

Appendix C

Technical Memorandum #3:

Purpose and Need



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Revised February 2006

Submitted to



Submitted by

URS

700 South Third Street
Suite 600
Minneapolis, MN 55415



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Submitted to
Bi-State Regional Commission
1504 Third Avenue
P.O. Box 3368
Rock Island, IL 61204

Submitted by
URS
700 Third Street South
Suite 600
Minneapolis, MN 55415

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EXECUTIVE SUMMARY

Overview

The Bi-State Regional Commission (BSRC), together with the Iowa Cities of Davenport and Bettendorf, are conducting an alternative analysis to identify potential transit improvement projects that will enhance the transportation network for residents, employees and visitors. The Iowa Quad Cities Transit Alternatives Analysis is a locally managed study process that will help identify and transportation analyze alternatives to improve mobility, support economic and investment activity and preserve communities and the environment within the Quad Cities.

Study Area

The Quad Cities metropolitan area is located along the Mississippi River in eastern Iowa and western Illinois. The Quad Cities are located approximately 165 miles west of Chicago and midway between Minneapolis-St. Paul to the north and St. Louis to the south. They include the Cities of Bettendorf and Davenport in Iowa – the focus of this study – and Moline and Rock Island in Illinois. According to the United States Census Bureau, the total population of the Quad Cities in year 2000 was 376,019.



*Quad Cities Metropolitan Area
Source: Bi-State Regional Commission.*

Consistent with the study goals and objectives, the Purpose and Need for transit improvements in the Iowa Quad Cities are classified into three categories – Transportation and Mobility, Economic Opportunity and Investment, and Communities and Environment.

Transportation and Mobility

Goal: Create transportation improvements that add people-carrying capacity as necessary, minimize operating costs and improve operating efficiency.

1. *Provide an expanded range of transportation choices.*
 - *Measure: Number of residents within ¼ mile of corridor*
 - *Measure: Number of employment within ¼ mile of corridor*
 - *Measure: School enrollment within ¼ mile of corridor*
2. *Proposed improvements should augment the Quad Cities' transportation system and make public transit a more attractive option.*
 - *Measure: Number of new riders*
3. *Expand opportunities for all transit users to move freely to, through and within the Quad Cities.*
 - *Measure: Number of transfer opportunities within the corridor.*
4. *Proposed improvements should be fundable and affordable.*
 - *Measure: Increase in annual operating cost*
 - *Measure: Increase in annual operating cost per passenger*
 - *Measure: Increase in capital cost.*

This goal and its associated objectives will address the following transportation problems in the Quad Cities, based on analyses of current ridership and operating figures for Bettendorf Transit and Davenport CitiBus, and results of the *QC 2025 Long-Range Transportation Plan for the Quad City Area*:

- Long transit travel times

With three transit providers serving the Quad Cities, traveling across the Mississippi River and across municipal lines always entails a transfer to another system. Transfers increase travel time and long travel times are a deterrent to increasing ridership. For example, based on current route schedules, while the travel time from Duck Creek Mall to the Belmont Campus of Scott Community College is only 10 to 15 minutes, traveling from Davenport to Scott Community College would easily double this trip time. In addition, some routes serve areas where there are no boardings or alightings, further increasing travel times and ultimately decreasing route efficiency. For example, survey data as well as interviews with staff and drivers indicated little to no activity along the downtown loop for CitiBus.



- Projected increase in roadway congestion

According to the *QC 2025 Long-Range Transportation Plan for the Quad City Area*, the mileage of roadway segments operating at or above their traffic capacities is expected to increase in 2025. For example, State Street/U.S. Highway 67 between Bettendorf and LeClaire will be congested in 2025. Similarly, I-80 and 53rd Street in Davenport will be congested, along with East River Drive between the Arsenal Bridge and Jersey Ridge; West Locus between I-280 and Wisconsin Avenue; and most of Middle Road in Bettendorf between I-74 and I-80. Additionally, congestion typically occurs at the Mississippi River crossings. Increasing transit usage could reduce traffic volumes and congestions at these locations.

- Complex fare structure

While all three transit providers generally offer half-fare to senior, disabled and youth patrons, they charge three different prices for their services. The adult fare for fixed route service is \$0.60 for Bettendorf Transit, \$0.75 for Davenport CitiBus and \$0.80 for MetroLINK, which serves the Illinois Quad Cities. The monthly QC PassPORT addresses this issue; however, although over 70 percent of survey respondents using Bettendorf Transit and CitiBus indicated their awareness of the monthly pass, only approximately 20 percent of the same respondents used it to pay for their bus fare. One reason for this may be that some patrons fear that they could not use the entire cash value of the pass within a month.

- **Insufficient evening and weekend service**
According to the transit user survey, over 80 percent of Bettendorf Transit respondents took the bus to work, school or other reasons that included work, and 66 percent of CitiBus respondents took the bus for the same reasons. Some transit patrons work non-traditional hours – they work shifts that begin or end after the 5:30 PM or 6:00 PM, when Bettendorf Transit and CitiBus end their service. Other patrons would like to use the bus for social and recreational purposes after these hours. Under both circumstances, limited choices exist for these patrons – coordinate a ride with friends or family or take a taxi, which is expensive and scarce in the Quad Cities.

- **Lack of bus stop amenities**
The user survey also asked Bettendorf Transit and CitiBus patrons to rank various aspects of each system. In both surveys, the lowest rated category was the availability of benches, shelters and signage at bus stops. This issue detracts from patron comfort and security when using the system. For example, the transit hub at Duck Creek mall is in the middle of a parking lot. There is no apparent waiting area for patrons, little additional lighting or signs that indicate that this area of the mall is a significant transit facility, given connections between Bettendorf Transit and Davenport’s CitiBus.



Duck Creek Mall transit hub.

- **Patrons do not know where to get information**
Riding the bus is daunting enough in an environment that is dominated by single-occupant vehicles. Not knowing where to get transit information, whether related to schedules, routes or fares would make riding the bus even a greater challenge. Having three transit providers in the Quad Cities can also contribute to the confusion. For example, if a trip requires a transfer to another transit system, does the patron call both transit providers for information? Another example is the low use of the QC PassPORT indicated in the December 2004 transit user survey. The monthly pass has a high potential for simplifying fare payment between different transit systems; however, some survey respondents indicated that they did not know where to purchase one or for how long the pass is valid.

- **Potential growth in transit patronage**
The Bi-State Regional Commission’s 2025 travel demand model indicate that access to transit would decrease in year 2025. The model (currently being updated to include a

forecast year of 2035) estimates that in 1998, 38 percent of all trips had access to transit assuming a one-quarter mile walking distance. In 2025, this figure is expected to decrease to 31 percent of all trips based on current transit service. (This decrease is attributed to declining household size and significant growth in areas that currently do not have access to transit service.) Therefore, there is a need to improve access to transit service in order to continue to provide transportation options to Quad City residents, particularly to those without private vehicles.

Economic Opportunity and Investment

Goal: Support investments in infrastructure, business and community that sustain the heart of the Quad Cities.

1. *Promote a reliable transit system that supports an efficient, effective land use development pattern in major activity centers, minimizes parking demand and facilitates the highest and best use of adjacent properties.*
 - *Measure: Priority areas served, including downtown Bettendorf and Davenport, St. Ambrose University, Scott Community College, Duck Creek Mall, North Park Mall, 53rd Street and Kimberly Road.*
2. *Provide employers with the confidence that their employees have reliable options to travel to and from work.*
 - *Measure: Number of employees working during proposed service hours.*

This goal will address the following economic needs in the Iowa Quad Cities:

- **Strong employment base**

The Quad Cities are home to major employers, many of whom are national firms. (Appendix C illustrates select activity center and major employers in the Quad Cities.) They include Deere and Company, the Rock Island Arsenal, Genesis Health System, Trinity Regional Health System, Tyson Fresh Meats and Alcoa. According to the Quad City Development Group, these six companies currently have over 26,000 employees. The current trend shows an aging population in the area. To sustain the area's economy, it is important to provide alternative means of transportation to and from work to attract and sustain employees. Presently, there are limitations to the current transit service that should be addressed to ensure businesses that their employees have reliable options to travel to and from work.

The Quad Cities also have a significant student population that educates and trains current and future workers. St. Ambrose University, a coeducational, liberal arts school located in Davenport, currently enrolls 3,500 students. St. Ambrose's projected student enrollment will increase to 4,000 within the next decade. The Belmont Campus of the Scott Community College in Bettendorf enrolls 4,000 students. Students may take classes at the main campus in Bettendorf, at two locations in downtown Davenport, or at the campus located north of Davenport off of I-80.

- Reliable transportation options

A transit trip to the Rock Island Arsenal from downtown Davenport requires two transfers: from CitiBus Route 7 (Bridgeline) to MetroLINK Route 10 (Red Route) to MetroLINK Route 80 (Arsenal Route). Assuming a trip in the morning peak hour that originates from the Downtown GTC in Davenport, the total trip time is approximately one hour and 15 minutes. This travel time assumes that timely connections at the District and Centre Stations in Rock Island and Moline, respectively, are made. Morning service between Centre Station and the Arsenal is only from 5:45 AM to 8:00 AM. Afternoon service is from 2:45 PM to 4:45 PM. The total distance between the Davenport GTC and the Arsenal is approximately three miles from the west end of the island and six miles from the east of the island. Undoubtedly, this would be an easy trip to make by private vehicle, but onerous by bus. Given the number of persons employed by the Rock Island Arsenal, there could be a significant potential in additional transit patrons that are currently untapped because of existing limitations in transit service.



Davenport Downtown Ground Transportation Center.

The Belmont Campus of Scott Community College (current enrollment of 4,000 students) in Bettendorf is another popular destination in the Quad Cities. Depending on the trip origin within Davenport, travel time to Scott Community College can take between 30 minutes and one hour. The boarding and alighting counts performed for this study along with focus group and driver and staff interviews identified this long travel time as a characteristic of the existing transit system that should be improved.

- Efficient land use development patterns

Transportation opportunities to cross the Mississippi River continue to be limited, as indicated in the *QC 2025 Long Range Transportation Plan* and *Quad Cities Metropolitan*

Area Mississippi River Crossing Study. In the peak hour, traffic volumes on both the Arsenal and I74 bridges exceeded their capacities. This condition is anticipated to continue in 2025 assuming no additional river crossing is constructed, and would continue to limit movement of employees and products between the two sides of the Quad Cities and beyond.

As the population in the area ages and employers see the need to draw human resources from the outlying areas of the Quad Cities, transit improvements such as park-and-ride lots and expanded bus service may be a way to transport employees from these areas.

Socioeconomic projections currently available from the Bi-State Regional Commission indicate that population and employment will continue to be concentrated in the existing core of Bettendorf and Davenport. While much of the growth is expected to occur in outlying areas of the two cities – generally northwards, including the Kimberly Road and 53rd Street corridors – the downtown cores will continue to have the highest densities of population and employment.

Communities and Environment

Goal: Facilitate the preservation and enhancement of neighborhoods in the Quad Cities.

1. *Acknowledge the individual character and aspirations of each place served, and of the Quad Cities as a whole.*
 - *Measure: Number of historical structures adjacent to the corridor*
 - *Measure: Number of environmental features adjacent to the corridor*
 - *Measure: Number of cultural resources adjacent to the corridor*
 - *Measure: Required right-of-way.*
2. *Support regional goals for cleaner air and water, more efficient energy use, and a safer and healthier environment.*
 - *Measure: Number of water bodies within 1/4 mile of the corridor*
 - *Measure: Number of greenways within 1/4 mile of the corridor.*

This goal will address the following community and environmental needs in the Iowa Quad Cities:

- **Preserve neighborhood character**

Neighborhood preservation and continuity are key elements for sustaining community life. Transportation investments need to be planned, designed and ultimately operated to enhance the community they serve. Within the study area and within the corridors themselves, many natural and cultural assets can be found. For example, within the Brady Street and Harrison Street corridor in Davenport, one can find the Davenport City

Hall, Palmer College, St. Ambrose University, Vander Veer Park and Junge Park/Duck Creek Park. These neighborhood assets should be protected and preserved from transportation projects and their impacts.

- Provide a healthier environment

A reliable and efficient transit system in the Iowa Quad Cities could stem the ever-increasing demand for additional roadways, parking facilities and fuel. Right-of-way and funds required for roadway construction could be limited to preserve and enhance neighborhoods in the Quad Cities. Demand for fuel could be decreased, reducing emissions and resulting in cleaner air and water and a healthier environment overall. Transit vehicles that use clean fuels such as clean diesel and electricity can further reduce air pollution and noise to enhance livability within the Iowa Quad cities.

I. INTRODUCTION

The Cities of Bettendorf and Davenport, with the assistance of the Bi-State Regional Commission (BSRC), are in the process of identifying potential transit alternatives that will improve transportation mobility for residents, employees and visitors. The Iowa Quad Cities Transit Alternatives Analysis is a locally managed study that will help identify and analyze alternatives to increase transportation options and transit ridership throughout the Quad Cities.

The Purpose and Need Statement for transit improvements in the Iowa Quad Cities define the framework within which a wide range of transit technologies and alignments would be identified and evaluated. As part of establishing the purpose and need for transit improvements, the Iowa Quad Cities Transit Alternatives Analysis examined demographics and transportation conditions in the study area using information from various sources including study stakeholders and the public.

Study Goals and Objectives

The following study goals were developed through the analysis of current and projected demographic and travel demand data. This information included 2000 U.S. Census data, both the BSRC's 2025 and 2035¹ travel demand model and operating data for Bettendorf Transit and Davenport CitiBus. This analysis was then supplemented with the transportation issues identified by the Study Advisory Committee (SAC), the public through open houses held in January 2005, project stakeholders through focus group meetings in March and April 2005, and interviews with Bettendorf Transit and Davenport CitiBus staff in January 2005. The goals and objectives were refined with the SAC and approved on August 2005.

Transportation and Mobility

Goal: Create transportation improvements that add people-carrying capacity as necessary, minimize operating costs and improve operating efficiency.

1. *Provide an expanded range of transportation choices.*
 - *Measure: Number of residents within ¼ mile of corridor*
 - *Measure: Number of employment within ¼ mile of corridor*
 - *Measure: School enrollment within ¼ mile of corridor*
2. *Proposed improvements should augment the Quad Cities' transportation system and make public transit a more attractive option.*
 - *Measure: Number of new riders*

¹ As of this writing, the BSRC's 2035 update of its travel demand model is in progress.

3. *Expand opportunities for all transit users to move freely to, through and within the Quad Cities.*
 - *Measure: Number of transfer opportunities within the corridor.*
4. *Proposed improvements should be fundable and affordable.*
 - *Measure: Increase in annual operating cost*
 - *Measure: Increase in annual operating cost per passenger*
 - *Measure: Increase in capital cost.*

Economic Opportunity and Investment

Goal: Support investments in infrastructure, business and community that sustain the heart of the Quad Cities.

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 - *Measure: Number of historical structures adjacent to the corridor*
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 - *Measure: Number of cultural resources adjacent to the corridor*
 - *Measure: Required right-of-way.*
2. *Support regional goals for cleaner air and water, more efficient energy use, and a safer and healthier environment.*
 - *Measure: Number of water bodies within ¼ mile of the corridor*
 - *Measure: Number of greenways within ¼ mile of the corridor.*

One of the initial steps in the study process is to document the purpose and need for transit improvements in the Iowa Quad Cities. This purpose and need has been developed based on the following sources of information:

- 2000 U.S. Census data
- Quad Cities Mississippi River Crossing

- Quad Cities 2025 Long-Range Transportation Plan for the Quad City Area
- RiverVision Final Report, July 2004
- Bus boarding and alighting counts
- Iowa Quad City Transit Consolidation Study: Additional Issues, Draft Working Paper, Draft 4, Kimberly Road Planning Study, February 1999
- Quad Cities Metropolitan Area Mississippi River Crossing Study, Stage I Report, April 1997
- Study, December 1998
- Quad Cities Balanced Growth Project, July 2002
- SAC meetings
- Public open houses
- Focus group meetings
- Transit patron survey
- Transit operating staff and driver interviews

This study evaluated the existing conditions of transit service and transportation in general in the Iowa Quad Cities using both qualitative and quantitative means. Quantitative analysis used current data from Bi-State Regional Commission's travel demand model and ridership and operating information from Bettendorf Transit and CitiBus. The qualitative element of the assessment involved meetings with the Study Advisory Committee, the public and businesses and community leaders. Through this qualitative assessment, some key transportation issues could be identified, such as the potential need for modifying hours of service, than an analysis of demographic data could not have determined at this level of study. The findings of these two methods of assessment are presented in this section and are the foundation of the Purpose and Need for transit improvements in the area.

The information in this document is presented in detail in *Technical Memorandum #1, Open Houses*, and *Technical Memorandum #2, Existing Transit Conditions*.

II. STUDY AREA

The Quad Cities metropolitan area is located along the Mississippi River in eastern Iowa and western Illinois. The Quad Cities are located approximately 165 miles west of Chicago and midway between Minneapolis to the north and St. Louis to the south. The Quad Cities' year 2000 population within 300 miles is 37.4 million, the largest west of Chicago. This figure is comparable to that of St. Louis (34.9 million), Kansas City (16.9 million), and the Minneapolis/St. Paul area (15.2 million). These three mid-size cities have a complement of transit services that include fixed route bus, Bus Rapid Transit (BRT) and Light Rail Transit (LRT).



Quad Cities Metropolitan Area
Source: Bi-State Regional Commission.

The Quad Cities include the Cities of Bettendorf and Davenport in Iowa and Moline in Rock Island in Illinois. They also include Scott and Muscatine Counties in Iowa and Rock Island,

Henry and Mercer Counties in Illinois. The total land area is 2,708 square miles.² According to the United States Census Bureau, the total population of the Quad Cities in year 2000 was 376,019. The most rapid growth in population appears to have occurred between 1960 and 1980, when population increased from 119,067 to 160,022.

The Quad Cities transportation system is made up of four interstate highways, five U.S. highways, 10 state highways, five railroads, one commercial airport and one general aviation airport. United States Customs Port of Entry and Foreign Trade Zone support the local economy. The Mississippi River carries significant commercial and recreational traffic, including 50 barge terminals. Crossing the Mississippi River also limits transportation access through and around the area. From Bettendorf and Davenport to Rock Island and Moline, there are three ways to cross the river: through I-74, the Government Bridge and the Centennial Bridge. The Government Bridge is the only direct connection between the Iowa Quad Cities (via Davenport) and the Rock Island Arsenal.

The Iowa Quad Cities Transit Alternatives Analysis is a planning study focused on improving transit service within the Cities of Bettendorf and Davenport in Scott County. Although the study focuses on the Iowa side of the Quad Cities, it will also examine how current transit services could be improved throughout the region. For example, the study will consider how transit connections could be improved between population centers in the Iowa Quad Cities and major employers such as Deere and Company, the Rock Island Arsenal, Genesis Health System, Trinity Regional Health System, Tyson Fresh Meats and Alcoa. Major employers, such as Deere and Company, Trinity Medical Center and the Rock Island Arsenal, and destinations such as the Moline Airport are located in Illinois, emphasizing the need for exploring transit connections across the Mississippi River.

City of Bettendorf

The City of Bettendorf has an area of 21.4 square miles and has a population of 31,275 in year 2000, or 20 percent of the Scott County population in 2000. Bettendorf was incorporated in 1903. At the time, the population was 440. Its population started to grow rapidly in the 1950s and 1960s, particularly with the opening of the Alcoa plant in the area in 1948. Between 1960 and 1980, Bettendorf's population grew two-fold. Its growth slowed between 1980 and 1990 (3 percent), but then increased again to 11 percent between 1990 and 2000. The number of housing units in Bettendorf has also grown; in 1990, there were 11,063 units and in 2000, there were 13,051 – an increase of 18 percent.



² Source: 2000 U.S. Census Bureau.

The median age of its population is relatively young – 38.7 years – albeit a few years older than Iowa’s state average of 34.0 years. The average household income for Bettendorf is \$66,620. This figure is higher than the average for Scott County (\$52,045), Iowa (\$48,005) and the nation (\$50,046). Likewise, the per capita income for Bettendorf is \$28,053, higher than the average for Scott County (\$21,310), Iowa (\$19,674) and the nation (\$21,587).

City of Davenport

The City of Davenport has an area of 66 square miles and has a population of 98,359 (2000 Census), or 62 percent of the Scott County population. Davenport was established as a special charter city in the Territory of Iowa in 1839 and became the Scott County seat in 1841. As an older city to Bettendorf, Davenport’s population increased markedly early in the 20th century, when population exceeded 35,000 and the city’s area increased to nearly eight square miles. Davenport’s landscape also changed with electric streetcar lines spanning its hills and multi-story buildings emerging in the riverfront.



Davenport Civil War Monument

Davenport’s population increased between 1960 and 1980 from 88,981 to 103,264. Since 1980, however, population declined, from 103,264 to 98,359. The median age of Davenport’s population is even younger than Bettendorf’s and the state averages – 33.6 years. The average household income for Davenport is \$45,944, lower than the average for Scott County (\$52,045), Iowa (\$48,005) and the nation (\$50,046). Similarly, the per capita income for Davenport is \$18,828, lower than that for Scott County (\$21,310), Iowa (\$19,674) and the nation (\$21,587).

Transit Providers in the Quad Cities

Transit service within the Quad Cities is provided by three separate entities: Bettendorf Transit, CitiBus for the City of Davenport and MetroLINK for the Illinois Quad Cities. The following is a description of the Bettendorf Transit and CitiBus systems. The fixed routes operated by Bettendorf Transit and CitiBus are illustrated in Figure 1.

**Figure 1
Transit Route Map**



Bettendorf Transit

Bettendorf Transit operates five fixed routes within the City of Bettendorf from 6:00 AM to 6:00 PM on weekdays and from 8:30 AM to 5:30 PM on Saturdays. Weekday service is provided every half-hour. Saturday service is provided every hour except for the Purple Route (53rd Street/Northeast), which operates every half-hour. (River Bend Services, Inc. provides Saturday service.) All of Bettendorf Transit's fixed routes meet at fixed times at Duck Creek Mall for transfer to other



Bettendorf Transit bus at Duck Creek Mall

Bettendorf routes as well as CitiBus routes.

In addition, Bettendorf Transit offers paratransit service known as Dial-A-Bus to city residents. This is door-to-door service within city limits and available to any resident living more than two blocks from a fixed route. Disabled and elderly citizens may use Dial-A-Bus from anywhere in Bettendorf. River Bend Services, Inc. also provides this service. Hours of operation for Dial-A-Bus are the same as the fixed routes from Monday through Saturday.

Fares vary by patron age and service used. For example, adults pay \$0.60 to ride any of the five fixed routes while senior citizens pay half-fare for this service at \$0.30. Similarly, Dial-A-Bus service costs \$2.40 for adults and \$1.20 for elderly. The monthly QC PassPORT is valid for all Bettendorf, CitiBus and MetroLINK fixed routes, facilitating transfers between the three different systems.

Davenport CitiBus

CitiBus operates 15 fixed routes within the City of Davenport from 5:30 AM to 6:00 PM on weekdays and from 9:00 AM to 6:00 PM on Saturdays. Service is provided between every half-hour and hour. Routes go through the Downtown Ground Transportation Center (GTC), although they do not operate in the same manner as Bettendorf Transit routes at Duck Creek Mall. Some routes, however, depart at the same time from the GTC, such as Routes 1 and 8.



CitiBus at 16th Street and Main

Fares vary by patron age and service used. For example, adults pay \$0.75 to ride any of the five fixed routes while senior citizens and disabled persons pay \$0.35. Similarly, the monthly QC PassPORT is valid for all Bettendorf, CitiBus and MetroLINK fixed routes, facilitating transfers between the three different systems.

Transit Connections

Currently, transit connections between the Iowa and Illinois Quad Cities are provided by each of the three providers. Bettendorf Transit Route 1 (Red Route) provides service at Center Station in Moline, Illinois. At Center Station, Bettendorf Transit passengers can transfer to the following MetroLink routes: 10, 20, 30, 57 and 80. Routes 10, 20, 30 and 57 generally operate from 5:30 AM to 9:00 PM on weekdays and from 7:30 AM to 5:30 PM on Saturdays. Route 80 to and from the Rock Island Arsenal only operates on weekdays during the morning and afternoon peak hours.

Davenport CitiBus Route 7 (Bridgeline) connects to MetroLink service at The District station in Rock Island. At The District, CitiBus passengers can transfer to MetroLink routes 10, 30, 40, 53 and 60. These routes generally operate on weekdays from 5:30 AM to 9:00 PM and on Saturdays from 7:30 AM to 5:30 PM.

MetroLink serves the Iowa Quad Cities on Sundays only via its Bridge Line route. Bettendorf Transit and CitiBus do not operate on Sundays.

Transfers from Bettendorf Transit to MetroLink are free and \$0.30 per passenger from MetroLink to Bettendorf Transit. Transfers from CitiBus to MetroLink are \$0.05 per person and \$0.10 per person from MetroLink to CitiBus.

III. PUBLIC PERCEPTIONS

The Study gathered feedback from the public, various stakeholders, businesses and institutions within the Quad Cities regarding their perceptions of the quality of transportation and specifically transit service. The methods used to obtain feedback included meetings with the Study Advisory Committee, two open houses held on January 2005 and three focus group meetings held in March and April 2005. A patron survey was conducted in December 2004. Bettendorf Transit and CitiBus staff was interviewed in January 2005.

The following is a summary of the perceived deficiencies in the existing transportation system in the Iowa Quad Cities to supplement those identified using numerical analyses.

Study Advisory Committee

A questionnaire was distributed to the Study Advisory Committee prior to the December 15, 2004 meeting. The following is a summary of Committee members' responses:

1. What do you think are the most significant transportation issues in the Quad Cities?
 - Due to convenience, people are not generally willing to give up their cars (and become regular transit users). Parking and fuel costs are too low to create the desire to use alternate modes. Most transit users are dependent (no other convenient or available means of transportation) on it. To encourage mode shifts to transit, service must be made "more attractive" (travel time).
 - There has been/will be an increasing number of persons 65 years and older. In this cohort, there are more people that have difficulty in driving themselves, but still need to travel. The transit system should provide them with adequate service and it currently does not.
 - There are capacity deficiencies at the river crossings.
 - The "demise" of shopping malls has reduced the number of multiple-purpose shopping trip opportunities, which has resulted in more shopping-trip vehicle miles traveled (VMT), and less opportunity to use transit for shopping (must make more "trips").
 - VMT continues to increase to no one's benefit. Transit has not been a "legitimate choice" for most travelers.
 - The employment density present in the downtown has not been leveraged as a transit market.

2. Is traffic congestion a significant problem? Where? When?
 - It is not a regional problem. There are selected recurring congestion problems, but the locations are limited in scope (e.g. when Alcoa lets out). River crossings are the more significant congestion points.

3. Characterize the quality of transit service:

- A survey was completed about 10 years ago. Transit was characterized as a social need, not an alternate transportation means for those who could afford to drive.
- Rated 5 on a scale of 0 to 10, with 10 representing “excellent.” Two Committee members further described transit service as “okay.”
- Transit in the Quad Cities fulfills a social need.

4. Most significant problems with existing transit service:

- Current service is not convenient enough to attract choice riders.
- Most routes travel to/from the downtown, which is not as significant of a destination as it was 10 to 15 years ago. Suburb-to-suburb trips must go through the downtown, which is not convenient.
- Connectivity is not present.
- Too many transfers are required to complete a trip.
- Transit has not been marketed as a potential economic development tool. Very little advertising is done.
- Those people living or working in the “doughnut” (outer development ring) do not see transit as a viable option (inconvenient).
- Transit is not incorporated into the planning process. Many developments are located off-line.



5. Most promising solutions:

- Use existing rail corridors as transit connectors for development areas.
- Reintroduce trolleys as an enhancement for economic development.
- Improve the flexibility of service. Include route deviation capabilities, go to a more “non-fixed route” service (dial-a-ride, taxi services, shuttles) that picks people up and takes them more directly to where they would like to go.
- Get more private entities and businesses involved in transit promotions.
- Increase system funding (the current system is woefully underfunded).
- Complete a comprehensive analysis of the system, which has not been completed in 20 years.
- Increase system advertising.
- Incorporate/promote transit as a development tool by providing incentives for developing along a transit line (disincentives for developing away from a line).

- Cross-market services. Social service agencies do not seem to think about transit as a part of their service portfolio.
- Revise routes to increase the 53rd Street connectivity.
- There needs to be seamless travel between the three systems (from the user side) – Bettendorf Transit, CitiBus and MetroLink.

Staff and Driver Interviews

The purpose of Bettendorf Transit and CitiBus staff and driver interviews was to determine existing service issues. As drivers and staff interact with patrons daily, their perspective is offers a pragmatic dimension to the numeric analyses performed with the financial and demographic data.

The interviews were group discussions with drivers and staff of Bettendorf Transit and CitiBus. No formal questionnaires were developed for the interviews. The discussions were informal and involved approximately eight to ten drivers and staff for Bettendorf Transit and three to six drivers and staff from CitiBus. The information garnered from these interviews were qualitative and intended only to supplement data analyses, in the same manner that public meetings were held as part of this study. A more detailed account of the discussions is attached as Appendix A.

Bettendorf

Bettendorf Transit staff and drivers were interviewed on January 26, 2005. A separate interview was held for each driver shift (i.e. morning vs. afternoon). Additionally, two Bettendorf staff members participated in these interviews.

Key issues raised during the interviews for Bettendorf Transit were the need to improve connections at Duck Creek Mall for CitiBus Route 12/53 and Bettendorf Transit Route 1 (Bridgeline) with service to Moline, Illinois. A suggestion was made for consideration to move the focal point of the routes to 18th Street and Spruce Hills Drive when Duck Creek Mall reconstruction is completed and adequate space for a transfer station will not be available. Other comments included running time problems for Route 4 (Green/Scott Community College) from too many “bubbles” in the route. (“Bubbles” in a route are minor deviations that are made on selected or all trips.) “Dead spots” on Route 2 (Gold/North) near Crow Creek Road, 29th Street and Tanglefoot Lane and 29th Street and Victoria Street were also cited as an issue. (“Dead spots” refer to segments of a route where there are either no or an insignificant number of riders.) Respondents also asked for consideration of a half-fare version of the passport and the extension of service to the Dollar Store at 13th Street near Grant Street.

Davenport

Two separate interviews were conducted for CitiBus on January 27, 2005. The first meeting involved key staff including the general manager. The second meeting was with drivers. The following key issues were raised during the interviews:

Key issues raised by drivers included the lack of riders in the downtown loop. The lack of riders cited referred to a portion of the downtown routing of buses where there are no or an insignificant number of riders. Other issues raised were the need for better east-west connections on Kimberly Road, and the need for better transfer connections between Route 12 and Bettendorf Route 5. Running time issues raised included the need for at least 5 minutes of recovery time in the schedules, tight running time issues for Routes 2 and 10, excess time for Route 7, and running time problems for routes crossing Kimberly Road.

Staff raised issues including:

- Need for a “school in” and a “school out” schedule (which changes service levels depending on whether public schools are in session)
- Need for better east-west connections on Kimberly Road
- Provision of service to the Jersey Ridge area, possibly with demand response
- Unproductivity of the downtown loop
- Running time issues with Route 10
- Possibly moving the second bus on Saturdays from Route 2 to somewhere else such as Route 11.

On-Board Patron Survey

A transit user survey was conducted on December 15 and 16, 2004, to obtain feedback from transit patrons. The survey addressed patron demographic characteristics, trip origins and destinations, trip purpose, reason for taking the bus and interest in various transit improvements. Only patrons on fixed routes were included in the survey. Responses to the on-board survey mainly reflected the ridership patterns throughout the system, with the Brady/Harrison corridor being the main travel path.

The following is a summary of the findings of the surveys. The full report containing the results of each survey distribution along with copies of the survey instrument are included in *Technical Memorandum #2, Existing Transit Conditions*.

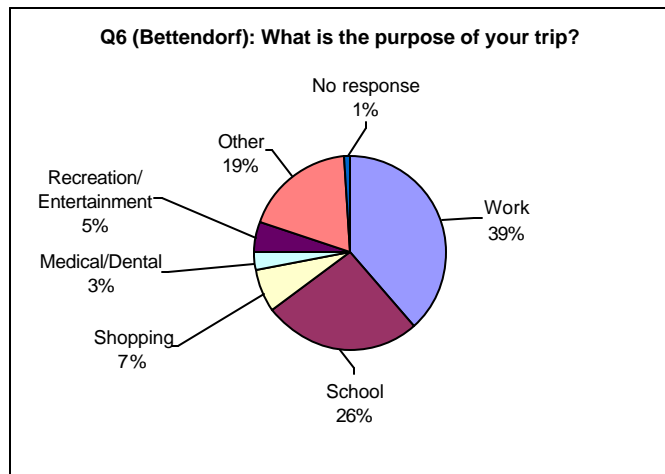
Bettendorf

The survey instrument was distributed to people riding the Bettendorf system. Riders were asked to only complete one survey. Overall, 229 surveys were distributed with 106 surveys returned for a total response rate of 46 percent. The sample has a precision of plus or minus 8 percentage points at a 90 percent confidence level.

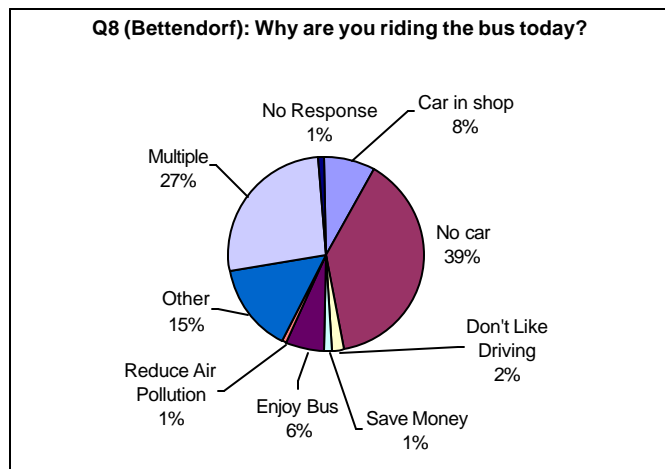
Major findings include:

- The survey responses came from all of Bettendorf routes, representing a good cross-section of riders.
- Respondents generally rode the system from about 6:00 AM to 2:00 PM. Responses tended to be proportionally lower during traditional afternoon peak period of 3:00 PM to 6:00 PM.
- Most riders (54 percent) walked to the bus. Forty percent transferred from another bus. The remaining 4 percent either did not answer the question or used some other unspecified mode of travel to the bus.

- The main trip purposes of riders were going to or from work (39 percent) and to or from school (26 percent). About 19 percent rode the bus for a variety of “other” trip purposes. These were typically multiple purposes most involving going to the library, with some for work and social reasons. The remaining 16 percent of respondents used the bus for recreation/entertainment, medical/dental appointments and shopping.



- Thirty-nine percent of respondents rode the bus because they did not have cars. Twenty-seven percent said they ride for multiple reasons which generally included “not having a car.” “to save money,” or “don’t like to drive.”



- Survey respondents (57 percent) indicated that they rode the bus more than 5 days per week. Another 13 percent ride 4 to 5 days per week.
- Eighty-two percent of the respondents said they know about the PassPORT monthly pass.
- Almost half (42 percent) of bus riders said they paid cash. Eighteen percent of riders used a monthly pass with only 8 percent said they used a transfer. The use of transfers is lower than what is indicated earlier about how people got to the bus. This contradiction means it is likely that respondents don't see transfers as a fare payment mechanism for multiple-seat trips.
- Users were asked to rate nine different aspects of the transit system on a scale of 1 (very poor) to 5 (excellent). These aspects included cleanliness of buses, patrons' perception of security, route frequency, hours of service, on-time performance, helpfulness of drivers, availability of information about bus routes and service, availability of benches, shelters and sign posts, and adequacy of areas served by the routes. Eight of the items were rated 4 or higher. Users were particularly pleased with the helpfulness of the bus drivers, punctuality of the buses, and feeling secure on the buses. The lowest rated category, "availability of benches, shelters and sign posts," received 3.7 out of 5.
- Thirty-five percent of the respondents thought that air pollution in the Iowa Quad Cities was either a serious or somewhat serious problem. The same proportion, 35 percent, either had no opinion, no response, or do not see air pollution as a problem.
- Respondents were slightly more male (51 percent) than female (46 percent). The remaining 3 percent of respondents did not provide this information.
- The mean age of the survey respondents was 38.1 years. The median age was 40.
- The annual household income of half (50 percent) of the respondents was under \$20,000.

Davenport

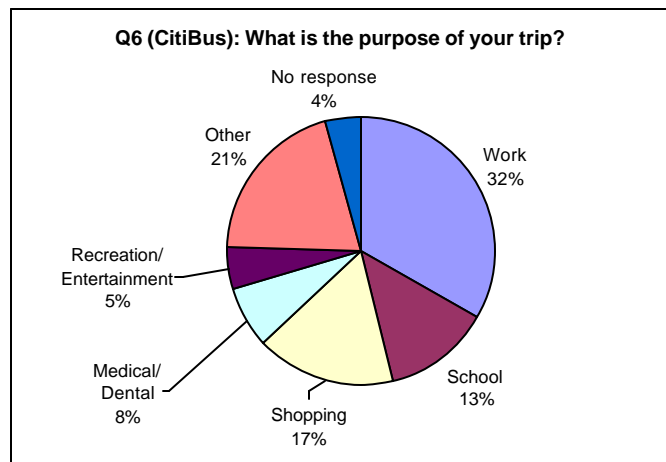
The survey instrument was distributed to people riding the CitiBus system. Riders were asked to only complete one survey. Overall, 795 surveys were distributed with 268 surveys returned for a total response rate of 34 percent. The sample has a precision of plus or minus 5 percentage points at a 90 percent confidence level.

Major findings include:

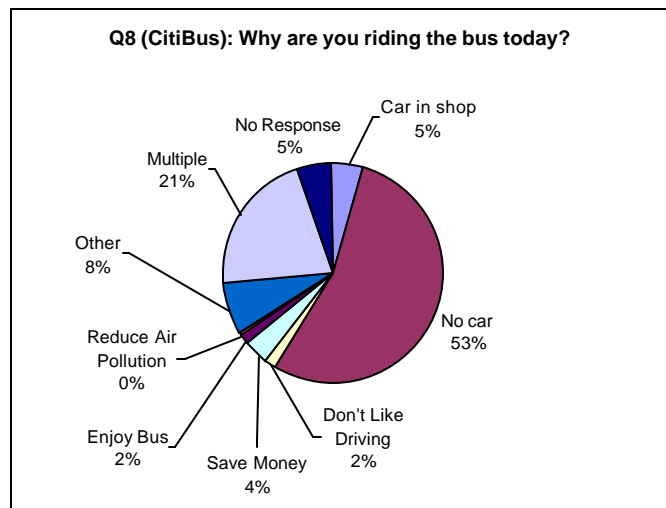
- The survey responses came from all of CitiBus routes, representing a cross-section of riders.

- Respondents generally rode the system from about 9:00 AM to 4:00 PM. Responses tended to be proportionally lower during traditional peak periods of 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM.
- Most riders (57 percent) walked to the bus while 31 percent transferred from another bus. The remaining 12 percent of respondents either did not answer the question or used some other mode of travel to the bus.

- The primary trip purposes of riders were going to or from work (32 percent) and going shopping (17 percent). About 21 percent rode the bus for a variety of “other” trip purposes. These were typically multiple purposes most involving work, school and or shopping reasons for riding.



- Fifty-three percent of respondents rode the bus because they did not have cars. Twenty-one percent said they ride for multiple reasons, which generally included “not having a car” as well as “saving money” or “car in shop.”



- Twenty-four percent of survey respondents indicated that they rode the bus more than 5 days per week. Another 46 percent ride 4 to 5 days per week.
- Seventy-five percent of the respondents said they know about the PassPORT monthly pass.

- Over half (54 percent) of bus riders said they paid cash. Twenty-three percent of riders used a monthly pass with only 3 percent who said they used a transfer. The use of transfers is lower than what is indicated earlier about how people got to the bus. This contradiction means it is likely that respondents do not see transfers as a fare payment mechanism.

- Users were asked to rate 9 different aspects of the transit system on a scale of 1 (very poor) to 5 (excellent). Six aspects were rated higher than 3, including punctuality of the buses and hours of service. The lowest rated category, “availability of benches, shelters and sign posts,” was rated 2.3 out of 5. Two aspects were rated 4 or higher and included helpfulness of bus drivers and patrons’ perception of security aboard buses.
- Thirty-four percent of the respondents thought that air pollution in the Iowa Quad Cities was either a serious or somewhat serious problem. 40 percent either had no opinion, no response, or do not see air pollution as a problem.
- Respondents were almost evenly male (45 percent) or female (49 percent). The remaining 6 percent of respondents did not provide this information.
- The mean age of the survey respondents was 36.4 years. The median age was 35.
- The annual household income of most respondents (62 percent) was under \$20,000.

Open Houses

On the evenings of January 26 and 27, 2005, two open house meetings were held in the Cities of Davenport and Bettendorf, Iowa, respectively, from 4:00 PM to 7:00 PM. The meetings introduced the project to the public and, more importantly, it provided the public with an opportunity to ask questions and express their concerns regarding the current transit system in the Bettendorf and Davenport area. Members of the project staff including the Bi-State Regional Commission, representatives from the Cities of Davenport and Bettendorf, as well Davenport CitiBus, Bettendorf Transit and River Bend Transit and URS, BSRC’s consultant, were present to address the public’s concerns.

The first meeting was held at the Davenport River Center and drew 16 citizens. The second meeting was held at the Bettendorf Library and drew ten citizens. The attendance at these meetings represented the transit population in the Iowa Quad Cities.

The meetings were publicized using various methods:

- Newspaper – A paid advertisement announcing the open houses appeared in the *Quad City Times* for one week, which ran from Friday, January 21, 2005 through Friday, January 27, 2005. The open houses also received media coverage from the *Quad City Times*. A press



Davenport open house, January 26, 2005

release was submitted to the newspaper and an article appeared shortly after on its web site.

- Newsletter – In addition to the newspaper advertisement, 1,500 news flyers were printed and distributed to the BSRC, and the Cities of Davenport and Bettendorf. The BSRC mailed 233 flyers to individuals throughout the Quad Cities area. Groups who received the mailing included the Regional Transportation Advisory Group, Job Access Reverse Commute, the Study Advisory Committee, Quad Cities Air Quality Task Force, Disabled Transportation Advisory Group, and the Drug and Alcohol Testing Consortium. Project Flyers were made available at the Davenport Transit Center, City Hall and on area buses. Copies were also given to the Fixed Route Advisory Group, the Davenport Mayor, City Council and Department directors. Information was also sent via electronic mail to members of the Bettendorf Chamber of Commerce. Extra copies of the news flyer were made available at the open houses as well.
- Television – Upon the completion of the meetings, the formal presentation given at the open houses was recorded in the Council Chambers at Bettendorf’s City Hall, to be aired on the public access channel for two weeks beginning Wednesday, February 2, 2005. A tape of the presentation was mailed to the public information officer in Davenport to have it available for airtime as well.

The open house format provided citizens with an opportunity to view display boards, discuss issues with project staff one-on-one, and fill out a questionnaire and evaluation form. A two-page document detailing the information on the boards was provided to all attendees. A 20-minute formal slide show was also given that provided similar information to what was available on the display boards.

Of the 26 citizens who attended the meetings, 15 individuals completed and returned questionnaires to the project staff. The questionnaire also asked citizens for their opinions on the main transit problems in the Iowa Quad Cities, the locations of these problems, potential solutions and their thoughts regarding alternatives presented in the open houses.

Summary of Findings

When residents were asked about the most significant transportation problems in the Davenport-Bettendorf area, the most frequent response included:

- Lack of transit service on weekday evenings and no service on Sundays
- Duration of time it takes to get to one’s final destination due to the number of transfers
- Frequency of certain routes.

Suggested potential solutions for the transit problems included:

- Altering the times of operation
- Seeing a more collaborative effort between existing transit providers, which would in turn be more accommodating to riders by creating smoother transfer points
- Having a universal fare structure
- Possibly revamping major routes to better encompass area businesses, colleges and universities.

Remarks varied regarding the potential transit alternatives discussed in the open houses. In addition to improvements to current bus service, five alternative transit modes were presented to the public, including low-cost modifications to the existing systems, BRT, trolley/streetcar, LRT and Commuter Rail. BRT and/or a trolley or streetcar system seemed most favorable among the attendees. Individuals considered these options were realistic and economically feasible. Half of the respondents supported a potential new or increased tax to fund expansion of the current bus service or other transit modes.

Complete documentation of these open houses is presented as *Technical Memorandum #1, Open Houses*.

Focus Group Meetings

Focus group meetings were conducted to obtain additional input from the community given the relatively low attendance at the public meetings conducted on January 26 and 27, 2005. In total, three focus groups were conducted to document existing conditions. Two focus groups were completed on Wednesday, March 9, 2005, at the Davenport Public Works Building at 1200 East 46th Street. The first meeting at 9:00 AM drew five attendees while the second meeting at 1:00 PM drew four attendees. The Bi-State Regional Commission (BSRC) invited a total of 55 stakeholders from the Quad Cities. The BSRC developed the guest list with the assistance of the Cities of Bettendorf and Davenport and Chambers of Commerce. BSRC staff followed up the invitation with a telephone call to garner participation at the meetings. The third focus group was attended by six St. Ambrose University students, who were all involved in student government, and was conducted on April 27, 2005 at the Rogalski Center.

At each meeting, URS introduced the project to the group using the materials from the public meetings that were conducted last January. The project overview included the purpose of the Alternatives Analysis, process to be followed, schedule and potential options to be studied.

The following is a summary of comments received from focus group participants. The comments presented are selected based on the frequency that they were cited and their potential impact on the Study. A list of individuals invited to the meetings and participants are included in Appendix B of this document.


March 9, 2005 – Businesses and Institutions

1. How do you see the Iowa Quad Cities growing over the next 20 years?

- Retirement of John Deere employees will change population of the Quad Cities (retirees and replacement employees), potentially increasing demand for public transit. Determine how to provide transit service to meet the demand for employees living in Bettendorf and Davenport from employers outside of the Quad Cities.
- Tyson employees currently use transit.
- My customers (employers) typically do not look at the availability of transit as a required service.
- St. Ambrose University
 - Will increase enrollment from 3,500 to 4,000 students within the decade.
 - Most students come from Greater Quad Cities.
 - New building projects include a new health science facility on Genesis West campus and residence hall that will add 200 new beds, increasing resident students to 1,500.
 - Expanding parking facilities. Don't anticipate changes in policy in this area.
 - Parking fee is \$40/semester.
 - Park-and-ride facility for faculty, staff and commuter students could promote transit use.
 - Suggest "educational corridor" – transit loop service between downtown Davenport and Van der Veer Park, connecting museums downtown and St. Ambrose and possibly up to North Park Mall.
 - Many students work in retail and could use transit service to employment north of St. Ambrose.
 - Most students don't avail themselves of transit information or service.
 - Scott Community College
 - Parking lots are full.
 - Adding to Bettendorf campus.



Downtown Davenport.

- Free parking in Belmont Campus.
 - \$50/semester parking fee in downtown Davenport Campus (Kahl Building).
 - Provides transit information to students.
- Bettendorf Schools
 - Two districts within Bettendorf – Bettendorf and Pleasant Valley. Growth within Pleasant Valley to the northeast. Southern portion of school district is more dependent on transit service.
 - Future revitalization projects in southern Bettendorf might affect enrolment.
 - No plans for capital expansion.
2. Where are the roadway deficiencies and/or bottlenecks within the Iowa Quad Cities? Do these transportation issues affect the way that your business or agency operates?
- Kimberly Road and 53rd Street are congested in the afternoon peak hours. Perhaps this indicates that there are not enough continuous east-west routes through town.
 - There are numerous hospitals in the Quad Cities with various services. There is difficulty in transporting both patients and physicians between these different facilities. Shuttle service is too expensive.
 - Shuttle service (River Bend Transit) is expensive and requires the patron to call ahead of time.
 - Buses on main arterials that are congested result in slow travel times for buses. If arterial routes were improved, then bus travel times would also improve.
 - Need a third Mississippi River crossing.
 - Elmore Avenue, 53rd Street corridor, I-80.
 - Bus service end too soon on weeknights.
 - There is no real traffic congestion in the area.
- 
- Congestion on Centennial Bridge*
3. What are some potential solutions to transportation problems in the Quad Cities?
- Park-and-ride facilities in the outskirts of town could make transit more attractive, particularly during special events.
 - Parking fee at Scott Community College is \$24/month. Waiting for the bus in winter could deter people from using transit, so address this issue.
 - Provide passenger information system with real time data that will tell patrons how long until the next bus arrives.
 - Provide a downtown circulator route, just like in Iowa City during football games.

- Promote transit use, e.g. offer free bus rides through employers.
 - Wells Fargo used to have company cars available for use by its employees during the day for business.
 - Have considered biking to work. Bike racks on buses are a good idea.
 - Improve other alternative modes (add bike lanes).
 - Install bus pullouts.
 - Expand service to end of day. Coordinate bus schedules.
4. In your opinion, how have the development and redevelopment efforts affected transportation in the Quad Cities?
- Davenport Planning and Zoning Commission is very careful about allowing development outside of municipal service area.
5. How are these transit providers received in the community – Davenport Citibus, Bettendorf Transit and River Bend Transit?
- Generally have a good impression.
 - Bettendorf drivers do not stop long enough at hospital.
 - Buses look good.
 - Fleet has improved.
6. Where do you see deficiencies in bus transit service that need to be supplemented?
- Long travel times.
 - Bus doesn't come often enough (every 30 minutes) and service stops too early in the evening, especially for second shift workers.
 - Lack of evening and late night service.
 - Lack of collaboration with other agencies such as public schools.
 - Extend student fare to college students.
 - Provide bus passes through employers.
 - Glut of structured parking in downtown Davenport discourages use of other modes such as transit.
7. Rank where transportation, redevelopment activities, environmental protection and preserving the character of the community fall within the hierarchy of issues affecting the Iowa Quad Cities.
- Transportation is a major issue for people with limited income. This population contributes to the labor force and need to be able to travel to and from work.
 - Parking is not a problem.
 - My job requires me to have a car; it is more cost-effective. I haven't used the bus in a long time.

8. What specific attractions or activity centers in the Iowa Quad Cities should be served by transit?

- Tyson, John Deere, uses identified in the River Vision Project.
- Need service between East Moline and Bettendorf.
- Casinos already have shuttle service.
- The Mark, major employers, health systems, educational institutions.



Palmer College of Chiropractic, Davenport

9. How do you personally feel about implementing a fixed guideway option in the Iowa Quad Cities?

- River Vision – Streetcar is part of River Vision that would attract convention patrons.
- Taxi service is poor.
- Taxi is expensive, unreliable and there aren't enough of them.
- LRT or other rail loop between downtown Davenport and Van der Veer Park.
- Water taxi
- Used to have Amtrak service. Rock Island Rocket service to Chicago took only three hours.

10. What do you perceive would be the benefits of having a fixed guideway system in the Iowa Quad Cities?

- If the need and cost can be justified, it would be one economic development tool.

11. What do you perceive would be the detriments of having a fixed guideway system in the Iowa Quad Cities?

- Cost, lack of riders if it isn't the appropriate mode.

12. How do they feel about increasing taxes to fund additional transit projects?

- If we can increase use (ridership), then increase in funding would be justified.
- Need to make transit more efficient.
- Transit service needs to be provided efficiently.
- Determine how to encourage people to try riding the bus, e.g. offer free pass for one month to new employees, or free day or free week. This would allow new riders to get educated on and comfortable with the transit system.
- Depends on size of increase.
- Need to subsidize persons who have no other means of transportation.

13. What should be done to make transit more attractive?

- Increase in fuel cost, educate students, provide park-and-ride facilities.
- Increase service frequency.
- Distribute transit information (schedule, route, fare).
- Provide bus service to The Mark.
- Have local businesses sponsor bus service between various attractions, e.g. restaurants and performance venues (The Mark).

14. What other groups in the community should be contacted as part of this Study?

- Residential realtor
- New welfare recipients (who should also receive route schedules).
- St. Ambrose students.

*April 27, 2005 – St. Ambrose University
Students*

- Three of the six SAU students have ridden the bus.
- Would like to take the bus to the mall, but difficult to find bus information.
- Difficult to find bus schedule information.
- Bus stop near campus is not nice or welcoming (security, lighting at shelter near Walgreens).
- Routes are confusing – no information posted at bus stop at the mall.
- Most freshmen have cars, which presents problems because SAU running out of parking.
- Provide discounts for students.
- Common knowledge not to go walking south of Locust.
- Desire to go to Wal-Mart on 53rd; also movie theatre, and Hy-Vee on West Kimberly.
- Bus shelters should have route information.
- Safety is a concern – quality of people who ride the bus.
- Long-term goal – Serve 53rd and Kimberly, not downtown; cleaner buses; rail would be attractive.
- Downtown attractions – mostly bars (not attractive to underage students); shows (too expensive). Therefore, most students go to 53rd for entertainment.
- Students desire late night bus service in and out of downtown.
- Bus service ends too early in the evenings (6:00 PM on weekends and 6:30 PM on weekdays). Students who work at the mall have shifts that end after that time.
- One student works as a home health care aid and needs a car to get around.



St. Ambrose University.

- Most jobs are off-campus, including work-study jobs. Limited number of shifts that coincide with bus schedule.
- Students do not get a formal orientation to the City of Davenport when they start school.
- Sidewalks around campus are in poor condition, discontinuous, especially on Locust.
- Locate bus stop(s) on any of the four border streets around campus – Locust, Gaines, Lombard and Harrison. Best if at Harrison/Lombard because dorms are closest to that intersection.
- Parking fee is \$45/year. Difficult to find a spot.
- Provide guide to bus service that is easy to use, with instructions on how to reach common, popular destinations such as Target and 53rd Street development. Provide information online (e.g. trip planner software).
- Difficult to cross the Mississippi River to reach destinations such as The Mark, the District, Augustana, Moline Mall, Comedy Sports.
- Provide connection to The Putnam, I-MAX – provide on-call service?
- Connect to Brady Stadium. (Bus to Northpark Mall stops there now.)
- Future transit connection need: New health science building at Genesis – nursing, physical therapy and occupational therapy programs. (Otherwise, a 10-minute walk.)
- Participants indicated willingness to pay a fee as part of student activity fee for a bus pass.
- Rerouting buses would suit short-term needs. Rail more attractive in long-term.
- Need bus maps, color-coded routes, newer fleet, shelters, emergency telephone.
- Taxis are too expensive to use for late night trips and mostly for bar-hopping.
- Bus service to health club facilities such as the Y, Curves, Gold's Gym.
- Provide transit information in student orientation packet.
- Transit system in Champaign, IL works well.
- Ambrose A to Z could include information/links to transit information (e.g. trip planner).
- Locate bus shelter in attractive space, e.g. in front of a coffee shop.
- Use resident assistants to disseminate transit information to students.

IV. TRAFFIC AND TRANSIT OPERATIONS

The quantitative analysis performed in order to develop the Purpose and Need for transit improvements in the Iowa Quad Cities are in two categories: roadway operations using Bi-State Regional Commission's 2025 Transportation Plan and transit operations using data collected expressly for the Iowa Quad Cities Transit Alternatives Analysis. A summary of the findings of these two methodologies is included in this section.

Summary of QC 2025 – Long-Range Transportation Plan

The Bi-State Regional Commission (BSRC) is in the process of updating its long-range transportation plan to include a planning year of 2035. As such, the Iowa Quad Cities Transit Alternatives Analysis will use BSRC's the currently adopted plan, which includes a planning year of 2025, to determine existing and future traffic operations in the area. *QC 2025* uses 1998 as its base year of analysis.

The following figures present the results of the travel demand model by BSRC for year 1998 and 2025 (assuming no roadway improvements). Figure 1 presents traffic operations in 1998 on roadways included in BSRC's travel demand model. Red segments denote roadways that are operating at or above their traffic capacities. These roadways include the Arsenal and I-74 bridges. In Davenport, these segments are of U.S. Highway 6, U.S. Highway 61, Northwest Boulevard, Kimberly Road and Eastern Avenue, among several segments. In Bettendorf, road segments operating near or above their existing capacity include U.S. Highway 67 and Middle Road.

Unlike major metropolitan areas, such as Chicago and St. Louis, congestion in the Quad Cities metropolitan area tends to be localized and is often caused by construction, crashes or inclement weather. One exception is at three inner-city Mississippi River crossings – U.S. 67/Centennial Bridge, Government Bridge at the Rock Island Arsenal and I-74 Bridge – where recurring congestion occurs during peak hour travel. There are outlying activity centers in the metropolitan area that also experience recurring congestion.



53rd Street and Elmore Avenue

Figure 2
1998 Level of Service

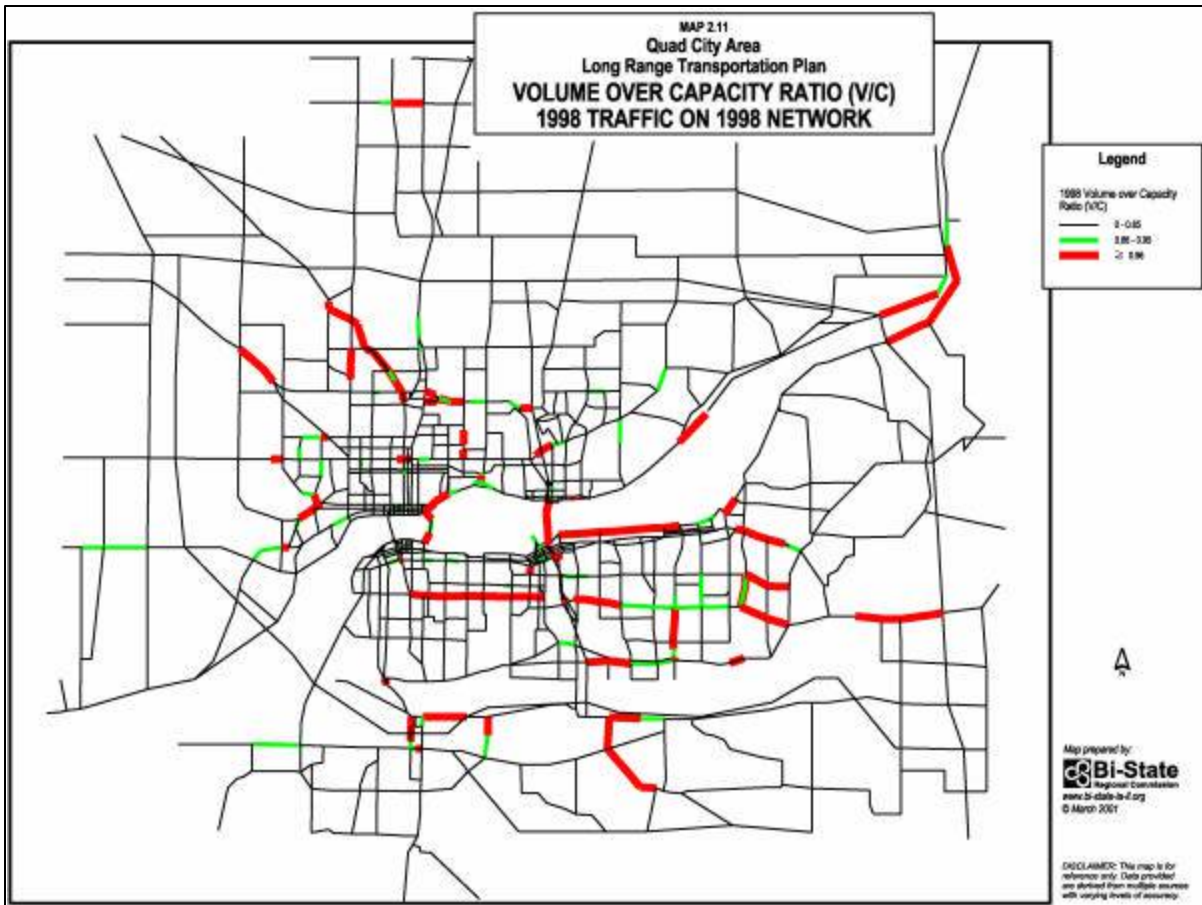
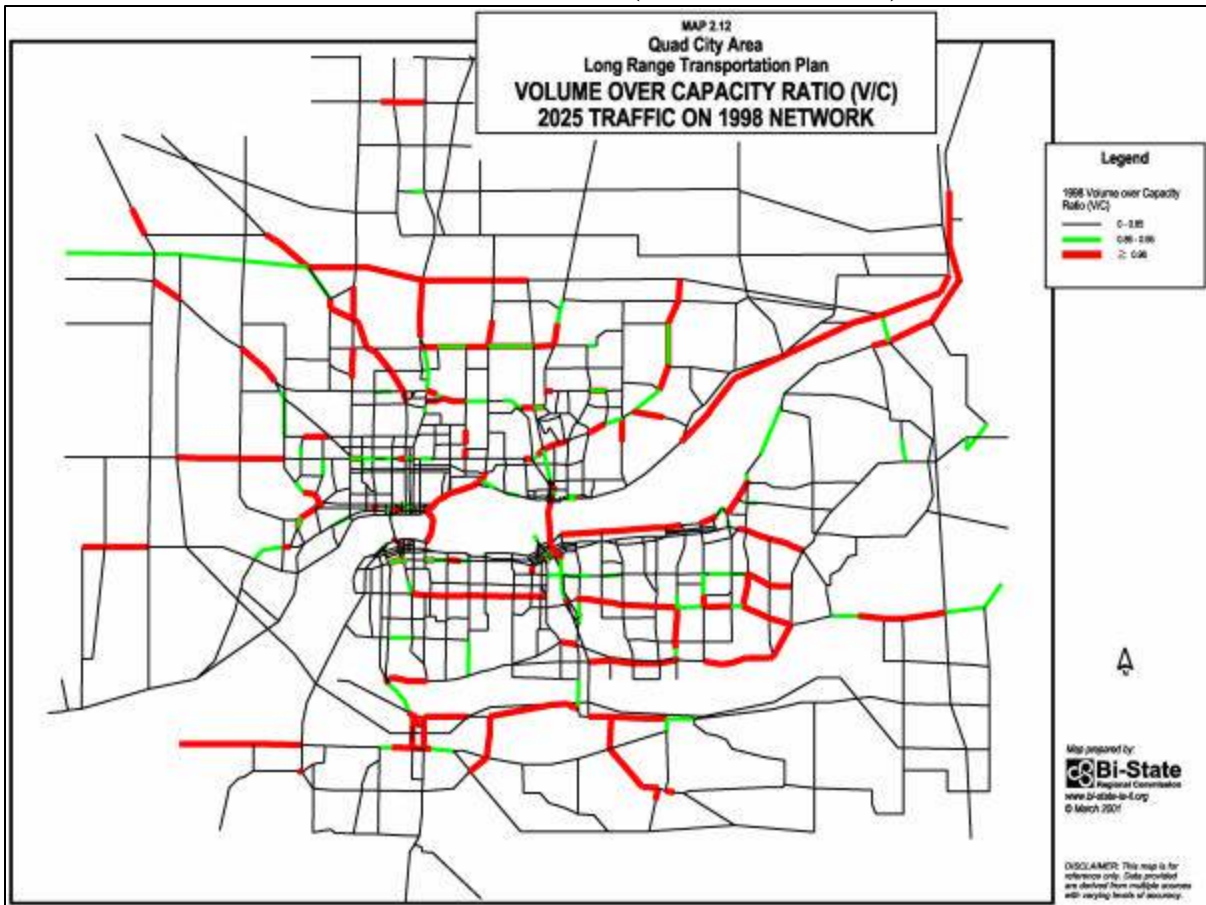


Figure 2 presents the expected traffic operations in 2025 on 1998 roadways as modeled by BSRC. Similarly, red segments denote roadways that are operating at or above their traffic capacities. In 2025, the mileage of roadway segments operating at or above their traffic capacities is expected to increase. For example, State Street/U.S. Highway 67 between Bettendorf and LeClaire will be congested in 2025. Similarly, I-80 and 53rd Street in Davenport will also be congested, along with East River Drive between the Arsenal Bridge and Jersey Ridge; West Locust between I-280 and Wisconsin Avenue; and most of Middle Road in Bettendorf, west of I-74 to I-80.

Figure 3
2025 Level of Service (No Build Network)

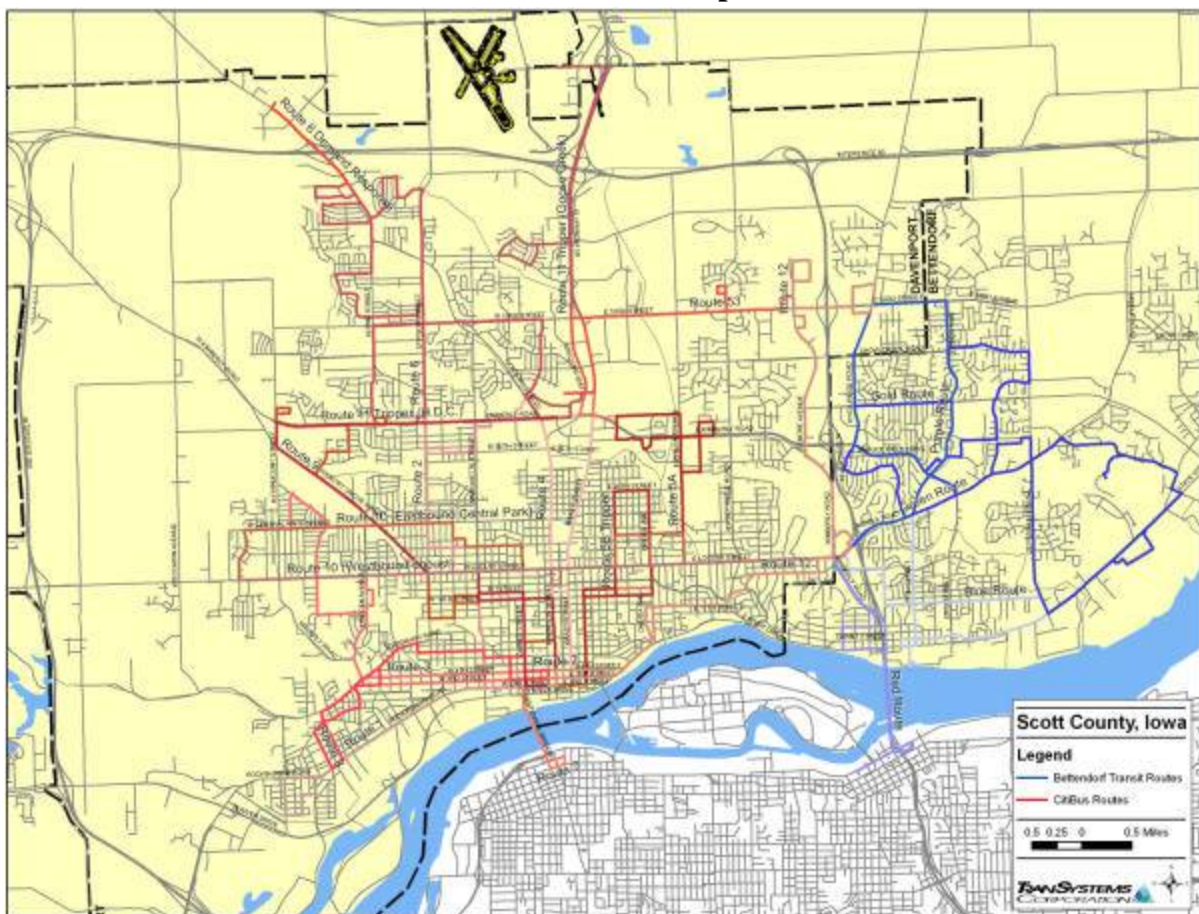


Transit

Technical Memorandum #2, Existing Transit Conditions, employed various methods to evaluate transit service currently provided in the Iowa Quad Cities by Bettendorf Transit and Davenport CitiBus (Figure 3). These methods entailed an examination of both quantitative and qualitative elements of transit service, including:

- Operating and financial trends
- Demographic data
- On/off counts
- Transfer survey.

Figure 4
Transit Route Map



A summary of the findings from each of these elements follows:

Operating and Financial Trends

Under this category, historic operating data provided by Bettendorf Transit and CitiBus that included ridership, cost, number revenue hours and number of revenue miles associated with each fixed route were analyzed.

The operating data show that the Bettendorf Transit and CitiBus systems are basically holding steady. It is anticipated that service will remain stable or possibly decline slightly as development and employment shifts from the core of Davenport to other locations in the area.

Ridership

- Bettendorf – The Scott Community College route has the highest ridership, with nearly 3,000 monthly riders on average. The lowest ridership for the Bettendorf routes is on the new 53rd Street route, which has fewer than 1,000 riders per month. The other three Bettendorf routes have ridership over 2,000 per month. Saturday ridership on the Bettendorf routes shows a downward trend.
- Davenport – Routes 4 and 10 have the highest weekday ridership – 400 and 500 passengers, respectively – Saturday ridership of 300 and 200 passengers, respectively. Routes 53, 11 and 6 have the lowest weekday ridership at 75, 78 and 106 passengers, respectively. The lowest Saturday ridership are on Routes 9, 6 and 3 at 45, 48 and 68 passengers, respectively.

Riders Per Revenue Hour

Riders per revenue hour weighs the service quantity (revenue hours) put on the street versus its use (riders). Typically, routes with high ridership per hour are well used and have the least cost per rider. Conversely, routes with low ridership per hour are poorly used and have the highest cost per rider.

- Bettendorf – The Scott Community College route has the most number of riders per revenue hour at 10.1 while the 53rd Street/Northeast route has the least at 3.0 riders. The remaining routes operate between 7.5 and 8.8 riders per revenue hour. The average for Bettendorf Transit is 8.6 riders per revenue hour.
- Davenport – The range of values for CitiBus routes is from 6.1 (Route 53) to 21.0 riders per revenue hour (Route 7). Route 2 has 7.3 riders per revenue hour while route 6 has 8.7 riders per revenue hour. Route 4 also performs well, with 20.9 riders per revenue hour. The remaining routes operate between 9.2 and 16.1 riders per revenue hour. The CitiBus average is 15.0 riders per revenue hour.

Operating Cost Per Rider

The operating cost per rider is important because it shows the relative financial commitment being made and can dictate where resources are directed. The average cost for Bettendorf Transit is \$6.00 per rider and \$5.00 per rider for CitiBus.

On/Off Counts

In addition to ridership and operating cost data, a route's productivity is assessed by counting the number of patrons boarding and alighting at each stop. A count was performed at each bus stop for each Bettendorf Transit and CitiBus route such that data are available for one whole weekday. The on/off counts also establish current travel patterns on the transit systems.

Specific on/off data for each route can indicate portions of a route that are underutilized. A bus stop boarding and alighting count was performed and the data were analyzed for each transit route. Observations from the on/off counts regarding each route include:

Bettendorf

- Route 1 (Bridge/Red) shows the majority of ons and offs at Duck Creek Mall and at Metro Centre Station in Moline with little intermediate outbound activity along the route. The Saturday boarding and alighting data reflect the same trends. Route 2 (North/Gold) shows most of the boardings and alightings at Duck Creek Mall and at 18th Street and Tanglefoot Lane. There is a fair amount of activity elsewhere along the route except along Crow Creek Road where there are virtually no riders getting on or off. Saturday shows very little ridership on the North route with ons and offs only at Duck Creek Mall and at 18th Street and Tanglefoot Lane, and only one or two riders getting on or off at other locations. Route 3 (Riverfront/Blue) has activity along the entire route with most boardings and alightings at Duck Creek Mall and at the Isle of Capri. Saturday continues to show activity except on the eastern portion of the route between 28th Street and Central Avenue and 28th Street and State Street.
- Route 4 (Scott Community College/Green) shows that major stops are Duck Creek Mall, Scott Community College and 29th Street and Dundee Lane. Elsewhere there is sparse activity along the route. For Saturday, the major stops are at Duck Creek Mall and at the Middle Road Hy-Vee with no activity inbound between Middle Road and Devil's Glen Road and Duck Creek Mall. Route 5 (53rd Street/Northeast/Purple) shows no activity outbound on 18th Street from Echodale Drive to 53rd Street and inbound along Spruce Hills Drive. Major stops are at the 53rd Street Cinemas and at Duck Creek Mall. Saturday shows very little activity along the entire route.

Davenport

- Route 1 (Rockingham) has activity along the entire route with major stops at Rockingham Road and Concord Street, Rockingham Road and Fairmont Street and at the Downtown Ground Transportation Center. Saturday continues to show activity along most of the route. Marquette (Route 2) shows activity along most of the route with major stops at NorthPark Mall, Genesis West Hospital and the Downtown Ground Transportation Center. For Saturday, there continues to be some boardings and alightings along most of the route. Route 3 (Fairgrounds) indicates major stops at 18th Street and Clark Street, Locust Street and Emerald Drive, Locust Street and Michigan Avenue, and at the Downtown Ground Transportation Center. There is activity along most of the route except between Michigan Avenue and 30th Street and Central Park Avenue and Calvin Court where there is only one boarding. Saturday shows little ridership along the entire route with major stops at Locust Street and Lincoln Avenue, Waverly Road and Telegraph Road and the Downtown Ground Transportation Center.

- Route 4 (Brady Street/Harrison Street) shows very high activity along the route with several major stops. There is little activity inbound along Harrison Street between 29th Street and 16th Street. Saturday has generally the same major stops as the weekday. Saturday inbound also has no boardings or alightings along Harrison Street between 32nd Street and Hayes Street and between Dover Court and 17th Street. Route 5A (NorthPark) has sparse activity along most of the route. No boardings or alightings were observed outbound between Grand Avenue and Dennison Avenue and Rusholme Street and Bridge Avenue. For Saturday, major stops continue at the same locations and activity along the route continues to be sparse with little activity outbound between Pershing Avenue and 11th Street and Eastern Avenue and 35th Street and no activity inbound between Rusholme Street and Adams Street and 15th Street and Arlington Avenue. Route 5B (Kimberly Downs) shows little ridership although boardings and alightings are spread along the route except inbound where there are few boardings and alightings along Bridge Avenue, 29th Street and Grand Avenue.

- Route 6 (Ridgeview) has some activity along most of the route with several major stops. Saturday shows very limited activity along the entire route with no boardings or alightings outbound from Linwood Avenue and Valley Drive to Pine Street and Northwest Boulevard and inbound from 72nd Street and Jebens Avenue to Division Street and 55th Street. Route 7 (Bridgeline) shows activity along the entire route with most people getting on and off at the Downtown Ground Transportation Center, 4th Street and Harrison Street, 3rd Street and Ripley Street, and the Rock Island Terminal. Saturday shows little activity between the Rock Island Terminal and 3rd Street with major stops at the same locations. Route 8 (Telegraph) has activity observed along the entire route. Saturday has little ridership although it is spread along the route with the most significant stops at Rockingham Road and Ditmer Street and at the Downtown Ground Transportation Center.

- Route 9 (Hickory Grove) has limited activity along the entire route with most boardings and alightings occurring at several key locations. Saturday also has ridership spread along the route although there are some dead spots along Gaines Street, Division Street, and Hickory Grove Road. Route 10 (Central Park) shows activity along most of the route with major stops at 16th Street and Main Street, Main Street and Locust Street and at Duck Creek Mall at Kimberly Road. Saturday shows gaps in the on/off data for portions of Locust Street and Central Park Avenue. Route 10 (Locust) has major stops at 16th Street and Main Street, 17th Street and Main Street, Main Street and Locust Street, Locust Street and Michigan Street and at Duck Creek Mall with activity along most of the route. Saturday major stops are at 17th Street and Main Street, Main Street and Locust Street, Emerald Drive and Locust Street and at Duck Creek Mall.

- Route 61 (Route 11 Tripper) has major stops at APAC, Goose Creek Americana Park and North Park Mall with little activity elsewhere on the route. The H.D.C. Tripper has stops at Hickory Grove Road and Hillandale Road, Locust Street and Fillmore Lane, 15th Street and Warren Street, and the Downtown Ground Transportation Center. Most riders get on and off at Hickory Grove Road and Hillandale Road and the Downtown Ground Transportation Center. Route 12/53 (East Davenport/East 53rd Street) shows a dead spot on Route 12 between Duck Creek Mall and Jersey Ridge Road for both inbound and outbound trips. Major stops are at NorthPark Mall, the Wal-Mart at Elmore Avenue, the Target off of Elmore Avenue, Duck Creek Mall and the Downtown Ground Transportation Center. For Saturday there is generally activity along the entire route with the major stops as the weekday in addition to Elmore Circle and Elmore Avenue. Saturday does show some activity at Elmore Avenue between Duck Creek Mall and Jersey Ridge Road.

Transfer Survey

A transfer survey was also undertaken as part of this Study to establish current travel patterns on the Iowa Quad Cities transit systems. Transfer data compiled for Davenport and Bettendorf showed the most significant transferring in Davenport occurring to and from Routes 4 and 10 with other transferring also occurring on Routes 2, 5, 7 and 12. All transfers from MetroLink occurred to Route 7 and most transfers from Bettendorf were to Route 10. Bettendorf had most transfers issued from Davenport's Route 10, and within Bettendorf, the Riverfront route issued and received the most transfers. Transfers from MetroLink occurred to the Bridge Route and most transfers from Davenport were from Route 10.

Interviews with staff and drivers of Bettendorf Transit and CitiBus conducted on January 2005 indicated that improvements to transfers between the Bettendorf and Davenport transit services could be achieved by modifying routes such as the Green Route to/from Scott Community College, which traverses neighborhoods in Bettendorf with low ridership, and possibly moving the transfer hub from Duck Creek Mall to 18th Street/Spruce Hills Drive.

V. DEMOGRAPHICS

For this analysis, several demographic characteristics using year 2000 U.S. Census data were examined to obtain a typical and general indication of the need for transit in the Iowa Quad Cities, summarized as follows:

- Population density is the number of residents per square mile. Generally, higher population density is desirable for transit service since it would point to higher patronage and route productivity. For the most part, current routes serve high population density areas. However, some routes serve the lowest population density areas of the community.
- Housing density is similar to population density in that a higher housing density would create favorable conditions for generating transit ridership. In general, both Bettendorf Transit and CitiBus are serving areas with high housing densities.
- Typically, persons who are 65 years of age and older can be a good market for transit service. On average, 12 percent of Scott County's population is in this age group. The current route structure serves some areas with high percentage of senior citizens well, while other areas such as north central Bettendorf are not served well.
- Among the most important factors in determining transit need are household income, poverty status and vehicle availability. This relationship is supported by the user survey data collected for this Study. For each community, the most frequently cited reason for using transit is the lack of a private vehicle. Automobile ownership and household income reflect an inverse relationship; auto ownership is often used as a surrogate measure of income. In general, Bettendorf Transit and CitiBus routes serve low-income areas well.
- To some degree, single-parent households also represent lower income households. The highest number of single-parent households in the Iowa Quad Cities is in north central Davenport. This area is generally well-served by the current system.

The following figures illustrate select demographic characteristics of the Iowa Quad Cities that are served by Bettendorf Transit and CitiBus.

Additionally, figures showing school enrollment densities for 1998 and 2025 as well as projected employment growth are included in this section to identify potential new transit patrons (Figures 12, 13 and 14).

Figure 5
Scott County Population Density

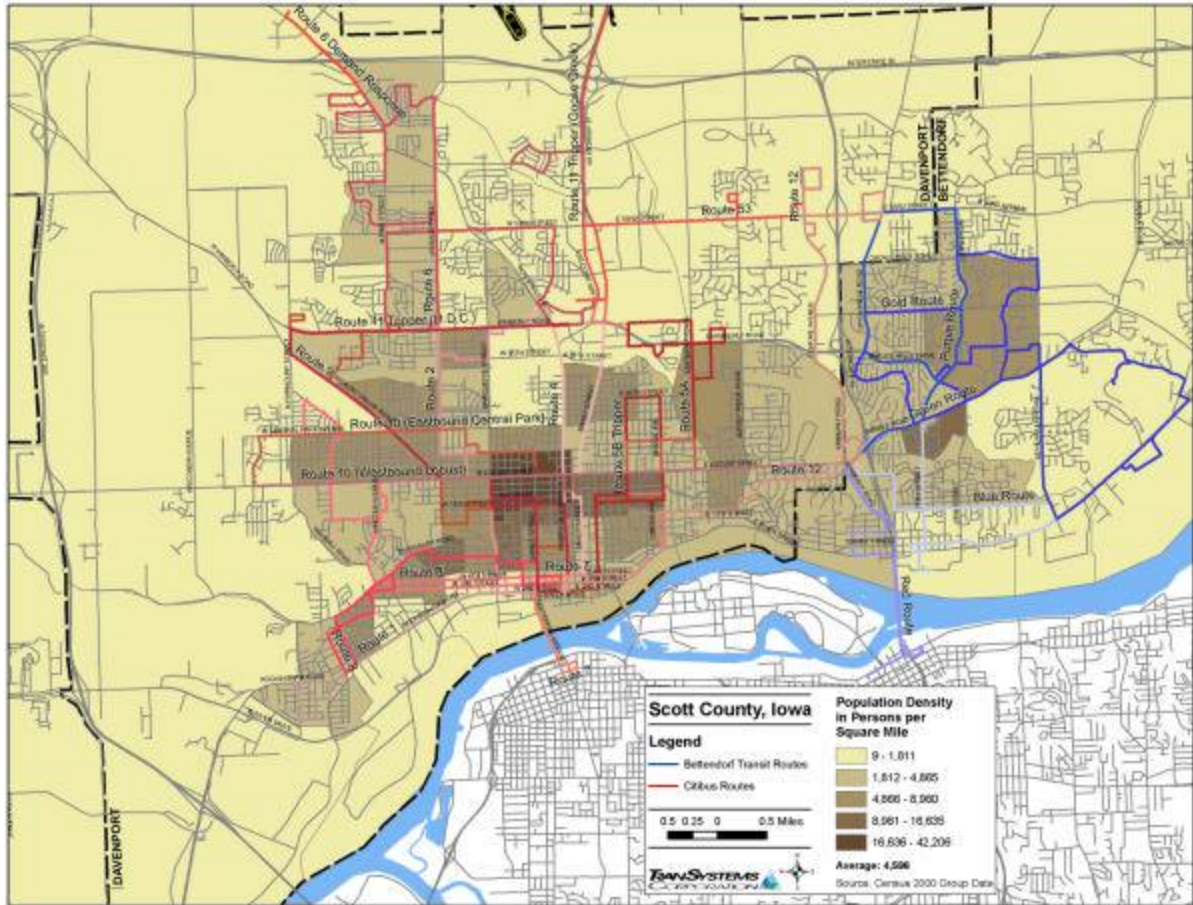


Figure 6
Scott County Housing Unit Density

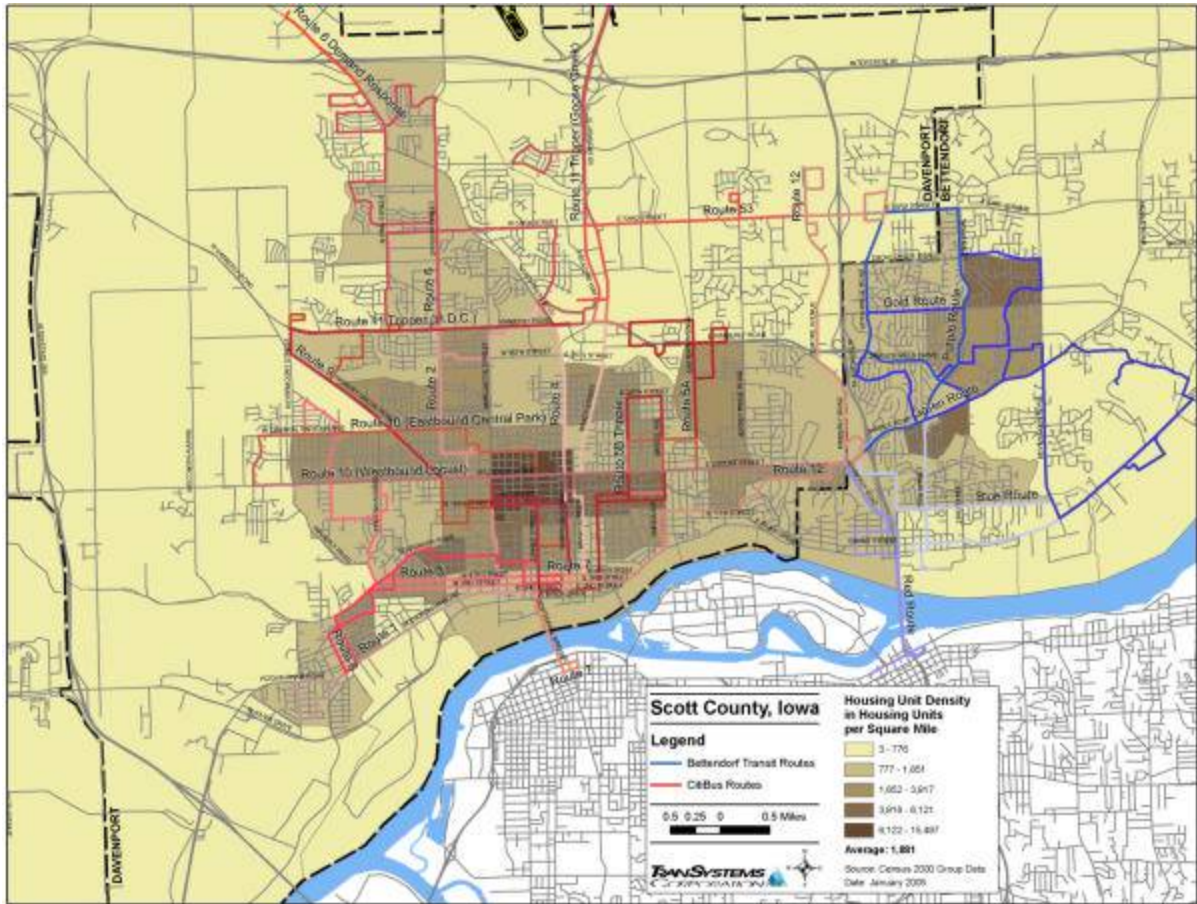
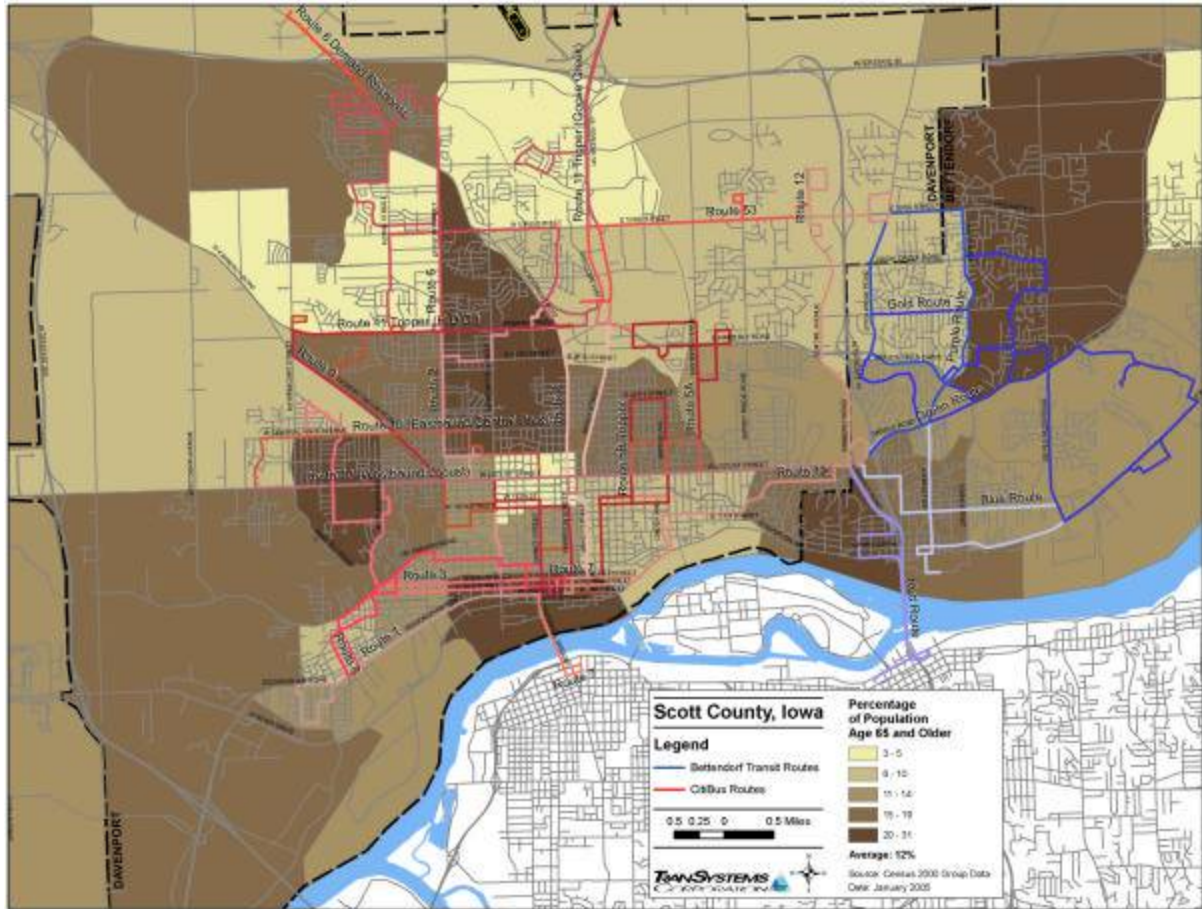


Figure 7
Scott County Percentage of Population Age 65 and Older



**Figure 8
Scott County Household Income in 1999**

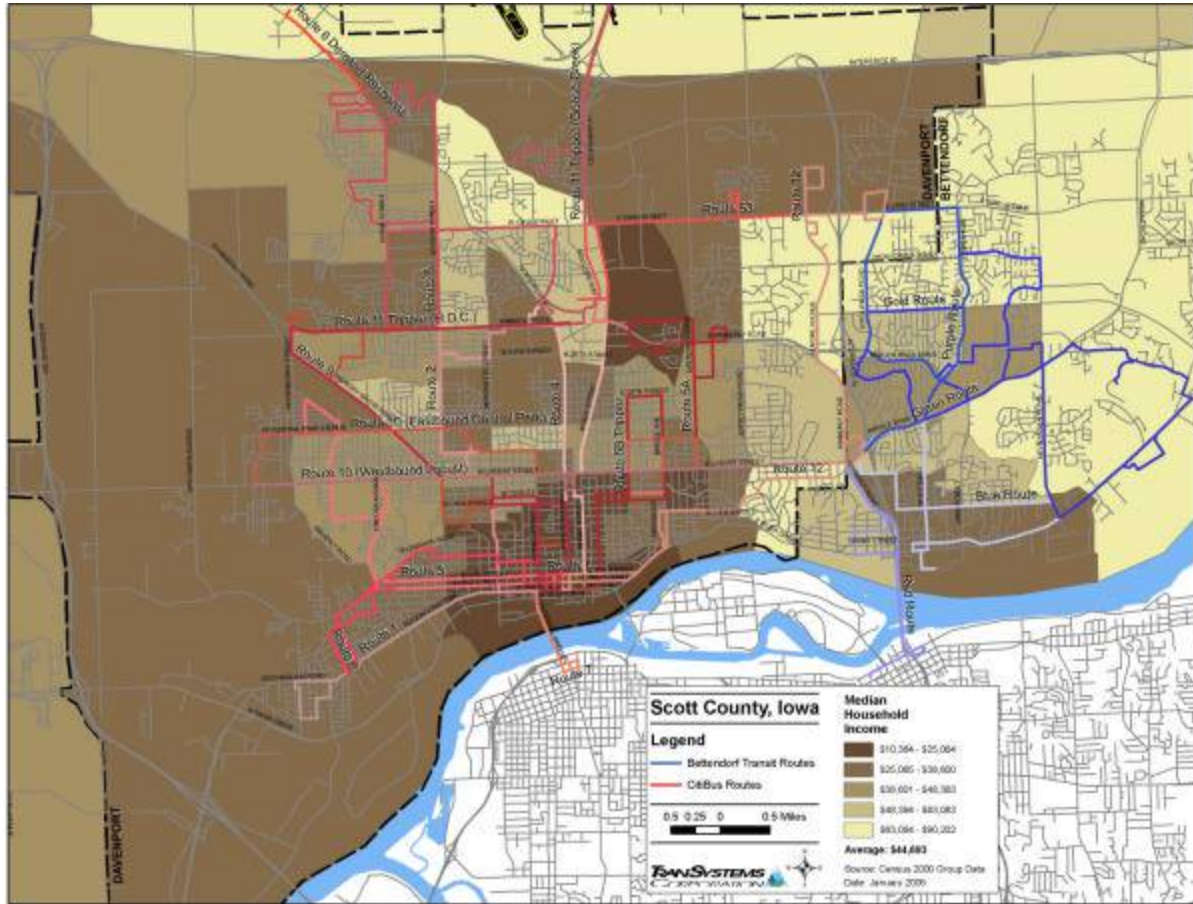


Figure 9
Percentage of Families Living Below Poverty Level

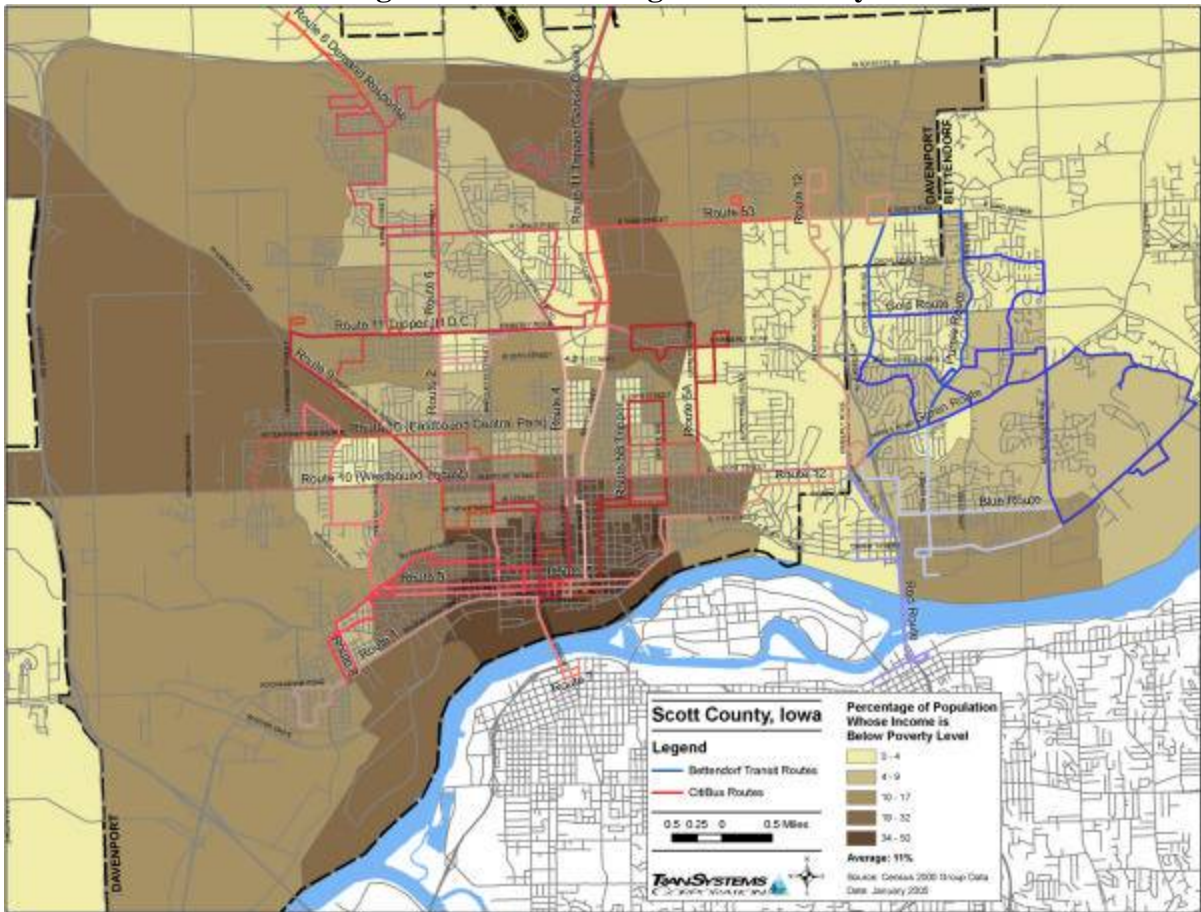


Figure 10
Percentage of Occupied Housing Units with No Vehicle Available

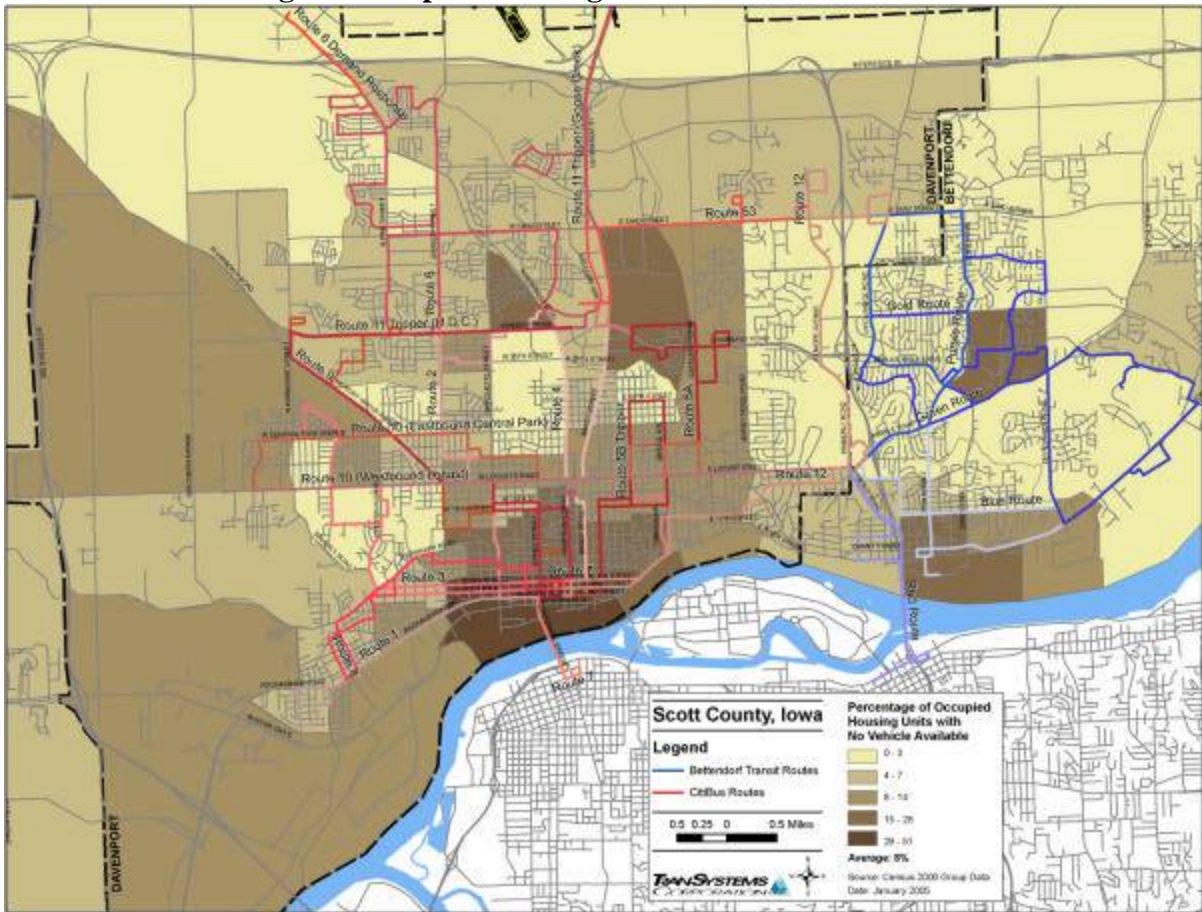
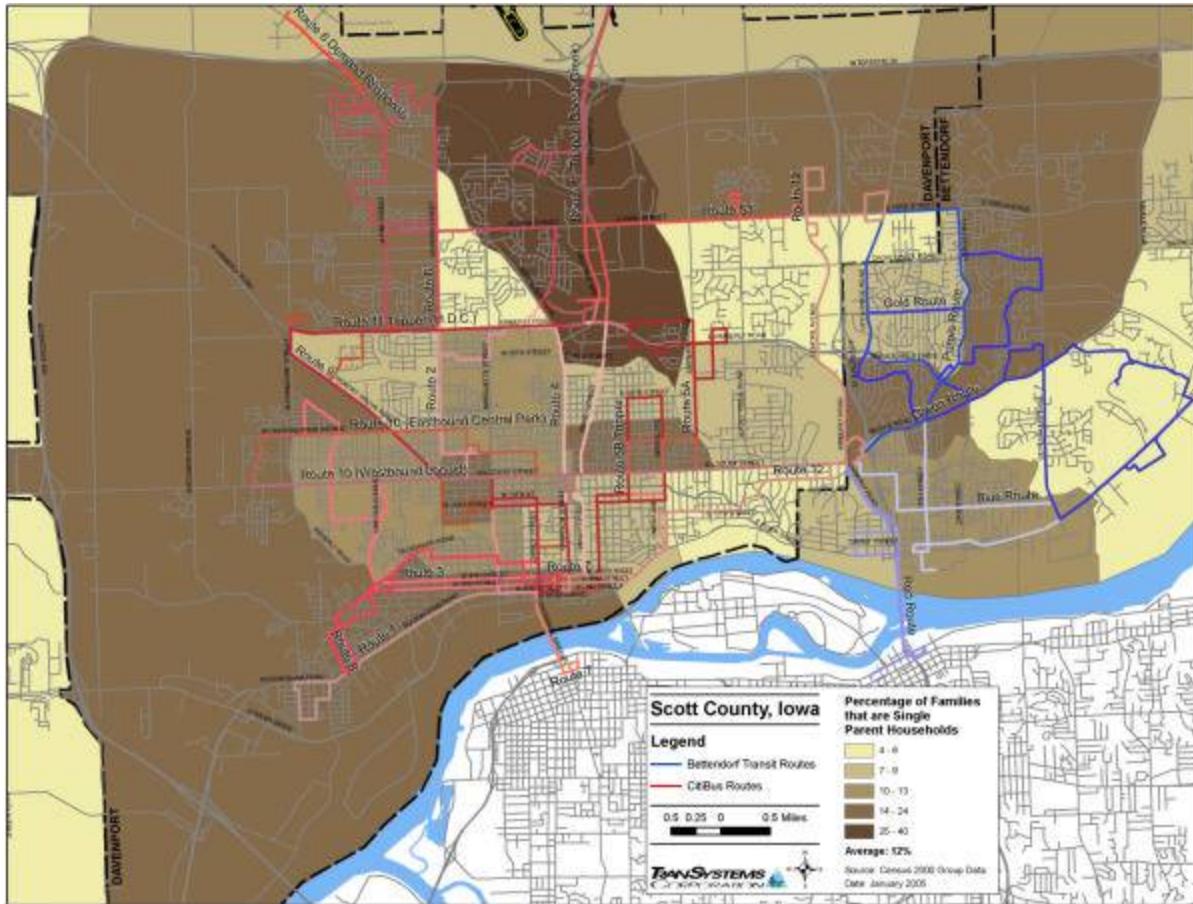


Figure 11
Percentage of Families That Are Single Parent Households



**Figure 12
Growth in Employment**

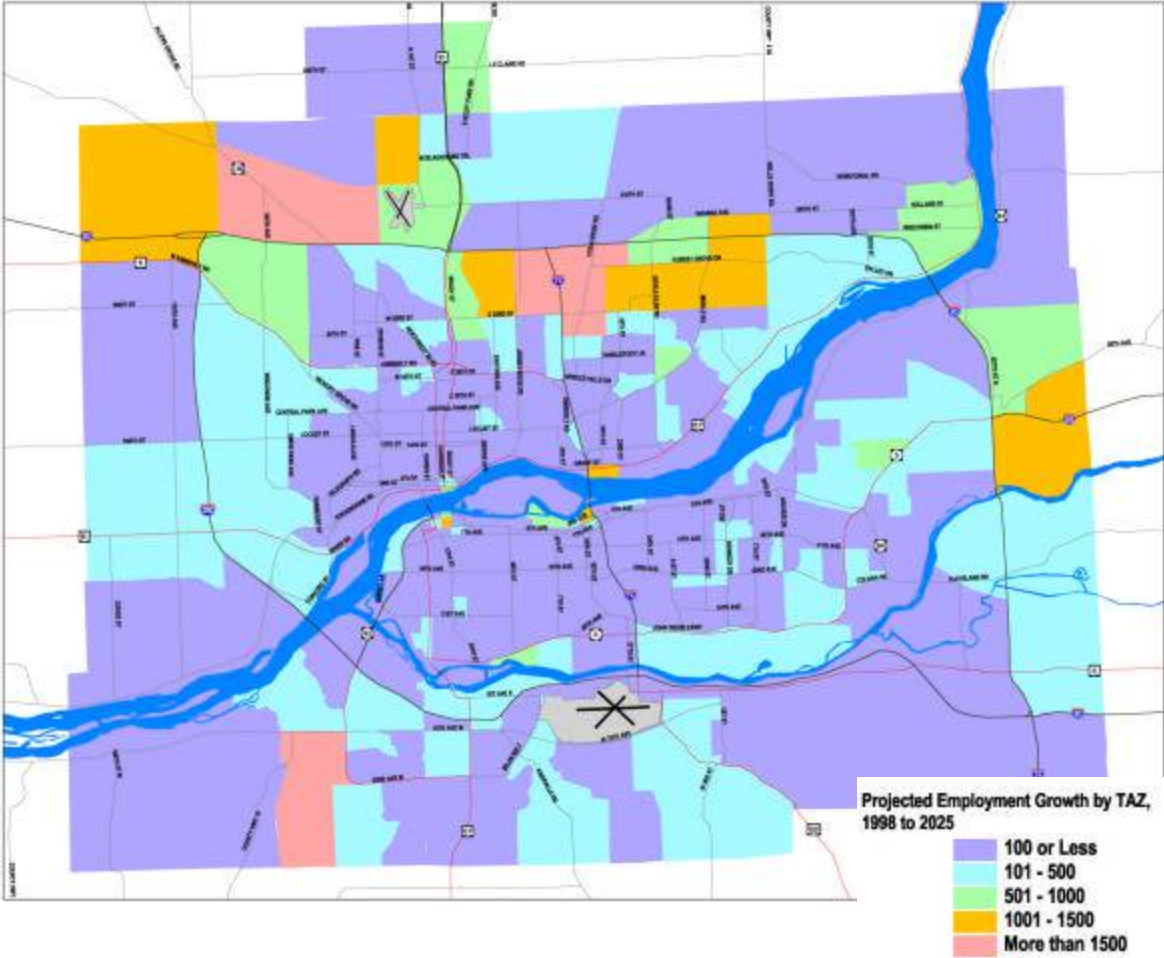


Figure 13
1998 School Enrollment Density

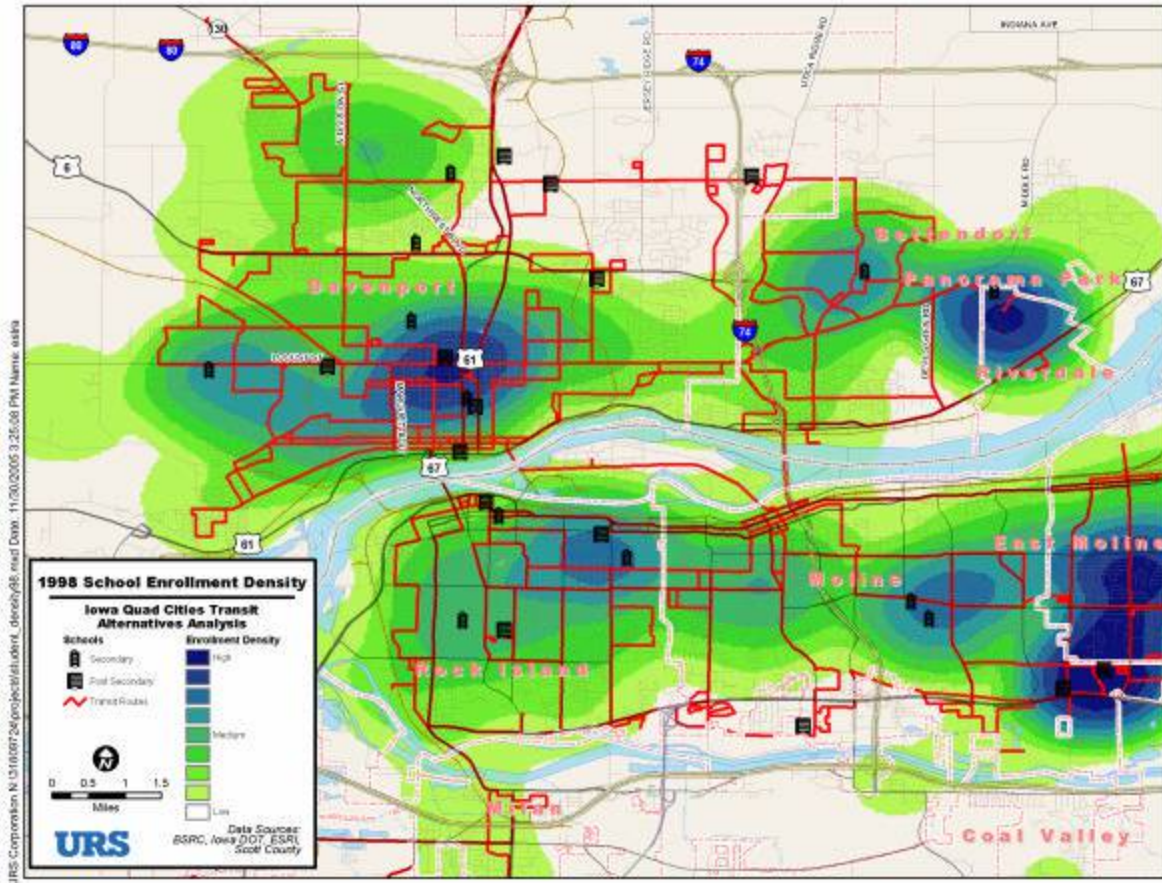
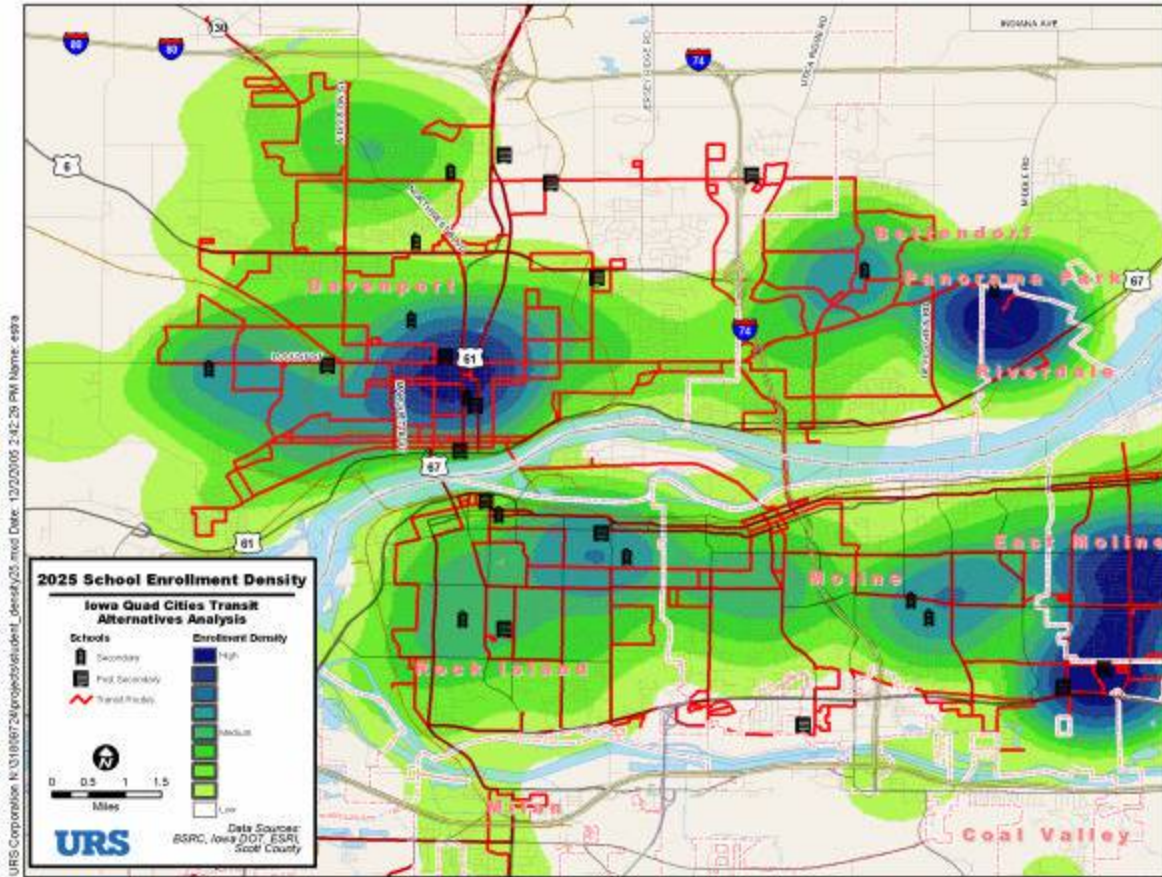


Figure 14
2025 School Enrollment Density



VI. PURPOSE AND NEED

Consistent with the study goals and objectives, the Purpose and Need for transit improvements in the Iowa Quad Cities are classified into three categories – Transportation and Mobility, Economic Opportunity and Investment, and Communities and Environment.

Transportation and Mobility

Goal: Create transportation improvements that add people-carrying capacity as necessary, minimize operating costs and improve operating efficiency.

1. *Provide an expanded range of transportation choices.*
 - a. *Measure: Number of residents within ¼ mile of corridor*
 - b. *Measure: Number of employment within ¼ mile of corridor*
 - c. *Measure: School enrollment within ¼ mile of corridor*
2. *Proposed improvements should augment the Quad Cities' transportation system and make public transit a more attractive option.*
 - a. *Measure: Number of new riders*
3. *Expand opportunities for all transit users to move freely to, through and within the Quad Cities.*
 - a. *Measure: Number of transfer opportunities within the corridor.*
4. *Proposed improvements should be fundable and affordable.*
 - a. *Measure: Increase in annual operating cost*
 - b. *Measure: Increase in annual operating cost per passenger*
 - c. *Measure: Increase in capital cost.*

This goal and its associated objectives will address the following transportation problems in the Quad Cities, based on analyses of current ridership and operating figures for Bettendorf Transit and Davenport CitiBus, and results of the *QC 2025 Long-Range Transportation Plan for the Quad City Area*:

- Long transit travel times

With three transit providers serving the Quad Cities, traveling across the Mississippi River and across municipal lines always entails a transfer to another system. Transfers increase travel time and long travel times are a deterrent to increasing ridership. For example, based on current route schedules, while the travel time from Duck Creek Mall to the Belmont Campus of Scott Community College is only 10 to 15 minutes, traveling from Davenport to Scott Community College would easily double this trip time. In addition, some routes serve areas where there are no boardings or alightings, further increasing travel times and ultimately decreasing route efficiency. For example, survey data as well as interviews with staff and drivers indicated little to no activity along the downtown loop for CitiBus.
- Projected increase in roadway congestion

According to the *QC 2025 Long-Range Transportation Plan for the Quad City Area*, the mileage of roadway segments operating at or above their traffic capacities is expected to increase in 2025. For example, State Street/U.S. Highway 67 between Bettendorf and LeClaire will be congested in 2025. Similarly, I-80 and 53rd Street in Davenport will be congested, along with East River Drive between the Arsenal Bridge and Jersey Ridge; West Locus between I-280 and Wisconsin Avenue; and most of Middle Road in Bettendorf between I-74 and I80. Additionally, congestion typically occurs at the Mississippi River crossings. Increasing transit usage could reduce traffic volumes and congestion at these locations.
- Complex fare structure

While all three transit providers generally offer half-fare to senior, disabled and youth patrons, they charge three different prices for their services. The adult fare for fixed route service is \$0.60 for Bettendorf Transit, \$0.75 for CitiBus and \$0.80 for MetroLINK. The monthly QC PassPORT addresses this issue; however, although over 70 percent of survey respondents using Bettendorf Transit and CitiBus indicated their awareness of the monthly pass, only approximately 20 percent of the same respondents used it to pay for their bus fare. One reason for this may be that some patrons fear that they could not use the entire cash value of the pass within a month.
- Insufficient evening and weekend service

According to the transit user survey, over 80 percent of Bettendorf Transit respondents took the bus to work, school or other reasons that included work, and 66 percent of CitiBus respondents took the bus for the same reasons. Some transit patrons work non-traditional hours – they work shifts that begin or end after the 5:30 PM or 6:00 PM, when Bettendorf Transit and CitiBus end their service. Other patrons would like to use the bus for social and recreational purposes after these hours. Under both circumstances, limited choices exist for these patrons – coordinate a ride with friends or family or take a taxi, which is expensive and scarce in the Quad Cities.

- Lack of bus stop amenities

The user survey also asked Bettendorf Transit and CitiBus patrons to rank various aspects of each system. In both surveys, the lowest rated category was the availability of benches, shelters and signage at bus stops. This issue detracts from patron comfort and security when using the system. For example, the transit hub at Duck Creek mall is in the middle of a parking lot. There is no apparent waiting area for patrons, little additional lighting or signs that indicate that this area of the mall is a significant transit facility, given connections between Bettendorf Transit and CitiBus.



- Patrons do not know where to get information

Riding the bus is daunting enough in an environment that is dominated by single-occupant vehicles. Not knowing where to get transit information, whether related to schedules, routes or fares would make riding the bus even a greater challenge. Having three transit providers in the Quad Cities can also contribute to the confusion. For example, if a trip requires a transfer to another transit system, does the patron call both transit providers for information? Another example is the low use of the QC PassPORT indicated in the December 2004 transit user survey. The monthly pass has a high potential for simplifying fare payment between different transit systems; however, some survey respondents indicated that they did not know where to purchase one or for how long the pass is valid.

- Potential growth in transit patronage

The Bi-State Regional Commission's 2025 travel demand model indicate that access to transit would decrease in year 2025. The model (currently being updated to include a forecast year of 2030) estimates that in 1998, 38 percent of all trips had access to transit assuming a one-quarter mile walking distance. In 2025, this figure is expected to decrease to 31 percent of all trips. This decrease is attributed to declining household size and significant growth in areas that currently do not have access to transit service.

Economic Opportunity and Investment

Goal: Support investments in infrastructure, business and community that sustain the heart of the Quad Cities.

1. *Promote a reliable transit system that supports an efficient, effective land use development pattern in major activity centers, minimizes parking demand and facilitates the highest and best use of adjacent properties.*
 - *Measure: Priority areas served.*

2. *Provide employers with the confidence that their employees have reliable options to travel to and from work.*
 - *Measure: Number of employees working during proposed service hours.*

This goal will address the following economic needs in the Iowa Quad Cities:

- **Strong employment base**

The Quad Cities are home to major employers, many of whom are national firms. (Appendix C illustrates select activity center and major employers in the Quad Cities.) They include Deere and Company, the Rock Island Arsenal, Genesis Health System, Trinity Regional Health System, Tyson Fresh Meats and Alcoa. According to the Quad City Development Group, these six companies currently have over 26,000 employees. The current trend shows an aging population in the area. To sustain the area's economy, it is important to provide alternative means of transportation to and from work to attract and sustain employees. Presently, there are limitations to the current transit service that should be addressed to ensure businesses that their employees have reliable options to travel to and from work.

The Quad Cities also have a significant student population that educates and trains current and future workers. St. Ambrose University, a coeducational, liberal arts school located in Davenport, currently enrolls 3,500 students. St. Ambrose's projected student enrollment will increase to 4,000 within the next decade. The Belmont Campus of the Scott Community College in Bettendorf enrolls 4,000 students. Students may take classes at the main campus in Bettendorf, at two locations in downtown Davenport, or at the campus located north of Davenport off of I-80.



- Reliable transportation options

A transit trip to the Rock Island Arsenal from downtown Davenport requires two transfers: from CitiBus Route 7 (Bridgeline) to MetroLINK Route 10 (Red Route) to MetroLINK Route 80 (Arsenal Route). Assuming a trip in the morning peak hour that originates from the Downtown GTC in Davenport, the total trip time is approximately one hour and 15 minutes. This travel time assumes that timely connections at the District and Centre Stations in Rock Island and Moline, respectively, are made. Morning service between Centre Station and the Arsenal is only from 5:45 AM to 8:00 AM. Afternoon service is from 2:45 PM to 4:45 PM. The total distance between the Davenport GTC and the Arsenal is approximately three miles from the west end of the island and six miles from the east of the island. Undoubtedly, this would be an easy trip to make by private vehicle, but onerous by bus. Given the number of persons employed by the Rock Island Arsenal, there could be a significant potential in additional transit patrons that are currently untapped because of existing limitations in transit service.

The Belmont Campus of Scott Community College (current enrollment of 4,000 students) in Bettendorf is another popular destination in the Quad Cities. Depending on the trip origin within Davenport, travel time to Scott Community College can take between 30 minutes and one hour. The boarding and alighting counts performed for this study along with focus group and driver and staff interviews identified this long travel time as a characteristic of the existing transit system that should be improved.

- Efficient land use development patterns

Transportation opportunities to cross the Mississippi River continue to be limited, as indicated in the *QC 2025 Long Range Transportation Plan* and *Quad Cities Metropolitan Area Mississippi River Crossing Study*. In the peak hour, traffic volumes on both the Arsenal and I-74 bridges exceeded their capacities. This condition is anticipated to continue in 2025 assuming no additional river crossing is constructed, and would continue to limit movement of employees and products between the two sides of the Quad Cities and beyond.



Davenport Downtown Ground Transportation Center.

As the population in the area ages and employers see the need to draw human resources from the outlying areas of the Quad Cities, transit improvements such as park-and-ride lots and expanded bus service may be a way to transport employees from these areas.

Socioeconomic projections currently available from the Bi-State Regional Commission indicate that population and employment will continue to be concentrated in the existing core of Bettendorf and Davenport. While much of the growth is expected to occur in outlying areas of the two cities – generally northwards, including the Kimberly Road and 53rd Street corridors – the downtown cores will continue to have the highest densities of population and employment.

Communities and Environment

Goal: Facilitate the preservation and enhancement of neighborhoods in the Quad Cities.

1. *Acknowledge the individual character and aspirations of each place served, and of the Quad Cities as a whole.*
 - *Measure: Number of historical structures adjacent to the corridor*
 - *Measure: Number of environmental features adjacent to the corridor*
 - *Measure: Number of cultural resources adjacent to the corridor*
 - *Measure: Required right-of-way.*
2. *Support regional goals for cleaner air and water, more efficient energy use, and a safer and healthier environment.*
 - *Measure: Number of water bodies within ¼ mile of the corridor*
 - *Measure: Number of greenways within ¼ mile of the corridor.*

This goal will address the following community and environmental needs in the Iowa Quad Cities:

- **Preserve neighborhood character**

Neighborhood preservation and continuity are key elements for sustaining community life. Transportation investments need to be planned, designed and ultimately operated to enhance the community they serve. Within the study area and within the corridors themselves, many natural and cultural assets can be found. For example, within the Brady Street and Harrison Street corridor in Davenport, one can find the Davenport City Hall, Palmer College, St. Ambrose University, Vander Veer Park and Junge Park/Duck Creek Park. These neighborhood assets should be protected and preserved from transportation projects and their impacts.
- **Provide a healthier environment**

A reliable and efficient transit system in the Iowa Quad Cities could stem the ever-increasing demand for additional roadways, parking facilities and fuel. Right-of-way and funds required for roadway construction could be limited to preserve and enhance neighborhoods in the Quad Cities. Demand for fuel could be decreased, reducing emissions and resulting in cleaner air and water and a healthier environment overall. Transit vehicles that use clean fuels such as clean diesel and electricity can further reduce air pollution and noise to enhance livability within the Iowa Quad Cities.

Appendix A
Driver and Staff Interviews
January 2005

Staff and Driver Meetings

As part of TranSystems' review of existing conditions, the drivers and staffs of the Bettendorf and Davenport systems were interviewed. The purpose of the interviews was to determine the service issues facing the systems. As the drivers and staff interact with the riding customers and operations on a daily basis, their perspective is vital to providing a pragmatic dimension to the foregoing statistical analysis.

Bettendorf Interviews

The Bettendorf staff and drivers were interviewed on January 26th, 2005 at the Bettendorf Public Works facility located on Devil's Glenn Road. Drivers representing morning and afternoon shifts were each interviewed as a group. Two members of the Bettendorf staff joined one of the meetings and presented their views as well.

The following significant issues were raised:

- Need to improve transfer connection at Duck Creek Mall between Davenport Route 12/53 and Bettendorf routes.
- Bridge Street route does not connect well with MetroLink service; radio communication with MetroLink drivers is hampered by going through MetroLink dispatch.
- Running time on the Scott County Community College route is tight; too many route deviations or "bubbles" in the route.
- Gold Route has "dead spots" near Crow Creek Road, 29th and Tanglefoot and 29th and Victoria.
- Duck Creek Mall will be inaccessible to transit once construction at the Mall is complete.
- Some drivers suggested that a new focal point at 18th and Spruce should be considered. Might eliminate overlapping service on Middle Road.
- Half-fare version of passport should be considered.
- Extend service to Dollar Store at 13th Street near Grant Street.

Davenport Interviews

Two separate interviews were conducted. First, TranSystems met with key staff of CitiBus, including the General Manager. Second, TranSystems interviewed drivers who volunteered to make comments. Both sessions were held on January 27th, 2005.

CitiBus Staff

These main issues were raised by the staff:

- The service should have a "school in" and "school out" schedule. Some routes (such as Route 6) have noticeable decreases in ridership when schools are out of session. Service in the system might be better regulated based on the schools' schedules.

- Need better east-west connections on Kimberly. Currently, services intersect Kimberly, creating a “hodgepodge” of service that does not tie the corridor together very well.
- The Jersey Ridge area could use service, possibly a “call a bus” operation.
- The downtown loop is largely unproductive with better opportunities to use the time and mileage now being expended.
- Route 10 has some running time issues with the other routes working acceptably.
- On Saturdays, Route 2 has an extra bus which might be better used on another route, such as Route 11.

CitiBus Drivers

Major comments received from the drivers:

- The downtown loop draws few riders.
- Need better east/west connections on Kimberly.
- After 3pm routes crossing or using Kimberly have running time problems.
- Need better transfer connections between Route 12 and Bettendorf Route 5.
- Most routes should have at least 5 minutes recovery time.
- Routes 2 and 10 have tight running time issues. The other routes are acceptable. Route 7 as a lot of excess time.

Appendix B

Focus Group Meeting Attendees

Wednesday, March 9, 2005

9:00 AM

Participants

<i>Name</i>	<i>Representing</i>	<i>Address</i>	<i>Telephone #</i>
Debbie Roski	Trinity Health Systems	4500 Utica Ridge Road Bettendorf 52722	563.742.3110
Bob Eckhart	Mel Foster Company	835 Golden Valley Drive Bettendorf 52722	800.226.9381
Melissa Freidhof	Ross, Inc.	430 14 th Street Bettendorf 52722	563.355.7573
Marlin "Hap" Volz, Jr	Wells Fargo	203 W. 3 rd Street Davenport 52801	563.383.3238
Cathy Wiebel	Kahl Education Center	326 W. 3 rd Street, Suite 710 Davenport 52801	563.336.3467

Project Staff

Dee Bruemmer, Davenport Public Works
Gena McCullough, Bi-State Regional Commission
April Manlapaz, URS
Rick Nau, URS

Wednesday, March 9, 2005

1:00 PM

Participants

<i>Name</i>	<i>Representing</i>	<i>Address</i>	<i>Telephone #</i>
Laurel McClellan	Scott Community College	500 Belmont Road Bettendorf 52722	563.441.4001
John Gere	SGGM Architects	1800 3 rd Avenue, Suite 600 Rock Island, IL 61201	
Dr. Ed Rogalski	St. Ambrose University	518 W. Locust Street Davenport 52804	
John Perdue	Bettendorf Schools	3311 Central Avenue Bettendorf 52722	

Project Staff

Dee Bruemmer, Davenport Public Works
April Manlapaz, URS
Rick Nau, URS

List of Invitees

The following is a list of stakeholders invited to the March 9, 2005 focus group meetings. Highlighted names indicate those who participated in the meetings.

Mr. Tom Earps
WG Block
PO Box 280
Bettendorf, IA 52722

Dr. Patricia Kier
Chancellor
Eastern Iowa Community College
306 W. River Drive
Davenport, IA 52801

Mr. Bob Eckhart
Mel Foster Commercial Co.
835 Golden Valley Drive
Bettendorf, IA 52722

Mr. Brock Earnhardt
Iowa American Water Co.
PO Box 979
Davenport, IA 52805

Mr. Todd Johnson
Pepsi-Cola Bottling Company
3809 Gaines Street
Davenport, IA 52806

Mr. David Schiltz
Brown Traffic Products, Inc.
735 Federal Drive
Davenport, IA 52803

Ms. Cathy Wiebel
Director
Eastern Iowa Job Training
Kahl Education Center, Suite 710
326 W. Third Street
Davenport, IA 52801

Dr. John Perdue
Superintendent
Bettendorf Community School District

Bettendorf, IA 52722

Mr. Hap Volz
Wells Fargo Bank
203 W. Third Street
Davenport, IA 52801

Mr. Ken Croken
Genesis Health
1227 E. Rusholme
Davenport, IA 52803

Mr. Tony Ciabattoni
Wal-Mart Supercenter
5811 Elmore Drive
Davenport, IA 52807

Mr. Frederick Fuessel
Davenport Electric Contract Co.
PO Box 5227
Davenport, IA 52808

Mr. Steve Geifman
First Equity Development Group
101 W. Second Street, Suite 306
Davenport, IA 52801

Mr. Morris Preston
Steel Drum Reconditioning Recycling
PO Box 3217
Davenport, IA 52808

Mr. Joe Taylor
President/CEO
QC Convention & Visitors Bureau
2021 River Drive
Moline, IL 61265

Mr. Harry Johannes
President
Johannes Bus Service, Inc.
115 31st Avenue
Rock Island, IL 61201

Superintendent
Davenport Community School District
1606 Brady Street
Davenport, IA 52803

Ms. Cheri Bustos (Debbie Roski)
Director of Corporate Communications
Trinity Health Systems
2701 17th Street
Rock Island, IL 61201-5393

Mr. Ed Rogalski
St. Ambrose University
518 W. Locust
Davenport, IA 52803

Mr. Dan Cosner
Wal-Mart Supercenter
3101 W. Kimberly
Davenport, IA 52806

Mr. Jim Anderson
Genesis Robotic Systems
8900 Harrison Street
Davenport, IA 52806

Mr. John Gere
Scholtz, Gowe, Gere, Marolf
Architects & Interior Designers, PC
1800 Third Avenue, Suite 600
Rock Island, IL 61201

Mr. Bob Shaw
Vice President Field Operations
Shaw Electric, Inc.
930 E. River Drive
Davenport, IA 52803

Alter Barge Line
2117 State Street
Bettendorf, IA 52722

Dr. Glenn Pelecky
Chief Administrator
Mississippi Bend Area Education Agency
792 21st Street
Bettendorf, IA 52722

Dr. David Claeys (Laurel McClellan)
President
Scott Community College
500 Belmont Road
Bettendorf, IA 52722

Mr. Allen Weimerskirck
Manager
Fareway Food Store
3900 Belmont Road
Bettendorf, IA 52722

Mr. Don Keller
K & K True Value Hardware
1818 Grant Street
Bettendorf, IA 52722

Ms. Melissa Freidhof-Cruz
Ross' Restaurant, Inc.
430 14th Street
Bettendorf, IA 52722

Mr. Dave Green
Mississippi Valley Regional Blood Center
5500 Lakeview Parkway
Davenport, IA 52807

Mr. Richard Glover
AVG Automation Autotech Technologies, LP
4140 Utica Ridge Road
Bettendorf, IA 527122

Mr. Sheila Zink
K'nees Florist
1829 15th Street Place
Moline, IL 61265

Ms. Karrie Holland
Cartridge World
5256 Utica Ridge Road
Davenport, IA 52807

Mr. Sean Sullivan
Crave-Bar Grill Fondue Room
5250 Utica Ridge Road
Davenport, IA 52807

Ms. Sherry Wilson
Java State LLC
1018 Mound Street
Davenport, IA 52803

Ms. Jane Reichenbacher
Kiles, Inc.
886 Middle Road
Bettendorf, IA 52722

Mr. Chris Boothe
U.S. Cellular
4540 Brady Street
Davenport, IA 52806

Mr. Paul Lensmeyer
Alcoa Employees & Community Credit
Union
PO Box 1107
Bettendorf, IA 52722

Ms. Nicole Friedrichsen
Starbucks
888 Middle Road
Bettendorf, IA 52722

Mr. Mike Chupka
Waterfront Deli
1020 State Street
Bettendorf, IA 52722

Mr. Tim Woods
Bee Line Company
2700 62nd Street Court
Bettendorf, IA 52722

Ms. Nancy Donovan
Isle of Capri Bettendorf
1777 Isle Parkway
Bettendorf, IA 52722

Mr. Scott Weber
Weber Meats, Inc.
2311 Cumberland Square Drive
Bettendorf, IA 52722

Ms. Meghan Welch
Big League Barbers
5262 Utica Ridge Road
Davenport, IA 52807

Mr. Jason Rockwell
American Bank & Trust Co.
1855 Middle Road
Bettendorf, IA 52722

Mr. Alicia Taylor
Quiznos Duck Creek Plaza
868 Middle Road
Bettendorf, IA 52722

Mr. Keith Hall
QCA Pools and Spas
1021 State Street
Bettendorf, IA 52722

Mr. Jim Russell
Russell Construction Company, Inc.
4600 E. 53rd Street
Davenport, IA 52807

Mr. Art Gibeaut
Sivyer Steel Corporation
225 S. 33rd Street
Bettendorf, IA 52722

Mr. Bob Mohr
Country Manor Chocolates
512 16th Street
Bettendorf, IA 52722

Mr. Mike Wallace
Trinity at Terrace Park
4500 Utica Ridge Road
Bettendorf, IA 52722

Ms. Denise Young
Youngstown Café
5266 Utica Ridge Road
Davenport, IA 52807

Mr. Gil Cepeda
Trattoria Tiramisu
1804 State Street
Bettendorf, IA 52722

Mr. Bob Gallagher
Gallagher Millage & Gallagher PLC
4301 E. 53rd Street, Suite 300
Davenport, IA 52807

Ms. Annette Snyder
Employment Source
1815 Grant Street
Bettendorf, IA 52722

Wednesday, April 27, 2005

5:30 PM, Rogalski Center, St. Ambrose University

Participants

<i>Name</i>	<i>Representing</i>	<i>Contact Information</i>
Emma Crino	SGA, resident student History Ed major	4350 Wittman Dr Davenport, IA 52806 563.940.2437 CrinoEmmaM@sau.edu
Heather Hill	SGA, resident assistant Biopsychology/Pre-DPT	518 W. Locust St Davenport, IA 52803 309.830.6529 HillHeatherM@sau.edu
Kari Rogers	SGA, CAB, resident student Criminal justice major	518 W. Locust St Davenport, IA 52803 563.542.4159 RogersKariL@sau.edu
Beth Pfeiffer	SGA, resident student Criminal justice major	518 W. Locust St Davenport, IA 52803 563.888.7052 PfeifferElizabethB@sau.edu
Carol Haywood	SGA, resident student Psychology/Pre-OT major	518 W. Locust St Davenport, IA 52803 563.333.5580 HaywoodCarolE@sau.edu
Alex Backes	SGA	518 W. Locust St Davenport, IA 52803 563.888.7020 BackesAlexanderL@sau.edu

Project Staff

Dee Bruemmer, Davenport Public Works

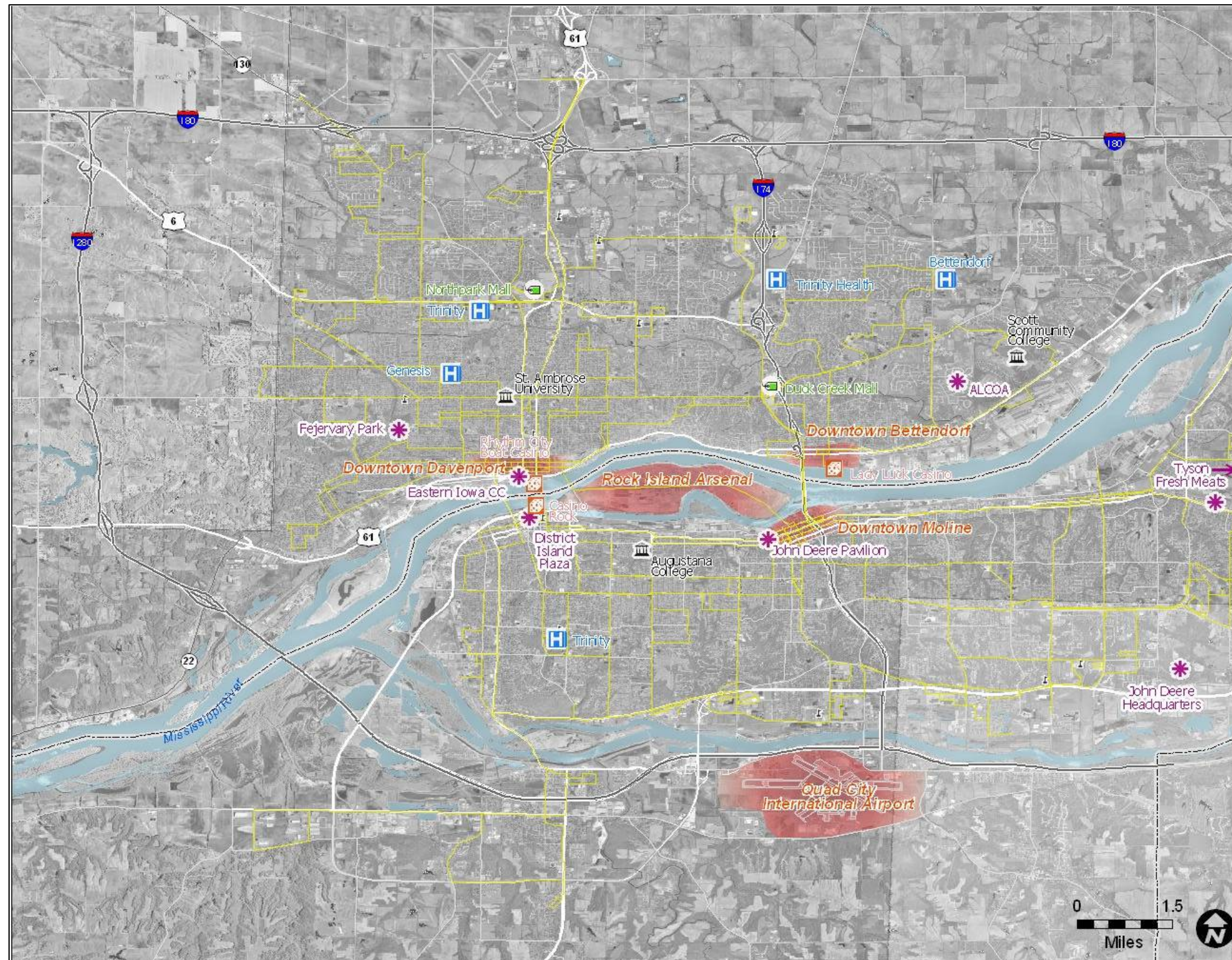
Pete Donner, Davenport CitiBus

April Manlapaz, URS

Rick Nau, URS

Appendix C

Select Activity Centers and Major Employers



Select Activity Centers and Major Employers

Legend

-  Casino
-  College
-  Hospital
-  Mall
-  Misc
-  School
-  Transit Routes

February 2006

