes @ 15 minutes	$1,951,200	$2,537,600
Complementary Paratransit	$274,000	$87,500
Demand-Response Zone	$1,095,800	$437,300
Totals	*$3,321,000*	*$3,062,400*

(1) Operating costs for demand-response service assumes pick-up and drop-off time window of 60 minutes.
(2) Capital costs for fixed-route service include vehicles ($250,000/vehicle) and bus stop installation. Capital costs for demand-response service includes only vehicles ($87,451/vehicle).
(3) Complementary paratransit and demand response services are assumed to use the same vehicle type. One complementary paratransit vehicle plus three operating DR vehicles totals four in operation, with the fifth (a spare vehicle at 25% spare ratio) being counted in the DR column, but available as a spare for either service.

Route 1 (Blue Route): 15-Minute Headway, with 2030 Land Use

- Number of vehicles in maximum service: 4
- Total number of vehicles: 5
- Initial vehicle costs: $1,250,000
- Annual operational cost: $975,600
- Annual hours of service: 18,000
- Annual passenger-trips: 123,000
- Passengers per hour: 6.8
- Cost per passenger-trip: $7.93

Route 2 (Red Route): 15-Minute Headway, with 2030 Land Use

- Number of vehicles in maximum service: 4

- Total number of vehicles: 5
- Initial vehicle costs: $1,250,000
- Annual operational cost: $975,600
- Annual hours of service: 18,000
- Annual passenger-trips: 306,200
- Passengers per hour: 17.0
- Cost per passenger-trip: $3.18

Demand-Responsive Service

- Number of vehicles in maximum service: 3
- Total number of vehicles: 4
- Initial vehicle costs: $349,800
- Annual operational cost: $821,900
- Annual hours of service: 13,500
- Annual passenger-trips: 72,000
- Passengers per hour: 5.3
- Cost per passenger-trip: $11.42

Complementary Paratransit Service

- Number of vehicles in maximum service: 1
- Total number of vehicles: 1 (For the vision service, the spare is covered by demand-response zone vehicle numbers above.)
- Initial vehicle costs: $87,500
- Annual operational cost: $274,000
- Annual hours of service: 4,500
- Annual passenger-trips: 5,900
- Passengers per hour: 1.3
- Cost per passenger-trip: $46.44

INITIAL SERVICE OPTIONS

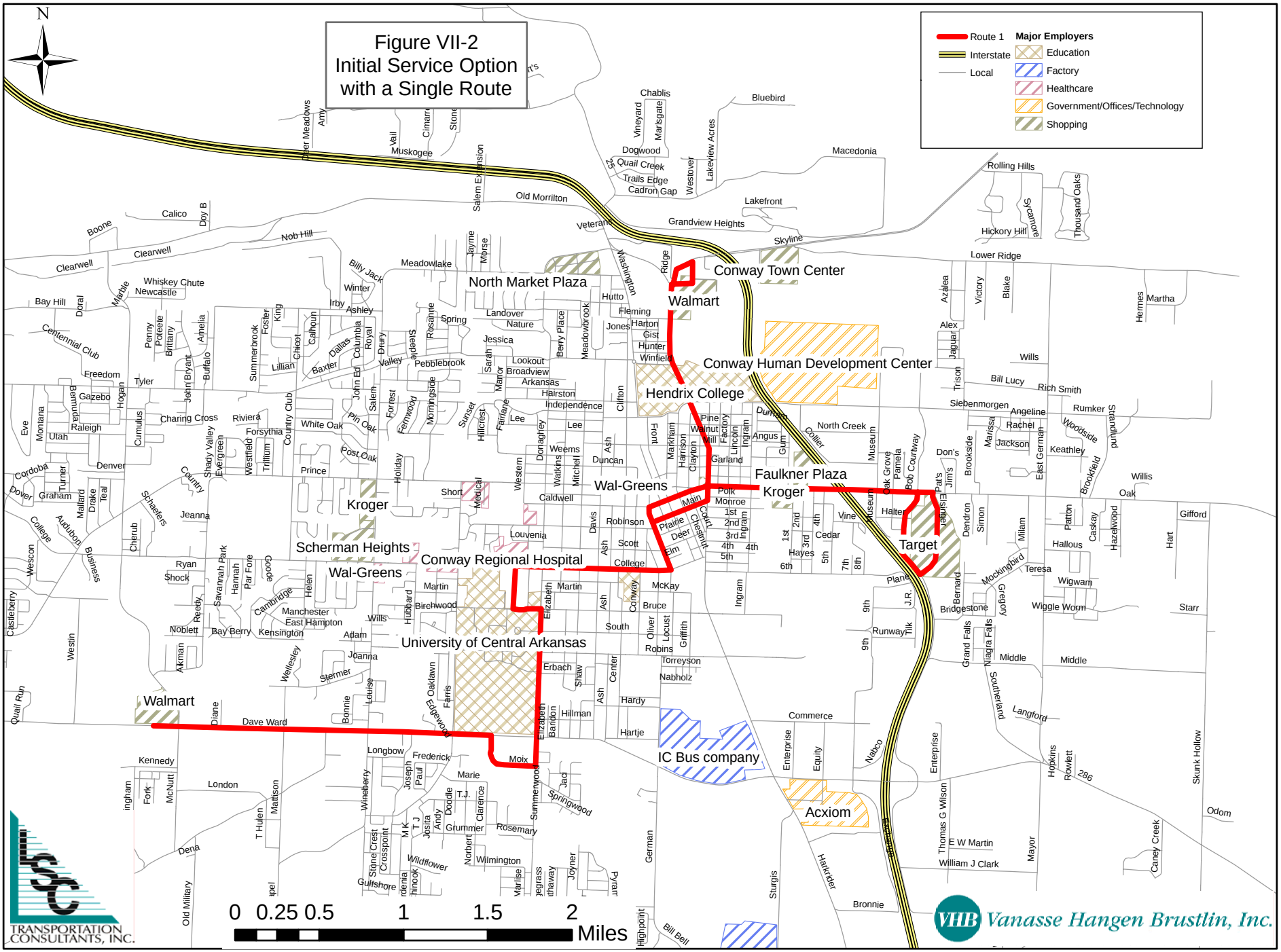
All of the initial service options are implementable in the near term and build toward the transit service vision. Service may be initiated with either one or two routes, and at either 60- or 30-minute frequencies.

Single Route

The path of the single route is shown in Figure VII-2. From west to east, the bus would begin on Dave Ward Drive near Wal-Mart, continue east to UCA, and serve student housing along Moix Boulevard, before turning north on Donaghey Avenue. After passing through the campus and hospital area at Western Avenue/College Avenue, the bus would travel east on College Avenue, through downtown on Main Street, then east on Oak Street past Faulkner Plaza, and out to the Target store, looping Eisinger Boulevard, Amity Road, and Lachowsky Drive. From there the bus would return along Oak Street, turning north on Harkrider Street, serving Hendrix College, serving Wal-Mart, then turning back south from the O'Bryant Street/ Skyline Drive intersection. The bus would travel south back to Oak Street, take Oak Street through downtown, then return westbound in the reverse direction along the streets previously described.

Ridership and cost estimate information for different headways were developed: 60-minute and 30-minute. These provide a good comparison for the effect of service frequency on ridership and cost.

Figure VII-2
Initial Service Option with a Single Route



The difference in costs for the single route would be $125,000 based on the difference between 60-minute and 30-minute headways. The 60-minute headways would require less capital expenditure because fewer vehicles would be needed when compared with the 30-minute headways (as shown in Tables VII-3 and VII-4, respectively).

Table VII-3
Operating and Capital Costs Associated with the Single-Route Option – 60-Minute Frequency

	Annual Operating Costs	Capital Costs (1)
Single Route @ 60 minutes	$246,600	$271,600
Complementary Paratransit	$274,000	$174,900
Totals	*$520,600*	*$446,500*

(1) Capital costs for fixed-route service include vehicles ($125,000/vehicle) and bus stop installation. Capital costs for paratransit service includes only vehicles ($87,451/vehicle).

Table VII-4
Operating and Capital Costs Associated with the Single-Route Option – 30-Minute Frequency

	Annual Operating Costs	Capital Costs (1)
Single Route @ 30 minutes	$487,800	$396,600
Complementary Paratransit	$274,000	$174,900
Totals	*$761,800*	*$571,500*

(1) Capital costs for fixed-route service include vehicles ($125,000/vehicle) and bus stop installation. Capital costs for paratransit service includes only vehicles ($87,451/vehicle).

60-Minute Headway

- Number of vehicles in maximum service: 1
- Total number of vehicles: 2
- Initial vehicle costs: $250,000
- Annual operational cost: $246,600
- Annual hours of service: 4,500
- Annual passenger-trips: 86,600
- Passengers per hour: 19.2
- Cost per passenger-trip: $2.85

30-Minute Headway

- Number of vehicles in maximum service: 2
- Total number of vehicles: 3
- Initial vehicle costs: $375,000
- Annual operational cost: $487,800
- Annual hours of service: 9,000
- Annual passenger-trips: 157,400
- Passengers per hour: 17.5
- Cost per passenger-trip: $3.10

Complementary Paratransit

- Number of vehicles in maximum service: 1
- Total number of vehicles: 2
- Initial vehicle costs: $174,900
- Annual operational cost: $274,000
- Annual hours of service: 4,500
- Annual passenger-trips: 3,400
- Passengers per hour: 0.8
- Cost per passenger-trip: $80.59

Two Routes

The paths of the two routes in this option are shown in Figure VII-3. The blue route is very similar to the single-route option, taking the same route into downtown, and extending further along Harkrider and Skyline than the single-route option. It follows the path from west to east along Dave Ward Drive near Wal-Mart. It continues east to UCA, serves student housing along Moix Boulevard, before turning north on Donaghey Avenue. After passing through the campus and hospital area at Western Avenue/College Avenue, the bus would travel east on College Avenue, through downtown on Main Street. Unlike the single route, the blue route omits the branch out to Target along Oak Street. It

instead turns north on Harkrider Street, serving Hendrix College, Wal-Mart, and the Conway Town Center along Skyline.

The red route takes some of the pieces of the single-route option that the blue route does not cover. Additionally, the red route picks up more of the eastern and southern parts of Conway. From UCA, it travels north on Donaghey, east on Rockwood, south on Clifton, and east on Siebenmorgen. From there it travels south on East German, west on Oak Street, and returns back to UCA along Donaghey, College, and Western. South of UCA, the route goes east on Robins, then does a loop around Griffith, south Harkrider, Dave Ward, and German.

The two routes intersect or overlap in three locations, affording transfer possibilities. The three locations are the UCA campus between College and Robins, near downtown at Harkrider/Oak, and Harkrider/Siebenmorgen.

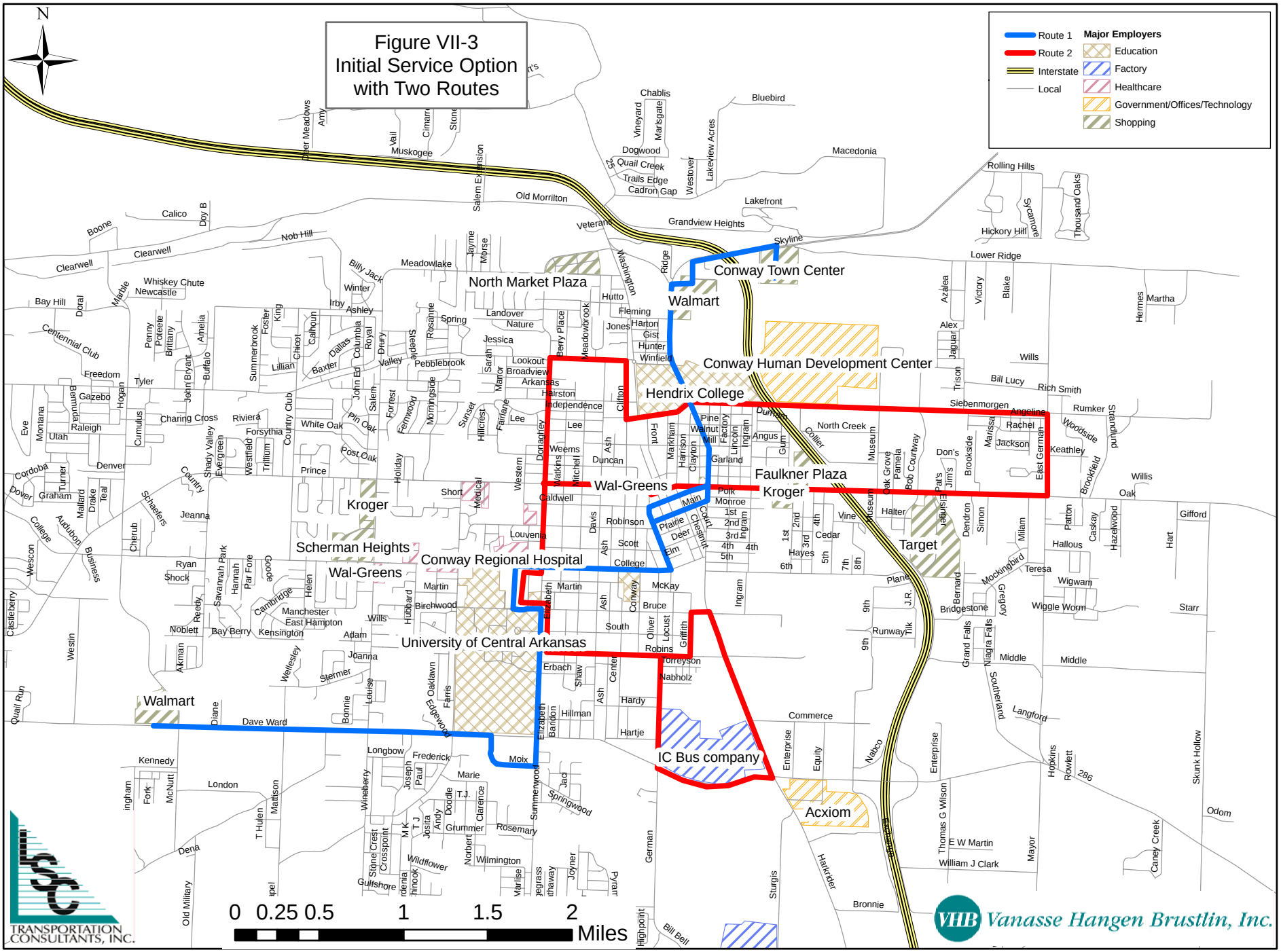


Figure VII-3
Initial Service Option
with Two Routes
N
Route 1
Route 2
Interstate
Local
Major Employers
Education
Factory
Healthcare
Government/Offices/Technology
Shopping
Conway Town Center
Walmart
North Market Plaza
Conway Human Development Center
Hendrix College
Faulkner Plaza
Kroger
Wal-Greens
Kroger
Scherman Heights
Conway Regional Hospital
Wal-Greens
University of Central Arkansas
Walmart
IC Bus company
Acxiom
Target
Old Morrilton
Veterans
Salem Extension
Dave Ward
Skyline
Ridge
Washington
Oak
Museum
Harkrider
Bronnie
Commerce
Enterprise
Equity
Nabco
Runway Tlk
Bridgestone
Mockingbird
Teresa
Wigwam
Wiggle Worm
Starr
Middle
Langford
Southerland
Grand Falls
Niagara Falls
Hallous
Patton
Caskay
Hazelwood
Gifford
Hart
Willis
Oak
Brookfield
Woodside
Standridge
Rumker
Rich Smith
Bill Lucy
Wills
Martha
Hermes
Lower Ridge
Hickory Hill
Sycamore
Thousand Oaks
Rolling Hills
Macedonia
Lakefront
Grandview Heights
Bluebird
Chablis
Vineyard
Marlsgate
Dogwood
Quail Creek
Trails Edge
Cadron Gap
Westover
Lakeview Acres
Meadowlake
Whiskey Chute
Newcastle
Calico
Doy B
Boone
Clearwell
Nob Hill
Bay Hill
Doral
Marble
Centennial Club
Freedom
Tyler
Gazebo
Hogan
Bennington
Raleigh
Utah
Eve
Montana
Cumulus
Charing Cross
Riviera
Forsythia
Trillium
Westfield
Shady Valley
Evergreen
Country Club
White Oak
Pin Oak
Post Oak
Prince
Holiday
Cordoba
Dover
Graham
Turner
Denver
Mallard
Drake
Teal
Schaefers
Country
Jeanna
College
Audubon
Business
Wescon
Cherub
Castleberry
Westin
Quail Run
Ryan
Shock
Savannah Park
Hannah
Par Fore
Goode
Helen
Cambridge
Manchester
East Hampton
Kensington
Bay Berry
Noblett
Reedy
Akinan
Wellesley
Joanna
Stermer
Louise
Bonnie
Diane
Oaklawn
Faris
Longbow
Kennedy
London
Mattison
T Hulen
Dena
Old Military
Gulfshore
Wildflower
Wilmington
Norbert
Grummer
Rosemary
Springwood
Summerwood
Jad
Moix
Frederick
Marie
Hillman
Hartje
Hardy
Center
Shaw
Erbach
Baldon
Elizabeth
Martin
Birchwood
Hubbard
Wills
Adam
Joanna
Louvenia
Caldwell
Short
Medical
Western
Dotadney
Weems
Watkins
Mitchell
Duncan
Ash
Davis
Robinson
Scott
College
Elm
Deer
Prairie
Chestnut
Court
Main
Polk
Monroe
1st
2nd
3rd
4th
5th
6th
7th
8th
Ingram
Cedar
Hayes
Vine
Halter
Plane
J.R.
9th
McKay
Bruce
Oliver
Locust
Griffith
Robins
Torreyson
Nabholz
South
Conway
Ash
Lee
Pine
Walnut
Mill
Factory
Lincoln
Angus
Garland
Markham
Harrison
Clayton
Front
Dunlap
Collier
Glen
North Creek
Museum
Oak Grove
Pamela
Bob Courtway
Don's
Pat's
Jim's
Fishing
Brookside
Marissa
Jackson
Rachel
Angeline
Siebenmorgen
East German
Keathley
Trison
Azalea
Victory
Blake
Alex
Jaguar
Wills
Bill Lucy
Rich Smith
Rumker
Standridge
Woodside
Brookfield
Willis
Oak
Gifford
Hart
Hallous
Caskay
Hazelwood
Patton
Miliam
Simon
Dendron
Bernard
Gregory
Grand Falls
Niagara Falls
Middle
Southerland
Langford
Wiggle Worm
Starr
Wigwam
Teresa
Mockingbird
Bridgestone
Runway Tlk
9th
J.R.
Plane
Ingram
Hayes
Cedar
Vine
Halter
Museum
Oak
Commerce
Enterprise
Equity
Nabco
Hopkins
Rowlett
286
Skunk Hollow
Odom
Caney Creek
Mayor
Thomas G Wilson
E W Martin
William J Clark
Harkrider
Sturgis
German
Highpoint
Bill Bell
Stone Crest
Crosspoint
Wildflower
Gulfshore
Wilmington
Norbert
Grummer
Rosemary
Springwood
Summerwood
Jad
Moix
Frederick
Marie
Longbow
Kennedy
London
Mattison
T Hulen
Dena
Old Military
Whineberry
Joseph
Paul
T.J.
Andy
Doodle
Clarence
Josita
M K
Ingham
Fork
McNutt
Jayne
Morse
Meadowbrook
Berry Place
Jessica
Nature
Landover
Spring
Rosanne
Sarah
Manor
Broadview
Arkansas
Hairston
Independence
Clifton
Jones
Harton
Gist
Hunter
Winfield
Fleming
Hutto
Billy Jack
Winter
Irby
Ashley
Meadowlake
Jayne
Morse
Summerbrook
Foster
King
Calhoun
Lillian
Chicot
Dallas
Columbia
Royal
Drury
Valley
Baxter
Pebblebrook
Lookout
Broadview
Arkansas
Hairston
Independence
Clifton
Jones
Harton
Gist
Hunter
Winfield
Fleming
Hutto
Spring
Landover
Nature
Jessica
Sarah
Manor
Berry Place
Meadowbrook
Rosanne
Steadman
Valley
Drury
Royal
Columbia
Dallas
Baxter
Lillian
Chicot
Calhoun
Foster
King
Summerbrook
Penny
Poteete
Brittany
Amelia
Buffalo
John Bryant
Hogan
Bennington
Gazebo
Freedom
Tyler
Bay Hill
Doral
Marble
Centennial Club
Whiskey Chute
Newcastle
Meadowlake
Billy Jack
Winter
Irby
Ashley
Boone
Clearwell
Nob Hill
Calico
Doy B
Old Morrilton
Veterans
Salem Extension
Dave Ward
Skyline
Ridge
Washington
Oak
Museum
Harkrider
Bronnie
Commerce
Enterprise
Equity
Nabco
Runway Tlk
Bridgestone
Mockingbird
Teresa
Wigwam
Wiggle Worm
Starr
Middle
Langford
Southerland
Grand Falls
Niagara Falls
Hallous
Patton
Caskay
Hazelwood
Gifford
Hart
Willis
Oak
Brookfield
Woodside
Standridge
Rumker
Rich Smith
Bill Lucy
Wills
Martha
Hermes
Lower Ridge
Hickory Hill
Sycamore
Thousand Oaks
Rolling Hills
Macedonia
Lakefront
Grandview Heights
Bluebird
Chablis
Vineyard
Marlsgate
Dogwood
Quail Creek
Trails Edge
Cadron Gap
Westover
Lakeview Acres
Meadowlake
Whiskey Chute
Newcastle
Calico
Doy B
Boone
Clearwell
Nob Hill
Bay Hill
Doral
Marble
Centennial Club
Freedom
Tyler
Gazebo
Hogan
Bennington
Raleigh
Utah
Eve
Montana
Cumulus
Charing Cross
Riviera
Forsythia
Trillium
Westfield
Shady Valley
Evergreen
Country Club
White Oak
Pin Oak
Post Oak
Prince
Holiday
Cordoba
Dover
Graham
Turner
Denver
Mallard
Drake
Teal
Schaefers
Country
Jeanna
College
Audubon
Business
Wescon
Cherub
Castleberry
Westin
Quail Run
Ryan
Shock
Savannah Park
Hannah
Par Fore
Goode
Helen
Cambridge
Manchester
East Hampton
Kensington
Bay Berry
Noblett
Reedy
Akinan
Wellesley
Joanna
Stermer
Louise
Bonnie
Diane
Oaklawn
Faris
Longbow
Kennedy
London
Mattison
T Hulen
Dena
Old Military
Gulfshore
Wildflower
Wilmington
Norbert
Grummer
Rosemary
Springwood
Summerwood
Jad
Moix
Frederick
Marie
Hillman
Hartje
Hardy
Center
Shaw
Erbach
Baldon
Elizabeth
Martin
Birchwood
Hubbard
Wills
Adam
Joanna
Louvenia
Caldwell
Short
Medical
Western
Dotadney
Weems
Watkins
Mitchell
Duncan
Ash
Davis
Robinson
Scott
College
Elm
Deer
Prairie
Chestnut
Court
Main
Polk
Monroe
1st
2nd
3rd
4th
5th
6th
7th
8th
Ingram
Cedar
Hayes
Vine
Halter
Plane
J.R.
9th
McKay
Bruce
Oliver
Locust
Griffith
Robins
Torreyson
Nabholz
South
Conway
Ash
Lee
Pine
Walnut
Mill
Factory
Lincoln
Angus
Garland
Markham
Harrison
Clayton
Front
Dunlap
Collier
Glen
North Creek
Museum
Oak Grove
Pamela
Bob Courtway
Don's
Pat's
Jim's
Fishing
Brookside
Marissa
Jackson
Rachel
Angeline
Siebenmorgen
East German
Keathley
Trison
Azalea
Victory
Blake
Alex
Jaguar
Wills
Bill Lucy
Rich Smith
Rumker
Standridge
Woodside
Brookfield
Willis
Oak
Gifford
Hart
Hallous
Caskay
Hazelwood
Patton
Miliam
Simon
Dendron
Bernard
Gregory
Grand Falls
Niagara Falls
Middle
Southerland
Langford
Wiggle Worm
Starr
Wigwam
Teresa
Mockingbird
Bridgestone
Runway Tlk
9th
J.R.
Plane
Ingram
Hayes
Cedar
Vine
Halter
Museum
Oak
Commerce
Enterprise
Equity
Nabco
Hopkins
Rowlett
286
Skunk Hollow
Odom
Caney Creek
Mayor
Thomas G Wilson
E W Martin
William J Clark
Harkrider
Sturgis
German
Highpoint
Bill Bell
0 0.25 0.5 1 1.5 2
Miles
TRANSPORTATION CONSULTANTS, INC.
VHB Vanasse Hangen Brustlin, Inc.

Ridership and cost estimate information for different headways was developed: 60-minute and 30-minute. These provide a good comparison for the effect of service frequency on ridership and cost.

The difference in costs for the single route would be $250,000 based on the difference between 60-minute and 30-minute headways. The 60-minute headways would require less capital expenditure because fewer vehicles would be needed when compared with the 30-minute headways (as shown in Tables VII-5 and VII-6, respectively).

Table VII-5
Operating and Capital Costs Associated with the Two-Route Option – 60-Minute Frequency

	Annual Operating Costs	Capital Costs (1)
Two Routes @ 60 minutes	$487,800	$410,800
Complementary Paratransit	$274,000	$174,900
Totals	*$761,800*	*$585,700*

(1) Capital costs for fixed-route service include vehicles ($125,000/vehicle) and bus stop installation. Capital costs for paratransit service includes only vehicles ($87,451/vehicle).

Table VII-6
Operating and Capital Costs Associated with the Two-Route Option – 30-Minute Frequency

	Annual Operating Costs	Capital Costs (1)
Two Routes @ 30 minutes	$975,600	$660,800
Complementary Paratransit	$274,000	$174,900
Totals	*$1,249,600*	*$835,700*

(1) Capital costs for fixed-route service include vehicles ($125,000/vehicle) and bus stop installation. Capital costs for paratransit service includes only vehicles ($87,451/vehicle).

60-Minute Headway

- Number of vehicles in maximum service: 2
- Total number of vehicles: 3
- Initial vehicle costs: $375,000
- Annual operational cost: $487,800
- Annual hours of service: 9,000

- Annual passenger-trips: 110,700
- Passengers per hour: 12.3
- Cost per passenger-trip: $4.41

30-Minute Headway

- Number of vehicles in maximum service: 4
- Total number of vehicles: 5
- Initial vehicle costs: $625,000
- Annual operational cost: $975,000
- Annual hours of service: 18,000
- Annual passenger-trips: 203,000
- Passengers per hour: 11.3
- Cost per passenger-trip: $4.81

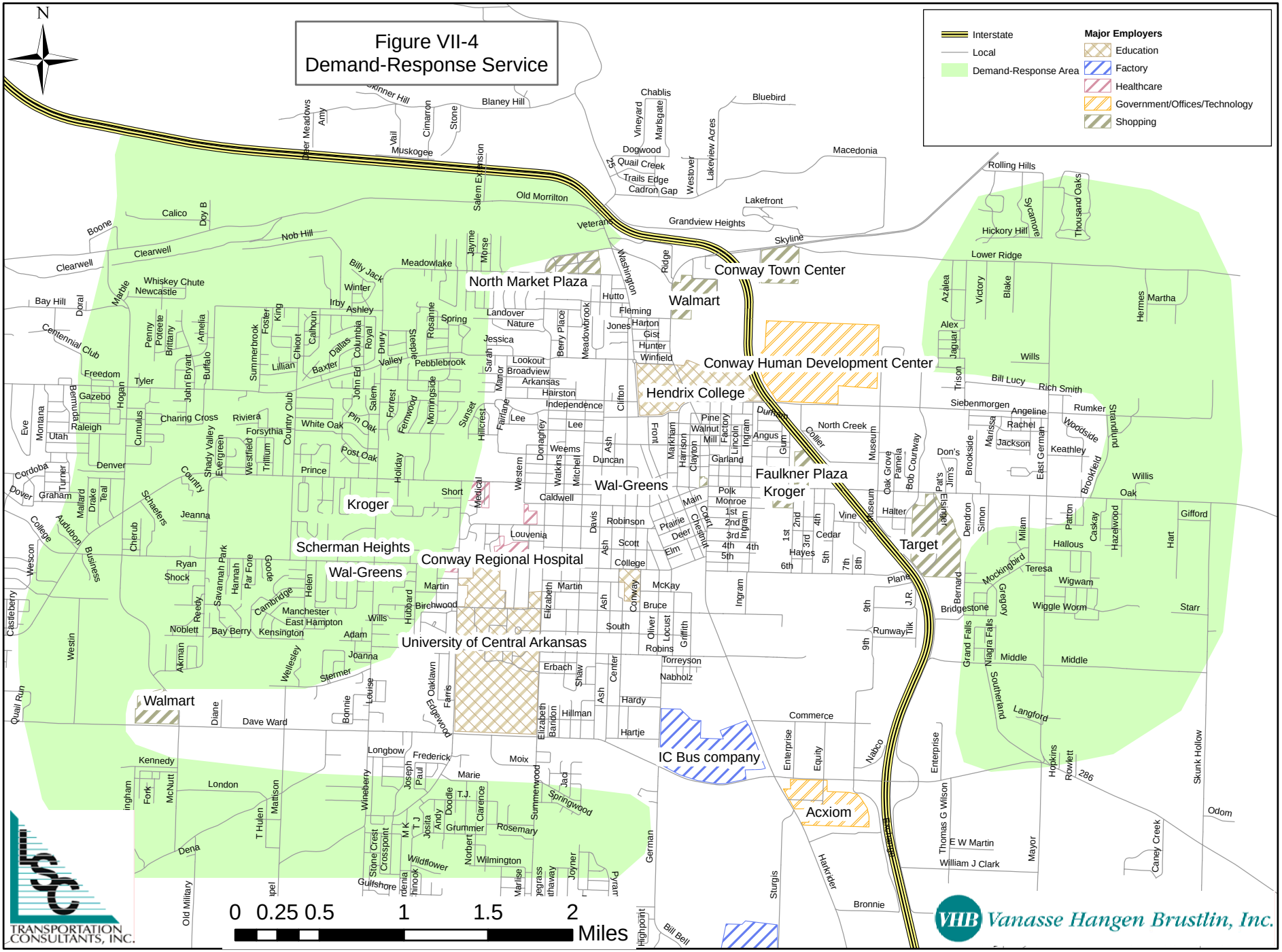
Complementary Paratransit

- Number of vehicles in maximum service: 1
- Total number of vehicles: 2
- Initial vehicle costs: $174,900
- Annual operational cost: $274,000
- Annual hours of service: 4,500
- Annual passenger-trips: 4,300
- Passengers per hour: 1.0
- Cost per passenger-trip: $63.72

Demand-Responsive Service

This option is demand-responsive service only, with two defined service areas beyond the service area of the fixed routes and the complementary paratransit associated with those routes. One demand-response zone is in the western areas of Conway and one is east near the airport. Refer to Figure VII-4. This option could be paired with either of the initial transit service options, whether the single-route or the two-route option.

Figure VII-4
Demand-Response Service



As the transit system and the land use grow toward the vision, and the current airport location is redeveloped, the eastern portion of this demand-responsive option should be replaced by fixed-route service. Additionally, as fixed-route service is extended along Tyler Street, Country Club Road, and Prince Street, the demand-responsive zone can assume more of the service area west of UCA.

Four cost estimates are provided for this option, reflecting different levels of service. One of the choices is between 60-minute and 30-minute windows of service from the time service is requested by phone or computer. The other choice is between 90 percent of the estimated demand and 100 percent. From a customer perspective, the difference between 90 percent and 100 percent is that some residents/customers may not be provided service within specified service times. The difference between these service levels is up to four vehicles and up to $1.1 million in operating costs per year. These differences are shown in Table VII-7.

Table VII-7
Operating and Capital Costs Associated with Demand-Response Service

Service Level	Annual Operating Costs (1)	Capital Costs (2)	TOTAL
60-minute response at 90%	$821,900	$349,800	$1,171,700
60-minute response at 100%	$1,095,800	$402,300	$1,498,100
30-minute response at 90%	$1,643,800	$612,200	$2,256,000
30-minute response at 100%	$1,917,700	$699,600	$2,617,300

(1) Operating costs assume 30-minute pick-up and drop-off time window.
(2) Capital costs include only vehicles, at $87,500/vehicle, rounded.

Demand-Response Service Statistics

- Number of vehicles in maximum service: 3-7
- Total number of vehicles: 4-8
- Initial vehicle cost: $349,800-$699,600
- Annual operational cost: $821,900-$1,917,700
- Annual hours of service: 13,500–31,500
- Annual passenger-trips: 38,500-49,500

- Passengers per hour: 2.85–1.57
- Cost per passenger-trip: $21.34-$38.74

PHASING OF SERVICE IMPLEMENTATION

Table VII-8 summarizes the various service options and the transit service vision discussed in this chapter. All of the fixed routes meet a basic productivity threshold of ten passengers per hour.

Although the complementary paratransit costs per passenger-trip can look quite high, the service is required as a complement to any fixed-route service. These estimates provide a conservatively high number for planning purposes. Actual costs may be lower. When actual passenger requests are made and a time-of-day pattern is established, it may be possible to deliver the required service with fewer vehicles and drivers during portions of the day.

Table VII-8
Summary of Conway Service Options

Service Option		Vehicles		Initial Capital Cost (2009$)	Annual O&M Cost (2009$)	Annual Hours of Service	Annual Passenger-Trips	Passengers Per Hour	Cost per Passenger-Trip
#	Description	Tot	In-Svc						
Vision - 2030	2 Fixed Routes @ 15 min.	10	8	$2,537,600	$1,951,200	36,000	429,200	11.9	$4.55
	Complementary Paratransit	1	1	$87,500	$274,000	4,500	5,900	1.3	$46.44
	Demand-Response Zone	4	3	$349,800	$821,900	13,500	72,000	5.3	$11.42
	Vision Total	*15*	*12*	*$2,974,900*	*$3,047,100*	*54,000*	*507,100*	*9.4*	*$6.01*
Single Route - 2010	Single Route @ 60 min.	2	1	$271,600	$243,900	4,500	86,600	19.2	$2.82
	Complementary Paratransit	2	1	$174,900	$274,000	4,500	3,400	0.8	$80.59
	Single @ 60 Total	*4*	*2*	*$446,500*	*$517,900*	*9,000*	*90,000*	*10.0*	*$5.75*
	Single Route @ 30 min.	3	2	$396,600	$487,800	9,000	157,400	17.5	$3.10
	Complementary Paratransit	2	1	$174,900	$274,000	4,500	3,400	0.8	$80.59
	Single @ 30 Total	*5*	*3*	*$571,500*	*$761,800*	*13,500*	*160,800*	*11.9*	*$4.74*
Two Routes - 2010	2 Fixed Routes @ 60 min.	3	2	$410,800	$487,800	9,000	110,700	12.3	$4.41
	Complementary Paratransit	2	1	$174,900	$274,000	4,500	4,300	1.0	$63.72
	Two Routes @ 60 Total	*5*	*3*	*$585,700*	*$761,800*	*13,500*	*115,000*	*8.5*	*$6.62*
	2 Fixed Routes @ 30 min.	5	4	$660,800	$975,600	18,000	203,000	11.3	$4.81
	Complementary Paratransit	2	1	$174,900	$274,000	4,500	4,300	1.0	$63.72
	Two Routes @ 30 Total	*7*	*5*	*$835,700*	*$1,249,600*	*22,500*	*207,300*	*9.2*	*$6.03*
DR Zones - 2010	60-minute response @ 90%	4	3	$349,800	$821,900	13,500	38,500	2.9	$21.35
	60-minute response @ 100%	5	4	$437,300	$1,095,800	18,000	42,800	2.4	$25.60
	30-minute response @ 90%	7	6	$612,200	$1,643,800	27,000	44,600	1.7	$36.86
	30-minute response @ 100%	8	7	$699,600	$1,917,700	31,500	49,500	1.6	$38.74

Source: LSC, 2009.

Notes: Complementary paratransit costs in all except the vision show the need for two vehicles: one in operation and one spare. In the vision option, the need for spares is shared with and accounted for in the demand-response zone total.

Start-up Investment

The cost totals in Table VII-8 show that for a single-route option, the City of Conway would need approximately $1.0 million to $1.3 million to initiate the single-route service with more than half that amount being required annually for operating costs.

At the $1.3 to $1.4 million dollar investment level, the City of Conway has a fairly equal choice between a single route operating at 30-minute frequencies or two routes operating at 60-minute frequencies. This is a policy decision between frequency and geographic coverage in the community. The annual operating costs at $761,800 are the same.

To step up to both routes operating at 30-minute frequencies, the investment increases by a little less than double, from $1.4 million to $2.1 million. The fixed-route operating costs double as the frequency is improved from 60 minutes to 30 minutes. The cost for the complementary paratransit service remains the same because the transit-dependent population and the need for trips remains the same.

The transition from the two-route option to the vision service reflects cost increases in two areas. There is an increase in operating costs due to the improvement in service from 30 minutes to 15 minutes. There is also a pre-sumption that at the vision level, the City of Conway would use a heavier-duty transit vehicle (at $250,000 per vehicle) than would be used at system start-up.

Service Efficiency

After looking at the start-up costs and annual operating costs, the next policy decision for the City of Conway is service efficiency. This is a trade-off decision between the cost of service and the number of passengers served.

The single-route option at 60 minutes is the most efficient, as measured by the cost per passenger-trip of $2.82. At $761,800 annual operating cost, the amount is the same for either a single route at 30-minute frequencies or two routes at 60-minute frequencies. The estimates show that the single route at 30

minutes is more efficient at $3.10 per passenger-trip than the two-route, 60-minute option at $4.41.

Chapter VIII

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER VIII

Community Transportation Survey

OVERVIEW AND METHODOLOGY

ETC Institute, in association with LSC Transportation Consultants, Inc., administered a community transportation survey for the City of Conway. The purpose of the survey was to gather input from residents about public transportation issues.

The survey was administered by phone during June 2009. The survey took the average person approximately 14 minutes to complete. The survey was administered to a random sample of 436 residents who lived inside the city limits of Conway. All residents were at least 18 years old. The overall results of the survey have a precision of at least +/-4.8 percent at the 95 percent level of confidence.

The survey instrument is included in Appendix C, and the tabulated results are included in Appendix D.

HOUSEHOLD CHARACTERISTICS

Vehicle Availability

Ninety-eight percent of the households surveyed indicated that their household had at least one working vehicle. Forty percent indicated that their household had three or more working vehicles.

Number of Drivers

Ninety-nine percent of the households surveyed indicated that their household had at least once licensed driver, 55 percent indicated there were two licensed drivers, and 29 percent indicated that their household had three or more licensed drivers.

Employment Outside the Home

Eighty-eight percent of the households surveyed indicated that at least one person in their household was employed outside the home.

Affiliation with Local Colleges/Universities

Twenty-two percent of the households surveyed indicated that at least one person in their household was a student at a local college or university, seven percent indicated that at least one person in their household was a faculty member at a local college or university, and six percent indicated that at least one person was employed as staff. Of the students, 76 percent were students at the University of Central Arkansas, five percent at Hendrix College, two percent at Central Baptist College, and 16 percent at other schools. Of those indicating a faculty member at a local college or university, 67 percent were affiliated with the University of Central Arkansas, 10 percent with Hendrix College, and 13 percent with Central Baptist College. Of the households with staff members at local colleges, 46 percent were affiliated with the University of Central Arkansas, 38 percent with Hendrix College, and eight percent with Central Baptist College.

Persons with Disabilities

Thirteen percent of the households surveyed indicated that at least one person in their household had a disability that made it difficult or impossible for them to drive. Eight percent indicated that someone in their household had a disability that made it difficult for or impossible to leave home without assistance. More than one-third (37 percent) of the respondents indicated they had provided transportation for a person with disabilities who could not drive within the past six months.

Ethnicity

The majority of respondents (81 percent) indicated they were white with 14 percent indicating black and three percent indicating another ethnic group. This very closely matches the ethnic mix within Conway.

INTEREST IN USING PUBLIC TRANSPORTATION

Interest in Using a Bus to Travel to/from Work or School

Forty-four percent of those surveyed who were students or employed outside the home indicated that they would consider using a bus to go to school or work. It must be noted that this does not represent demand for transit service,

but only the level of interest. Separate demand estimates should be used to evaluate any transit service options.

Interest in Using a Bus to Travel to Other Locations

Sixty-three percent of those surveyed who were students or employed outside the home indicated that they would consider using a bus to go to non-work and non-school destinations.

Desire for Bus Service Near Homes

Sixty-three percent of all residents surveyed indicated that they would like to have bus service available near their home.

SUPPORT FOR FUNDING PUBLIC TRANSIT

The Role of the City in Funding Public Transit

Seventy-five percent of those surveyed thought the City of Conway should provide financial support for public transit, 19 percent did not think the City should provide financial support, and six percent did not have an opinion.

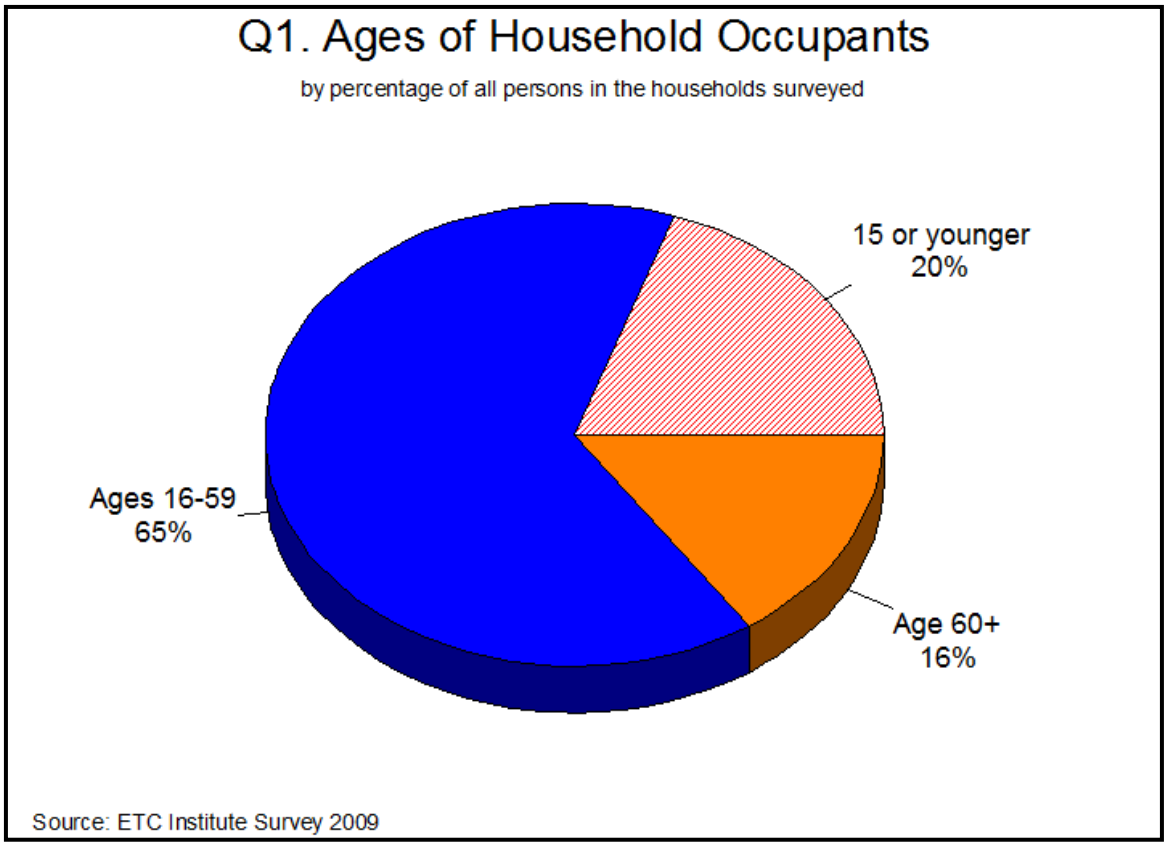
Willingness to Pay an Increase in Property Tax to Support Public Transit

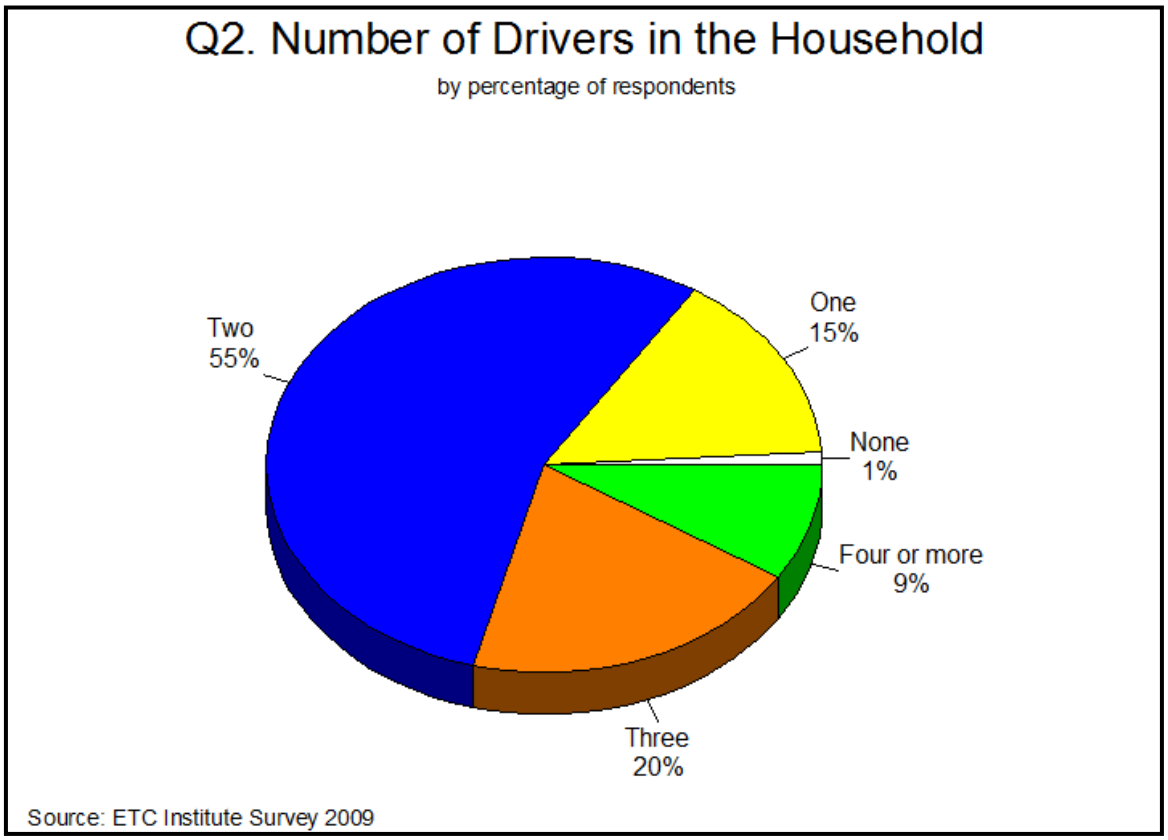
Half (50 percent) of those surveyed indicated that they would be willing to pay an increase in property tax to support public transit, 46 percent would not be willing to pay an increase in property tax, and four percent did not have an opinion.

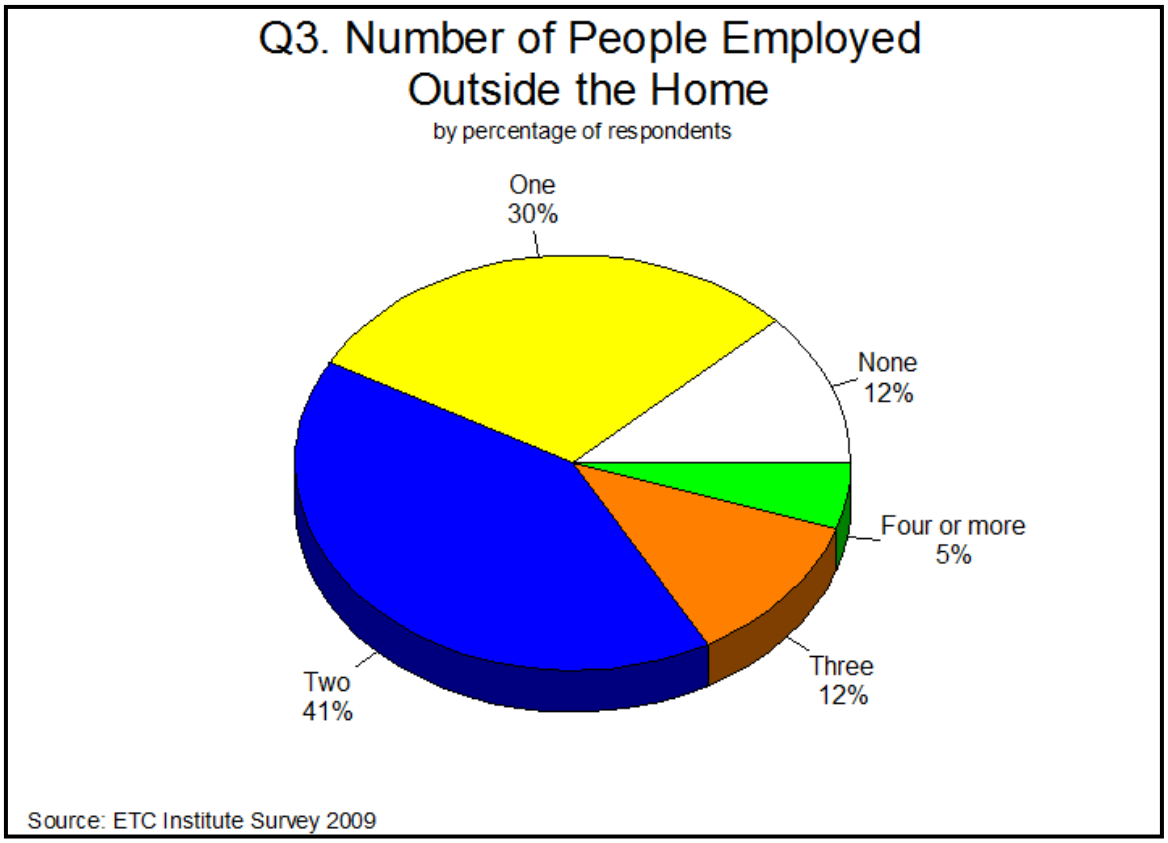
Willingness to Pay an Increase in Sales Tax to Support Public Transit

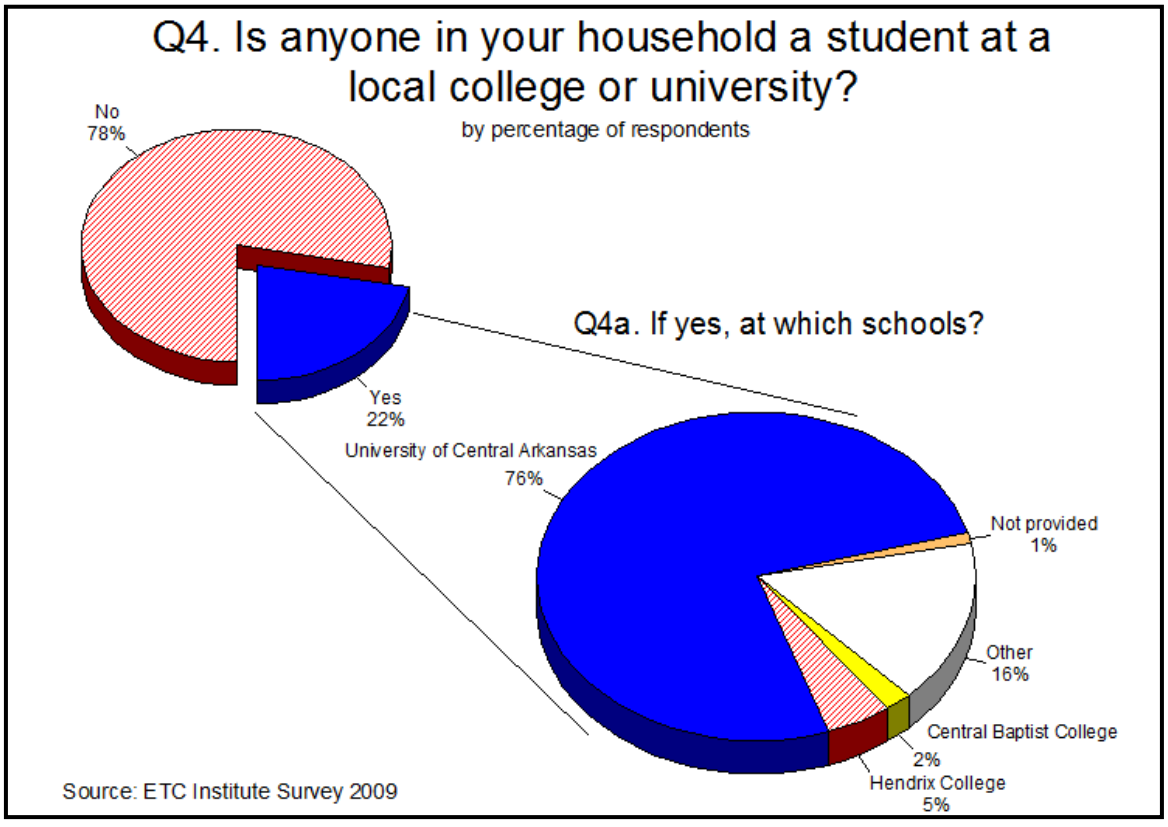
Two-fifths (40 percent) of those surveyed indicated that they would be willing to pay an increase in sales tax to support public transit, 57 percent would not be willing to pay an increase in sales tax, and three percent did not have an opinion.

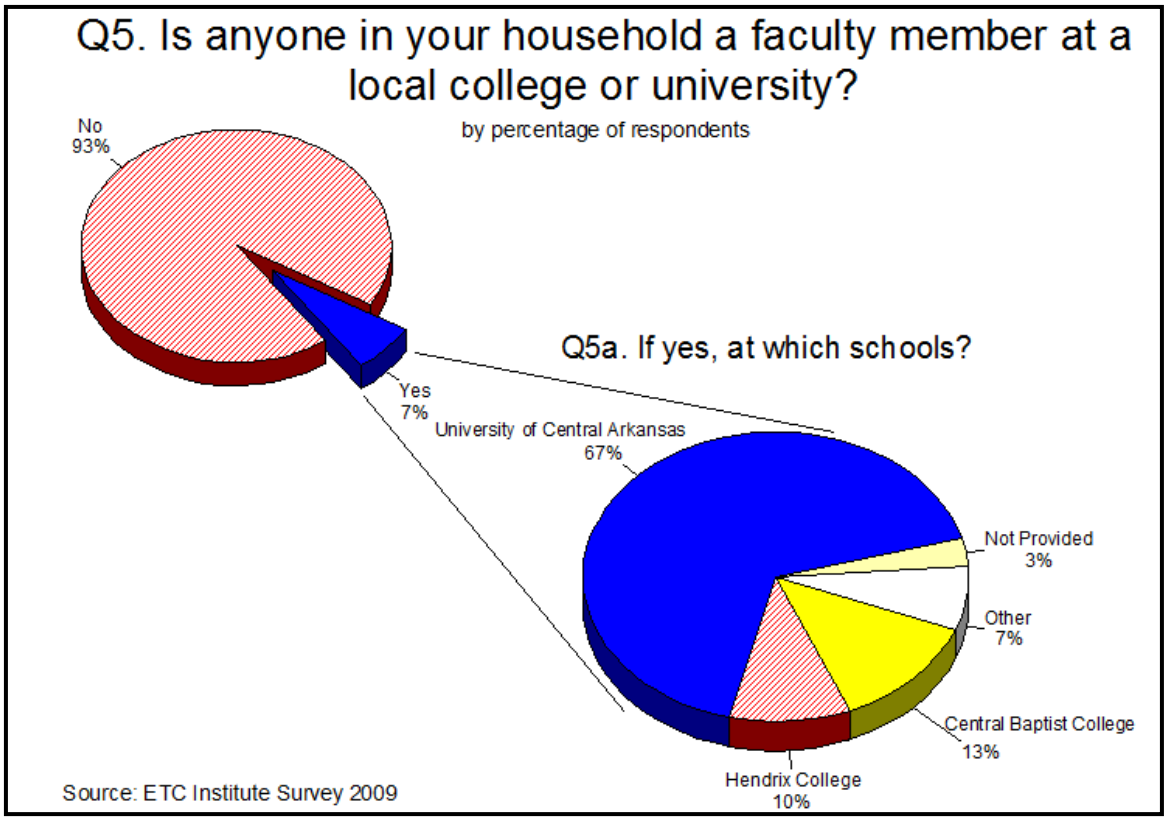
The majority of respondents indicated they were willing to pay at least $10 per year in additional taxes per household to support public transit. Forty-one percent indicated a willingness to pay $20 per year, and 22 percent were willing to pay as much as $30 per year in additional taxes per household.

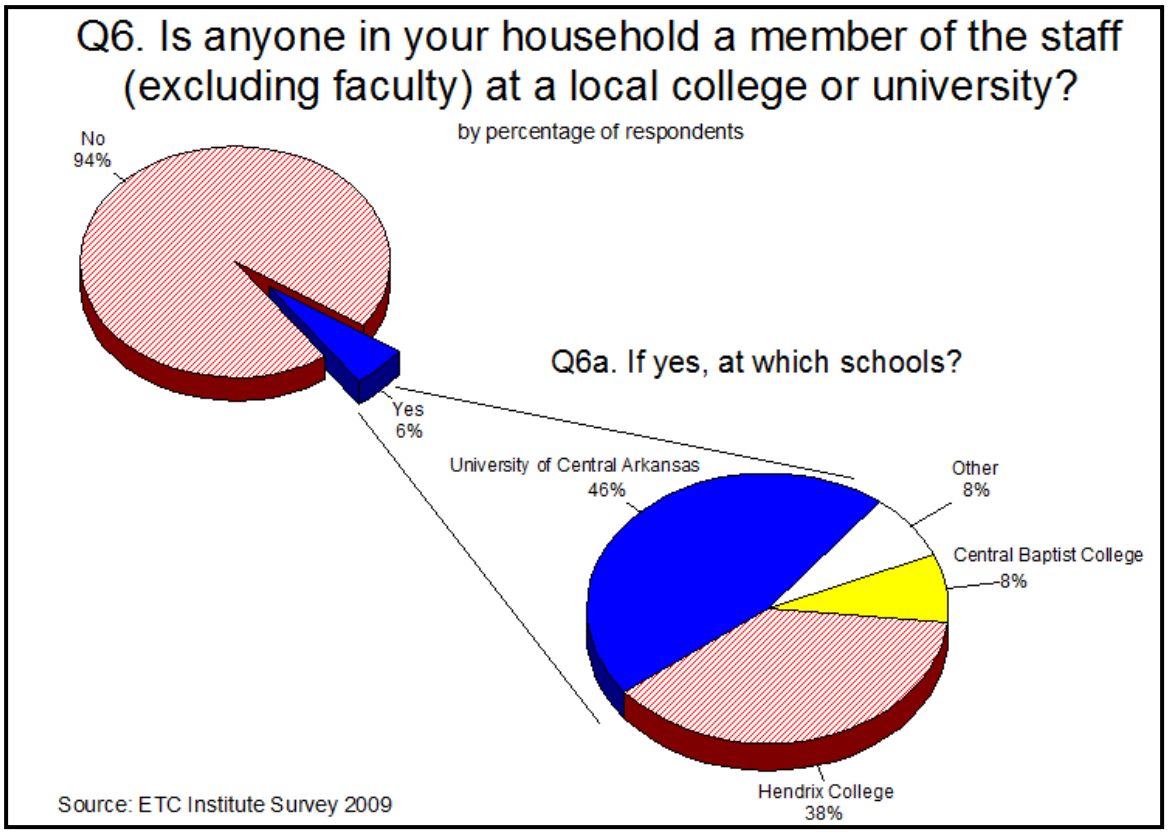

Q1. Ages of Household Occupants
by percentage of all persons in the households surveyed
15 or younger
20%
Ages 16-59
65%
Age 60+
16%
Source: ETC Institute Survey 2009


Q2. Number of Drivers in the Household
by percentage of respondents
Two
55%
One
15%
None
1%
Four or more
9%
Three
20%
Source: ETC Institute Survey 2009


Q3. Number of People Employed Outside the Home
by percentage of respondents
One 30%
None 12%
Four or more 5%
Three 12%
Two 41%
Source: ETC Institute Survey 2009

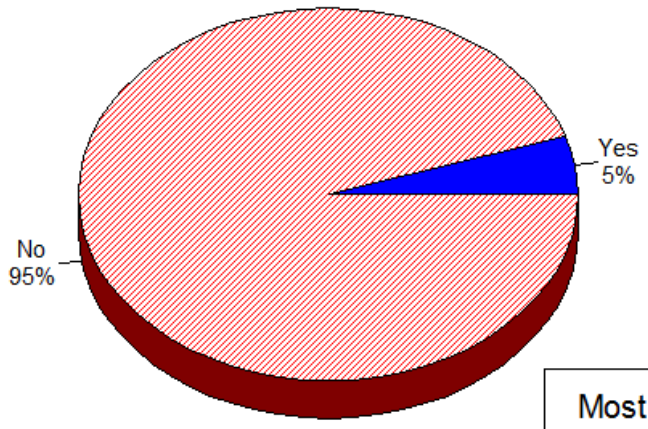

Q4. Is anyone in your household a student at a local college or university?
by percentage of respondents
No 78%
Yes 22%
Q4a. If yes, at which schools?
University of Central Arkansas 76%
Not provided 1%
Other 16%
Central Baptist College 2%
Hendrix College 5%
Source: ETC Institute Survey 2009


Q5. Is anyone in your household a faculty member at a local college or university?
by percentage of respondents
No
93%
Yes
7%
Q5a. If yes, at which schools?
University of Central Arkansas
67%
Not Provided
3%
Other
7%
Central Baptist College
13%
Hendrix College
10%
Source: ETC Institute Survey 2009


Q6. Is anyone in your household a member of the staff (excluding faculty) at a local college or university?
by percentage of respondents
No
94%
Yes
6%
Q6a. If yes, at which schools?
University of Central Arkansas
46%
Other
8%
Central Baptist College
8%
Hendrix College
38%
Source: ETC Institute Survey 2009

Q7. Is anyone in your household affiliated with a local college or university in any other way?

by percentage of respondents

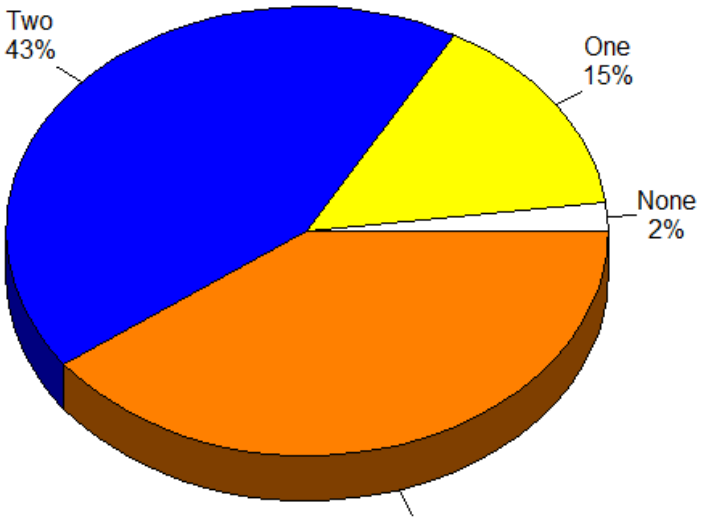


Most frequently mentioned "other affiliation" was "Alumni"

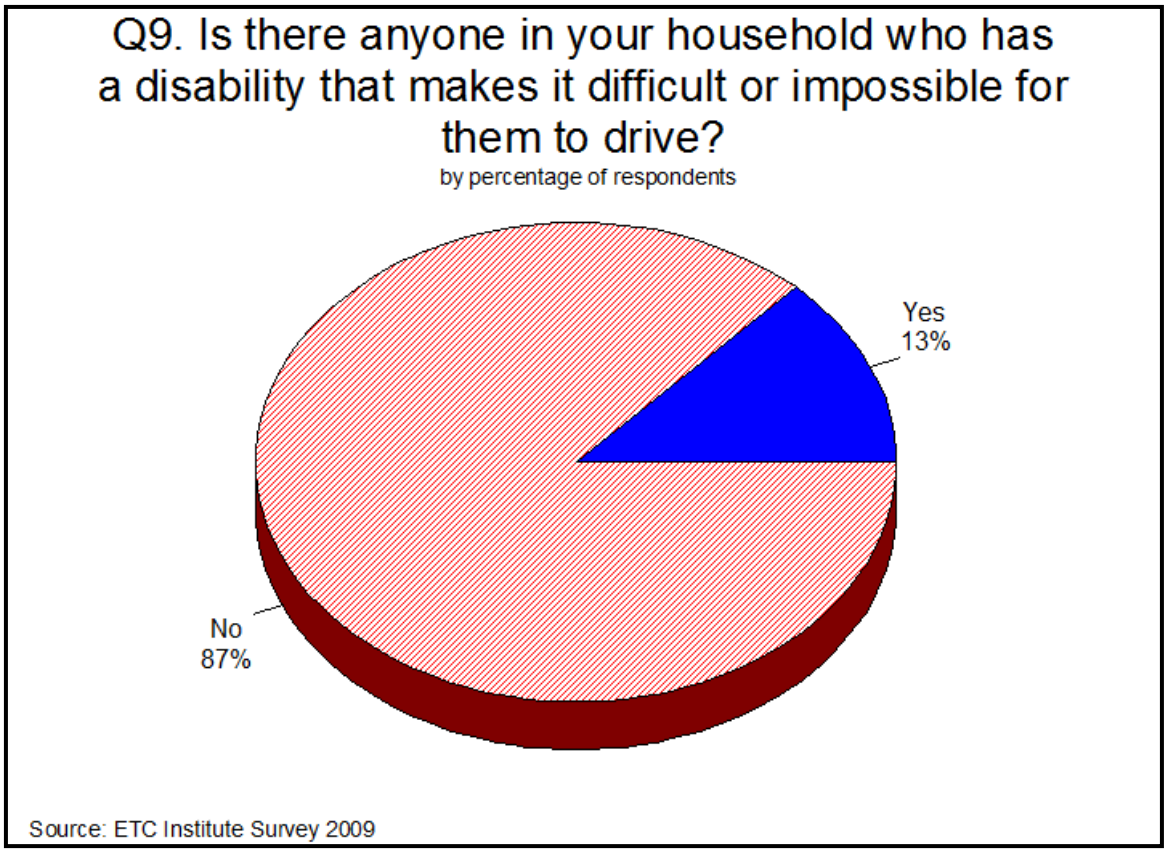
Source: ETC Institute Survey 2009

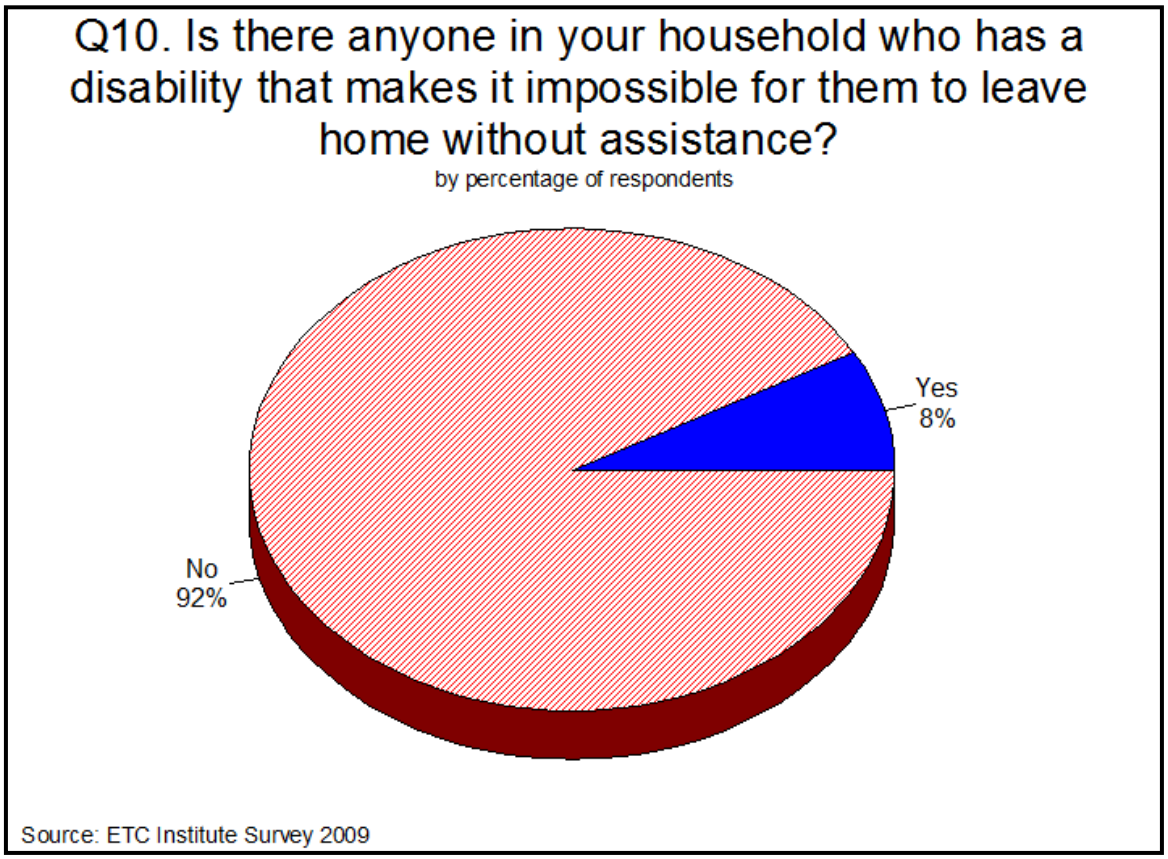
Q8. Number of working motor vehicles available to the household

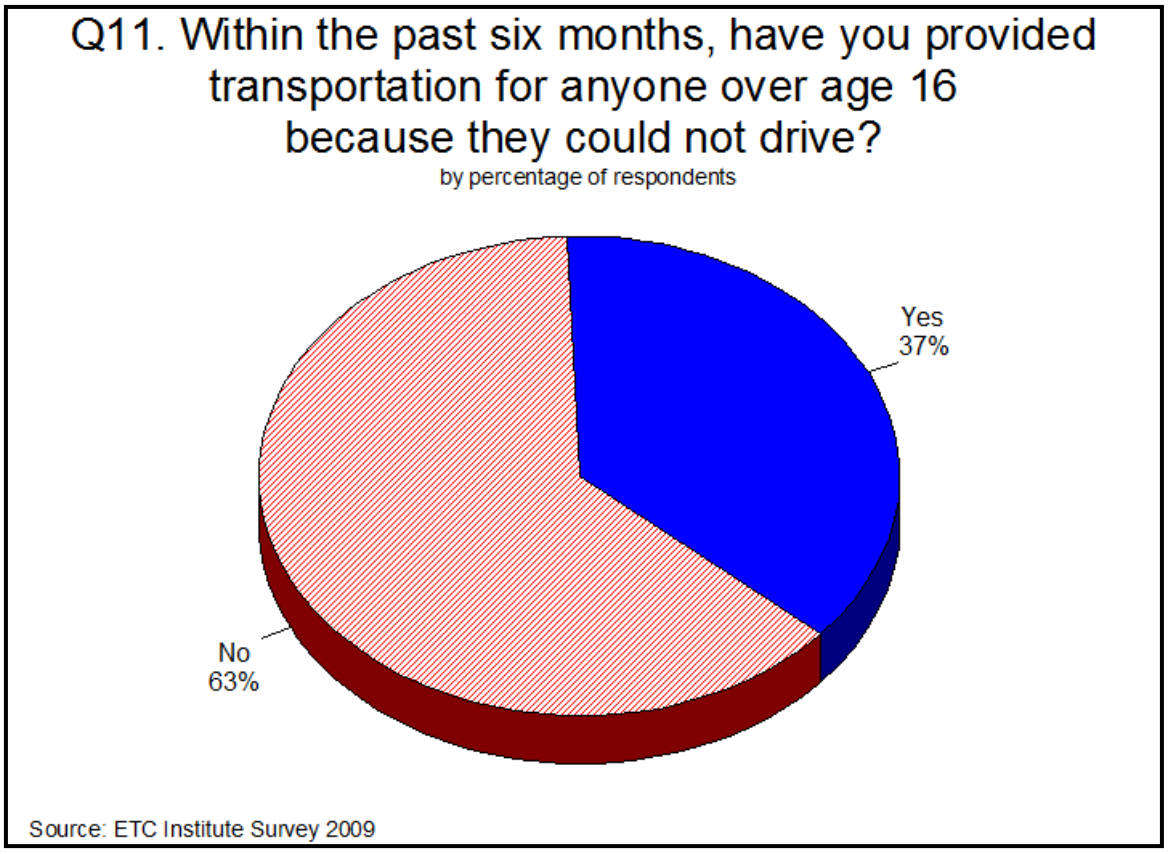
by percentage of respondents

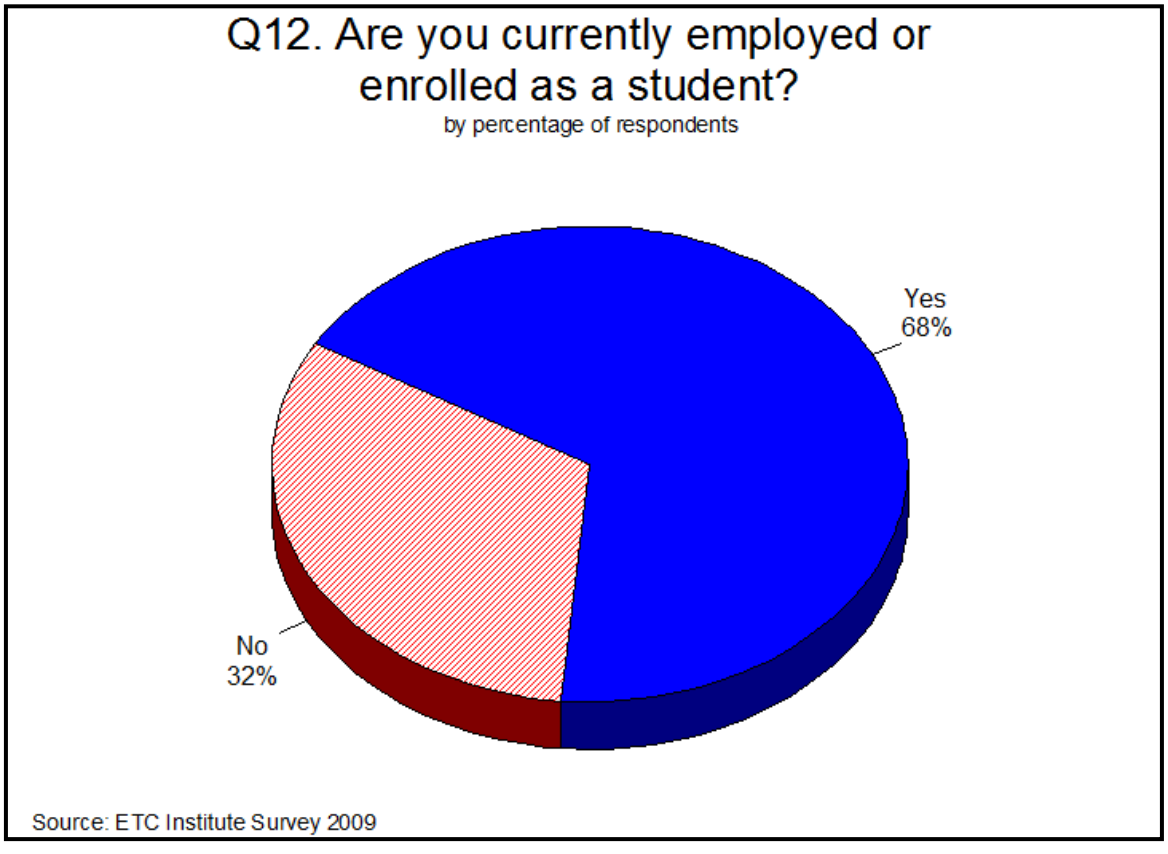


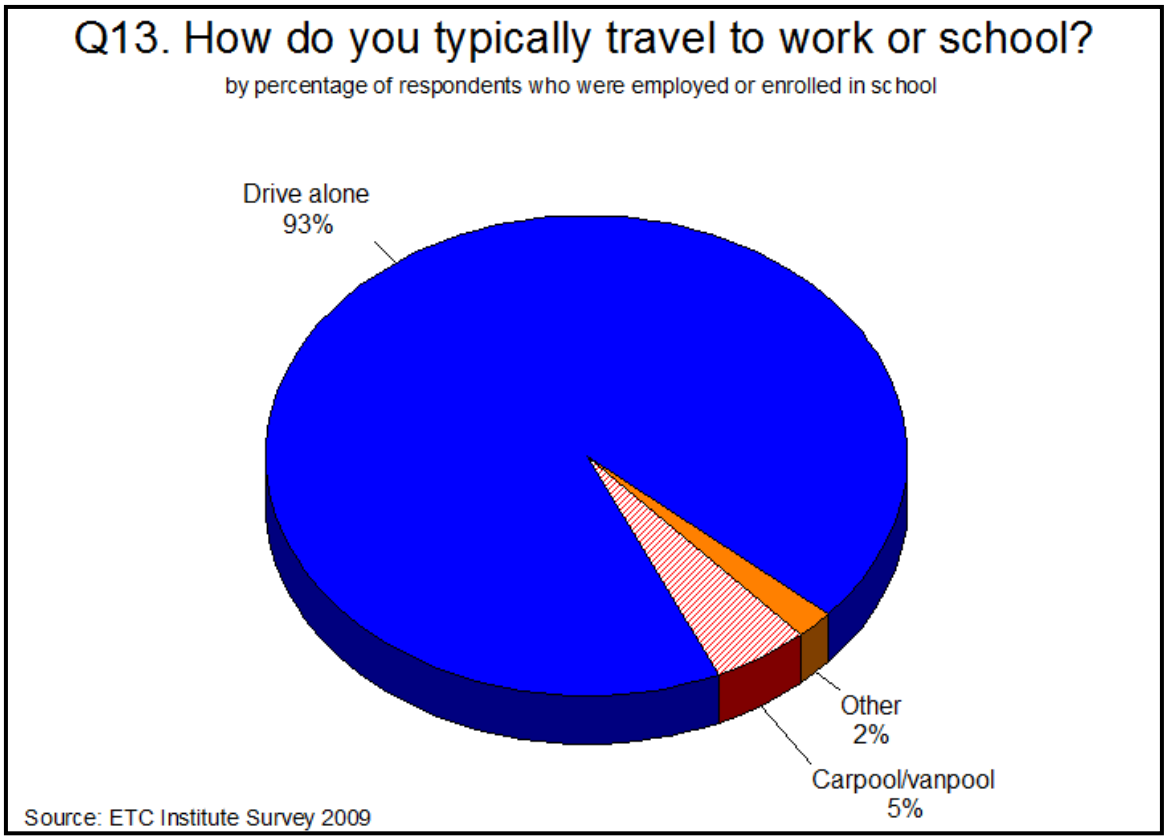
Source: ETC Institute Survey 2009

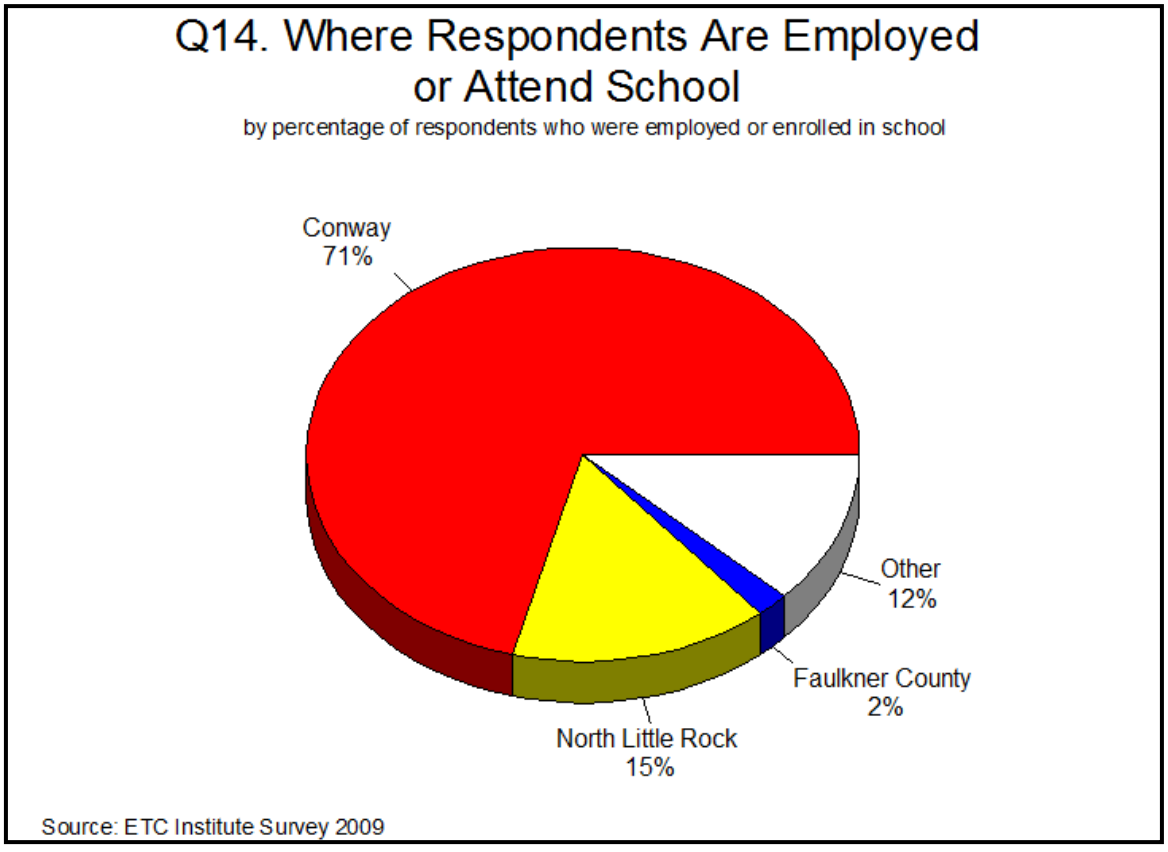

Q9. Is there anyone in your household who has a disability that makes it difficult or impossible for them to drive?
by percentage of respondents
Yes
13%
No
87%
Source: ETC Institute Survey 2009

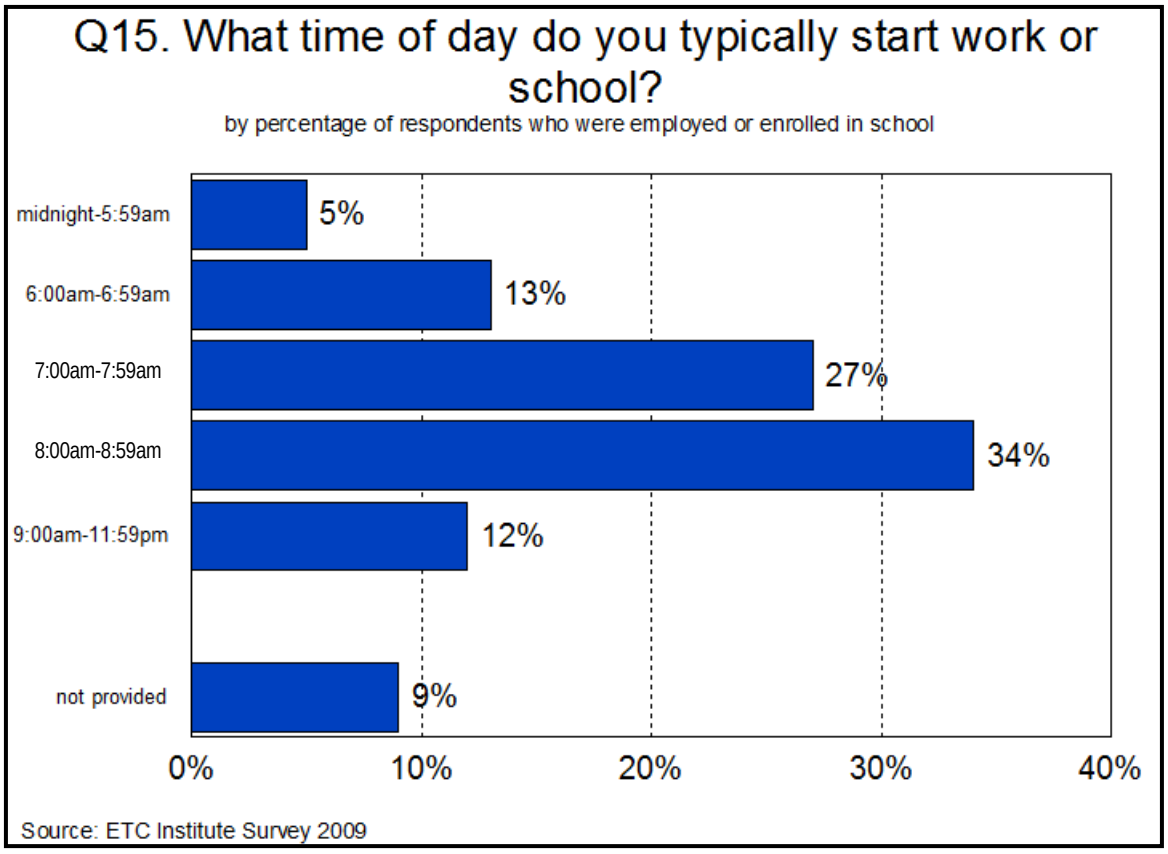

Q10. Is there anyone in your household who has a disability that makes it impossible for them to leave home without assistance?
by percentage of respondents
Yes
8%
No
92%
Source: ETC Institute Survey 2009

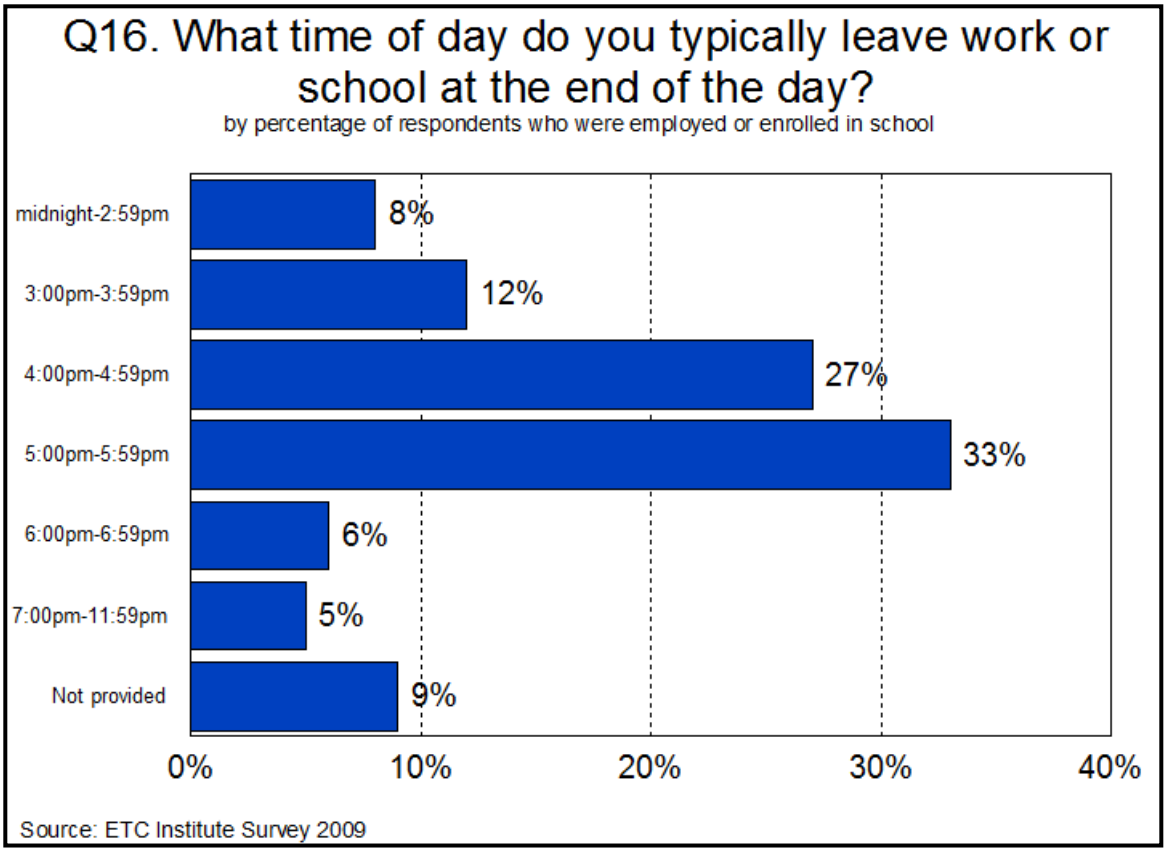

Q11. Within the past six months, have you provided transportation for anyone over age 16 because they could not drive?
by percentage of respondents
Yes
37%
No
63%
Source: ETC Institute Survey 2009

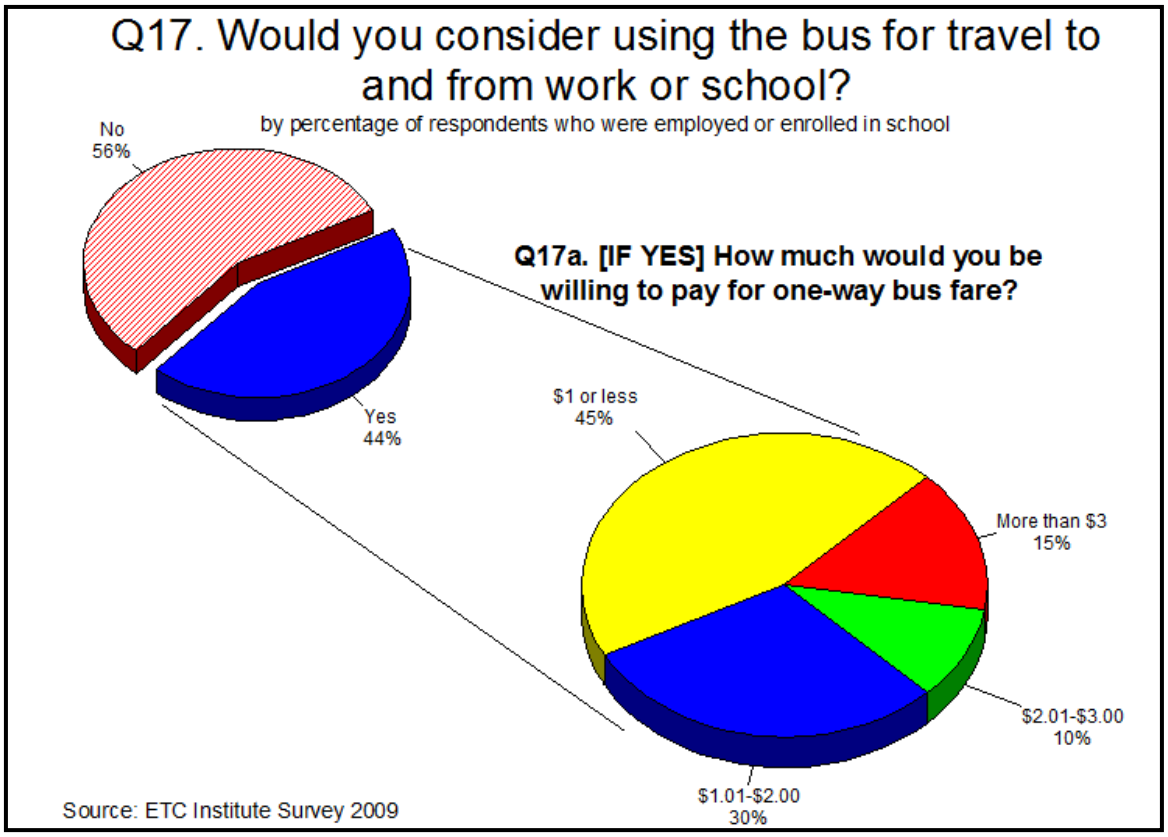

Q12. Are you currently employed or enrolled as a student?
by percentage of respondents
Yes
68%
No
32%
Source: ETC Institute Survey 2009

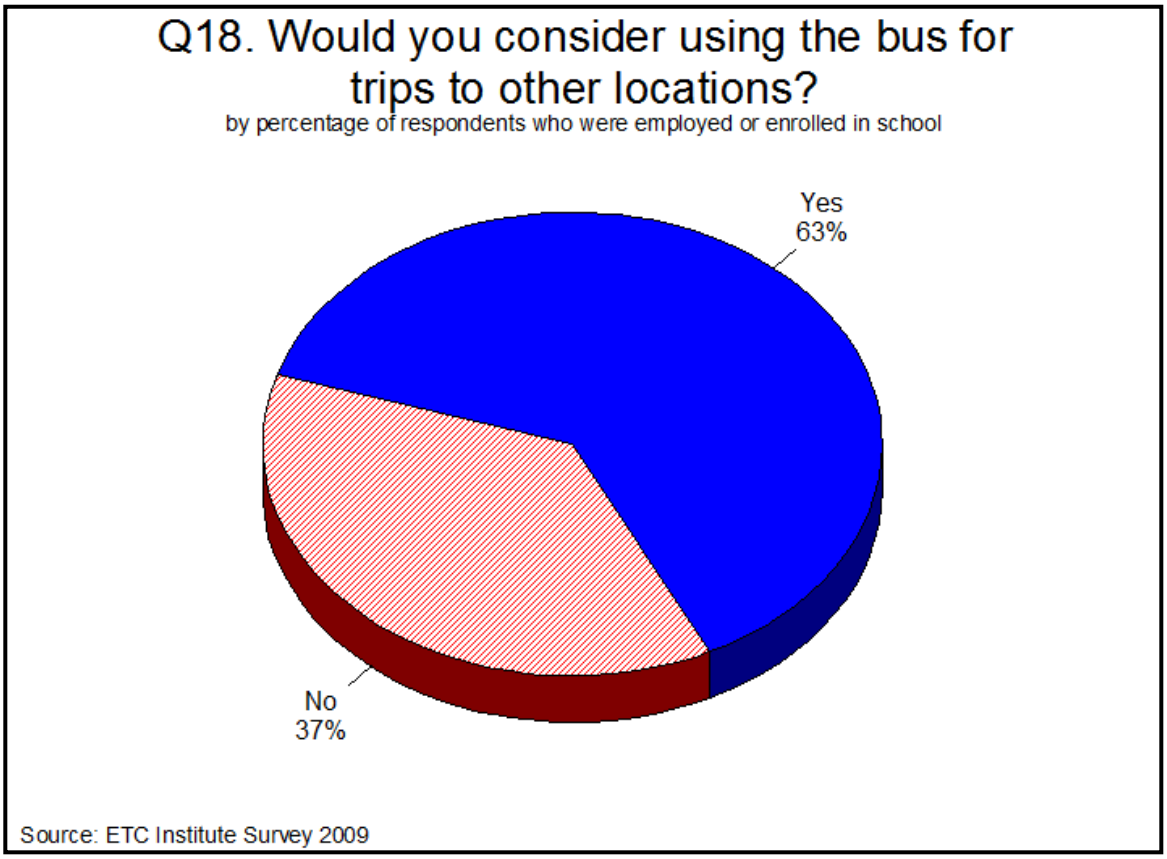

Q13. How do you typically travel to work or school?
by percentage of respondents who were employed or enrolled in school
Drive alone
93%
Other
2%
Carpool/vanpool
5%
Source: ETC Institute Survey 2009


Q14. Where Respondents Are Employed or Attend School
by percentage of respondents who were employed or enrolled in school
Conway
71%
Other
12%
Faulkner County
2%
North Little Rock
15%
Source: ETC Institute Survey 2009


Q15. What time of day do you typically start work or school?
by percentage of respondents who were employed or enrolled in school
midnight-5:59am
5%
6:00am-6:59am
13%
7:00am-7:59am
27%
8:00am-8:59am
34%
9:00am-11:59pm
12%
not provided
9%
0%
10%
20%
30%
40%
Source: ETC Institute Survey 2009

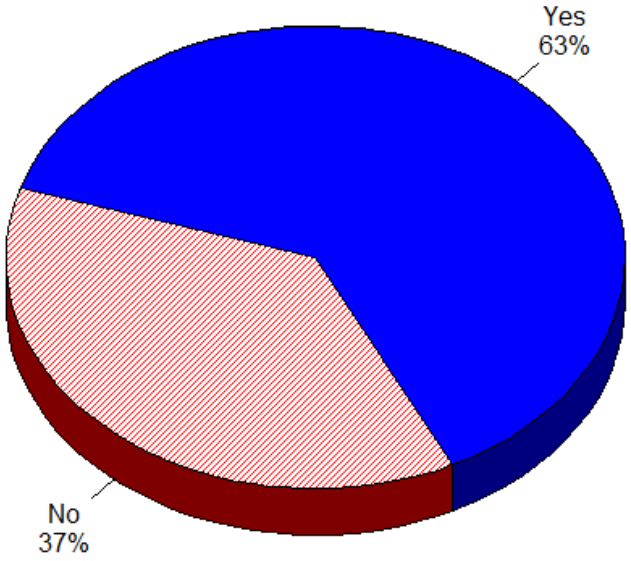

Q16. What time of day do you typically leave work or school at the end of the day?
by percentage of respondents who were employed or enrolled in school
midnight-2:59pm
8%
3:00pm-3:59pm
12%
4:00pm-4:59pm
27%
5:00pm-5:59pm
33%
6:00pm-6:59pm
6%
7:00pm-11:59pm
5%
Not provided
9%
0%
10%
20%
30%
40%
Source: ETC Institute Survey 2009


Q17. Would you consider using the bus for travel to and from work or school?
by percentage of respondents who were employed or enrolled in school
No 56%
Yes 44%
Q17a. [IF YES] How much would you be willing to pay for one-way bus fare?
$1 or less 45%
More than $3 15%
$2.01-$3.00 10%
$1.01-$2.00 30%
Source: ETC Institute Survey 2009


Q18. Would you consider using the bus for trips to other locations?
by percentage of respondents who were employed or enrolled in school
Yes 63%
No 37%
Source: ETC Institute Survey 2009

Q19. Would you like to have bus service available for use near your home?

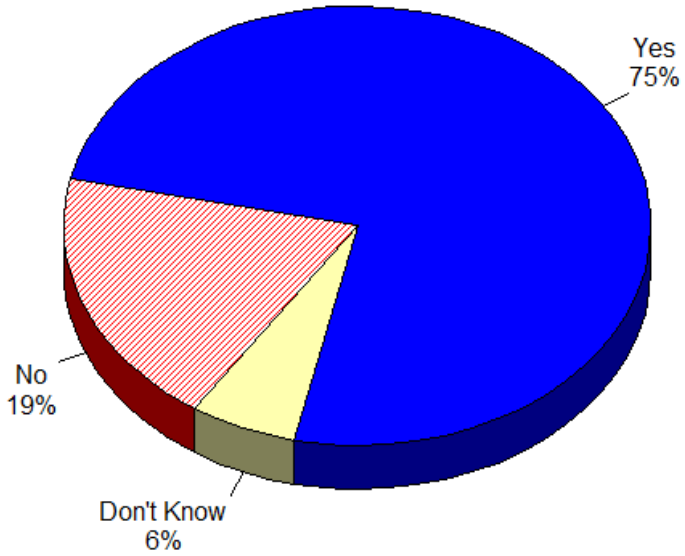
by percentage of respondents



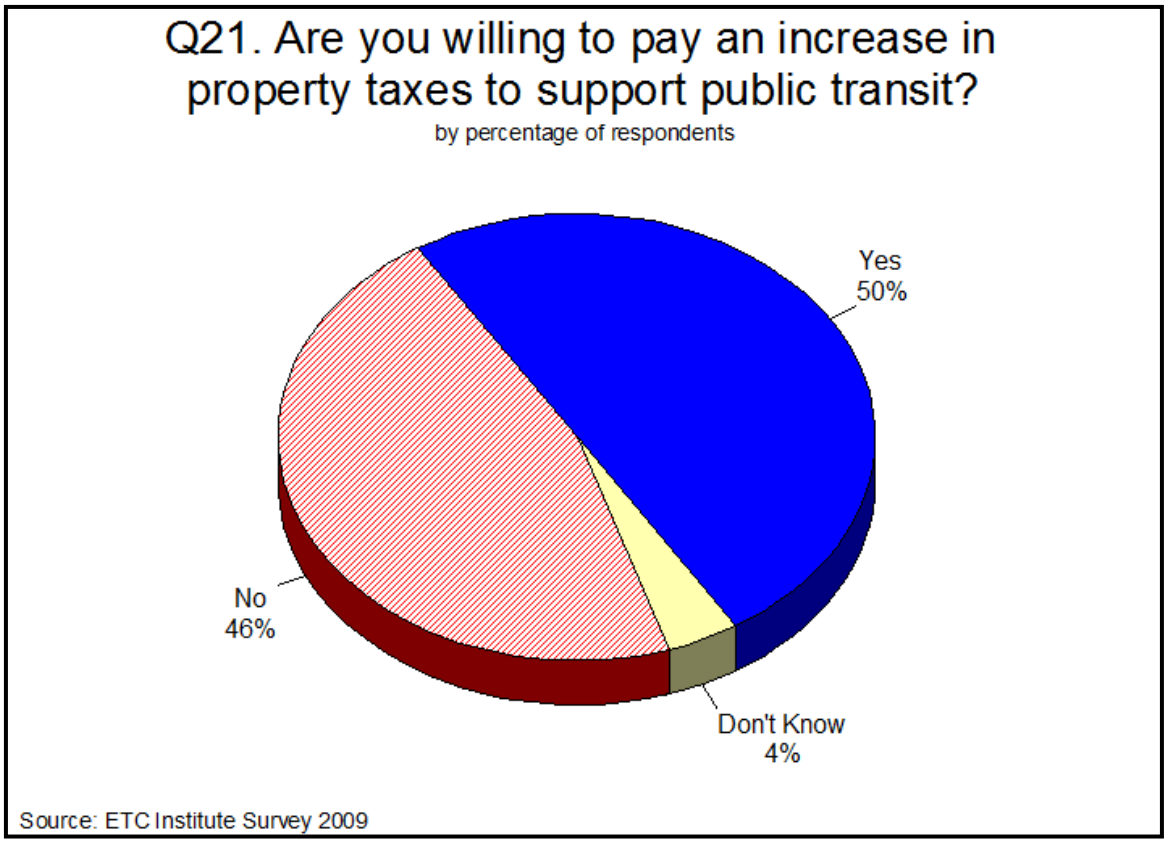
Source: ETC Institute Survey 2009

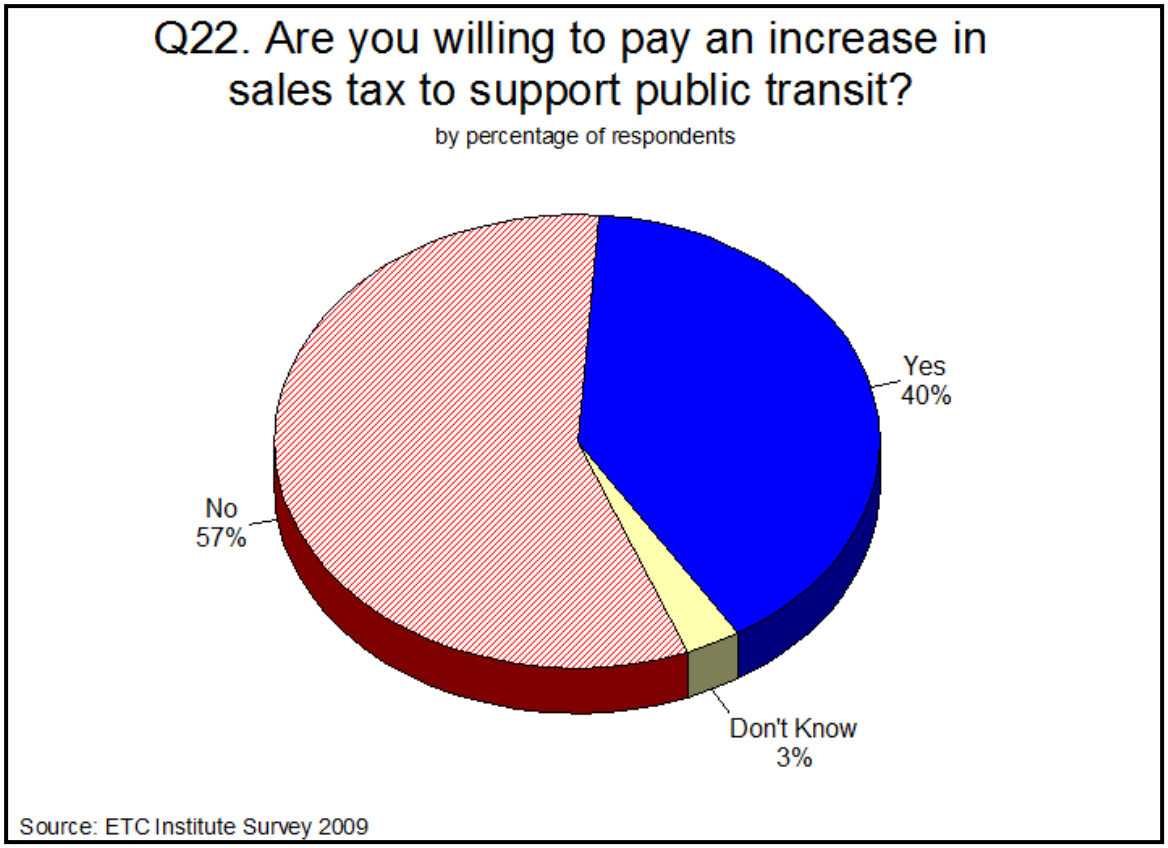
Q20. Do you think the City of Conway should provide financial support for public transit service?

by percentage of respondents



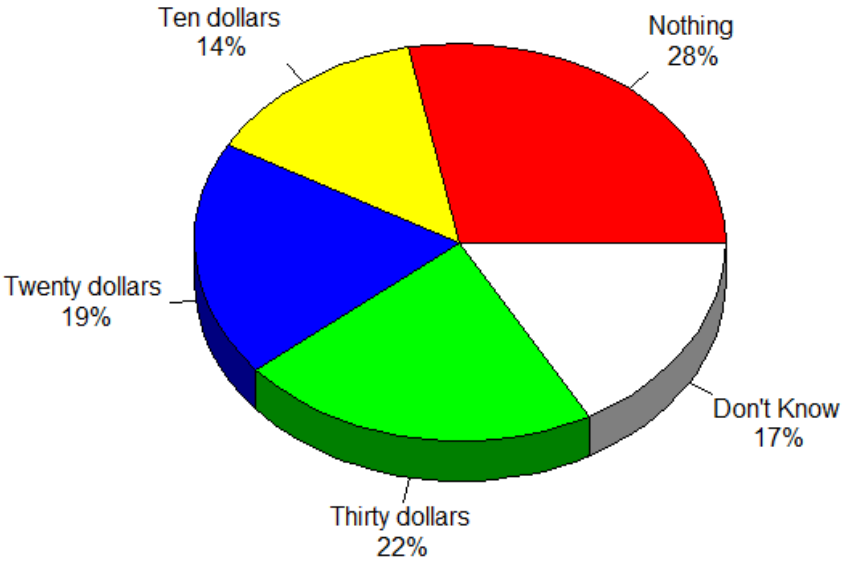
Source: ETC Institute Survey 2009


Q21. Are you willing to pay an increase in property taxes to support public transit?
by percentage of respondents
Yes
50%
No
46%
Don't Know
4%
Source: ETC Institute Survey 2009


Q22. Are you willing to pay an increase in sales tax to support public transit?
by percentage of respondents
Yes
40%
No
57%
Don't Know
3%
Source: ETC Institute Survey 2009

Q23. What is the maximum increase in taxes that your household would be willing to pay per year to support public transit in Conway?

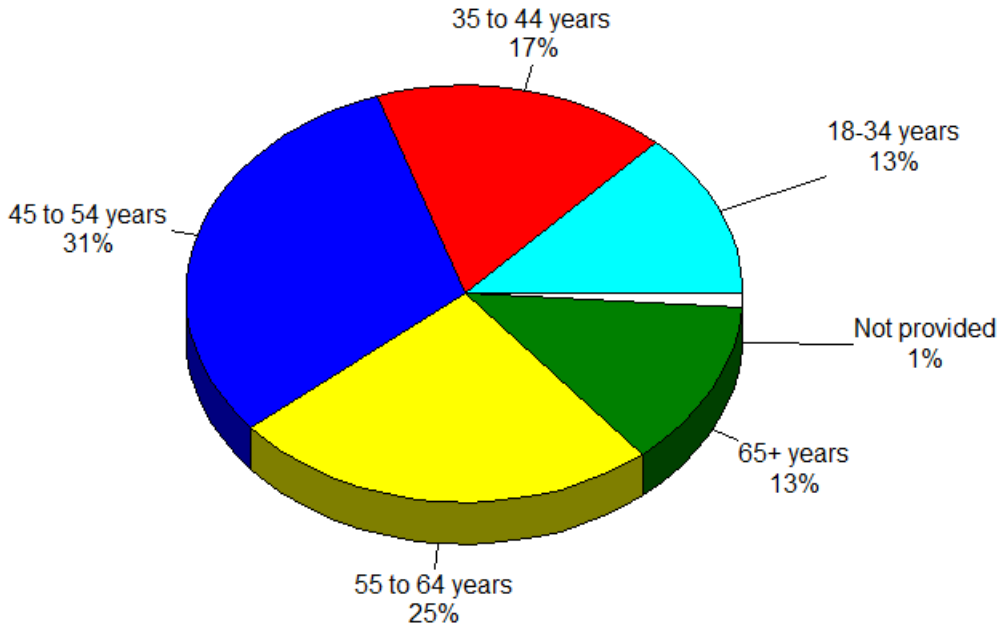
by percentage of respondents



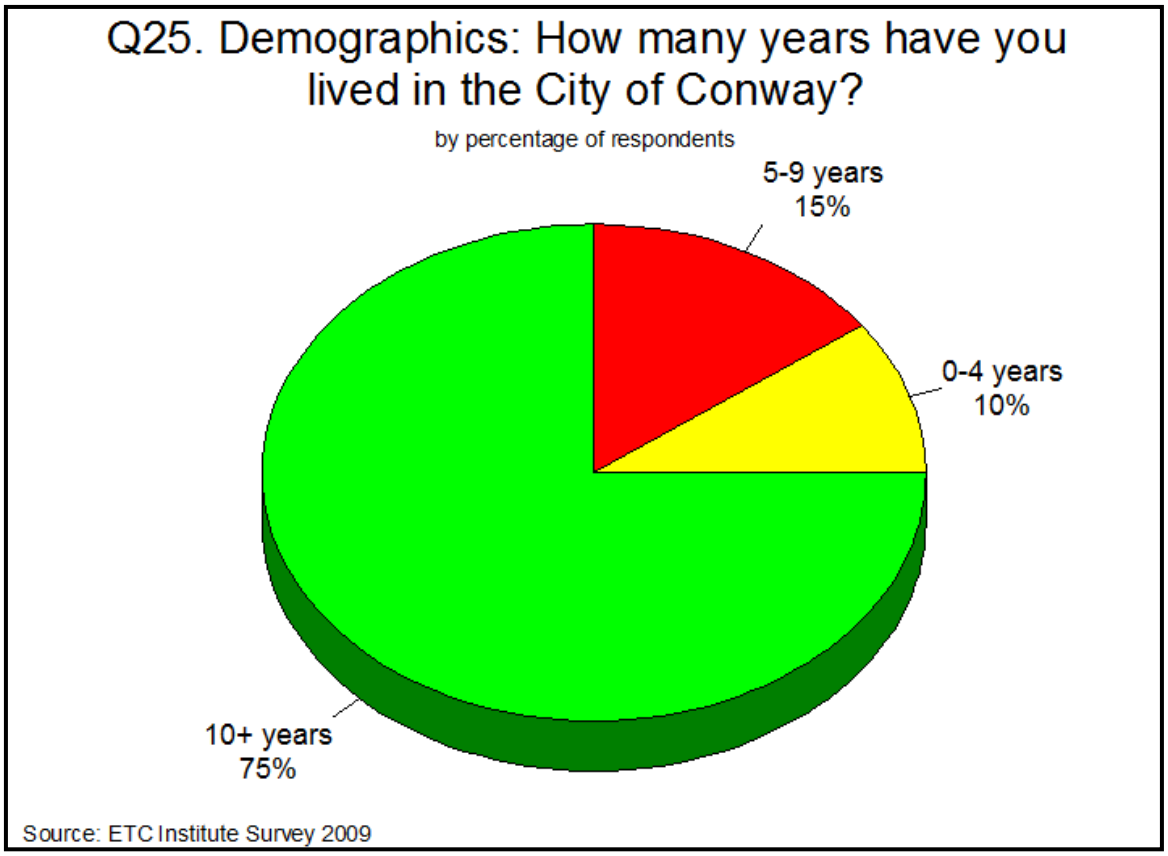
Source: ETC Institute Survey 2009

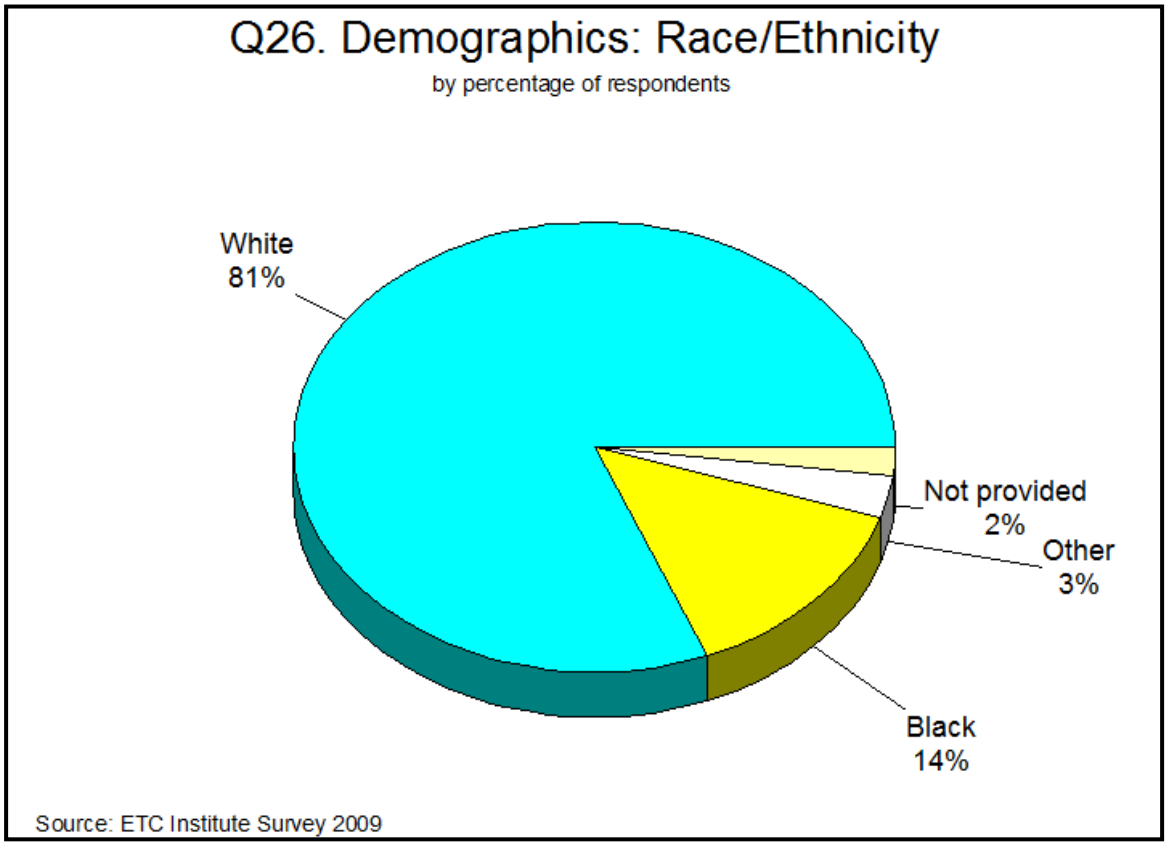
Q24. Demographics: Age of Respondents

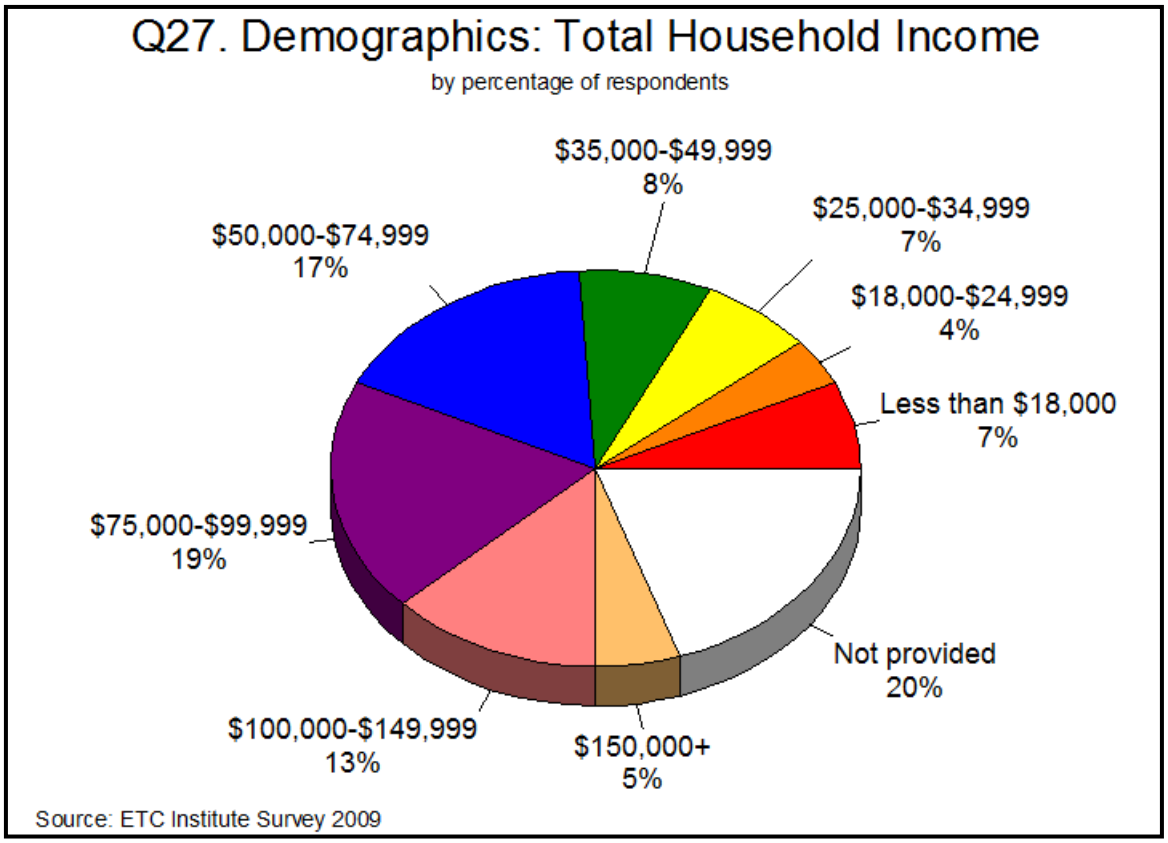
by percentage of respondents



Source: ETC Institute Survey 2009


Q25. Demographics: How many years have you lived in the City of Conway?
by percentage of respondents
5-9 years
15%
0-4 years
10%
10+ years
75%
Source: ETC Institute Survey 2009


Q26. Demographics: Race/Ethnicity
by percentage of respondents
White
81%
Not provided
2%
Other
3%
Black
14%
Source: ETC Institute Survey 2009


Q27. Demographics: Total Household Income
by percentage of respondents
$35,000-$49,999
8%
$25,000-$34,999
7%
$50,000-$74,999
17%
$18,000-$24,999
4%
Less than $18,000
7%
$75,000-$99,999
19%
Not provided
20%
$100,000-$149,999
13%
$150,000+
5%
Source: ETC Institute Survey 2009

Chapter IX

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER IX

Key Person Interviews

INTRODUCTION

The advisory committee for this Conway Transit Feasibility Study provided a list of approximately ten community leaders who should be contacted about transit and the role that transit could play in the City of Conway. The conversations were confidential individually, with the results being summarized as a group.

The conversations were held as structured interviews, meaning the community leaders were each asked the same questions, in the same order, using the same wording. The only exception to this rule was a question about the ability of the employer or the community leader to use some of his/her current transportation funding for general public purposes. This question was applicable to only a portion of the identified community leaders. A total of 14 questions were asked. During the interviews, the interviewer was able to ask follow-up questions which may have differed from person to person. A copy of the structured interview question-set is in Appendix E.

KEY ISSUES IN CONWAY

During the interview, several questions were asked about key issues in Conway. One question asked community leaders to list or name the issues that came to mind for them, looking at the next five to ten years. Other questions asked the community leaders to rank or otherwise provide some sense of the importance of issues compared to the others.

The overarching concern was about growth in Conway. Despite a slowdown in the national economy, community leaders remain optimistic about the City of Conway's potential to keep growing.

With growth come growing pains. Education, health care, police services, affordable housing, and transportation are all on the minds of community leaders in Conway. Transportation was named near or at the top in importance. Some

community leaders stated that health care and education have been and are well served by current policies and funding streams.

Transportation and Transit in Conway

Transportation and transit were discussed in the context of increasing congestion, the increasing difficulty of finding parking in some locations in Conway, and some members of the community not having adequate transportation to participate effectively in the local economy.

More generalized concerns were expressed about increasing pollution and uncertainties about climate change and oil prices. There did not appear to be a strong sense of urgency for controls or regulations in this area. Rather, interests were expressed about keeping Conway livable and attractive to residents and prospective employers who might choose to do business in Conway.

ROLE OF TRANSIT IN CONWAY

The opinion of community leaders provided a mixed, complex view of the role of transit in Conway. Many community leaders shared a concern about increasing the inclusivity of the elderly, persons with disabilities, and low-income persons in their ability to participate in the community and economy of Conway. Some saw transit as a way to combat congestion directly, while some saw transit as part of an overall collection of strategies to deal with congestion.

Making Transit Successful in Conway

Most community leaders said that public transit could be successful in Conway if it were affordable, accessible, and reliable. No clear opinion on a definition of reliability emerged from the interviews.

Affordability was variously defined as a fare of $1.00 or less per trip, or as being lower than the cost of operating an automobile. The IRS privately owned vehicle reimbursement rate was $0.55 per mile for business purposes as of January 2009.

Accessibility was defined in terms of service to the needed locations. This is discussed more below.

Priority Service Areas for Transit

The important areas for transit service seemed to cover the range of transit populations. Some thought a good first step would be better coordination of the many existing transit providers, something that would help to overcome the unintended effects of each agency focusing on their own clients.

Within Conway, geographically speaking, community leaders' "feel" for where public transportation should be initiated is in central Conway. Opinions about the definition of "central" vary somewhat, but there is agreement that it includes downtown, areas immediately east of downtown, and north of downtown to Wal-Mart. Various southern boundaries mentioned were between Robbins Street and Dave Ward Drive. Eastern boundaries mentioned were between Eisinger Boulevard and East German Lane. Western boundaries mentioned were between Donaghey Avenue and Salem Road.

Some suggested that poorer areas of town could benefit from general public transportation service. The poorer areas of town were identified as being in central Conway and to the east of downtown. Public transportation, if provided by the City of Conway, could free up money in human resource providers and enable them to focus on delivering programs for adult education and job training, senior services, and food assistance.

There were also a few comments about connecting Conway with nearby communities. The nearby communities mentioned were: Mayflower, Vilonia, and Greenbrier.

There was agreement that, no matter the particular emphasis that emerged initially, increasing transit in Conway was important. Further, it was stated as important that, regardless of the starting point, the transit strategy be clearly communicated in terms that the community as a whole—residents and businesses—could understand.

Direction on Transit-Supportive Land Use

Many community leaders were positive about the growth potential for Conway. Some apartment complexes have been successful recently. There has been less

success with neo-traditional development and developments with higher densities. This was variously explained by the downturn in the economy and the unfamiliarity of the community with this type of development. The general tone was one of support for the concept, with the acknowledgement that it would happen over time, not overnight. Like the location of a new jail, Conway residents will need to understand, through planning, where and how unfamiliar development types will be introduced into the community.

Role of Transit Relative to Existing Services

Relative to existing transit services, the general opinion was that general public transit would augment existing services or fill gaps in service not being provided by anyone currently. In rare cases, public transit might take the place of some existing services and/or some existing trip destinations.

As such, few community leaders expected funding for new services to come out of or at the expense of existing services. Rather than cost-sharing for new services, most community leaders expected any "savings" from the creation of a public transit system would be plowed back into either specialized transportation services or into the non-transportation portion of agency programs.

Level of Community Support for Funding Transit

The response, generally speaking, was, "yes, transit should be funded." When community leaders were asked specific questions about funding sources and strategies, the strength of favorable comments was weaker.

About two-thirds thought it would be difficult to pass a tax, but thought it could be done under the right conditions. The remaining one-third saw no community support whatsoever for additional taxes going to public transportation. The community leaders stated that most tax initiatives in recent years have been turned down by voters, the only exception being the new jail.

More of the community leaders felt that a small sales tax increase might fare better with voters than a property tax. There appeared to be general agreement that increasing sales taxes would be difficult with an 8.25 percent rate on most things and 10.25 percent on prepared foods, prepared beverages, and hotels.

Most agreed that users of a public transportation system would contribute to a sales tax. While some saw this as a regressive tax structure and a penalty to those who could least afford it, there was equal support for the concept that the beneficiaries (users) of the transit system ought to bear some of the costs.

Finally, some thoughts were provided about severance taxes on oil and gas. Conway is in an area where drilling of new wells and petroleum production is expected to increase. It was acknowledged that the oil and gas industry has seen some large fluctuations in prices recently, indicating some caution would need to be taken if this funding source were considered more heavily.

Community leaders who are more familiar with human services tended to express views that public transportation would help poorer persons get to jobs and be self-sufficient. Community leaders who are more familiar with economic development tended to view street infrastructure as being more important to attracting commerce and creating jobs so poorer persons could be self-sufficient.

Common to these comments are interpretations about the costs versus benefits of providing or not providing public transportation. Also common to these comments is the expressed desire to carefully define which markets (how, where, and who) would be served by public transit. Support for or against public transportation rests, then, in the balancing of costs and benefits, both in the minds of community leaders and in the eye of the public.

Chapter X

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER X

Institutional and Financial Alternatives

INTRODUCTION

Chapter X provides a description of the institutional (organizational) alternatives for transit services in the Conway area as well as financial options which may be available. Having the correct institutional structure for the transit needs of the community is very important as the wrong type of structure could result in a very inefficient transit system.

An important objective of this study is to present recommendations for an organizational framework for public transit that are acceptable to the parties involved and that can be realistically implemented. With this goal in mind, the following discussion presents an analysis of the most appropriate organizational alternatives and a basis for making a decision. One important issue is that the City of Conway may be reclassified as an urbanized area at the next census based on its population exceeding 50,000 persons. This potential change in classification is important to both the institutional structure and the available revenue sources.

INSTITUTIONAL ALTERNATIVES

This study approaches institutional alternatives from a practical standpoint rather than a theoretical one. As the population in the region changes, so will the demands on the existing agencies. The following section examines the institutional alternatives Conway which could continue to support the existing network of elderly, disabled, and student transit service providers or could also provide new general-public transit service.

Transit services throughout the United States have a variety of organizational structures—independent agencies (such as resort areas in the western US); transit districts (such as the Utah Transit Authority); departments of a municipal government (such as Colorado Springs, Colorado); transit agencies formed by Intergovernmental Agreements (such as Central Arkansas Transit Authority); and

departments of county government such as Cleveland Area Rapid Transit in Norman, Oklahoma.

Municipal Transit Department/Division

A municipal transit institutional structure is where the transit service is operated by a city or county. Normally the transit service is set up as a new department of the municipality or is a division within an existing department. In smaller municipalities, the transit service is part of the public works department, which in Conway is the Street Department. Listed below are some advantages of having transit within a municipal institutional structure.

- **Existing Governing Body:** As with other municipal departments, the transit service could be governed by the Conway City Council which alleviates the need for the transit service to develop a Board of Directors. The City Council would make decisions on how the transit service is to be funded, approve the annual budget for the transit service, and approve performance factors for the service. Day-to-day oversight and decision making can come from the director of the Street Department if the service is placed as a division of that department.

- **Existing Departmental Agencies:** Placing the new transit service in an existing municipal department alleviates the need to hire senior management personnel and also provides clerical and administrative assistance. It may also alleviate the need to develop new facilities for the transit service since administrative space may be available within the department's facilities.

- **Possibility of General Fund Revenue:** Taxes that the municipality collects can be used to help fund the new public transit service. This is an important source of operational funding and also allows for local revenue to match any funding received from federal or state grants. It is important to note that the majority of funding needed to operate the service and to pay the labor and non-capital costs would be from local sources of revenue.

- **Existing Facilities:** Transit needs relatively large facilities to maintain the bus fleet. Generally a municipality has a maintenance facility to take care of police vehicles, fire trucks, and large public works vehicles. Conway has a fleet maintenance facility which could be used to maintain the transit buses as well, thus alleviating the need to construct a new facility.

- **Shared Resources:** Having the new transit service within the municipal government structure would allow for accounting, payroll, grant application development, and legal services that the municipal government has within its institutional structure to be shared by the new transit service.

Again, this would save the transit service considerable administrative costs.

- **Eligibility to Receive Federal Transit Funds:** As a city, Conway is eligible to receive Federal Transit Administration Section 5311 funds for rural transit services. Once Conway becomes an urbanized area, the city would be eligible to receive Section 5307 funds for transit services in urban areas.

The municipal government institutional structure has many advantages for implementing a public transit service and is used extensively across the United States, particularly in mid-size and small urban areas. However, there are some disadvantages to this structure as well which are listed below.

- **Procurement of Transit Vehicles and Related Equipment:** The City would need to procure transit vehicles, related equipment, and a parts inventory. That can be a costly venture. Small buses, depending on options chosen, are likely to cost between $125,000 and $250,000 each, and can cost more.
- **Hiring of Drivers and Supervisory/Administrative Staff:** The City would have to create a new department or division of an existing department for the new transit service. This could require hiring management, supervisory, maintenance, and operational (drivers) staff.
- **Transit May Not be a High Priority with Municipal Decision Makers:** The new transit service would be vying for scarce public funds and would compete with existing municipal departments for these limited funds. The City Council may not see transit as an essential service when it is competing with traditional governmental services such as the police and fire departments.
- **Possible Jurisdictional Issues:** Municipal transit departments generally serve the municipality and generally do not travel past municipal boundaries. Some of the proposed route concepts for Conway take routes very close to the city limits—for example, the business center at Sturgis Road and Executive Center Drive. Providing federally-required complementary paratransit service three-fourths of a mile on either side of a fixed route could put service requests in unincorporated Faulkner County.

Public Transit Improvement District or Authority

Arkansas Code allows the creation of Public Transit Improvement Districts (Title 14, Subtitles 20-21). Under this law, a transit system may be owned and operated by any municipality, county, regional authority, the state, or other governmental agency including school districts. Excluded in this law are intercity bus systems.

An authority generally follows the same rules and definitions as a public transit improvement district with one exception. An authority is the combination of two or more entities (i.e., municipality, county, regional authority, the state, or other government entity) joined together.

The legislative intent of public transit systems, whether districts or authorities, is that they operate as a governmental entity. As such they are exempt from suits in tort, ad valorem (property) taxes, and motor vehicle registration fees other than a $1.00 (one dollar) annual fee per public transit vehicle.

Public Transit Improvement Districts are empowered to apply for and expend grant funds, issue bonds, and enter into contracts for business. They may buy and sell property. As an extension of the municipal improvement districts legislation (Title 14, Subtitle 5), transit improvement districts and authorities may collect taxes.

A new district or authority could operate transit services directly. Because of the contracting provision, a new district or authority could also serve in a management role only, and hire a transit operator to deliver the services.

The advantages of a public transit district or authority are as follows:

- **Ability to Set the Taxing Boundaries to Match the Service Boundaries:** This may be more politically acceptable than a municipal department which requires use of tax funds paid by all city residents, for example, whether or not the transit service covers the entire city. With the provisions of an authority, this could carve out selected portions of both the City of Conway and Faulkner County as desired for public transit service.
- **Independent Governing Body:** A transit district or authority would operate with its own Board, responsible to the citizens within the district or authority. As such, decisions could be more streamlined as compared to City or County processes.
- **Single Service Focus:** A transit district or authority has only a single function. While transit agencies may still have intra-departmental decisions such as the proportion to spend on marketing of services versus bus services on the streets, these decisions can be simpler than City or County decisions which are balancing multiple functions like police/fire services, economic development, and street maintenance.

The disadvantages of a public transit district or authority in Conway are the inverse of the strengths of a municipal department. As a new entity in Conway, many of the necessary functions would need to be newly created.

- **New Governing Body Required:** A new district or authority would require the creation of a governing Board of Directors with new by-laws and decision-making procedures.
- **Requires Two Government Entities:** The City of Conway would need participation of another government entity such as Faulkner County. No other local government entity has indicated an interest in participating in public transit service.
- **New Revenues/Taxes:** New taxes would be required to establish a funding source for the transit agency. As a start-up operation, gauging the appropriate tax rate would be important as it is difficult to go back to voters for tax rate changes. There are no existing revenues or funds to start from, so "donors" would need to be identified to provide "seed" money to complete the planning, paperwork, and other required administrative actions to establish the district or authority itself.
- **New Facilities:** Transit needs relatively large facilities to maintain the bus fleet. Without the use of a municipal maintenance facility partnership, a new transit facility would need to be constructed. Even with an early partnership and sharing of an existing facility, it is possible that natural growth in Conway could require the start-up transit agency to establish its own facility.
- **Procurement of Transit Vehicles and Related Equipment:** The district or authority would need to procure transit vehicles, related equipment, and a parts inventory. That can be a costly venture. Small buses, depending on options chosen, are likely to cost between $125,000 and $250,000 each, and can cost more.
- **Hiring of Drivers and Supervisory/Administrative Staff:** The district or authority would have to create a new operational structure to deliver transit services. This would require hiring management, supervisory, maintenance, and operational (drivers) staff or contracting out these functions to a private provider.

University Transit Department

A university transit institutional structure is where the transit service is operated by one or more universities. Much like the municipal structure, the transit service is set up as a new department of a university or is a division within an existing department. The concept in Conway would be to extend the existing

UCA shuttle service to wider geographic and general public coverage, with appropriate funding.

In universities with a centralized campus, the transit services are operated wholly within the campus boundaries or very nearly so. In universities with decentralized campus facilities, the services operate large segments of their transit services "off-campus" through the city in which they reside. Listed below are some advantages of having transit within a university institutional structure.

The description below uses the University of Central Arkansas as an example, which could be applied to Hendrix College, Central Baptist College, or an association among any of the three of them. Shuttle bus service for the Conway ArtsFest is an example of such collaboration.

- **Existing Governing Body:** The transit service would be governed by the UCA Board of Trustees and the Office of the President for UCA which alleviates the need for the transit service to develop a Board of Directors. The Board of Trustees and the Office of the President would make decisions on how the transit service is to be funded, would approve the annual budget for the transit service, and would approve performance factors for the service. Day-to-day oversight and decision making could continue to come from the Director of the Physical Plant.

- **Existing Departments:** Placing the new transit service in an existing university department alleviates the need to hire senior management personnel and also provides clerical and administrative assistance. It may also alleviate the need to develop new facilities for the transit service since administrative space may be available within the physical plant's facilities.

- **Possibility of General Revenue:** State funding and student tuition/fees that the university collects could be used to help fund the new public transit service. This is an important source of operational funding and also could allow for local revenue to match any funding received from federal or other state grants. It is important to note that the majority of funding needed to operate the service and to pay the labor and non-capital costs would be from local sources of revenue.

- **Existing Facilities:** Transit needs relatively large facilities to maintain the bus fleet. Generally a university has a maintenance facility to take care of pool vehicles and physical plant equipment. This facility could be used to maintain the transit buses as well, thus alleviating the need to construct a new facility.

- **Shared Resources:** Having the new transit service within the university structure would allow for accounting, payroll, grant application development, and legal services that the university generally has within its insti-

tutional structure to be shared by the new transit service. Again, this would save the transit service considerable administrative costs.

The university institutional structure has some advantages for implementing a public transit service. It is used more rarely than the municipal structure

- **Possible Jurisdictional Issues:** University shuttles and their home departments, in this case the physical plant, generally serve students and generally do not serve the general public. Although some precedents exist for collaborative service to special events, serving more than the student population on a regular basis would be a significant shift in thinking, structure, and funding.
- **Procurement of Transit Vehicles and Related Equipment:** UCA would need to procure transit vehicles, related equipment, and a parts inventory. That can be a costly venture. Small buses, depending on options chosen, are likely to cost between $125,000 and $250,000 each, and can cost more.
- **Hiring of Drivers and Supervisory/Administrative Staff:** UCA would need to create a new department or expand the physical plant organizational structure for the new transit service. This could require hiring management, supervisory, maintenance, and operational (drivers) staff.
- **General Public Transit Service May Not be a High Priority with the Board of Trustees:** The new transit service would be vying for scarce funds and would compete with existing university departments for these limited funds. The Board of Trustees may not see a rationale for extending transit services beyond the existing shuttle services for students or may wish to remain focused on education-related goals.

Intergovernmental Agreement (IGA)

An Intergovermental Agreement (IGA) could function in a number of different ways as an institutional structure:

- Create an independent transit agency without creating a separate taxing district or authority.
- Provide the mechanism for either the University of Central Arkansas, the City of Conway, or another entity to serve as the lead agency in delivering services, and with the support of a contractual commitment from one or more entities.
- Provide a contractual commitment to provide the “seed money” or some fixed financial commitment to a Public Transit Improvement District or Authority.

FINANCIAL ALTERNATIVES

Successful transit systems are strategic about funding and attempt to develop funding bases that enable them to operate reliably and efficiently within a set of clear goals and objectives according to both short-range and long-range plans. Potential strategies for funding transit services within the city are described in this section.

The community telephone survey helped to establish a general tolerance of the general public in Conway about providing funding through increased taxes. From the survey, the tolerance was ten dollars ($10) per household per year.

Federal Funding Sources

On August 10, 2005 President Bush signed the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), providing $286.4 billion in guaranteed funding for federal surface transportation programs over six years through FY 2009, including $52.6 billion for federal transit programs—a 46 percent increase over transit funding guaranteed in the Transportation Efficiency Act for the 21st Century (TEA-21).Within the existing framework for metropolitan transit services, the region receives Federal Transit Administration (FTA) funds based upon a formulary system known as the Section 5307 Program. Following are discussions of the federal transit funding programs for which the transit service may be eligible.

A reauthorization bill beyond FY 2009 has not yet been signed. In the past, extensions of the existing bill have been passed until a full reauthorization bill takes its place.

FTA Section 5307 – Urbanized Area Formula Program

This program (49 USC 5307) makes federal resources available to urbanized areas for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more. Eligible purposes include planning, engineering design, and evaluation of transit projects and other technical transportation-related studies;

capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment, and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

As of the 2000 Census, the City of Conway was under the 50,000 threshold for this funding. Current population estimates place it over 50,000. The designation relies on the Census, so it is likely that the City of Conway will be reclassified after the 2010 Census.

For urbanized areas with a population of 200,000 or more, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive federal funds. For urbanized areas under 200,000 in population, the funds are apportioned to the governor of each state for distribution. However, a few areas under 200,000 in population have been designated as transportation management areas and receive apportionments directly.

Operating assistance is not an eligible expense for urbanized areas with populations of 200,000 or more. In these areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for the disabled. In those areas with a population of less than 200,000, operating expenses are matched 50 percent federal and 50 percent local. For every dollar the agency uses in operation, the amount available for capital expenditures is reduced.

FTA Section 5309 – Capital Improvement Grants

The FTA Section 5309 program is split into three categories—new starts, fixed guideway modernization, and transit vehicles and facilities. These funds were formerly apportioned by the FTA. For several years, however, Congress has ear-

marked these funds directly, and there is no indication that this trend toward earmarking the funds will change.

The Bus and Bus-Related Facilities program provides capital assistance for new and replacement buses and related equipment and facilities. Eligible capital projects include the acquisition of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, bus preventive maintenance, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers, and shop and garage equipment.

FTA Section 5311 – Public Transportation for Rural Areas

FTA funding for rural areas is currently provided through the Section 5311 program. Rural areas are all those areas which have a population under 50,000 and have not been designated as urbanized areas. Currently Conway is eligible for funding through this program administered by the Arkansas State Highway and Transportation Department. A 20 percent local match is required for capital and administrative expenditures, and a 50 percent local match is required for operating expenditures. Funds are distributed to rural systems based on need, annual application, and funding availability.

FTA Section 5316 – Job Access and Reverse Commute Program

The JARC program funds transportation projects designed to help low-income individuals access employment and related activities where existing transit is either unavailable, inappropriate, or insufficient. With the passage of SAFETEA-LU, JARC funding is allocated by formula (based on the number of eligible low-income and welfare recipients) to urbanized and rural areas.

FTA Section 5317 – New Freedom

FTA Section 5317 New Freedom funding is for states to provide formula grants for operating and capital expenses related to transportation services for the disabled. The program's primary purpose is to increase access beyond the standard

ADA paratransit requirements. Public and private transportation providers are eligible for the funding.

Other Federal Funding

The US Department of Transportation funds other programs, including the Research and Special Programs Administration and the National Highway Traffic Safety Administration's State and Community Highway Grants Program (which funds transit projects that promote safety). A wide variety of other federal funding programs provide support for elderly and handicapped transportation programs, including the following:

- Retired Senior Volunteer Program
- Title IIIB of The Older Americans Act
- Medicaid Title XIX
- Veterans' Affairs
- Job Training Partnership Act
- Developmental Disabilities
- Housing and Urban Development - Bridges to Work and Community Development Block Grants
- Department of Energy
- Vocational Rehabilitation
- Health Resources and Services Administration
- Senior Opportunity Services
- Special Education Transportation
- Justice Department - Weed and Seed Program
- National Endowment for the Arts
- Agriculture Department - Rural Enterprise Community Grants
- Department of Commerce - Economic Development and Assistance Programs
- Environmental Protection Agency - Pollution Prevention Projects

Local Funding Sources

The following describes local funding opportunities possible in the City of Conway.

City of Conway General Fund Appropriations

The City of Conway could consider funding, either entirely or in part, public transit service from the existing general fund. The City's 2009 Adopted Budget explains the current economic environment and funding availability as follows:

> Over $1 million in departmental requests for capital needs went unfunded, with only limited capital requests being met in the adopted budget. The message to departments was that the governing body would monitor economic conditions and revenue streams during 2009 and consider midyear adjustments and appropriations should funds be available.
>
> The City's budget is balanced with total resources equal to total expense appropriation within each fund, as well as in the aggregate. Total estimated revenues and expenses amount to $50,196,228 for the City of Conway. The FY 2009 budget is allocated to personal services ($27,644,805; 55%), operating expenses ($13,283,736; 27%), capital expenditures ($1,662,900; 4%), and contingencies ($7,604,787; 14%).

The 2009 reflects a 14 percent reduction in total budget as compared to 2008 when the annual budget was $58.3 million, with the largest reduction coming out of the street fund—$3.9 million in 2009 as compared to nearly $8.2 million in 2008.

City of Conway Ad Valorem (Property) Tax

A City of Conway public transit system could be funded, in part or in whole, through an increase in local property taxes. The 2009 Adopted Budget for the City of Conway states that property taxes amount to five percent of the City's total budget. Based on the data available in the budget, this amounted to an

average of approximately $193 per household per year, for the City of Conway only.[1]

Current property tax rates in Conway total 49.60 mills or $49.60 per $1,000 of assessed valuation. The total mill levy is allocated as follows: 36.20 mills (72.9 percent) to Conway Public Schools, 7.80 mills (15.7 percent) to Faulkner County services and operations, and 5.60 mills (11.3 percent) to City of Conway services and operations.

Based on the $193 per household from a 5.60 mill rate for the City of Conway only, each mill imposes about $34 of tax per household per year. Each additional mill in Conway would generate approximately $745,000 in tax revenue.

City of Conway Sales Tax

A City of Conway public transit system could be funded, in part or in whole, through an increase in the city sales tax. According to the 2009 Adopted Budget, sales tax generates about half of the total budget for the City of Conway, and that same amount represents 71 percent of the general fund.

The total sales tax in Conway is 8.25 percent on all goods except prepared foods and hotels, where the rate is 10.25 percent. That total of 8.25 percent includes a six percent state sales tax, a 0.5 percent Faulkner County sales tax, and a 1.75 percent City of Conway sales tax. There is an additional two percent sales tax on prepared foods and hotel rooms.

Of the total 1.75 percent City of Conway sales tax, one percent supports the general fund, 0.25 percent pays bonded debt service, 0.25 percent is pay-as-you-go street and fire expenditures, and 0.25 percent is for employee compensation. In 2008, the 1.75 percent sales tax rate generated $20.46 million dollars. In 2008 each quarter of a cent sales tax generated $2.92 million dollars.

[1] City of Conway Adopted Budget 2009. Assessed valuation in 2007 was $3,338,270 at an 80% collection rate. Based on 2005 special census there were 20,238 households in Conway, and at a growth rate of 1.033% per year are estimated at 21,608 in 2007.

Oil and Gas Severance Tax

The City of Conway receives revenue from an oil and gas severance tax. The City has dedicated the revenue from this tax to support alternate modes of transportation. These revenues could be used to support a public transit system in Conway.

Public Transit Improvement District or Authority

A public transit improvement district or authority would generate revenue through a sales or property tax levied on a specific geographic area. That geographic area would be defined with approval by the citizens of the proposed district.

Transportation Impact Fees

The traditional methods of funding transportation improvements required by new development raise questions of equity. Sales taxes and property taxes are applied to both existing residents and new residents attracted by the development. Hence, existing residents then inadvertently pay for the public services required by the new residents. As a means of correcting this inequity, many communities nationwide, faced with strong growth pressures, have implemented development impact fee programs that place a fee upon new developments equal to the costs imposed upon the community.

LSC's previous work has indicated that the levy of impact fees upon real estate development has become a commonplace tool in many regions to ensure that the costs associated with a development do not fall entirely upon the existing residents. Impact fees have been used primarily for highways and roads, followed by water and sewer projects. A program specifically for mass transit has been established in San Francisco, for example.

The City of Conway currently has an impact fee program. The 2009 Adopted Budget forecasts a total collection of $1,823,520, with $1,436,663 for streets and $386,857 for parks.

University/College Funding: Student Activity Fees

A strategy successfully applied in several similar cities to generate transit funding from college campuses is to levy a student activity fee for transit services or an established amount from the university or college general fund. An activity fee would have to be approved by a majority of the students and would be applied each school semester or quarter. A semester fee of $10 per student has the potential to generate approximately $258,000. The activity fee would not dip into the university's general fund. Federal Section 5311 rules state that contracts for service between a university or college could be used as local match.

Transit Funding Sources

Advertising

One modest but important source of funding for many transit agencies is on-vehicle advertising. The largest portion of this potential is for exterior advertising, rather than interior "bus card" advertising, since the potential funds generated by interior advertising are comparatively low. Advertising on bus shelters has also been used to pay for the cost of providing the shelters.

Fare Revenues

Fare revenues are another modest and important source of funding for transit agencies. It is typically an unmet expectation that rider farebox revenues entirely pay for the service provided. A typical fare recovery rate for small to mid-sized cities is about 10 percent of operating costs, with that percentage varying by transit agency between 5 and 20 percent, depending on fare structures, performance criteria, and policy objectives. Typical fares to achieve these farebox recovery rates are $1.00 to $1.50.

Chapter XI

TRANSPORTATION
CONSULTANTS, INC.

CHAPTER XI

Feasibility of Transit Service

The feasibility of providing transit service must ultimately be decided by local elected officials. The decision to operate public transit service will require the commitment of local community funds. Other sources of funding may be available as described in Chapter X, but a major local commitment is still essential.

TECHNICAL FEASIBILITY

Chapter VII describes a range of options for implementation of transit service ranging from an annual operating cost of approximately $520,000 to $3.3 million for the long-range transit vision. Needs for transportation services have been identified through detailed analysis and supported by community input and the results of the community telephone survey. There is strong support for having public transit service in Conway, both to meet the needs of those who may depend on transit for transportation and as part of maintaining and strengthening Conway as a livable community. The University of Central Arkansas has a large body of students who would be users of public transit service, including a contingent of international students who are accustomed to public transit service. Although not as large, Hendrix College also has a number of students who would likely use public transit service if it were available.

Much of Conway has developed in patterns which are not supportive of public transit as a mode of transportation. However, that pattern may be changing. The development of Hendrix Village and residential developments near the University campus have higher densities that are supportive of public transit service. Many of the older residential neighborhoods and the downtown area have densities that will support public transit service. The City's Comprehensive Plan calls for transition development with higher densities and mixed uses in many areas included within the core transit service area.

FINANCIAL FEASIBILITY

Sources of potential funding have been identified in Chapter X that could support a new public transit service. Although no funding commitments have been made, the community telephone survey and the key person interviews demonstrate that there is support for funding public transit. A property tax has more support than a sales tax. A one-half mill levy property tax has the potential to generate approximately $370,000 per year. Although not supported by a majority of respondents in the telephone survey, a 0.1 percent sales tax would generate approximately $1.1 million annually. With the majority of respondents indicating support for a property tax and a stated willingness to pay increased taxes per household of up to $20 per year to support a transit service, there is the potential to generate local funding to cover the required local share of the costs of implementing public transit service. Conway also receives an oil and gas severance tax which has been dedicated to alternate modes of transportation. A portion of the severance tax revenue could be used to support public transportation.

With presence of the campus population, there may be an opportunity to implement a campus pass program under which students pay a semester activity fee for unlimited use of the transit service. Another option is that the University contribute because of the potential savings to its transportation costs and the benefit for students and employees. Table XI-1 provides a summary of the potential level of funding from different sources.

Table XI-1
Potential Funding for Transit Service

Source	Level of Funding
Property Tax	$370,000
Student Activity Fee ($10 per student per semester)	$240,000
Federal Transit Administration	$610,000
Fares	$60,000
Total Potential Funding	$1,280,000

The level of funding presented in Table XI-1 would be sufficient to operate the two-route option with 30-minute frequencies. It may be desirable to phase the implementation by starting with a smaller system, but the community support

and the potential level of funding indicate the new public transit service in Conway may be financially feasible.

INSTITUTIONAL FEASIBILITY

The City of Conway has the managerial capability to implement and oversee a public transportation system. The City has demonstrated the capability to apply for grants and to administer grant funds. The City has a fleet maintenance facility with adequate space for vehicle storage and staff and equipment providing the capability of maintaining diesel-powered vehicles. The City can also support the other functions required for a transit operation including legal services, purchasing and procurement, personnel and payroll, with existing staff. One new staff member designated with full-time responsibility for managing transit operations will be required. Operation of public transportation service by the City of Conway is a feasible option.

POLICY FEASIBILITY

Public transportation service would support the goals of Conway for sustainability and quality of life (Chapter VI). Public transportation service will support new development patterns such as that found in Hendrix Village. Public transportation is consistent with and will be supportive of the Conway Comprehensive Plan to provide citizens with a high quality environment; to provide a logical pattern of land uses incorporating an efficient relationship between transportation, public services, residential, commercial, industrial, and business areas; and to provide high levels of public service. The community is supportive of public transportation as evidenced by the community telephone survey results.

SUMMARY

Transit service in Conway appears to be feasible. There are identified needs and sufficient demand to support public transit. There is community support for public transit. The recommended service plan is the two-routes option described in Chapter VII and shown in Figure VII-3 with 30-minute frequencies on both routes. This plan provides a good level of service, covers the areas with

greatest demand, and provides access to major destinations. The estimated cost of $1,250,000 appears to be financially feasible.

CHAPTER XII

Implementation Plan

INTRODUCTION

This chapter builds on and develops a detailed implementation plan based on information presented in Chapters VII through XI. After reviewing the various options, City Council decided in September 2009 to pursue the implementation of a two-route system, with each route running at 30-minute headways. This chapter provides a detailed operations plan and more information about vehicle requirements and facility requirements, expands on operating and capital budgeting needs, provides a marketing program, and provides a monitoring program to assess performance after implementation.

OPERATIONS PLAN

The operations plan in this chapter has been refined from the more conceptual versions shown in prior chapters. Route information was collected to determine actual travel times; verify traffic control devices such as signals, medians, roundabouts, and one-way streets that could affect bus routing; and other community conditions such as space available for a bus stop without blocking a driveway or taking on-street parking, presence/absence of sidewalk connections, and adjacent land uses that support transit service.

Service Parameters

Table XII-1 applies the previously described service parameters which assume a 13-hour span of service Monday through Thursday, a 16.5-hour span of service on Fridays, a 14.5-hour span of service on Saturdays, and a 7-hour span of service on Sundays. Only six major holidays will be observed. Each route requires 9,200 revenue-hours of service annually, based on 30-minute frequencies being offered throughout the service day. The table shows the number of hours per day, per week, and per year each segment of the service requires. This is important for both the operating and maintenance cost (O&M cost) estimate and the performance measures discussed later in this chapter.

Typically, within six months to a year after implementation of a new service, minor adjustments are needed for better customer service and to be efficient with resource use. Examples of possible adjustments are:

- Ridership is focused more toward traditional work commute hours.
- School "trippers" need to be added because student riders create the need for more capacity at certain times of the day.
- There is demand for more or not as much service after 6:00 p.m.
- Demand for service might be lighter on weekend days than weekdays, and less service is required.

Table XII-2 shows a lower cost option that would offer 30-minute frequencies only during the traditional peak commuting periods, and 60-minute (hourly) frequencies at all other times. Although this is not the current expectation for the initial Conway service, this option provides a point of reference for adjustments that might be necessary due to budget and/or performance monitoring reasons. The usefulness of this table is in comparing weekday, Friday, Saturday, and/or Sunday service-hour components of the total weekly service to adjust service delivery day-by-day or for certain hours of the day.

Table XII-1
Base Scenario: 30-Minute Frequency At All Times

Day	Description	Time	Frequency	Hours	Vehicles	Daily	Weekly	Yearly
M-Th	AM Peak	6:30 am - 9am	30 minute	2.5	4	10	40	2,040
	Midday	9 am - 4 pm	30 minute	7	4	28	112	5,712
	PM Peak	4 pm - 6 pm	30 minute	2	4	8	32	1,632
	Evening	6 pm - 7:30 pm	30 minute	1.5	4	6	24	1,200
					Subtotal	*52*	*208*	*10,584*
Fri	AM Peak	6:30 am - 9am	30 minute	2.5	4	10	10	510
	Midday	9 am - 4 pm	30 minute	7	4	28	28	1,428
	PM Peak	4 pm - 6 pm	30 minute	2	4	8	8	408
	Evening	6 pm - 11 pm	30 minute	5	4	20	20	1,020
					Subtotal	*66*	*66*	*3,366*
Sat	Weekend	8:30 am - 11 pm	30 minute	14.5	4	58	58	3,016
					Subtotal	*58*	*58*	*3,016*
Sun	Weekend	9 am - 4 pm	30 minute	7	4	28	28	1,456
					Subtotal	*28*	*28*	*1,456*
					Revenue-Hours Both Routes	204	360	18,422
					Revenue-Hours Each Route	102	180	9,211

Source: LSC, 2010.

Table XII-2
Low Cost Scenario: 30-Minute Frequency At Peak Times, 60-Minute All Other Times

Day	Description	Time	Frequency	Hours	Vehicles	Daily	Weekly	Yearly
M-Th	AM Peak	6:30 am - 9am	30 minute	2.5	4	10	40	2,000
	Midday	9 am - 4 pm	60 minute	7	2	14	56	2,800
	PM Peak	4 pm - 6 pm	30 minute	2	4	8	32	1,600
	Evening	6 pm - 7:30 pm	60 minute	1.5	2	3	12	600
					Subtotal	*35*	*140*	*7,000*
Fri	AM Peak	6:30 am - 9am	30 minute	2.5	4	10	10	500
	Midday	9 am - 4 pm	60 minute	7	2	14	14	700
	PM Peak	4 pm - 6 pm	30 minute	2	4	8	8	400
	Evening	6 pm - 11 pm	60 minute	5	2	10	10	500
					Subtotal	*42*	*42*	*2,100*
Sat	Weekend	8:30 am - 11 pm	60 minute	14.5	2	29	29	1,450
					Subtotal	*29.0*	*29.0*	*1,450*
Sun	Weekend	9 am - 4 pm	60 minute	7	2	14	14	700
					Subtotal	*14*	*14*	*700*
					Revenue-Hours Both Routes	120	225	11,250
					Revenue-Hours Each Route	60	113	5,625

Source: LSC, 2010.

Blue Route

The paths of the two routes, revised for the implementation plan, are shown in Figure XII-1. Prior work on the Blue Route envisioned it starting at Wal-Mart, west of McNutt and Dave Ward Drive. Based on field review of much of the Dave Ward Drive segment, the implementation plan recommends starting the route, instead, at the student housing complex off of Moix Boulevard. The rationale for this change is as follows:

- The Blue Route serves a Wal-Mart north of downtown, along Harkrider.
- Many of the land uses along Dave Ward Drive are set back from the road-way and there is currently little or no sidewalk along Dave Ward Drive, both conditions making it less likely that people would access these businesses and churches until some improvements are made.
- Travel times to the western Wal-Mart location were reallocated to better serve UCA and the Conway Regional Hospital.

The Blue Route is adjusted to pull through the student housing complex, mirroring current UCA service. Additionally, the Blue Route is extended west through the UCA campus along Bruce Street, as well as traveling a block north of College to provide more direct service to the Conway Regional Hospital.

The route north of the hospital remains the same as in prior work. It travels through downtown, north on Harkrider through Hendrix College, past Wal-Mart, and terminates at the Conway Town Center.

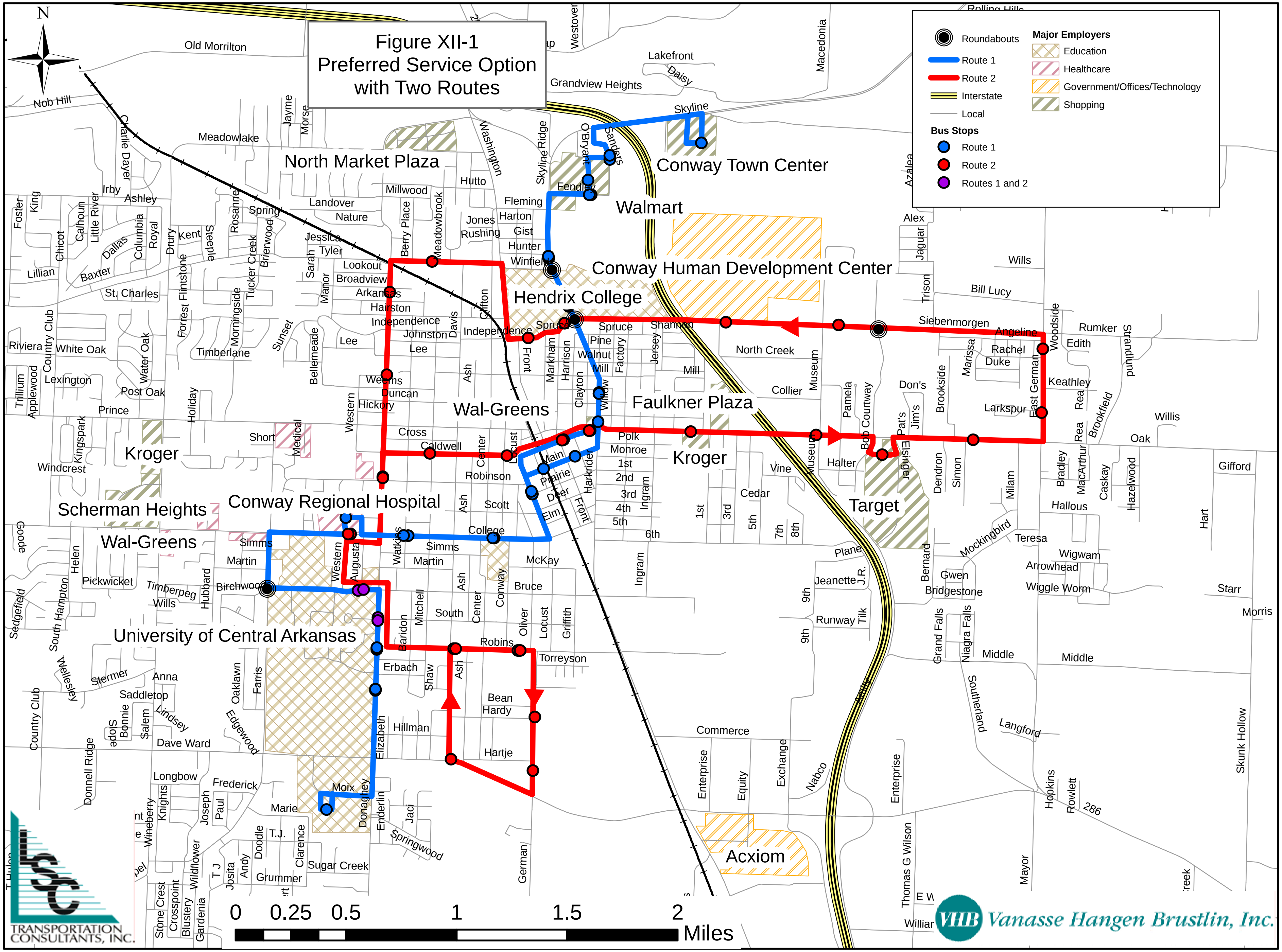


Figure XII-1
Preferred Service Option
with Two Routes
N
Roundabouts
Route 1
Route 2
Interstate
Local
Bus Stops
Route 1
Route 2
Routes 1 and 2
Major Employers
Education
Healthcare
Government/Offices/Technology
Shopping
North Market Plaza
Conway Town Center
Walmart
Conway Human Development Center
Hendrix College
Wal-Greens
Faulkner Plaza
Kroger
Kroger
Target
Conway Regional Hospital
Scherman Heights
Wal-Greens
University of Central Arkansas
Acxiom
0
0.25
0.5
1
1.5
2
Miles
TRANSPORTATION CONSULTANTS, INC.
Vanasse Hangen Brustlin, Inc.

Schedule

Auto driving times and estimates for average bus stop times were used to estimate a preliminary schedule for the Blue Route. Table XII-3 shows the one-way travel times for this route, at 27 minutes. As a round-trip, the total travel time would be 54 minutes, allowing six minutes (or eleven percent) of the total round-trip time for layover and driver recovery. Typically ten to fifteen percent of the trip time should be allowed for layover and recovery.

Table XII-3
Blue Route Travel Times

Route	Location	Time	Minutes Between Locations
Blue Route	Moix	0:00	0
	Bruce & Elizabeth	0:04	4
	College & Farris	0:07	3
	Conway Regional Hospital	0:09	2
	Locust & College	0:13	4
	Harkrider & Oak	0:17	4
	Harkrider & Siebenmorgan	0:20	3
	Wal-Mart (North)	0:23	3
	Conway Town Center	0:27	4
Distance (miles)		6 miles one-way 12 miles round-trip	
Average Speed (mph)		13.3	

Source: LSC and VHB, 2010.

Tables XII-4 through XII-6 show preliminary weekday, Saturday, and Sunday schedules for the Blue Route, both southbound and northbound. The weekday schedules were designed to achieve the following:

- Consider travel in both directions of the Blue Route.
- Consider bus meets with the Red Route at Siebenmorgen/Harkrider (Hendrix College), Oak/Harkrider, Chestnut or Oak/Main (Downtown), and Bruce/Donaghey (UCA).
- Consider the "deadhead time" required to deploy buses from the maintenance facility to on-route passenger revenue service.
- Deliver commuters to downtown Conway near the hour and half-hour start times of standard work shifts.

- Deliver students to campus before the typical class times which start on the hour Mondays, Wednesdays, and Fridays, and near the hour or half-hour on Tuesdays and Thursdays.

Table XII-4
Blue Route Schedule - Weekday

Southbound										Northbound									
Conway Town Center	Wal-Mart Harkrider/ Fleming	Harkrider/ Sieben-morgen	Harkrider/ Oak	Chestnut /Main	Locust/ College	Conway Regional Hospital	College/ Farriss	Bruce/ Donaghey	UCA Housing/ Moix Blvd	UCA Housing/ Moix Blvd	Bruce/ Donaghey	College/ Farriss	Conway Regional Hospital	Locust/ College	Chestnut /Oak	Harkrider/ Oak	Harkrider/ Sieben-morgen	Wal-Mart Harkrider/ Fleming	Conway Town Center
5:47	5:51	5:54	5:57	5:59	6:01	6:05	6:07	6:10	6:14	6:14	6:18	6:21	6:23	6:27	6:29	6:31	6:34	6:37	6:41
6:17	6:21	6:24	6:27	6:29	6:31	6:35	6:37	6:40	6:44	6:44	6:48	6:51	6:53	6:57	6:59	7:01	7:04	7:07	7:11
6:47	6:51	6:54	6:57	6:59	7:01	7:05	7:07	7:10	7:14	7:14	7:18	7:21	7:23	7:27	7:29	7:31	7:34	7:37	7:41
7:17	7:21	7:24	7:27	7:29	7:31	7:35	7:37	7:40	7:44	7:44	7:48	7:51	7:53	7:57	7:59	8:01	8:04	8:07	8:11
7:47	7:51	7:54	7:57	7:59	8:01	8:05	8:07	8:10	8:14	8:14	8:18	8:21	8:23	8:27	8:29	8:31	8:34	8:37	8:41
8:17	8:21	8:24	8:27	8:29	8:31	8:35	8:37	8:40	8:44	8:44	8:48	8:51	8:53	8:57	8:59	9:01	9:04	9:07	9:11
8:47	8:51	8:54	8:57	8:59	9:01	9:05	9:07	9:10	9:14	9:14	9:18	9:21	9:23	9:27	9:29	9:31	9:34	9:37	9:41
9:17	9:21	9:24	9:27	9:29	9:31	9:35	9:37	9:40	9:44	9:44	9:48	9:51	9:53	9:57	9:59	10:01	10:04	10:07	10:11
9:47	9:51	9:54	9:57	9:59	10:01	10:05	10:07	10:10	10:14	10:14	10:18	10:21	10:23	10:27	10:29	10:31	10:34	10:37	10:41
10:17	10:21	10:24	10:27	10:29	10:31	10:35	10:37	10:40	10:44	10:44	10:48	10:51	10:53	10:57	10:59	11:01	11:04	11:07	11:11
10:47	10:51	10:54	10:57	10:59	11:01	11:05	11:07	11:10	11:14	11:14	11:18	11:21	11:23	11:27	11:29	11:31	11:34	11:37	11:41
11:17	11:21	11:24	11:27	11:29	11:31	11:35	11:37	11:40	11:44	11:44	11:48	11:51	11:53	11:57	11:59	12:01	12:04	12:07	12:11
11:47	11:51	11:54	11:57	11:59	12:01	12:05	12:07	12:10	12:14	12:14	12:18	12:21	12:23	12:27	12:29	12:31	12:34	12:37	12:41
12:17	12:21	12:24	12:27	12:29	12:31	12:35	12:37	12:40	12:44	12:44	12:48	12:51	12:53	12:57	12:59	1:01	1:04	1:07	1:11
12:47	12:51	12:54	12:57	12:59	1:01	1:05	1:07	1:10	1:14	1:14	1:18	1:21	1:23	1:27	1:29	1:31	1:34	1:37	1:41
1:17	1:21	1:24	1:27	1:29	1:31	1:35	1:37	1:40	1:44	1:44	1:48	1:51	1:53	1:57	1:59	2:01	2:04	2:07	2:11
1:47	1:51	1:54	1:57	1:59	2:01	2:05	2:07	2:10	2:14	2:14	2:18	2:21	2:23	2:27	2:29	2:31	2:34	2:37	2:41
2:17	2:21	2:24	2:27	2:29	2:31	2:35	2:37	2:40	2:44	2:44	2:48	2:51	2:53	2:57	2:59	3:01	3:04	3:07	3:11
2:47	2:51	2:54	2:57	2:59	3:01	3:05	3:07	3:10	3:14	3:14	3:18	3:21	3:23	3:27	3:29	3:31	3:34	3:37	3:41
3:17	3:21	3:24	3:27	3:29	3:31	3:35	3:37	3:40	3:44	3:44	3:48	3:51	3:53	3:57	3:59	4:01	4:04	4:07	4:11
3:47	3:51	3:54	3:57	3:59	4:01	4:05	4:07	4:10	4:14	4:14	4:18	4:21	4:23	4:27	4:29	4:31	4:34	4:37	4:41
4:17	4:21	4:24	4:27	4:29	4:31	4:35	4:37	4:40	4:44	4:44	4:48	4:51	4:53	4:57	4:59	5:01	5:04	5:07	5:11
4:47	4:51	4:54	4:57	4:59	5:01	5:05	5:07	5:10	5:14	5:14	5:18	5:21	5:23	5:27	5:29	5:31	5:34	5:37	5:41
5:17	5:21	5:24	5:27	5:29	5:31	5:35	5:37	5:40	5:44	5:44	5:48	5:51	5:53	5:57	5:59	6:01	6:04	6:07	6:11
5:47	5:51	5:54	5:57	5:59	6:01	6:05	6:07	6:10	6:14	6:14	6:18	6:21	6:23	6:27	6:29	6:31	6:34	6:37	6:41
6:17	6:21	6:24	6:27	6:29	6:31	6:35	6:37	6:40	6:44	6:44	6:48	6:51	6:53	6:57	6:59	7:01	7:04	7:07	7:11
6:47	6:51	6:54	6:57	6:59	7:01	7:05	7:07	7:10	7:14	7:14	7:18	7:21	7:23	7:27	7:29	7:31	7:34	7:37	7:41
7:17	7:21	7:24	7:27	7:29	7:31	7:35	7:37	7:40	7:44	7:44	7:48	7:51	7:53	7:57	7:59	8:01	8:04	8:07	8:11
7:47	7:51	7:54	7:57	7:59	8:01	8:05	8:07	8:10	8:14	8:14	8:18	8:21	8:23	8:27	8:29	8:31	8:34	8:37	8:41
8:17	8:21	8:24	8:27	8:29	8:31	8:35	8:37	8:40	8:44	8:44	8:48	8:51	8:53	8:57	8:59	9:01	9:04	9:07	9:11
8:47	8:51	8:54	8:57	8:59	9:01	9:05	9:07	9:10	9:14	9:14	9:18	9:21	9:23	9:27	9:29	9:31	9:34	9:37	9:41
9:17	9:21	9:24	9:27	9:29	9:31	9:35	9:37	9:40	9:44	9:44	9:48	9:51	9:53	9:57	9:59	10:01	10:04	10:07	10:11
9:47	9:51	9:54	9:57	9:59	10:01	10:05	10:07	10:10	10:14	10:14	10:18	10:21	10:23	10:27	10:29	10:31	10:34	10:37	10:41
10:17	10:21	10:24	10:27	10:29	10:31	10:35	10:37	10:40	10:44	10:44	10:48	10:51	10:53	10:57	10:59	11:01	11:04	11:07	11:11

Note: The shaded area shows extended service for Fridays only.
Source: LSC and VHB, 2010.

(This page intentionally left blank.)

Table XII-5
Blue Route Schedule - Saturday

Southbound										Northbound									
Conway Town Center	Wal-Mart Harkrider/ Fleming	Harkrider/ Sieben-morgen	Harkrider/ Oak	Chestnut /Main	Locust/ College	Conway Regional Hospital	College/ Farriss	Bruce/ Donaghey	UCA Housing/ Moix Blvd	UCA Housing/ Moix Blvd	Bruce/ Donaghey	College/ Farriss	Conway Regional Hospital	Locust/ College	Chestnut /Oak	Harkrider/ Oak	Harkrider/ Sieben-morgen	Wal-Mart Harkrider/ Fleming	Conway Town Center
8:17	8:21	8:24	8:27	8:29	8:31	8:35	8:37	8:40	8:44	8:44	8:48	8:51	8:53	8:57	8:59	9:01	9:04	9:07	9:11
8:47	8:51	8:54	8:57	8:59	9:01	9:05	9:07	9:10	9:14	9:14	9:18	9:21	9:23	9:27	9:29	9:31	9:34	9:37	9:41
9:17	9:21	9:24	9:27	9:29	9:31	9:35	9:37	9:40	9:44	9:44	9:48	9:51	9:53	9:57	9:59	10:01	10:04	10:07	10:11
9:47	9:51	9:54	9:57	9:59	10:01	10:05	10:07	10:10	10:14	10:14	10:18	10:21	10:23	10:27	10:29	10:31	10:34	10:37	10:41
10:17	10:21	10:24	10:27	10:29	10:31	10:35	10:37	10:40	10:44	10:44	10:48	10:51	10:53	10:57	10:59	11:01	11:04	11:07	11:11
10:47	10:51	10:54	10:57	10:59	11:01	11:05	11:07	11:10	11:14	11:14	11:18	11:21	11:23	11:27	11:29	11:31	11:34	11:37	11:41
11:17	11:21	11:24	11:27	11:29	11:31	11:35	11:37	11:40	11:44	11:44	11:48	11:51	11:53	11:57	11:59	12:01	12:04	12:07	12:11
11:47	11:51	11:54	11:57	11:59	12:01	12:05	12:07	12:10	12:14	12:14	12:18	12:21	12:23	12:27	12:29	12:31	12:34	12:37	12:41
12:17	12:21	12:24	12:27	12:29	12:31	12:35	12:37	12:40	12:44	12:44	12:48	12:51	12:53	12:57	12:59	1:01	1:04	1:07	1:11
12:47	12:51	12:54	12:57	12:59	1:01	1:05	1:07	1:10	1:14	1:14	1:18	1:21	1:23	1:27	1:29	1:31	1:34	1:37	1:41
1:17	1:21	1:24	1:27	1:29	1:31	1:35	1:37	1:40	1:44	1:44	1:48	1:51	1:53	1:57	1:59	2:01	2:04	2:07	2:11
1:47	1:51	1:54	1:57	1:59	2:01	2:05	2:07	2:10	2:14	2:14	2:18	2:21	2:23	2:27	2:29	2:31	2:34	2:37	2:41
2:17	2:21	2:24	2:27	2:29	2:31	2:35	2:37	2:40	2:44	2:44	2:48	2:51	2:53	2:57	2:59	3:01	3:04	3:07	3:11
2:47	2:51	2:54	2:57	2:59	3:01	3:05	3:07	3:10	3:14	3:14	3:18	3:21	3:23	3:27	3:29	3:31	3:34	3:37	3:41
3:17	3:21	3:24	3:27	3:29	3:31	3:35	3:37	3:40	3:44	3:44	3:48	3:51	3:53	3:57	3:59	4:01	4:04	4:07	4:11
3:47	3:51	3:54	3:57	3:59	4:01	4:05	4:07	4:10	4:14	4:14	4:18	4:21	4:23	4:27	4:29	4:31	4:34	4:37	4:41
4:17	4:21	4:24	4:27	4:29	4:31	4:35	4:37	4:40	4:44	4:44	4:48	4:51	4:53	4:57	4:59	5:01	5:04	5:07	5:11
4:47	4:51	4:54	4:57	4:59	5:01	5:05	5:07	5:10	5:14	5:14	5:18	5:21	5:23	5:27	5:29	5:31	5:34	5:37	5:41
5:17	5:21	5:24	5:27	5:29	5:31	5:35	5:37	5:40	5:44	5:44	5:48	5:51	5:53	5:57	5:59	6:01	6:04	6:07	6:11
5:47	5:51	5:54	5:57	5:59	6:01	6:05	6:07	6:10	6:14	6:14	6:18	6:21	6:23	6:27	6:29	6:31	6:34	6:37	6:41
6:17	6:21	6:24	6:27	6:29	6:31	6:35	6:37	6:40	6:44	6:44	6:48	6:51	6:53	6:57	6:59	7:01	7:04	7:07	7:11
6:47	6:51	6:54	6:57	6:59	7:01	7:05	7:07	7:10	7:14	7:14	7:18	7:21	7:23	7:27	7:29	7:31	7:34	7:37	7:41
7:17	7:21	7:24	7:27	7:29	7:31	7:35	7:37	7:40	7:44	7:44	7:48	7:51	7:53	7:57	7:59	8:01	8:04	8:07	8:11
7:47	7:51	7:54	7:57	7:59	8:01	8:05	8:07	8:10	8:14	8:14	8:18	8:21	8:23	8:27	8:29	8:31	8:34	8:37	8:41
8:17	8:21	8:24	8:27	8:29	8:31	8:35	8:37	8:40	8:44	8:44	8:48	8:51	8:53	8:57	8:59	9:01	9:04	9:07	9:11
8:47	8:51	8:54	8:57	8:59	9:01	9:05	9:07	9:10	9:14	9:14	9:18	9:21	9:23	9:27	9:29	9:31	9:34	9:37	9:41
9:17	9:21	9:24	9:27	9:29	9:31	9:35	9:37	9:40	9:44	9:44	9:48	9:51	9:53	9:57	9:59	10:01	10:04	10:07	10:11
9:47	9:51	9:54	9:57	9:59	10:01	10:05	10:07	10:10	10:14	10:14	10:18	10:21	10:23	10:27	10:29	10:31	10:34	10:37	10:41
10:17	10:21	10:24	10:27	10:29	10:31	10:35	10:37	10:40	10:44	10:44	10:48	10:51	10:53	10:57	10:59	11:01	11:04	11:07	11:11

Source: LSC and VHB, 2010.

(This page intentionally left blank.)

Table XII-6
Blue Route Schedule - Sunday

Southbound										Northbound									
Conway Town Center	Wal-Mart Harkrider/ Fleming	Harkrider/ Sieben-morgen	Harkrider/ Oak	Chestnut /Main	Locust/ College	Conway Regional Hospital	College/ Farriss	Bruce/ Donaghey	UCA Housing/ Moix Blvd	UCA Housing/ Moix Blvd	Bruce/ Donaghey	College/ Farriss	Conway Regional Hospital	Locust/ College	Chestnut /Oak	Harkrider/ Oak	Harkrider/ Sieben-morgen	Wal-Mart Harkrider/ Fleming	Conway Town Center
8:47	8:51	8:54	8:57	8:59	9:01	9:05	9:07	9:10	9:14	9:14	9:18	9:21	9:23	9:27	9:29	9:31	9:34	9:37	9:41
9:17	9:21	9:24	9:27	9:29	9:31	9:35	9:37	9:40	9:44	9:44	9:48	9:51	9:53	9:57	9:59	10:01	10:04	10:07	10:11
9:47	9:51	9:54	9:57	9:59	10:01	10:05	10:07	10:10	10:14	10:14	10:18	10:21	10:23	10:27	10:29	10:31	10:34	10:37	10:41
10:17	10:21	10:24	10:27	10:29	10:31	10:35	10:37	10:40	10:44	10:44	10:48	10:51	10:53	10:57	10:59	11:01	11:04	11:07	11:11
10:47	10:51	10:54	10:57	10:59	11:01	11:05	11:07	11:10	11:14	11:14	11:18	11:21	11:23	11:27	11:29	11:31	11:34	11:37	11:41
11:17	11:21	11:24	11:27	11:29	11:31	11:35	11:37	11:40	11:44	11:44	11:48	11:51	11:53	11:57	11:59	12:01	12:04	12:07	12:11
11:47	11:51	11:54	11:57	11:59	12:01	12:05	12:07	12:10	12:14	12:14	12:18	12:21	12:23	12:27	12:29	12:31	12:34	12:37	12:41
12:17	12:21	12:24	12:27	12:29	12:31	12:35	12:37	12:40	12:44	12:44	12:48	12:51	12:53	12:57	12:59	1:01	1:04	1:07	1:11
12:47	12:51	12:54	12:57	12:59	1:01	1:05	1:07	1:10	1:14	1:14	1:18	1:21	1:23	1:27	1:29	1:31	1:34	1:37	1:41
1:17	1:21	1:24	1:27	1:29	1:31	1:35	1:37	1:40	1:44	1:44	1:48	1:51	1:53	1:57	1:59	2:01	2:04	2:07	2:11
1:47	1:51	1:54	1:57	1:59	2:01	2:05	2:07	2:10	2:14	2:14	2:18	2:21	2:23	2:27	2:29	2:31	2:34	2:37	2:41
2:17	2:21	2:24	2:27	2:29	2:31	2:35	2:37	2:40	2:44	2:44	2:48	2:51	2:53	2:57	2:59	3:01	3:04	3:07	3:11
2:47	2:51	2:54	2:57	2:59	3:01	3:05	3:07	3:10	3:14	3:14	3:18	3:21	3:23	3:27	3:29	3:31	3:34	3:37	3:41
3:17	3:21	3:24	3:27	3:29	3:31	3:35	3:37	3:40	3:44	3:44	3:48	3:51	3:53	3:57	3:59	4:01	4:04	4:07	4:11
3:47	3:51	3:54	3:57	3:59	4:01	4:05	4:07	4:10	4:14	4:14	4:18	4:21	4:23	4:27	4:29	4:31	4:34	4:37	4:41

Source: LSC and VHB, 2010.

(This page intentionally left blank.)

Red Route

As compared to prior planning of the Red Route, several changes have been made.

First, the bus is routed along Caldwell Street, rather than Prince Street, between Donaghey Avenue and Parkway Avenue. This is due to the closure of Prince Street during the day for the safety of high school students. This street closure would not allow the bus to pass through the campus. Additionally, the use of Caldwell Street makes for a smoother eastbound transition to Oak Street.

The second change is near the shopping complex along Oak, including Target and Kohl's. The bus is routed through the northern part of the site to place exiting passengers closer to the activity center and existing sidewalks.

The third change is to modify the loop at the south end. Closure of the IC Bus facility no longer supports the larger loop east to Harkrider. The route now travels south on German to Dave Ward and then north on Davis.

Schedule

Auto driving times and estimates for average bus stop times were also used to estimate a preliminary schedule for the Red Route. Table XII-7 shows the round-trip travel time for this route, at 56 minutes. This allows four minutes or seven percent of the total round-trip time for layover and driver recovery. Typically, 10 to 15 percent of the trip time should be allowed for layover and recovery. With additional route travel-time tests, it is preferred to achieve 10 percent layover and recovery time. If the desired layover and recovery time cannot be achieved through driver familiarity alone, options to achieve this are:

- Eliminate unnecessary stops along the route, as measured by the stops with the smallest number of boardings.
- Keep the route along Oak Street, rather than entering the shopping complex, and instead install sidewalk from Oak to the nearest parking lot.

Table XII-7
Red Route Travel Times

Route	Location	Time	Minutes Between Locations
Red Route	Oak & Elsinger	0:00	0
	E. German & Siebenmorgen	0:05	5
	Siebenmorgen & Harkrider	0:12	7
	Tyler & Donaghey	0:19	7
	Donaghey & College	0:25	6
	Donaghey & Robins	0:31	6
	German & Dave Ward	0:36	5
	Davis & Dave Ward	0;38	2
	Davis & Robins	0:42	4
	Oak & Elsinger	0:50	8
Distance (miles)		12 miles round-trip	
Average Speed (mph)		14.4	

Source: LSC and VHB, 2010.

Tables XII-8 through XII-10 show preliminary weekday, Saturday, and Sunday schedules for the Red Route in both directions. The weekday schedules were designed to achieve the following:

- Consider travel in both directions of the Red Route.
- Consider bus meets with the Blue Route at Siebenmorgen/Harkrider (Hendrix College), Oak/Harkrider, Chestnut or Oak/Main (Downtown), and Bruce/Donaghey (UCA). Also consider northbound and southbound meets of the Red Route near Caldwell/Donaghey.
- Consider the "deadhead time" required to deploy buses from the maintenance facility to on-route passenger revenue service.
- Deliver commuters to downtown Conway near the hour and half-hour start times of standard work shifts.
- Deliver students to campus before the typical class times which start on the hour Mondays, Wednesdays, and Fridays, and near the hour or half-hour on Tuesdays and Thursdays.

Table XII-8
Red Route Schedule - Weekday

Westbound/Southbound									Northbound/Eastbound								
E.German/ Sieben-morgen	Museum/ Sieben-morgen	Harkrider/ Sieben-morgen	Donaghey/ Tyler	Donaghey/ Caldwell	Donaghey/ College	Donaghey/ Bruce	Donaghey/ Robins	German/ Dave Ward	Davis/ Dave Ward	Donaghey/ Robins	Donaghey/ College	Donaghey/ Caldwell	Locust/ Caldwell	Chestnut /Oak	Harkrider/ Oak	Elsinger/ Oak	E.German/ Sieben-morgen
5:57	6:00	6:04	6:11	6:15	6:17	6:20	6:21	6:25	6:28	6:30	6:34	6:38	6:40	6:41	6:42	6:45	6:54
6:27	6:30	6:34	6:41	6:45	6:47	6:50	6:51	6:55	6:58	7:00	7:04	7:08	7:10	7:11	7:12	7:15	7:24
6:57	7:00	7:04	7:11	7:15	7:17	7:20	7:21	7:25	7:28	7:30	7:34	7:38	7:40	7:41	7:42	7:45	7:54
7:27	7:30	7:34	7:41	7:45	7:47	7:50	7:51	7:55	7:58	8:00	8:04	8:08	8:10	8:11	8:12	8:15	8:24
7:57	8:00	8:04	8:11	8:15	8:17	8:20	8:21	8:25	8:28	8:30	8:34	8:38	8:40	8:41	8:42	8:45	8:54
8:27	8:30	8:34	8:41	8:45	8:47	8:50	8:51	8:55	8:58	9:00	9:04	9:08	9:10	9:11	9:12	9:15	9:24
8:57	9:00	9:04	9:11	9:15	9:17	9:20	9:21	9:25	9:28	9:30	9:34	9:38	9:40	9:41	9:42	9:45	9:54
9:27	9:30	9:34	9:41	9:45	9:47	9:50	9:51	9:55	9:58	10:00	10:04	10:08	10:10	10:11	10:12	10:15	10:24
9:57	10:00	10:04	10:11	10:15	10:17	10:20	10:21	10:25	10:28	10:30	10:34	10:38	10:40	10:41	10:42	10:45	10:54
10:27	10:30	10:34	10:41	10:45	10:47	10:50	10:51	10:55	10:58	11:00	11:04	11:08	11:10	11:11	11:12	11:15	11:24
10:57	11:00	11:04	11:11	11:15	11:17	11:20	11:21	11:25	11:28	11:30	11:34	11:38	11:40	11:41	11:42	11:45	11:54
11:27	11:30	11:34	11:41	11:45	11:47	11:50	11:51	11:55	11:58	12:00	12:04	12:08	12:10	12:11	12:12	12:15	12:24
11:57	12:00	12:04	12:11	12:15	12:17	12:20	12:21	12:25	12:28	12:30	12:34	12:38	12:40	12:41	12:42	12:45	12:54
12:27	12:30	12:34	12:41	12:45	12:47	12:50	12:51	12:55	12:58	13:00	1:04	1:08	1:10	1:11	1:12	1:15	1:24
12:57	1:00	1:04	1:11	1:15	1:17	1:20	1:21	1:25	1:28	1:30	1:34	1:38	1:40	1:41	1:42	1:45	1:54
1:27	1:30	1:34	1:41	1:45	1:47	1:50	1:51	1:55	1:58	2:00	2:04	2:08	2:10	2:11	2:12	2:15	2:24
1:57	2:00	2:04	2:11	2:15	2:17	2:20	2:21	2:25	2:28	2:30	2:34	2:38	2:40	2:41	2:42	2:45	2:54
2:27	2:30	2:34	2:41	2:45	2:47	2:50	2:51	2:55	2:58	3:00	3:04	3:08	3:10	3:11	3:12	3:15	3:24
2:57	3:00	3:04	3:11	3:15	3:17	3:20	3:21	3:25	3:28	3:30	3:34	3:38	3:40	3:41	3:42	3:45	3:54
3:27	3:30	3:34	3:41	3:45	3:47	3:50	3:51	3:55	3:58	4:00	4:04	4:08	4:10	4:11	4:12	4:15	4:24
3:57	4:00	4:04	4:11	4:15	4:17	4:20	4:21	4:25	4:28	4:30	4:34	4:38	4:40	4:41	4:42	4:45	4:54
4:27	4:30	4:34	4:41	4:45	4:47	4:50	4:51	4:55	4:58	5:00	5:04	5:08	5:10	5:11	5:12	5:15	5:24
4:57	5:00	5:04	5:11	5:15	5:17	5:20	5:21	5:25	5:28	5:30	5:34	5:38	5:40	5:41	5:42	5:45	5:54
5:27	5:30	5:34	5:41	5:45	5:47	5:50	5:51	5:55	5:58	6:00	6:04	6:08	6:10	6:11	6:12	6:15	6:24
5:57	6:00	6:04	6:11	6:15	6:17	6:20	6:21	6:25	6:28	6:30	6:34	6:38	6:40	6:41	6:42	6:45	6:54
6:27	6:30	6:34	6:41	6:45	6:47	6:50	6:51	6:55	6:58	7:00	7:04	7:08	7:10	7:11	7:12	7:15	7:24
6:57	7:00	7:04	7:11	7:15	7:17	7:20	7:21	7:25	7:28	7:30	7:34	7:38	7:40	7:41	7:42	7:45	7:54
7:27	7:30	7:34	7:41	7:45	7:47	7:50	7:51	7:55	7:58	8:00	8:04	8:08	8:10	8:11	8:12	8:15	8:24
7:57	8:00	8:04	8:11	8:15	8:17	8:20	8:21	8:25	8:28	8:30	8:34	8:38	8:40	8:41	8:42	8:45	8:54
8:27	8:30	8:34	8:41	8:45	8:47	8:50	8:51	8:55	8:58	9:00	9:04	9:08	9:10	9:11	9:12	9:15	9:24
8:57	9:00	9:04	9:11	9:15	9:17	9:20	9:21	9:25	9:28	9:30	9:34	9:38	9:40	9:41	9:42	9:45	9:54
9:27	9:30	9:34	9:41	9:45	9:47	9:50	9:51	9:55	9:58	10:00	10:04	10:08	10:10	10:11	10:12	10:15	10:24
9:57	10:00	10:04	10:11	10:15	10:17	10:20	10:21	10:25	10:28	10:30	10:34	10:38	10:40	10:41	10:42	10:45	10:54
10:27	10:30	10:34	10:41	10:45	10:47	10:50	10:51	10:55	10:58	11:00	11:04	11:08	11:10	11:11	11:12	11:15	11:24

Note: The shaded area shows extended service for Fridays only.
Source: LSC and VHB, 2010.

(This page intentionally left blank.)

Table XII-9
Red Route Schedule - Saturday Southbound

Westbound/Southbound									Northbound/Eastbound								
E.German/ Sieben-morgen	Museum/ Sieben-morgen	Harkrider/ Sieben-morgen	Donaghey/ Tyler	Donaghey/ Caldwell	Donaghey/ College	Donaghey/ Bruce	Donaghey/ Robins	German/ Dave Ward	Davis/ Dave Ward	Donaghey/ Robins	Donaghey/ College	Donaghey/ Caldwell	Locust/ Caldwell	Chestnut /Oak	Harkrider/ Oak	Elsinger/ Oak	E.German/ Sieben-morgen
8:27	8:30	8:34	8:41	8:45	8:47	8:50	8:51	8:55	8:58	9:00	9:04	9:08	9:10	9:11	9:12	9:15	9:24
8:57	9:00	9:04	9:11	9:15	9:17	9:20	9:21	9:25	9:28	9:30	9:34	9:38	9:40	9:41	9:42	9:45	9:54
9:27	9:30	9:34	9:41	9:45	9:47	9:50	9:51	9:55	9:58	10:00	10:04	10:08	10:10	10:11	10:12	10:15	10:24
9:57	10:00	10:04	10:11	10:15	10:17	10:20	10:21	10:25	10:28	10:30	10:34	10:38	10:40	10:41	10:42	10:45	10:54
10:27	10:30	10:34	10:41	10:45	10:47	10:50	10:51	10:55	10:58	11:00	11:04	11:08	11:10	11:11	11:12	11:15	11:24
10:57	11:00	11:04	11:11	11:15	11:17	11:20	11:21	11:25	11:28	11:30	11:34	11:38	11:40	11:41	11:42	11:45	11:54
11:27	11:30	11:34	11:41	11:45	11:47	11:50	11:51	11:55	11:58	12:00	12:04	12:08	12:10	12:11	12:12	12:15	12:24
11:57	12:00	12:04	12:11	12:15	12:17	12:20	12:21	12:25	12:28	12:30	12:34	12:38	12:40	12:41	12:42	12:45	12:54
12:27	12:30	12:34	12:41	12:45	12:47	12:50	12:51	12:55	12:58	13:00	1:04	1:08	1:10	1:11	1:12	1:15	1:24
12:57	1:00	1:04	1:11	1:15	1:17	1:20	1:21	1:25	1:28	1:30	1:34	1:38	1:40	1:41	1:42	1:45	1:54
1:27	1:30	1:34	1:41	1:45	1:47	1:50	1:51	1:55	1:58	2:00	2:04	2:08	2:10	2:11	2:12	2:15	2:24
1:57	2:00	2:04	2:11	2:15	2:17	2:20	2:21	2:25	2:28	2:30	2:34	2:38	2:40	2:41	2:42	2:45	2:54
2:27	2:30	2:34	2:41	2:45	2:47	2:50	2:51	2:55	2:58	3:00	3:04	3:08	3:10	3:11	3:12	3:15	3:24
2:57	3:00	3:04	3:11	3:15	3:17	3:20	3:21	3:25	3:28	3:30	3:34	3:38	3:40	3:41	3:42	3:45	3:54
3:27	3:30	3:34	3:41	3:45	3:47	3:50	3:51	3:55	3:58	4:00	4:04	4:08	4:10	4:11	4:12	4:15	4:24
3:57	4:00	4:04	4:11	4:15	4:17	4:20	4:21	4:25	4:28	4:30	4:34	4:38	4:40	4:41	4:42	4:45	4:54
4:27	4:30	4:34	4:41	4:45	4:47	4:50	4:51	4:55	4:58	5:00	5:04	5:08	5:10	5:11	5:12	5:15	5:24
4:57	5:00	5:04	5:11	5:15	5:17	5:20	5:21	5:25	5:28	5:30	5:34	5:38	5:40	5:41	5:42	5:45	5:54
5:27	5:30	5:34	5:41	5:45	5:47	5:50	5:51	5:55	5:58	6:00	6:04	6:08	6:10	6:11	6:12	6:15	6:24
5:57	6:00	6:04	6:11	6:15	6:17	6:20	6:21	6:25	6:28	6:30	6:34	6:38	6:40	6:41	6:42	6:45	6:54
6:27	6:30	6:34	6:41	6:45	6:47	6:50	6:51	6:55	6:58	7:00	7:04	7:08	7:10	7:11	7:12	7:15	7:24
6:57	7:00	7:04	7:11	7:15	7:17	7:20	7:21	7:25	7:28	7:30	7:34	7:38	7:40	7:41	7:42	7:45	7:54
7:27	7:30	7:34	7:41	7:45	7:47	7:50	7:51	7:55	7:58	8:00	8:04	8:08	8:10	8:11	8:12	8:15	8:24
7:57	8:00	8:04	8:11	8:15	8:17	8:20	8:21	8:25	8:28	8:30	8:34	8:38	8:40	8:41	8:42	8:45	8:54
8:27	8:30	8:34	8:41	8:45	8:47	8:50	8:51	8:55	8:58	9:00	9:04	9:08	9:10	9:11	9:12	9:15	9:24
8:57	9:00	9:04	9:11	9:15	9:17	9:20	9:21	9:25	9:28	9:30	9:34	9:38	9:40	9:41	9:42	9:45	9:54
9:27	9:30	9:34	9:41	9:45	9:47	9:50	9:51	9:55	9:58	10:00	10:04	10:08	10:10	10:11	10:12	10:15	10:24
9:57	10:00	10:04	10:11	10:15	10:17	10:20	10:21	10:25	10:28	10:30	10:34	10:38	10:40	10:41	10:42	10:45	10:54
10:27	10:30	10:34	10:41	10:45	10:47	10:50	10:51	10:55	10:58	11:00	11:04	11:08	11:10	11:11	11:12	11:15	11:24

Source: LSC and VHB, 2010.

(This page intentionally left blank.)

Table XII-10
Red Route Schedule - Sunday

Westbound/Southbound									Northbound/Eastbound								
E.German/ Sieben-morgen	Museum/ Sieben-morgen	Harkrider/ Sieben-morgen	Donaghey/ Tyler	Donaghey/ Caldwell	Donaghey/ College	Donaghey/ Bruce	Donaghey/ Robins	German/ Dave Ward	Davis/ Dave Ward	Donaghey/ Robins	Donaghey/ College	Donaghey/ Caldwell	Locust/ Caldwell	Chestnut /Oak	Harkrider/ Oak	Elsinger/ Oak	E.German/ Sieben-morgen
8:57	9:00	9:04	9:11	9:15	9:17	9:20	9:21	9:25	9:28	9:30	9:34	9:38	9:40	9:41	9:42	9:45	9:54
9:27	9:30	9:34	9:41	9:45	9:47	9:50	9:51	9:55	9:58	10:00	10:04	10:08	10:10	10:11	10:12	10:15	10:24
9:57	10:00	10:04	10:11	10:15	10:17	10:20	10:21	10:25	10:28	10:30	10:34	10:38	10:40	10:41	10:42	10:45	10:54
10:27	10:30	10:34	10:41	10:45	10:47	10:50	10:51	10:55	10:58	11:00	11:04	11:08	11:10	11:11	11:12	11:15	11:24
10:57	11:00	11:04	11:11	11:15	11:17	11:20	11:21	11:25	11:28	11:30	11:34	11:38	11:40	11:41	11:42	11:45	11:54
11:27	11:30	11:34	11:41	11:45	11:47	11:50	11:51	11:55	11:58	12:00	12:04	12:08	12:10	12:11	12:12	12:15	12:24
11:57	12:00	12:04	12:11	12:15	12:17	12:20	12:21	12:25	12:28	12:30	12:34	12:38	12:40	12:41	12:42	12:45	12:54
12:27	12:30	12:34	12:41	12:45	12:47	12:50	12:51	12:55	12:58	13:00	1:04	1:08	1:10	1:11	1:12	1:15	1:24
12:57	1:00	1:04	1:11	1:15	1:17	1:20	1:21	1:25	1:28	1:30	1:34	1:38	1:40	1:41	1:42	1:45	1:54
1:27	1:30	1:34	1:41	1:45	1:47	1:50	1:51	1:55	1:58	2:00	2:04	2:08	2:10	2:11	2:12	2:15	2:24
1:57	2:00	2:04	2:11	2:15	2:17	2:20	2:21	2:25	2:28	2:30	2:34	2:38	2:40	2:41	2:42	2:45	2:54
2:27	2:30	2:34	2:41	2:45	2:47	2:50	2:51	2:55	2:58	3:00	3:04	3:08	3:10	3:11	3:12	3:15	3:24
2:57	3:00	3:04	3:11	3:15	3:17	3:20	3:21	3:25	3:28	3:30	3:34	3:38	3:40	3:41	3:42	3:45	3:54
3:27	3:30	3:34	3:41	3:45	3:47	3:50	3:51	3:55	3:58	4:00	4:04	4:08	4:10	4:11	4:12	4:15	4:24
3:57	4:00	4:04	4:11	4:15	4:17	4:20	4:21	4:25	4:28	4:30	4:34	4:38	4:40	4:41	4:42	4:45	4:54

Source: LSC and VHB, 2010.

(This page intentionally left blank.)

VEHICLE REQUIREMENTS

Based on community input in other communities[1], projected ridership levels, and the characteristics of the roadways in Conway, the vehicles in Table XII-11 are provided as candidates for Conway to consider.

Based on service parameters, Conway will need five of the larger vehicles with a capacity of 25 or more passengers for the fixed-route service and two of the smaller vehicles with a capacity of 12 passengers for the complementary paratransit service.

The vehicles will all need to be purchased before service can commence and should be scheduled for delivery in the early summer of 2011 (assuming service starts in July 2011). In addition, a bicycle rack should be purchased at the same time for each new vehicle. Each larger vehicle is estimated to cost approximately $131,250 in 2009 dollars. Each smaller vehicle is estimated to cost $91,825 in 2009 dollars. In this implementation chapter, vehicle costs were inflated by five percent—from $125,000 and $87,451, respectively—based on the availability of updated information. Each bike rack is estimated to cost $1,200. The total of all vehicles and equipment is estimated at $848,300.

[1] LSC has conducted focus group work in Illinois. Twelve vehicles were viewed by citizen groups in four and rated for their attractiveness. Seven of the twelve were rated as being among the top several choices in at least one of the communities. The final hybrid vehicle is added as an emerging technology option for Conway.

Table XII-11
Sample of Potential Vehicles for Conway

Characteristic	Dallas Smith Friendly Bus	General Coach EZ-Trans	Ameritrans Spirit of Mobility	Glaval Bus Easy On	Azure Dynamics AZD Balance Hybrid Electric
					
Length	24' - 27'	26' - 36'	28' - 30'	26' - 30'	24' - 27'
Chassis	Ford F-450	International 3200	International 3200	Custom	Ford E-450
Low-Floor	Yes	Yes	Yes	Yes	No
Accessible	Yes	Yes	Yes	Yes	Yes
Seating Capacity	14-20	13-33	19-33	19-28	16-20
Wheelchair Positions	2	3	2	2	2

Source: LSC, 2010 from manufacturer brochures and websites.

MAINTENANCE FACILITY

The following is an assessment of the existing maintenance capabilities of the City of Conway Fleet Maintenance Department.

Organization and Staffing

The Fleet Maintenance Department is under the City of Conway Sanitation Department. This department is tasked with maintaining City vehicles and equipment that are not part of the Street Department[2] or Conway Public Schools. The Sanitation Director oversees the department and the Sanitation Shop Manager is in charge of supervising the maintenance functions of the department. There are nine mechanics who work under the Fleet Maintenance Department. Five of those mechanics are "Senior" mechanics. Senior mechanics are ASE-certified mechanics and are tasked with more difficult maintenance jobs. The junior mechanics will assist the senior mechanics and also perform preventative maintenance tasks such as changing fluids and filters and rotating tires. All staff is required to submit to a drug and alcohol screening upon initial hire. There are also random screenings performed as well as testing under reasonable suspicion.

Facilities

The maintenance facility was constructed around 1990 and is located northwest of downtown Conway on State Highway 64 West. Figures XII-2 and XII-3 show the exterior and interior of this facility. The facility shares the property with the City Recycling Facility as well as the City Landfill. The property has gates that are locked after hours, blocking access by vehicle. The property can be accessed after the maintenance facility is closed using a key code that will open the gate. The property does not have fencing. Staff reported no incidences of vehicle or property vandalism on the property, but did mention that they have had individuals trespass onto the property with four-wheelers riding in the landfill. There are plans to install video cameras on the property.

[2] The Street Department maintains its own vehicles and has a facility located at 100 E. Robins Street.

Figure XII-2: Conway Fleet Maintenance Facility

Figure XII-3: Maintenance Facility Interior

The Fleet Maintenance Facility consists of office space for department staff and six repair bays, three on either side. One side of the facility is set up for repairs on smaller City vehicles, and the other is set up for repair and maintenance of the City's sanitation vehicles and other heavy equipment. Each bay has a vehicle lift and a ceiling clearance that ranges from 16 feet near the exterior

wall to 20 feet at the center. There are no repair pits in the facility. The property has ample parking for staff vehicles in addition to the City vehicles that are parked overnight. The parking area currently consists of a gravel lot, but there are plans to have the lot paved at a yet-to-be-determined future date. There is a covered wash facility with a power washer and shop vacuum on-site. A diesel fueling station is located next to the building on the heavy-vehicle repair side. A pad has been constructed to install a gasoline fueling station next to the existing diesel fueling station. Vehicle fueling is tracked using the Phoenix system. This system does not track mileage, but does require a unique "key" identifier that accompanies each vehicle and is required to operate the fueling system. The fuel tracking system will not be initially employed on the new gasoline fueling station.

Repair Staff, Training, and Operations

As mentioned above, there are a total of nine mechanics who are tasked with performing maintenance on the approximately 200 vehicles the fleet maintenance department oversees. This figure does not include the Shop Manager. Five of the mechanics are considered senior mechanics and have received ASE certification. Four of the mechanics are junior mechanics. These mechanics have not received certification yet, perform less complicated repair tasks, and assist the senior mechanics. The goal is to have all staff certified. This goal is dependent on having funding available to pay for the certification courses.

The Fleet Maintenance Department is equipped and trained to perform routine vehicle maintenance activities such as:

- Vehicle servicing – fueling, fluid checking, and cleaning
- Preventative maintenance inspections
- Diagnostic (running) repairs
- Minor body work
- Radio installs
- Tire installs

For most other repair work, Conway uses outside vendors. This work includes:

- Engine and transmission rebuilds
- Frame straightening

- Painting
- Glass repairs/installs

The individual vehicle operators are tasked with washing their vehicle, cleaning the interior, fueling, and checking and topping vehicle fluids.

The maintenance garage is staffed Monday through Friday. On Saturdays there is staff available to be called in as needed during the hours specified below. These hours can be extended if there are vehicles that need to be repaired. The current hours of operation are shown in Table XII-12.

Table XII-12
Maintenance Facility Hours

Day	Hours
Monday - Friday	6:00 am – 4:30 pm
Saturday	7:30 am – 4:00 pm (On-call)

Outside of regularly scheduled hours, senior staff can be contacted by cellular telephone and a decision can be made on whether an emergency repair is required or whether the vehicle should be towed back to the maintenance facility.

There are two mobile repair vehicles (see Figure XII-4)—and a third on order—that are capable of responding to maintenance requests in the field. These vehicles are equipped with a variety of tools designed to handle a multitude of potential repair issues.

Figure XII-4: Mobile Repair Vehicle

Repair work is assigned based on the vehicle requiring repair and the length of time required to complete the repair. Police and other emergency vehicles will receive first priority to ensure that those departments can continue to perform their required duties. Secondly, repairs that can be made in a relatively short amount of time will be completed over repairs that may require a vehicle to sit out-of-service while it waits for a part.

The Fleet Maintenance Department uses ALLDATA as their fleet management and maintenance software. This software is capable of allowing staff to observe repair trends for vehicles and produce and track work orders for vehicle repairs. The software is not used to notify staff about preventative maintenance (PM) intervals. There is no system in place for regularly tracking vehicle mileage electronically. PM intervals are placed on windshield decals, and it is the responsibility of the driver of the vehicle to monitor the mileage and bring the vehicle in for PM.

The City of Conway is transitioning its accounting software to QuickBooks in 2010. The Sanitation Director stated that if QuickBooks cannot be configured to perform all the maintenance and fleet management operations required, they will either continue using their existing software or find software that could be integrated. The mechanics do not currently perform any task on the computer. There is a staff member who creates work orders and enters information into

the computer system based on what the mechanic submits. There are plans to construct a room near the garage bays where this individual would be stationed so that they could be closer to the mechanics and create work orders in a more timely fashion.

Addition of Transit Repairs

Based on a discussion of the vehicle requirements being considered for implementation of transit service for Conway, the Sanitation Director did not feel additional staff would be required to maintain a transit fleet of three to seven vehicles. The recognized standard in the transit industry for determining the number of staff required to maintain a transit fleet is three buses per maintenance employee, or 20 to 24 labor-hours per bus per 1,000 miles of service provided[3].

Based on a review of the existing maintenance operations, the addition of transit vehicles to the City fleet should only require minor changes to the existing maintenance function. The existing maintenance functions that are performed in-house could be performed in-house on the transit vehicles. Major repairs would be contracted out as they are done now on existing equipment. Development of a good preventative maintenance policy should be a top priority. Maintenance intervals are typically set by the vehicle manufacturer as well as the items that should be inspected. These inspections should be done on-time and include not only recommended items but also allow an opportunity to thoroughly inspect all aspects of the vehicle. Performing regular, periodic inspection of all vehicle systems will ensure vehicles are operating smoothly and allow for early detection of potential problems. A good PM program should include at least weekly monitoring of vehicle mileages by the maintenance supervisor to ensure vehicles are being serviced in line with the recommended service interval.

Required changes would be developing a policy and procedure for daily cleaning of the transit vehicles. This could be accomplished by the operators themselves, the maintenance staff, or a combination of the two. This cleaning should involve daily power washing of the exterior using the existing wash barn (shown in Figure XII-5). In addition, sweeping and mopping of the interior should be done

[3] National Cooperative Transit Research and Development Program, Report 11: Small Transit Vehicles How to Buy, Operate, and Maintain Them, 1985.

daily as well. Additional detailed cleaning may be required based on environmental factors (rain or snow) and cleaning graffiti on a regular but less frequent basis. Considerations that should be given to the cleaning of transit vehicles are the collection of the waste water used in the exterior cleaning. This water will typically contain contaminants washed from the vehicle body, chassis, and engine. Proper collection of this water ensures that this waste doesn't harm the surrounding environment. Some transit systems even have taken the step of installing systems that filter and reclaim the water to be used again in future washes.

Figure XII-5: Wash Barn

The largest improvement will be the creation of a secure facility to deposit and store fare revenue collected by the system. Currently, the Sanitation Department does deal with cash revenue collected through the fees associated with accessing the landfill. These fees are collected, reconciled, and deposited daily. This can be accomplished because the landfill operates on the same schedule as the Sanitation Department office personnel. The transit system is proposed to operate past the scheduled hours of the Sanitation Department as well as on Saturdays and Sundays. This difference in hours will require the construction of a secure room where the operators can deposit the fareboxes at the conclusion of their shift through a drop box. This room should be designed so that it can be accessed only by assigned office staff during normal office hours.

Reconciliation of the fares can be completed and deposits made in this secure room. In addition to the construction of the room, a policy will need to be developed outlining the process of drivers depositing fares, reconciliation, and subsequent deposit to the bank. The director did not feel this would be a difficult task to accomplish. Overall, the Sanitation Director and the Sanitation Shop Manager indicated that whatever improvements were required to operate the transit maintenance function could be accommodated.

The implementation plan assumes that dispatching will occur over the City's radio system. Dispatching and scheduling will require staff to take reservations for paratransit service and to schedule the trips. Cost estimates include the dispatching function. Scheduling software has not been included for the initial implementation because only one paratransit vehicle will be in operation and specialized software will not be required.

Other considerations that should not necessarily impact staffing requirements are creation of policies regarding daily vehicle inspections. This is typically accomplished by the drivers themselves. These regular inspections not only ensure that the vehicle is in safe operational order, but also allow for the early detection of possible defects. An important aspect of the daily vehicle inspection is good communication between the operators and maintenance staff. This can be accomplished by requiring the operators to submit a copy of the daily inspection form to the maintenance department. This will allow maintenance staff to review the forms and indentify potential problems. It is also important to keep accurate records of all aspects of the vehicle. This includes all defects and work performed throughout the history of the vehicle, warranty claims, road calls, and accident information. The records allow the maintenance department and transit manager to estimate budgets, identify trends, and analyze vehicle performance.

BUS STOP INSTALLATION

The major facilities that will be necessary to operate the Conway bus service are bus stops and their associated signs and amenities. All bus stops must be ADA compliant and include a 5-foot by 8-foot passenger loading area. Signage is of primary importance to help potential riders locate a stop and also serves as additional advertising. Standard signage at every stop should include:

- Identifying sign – should be easily visible from the roadway to passing vehicles and clearly identifiable with the Conway bus service. Near the UCA campus, the sign should be easily distinguishable from the UCA parking shuttle signs.
- Schedules – full schedules at each stop allow passengers to know how long they have to wait and make new passengers more likely to use the service (draft schedules have already been developed).
- Route map – full map of the route with major stops highlighted.

Some stops will require additional amenities such as trash cans, benches, and shelters. The criteria used to determine where these amenities are appropriate typically include:

- High levels of boardings
- Near medical facilities
- Near concentrations of senior citizens

For the initial implementation of this new transit service, it is recommended that bus stop signs be installed, and that benches and shelters be phased in some time after the second year of service. As the transit service becomes more established in the community, the stops should be re-examined on a periodic basis to determine when upgrades of benches or shelters are appropriate.

Many of the stops that will eventually warrant upgrades would be installed in private locations including shopping centers, industrial complexes, and at medical facilities. For each stop warranting an upgrade, the City of Conway will need to negotiate with the property owner(s) to determine the specific site for a stop. Wherever possible, Conway should encourage property owners to pay for a portion of the cost of the bus stop, bench, shelter, or other amenities as a beneficial service that can be offered to their customers. This may be especially important at locations that are expected to have significant levels of ridership.

Shelters and benches are not currently in the implementation budget. The City of Conway will need to make a determination, after implementation, about the timing/scheduling of bench and/or shelter installation. For budgeting purposes, bench installation requires about $1,500 on average, with shelters costing closer to $15,000.

Bus stop identification signs must be installed for the start of service during the first year. Other improvements, including shelters and benches should be prioritized by boarding activity (stops with higher boarding levels should be completed first).

One approach which has been used in several communities is to have a local advertising company install and maintain the bus stop improvements. Transit systems have been able to fund the improvements and obtain additional revenue in exchange for advertising space on the bus stops.

Access to bus stops is another important issue that must be addressed for all bus stops, no matter how many daily boardings occur there. Passengers must be able to access the bus stop easily and safely or many potential riders will choose not to use the service. Sidewalks must connect from the local streets to every bus stop, and construction will be necessary wherever these connections are currently missing. A marked crosswalk should also be provided within 300 feet of every bus stop, as passengers will be required to cross the street at least once during a round-trip. These improvements to the pedestrian network will make accessing transit easier and safer, should help to improve ridership on the Conway bus service, and should be completed as soon as local funding allows. These improvements are also necessary to meet the requirements of the Americans with Disabilities Act (ADA).

Bus Stops at Roundabouts

Conway is completing the installation of seven roundabouts by the end of 2010. Several are in place or already under construction as of late 2009. Of those seven planned roundabouts, three are along the path of the proposed transit routes:

1. Harkrider at Winfield (Blue Route),
2. Harkrider at Siebenmorgen (both Blue and Red Routes), and
3. Siebenmorgen at Bob Courtway (Red Route).

Based on existing roundabouts in other locations around the country, it is recommended that bus stop signs be placed approximately 100 feet from the outside edge of the departing lane(s) pedestrian crosswalk. This allows room for traffic to clear the roundabout itself and have time and space (distance) to move around a bus stopped to pick up passengers. Figure XII-6 shows a plan view of a typical layout while Figure XII-7 shows an actual roundabout with 90-feet between the bus stop sign-post and the crosswalk in the background of the picture.

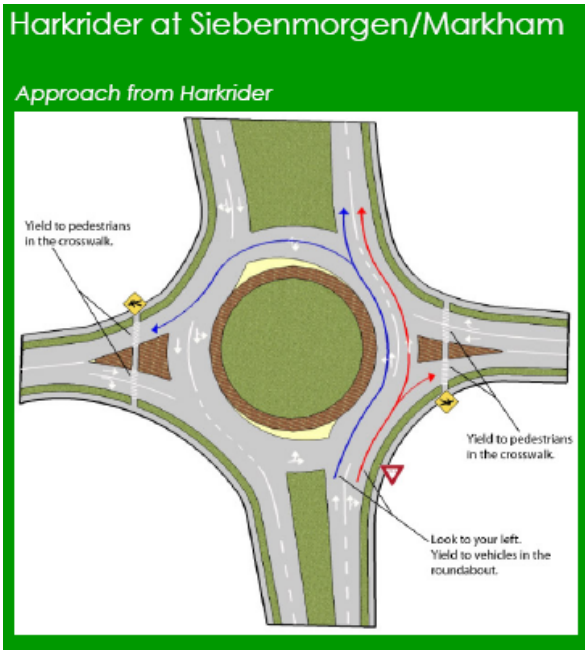


Figure XII-6: Roundabout Layout

Figure XII-7: Roundabout

OPERATING AND CAPITAL BUDGET

Table XII-13 shows how the operating parameters from earlier in this chapter are translated into operating and maintenance (O&M) costs. This table includes the costs for both the Blue and Red fixed routes as well as the complementary paratransit service required to meet the Americans with Disabilities Act provisions for mass transit. The information in this table is input into the six-year implementation plan budget.

Table XII-13
Base Scenario: 30-Minute Frequency At All Times

Day	Time	Daily	Weekly	Yearly
Revenue-Hours - Red + Blue Fixed Routes				
M-Th	6:30 am - 7:30 pm	52	208	10,584
Fri	6:30 am - 11:00 pm	66	66	3,366
Sat	8:30 am - 11:00 pm	58	58	3,016
Sun	9:00 am - 4:00 pm	28	28	1,456
	Totals	204	360	18,422
Revenue-Hours - Complementary Paratransit				
M-Th	6:30 am - 7:30 pm	13	52	2,652
Fri	6:30 am - 11:00 pm	16.5	16.5	842
Sat	8:30 am - 11:00 pm	14.5	14.5	754
Sun	9:00 am - 4:00 pm	7	7	364
	Totals	51	90	4,612
O&M Costs - Red + Blue Fixed Routes				
M-Th	6:30 am - 7:30 pm	$2,818	$11,274	$573,653
Fri	6:30 am - 11:00 pm	$3,577	$3,577	$182,437
Sat	8:30 am - 11:00 pm	$3,144	$3,144	$163,467
Sun	9:00 am - 4:00 pm	$1,518	$1,518	$78,915
	Totals	$11,057	$19,512	$998,472
O&M Costs - Complementary Paratransit				
M-Th	6:30 am - 7:30 pm	$791	$3,166	$161,454
Fri	6:30 am - 11:00 pm	$1,005	$1,005	$51,231
Sat	8:30 am - 11:00 pm	$883	$883	$45,904
Sun	9:00 am - 4:00 pm	$426	$426	$22,160
	Totals	$3,105	$5,479	$280,748
O&M Costs - Total System				
M-Th	6:30 am - 7:30 pm	$3,610	$14,439	$735,107
Fri	6:30 am - 11:00 pm	$4,582	$4,582	$233,668
Sat	8:30 am - 11:00 pm	$4,026	$4,026	$209,371
Sun	9:00 am - 4:00 pm	$1,944	$1,944	$101,076
	Totals	$14,162	$24,991	$1,279,221

Source: LSC, 2010.

Tables XII-14 and XII-15 present the detailed six-year implementation budget for the Conway transit services. The first table shows all costs in constant 2009 dollars, with the second showing the inflated year-of-expenditure (YOE) costs.

This budget provides line items for both fixed-route and paratransit service by day of the week. A marketing budget line item has been added. This detail provides Conway the managerial capability to make decisions about segments of service and their costs, relative to overall City budget availability.

This budget is based on the premise of initiating service at the beginning of the academic calendar in July 2011.

To initiate service in July 2011, the City of Conway will need to make a general fund allocation, increase property taxes, and/or use oil and gas severance money dedicated to transit to cover the local match for both capital and operating expenses. The Federal Transit Administration (FTA), through the Arkansas Highway and Transportation Department, would provide 80 percent of capital funding and 50 percent of operating funding through the Section 5311 program.

In addition, part of the local matching dollars will come from the University of Central Arkansas through a combination of student fees and savings from reductions to the UCA shuttle program. The UCA shuttle's budget is approximately $300,000 for the regular academic year, split about one-third for the parking shuttle and two-thirds for the shuttle to Bear Village student housing. Students are accustomed to between 10- and 15-minute frequencies on the Bear Village shuttle. It is proposed that the City's Blue Route would assume the function of the Bear Village shuttle, but operate at 30-minute frequencies. UCA may choose to supplement the 30-minute service for portions of the day to meet student expectations. Taken together, it is estimated that UCA could save in the range of $100,000 to $150,000 after the implementation of the Blue Route. A $240,000 per year target is estimated for the continuing contribution by students.

Table XII-14
Six-Year Implementation Budget - 2009 Constant Dollars

	2011	2012	2013	2014	2015	2016	Six-Year Total
EXPENDITURES							
O&M Costs							
Fixed Routes - Weekday	$378,045	$756,090	$756,090	$756,090	$756,090	$756,090	$4,158,495
Fixed Routes - Saturday	$81,734	$163,467	$163,467	$163,467	$163,467	$163,467	$899,070
Fixed Routes - Sunday	$39,458	$78,915	$78,915	$78,915	$78,915	$78,915	$434,034
Complementary Paratransit - Weekday	$106,342	$212,684	$212,684	$212,684	$212,684	$212,684	$1,169,764
Complementary Paratransit - Saturday	$22,952	$45,904	$45,904	$45,904	$45,904	$45,904	$252,469
Complementary Paratransit - Sunday	$11,080	$22,160	$22,160	$22,160	$22,160	$22,160	$121,882
Marketing Program	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$90,000
Subtotal O&M	*$654,610*	*$1,279,221*	*$1,294,221*	*$1,294,221*	*$1,294,221*	*$1,294,221*	*$7,125,713*
Capital Costs							
Bus Stop Installation (100)	$18,100	$0	$0	$0	$0	$0	$18,100
Bus Bench Installation (20)	$0	$30,000	$0	$0	$0	$0	$30,000
Bus Shelter Installation (14)	$30,000	$0	$60,000	$60,000	$60,000	$0	$210,000
Bike on Bus Racks (7)	$8,400	$0	$0	$0	$0	$0	$8,400
Fixed-Route Buses (5)	$328,125	$328,125	$0	$0	$0	$0	$656,250
Paratransit Buses (2)	$91,824	$91,824	$0	$0	$0	$0	$183,647
Subtotal Capital	*$476,449*	*$449,949*	*$60,000*	*$60,000*	*$60,000*	*$0*	*$1,106,397*
Total All Expenditures	*$1,131,059*	*$1,744,169*	*$1,354,221*	*$1,354,221*	*$1,354,221*	*$1,294,221*	*$8,232,110*
REVENUES							
Federal Revenues							
FTA 5311 - Capital @ 80%	$381,159	$359,959	$0	$0	$0	$0	$741,118
FTA 5311 - Operating @ 50%	$314,805	$609,610	$0	$0	$0	$0	$924,415
FTA 5307 - Capital @ 80%	$0	$0	$48,000	$48,000	$48,000	$0	$144,000
FTA 5307 - Operating @ 50%	$0	0	$590,000	$590,000	$590,000	$617,110	$2,387,110
Subtotal Federal Revenues	*$695,964*	*$969,569*	*$638,000*	*$638,000*	*$638,000*	*$617,110*	*$4,196,643*
Local Revenues							
General Fund Allocation		$103,600	$45,221	$45,221	$45,221	$6,110	$245,373
Property Tax*	$290,095	$370,000	$370,000	$370,000	$370,000	$370,000	$2,140,095
Student Activity Fee	$120,000	$240,000	$240,000	$240,000	$240,000	$240,000	$1,320,000
Fares	$25,000	$60,000	$60,000	$60,000	$60,000	$60,000	$325,000
Advertising	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$5,000
Subtotal Local Revenues	*$435,095*	*$774,600*	*$716,221*	*$716,221*	*$716,221*	*$677,110*	*$4,035,468*
Total All Revenues	*$1,131,059*	*$1,744,169*	*$1,354,221*	*$1,354,221*	*$1,354,221*	*$1,294,220*	*$8,232,111*
Revenues Minus Expenditures	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***$1***

* Note: Council has authority to increase the mill levy without a vote.

Source: LSC and VHB, 2010.

Table XII-15
Six-Year Implementation Budget - Inflated Year of Expenditure Dollars

	2010	2011	2012	2013	2014	2015	Six-Year Total
EXPENDITURES							
O&M Costs							
Fixed Routes - Weekday	$408,108	$848,047	$881,121	$915,485	$951,189	$988,285	$4,992,235
Fixed Routes - Saturday	$88,233	$183,348	$190,499	$197,929	$205,648	$213,668	$1,079,325
Fixed Routes - Sunday	$42,595	$88,513	$91,965	$95,552	$99,278	$103,150	$521,053
Complementary Paratransit - Weekday	$114,799	$238,551	$247,855	$257,521	$267,565	$278,000	$1,404,290
Complementary Paratransit - Saturday	$24,777	$51,486	$53,494	$55,581	$57,748	$60,000	$303,087
Complementary Paratransit - Sunday	$11,961	$24,856	$25,825	$26,832	$27,878	$28,966	$146,318
Marketing Program	$16,193	$16,824	$17,480	$18,162	$18,871	$19,607	$107,137
Subtotal O&M	*$706,666*	*$1,451,627*	*$1,508,240*	*$1,567,061*	*$1,628,177*	*$1,691,676*	*$8,553,446*
Capital Costs							
Bus Stop Installation (100)	$19,539	$0	$0	$0	$0	$0	$19,539
Bus Bench Installation (20)	$0	$33,649	$0	$0	$0	$0	$33,649
Bus Shelter Installation (14)	$32,386	$0	$69,922	$72,649	$75,482	$0	$250,439
Bike on Bus Racks (7)	$9,068	$0	$0	$0	$0	$0	$9,068
Fixed-Route Buses (5)	$354,218	$368,032	$0	$0	$0	$0	$722,250
Paratransit Buses (2)	$99,125	$102,991	$0	$0	$0	$0	$202,117
Subtotal Capital	*$514,336*	*$504,672*	*$69,922*	*$72,649*	*$75,482*	*$0*	*$1,237,062*
Total All Expenditures	*$1,221,002*	*$1,956,299*	*$1,578,162*	*$1,639,710*	*$1,703,659*	*$1,691,676*	*$9,790,508*
REVENUES							
Federal Revenues							
FTA 5311 - Capital @ 80%	$411,469	$403,738	$0	$0	$0	$0	$815,207
FTA 5311 - Operating @ 50%	$339,839	$683,752	$0	$0	$0	$0	$1,023,591
FTA 5307 - Capital @ 80%	$0	$0	$55,938	$58,119	$60,386	$0	$174,442
FTA 5307 - Operating @ 50%	$0	$0	$687,566	$714,381	$742,242	$806,625	$2,950,813
Subtotal Federal Revenues	*$751,308*	*$1,087,490*	*$743,503*	*$772,500*	*$802,627*	*$806,625*	*$4,964,053*
Local Revenues							
General Fund Allocation	$9,542	$145,389	$92,386	$105,349	$118,818	$81,691	$553,175
Property Tax*	$313,164	$415,000	$431,185	$448,001	$465,474	$483,627	$2,556,451
Student Activity Fee	$120,000	$240,000	$240,000	$240,000	$240,000	$240,000	$1,320,000
Fares	$26,988	$67,297	$69,922	$72,649	$75,482	$78,426	$390,764
Advertising	$0	$1,122	$1,165	$1,211	$1,258	$1,307	$6,063
Subtotal Local Revenues	*$469,694*	*$868,808*	*$834,659*	*$867,210*	*$901,032*	*$885,051*	*$4,826,454*
Total All Revenues	*$1,221,001*	*$1,956,299*	*$1,578,162*	*$1,639,710*	*$1,703,659*	*$1,691,676*	*$9,790,507*
Revenues Minus Expenditures	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***	***-$1***

* Note: Council has authority to increase the mill levy without a vote.

Source: LSC and VHB, 2010.

Student activity fees will need to be negotiated with the three colleges. UCA has indicated some initial willingness to convert existing student fees for shuttles toward a general public service on the basis of the Conway fixed routes taking the place of some of the currently provided UCA service. Whether the exchange of service costs and student revenues is considered equal will need to be determined by UCA administrators and the student body. Participation by students of Hendrix College and Central Baptist College could affect the amount of fee needed to meet revenue estimates.

The monitoring program, discussed below, will be essential in assessing performance of the system overall, and especially for tracking revenue objectives. In particular, policy decisions will need to be made about how student activity fees and fares are handled to achieve inflation-driven revenue estimates. If ridership is rising, the need to raise fee amounts and fares will be less pressing. If ridership shows little or no growth from year to year, then fees and fares will need to be increased, either by small amounts annually or by larger amounts periodically (i.e., once every three years). The following performance measure estimates have been updated for the revised routing, ridership, and costs.

30-Minute Headway

- Number of vehicles in maximum service: 4
- Total number of vehicles: 5
- Initial vehicle costs (2009$): $656,250
- Annual operational cost (2009$): $975,600
- Annual hours of service: 18,000
- Annual passenger-trips: 197,300
- Passengers per hour: 11.0
- Cost per passenger-trip: $4.94

Complementary Paratransit

- Number of vehicles in maximum service: 1
- Total number of vehicles: 2
- Initial vehicle costs (2009$): $183,650

- Annual operational cost (2009$): $274,000
- Annual hours of service: 4,500
- Annual passenger-trips: 4,300
- Passengers per hour: 1.0
- Cost per passenger-trip: $63.72

MARKETING PROGRAM

The following information describes the initiation of a marketing program, intended to begin in 2011, in advance of service implementation in July 2011. The marketing program describes materials that will likely need to be developed and provides a strategy for completing these steps. The start-up discussion covers the six months prior to passenger service, and the introductory campaign, the three months prior to and continuing three months after the start of passenger service.

Start-Up Marketing Materials (Six-Month Plan)

It is recommended that Conway begin with a two-month preparation phase to carefully orchestrate the development of support marketing materials.

- Development of creative theme for the bus system.
- Development of logo for the bus system.
- Sample "template" creative options for the system's internal and external use.
- Route map illustration to be used in all marketing.
- Route map design within template.
- Printing of route maps.
- Bus wrap graphics to brand the new service.
- Bus driver polo shirts.
- Production of refrigerator magnets, marker boards, or other specialty items.
- Pull-up banner for shopping areas, senior citizen centers, libraries, and transit facilities (lightweight, eye-catchy, and easy to assemble).
- Design of bus stop signs, bus shelter signs, and bench signage.

- Website layout and graphics.
- Website programming.

Some of these items may be capital expenses and/or amortized over a year.

Introductory Campaign – Public and Media Relations (Six-Month Plan)

Approximately three months prior to the start of passenger service, it is recommended that Conway implement a six-month campaign to relay the route information to the consumer.

- Month 1 – Press and free publicity.
- Months 2 and 3 – Introduce advertising and market saturation.
- Months 4-6 – Maintain the advertising schedule.

Introductory campaign recommendations include:

- Announcement Materials

  To launch the advertising campaign for the Conway bus system, submit announcement materials to community bulletin boards, neighborhood groups, and others before rolling out the introductory campaign. It is recommended to provide posters, route maps, and flyers to government agencies, public and private schools, businesses, hospitals, and retirement homes as indicated by the nature of the new routes being unveiled.

- Press Release, Special PR – program interviews, bulletin boards, neighborhood meetings, etc., press conference expense

  Next, send out a press release announcing the new bus routes, and any additional information that will be necessary to communicate to the community. A press event could also garner free media exposure that will appeal to consumers. Special PR endeavors would include program interviews, bulletin boards, and neighborhood meetings.

- Distribution of route map displays to selected locations.
- Newspaper advertising (local introduction - 3x10 ads) and other print advertising.

  To complement the PR endeavors, we recommend distributing route map displays to selected locations. Also, it is recommended to run newspaper advertisements (local introduction ads), as well as other print publications

located in Conway and Faulkner County. The newspaper advertisements should target the zones that include the three colleges, the Conway Regional Hospital, the Conway Human Development Center, and other local community stakeholders.

- Postcard design, printing, and postcard mailing cost.

  The next phase recommended is a direct mail postcard to residents and business within three-quarters of a mile of each route. This coordinates with posters, maps, and flyers. This will get the route information to consumers in Conway.

- Brochure/handout about the new service with overall routes and printing of the handout; distribution of handout about the new service—select key locations along the route; government buildings, transit locations, libraries, senior citizen facilities, etc.
- Website link research and implementation—link a visual of the route and information about the route to area transit sites, government sites, tourism, and other relevant site locations.

Introductory Media Campaign Recommendations

To brand the campaign to those in Conway, we recommend placing advertisements in newspapers and publications that target the community and the elderly. With this exposure, the new campaign will be branded throughout the community.

- The Log Cabin Democrat
  - Published daily, 7 days a week
  - Recommend 2 column x 4" or 2 column x 5" ads
  - Circulation: 19,000 per issue
- The Echo (Student Newspaper for UCA)
  - Published Weekly
  - Recommend full-page, half-page (6 columns x 10 inches), and quarter-page (3 columns x 10 inches) ads.
  - Circulation: 5,500 copies per issue
  - http://www.ucaecho.net/ads/The%20Echo%20Media%20Kit%20%5BSpring%202007%5D.pdf
- Hendrix College Newspaper

- Central Baptist College News
- El Latino
  - Published Weekly
  - Recommended full-page, three-quarters page, half-page, and quarter-page ads.
  - Circulation: 6,600 copies per issue (500 in Conway)
  - http://www.ellatinoarkansas.com/pdfs/displayrates.pdf

Cost-Saving Measures

As indicated in the marketing plan outline, there is both a "start-up" expense and an introductory campaign expense to educate the public concerning the new bus service. With a new route such as this, transit systems often struggle to find the most cost-effective means of educating the public *and* motivating the public to use a new bus service.

Below are some cost-saving items which can help contain the costs while introducing the route in a way that will motivate residents to want to ride.

1. Build a marketing budget into any grant funding or try for environmental grant funding since the bus service can help reduce air pollution.
2. Split the cost of creative development of materials with other City Departments or stakeholders. This can give a system professional looking materials at a significant reduction in cost.
3. Ask for community support in the form of talk shows, speaking engagements, signs in government buildings, public service announcements, etc.
4. Place media buys with those media outlets which will "bonus" free publicity. This may be in the form of public service announcements, radio promotions during drive time, etc.
5. Use costly radio and/or TV for branding exposure if Conway can afford it. One way to afford to run this advertising is to run shorter radio "traffic sponsorships" or TV IDs or logo sponsorships instead of full run commercials.
6. Ask the area phone book or other reference books to publish the bus route map for free.
7. Ask for free reciprocal links to/from area websites—government websites, tourism, Chamber of Commerce, and local employers.
8. Get professional assistance to "find the editorial angles" that will get the most coverage from Conway press releases and events as Conway announces the service.
9. Make marketing materials more effective by relating them to the initial study phase of the work in Conway. References such as "You asked for it,

you got it" help the public take "ownership" in the bus service, and therefore they are open to the information about it.

10. Make all materials not only educational, but motivational. Make sure to take into account special diversity markets affected.

Accountability

1. **Publicity prior to the route launch**.

Set a timetable to roll out material before the route begins. Make sure this phase is done to produce anticipation for the route to begin.

- People need time to adjust behavioral habits to begin to use the new routes.
- The news media's coverage, speaking venues, and other opportunities are more prevalent when there is an announcement of something upcoming.
- By the time the "introductory campaign" begins, ridership will be solicited. Routes which garner initial support and show immediate success encourage participation from others in the community.

2. **Ridership** during the "Introductory Campaign."
3. **Ridership retention** over the first six months.
4. **Ridership surveys** concerning how they learned about the routes. A single survey can obtain this information and fulfill objectives of the monitoring program. See below for more.

MONITORING PROGRAM

Monitoring should begin immediately when service is initiated. Data collection is essential to evaluate the service performance and to determine if changes should be made in the service delivery. This chapter provides information on data collection, databases, and standard reports which should be prepared. Data to be collected fall into three basic categories—ridership data, on-time performance, and financial.

Ridership

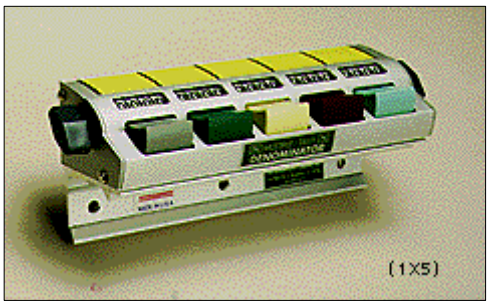
Passenger boarding data should be collected continually. There is a trade-off between data collection efforts and the value of information. It is just as easy to collect too much data as it is to collect insufficient data.

Passenger boardings should be recorded daily by route, fare category, and by trip. One approach is to use Mobile Data Terminals (MDT) with areas to record

each passenger by fare category as they board. Mobile Data Terminals will allow both data and voice communication between operator and dispatcher. It is similar to having an alphanumeric pager on the dashboard. Several successful agencies across the United States have implemented MDTs including Central Ohio Transit Authority, Colorado Springs Mountain Metropolitan Transit, Tri-Met - Oregon, Milwaukee County Transit System, Ann Arbor Transportation Authority, and Montgomery County Transportation Authority. A second approach is to use electronic recording fareboxes. Many transit systems have placed electronic fareboxes on their fixed-route buses. Either of these technologies may be integrated with automated vehicle location systems to record passenger boardings by location.

Passenger boardings can also be accomplished using tally boards on the buses. A sample counter is shown in Figure XII-8. Sufficient buttons are required to record passengers in each fare category. A driver's log sheet should then be used to record the passenger counts at the end of each trip. The drivers do not need to calculate the number of passengers for that trip, but the running total by fare category. As data are entered, the calculation of passengers on each trip can be made. An effective approach is to prepare the driver's log sheet for each of the drivers' runs. This will provide preprinted route and trip information, and the driver will need only to record the date and the passenger count data.

Figure XII-8



Twice each year, a full boarding and alighting count should be completed. If passenger boardings are counted using the MDTs and integrated with Automatic Vehicle Location (AVL), the data can be recorded automatically. If it must be done manually, this is a more intense effort and will require the use of addi-

tional personnel. Passenger counts are recorded for passengers boarding and alighting by stop for a full day. This information records the passenger activity at individual stops and is useful to determine if stops are appropriately placed and what amenities should be provided. If a stop has little or no activity, it would not warrant a bench or shelter, and may not even be appropriate as a designated stop. Data collection forms should be prepared for each route showing the stops and providing space to record the passenger counts. An example used for an existing system is provided. Similar sheets should be prepared in advance for the boarding and alighting data collection.

Time: _____ am / pm

Breckenridge Route

# of carryover passengers: _____

ID	Bus Stop	ON	OFF	W/CH ON	W/CH OFF
34	Frisco Station				
46	Summit Boulevard @ School Road				
89	Main St @ 6th				
94	Granite Street				
50	Ophir Mountain Village				
21	County Commons				
95	Hwy 9 @ Farmer's Korner				
74	Hwy 9 @ Tiger Run				
97	Hwy 9 @ Vienna Townhomes				
13	Hwy 9 @ Breckenridge Rec. Ctr				
18	Park Ave. @ City Market				
6	Park Ave. @ 4 O'Clock Road				
110	Breckenridge Station				
110	Breckenridge Station				
108	Park Ave. @ River Mountain Lodge				
18	Park Ave. @ City Market				
98	Hwy 9 @ Breck Inn				
97	Hwy 9 @ Vienna Townhomes				
74	Hwy 9 @ Tiger Run				
95	Hwy 9 @ Farmer's Korner				
50	Ophir Mountain Village				
21	County Commons				
109	Summit Co Comm. Ctr				
94	Granite Street				
89	Main St @ 6th				
46	Summit Boulevard @ School Road				
34	Frisco Station				

EXTRAS

Finally, an onboard passenger survey should be conducted periodically. We recommend that the initial survey be conducted after service has been operating one year. Following that, passenger surveys should be conducted at least every two years. Survey instruments with questions appropriate for Conway should be developed to collect information about passenger demographics, trip characteristics, and perceptions of the transit service. An onboard survey used in Colorado Springs is provided as an example.

(This page intentionally left blank.)

Guest of Mountain Metro:

Please take a few minutes to complete this survey during your bus ride today. Your answers and suggestions will help us improve service. You may receive more than one survey form today. Thank you!

Mountain Metropolitan Transit

1. Where did you come from before you got on this bus? (*check only one*)

☐ Home ☐ School/College ☐ Shopping/Errands
☐ Work ☐ Doctor/Dentist ☐ Social Visit/Recreation
☐ Other (please specify) _____

2. How did you get to this bus? (*check only one*)

☐ Walking ___ blocks ☐ Having someone drive me ☐ Bicycle
☐ Driving myself ☐ Transfer from _____ Route
☐ Other _____ (please specify)

3. Where did you board this bus?

Address or main cross streets (i.e., Academy & Platte)

_____

3a. How long did you wait for this bus? _____ (# of minutes)

4. Where are you going to now? (*check only one*)

☐ Home ☐ School/College ☐ Shopping/Errands
☐ Work ☐ Doctor/Dentist ☐ Social Visit/Recreation
☐ Other (please specify) _____

5. What is your final destination? Address or main cross streets

_____

6. How will you get from this bus to the place that you are going? (*check only one*)

☐ Walking ___ blocks ☐ Having someone drive me ☐ Bicycle
☐ Driving myself ☐ Transfer to _____ Route
☐ Other _____ (please specify)

7. Was a vehicle available to use on this trip instead of taking the bus?

☐ Yes ☐ No

8. What is the zip code of your primary residence? _____

9. What is the average amount of time you spend on the bus for this part of your trip?

_____ (# of minutes)

10. Have you previously filled out this survey?

☐ Yes ☐ No

If Yes, please stop here. If No, please continue and complete all questions.

11. Is a transfer needed to reach your final destination? ☐ Yes ☐ No

11.a. If yes, how many transfers do you need to reach your final destination?

☐ One ☐ Two ☐ Three ☐ More than three

12. I usually ride the bus ____?_____ days a week. (*check only one*)

☐ One Day ☐ Four Days ☐ Less than once a month
☐ Two Days ☐ Five Days ☐ One -Three Days/Month
☐ Three Days ☐ Six/Seven Days ☐ This is my first time

13. What is the single MOST IMPORTANT reason you ride the bus?

(CHECK ONLY ONE)

☐ Family doesn't have a car ☐ Someone else uses car ☐ Traffic is bad
☐ Parking is a problem ☐ Car trouble/no insurance ☐ I don't drive
☐ Bus is economical ☐ Bus is convenient
☐ Other (please specify) _____

14. Are you a licensed driver and able to drive? ☐ Yes ☐ No

15. How many vehicles in operating condition does your household have?

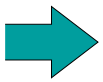
☐ None ☐ One ☐ Two ☐ Three or more

16. Gender: ☐ Female ☐ Male

17. Age in Years: _____

18. What is your primary language? _____

Please Continue on Other Side



19. How do you RATE your present bus service? (*check answers below for each part*)

	Very Good	*Good*	*Fair*	*Poor*	*Don't Know*
Comfort	☐	☐	☐	☐	☐
Service Frequency	☐	☐	☐	☐	☐
Condition of Buses	☐	☐	☐	☐	☐
Transfer Convenience	☐	☐	☐	☐	☐
Schedules	☐	☐	☐	☐	☐
Driver Courtesy	☐	☐	☐	☐	☐
Bus Routes/Area Served	☐	☐	☐	☐	☐
Safety	☐	☐	☐	☐	☐
Convenience	☐	☐	☐	☐	☐
Evening Service	☐	☐	☐	☐	☐
Fares	☐	☐	☐	☐	☐
Sunday Service	☐	☐	☐	☐	☐
Transfer Stations	☐	☐	☐	☐	☐
Website	☐	☐	☐	☐	☐
Overall Service Quality	☐	☐	☐	☐	☐

20. The combined Total Annual Income of all members of my household is:

- ☐ Less than $10,000 per year
- ☐ $10,000 - $24,999 per year
- ☐ $25,000 - $34,999 per year
- ☐ $35,000 - $44,999 per year
- ☐ $45,000 - $54,999 per year
- ☐ More than $55,000 per year

21. For what one purpose do you MOST OFTEN ride the bus? ***(CHECK ONE)***

- ☐ Personal Business/Errands
- ☐ Recreation
- ☐ School/College
- ☐ Shopping
- ☐ Work
- ☐ Other (please specify) _____

22. What is your occupation?

- ☐ Homemaker
- ☐ Laborer
- ☐ Managerial/Professional
- ☐ Production/Craft/Repair/Machine Operator
- ☐ Retired
- ☐ Sales
- ☐ Service Worker
- ☐ College Student
- ☐ Secondary Student
- ☐ Technical/Administration
- ☐ Unemployed
- ☐ Other (please specify) _____

23. What is your ethnicity?

- ☐ American Indian/Alaskan Native
- ☐ Black/African American
- ☐ Pacific Islander
- ☐ Asian
- ☐ Hispanic/Latino
- ☐ White
- ☐ Other (please specify) _____

24. Number of persons over 15 years of age in your household? _____

24a. How many are employed full-time? _____

How many are employed part-time? _____

25. How do you get information about Mountain Metro? ***(check all that apply)***

- ☐ From the driver
- ☐ Bus guide
- ☐ Someone told me
- ☐ Shopping center/store
- ☐ Transfer stations
- ☐ Other _____
- ☐ Newspaper/magazine
- ☐ Bus stop sign/bench/shelter/carousel
- ☐ Schedules
- ☐ Internet
- ☐ Downtown Terminal

26. How did you pay for THIS trip? ***(check only one)***

- ☐ Cash
- ☐ Transfer
- ☐ Pass
- ☐ Other _____

27. With the increasing price of fuel, would you be willing to pay a higher fare?

- ☐ Yes
- ☐ No

27a. What would be a reasonable fare?

- ☐ $1.75
- ☐ $2.00
- ☐ $2.25
- ☐ $2.50
- ☐ $2.50 or More

28. What are your suggestions to improve Mountain Metro service/any other comments?

Completed surveys are entered into a drawing for a FREE 31-day bus pass. To be eligible, please provide the information below.

Name: _____

Address: _____

City: _____ Zip: _____

Phone: _____

metro
MOUNTAIN METROPOLITAN TRANSIT

THANK YOU!!

On-Time Performance

With the start of the new system, it will be important to monitor on-time performance. An on-time performance goal should be established. For instance, an attainable on-time goal of 95 percent for the service may be considered for start-up. A recommended on-time window for fixed-route systems is not earlier than the earliest scheduled pick-up time and no more than five minutes after the scheduled time. Minor adjustments may be needed to routes to ensure that schedules and headway adherence can be maintained.

To record on-time performance, drivers should report actual arrival and departure times at designated bus stops along the routes and at the end of each trip. This information can be tabulated manually by the driver or radioed into a dispatcher. It should be emphasized that drivers should not leave prior to a scheduled stop time in order to make up time along a route. Leaving early could cause riders to miss a bus.

The dispatcher or other transit office staff should then record this information so that the number of trips running late can be determined. Again, this capability could be integrated with the MDT and database system so that the data are entered directly by the driver. This effort should continue for the first three months of service. After that, on-time data should be checked randomly to ensure that performance remains acceptable.

Financial Data

Operating cost data should be tracked and monitored monthly. Cost accounts should be established for operators' wages and benefits, administration, maintenance, operating costs, and other overhead. Actual costs should be compared with budget line items to monitor system financial performance.

Database Format

Several options are available for storing the data. The recommended approach is to set up databases in Microsoft Access or SQL to record passenger data. A separate database should be set up for routine passenger data and a second for the boarding and alighting counts.

If the buses are equipped with Mobile Data Terminals (MDT), passenger count data can be entered directly into the database by the driver. The touch screen capability will allow the driver to record passenger boardings at each stop. This, combined with Automatic Vehicle Location systems, can record the data automatically by stop, eliminating the need for separate boarding and alighting counts. Similarly, drivers could report their arrival at key points via the MDT, and the time could be recorded automatically into a database for on-time performance. These capabilities should be programmed into the new software capabilities as they are implemented.

Onboard survey data can be entered into a database such as Access or a spreadsheet program such as Excel. Specialty programs are also available for survey data entry and analysis.

Standard Reports

Conway should generate monthly performance reports. The report should include performance data for the current month, the same month in the previous year, year-to-date performance, and the prior year-to-date performance. Information which should be reported includes passenger boardings, passengers per revenue-hour, total passengers by fare category, and system passengers per revenue-hour. Financial information should be reported including the operating cost and the cost per passenger. The average fare should be calculated and reported based on fare revenue and passenger counts.

Quarterly reports should be considered for providing recent trends and interim performance data to elected officials, the public, and other stakeholders. Additionally, an annual report should be compiled and presented. The information for these reports can be easily generated from the databases and the accounting system.

In addition to these internal reports, Conway will be required to submit reports to the Arkansas Highway and Transportation Department for the FTA Section 5311 program. Funding through the FTA Section 5307 program will require reporting to the National Transit Database.

Recommended Performance Measures

Transit performance measures serve as a guide to find out how a transit system performs. Performance measures define the type of data to be collected and give the tools necessary to identify transit system deficiencies and opportunities.

Criteria for selection of performance measures include:

- Be measurable.
- Have a clear and intuitive meaning, so that it is understandable to those who will use it and to non-transportation professionals.
- Be acceptable and useful to transportation professionals.
- Be comparable across time and between geographical areas.
- Have a strong functional relationship to actual system operations so that once changes occur in system operations, changes to the system can readily be determined.
- Provide the most cost-effective means of data collection.
- Where appropriate, be based on statistically sound measurement techniques.
- Be consistent with measures identified for other systems.

The following performance measures are recommended for the Conway bus system.

Passengers/Hour: Number of total monthly and annual passengers divided by the corresponding revenue-hours. If mobile data terminals are used, it is also suggested that data be analyzed, not only at the monthly level, but also weekday as compared to weekend day.

Number of Trips by Purpose: Indicator of the service being provided. Particularly useful if work trips can be related to access to employment, prevention of welfare, etc. Data for this category should be collected from onboard passenger surveys.

Number of Trips by Passenger Type or Fare Category: The number of trips by passengers who are elderly, have a disability, or are youth. This may be collected through onboard passenger surveys or based on the number of passengers using each fare category.

Number of Wheelchair Trips: Often useful for political purposes. Could also be expressed as the ratio of wheelchair trips to total trips which can also be combined with measures of efficiency/effectiveness—i.e., a low passenger/hour ratio may be the direct result of a high percentage of wheelchair-trips.

Cost per Passenger: The total cost divided by the number of passengers. This indicates the actual cost to provide each passenger-trip.

Subsidy/Passenger: Total cost less fares divided by the number of passengers. A good indicator of the public cost of providing service, better than farebox recovery ratio. This is a measure of cost-effectiveness.

Cost/Hour: Annual operating cost divided by the number of revenue-hours. Good measure of efficiency.

Cost/Mile: Annual operating cost divided by the number of revenue-miles. Good measure of efficiency.

Administrative Cost Ratio: The system administrative cost divided by the operating budget expressed as a percent. Good indicator of administrative over-head.

On-Time Performance: The percentage of trips which are on time as defined by the standard established by Conway.

Late Trips: The number of trips which are late by more than five minutes, but less than 10 minutes.

Accidents/1,000 miles: Measure of driver safety. Accidents must be defined as a standard.

Average Distance Between Breakdowns: This measure is intended to track goals for preventive maintenance and to help inform decisions about vehicle replacements, including when it is time to replace and possibly which vehicle make/model have done the best.

Appendix A: Transit-Friendly Checklists

TRANSPORTATION
CONSULTANTS, INC.

Appendix A

Healthy Neighborhood Development Supporting Transit

CHECKLIST FOR ALL REVIEW PROJECTS. This transit checklist should be used to evaluate the accessibility of a development to transportation by local Review Boards. Development plans can be critiqued by answering the questions on the following checklist. These questions are designed to receive a "YES" response if the development will accommodate transit vehicles and provides access to public transportation. If a "YES" response is not received, the Review Boards should further review the appropriate area and provide reasonable transit friendly recommendations for the project.

❑ Do the roads within and around the development incorporate the following features to make the development accessible by public transportation?

- ✓ Intersection radii for driveway and intersections designed for a 53-foot outside turning radius.
- ✓ Roadway grades that are 3% or less.
- ✓ Roadway pavement should be constructed to handle vehicles with loads of 20,000 lbs. per axle.
- ✓ Bus loading pads should be designed with a minimum 8-inch portland cement concrete jointed reinforced pavement and a 4-inch subbase of stabilized granular material.
- ✓ Lane widths of 12-feet.
- ✓ Curb heights of 6-inch or higher.

❑ Are residential developments designed with a central collector street that provides access for transit vehicles?

❑ Have bus stop locations near the development been identified?

❑ Are paved passenger waiting areas provided at all near-side corners of collector and arterial street intersections?

❑ Are passenger amenities (shelters, benches, adequate lighting, bicycle facilities, and landscaping) provided at bus stops?

❑ Are transit stops located within one-quarter mile (one-half mile in low density developments) or less of all buildings within the development?

❑ Have bus turnouts, berths, turnarounds and/or park-and-ride facilities been incorporated into appropriate roadway or development designs?

❑ Do pedestrian walkways provide a direct path from building entrances to transit stops?

❑ Are pedestrian walkways and bicycle routes located along the development's perimeter streets? Do they lead directly to building entrances?

❑ Are walkways, curbs, bus stops, building entrances, parking areas, and transit facilities designed for the mobility limited?

❑ Do office and industrial developments over 25,000 square feet have lobbies designed with passenger waiting areas?

❑ Are retail, office and industrial buildings located within 150 feet from transit service?

❑ Is adequate lighting provided at bus stops, passenger waiting areas and along pedestrian walkways?

❑ Are 5% of the parking spaces near the primary building entrance from the parking lot designed for vanpool/carpool vehicles?

❑ Do parking spaces for the mobility limited conform to ADA regulations?

❑ Are parking spaces for the mobility limited located adjacent to the primary building entrance from the parking lot?

US DOT, Guidelines for Transit Sensitive Suburban Land Use Design, July 1991.

Good Practices for Transit-Supportive Development

FTA, Transit Supportive Development in the United States, 1993

Land Use

- Mix transit-compatible land uses on single sites and near transit stops. Mixes may take the form of first-floor retail with office and residential above, or it may involve integrating housing, office, retail, industrial, and recreational uses over a larger area.

- Encourage densities that can support transit. Some generally agreed-upon thresholds are:

  Residential Densities
  - ✓ At least 7 units per acre is necessary to support bus service every 30 minutes;
  - ✓ At about 30 units per acre, bus service every 10 minutes becomes possible.

  Employment Densities
  - ✓ The threshold for employee-based local bus service is approximately 50-60 employees per acre when the total employment base is 10,000 or more;
  - ✓ Floor-to-area ratios (FAR) should exceed 2 to justify frequent service.

- Site high-density development close to transit stops and routes. Densities should gradually decline with distance from the stops, and non-transit-compatible (low intensity) should be located away from transit stops.

- Situate new developments along transit routes in existing urban or suburban activity centers. These centers should be mixed-use and transit-oriented in nature (or they should be gradually converted if they are not).

- A quarter-mile is usually the maximum distance that a person will walk to a transit stop; thus, new developments should be located within a quarter-mile of a transit stop, and preferable much closer where possible.

Site Design

- Minimize the distance between a main building entrance and the nearest transit stop. There should be a direct, paved pedestrian route from the stop to the entry.

- Retail and office buildings should be located near the roadway (i.e., setbacks should be minimized) with parking in the back or on the side.

- Pedestrian-oriented retail uses should be located along the roadway.

- Gridiron, or modified grid, street patterns are preferred to cul-de-sac or curvilinear streets. Street systems should have clear functional hierarchy, including local, collector, and arterial streets.

- Connect neighborhoods and transit stops with direct pedestrian walkways. Where soundwalls surround a neighborhood, the wall surface should be staggered to create entrance/exit points. In the case of a cul-de-sac, walkway easements should be used to shorten the distance to nearby bus stops.

- Configure streets to allow for through and efficient movement of buses; avoid cul-de-sacs, branch roads, and excessive circuity.

- Abundant free parking should be discouraged. Walking distances from parking facilities to buildings should be no closer than the nearest transit facilities.

- All buildings should be oriented toward transit stops. Front and rear lot setbacks should be modest.

- Non-connected, adjacent development parcels should be linked by new roadways when possible.

Pedestrian and Transit Facilities

- All geometrics on roads serving a development should be designed to accommodate transit. Special attention should be given to turning radii, road widths, and pavement depths where future bus routes are expected.

- To encourage walking, there should be generous landscaping, paved walkways, and safe street crossings including pedestrian refuges in raised medians on multilane streets.

- Link all buildings and transit stops with continuous sidewalks. Sidewalks should abut all roadways.

- Bike racks, lockers, and showers should be made available at work sites.

- Transit shelters and other transit stop facilities (i.e. route information stands, trash cans, and benches) should be appropriately sited.

- Locate bus stops at least every one-quarter mile. Also locate new developments within one-quarter mile of bus stops. Often one-quarter mile is treated as the maximum walking distance to a transit stop, although the more realistic 500-1,000 foot maximum walk for bus transit is sometimes used.

- All buildings, walkways, and transit facilities should be accessible.

- Give transit passenger safety and security a high priority.

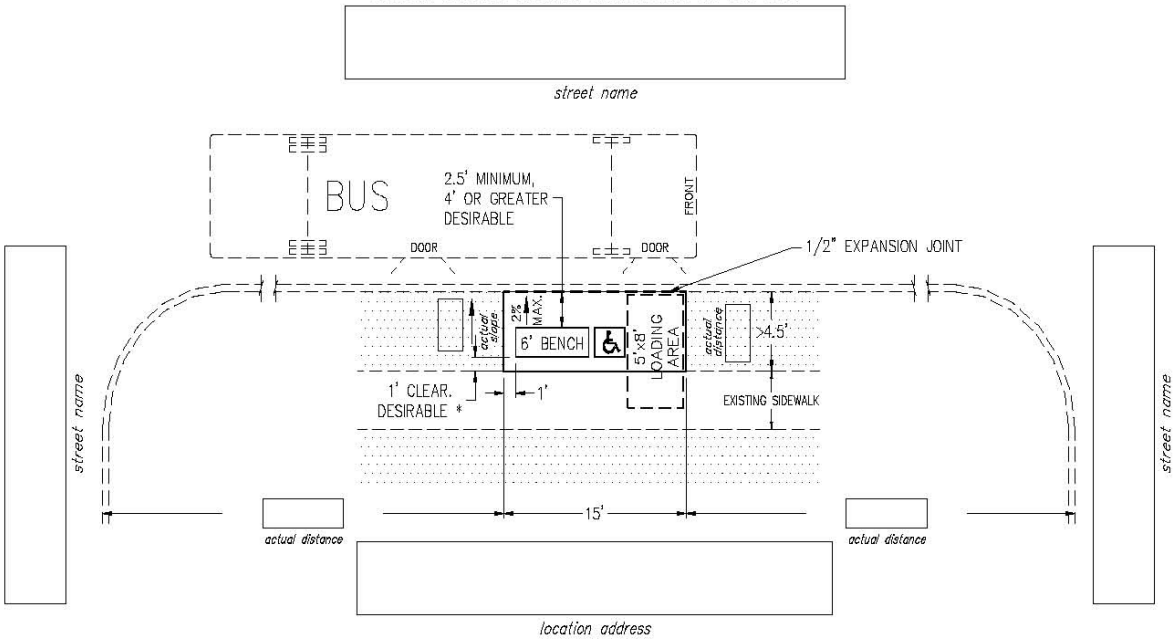
Appendix B: Bus Stop and Facility Diagrams

TRANSPORTATION
CONSULTANTS, INC.

B-1

Typical Bus Bench Placement

FOR BUS STOPS WITH DETACHED SIDEWALKS AND AN AREA
BETWEEN CURB AND SIDEWALK GREATER THAN 4.5 FEET WIDE.



* IF EXISTING SIDEWALK IS ALSO A BIKE TRAIL, THEN A 3' CLEARANCE MUST BE PROVIDED BETWEEN EDGE OF SIDEWALK AND BENCH.

ALL NEW SIDEWALK AND BENCH PADS SHALL BE A MINIMUM OF 4" THICK, 4000psi CONCRETE.

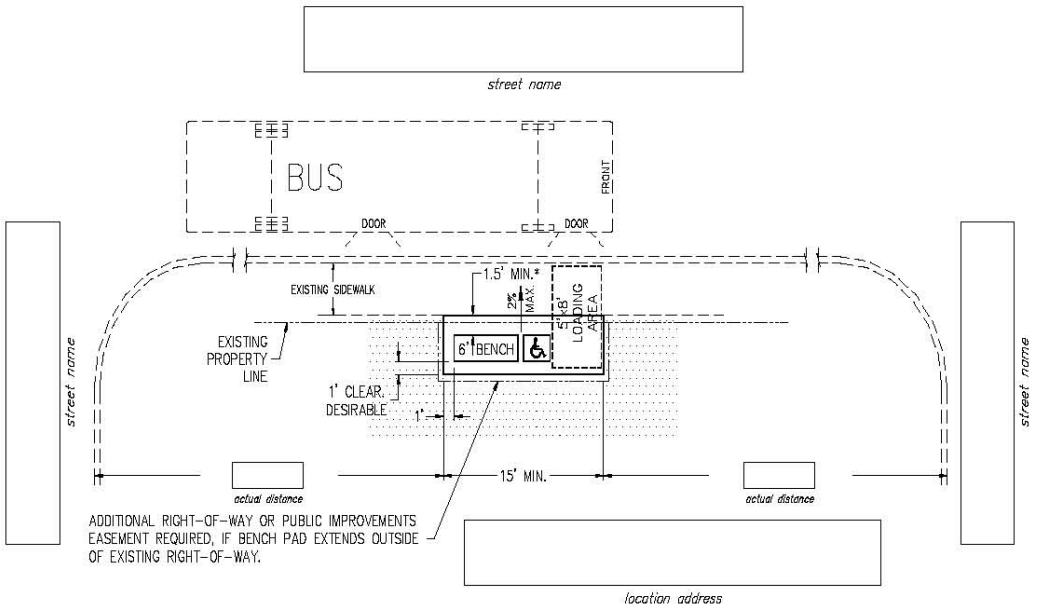
ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

TRANSPORTATION CONSULTANTS, INC.

B-2

Typical Bus Bench Placement

FOR BUS STOPS WITH DETACHED SIDEWALKS AND AN AREA BETWEEN CURB AND SIDEWALK LESS THAN 4.5 FEET WIDE.



TRANSPORTATION CONSULTANTS, INC.

* IF EXISTING SIDEWALK IS ALSO A BIKE TRAIL, THEN A 3' CLEARANCE MUST BE PROVIDED BETWEEN EDGE OF SIDEWALK AND BENCH.

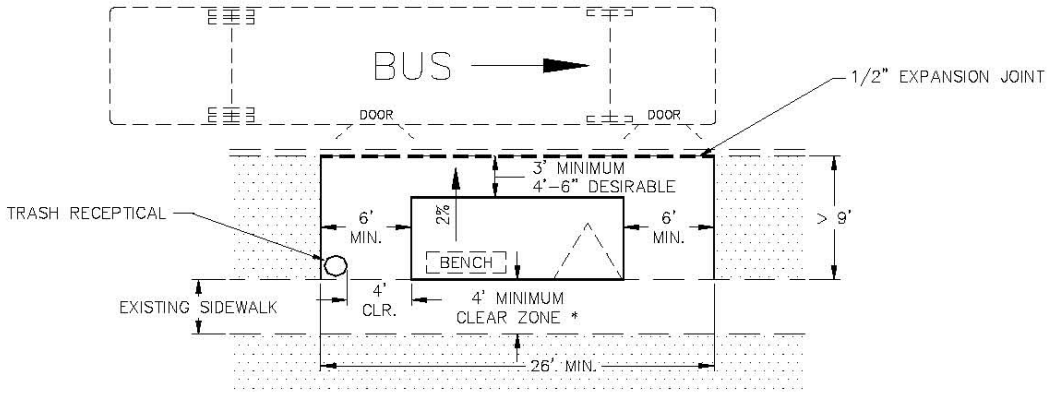
** IF COMBINED DISTANCE OF DETACHED AREA AND EXISTING SIDEWALK IS MORE THAN 8 FEET, THEN PAD LENGTH MAY BE REDUCED TO 10 FEET.

ALL NEW SIDEWALK AND BENCH PADS SHALL BE A MINIMUM OF 4" THICK, 4000psi CONCRETE.

ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

B-3
Typical Bus Shelter General Notes

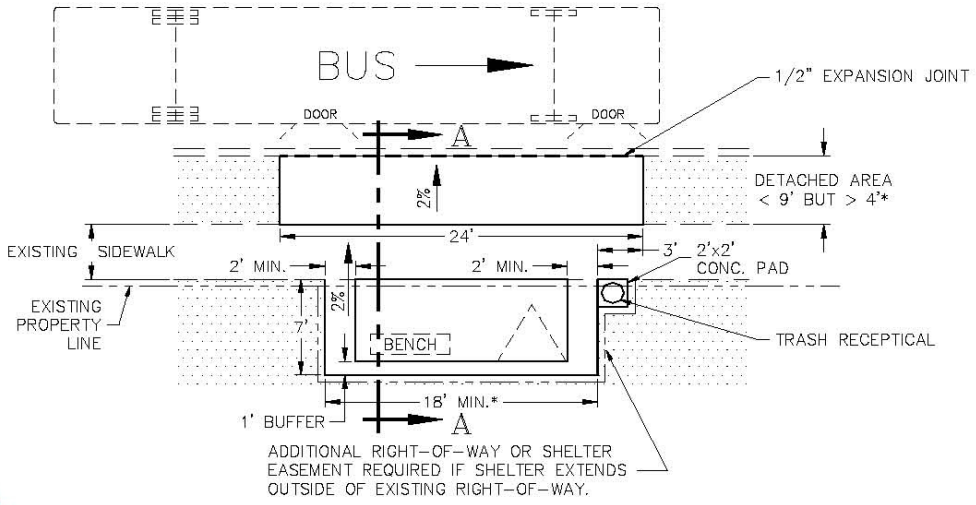
FOR BUS STOPS WITH DETACHED SIDEWALKS AND AN AREA BETWEEN CURB AND SIDEWALK GREATER THAN 9 FEET WIDE.



* 4' MINIMUM CLEAR ZONE OR MATCH EXISTING SIDEWALK WIDTH, WHICHEVER IS GREATER.

IF EXISTING SIDEWALK IS ALSO A BIKE TRAIL, THEN AN ADDITIONAL 3' CLEARANCE AREA MUST BE PROVIDED BETWEEN EDGE OF SIDEWALK AND SHELTER.

FOR BUS STOPS WITH DETACHED SIDEWALKS AND AN AREA BETWEEN CURB AND SIDEWALK LESS THAN 9 FEET WIDE BUT GREATER THAN 4 FEET WIDE.



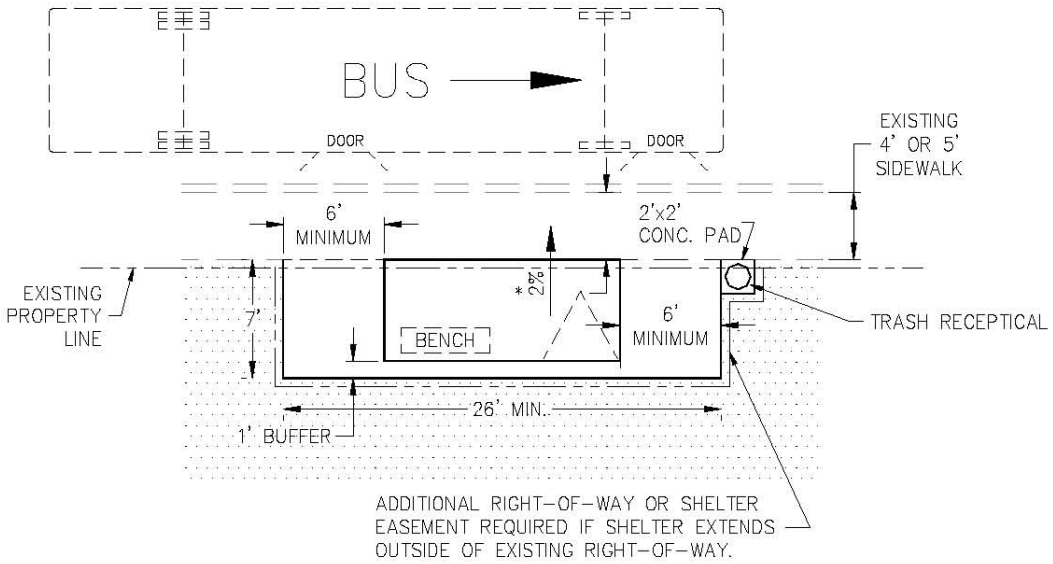
* IF SIDEWALK IS DETACHED LESS THAN 4 FEET USE CASE III AND SHELTER PAD SHALL BE A MINIMUM OF 26' WIDE.

TRANSPORTATION CONSULTANTS, INC.

B-4

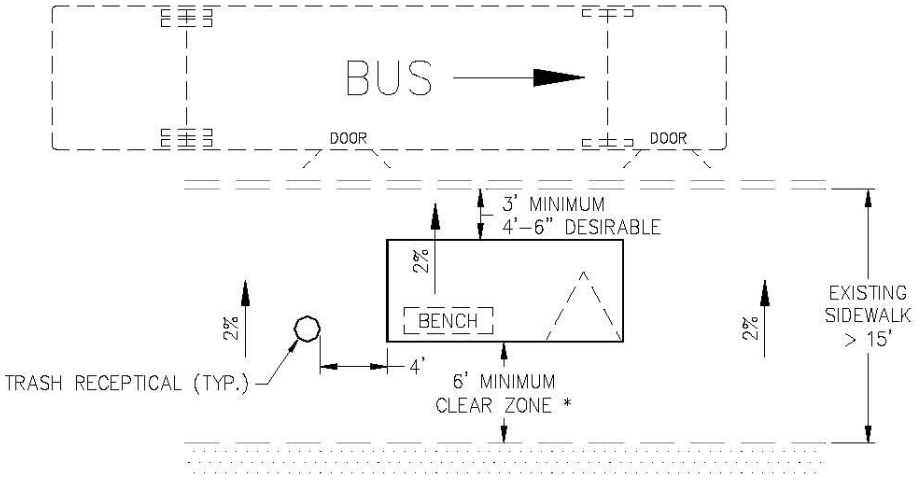
Typical Bus Shelter General Notes

FOR BUS STOPS WITH ATTACHED SIDEWALKS.



* MATCH EXISTING SIDEWALK WIDTH.

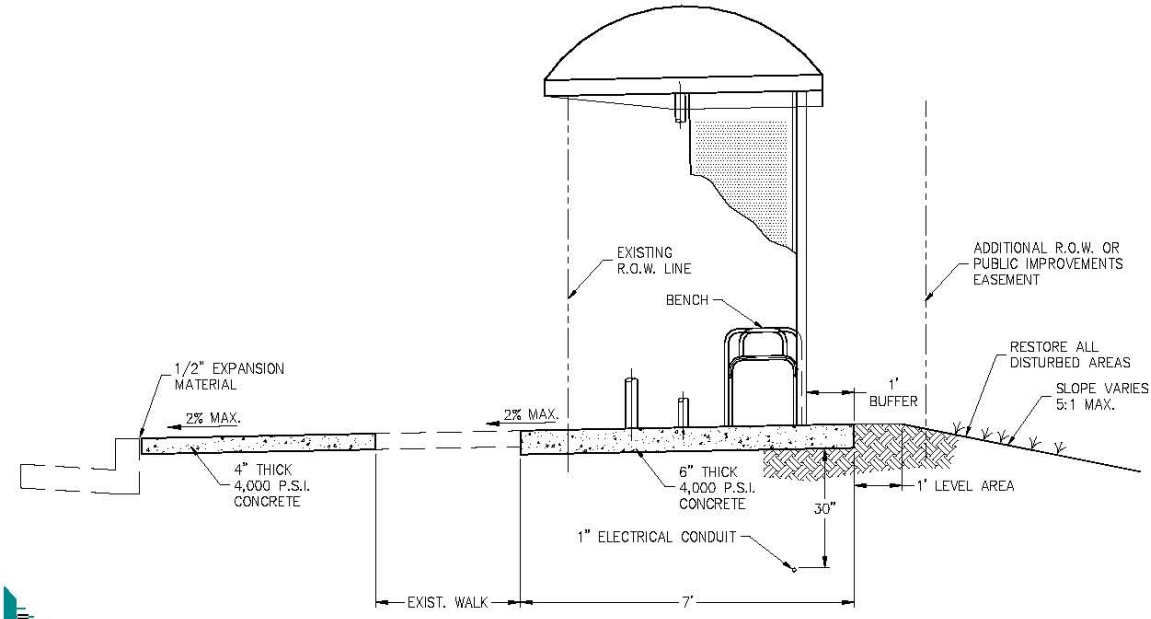
FOR BUS STOPS WITH ATTACHED SIDEWALKS MORE THAN 15 FEET WIDE



TRANSPORTATION CONSULTANTS, INC.

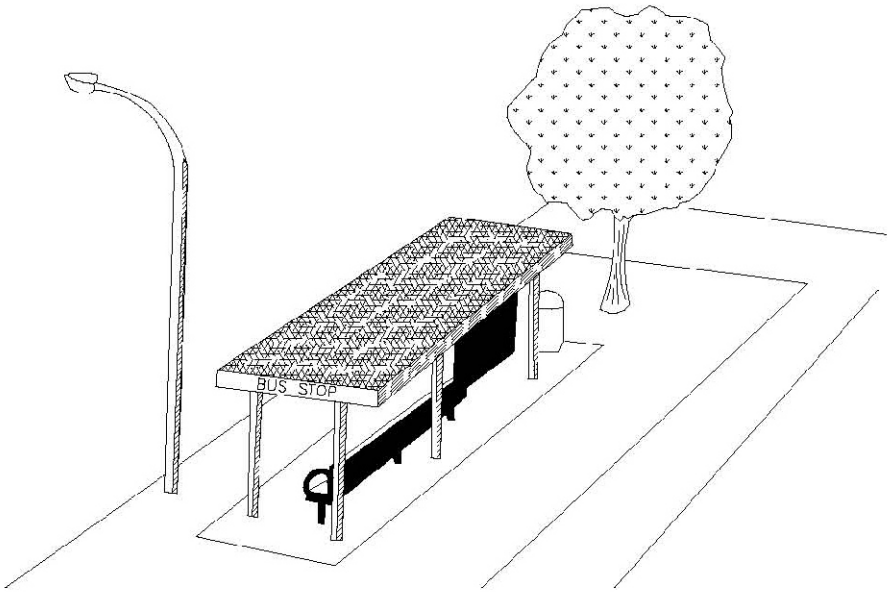
* PROVIDED THAT THE SIDEWALK IS NOT ALSO A BIKE LANE OR TRAIL, IN WHICH CASE THE SIDEWALK MAY NOT BE OBSTRUCTED AND THE SHELTER WILL NEED TO BE LOCATED BEHIND THE BACK OF SIDEWALK.

B-5
Typical Bus Shelter General Notes



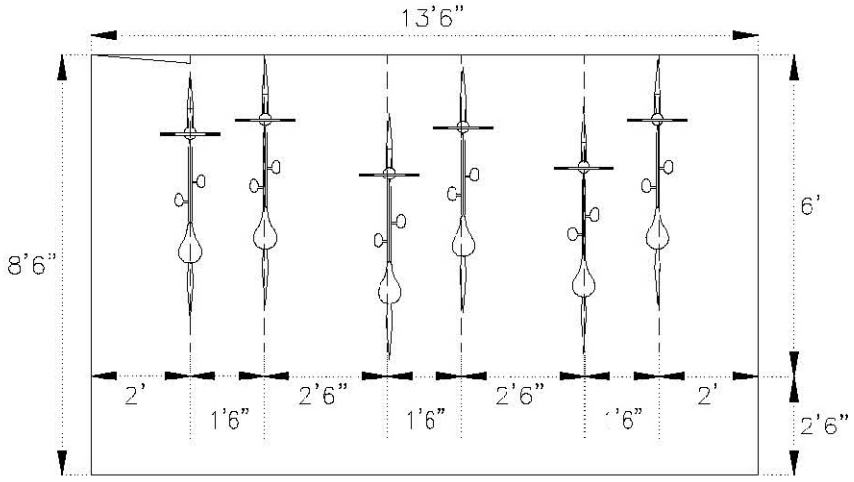
TRANSPORTATION
CONSULTANTS, INC.

B-6



EXAMPLE OF COORDINATING BUS STOP LOCATION WITH AN EXISTING STREET LIGHT

SOURCE: TCRP REPORT 19, *GUIDELINES FOR THE LOCATION AND DESIGN OF BUS STOPS*



RECOMMENDED SPACE FOR PARKING SIX BICYCLES

INC.

FIGURE NO. 7

BUS STOP COORDINATION WITH STREET LIGHTS & RECOMMENDED SPACE FOR BICYCLE PARKING

TRTPA TRANSIT IMPROVEMENT STANDARDS

Appendix C: Community Survey Form

TRANSPORTATION
CONSULTANTS, INC.

Telephone Survey Conducted by ETC for the Conway Transit Feasibility Study

June 2009

Hi, this is _____ calling on behalf of the City of Conway. We are conducting a brief survey of residents of the city of Conway to study the need for public transit. The survey takes less than 10 minutes to complete. We'd like to include your household's responses, and I need to speak with someone in the household who is 18 years old or older. Would that be you?

IF NO, ASK: May I please speak with someone who is 18 or older?

IF NOT AVAILABLE, ARRANGE A CALLBACK TIME.

First, do you live in the City of Conway [If NO THANK AND TERMINATE]

1. **Including you, how many people in your household are in each of the following age categories** (read each age category and record the total number of people in each category – including the respondent):

   (A) Age 11 or younger ....._____

   (B) Age 12 to 15....._____

   (C) Age 16 to 59....._____

   (D) Age 60 to 64 ....._____

   (E) Age 65 to 74....._____

   (F) Age 75 or older ....._____

2. **Including you, how many people in your household have a driver's license?**

_____ people

3. **Including you, how many people in your household have jobs outside the home?**

_____ people

4. **Is anyone in your household a <u>student</u> at a local area College or University?**

___(1) Yes – ask 4a

___(2) No

4a. At which school(s)? – check all that apply

___(1) University of Central Arkansas

___(2) Hendrix College

___(3) Central Baptist College

___(4) Other: _____

5. **Is anyone in your household a <u>faculty member</u> at a local area College or University?**

___(1) Yes – ask 5a

___(2) No

5a. At which school(s)? – check all that apply

___(1) University of Central Arkansas

___(2) Hendrix College

___(3) Central Baptist College

___(4) Other: _____

6. **Is anyone in your household a <u>member of the staff (excluding faculty)</u> at a local area college or university?**

___(1) Yes – ask 6a

___(2) No

6a. At which school(s)? – check all that apply

___(1) University of Central Arkansas

___(2) Hendrix College

___(3) Central Baptist College

___(4) Other: _____

7. **Is anyone in your household a <u>affiliated with</u> a local area College or University in any other way that I have not mentioned?**

___(1) Yes – ask 7a

___(2) No

7a. How are they affiliated? _____

8. **In total, how many motor vehicles, in working condition, are available to members of your household on a daily basis? Please include passenger vehicles of all types: trucks, vans, motorcycles, and so forth.**

_____ vehicles

9. **Is there anyone in your household that has a disability that makes it difficult or impossible for them to drive?**

___(1) Yes

___(2) No

___(3) REFUSED/NO RESPONSE

10. **Is there anyone in your household that has a disability that makes it impossible for them to leave home without assistance?**

___(1) Yes

___(2) No

___(3) REFUSED/NO RESPONSE

11. **Within the past six months, have you provided transportation for anyone over age 16 because they could not drive? [This includes family members and people who are not members of your family]**

___(1) Yes

___(2) No

___(3) REFUSED/NO RESPONSE

12. **Are you currently employed or enrolled as a student?**

___(1) Yes – ask #13-#18 ___(2) No – skip to #19

IF YES to #12

13. **How do you typically travel to work or school?** (check all that apply)

___(1) Drive Alone

___(2) Driver of a car/vanpool – ask 13a

___(3) Passenger in a car/vanpool – ask 13a

___(4) Other (please specify) _____

13a. Including you, how many people usually travel in your vehicle to work or school? (answer must be **2** or more)

_____ people

14. Is your work or school located in:

___(1) Conway

___(2) North Little Rock

___(3) Faulkner County

___(4) Other: _____?

15. What time of day do you typically start work or school?

_____ am/pm

16. What time of day do you typically <u>leave work or school</u> at the end of the day?

_____ am/pm

17. Would you consider using the bus for travel to and from work or school?

___(1) Yes – ask 17a ___(2) No

17a. IF YES – How much would you be willing to pay for one-way bus fare to travel from your home to work or school?

$_____ for a one-way trip

18. Would you consider using the bus for trips to other locations?

___(1) Yes ___(2) No

<u>RESUME HERE FOR ALL RESPONDENTS</u>

19. Would you like to have bus service available for use near your home?

___(1) Yes – ask 19a

___(2) No

19a. Can you think of any places that you would like to be able to go on the bus?

Place #1:_____

Place #2:_____

Place #3:_____

20. Do you think the City of Conway should provide financial support for public transit service?

___(1) Yes ___(2) No

21. Are you willing to have an increased <u>property tax</u> to support public transit?

___(1) Yes ___(2) No

22. Are you willing to pay an increase in <u>sales tax</u> to support public transit?

___(1) Yes ___(2) No

23. What is the maximum increase in taxes that your household would be willing to pay per year to support public transit in Conway?

___(4) $30 per household per year

___(3) $20 per household per year

___(2) $10 per household per year

___(1) $0 per household per year

___(9) Don't know

Now I have a just few more questions about you and your household that will help us in understanding and interpreting the survey results.

24. Which of the following age ranges best describes your age?

___(1) 18 to 24

___(2) 25 to 34

___(3) 35 to 44

___(4) 45 to 54

___(5) 55 to 64

___(6) 65 to 74

___(7) 75 or older

___(9) REFUSED

25. How many years have you lived in Conway?

___(1) less than one year

___(2) one to four years

___(3) five to nine years

___(4) 10 years or longer

___(9) REFUSED

26. For statistical purposes only, with which racial or ethnic group do you identify?

[READ LIST] [MAY ANSWER MORE THAN ONE]

___(1) American Indian [includes Alaskans]

___(2) Asian [includes Pakistanis, Indians or Pacific Islanders]

___(3) Black [includes Jamaicans, Bahamians & other Caribbeans or Africans but not Hispanic or Arabian descent]

___(4) Hispanic [includes persons of Mexican, Puerto Rican, Central or South American or Spanish origin or culture]

___(5) White [includes Arabian]

___(9) DON'T KNOW/REFUSED

27. Which of the following ranges best describe the total income for your household in 2008? Was it…

___(1) Less than $18,000

___(2) $18,000 to $24,999

___(3) $25,000 to $34,999

___(4) $35,000 to $49,999

___(5) $50,000 to $74,999

___(6) $75,000 to $99,999

___(7) $100,000 to $149,999

___(8) $150,000 or more.

___(9) REFUSED

28. What is your home street address? [If they do not want provide it, ask them to provide a nearby intersection or record the address information on the call sheet.]

Street Address: _____

That concludes the survey.

Thanks for your time and cooperation.

Appendix D: Community Survey Results

TRANSPORTATION
CONSULTANTS, INC.

Conway Community Survey Results

Q1. Including you, how many people in your household are in each of the following age categories?

	Mean #
Total number of occupants	2.96
11 or younger	0.41
Ages 12-15	0.18
Ages 16-59	1.91
Ages 60-64	0.20
Ages 65-74	0.13
Ages 75+	0.13

Q2. Including you, how many people in your household have a driver's license?

Q2. # with a driver's license	Number	Percent
0	4	0.9 %
1	66	15.1 %
2	238	54.6 %
3	89	20.4 %
4	29	6.7 %
5	8	1.8 %
6	1	0.2 %
Not provided	1	0.2 %
Total	436	100.0 %

Q3. Including you, how many people in your household have jobs outside the home?

Q3. # with jobs outside the home	Number	Percent
0	53	12.2 %
1	133	30.5 %
2	177	40.6 %
3	50	11.5 %
4	18	4.1 %
5	2	0.5 %
6	2	0.5 %
Not provided	1	0.2 %
Total	436	100.0 %

Q4. Is anyone in your household a student at a local area College or University?

Q4. Student at a College or University	Number	Percent
1=Yes	94	21.6 %
2=No	342	78.4 %
Total	436	100.0 %

Q4a. If YES, at which school(s)?

Q4a. Which school	Number	Percent
1=University of Central Arkansas	71	75.5 %
2=Hendrix College	5	5.3 %
3=Central Baptist College	2	2.1 %
4=Other	15	16.0 %
9=Not provided	1	1.1 %
Total	94	100.0 %

Q5. Is anyone in your household a faculty member at a local area College or University?

Q5. Faculty member at a College or University	Number	Percent
1=Yes	30	6.9 %
2=No	406	93.1 %
Total	436	100.0 %

Q5a. If YES, at which school(s)?

Q5a. Which school	Number	Percent
1=University of Central Arkansas	20	66.7 %
2=Hendrix College	3	10.0 %
3=Central Baptist College	4	13.3 %
4=Other	2	6.7 %
9=Not provided	1	3.3 %
Total	30	100.0 %

Q6. Is anyone in your household a member of the staff (excluding faculty) at a local area College or University?

Q6. Member of the staff at a College or University	Number	Percent
1=Yes	26	6.0 %
2=No	410	94.0 %
Total	436	100.0 %

Q6a. If YES, at which school(s)?

Q6a. Which school	Number	Percent
1=University of Central Arkansas	12	46.2 %
2=Hendrix College	10	38.5 %
3=Central Baptist College	2	7.7 %
4=Other	2	7.7 %
Total	26	100.0 %

Q7. Is anyone in your household affiliated with a local area College or University in any other way than mentioned above?

Q7. Affiliated with a College or University	Number	Percent
1=Yes	21	4.8 %
2=No	415	95.2 %
Total	436	100.0 %

Q8. In total, how many motor vehicles in working conditions are available to members of your household on a daily basis?

Q8. # vehicles available to household	Number	Percent
0=0	7	1.6 %
1=1	67	15.4 %
2=2	189	43.3 %
3=3	99	22.7 %
4=4+	74	17.0 %
Total	436	100.0 %

Q9. Is there anyone in your household that has a disability that makes it difficult or impossible for them to drive?

Q9. Anyone with a disability to drive?	Number	Percent
1=Yes	55	12.6 %
2=No	380	87.2 %
3=Not provided	1	0.2 %
Total	436	100.0 %

Q10. Is there anyone in your household that has a disability that makes it impossible for them to leave home without assistance?

Q10. Anyone with a disability to leave home	Number	Percent
1=Yes	35	8.0 %
2=No	399	91.5 %
3=Not provided	2	0.5 %
Total	436	100.0 %

Q11. Within the past six months, have you provided transportation for anyone over age 16 because they could not drive?

Q11. Provided transportation for anyone over 16	Number	Percent
1=Yes	160	36.7 %
2=No	275	63.1 %
3=Don't remember	1	0.2 %
Total	436	100.0 %

Q12. Are you currently employed or enrolled as a student?

Q12. Employed or enrolled as a student	Number	Percent
1=Yes	295	67.7 %
2=No	140	32.1 %
9=Not provided	1	0.2 %
Total	436	100.0 %

Q13. If YES to Question #12, how do you typically travel to work or school?

Q13. Travel to work or school	Number	Percent
1=Drive alone	276	93.6 %
2=Driver of a car/vanpool	9	3.1 %
3=Passenger in a car/vanpool	5	1.7 %
4=Other	5	1.7 %
Total	295	100.0 %

Q14. Is your work or school located in:

Q14. Location of work or school	Number	Percent
1=Conway	208	70.5 %
2=North Little Rock	44	14.9 %
3=Faulkner County	7	2.4 %
4=Other	35	11.9 %
9=Not provided	1	0.3 %
Total	295	100.0 %

Q15. What Time Do You Normally Start Work or School? (military time)

Q15. Time of day start work or school	Number	Percent
0300	2	0.7 %
0400	3	1.0 %
0500	2	0.7 %
0530	6	2.0 %
0545	1	0.3 %
0600	22	7.5 %
0615	2	0.7 %
0630	9	3.1 %
0645	4	1.4 %
0650	1	0.3 %
0700	38	12.9 %
0715	4	1.4 %
0730	31	10.5 %
0740	1	0.3 %
0745	7	2.4 %
0800	86	29.2 %
0815	3	1.0 %
0830	11	3.7 %
0855	1	0.3 %
0900	17	5.8 %
0930	2	0.7 %
1000	4	1.4 %
1100	3	1.0 %
1130	1	0.3 %
1200	1	0.3 %
1300	1	0.3 %
1500	1	0.3 %
1530	1	0.3 %
1600	1	0.3 %
1800	1	0.3 %
1830	1	0.3 %

1845	1	0.3 %
2230	1	0.3 %
Not provided	25	8.5 %
Total	295	100.0 %

Q16. What Time Do You Normally Leave Work or School? (military time)

Q16. Time of day leave work or school	Number	Percent
0200	1	0.3 %
0600	1	0.3 %
0700	3	1.0 %
0930	1	0.3 %
1030	1	0.3 %
1200	1	0.3 %
1300	4	1.4 %
1330	1	0.3 %
1400	5	1.7 %
1430	4	1.4 %
1500	18	6.1 %
1515	2	0.7 %
1530	13	4.4 %
1540	1	0.3 %
1545	2	0.7 %
1600	42	14.2 %
1602	1	0.3 %
1630	35	11.9 %
1645	2	0.7 %
1700	78	26.4 %
1715	3	1.0 %
1730	16	5.4 %
1800	17	5.8 %
1830	1	0.3 %
1900	5	1.7 %
2000	3	1.0 %

2100	3	1.0 %
2200	1	0.3 %
2400	3	1.0 %
Not provided	27	9.2 %
Total	295	100.0 %

Q17. Would you consider using the bus for travel to and from work or school?

Q17. Would use the bus to and from work or school	Number	Percent
1=Yes	129	43.7 %
2=No	166	56.3 %
Total	295	100.0 %

Q17a. If YES to Question #17, how much would you be willing to pay for one-way bus fare to travel from your home to work or school?

Q17a. Willing to pay for one-way bus fare	Number	Percent
$ 0.25	1	1.0 %
$ 0.50	10	10.0 %
$ 0.75	5	5.0 %
$ 1.00	29	29.0 %
$ 1.25	3	3.0 %
$ 1.50	7	7.0 %
$ 2.00	20	20.0 %
$ 2.50	4	4.0 %
$ 3.00	6	6.0 %
$ 4.00	2	2.0 %
$ 5.00	11	11.0 %
$ 6.00	1	1.0 %
$10.00	1	1.0 %
Total	100	100.0 %

Did Not Answer = 29

Q18. If YES to Question #12, would you consider using the bus for trips to other locations?

Q18. Using the bus for other locations	Number	Percent
1=Yes	185	62.7 %
2=No	108	36.6 %
9=Don't Know	2	0.7 %
Total	295	100.0 %

Q19. Would you like to have bus service available for use near your home?

Q19. Bus service available near home	Number	Percent
1=Yes	273	62.6 %
2=No	160	36.7 %
9=Don't Know	3	0.7 %
Total	436	100.0 %

Q19a. If YES to Question #19, can you think of any places that you would like to be able to get on the bus? MULTIPLE RESPONSES ALLOWED

Q19a. Top choice	Number	Percent
SHOPPING CENTERS	6	2.2 %
INTO LITTLE ROCK	1	0.4 %
GROCERY	10	3.7 %
MEDICAL SERVICES	1	0.4 %
GROCERY STORE	28	10.3 %
SHOPPING	44	16.1 %
PARK	2	0.7 %
DOCTOR	19	7.0 %
DONAGHEY & MEADOWLAKE	1	0.4 %
DOWNTOWN CONWAY	2	0.7 %
CONWAY COMMONS	10	3.7 %
PARKS	4	1.5 %
LIBRARY	11	4.0 %
CONWAY AREA IN GENERAL	1	0.4 %
DOWNTOWN	53	19.4 %

Q19a. If YES to Question #19, can you think of any places that you would like to be able to get on the bus? MULTIPLE RESPONSES ALLOWED (continued)

Q19a. Top choice	Number	Percent
MALL	17	6.2 %
WALMART	39	14.3 %
EVENTS	1	0.4 %
SHOPPING MALLS	1	0.4 %
CHURCH	12	4.4 %
MOVIE THEATRE	1	0.4 %
POST OFFICE	5	1.8 %
OAK ST	1	0.4 %
LITTLE QUCH	1	0.4 %
PHARMACY	2	0.7 %
DAVE WARD	1	0.4 %
SALEM	1	0.4 %
WALMART @ DAVE WARD DR	1	0.4 %
TURF INN & HANNAH	1	0.4 %
LITTLE ROCK	30	11.0 %
CONWAY COURT	1	0.4 %
BANKS	1	0.4 %
HENDRIX	1	0.4 %
UPTOWN	1	0.4 %
RESTAURANTS	3	1.1 %
AIRPORT	3	1.1 %
DOLLAR STORE	1	0.4 %
SCHOOLS	3	1.1 %
WORK	18	6.6 %
KROGER	9	3.3 %
BANK	4	1.5 %
COMMONS AREA	1	0.4 %
UCA	7	2.6 %
COLLEGE	7	2.6 %
MAYFLOWER/LITTLE ROCK	1	0.4 %

Q19a. If YES to Question #19, can you think of any places that you would like to be able to get on the bus? MULTIPLE RESPONSES ALLOWED (continued)

Q19a. Top choice	Number	Percent
PHYSICAL THERAPY	1	0.4 %
MAYFLOWER	1	0.4 %
SHOPPING CENTER	9	3.3 %
KROGERS	1	0.4 %
SCHOOL	5	1.8 %
HOSPITAL	9	3.3 %
MAJOR SHOPPING CENTERS	1	0.4 %
SAMS	1	0.4 %
THEATRE	1	0.4 %
MAJOR SHOPPING AREAS	1	0.4 %
SHOPPING AREAS	3	1.1 %
OTHER NEIGHBORHOODS	1	0.4 %
COMMONS	5	1.8 %
MALLS	1	0.4 %
GROCERY STORES	4	1.5 %
MAIN MALLS	1	0.4 %
STORES	4	1.5 %
HEALTH CARE	1	0.4 %
HOT SPRINGS	1	0.4 %
HARDINE COLLEGE	1	0.4 %
ALL OVER TOWN	1	0.4 %
STORE	2	0.7 %
HOUSES	1	0.4 %
GYM	2	0.7 %
DEPOT	1	0.4 %
DINNER	1	0.4 %
MOMS	1	0.4 %
FITNESS/CITY CENTERS	1	0.4 %
ALLTEL ARENA	1	0.4 %
ROBINSON THEATRE	1	0.4 %

Q19a. If YES to Question #19, can you think of any places that you would like to be able to get on the bus? MULTIPLE RESPONSES ALLOWED (continued)

Q19a. Top choice	Number	Percent
TARGET, KOHL	1	0.4 %
PRINCE ST	1	0.4 %
SPORTS CENTER/GYM	1	0.4 %
UNIVERSITY OF CENTRAL ARKANSAS	1	0.4 %
TARGET	1	0.4 %
MALL/SHOPPING AREAS	1	0.4 %
WEST LITTLE ROCK	1	0.4 %
LIFE CHURCH	1	0.4 %
ERRANDS	2	0.7 %
TOWN	2	0.7 %
HOSPITAL/PHARMACY	1	0.4 %
WEST CONWAY	2	0.7 %
RECREATION	2	0.7 %
GAS STATION	1	0.4 %
UNIVERSITY EVENTS	1	0.4 %
SENIOR CITIZENS GROUP	1	0.4 %
IN CITY LIMITS	1	0.4 %
RIVERFEST	1	0.4 %
LITTLE ROCK/HOSPITALS	1	0.4 %
MALL/BARS	1	0.4 %
UNIVERSITY	5	1.8 %
APPOINTMENTS	2	0.7 %
MOVIE THEATRES	1	0.4 %
DRUG STORE	2	0.7 %
GROCERIES	1	0.4 %
MEDICAL	1	0.4 %
LIGHT COMPANY	1	0.4 %
SHOPPING MALL	2	0.7 %
LOWES/HOME DEPOT	1	0.4 %
OUT OF TOWN	1	0.4 %

Q19a. If YES to Question #19, can you think of any places that you would like to be able to get on the bus? MULTIPLE RESPONSES ALLOWED (continued)

Q19a. Top choice	Number	Percent
FAMILIES HOMES	1	0.4 %
CONWAY	4	1.5 %
FITNESS CENTER	1	0.4 %
HOSPITALS	1	0.4 %
ELEMENTARY SCHOOLS	1	0.4 %
MOVIE THEATRES/MALL/LIBRARY	1	0.4 %
RESTAURANT	2	0.7 %
DENTIST	1	0.4 %
WALGREENS	1	0.4 %
PRINCE & SHADY VALLEY	1	0.4 %
PRINCE & REEDY RD	1	0.4 %
SOCCEER PARK	1	0.4 %
TARGET/SHOPPING AREAS	1	0.4 %
SOCCER GAMES/SPORTS FACILITIES	1	0.4 %
LIBRARIES	1	0.4 %
DOWNTOWN RESTAURANTS/FACILITIE	1	0.4 %
COMOMNS SHOPPING MALL	1	0.4 %
COMMONS SHOPPING MALL	1	0.4 %
NEIGHBORHOODS	1	0.4 %
AXIOM	1	0.4 %
TARGET/OLD NAVY	1	0.4 %
MOVIES	2	0.7 %
WALGREEN	1	0.4 %
Total	501	

Q20. Do you think the City of Conway should provide financial support for public transit service?

Q20. Should City provide financial support for public transit service	Number	Percent
1=Yes	326	74.8 %
2=No	85	19.5 %
9=Don't know	25	5.7 %
Total	436	100.0 %

Q21. Are you willing to have an increased property tax to support public transit?

Q21. Increased property tax	Number	Percent
1=Yes	217	49.8 %
2=No	200	45.9 %
9=Don't know	19	4.4 %
Total	436	100.0 %

Q22. Are you willing to pay an increase in sales tax to support public transit?

Q22. Increased sales tax	Number	Percent
1=Yes	175	40.1 %
2=No	247	56.7 %
9=Don't know	14	3.2 %
Total	436	100.0 %

Q23. What is the maximum increase in taxes that your household would be willing to pay per year to support public transit in Conway?

Q23. Maximum increase in taxes	Number	Percent
1=$0 per household per year	123	28.2 %
2=$10 per household per year	61	14.0 %
3=$20 per household per year	84	19.3 %
4=$30 per household per year	96	22.0 %
9=Don't know	72	16.5 %
Total	436	100.0 %

Q24. Which of the following age ranges best describes your age?

Q24. Your age	Number	Percent
18 to 34	57	13.1 %
35 to 44	75	17.2 %
45 to 54	133	30.5 %
55 to 64	111	25.5 %
65 to 74	29	6.7 %
75+	27	6.2 %
Not provided	4	0.9 %
Total	436	100.0 %

Q25. How many years have you lived in Conway?

Q25. Years lived in Conway	Number	Percent
1=Less than one year	3	0.7 %
2=One to four	39	8.9 %
3=Five to nine	67	15.4 %
4=10 years or longer	326	74.8 %
9=Not provided	1	0.2 %
Total	436	100.0 %

Q26. For statistical purposes only, with which racial or ethnic group do you identify?

MUTLIPLE RESPONSES ALLOWED

Q26. Race/ethnic group	Number	Percent
1 = American Indian	4	0.9 %
2 = Asian	6	1.4 %
3 = Black	60	13.8 %
4 = Hispanic	5	1.1 %
5 = White	354	81.2 %
9 = Not provided	9	2.1 %
Total	438	

Q27. Which of the following ranges best describes the total income for your household in 2008?

Q27. Total income in 2008	Number	Percent
Less than 18K	29	6.7 %
18K to 24,999	17	3.9 %
25K to 34,999	31	7.1 %
35K to 49,999	37	8.5 %
50K to 74,999	73	16.7 %
75K to 99,999	81	18.6 %
100K to 149,999	59	13.5 %
150K+	21	4.8 %
Not provided	88	20.2 %
Total	436	100.0 %

Appendix E: Key Person Interview Questionnaire

TRANSPORTATION
CONSULTANTS, INC.

Conway Transit Feasibility Study

Key Person Interviews

Name of Person Interviewed: _____

Contact information (phone, email): _____

Date/Time/Duration of Interview: _____

Introduction: Hi, my name is David Krutsinger with LSC Transportation Consultants. We've been hired by Metroplan, the MPO in coordination with the City of Conway to conduct a transit feasibility study. As part of the overall study, two efforts are underway to gather opinions on this matter. Both general public phone surveys and key person interviews are being conducted. I'm calling you because you've been identified by the project advisory committee as one of ten key persons we should talk to. I'd like to get about 15 - 30 minutes of your time, all at once or over several conversations. Is this a convenient time or can we schedule a time as soon as possible?

All conversations we have will be confidential. The paraphrased and summarized collection of opinions from the ten interviews will be shared in a public report.

1. **Do you have any questions for me before we get started?**

2. **What are the most important issues facing Conway in the next 5-10 years?**

3. **In your opinion, what are the major transportation issues facing the area?**

4. **In your opinion what is the role of public transportation in Conway?**

5. **How important is public transportation compared to other issues?**

6. **What areas should be given priority for local transit service?**

7. **What do you think is the general level of community support in Conway for public transportation?**

8. **What do you think would make transit service succeed in your community?**

9. **In your opinion, would Conway citizens, as voters, support a sales tax or property tax increase for purposes of providing public transit in Conway?**

10. **In your opinion, would Conway citizens be supportive of any other means of funding public transportation in Conway? If so, what?**

11. **Many communities find that development at higher densities, similar to Hendrix Village, supports the efficiency of public transportation. Do you think Conway would support more development of this type?**

12. **Now let's turn to your agency/department/business. I know from information we've collected that _____ provides bus service to _____ and_____**
    a. **How is that working for your agency/department/business?**

    b. **If a city-wide public transportation system were implemented, how would you see your current services in relation to that?**

    c. **Would your agency/department/business be willing to use funding for your existing bus service to support a more generalized Conway public transportation system? [This probably only applies to the University – the only other services are specific for agency clients.]**

13. **In your opinion what position would your agency/department/business take if a public transit sales or property tax were proposed?**

14. **Do you have any other comments or questions?**