

**DEKALB-SYCAMORE AREA
TRANSIT DEVELOPMENT PLAN**

FINAL REPORT

FEBRUARY 3, 2005

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I. INTRODUCTION

This document is the final report prepared under a project sponsored by the DeKalb-Sycamore Area Transportation Study (DSATS) and the Illinois' Department of Transportation to prepare a Transit Plan for the DeKalb-Sycamore urbanized area. Transit planning is essential to guide the management, operation, and financial functions of transportation systems. This study has resulted in a plan to guide decision-makers to improve the existing transportation service in the Cities of DeKalb and Sycamore, as well as all of DeKalb County.

The first step in developing the Transit Plan consisted of collecting background information on the characteristics of DeKalb County and the transportation services that are available in the county. Data for the report was collected in a variety of ways. Section II of this report describes the existing conditions in DeKalb County. It provides background information about the demographics and economic status of the county's population and the labor force and employers in the county using U.S. Census Bureau and Illinois Department of Commerce data. In addition, numerous maps exhibit the major trip generators in the county including shopping destinations, medical facilities, residential and assisted living facilities, and human services agency sites, among others.

Section III provides a detailed description of the transportation service provided by TransVAC. The profile of TransVAC includes its service area, routes operated, vehicle fleet, and past performance. This section also includes the routes provided by Huskie Line and the ridership levels. Section IV contains a transportation needs assessment for the DeKalb-Sycamore area. Based on this assessment, three service improvement alternatives were identified. These were presented and reviewed by the DSATS Technical Committee before a recommended Five-Year plan was created.

Some service improvements were identified that would involve an increase in service hours and a corresponding increase in costs. This includes expanding transportation service to Saturdays, increasing evening service, and extending the Green Line to Sycamore. It is expected that these service improvements would not be possible unless the State of Illinois provides Downstate Operating Assistance Program (DOAP) funds. These are funds that are available to urban transit systems throughout the State of Illinois.

II. EXISTING CONDITIONS

DeKalb County is located in northwest Illinois. Eight Counties share some portion of the border. To the west are Ogle and Lee Counties and to the south La Salle County. Kendall and Kane counties create the east border, and McHenry, Boone, and Winnebago Counties are to the North. The DeKalb-Sycamore metropolitan area is approximately seventy (70) miles from downtown Chicago. Being so close to Chicago ties DeKalb County to that metropolitan area geographically and economically. DeKalb County is included in the Chicago MSA, but is not included in the jurisdictions of Chicago planning organizations, like the Chicago Area Transportation Study (CATS), or the Regional Transit Authority (RTA).

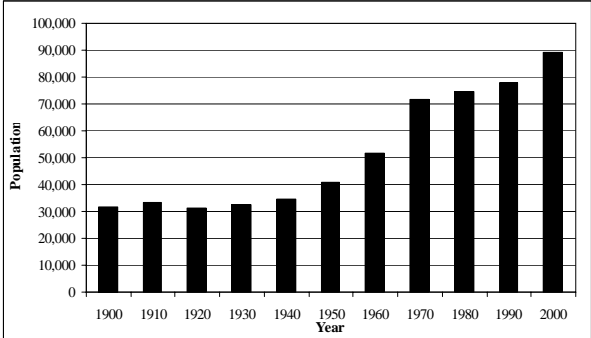
The East-West Tollway (Interstate 88) runs through central DeKalb County and provides access to Annie Glidden and Peace Roads at the City of DeKalb’s southern end. The close proximity of DeKalb County and the DeKalb-Sycamore metropolitan area’s close proximity to Chicago provides short driving times to O’Hare and Midway International Airports, downtown Chicago, major sporting events, and museums. DeKalb County is approximately two hours drive from Milwaukee, Madison, the Quad Cities, Peoria, Bloomington-Normal, and Galena. Exhibit II.1 shows DeKalb County’s major highways and communities.

POPULATION

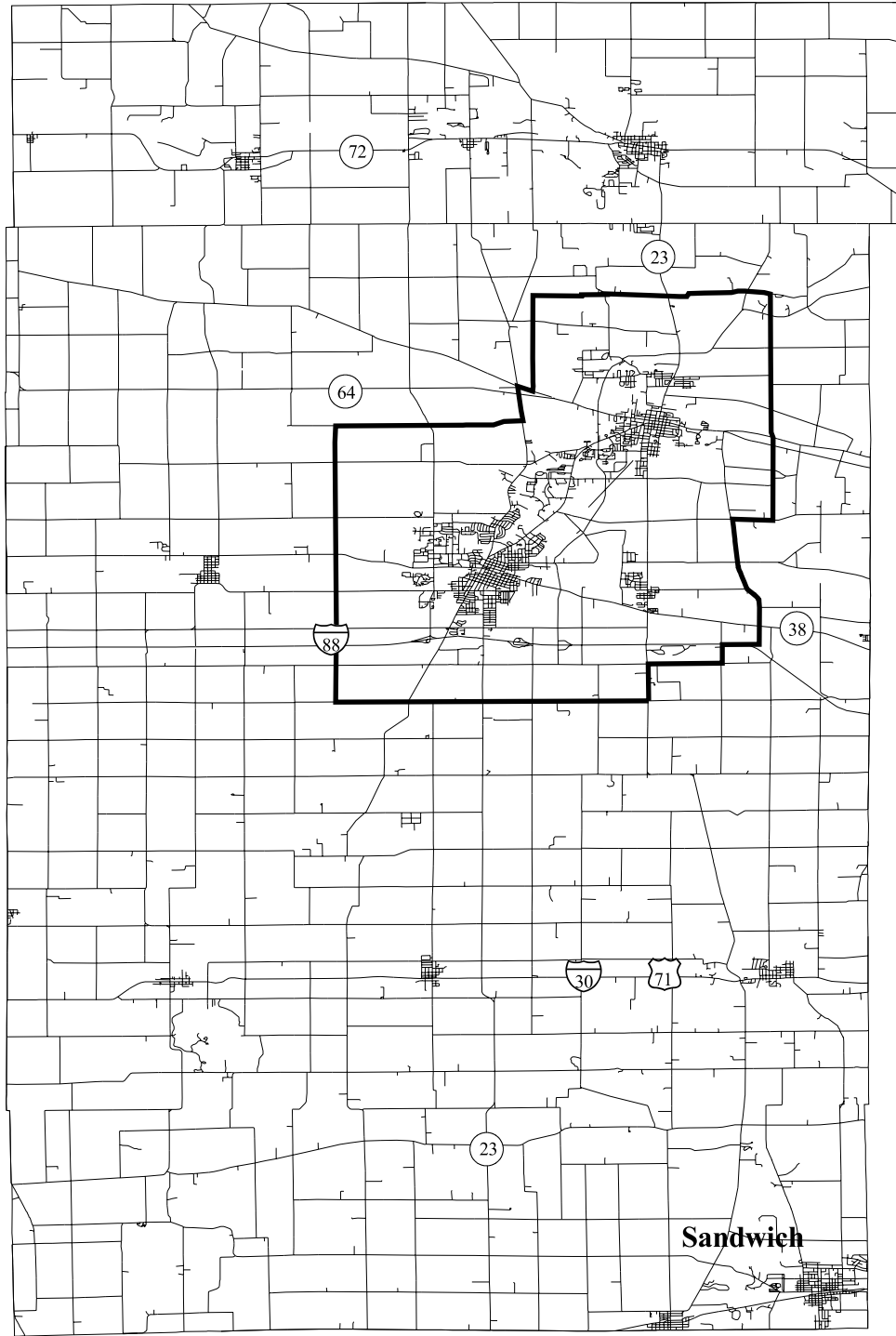
DeKalb County’s population has grown continuously since 1920 with its largest growth occurring in the 1950s and 1960s. This growth slowed after the 1960s, until it began increasing dramatically between 1990 and 2000, when its population increased by nearly twelve percent. From 2000 to 2002, DeKalb County’s population increased approximately three percent to 91,561 people. Exhibit II.2 illustrates these population trends.

Population





Exhibit II.2: County Population Trend, 1900-2000



Source: DeKalb County Clerk Office, and the U.S. Census Bureau



Legend

-  State Routes
-  Interstate Routes
-  US Highways
-  MPO Boundary



Prepared By:
RLS & Associates, Inc.

**Exhibit II-1
Location Map**

**DeKalb-Sycamore
Urban Transit Plan**

Population

Nineteen townships comprise DeKalb County's 634 square miles. It has an overall population density of 140 people per square mile and fourteen towns, villages, and cities. The City of DeKalb has the largest population within the county, according to the 2000 U.S. Census. Exhibit II.3 shows the county's population by township and each of the townships' villages, towns, or cities.

Exhibit II.3: Population of DeKalb County Municipalities

Name	1970	1980	1990	2000
Afton Twp	708	605	665	640
Clinton Twp	1591	1451	1521	1,663
Village of Waterman	990	943	1074	1,224
Cortland Twp	3037	4297	4637	6,986
Town of Cortland	541	1010	963	2,066
Village of Maple Park	---	124	641	765
DeKalb Twp	35,976	36,375	38,710	42,189
City of DeKalb	32,949	33,099	34,925	39,018
Franklin Twp	1950	1891	1879	2,026
Village of Kirkland	1,138	1,155	1,011	1,116
Genoa Twp	3,797	4,195	4,210	5,342
City of Genoa	3,003	3,276	3,083	4,169
Kingston Twp	1,347	1,809	1,955	2,577
Village of Kingston	481	618	562	980
Malta Twp	1,532	1,484	1,335	1,402
Village of Malta	961	995	865	969
Mayfield Twp	461	413	373	810
Milan Twp	461	413	373	364
Paw Paw Twp	481	398	384	306
Pierce Twp	622	512	506	473
Sandwich Twp	5250	5,743	5,990	6,920
City of Sandwich	5,046	5,241	5,567	6,059
Shabbona Twp	1,354	1,372	1,379	1,454
Village of Lee	121	145	319	319
Village of Shabbona	730	851	897	929
Somonauk Twp	1,448	1,610	1,543	1,805
Village of Somonauk	1,012	1,107	1,263	1,295
South Grove Twp	605	532	461	535
Squaw Grove Twp	1,770	2,175	2,387	2,712
Village of Hinckley	1,053	1,447	1,682	1,994
Sycamore Twp	8,522	8,549	8,843	10,401
City of Sycamore	7843	9,219	9,708	12,020
Victor Twp	437	448	413	364

Source: U.S. Census, 2000

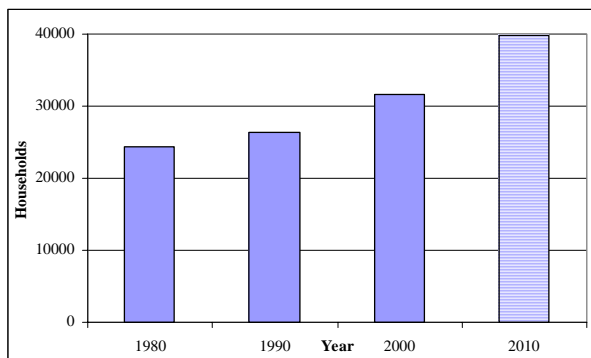
The 71,838 persons living in the five (5) largest townships constitute about eighty-one (81) percent of the DeKalb County population. DeKalb is the largest Township in the county, and Sycamore Township is the second largest. Recent population growth in the town of Cortland (within

Population

Cortland Township) made it the third largest Township over Sandwich. In the most populous Townships, seventy-eight (78) to ninety-two (92) percent of the population lives within a town, village or city. Approximately seventy-seven (77) percent of the County’s population lives within an incorporated area. DeKalb and Sycamore are the largest cities, and together have fifty-seven (57) percent of the county’s population.

There were 31,674 households in DeKalb County in 2000. The number of people per household has been steady since 1990, and is projected to remain stable. The overall average number of people per household in 2000 was 2.56.

Exhibit II.4: DeKalb County Households, 1980-2010

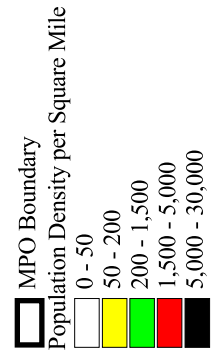
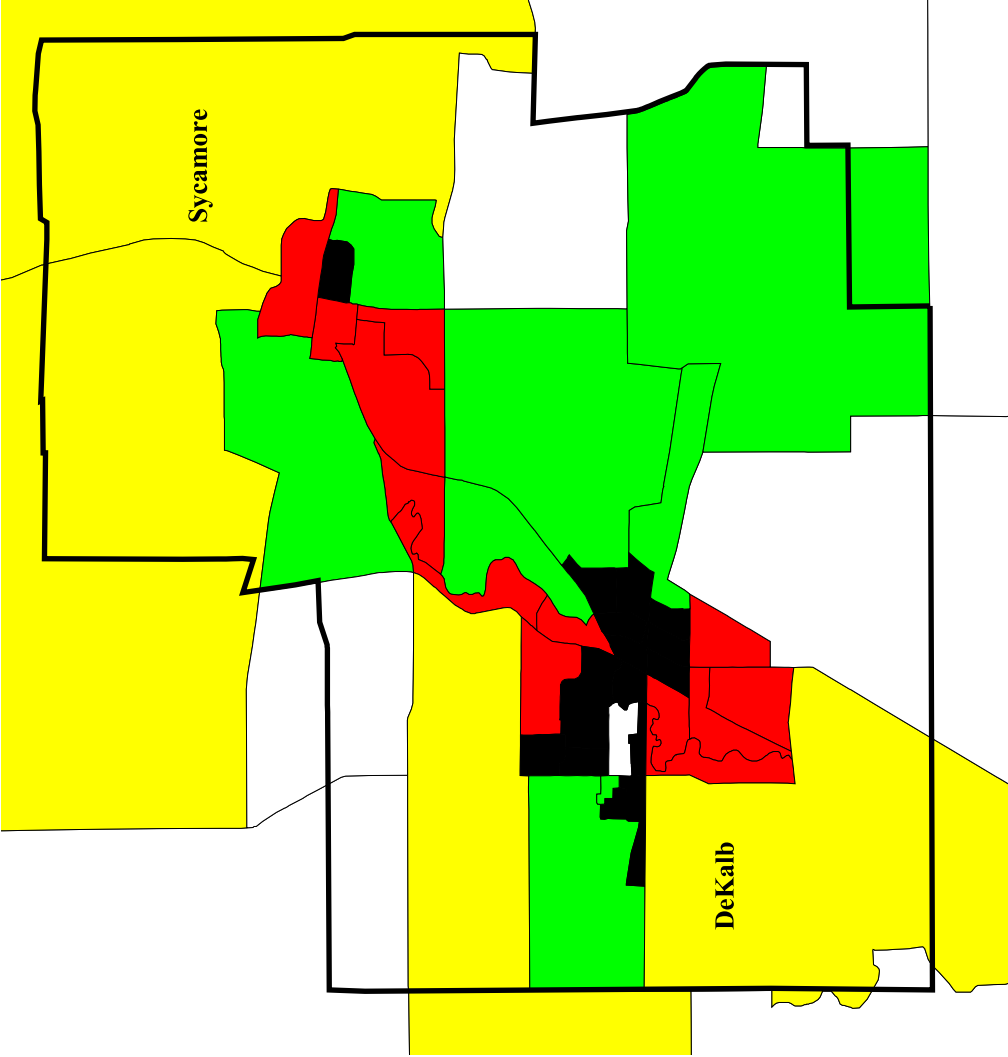
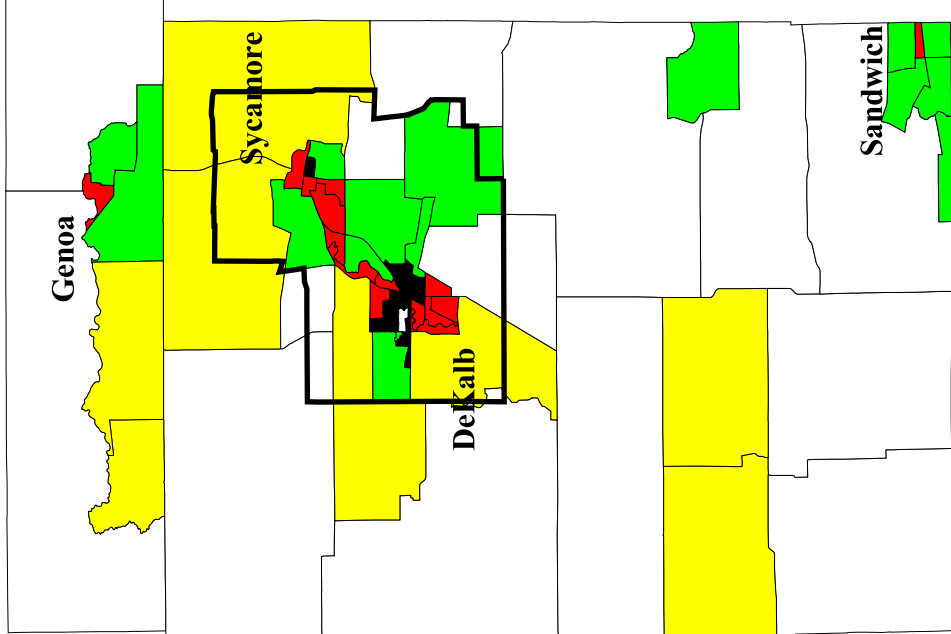


Source: 1980, 1990, 2000 U.S. Census, and Center for Governmental Studies

Exhibit II.5 illustrates the number of persons per square mile, by block group in DeKalb County. The block groups with the greatest population densities are located in the DeKalb-Sycamore urban area. There are several block groups in DeKalb that have over 5,000 persons per square mile.

Age

According to the 2000 U.S. Census, the largest age cohort was between age 20 and 24, constituting more than fifteen (15) percent of the county’s population (see Exhibit II.6). A significant portion of the 20 to 24 age cohort is most likely made up of the Northern Illinois University (NIU) students who may or may not live in DeKalb County year round. The next largest age groups were in the 25 to 29, 35 to 39, and 40 to 44 cohorts, each making up approximately seven (7) percent of the population. Approximately twenty-one (21) percent of the population was under age 18, while less than ten (10) percent is age 60 or older. The distribution indicates that, given stability in county migration rates, as the working age



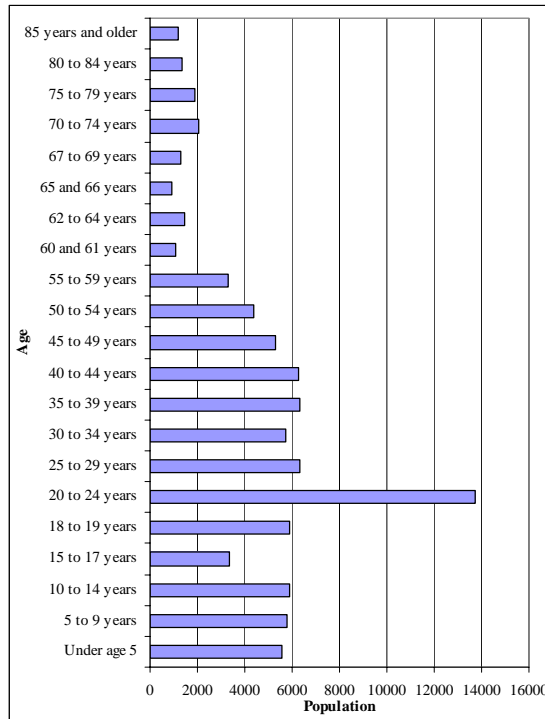
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**Exhibit II-5
Population Density
DeKalb-Sycamore
Urban Transit Plan**

Population

group enters retirement, the younger age group will be entering the workforce.

Exhibit II.6: County Population by Age Cohort, 2000



Source: U.S. Census, 2000

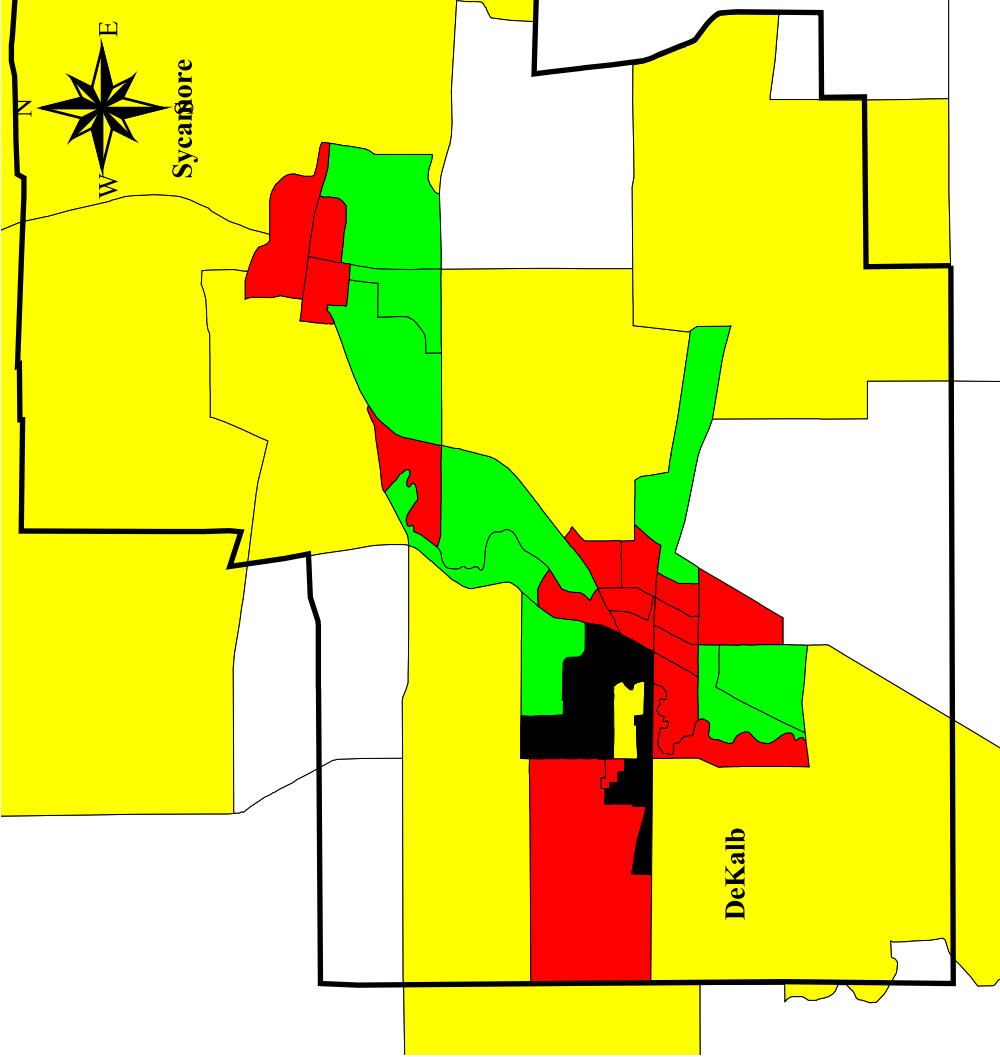
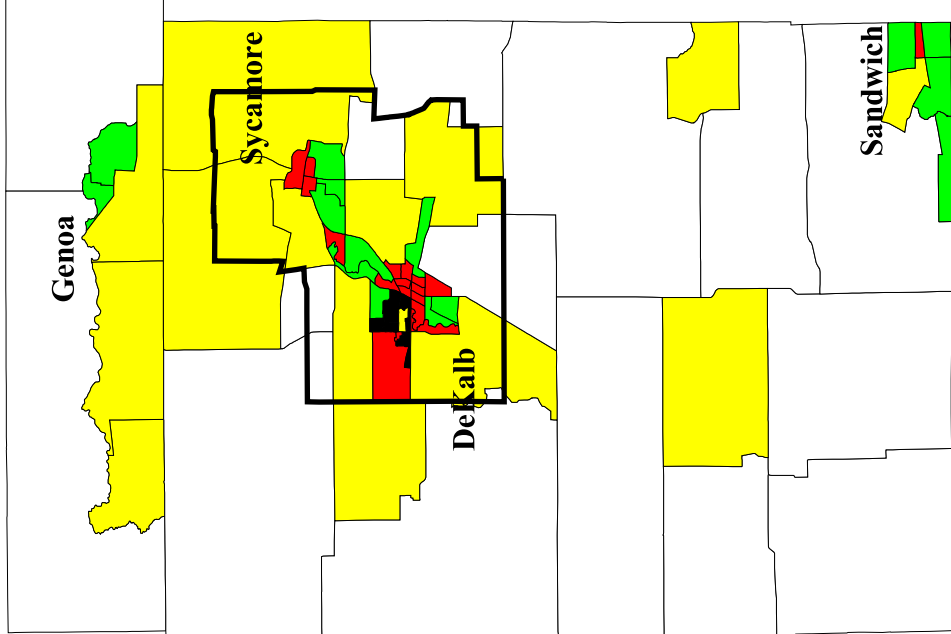
Exhibit II.7 illustrates the population density of people age 18 to 24, per square mile, by Census block group. The block groups with the highest density of this age group are in the City of DeKalb surrounding Northern Illinois University. In this area there are several block groups with more than 3,500 persons between 18 and 24 years old per square mile.

Exhibit II.8 illustrates the population density of people age 65 and older per square mile, by Census block group. The highest concentrations of senior citizens are in DeKalb, Sycamore and in Sandwich where there are block groups with more than 400 persons per square mile over 65 years. This can be attributed to, in part, to the location within these block groups of the Golden Years Plaza and Barb City Manor in DeKalb and Oakcrest Retirement Center in Sycamore.

Persons with Disabilities

Exhibit II.9 illustrates the number of people in the county who report some type of disability.¹ The data represents a total count of disabilities by age

¹ Disabilities include sensory, physical, mental, self-care, and go outside the home limitations.

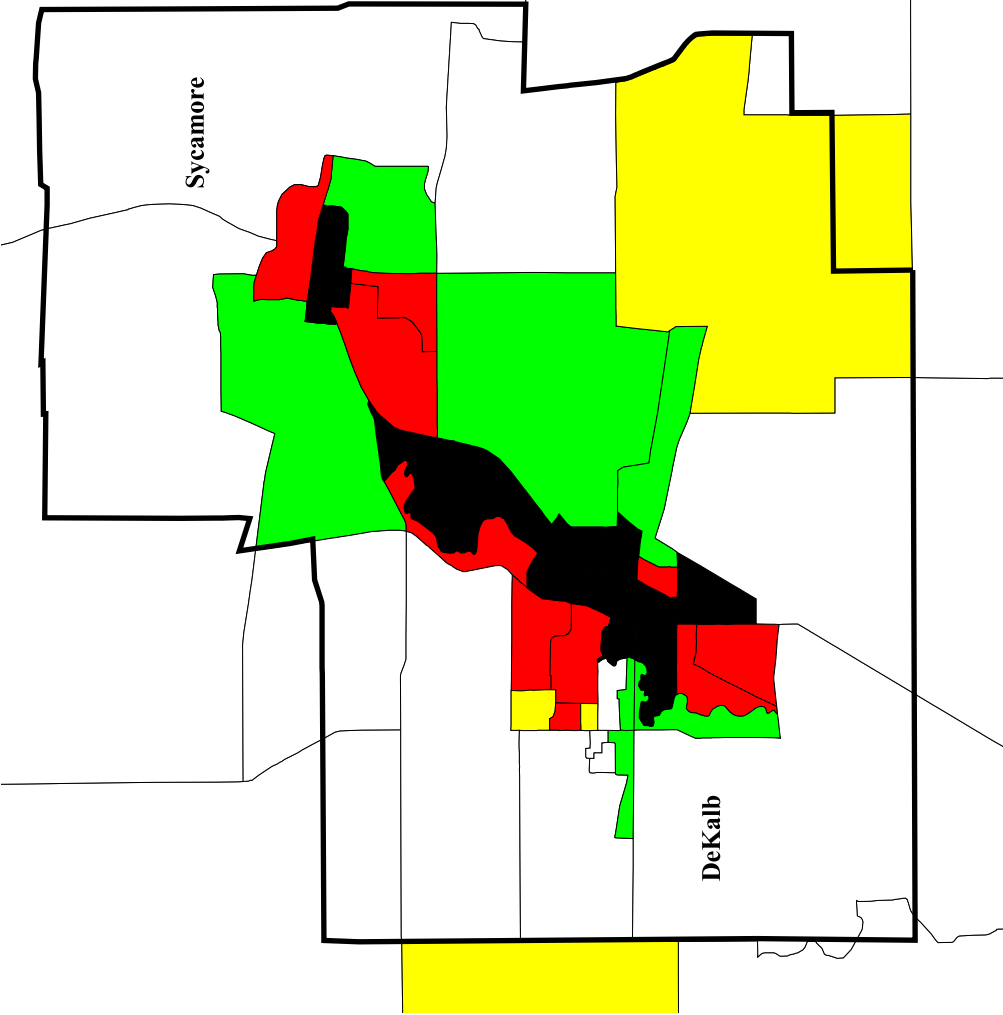
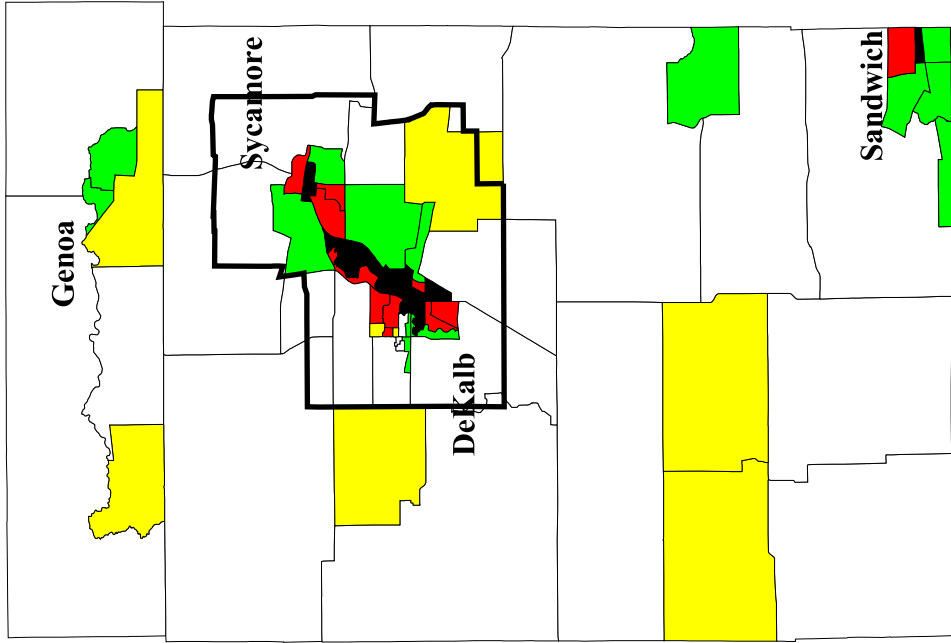


MPO Boundary
 Pop. Aged 18-24 per Square Mile
 0 - 5
 5 - 50
 50 - 200
 200 - 3,500
 3,500 - 30,000



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Exhibit II-7
Population Aged 18-24
DeKalb-Sycamore
Urban Transit Plan



MPO Boundary
 Pop. Aged 65+ per Square Mile
 0 - 10
 10 - 25
 25 - 200
 200 - 400
 400 - 1200



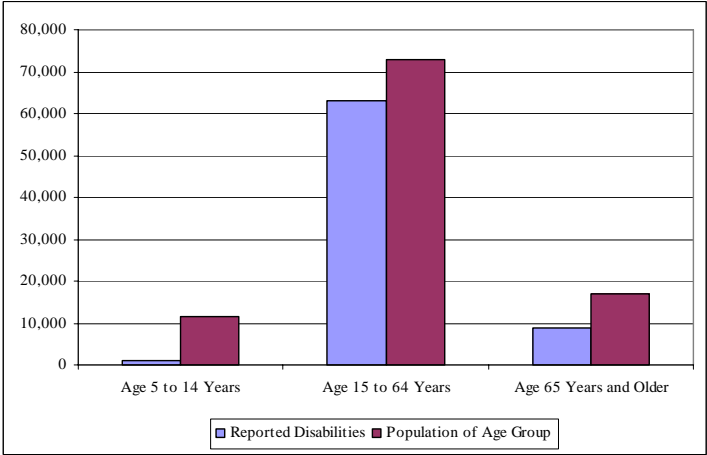
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Exhibit II-8
Population Aged 65+
DeKalb-Sycamore
Urban Transit Plan

Population

group. In some cases, individuals may have reported multiple disabilities and is therefore counted more than one time for his or her age group.

Exhibit II.9: Reported Disabilities by Age Group, 2000



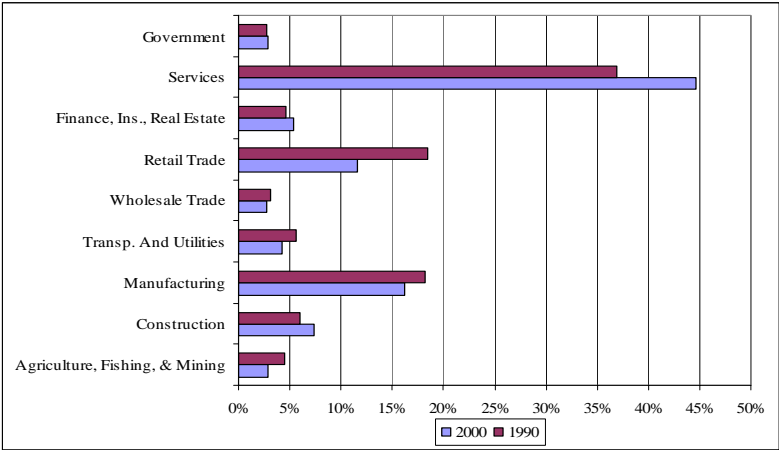
Source: U.S. Census, 2000

The ratio of disabilities to total population is twenty-one (21) percent. Likewise, the DeKalb city ratio is twenty (20) percent. It should be noted that because the U.S. Census does not discount for people who report multiple disabilities, it does not report the number of disabled persons.

Labor Force

DeKalb County’s 2000 labor force consisted of 44,733 workers, up from 40,120 workers in 1990. Exhibit II.10 compares the number of employees by industry for 1990 and 2000. In 2000, the service industry comprised over forty-four (44) percent of the workforce. Retail trade surpassed manufacturing in 2000, making it the second largest employment sector. Manufacturing, however, was second highest in 1990.

Exhibit II.10: Employment by Industry, DeKalb County



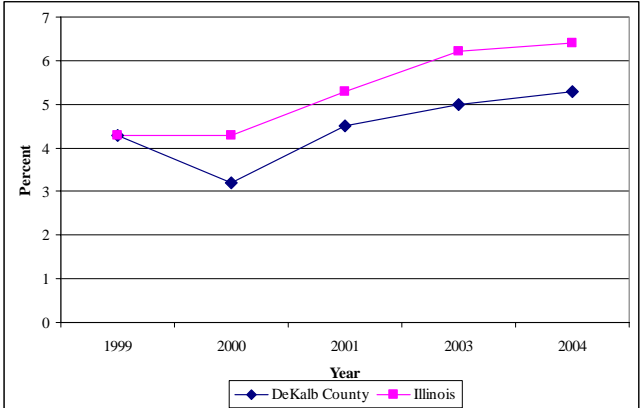
Source: Center for Government Studies

Population

The mining industry employed the fewest number of people, but it had the highest annual payroll per employee (\$54,617). Wholesale trade had the second highest annual payroll per employee (\$41,094). Retail trade averaged \$17,770 per employee in 1999.²

The unemployment rate in DeKalb County is consistently lower than the state as a whole. The rates were nearly equal in July 1999, and the county rates have been lower ever since. The May 2004 unemployment rate for DeKalb County was 5.3 percent, which is lower than the statewide rate of 6.4 percent. In May 2003, DeKalb County had the 67th highest county unemployment rate in Illinois. In May 2004, it ranked 59th. Exhibit II.11 illustrates the unemployment rates for the state and county.

Exhibit II.11: Unemployment Rates, 1999 – 2004



Source: Center for Government Studies, and U.S. Department of Labor

Housing Units without a Vehicle

There are 1,833 occupied housing units in DeKalb County that have no available vehicles. Exhibit II.12 depicts the density of zero-vehicle housing units in DeKalb County and in the DeKalb-Sycamore metropolitan area. The block groups with the highest density of zero-vehicle housing units are located in DeKalb and Sycamore.

MAJOR TRIP GENERATORS

The term “trip generators” is used to indicate places where a large number of trips originate or end. These trip generators include residences, employment centers, commercial business centers, colleges, medical facilities, and other important trip destinations. A series of trip generator

² Source: County Business Patterns.

**Major Trip
Generators**

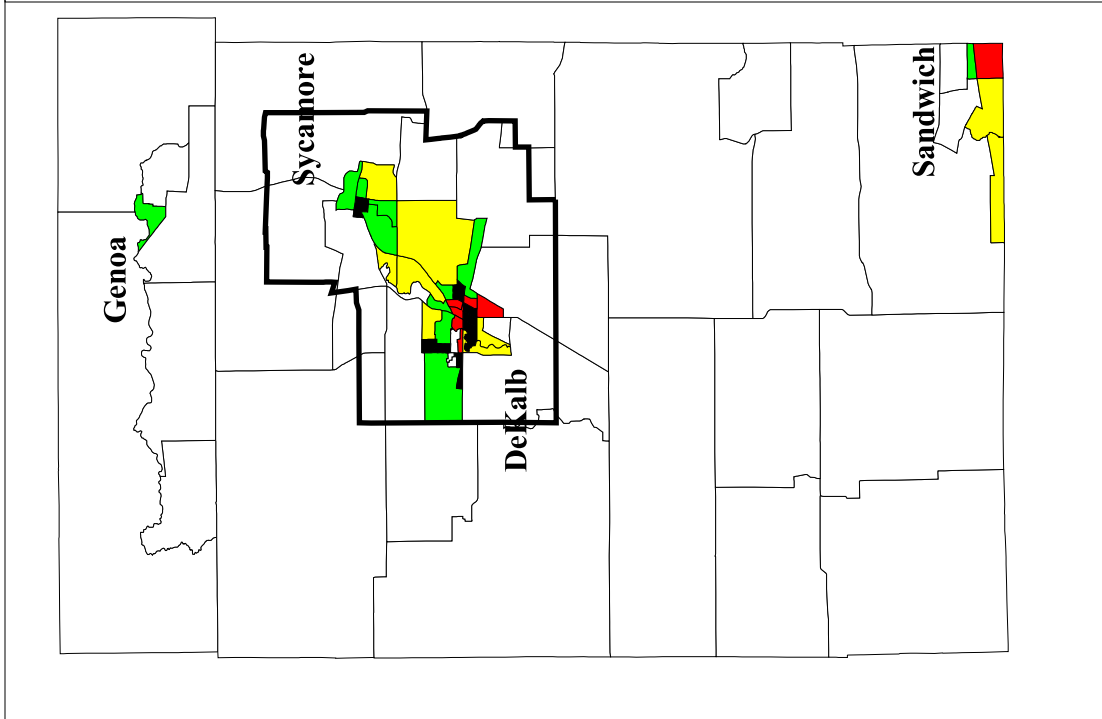
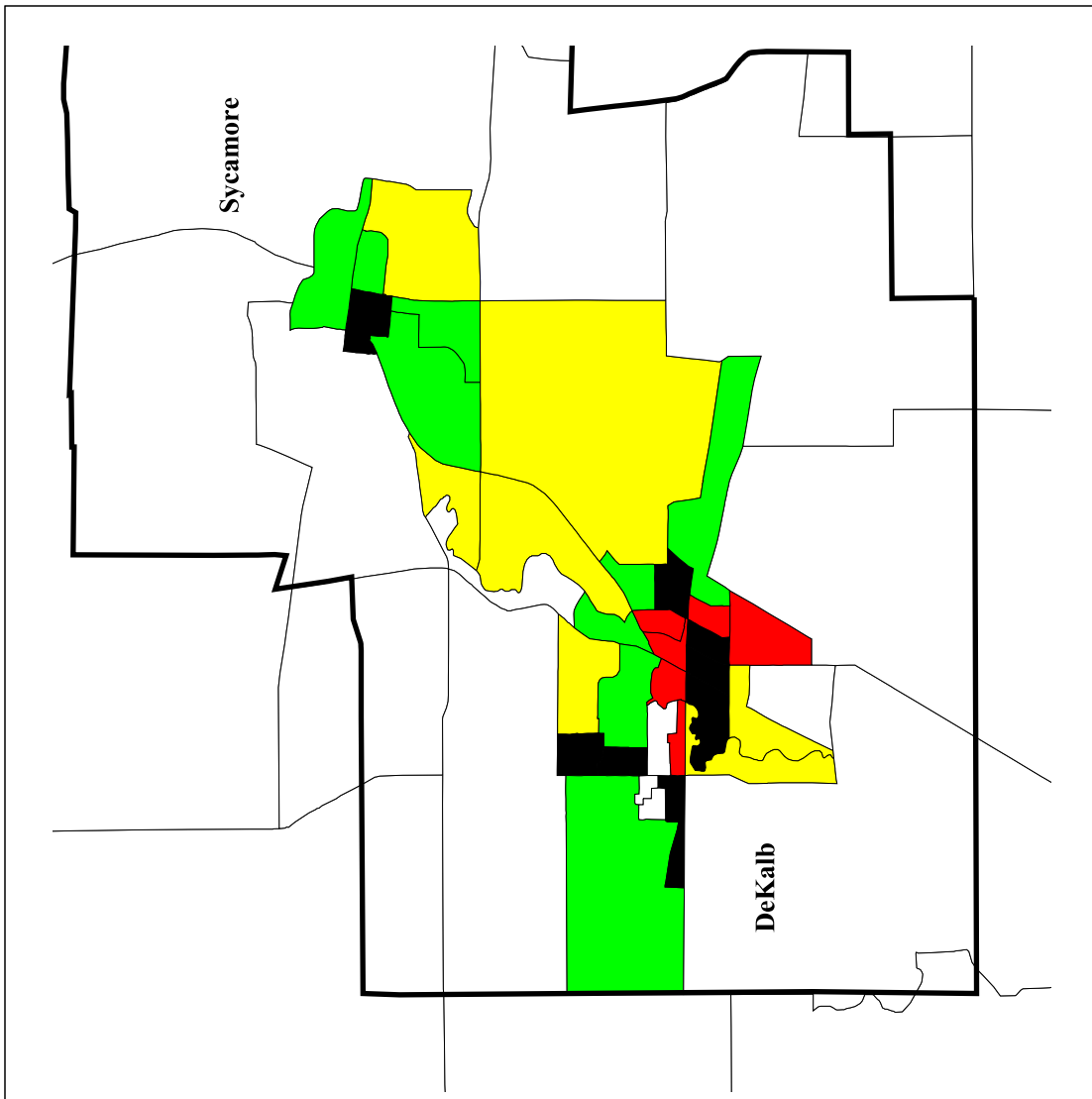
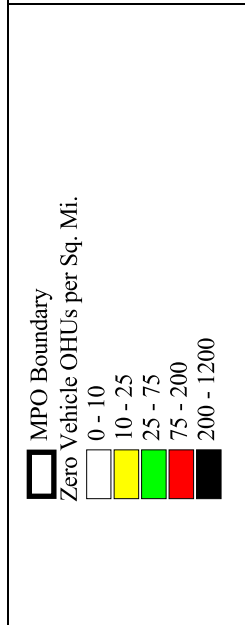


Exhibit II-12
Zero-Vehicle Occupied Housing Units
DeKalb-Sycamore
Urban Transit Plan



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**Major Trip
Generators**

categories were compiled, geocoded and appear on the following pages. The categories chosen represent trip generators that VAC serves or transportation systems similar to VAC serve. The categories include childcare facilities, medical centers, shopping centers, social service agencies, nursing homes, and assisted living complexes. These are shown in Exhibits II.13 through II.17. The following general observations can be made from this information:

- ◆ While trip generators tend to be concentrated in the communities of DeKalb and Sycamore, there are a significant number of trip generators in Sandwich and other parts of the county.
- ◆ The City of DeKalb has the most trip generators of any location in the county.
- ◆ The southwestern portion of the county has few trip generators.

PEER COMPARISON

**Peer
Comparison**

The consultant team selected five different counties in Illinois to form a peer group to compare different transportation systems in settings similar to DeKalb County. Exhibit II.18 below shows socioeconomic characteristics of Champaign, Madison, McLean, Kane, and McDonough Counties along with the same characteristics for DeKalb County.

Exhibit II.18: Peer Group 2000 Socioeconomic Characteristics

	Champaign	Madison	McLean	Kane	McDonough	DeKalb
Population	179,669	258,941	150,433	404,119	32,913	88,969
Unempl. Rate	3.7%	3.4%	4.4%	3.3%	3.2%	4.3%
Employment by Sector						
Agriculture	1.4%	0.9%	1.4%	0.6%	5.1%	2.9%
Construction	3.9%	5.8%	4.9%	7.4%	5.3%	7.3%
Manufacturing	8.7%	16.1%	8.8%	20.8%	11.1%	16.2%
Trans./Utilities	4.0%	6.4%	3.6%	4.9%	3.1%	4.2%
Wholesale Trade	2.7%	3.1%	2.4%	4.8%	1.4%	2.7%
Retail Trade	11.3%	11.8%	10.6%	11.4%	12.7%	11.6%
Fin., Real.Est.	4.8%	6.7%	20.7%	6.8%	3.7%	5.3%
Services	48.3%	43.5%	42.0%	46.7%	54.3%	44.6%
Government	3.6%	3.6%	2.9%	2.6%	3.3%	2.9%

Although these counties vary in size and population, they have similar employment characteristics. However, DeKalb and neighboring Kane Counties have the highest percentage of manufacturing and construction employment among the peer group members. Other differences include a higher rate of finance and real estate employment in McLean County and a higher rate of agricultural employment in McDonough County.

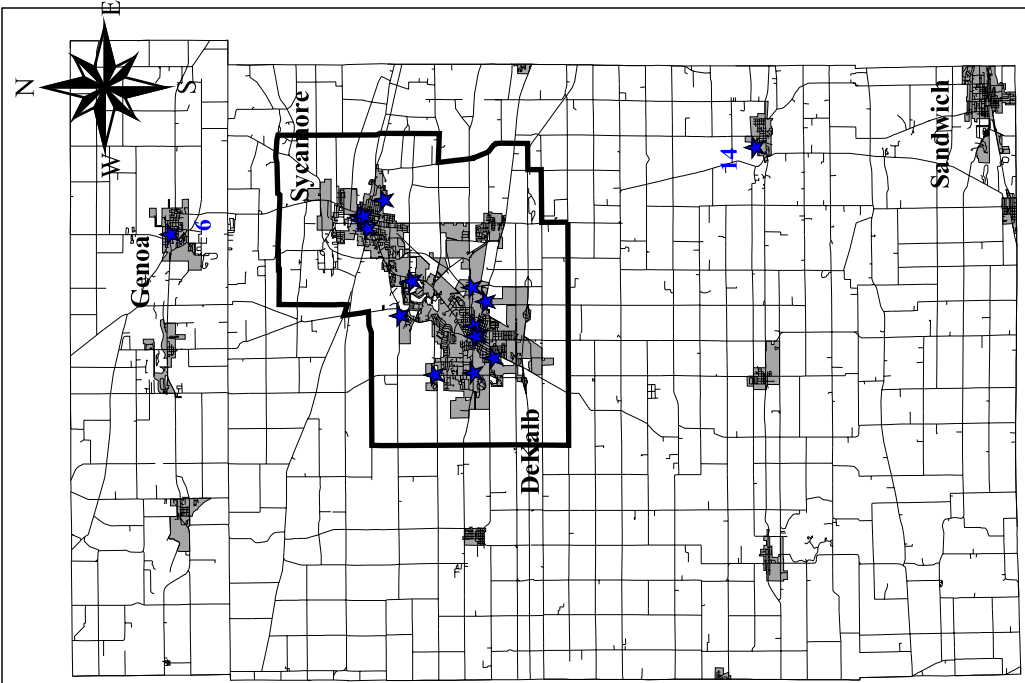
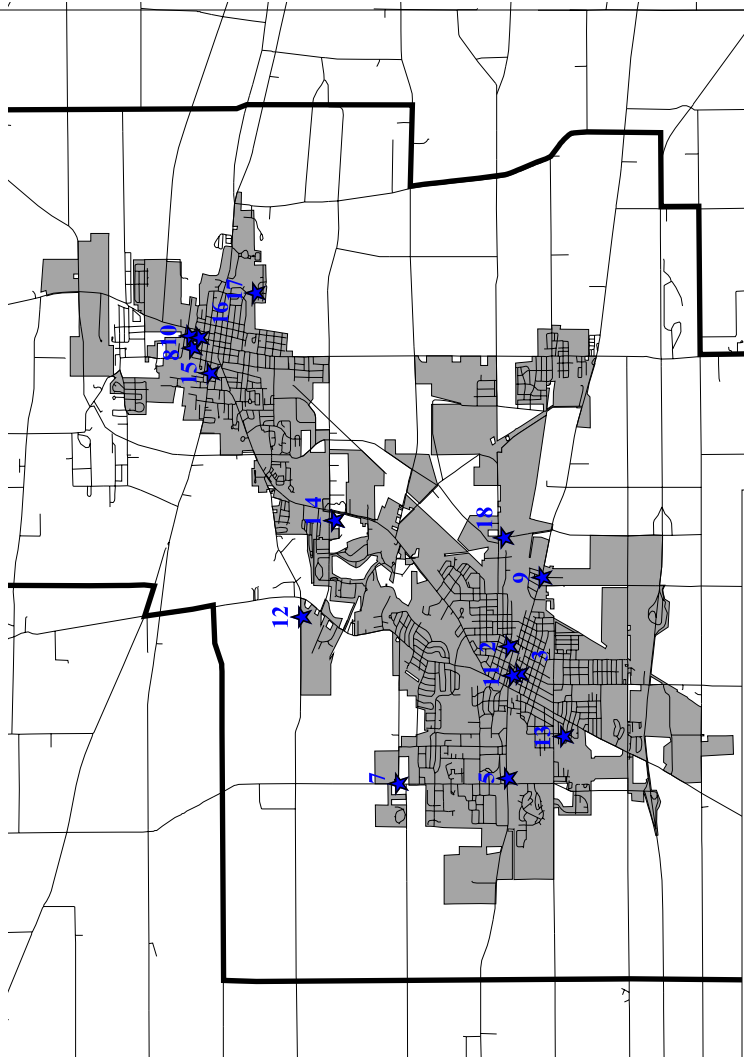


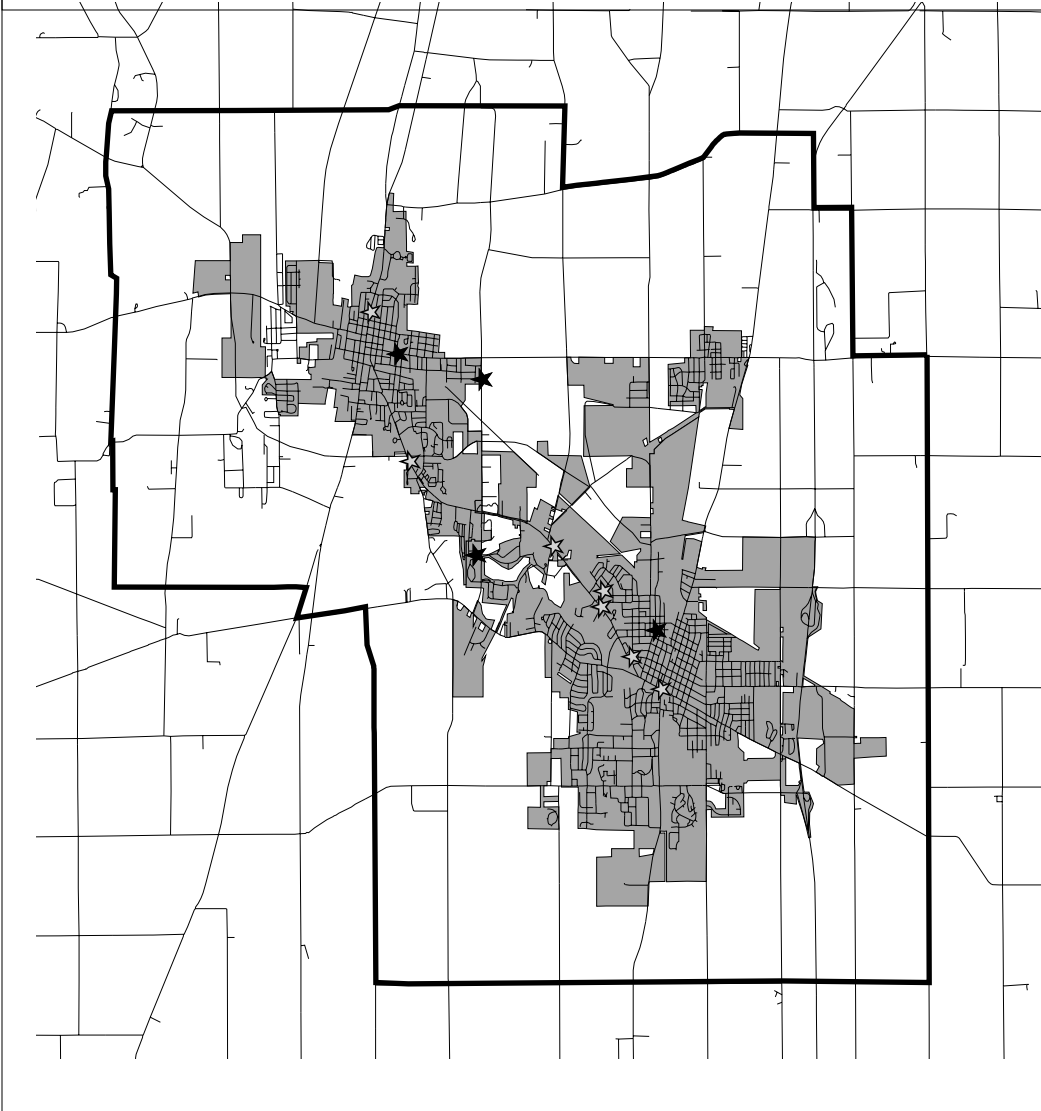
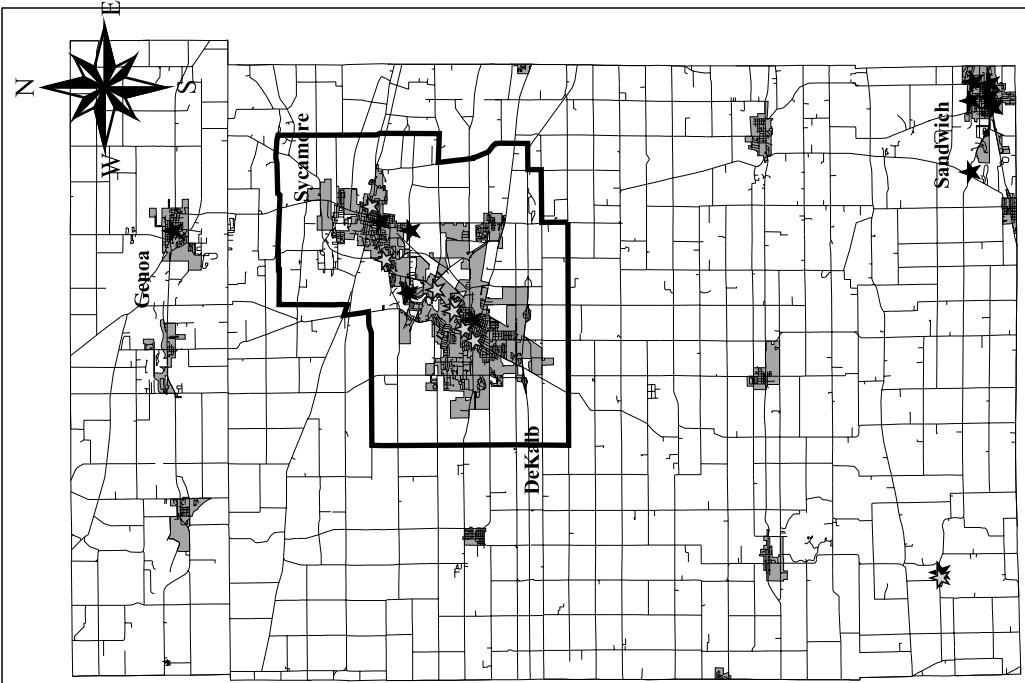
Exhibit II-13
Social Service Agencies
DeKalb-Sycamore
Urban Transit Plan



- Legend**
- 1 Ben Gordon Center
 - 2 DeKalb County Housing Authority
 - 3 DeKalb County Youth Services Bureau
 - 4 Family Service Agency
 - 5 RAMP, Inc.
 - 6 RAMP, Inc.
 - 7 DeKalb County Community Services
 - 8 DeKalb County Economic Development
 - 9 Illinois Employment & Training Ct.
 - 10 Opportunity House
 - 11 Opportunity House
 - 12 Opportunity House
 - 13 Opportunity House
 - 14 Opportunity House
 - 15 Opportunity House
 - 16 Opportunity House
 - 17 Genesis Works
 - 18 Department of Human Services



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**Exhibit II-14
Medical Facilities
DeKalb-Sycamore
Urban Transit Plan**



- Legend**
- ★ Hospitals and Clinics
 - ☆ Pharmacies
 - ▭ MPO Boundary
 - ▭ Cities and Towns

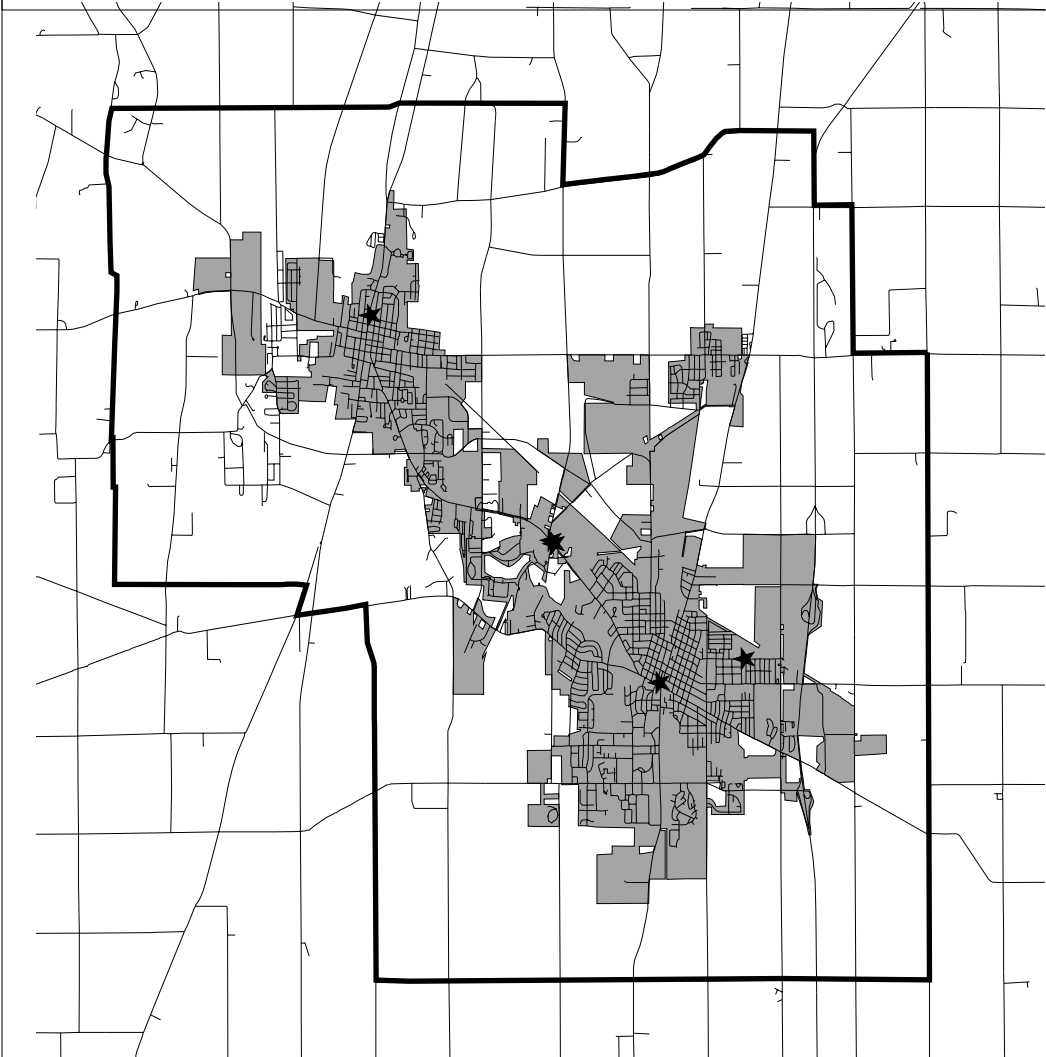
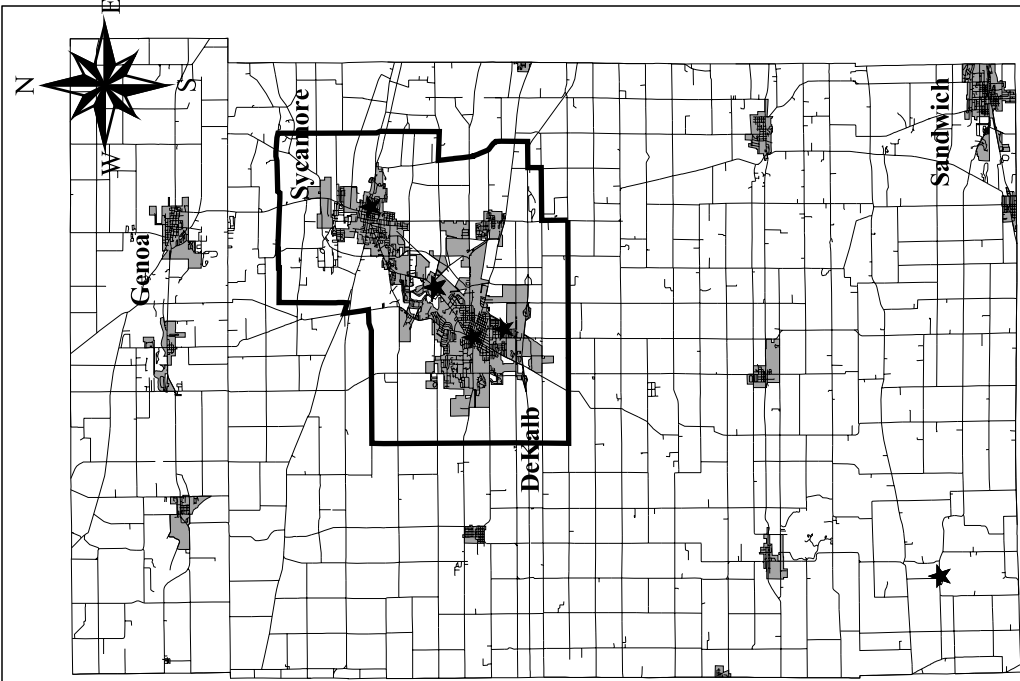


Exhibit II-15
Shopping Centers
DeKalb-Sycamore
Urban Transit Plan



- Legend**
- ★ Shopping Centers
 - ▭ MPO Boundary
 - ▭ Cities and Towns

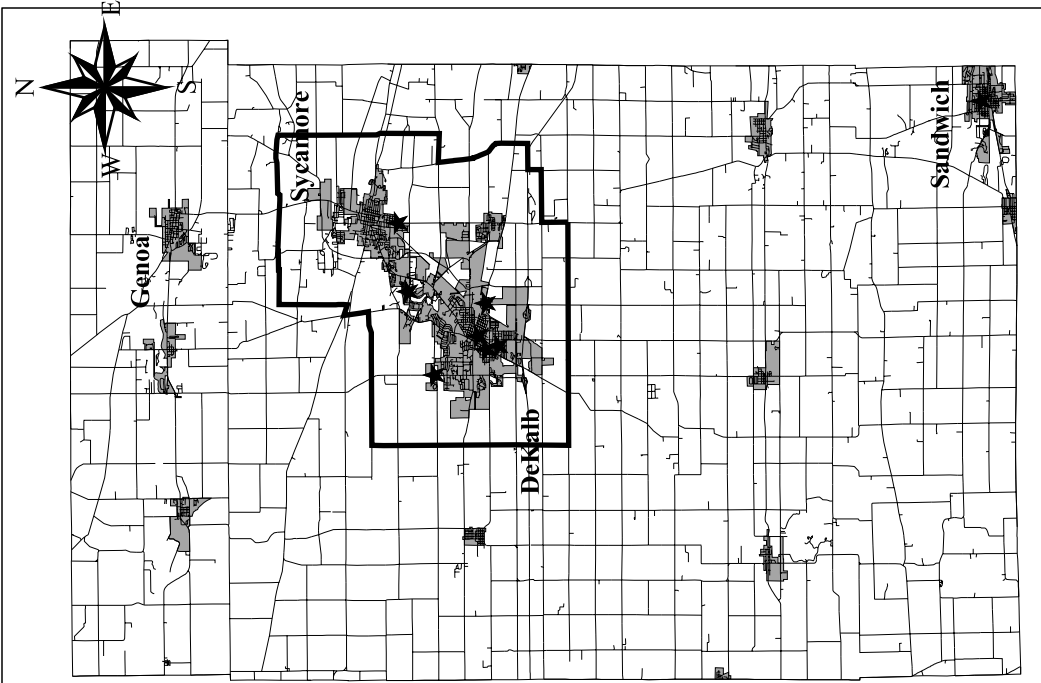
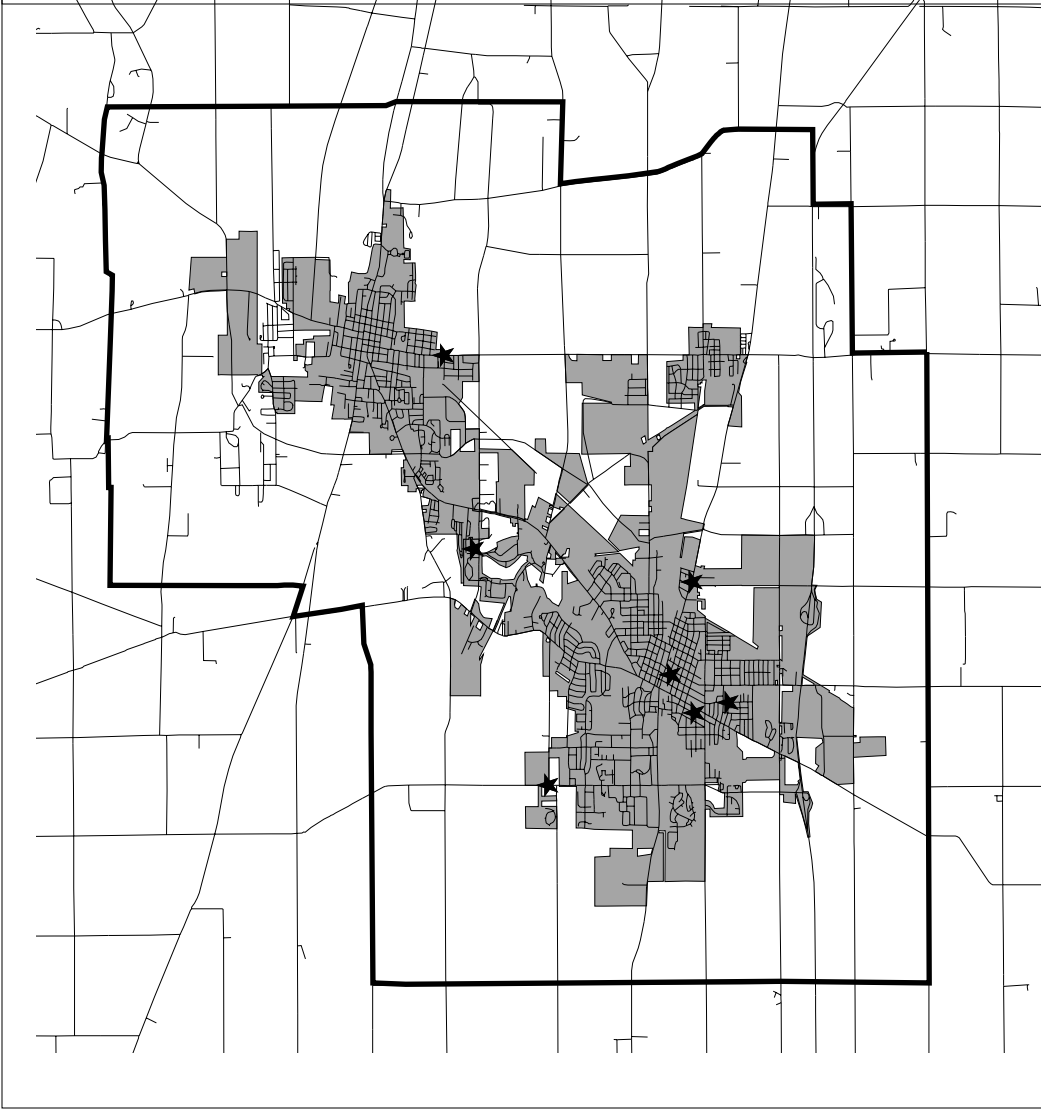


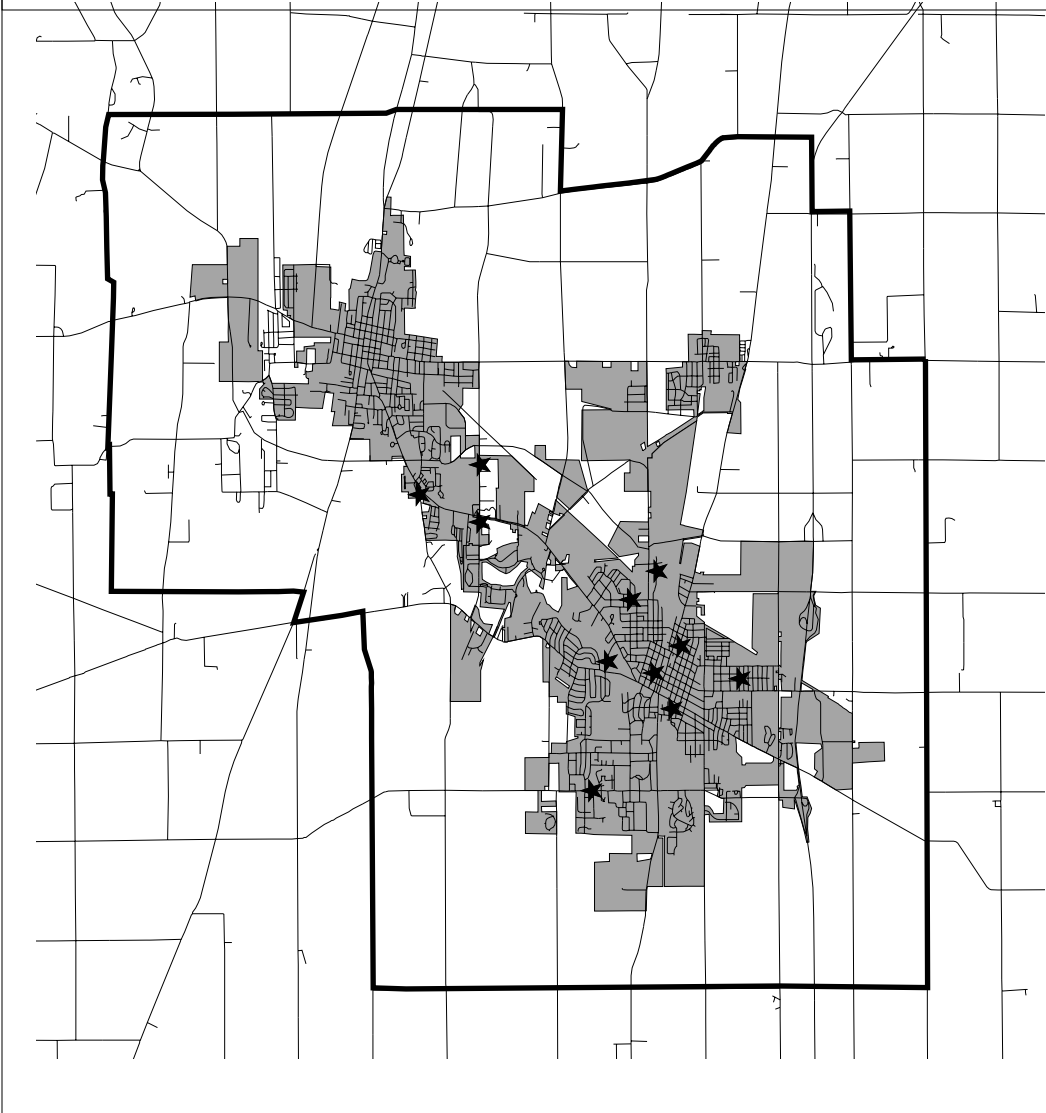
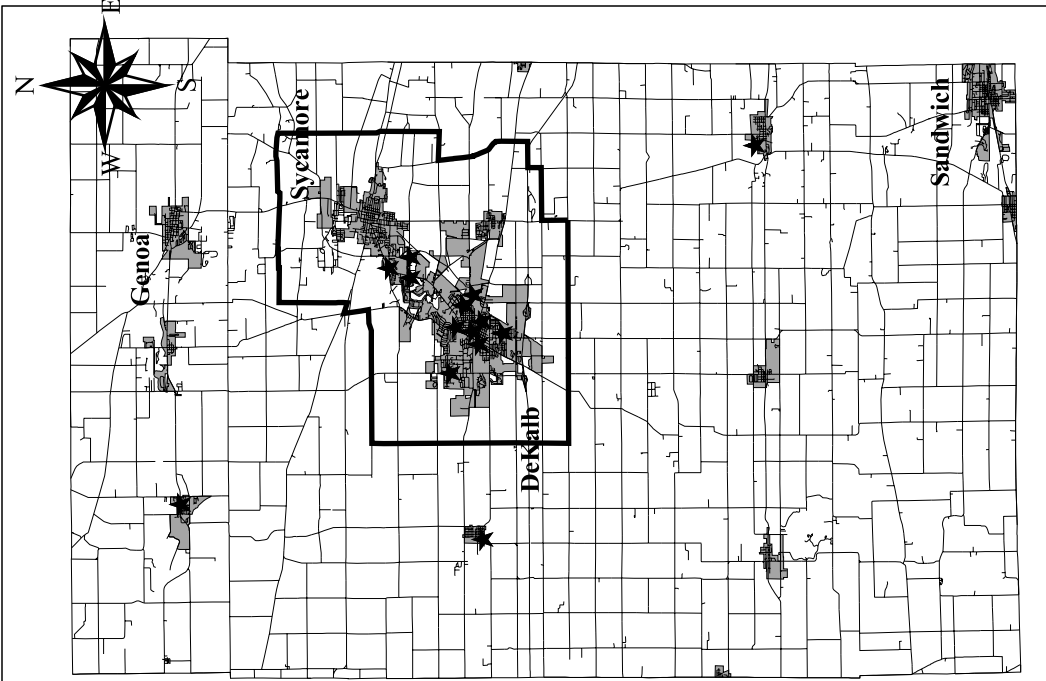
Exhibit II-16
Nursing Homes and
Assisted Living Centers
DeKalb-Sycamore
Urban Transit Plan



Legend
 ★ Nursing Homes and Assisted Living Centers
 [Thick Black Line] MPO Boundary
 [Grey Box] Cities and Towns



RLS & Associates, Inc.



Legend

- ★ Childcare Facilities
- ▭ MPO Boundary
- ▭ Cities and Towns

**Exhibit II-17
Childcare Facilities
DeKalb-Sycamore
Urban Transit Plan**

III. CURRENT TRANSPORTATION SERVICES

VOLUNTARY ACTION CENTER TRANSPORTATION PROGRAM – TRANSVAC

TransVAC

A board of seventeen individuals who represent a cross-section of DeKalb County's private businesses, public organizations, and senior citizens governs the Voluntary Action Center of DeKalb County. Board members are assigned to Transportation, Public Relations, Finance, and Nutrition Committees within the Voluntary Action Center. The Voluntary Action Center operates a transportation service called TransVAC.

The Voluntary Action Center provides deviated route and paratransit services throughout DeKalb County using a fleet of forty-six (46) vehicles. It owns twenty-two of these vehicles and leases the remainder. It acquired its most recent vehicle in February 2004 with a replacement vehicle from the Illinois Department of Transportation. The vehicle inventory as of December 31, 2003 is provided on the following page as Exhibit III.1. Eighty-nine percent of this fleet is lift-equipped and has two to six wheelchair tie-downs per vehicle.

TransVAC Routes

Green Line Bus Route

TransVAC operates the Green Line Bus Route in DeKalb from 7:00 a.m. to 9:00 p.m., Monday through Friday. Vehicles on this route travel east on Bethany Road from Health Services Drive, then south on Sycamore Road. It travels west on Hillcrest to North First Street, where it heads south to downtown DeKalb. It winds through Third, Locust, and Tenth Streets to Taylor Street. It stops near the High School, then heads north to Annie Glidden Road, stops at NIU, and proceeds north to the DeKalb County Health Department. The route continues east on Dresser Road and eventually north on Sycamore Road ending at the Oak Crest Retirement Center. The route takes one (1) hour.

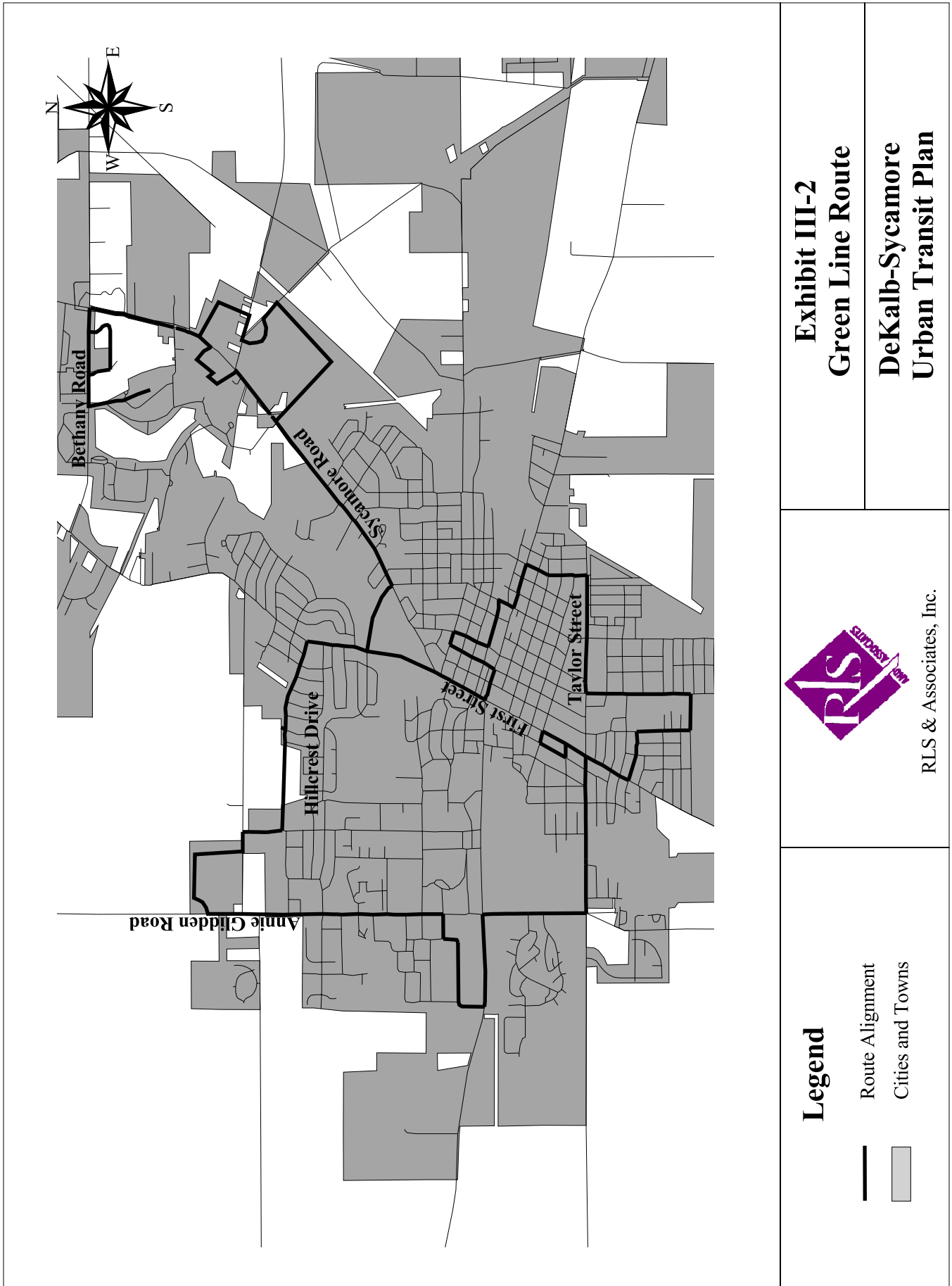
The Green Line serves the DeKalb County Health Department, apartment complexes, churches, social service agencies, NIU, and multiple department and grocery stores. Exhibit III.2 shows its alignment.

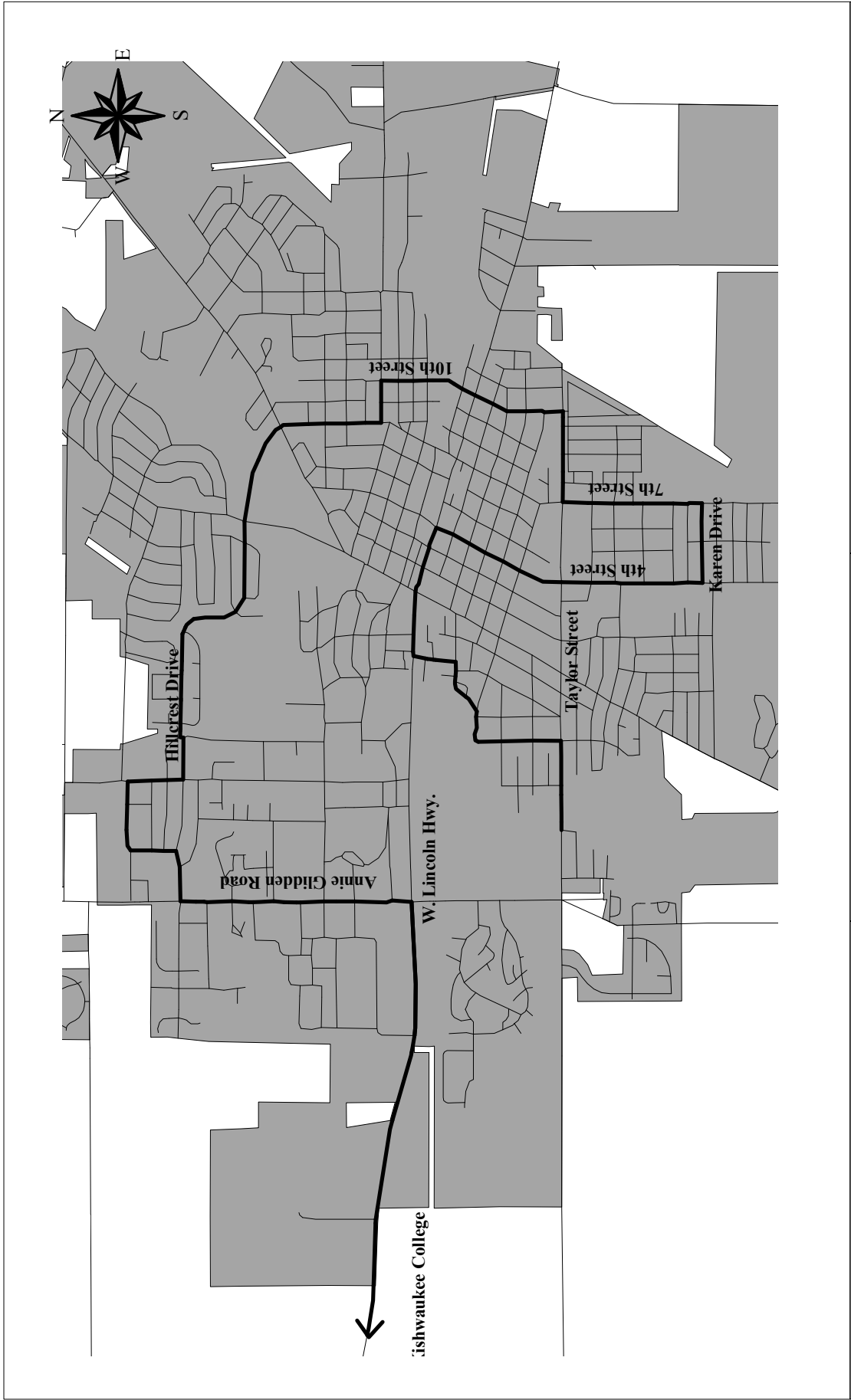
Kishwaukee College-DeKalb Area Bus Route

TransVAC operates the Kishwaukee College-DeKalb Area Bus Route, as shown in Exhibit III.3. The route schedule is designed so that students may arrive for 8:00 or 9:00 a.m. classes. The run with arrival for 8:00 a.m. classes begins at 7:07 a.m. at Taylor-Riverside Apartments. It travels

**Exhibit III.1
Vehicle Inventory**

Year	Make	Date Acquired	Type	VAC #	Odometer Reading	Seats/Lift/Tie Downs	Owned/Leased	Funding Source	IDOT Replacement Vehicle
1992	Ford/Braun	Mar-93	R.R. Van	5	198,953	10/Yes/2	Owned	5310	No
1992	Ford/Braun	Mar-93	R.R. Van	7	160,323	10/Yes/2	Owned	5310	No
1991	Eldorado	May-91	Heavy Duty	20	137,485	18/Yes/2	Owned	5310	No
1991	Eldorado	May-91	Heavy Duty	21	205,781	18/Yes/2	Owned	5310	No
1991	Ford/Braun	Jun-91	R.R. Van	22	195,292	10/Yes/2	Owned	5310	No
1991	Ford/Braun	Jun-91	R.R. Van	23	171,218	10/Yes/2	Owned	5310	No
1991	Ford/Braun	Jun-91	R.R. Van	x	146,594	10/Yes/2	Owned	5310	No
1991	Ford/Braun	Jun-91	R.R. Van	x	182,094	10/Yes/2	Owned	5310	No
1991	Ford/Braun	Jun-91	R.R. Van	x	199,676	10/Yes/2	Owned	5310	No
1994	Ford/Eldorado	Apr-94	Medium Duty	27	216,106	16/No	Owned	5310	No
1994	Ford/Eldorado	Apr-94	Medium Duty	28	147,401	14/Yes/2	Owned	5310	No
1993	Ford/Braun	Apr-94	R.R. Van	29	153,257	10/Yes/2	Owned	5310	Yes
1996	Ford/Eldorado	Dec-96	Medium Duty	39	161,504	14/Yes/2	Owned	5310	Yes
1994	Dodge Caravan	Jun-94	Mini Van	x	110,140	7/yes/2	Owned	5310	Yes
1996	Dodge Caravan	Oct-96	Mini Van	11	156,032	7/yes/2	Owned	5310	Yes
1996	Dodge Caravan	Oct-96	Mini Van	12	157,990	7/yes/2	Owned	5310	No
1988	Ford Taurus		Auto	3	238,381	5/No	Owned	Private	Yes
1989	Pontiac Wagon		Auto	2	187,311	6/No	Owned	Private	No
1997	Dodge Caravan	Mar-97	Mini Van	14	199,099	7/yes/2	Owned	5310	No
1985	Pontiac Wagon	Jan-97	A.Uto	1	328,899	6/No	Owned	Private	No
1998	Pontiac Transport	Jan-04	Mini Van		143,546	7/No	Owned	Private	No
1998	Blue Bird	Jul-04	Heavy Duty	25a	151,875	31/Yes/2	Owned	CVP	No
1991	Orion Bus	Oct-04	Heavy Duty		500,000	36/Yes/2	Owned		No
1994	Dodge Caravan	Jun-94	Mini Van	x	143,671	7/Yes/2	Leased from City	State	No
1994	Ford/Eldorado	Dec-94	Medium Duty	31	146,966	14/Yes/2	Leased from City	State	Yes
1994	Ford/Eldorado	Dec-94	Medium Duty	32	179,152	14/Yes/2	Leased from City	State	Yes
1997	Ford/Eldorado	Sep-97	Medium Duty	33	154,027	14/Yes/2	Leased from City	State	Yes
1994	Ford/Braun	Dec-94	R.R. Van	34	155,586	14/Yes/2	Leased from City	State	Yes
1994	Ford/Braun	Dec-94	R.R. Van	35	156,775	10/Yes/2	Leased from City	State	Yes
1994	Ford/Braun	Dec-94	R.R. Van	36	157,649	10/Yes/2	Leased from City	State	Yes
1994	Eldorado/MST	Feb-95	Heavy Duty	37	199,130	10/Yes/2	Leased from City	State	Yes
1994	Blue Bird	Nov-97	Heavy Duty	38	138,768	19/Yes/2	Leased from City	State	Yes
1998	Blue Bird	Nov-97	Heavy Duty	40	99,032	31/Yes/2	Leased from City	State	Yes
1998	Blue Bird	Nov-97	Heavy Duty	41	104,764	31/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Oct-98	Raised Roof Van	42	102,781	31/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Oct-98	Raised Roof Van	43	154,911	10/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Oct-98	Raised Roof Van	44	157,580	10/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Oct-98	Raised Roof Van	45	162,578	10/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Oct-98	Raised Roof Van	46	138,294	10/Yes/2	Leased from City	State	Yes
1998	Dodge/Natl. Mob.	Jun-99	Raised Roof Van	47	145,555	10/Yes/2	Leased from City	State	Yes
1999	Dodge/Natl. Mob.	Jun-99	Raised Roof Van	48	135,970	10/Yes/2	Leased from City	State	Yes
1999	Dodge/Natl. Mob.	Sep-99	Raised Roof Van	49	114,289	10/Yes/2	Leased from City	State	Yes
1993	Eldorado/MST	Dec-04	Medium Duty	50	108,943	18/Yes/2	Leased from City	State	Yes
2002	Ford/Eldorado	Dec-04	Light Duty	22a	28,751	11/Yes/2	Leased from City	State	Yes
2002	Ford/Eldorado	Jun-04	Medium Duty	23a	24,800	15/Yes/2	Leased from City	State	Yes
2003	IHC/MID Bus	Jun-04	Super Medium Duty	24a	10,715	22/Yes/6	Leased from City	State	Yes
2004	IHC/MID Bus	Feb-04	Super Medium Duty			22/Yes/6	Leased from City	CAP	Yes





<p>Exhibit III-3 Kishwaukee College Route</p>	 <p>RLS & Associates, Inc.</p>
<p>DeKalb-Sycamore Urban Transit Plan</p>	

TransVAC

north to Lincoln Highway, then south on Fourth Street to Karen Drive. Then the vehicle travels north along South Seventh Street and Tenth Street, to Ridge Drive. Finally, it heads south on Annie Glidden Road to Gideon Court Apartments on Lincoln Highway. The later run, scheduled so students arrive at NIU for 9:00 a.m. classes, begins at 8:07 a.m. TransVAC vehicles leave Kishwaukee College at 1:00, 2:00, or 3:30 p.m. from the main entrance. The fare is \$120 for sixteen (16) weeks of round trip service. TransVAC contracts with Kishwaukee College for \$30,000 to offset the cost of this service.

Paratransit Routes

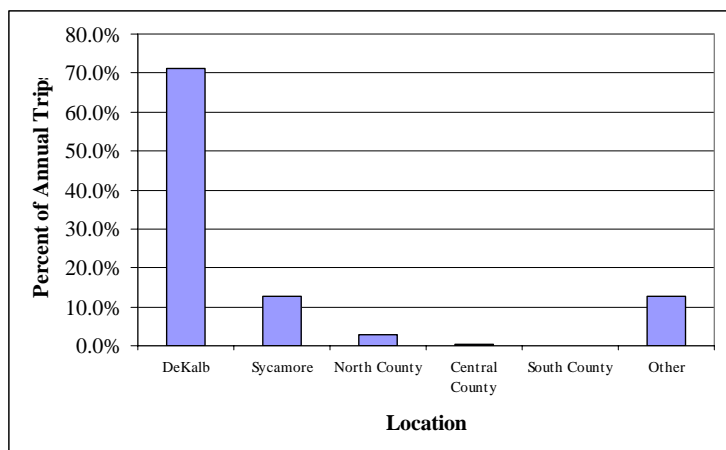
The majority of TransVAC service is demand response paratransit service that is provided throughout DeKalb County. As part of this, TransVAC operates eight regular routes. Because they are paratransit routes, they are flexible in nature and change in response to who is riding on them. Exhibits III.4 through III.11 shows where these routes operate and the current location of passenger pick-ups and drop-offs. As can be seen, all of these routes operate in DeKalb and Sycamore.

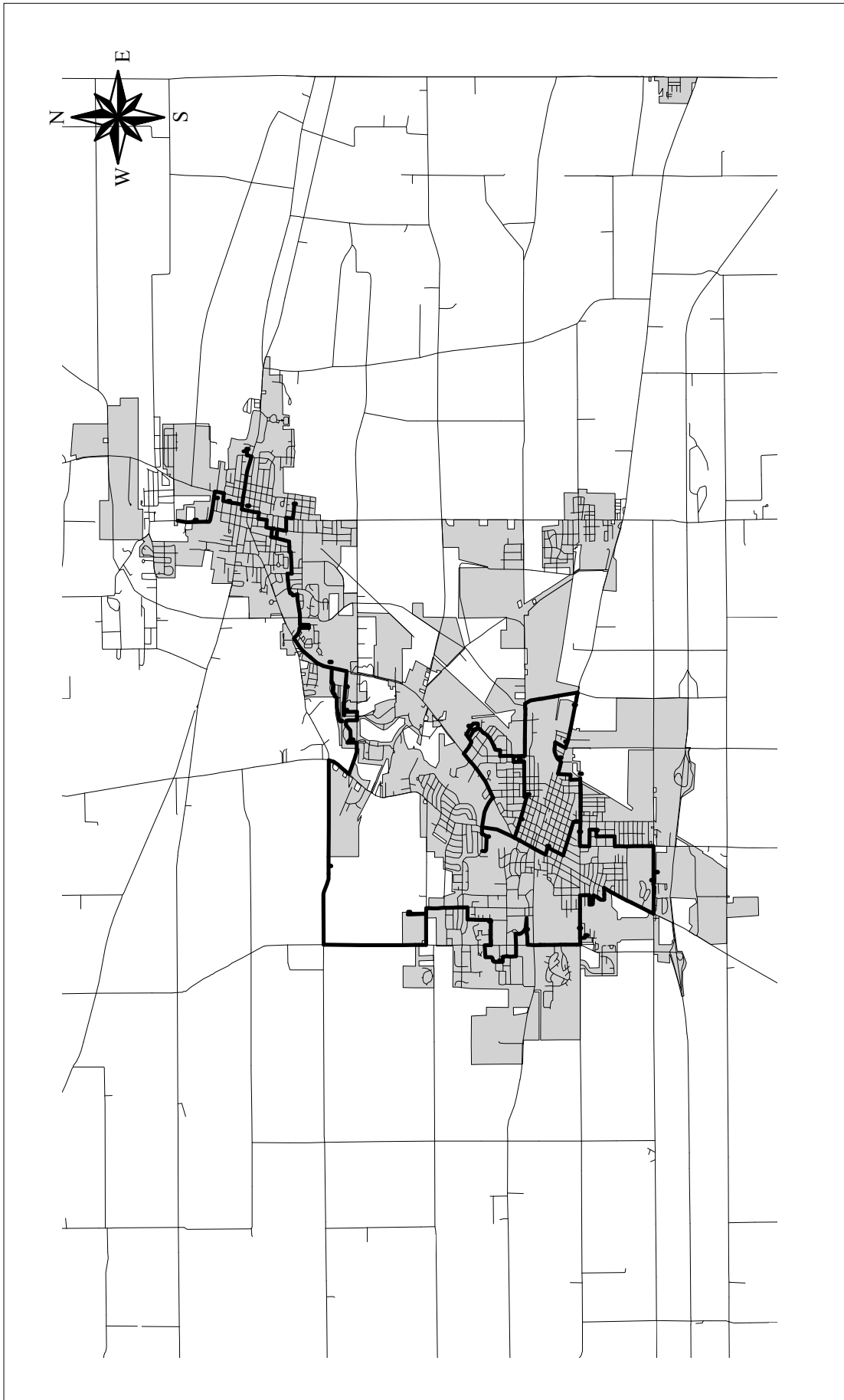
Operating Statistics

TransVAC provided 121,261 passenger trips between July 1, 2002 and June 30, 2003. Fifty-five (55) percent of these trips were for the general public, twenty-six (26) percent were for disabled individuals, and nineteen (19) percent were for seniors. One-half of the trips were for general purposes including Green Line, Kishwaukee College Bus Route, and YMCA after school program that transports students from schools in DeKalb and Sycamore. The other half of the trips was for medical, employment, nutrition, recreation, education, or shopping.

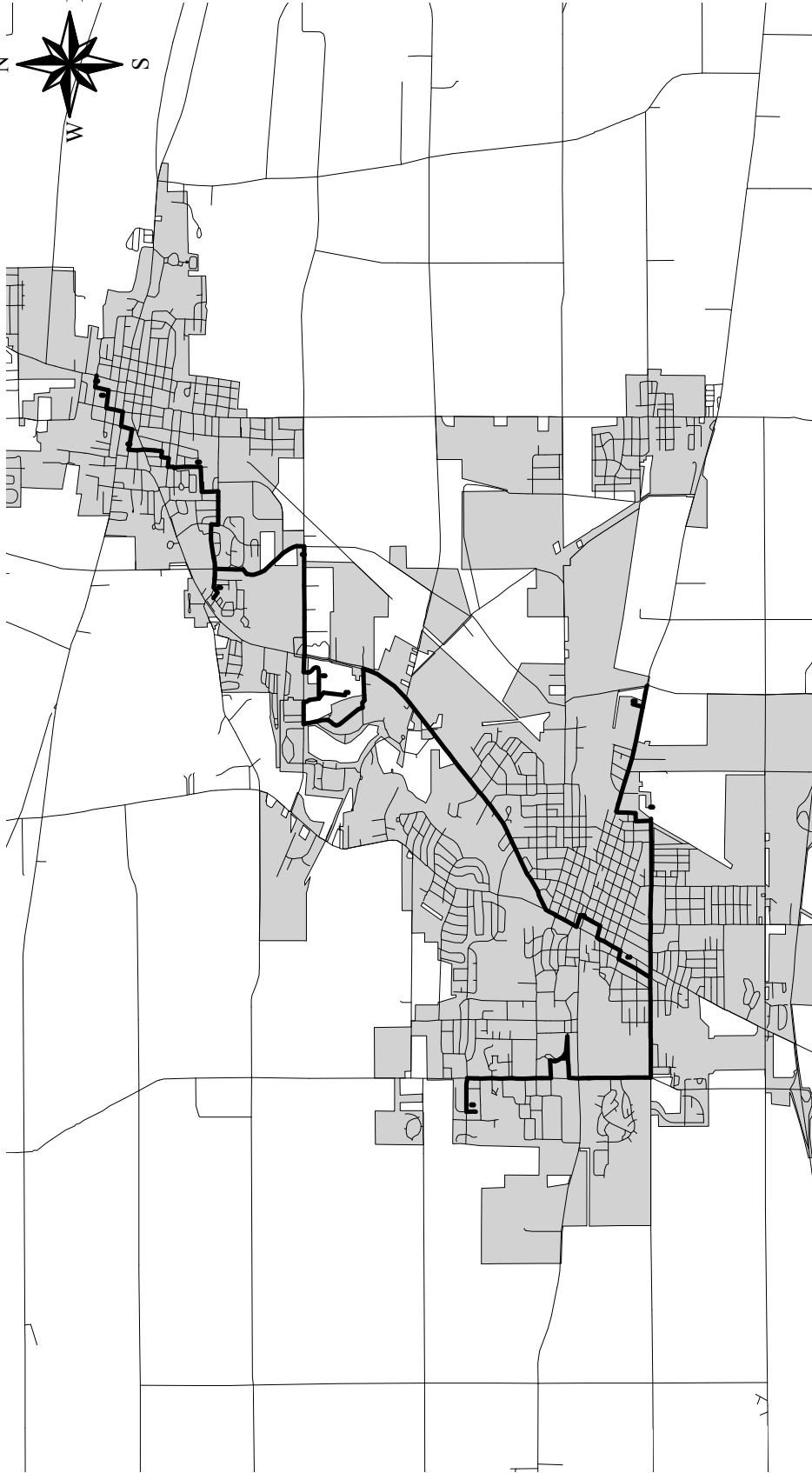
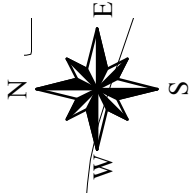
TransVAC tracks trips by geographic location, or community. About seventy-one (71) percent of the annual trips were within DeKalb, and thirteen (13) percent were in Sycamore. The percentage of trips provided by geographic location is illustrated in Exhibit III.12.

Exhibit III.12: TransVAC Trips by Location, FY 2002-2003

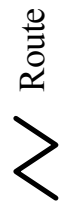




	<p>Exhibit III-4 Paratransit Route #1</p>
<p>DeKalb-Sycamore Urban Transit Plan</p>	 <p>RLS & Associates, Inc.</p>
<p>Legend</p> <ul style="list-style-type: none"> • Pickup/Dropoff Locations ▬ Route 	



Legend



Route

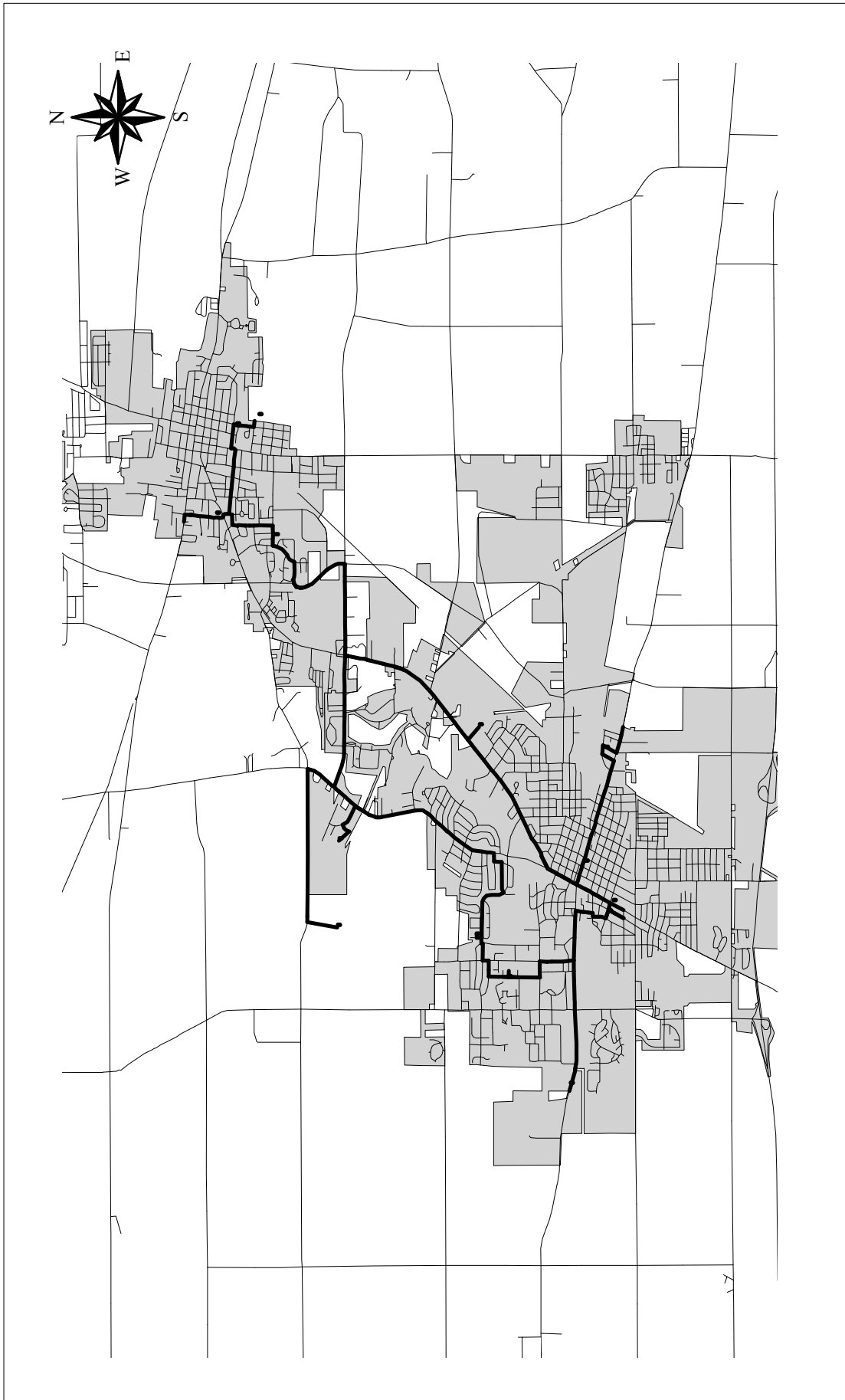


Pickup/Dropoff Locations



RLS & Associates, Inc.

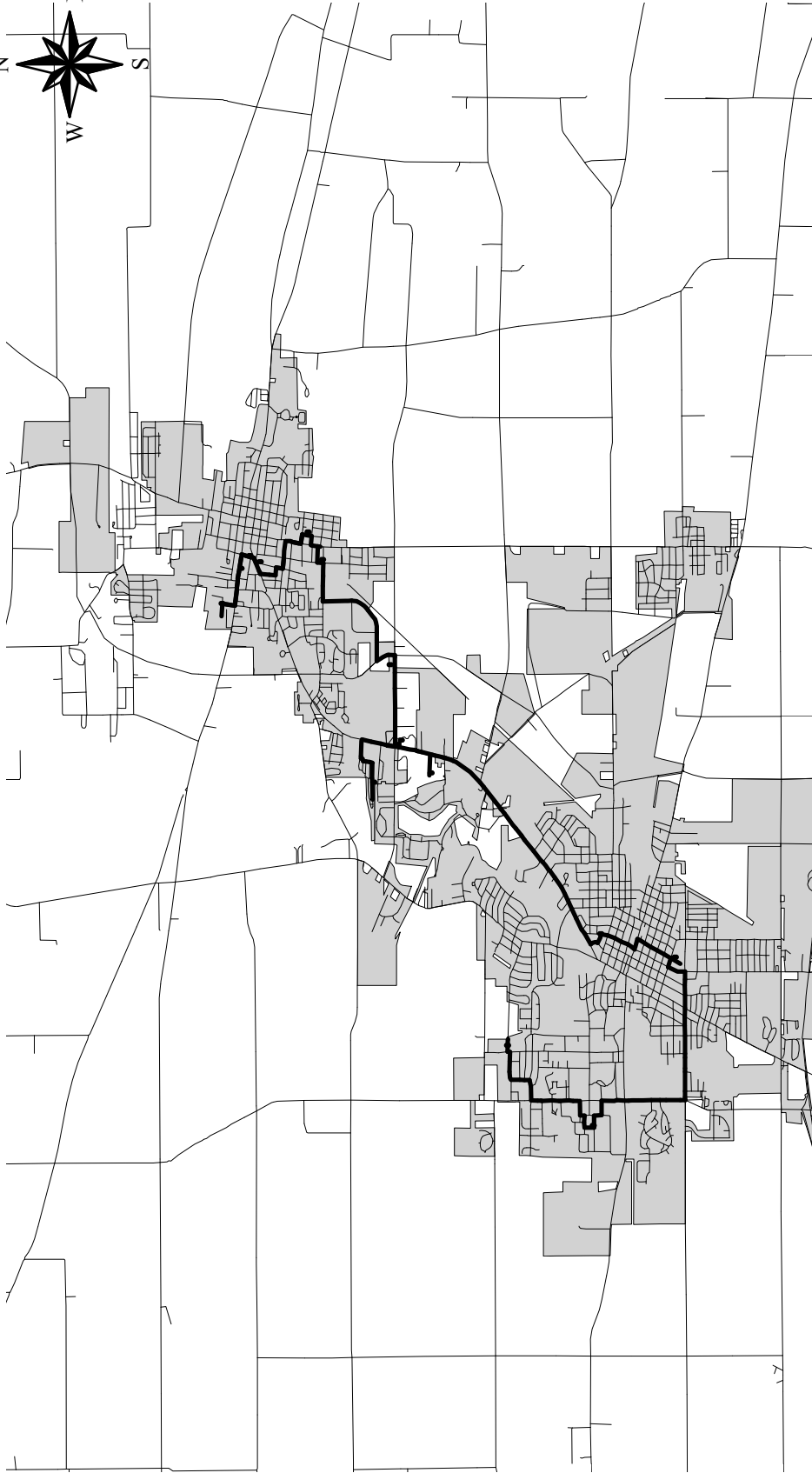
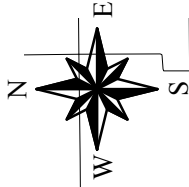
**Exhibit III-5
Paratransit Route #2
DeKalb-Sycamore
Urban Transit Plan**




<p>Legend</p> <p>  Route  Pickup/Dropoff Locations </p>	 <p>RLS & Associates, Inc.</p>	<p>Exhibit III-6 Paratransit Route #3 DeKalb-Sycamore Urban Transit Plan</p>
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	<p>Exhibit III-7 Paratransit Route #4</p>
<p>DeKalb-Sycamore Urban Transit Plan</p>	 <p>RLS & Associates, Inc.</p>
<p>Legend</p>	<ul style="list-style-type: none"> • Pickup/Dropoff Locations — Route



Legend

 Route

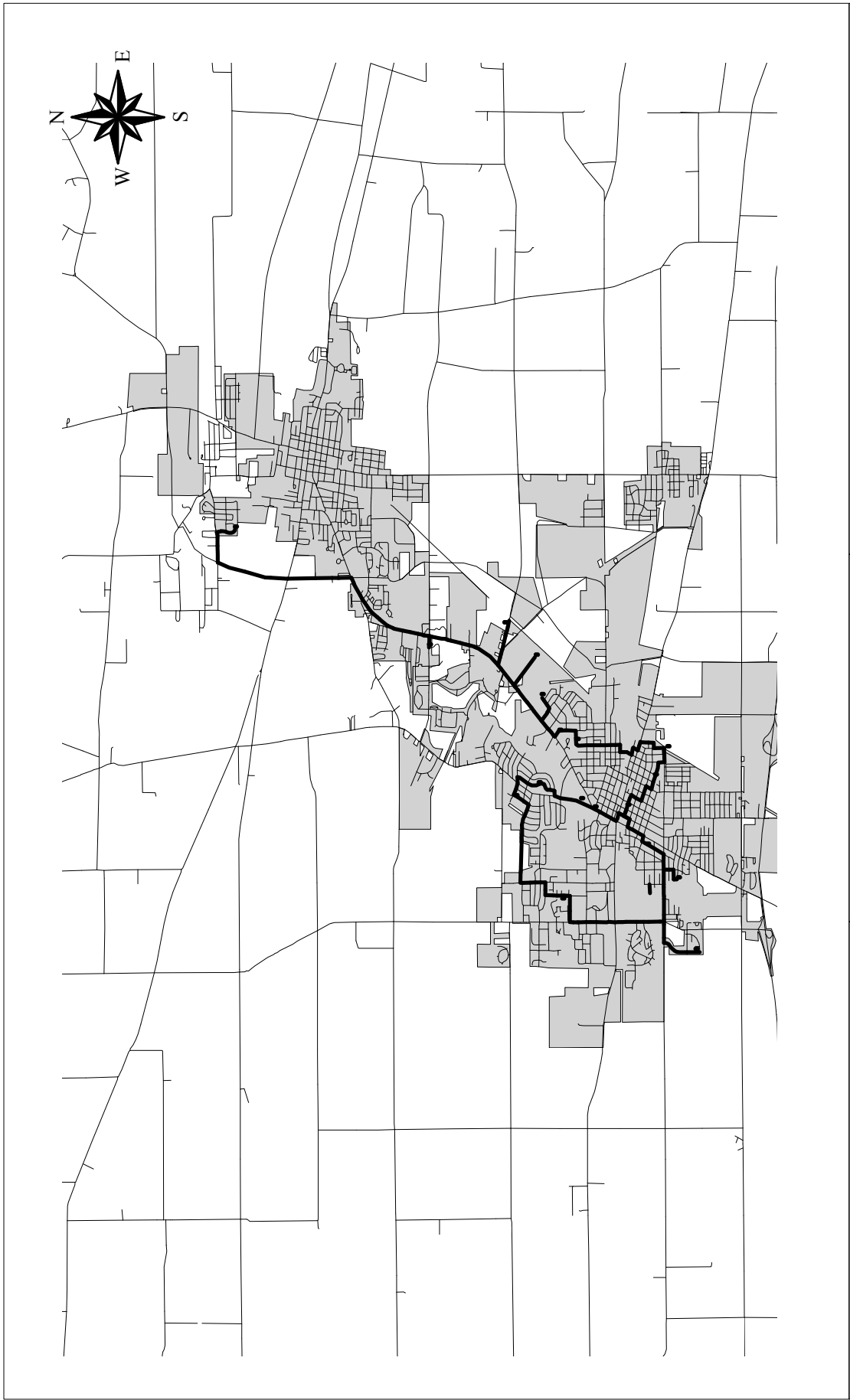
 Pickup/Dropoff Locations



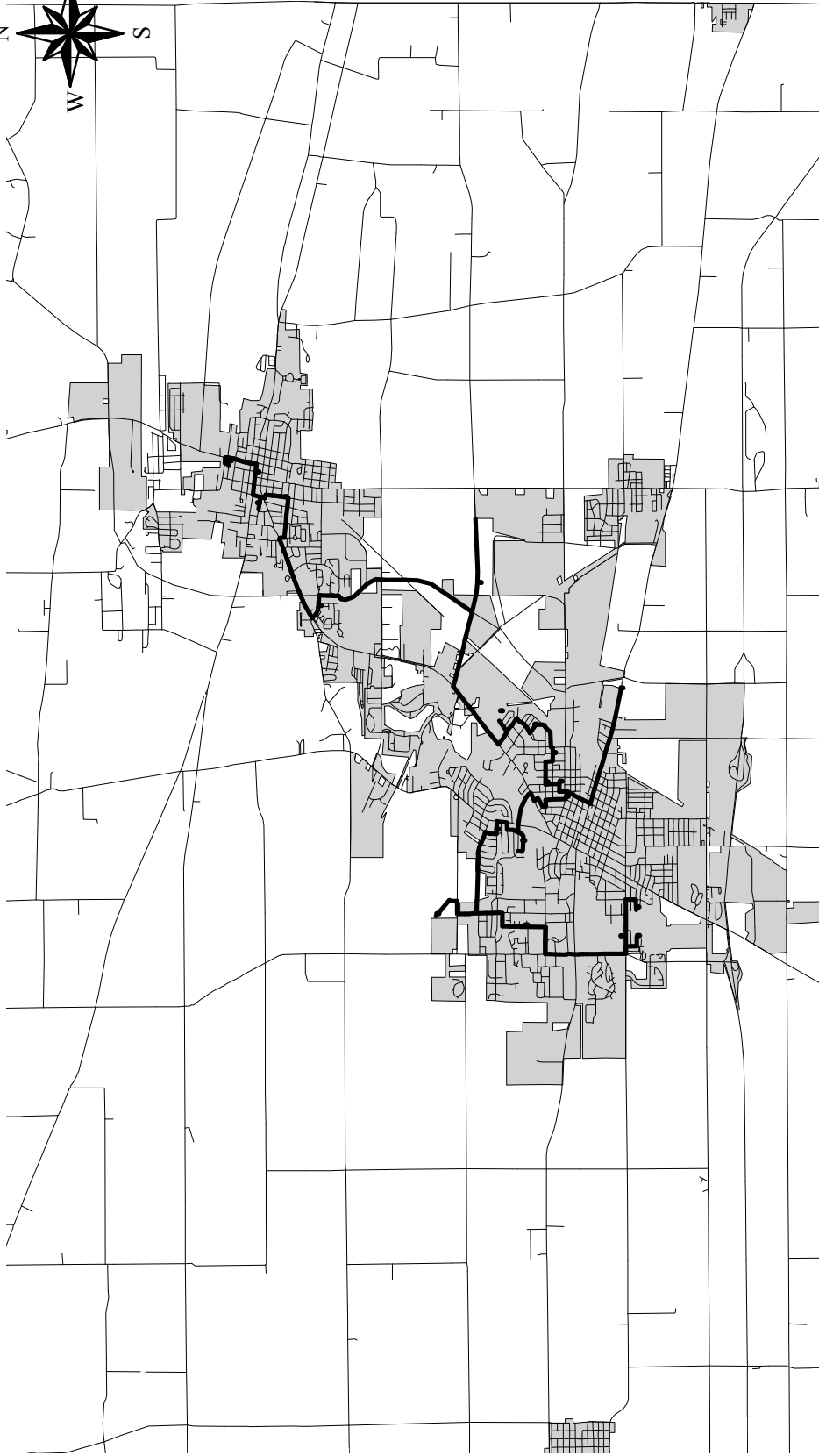
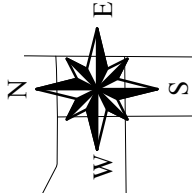
RLS & Associates, Inc.

**Exhibit III-8
Paratransit Route #5**

**DeKalb-Sycamore
Urban Transit Plan**



<p>Exhibit III-9 Paratransit Route #6</p>	 <p>RLS & Associates, Inc.</p>	<p>Legend</p> <ul style="list-style-type: none">  Route  Pickup/Dropoff Locations
<p>DeKalb-Sycamore Urban Transit Plan</p>		



Legend



Route



Pickup/Dropoff Locations



RLS & Associates, Inc.

**Exhibit III-10
Paratransit Route #7**

**DeKalb-Sycamore
Urban Transit Plan**

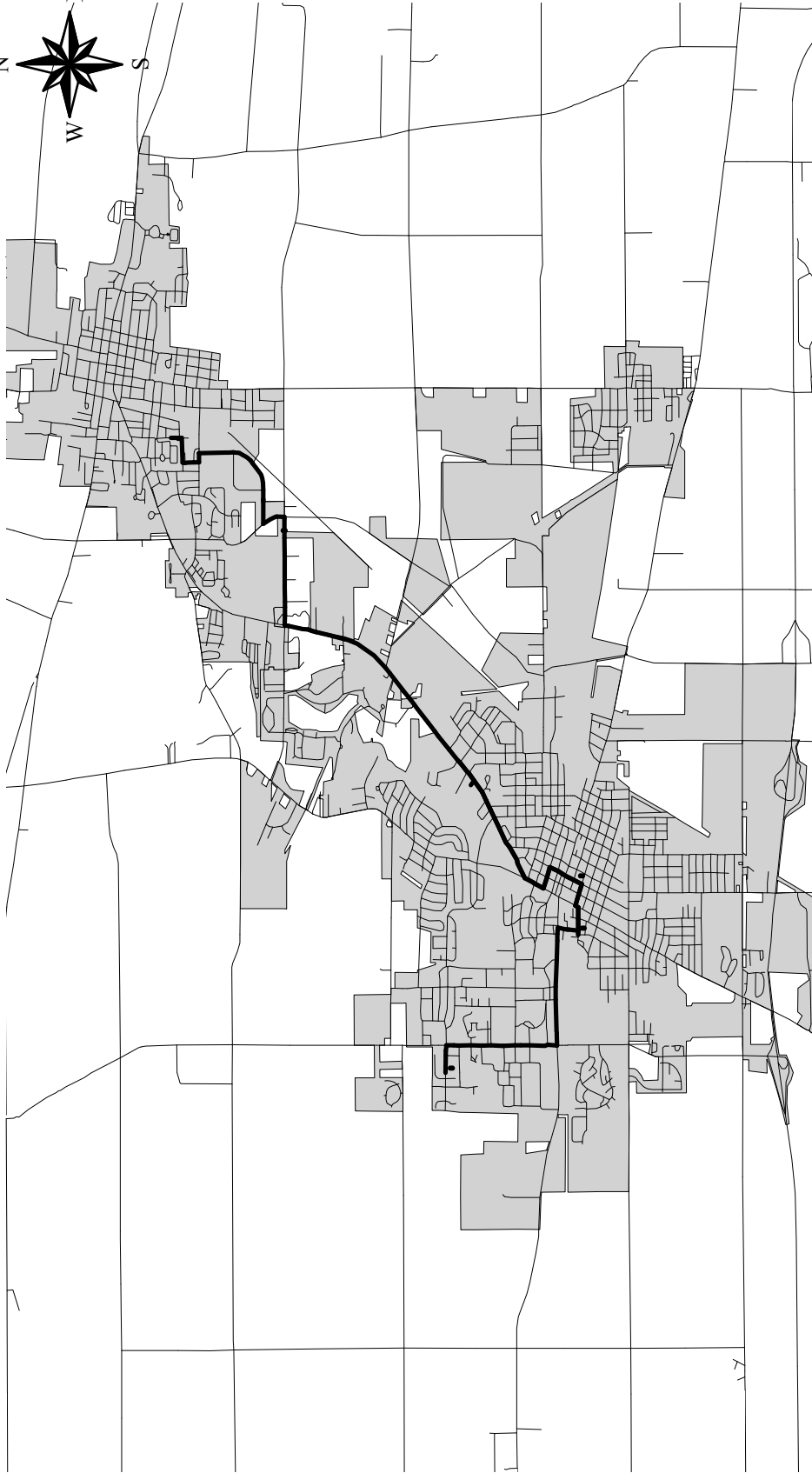
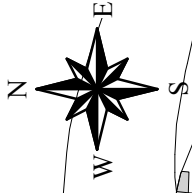


Exhibit III-11
Paratransit Route #8
DeKalb-Sycamore
Urban Transit Plan



RLS & Associates, Inc.

Legend

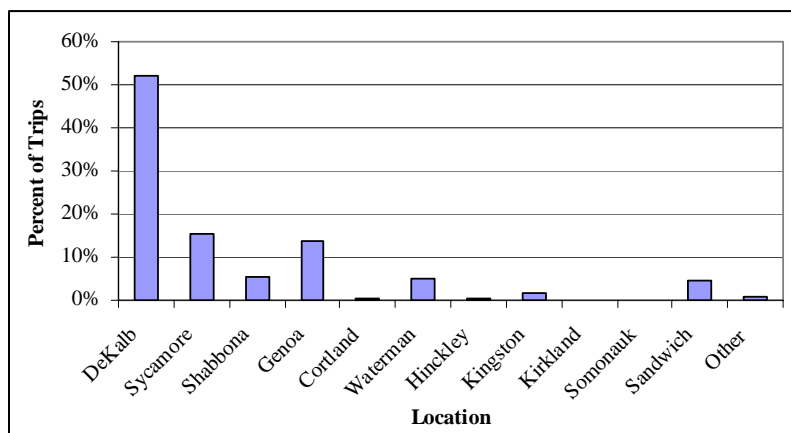
-  Route
-  Pickup/Dropoff Locations

TransVAC

TransVAC provided 9,129 trips in June 2003, and the distribution by category of rider and trip location were reflective of the annual total. The majority of the trips were for the general public. Twenty-seven (27) percent of the monthly trips were for individuals with a disability, and the remaining trips were for senior citizens. Approximately seventy-eight (78) percent of the June 2003 trips originated in DeKalb, and thirteen (13) percent originated in Sycamore.

The Voluntary Action Center also operates a medical transportation program called MedVAC, which primarily provides out-of-county medical trips from DeKalb County. In FY 2002-2003, MedVAC provided 2,135 trips with approximately 10% of these trips for senior citizens. Total trips declined by eight percent from the previous year. Exhibit III.13 shows trip distribution by community. Over one-half of these trips began in DeKalb, 16% percent began in Sycamore, and 14% began in Genoa.

Exhibit III.13: MedVAC Trips by Location, FY 2002-2003



MedVAC provided 161 trips in June 2003. Thirty-nine percent of the trips in June originated in DeKalb. Only a small part of this service in June was for senior citizens.

Transportation Revenue

Exhibit III.14 shows the Voluntary Action Center’s annual transportation revenues for 2001 through 2003. In 2002, total transportation revenue from local sources equaled \$150,943. Most of these contributions came from government grants including, Title XX, Title III-B, Section 5311, Illinois Department of Aging Demonstration Project funds, and Illinois Department of Community and Economic Opportunity funds.

TransVAC

The City of DeKalb continues to receive Section 5311 funding, but after the 2000 U.S. Census, it became eligible for and has since received Section 5307 funding. The City entered into a contract with the Voluntary Action Center to provide transportation services that are required under each of these grants. The additional \$400,000 in Section 5307 funding nearly doubled the combined contributions from other government grants.

Local government and contract revenue are also a significant part of the operating budget. The City of DeKalb and the DeKalb County Senior Citizen Levy are the largest local government contributors. DeKalb, Sycamore, Genoa-Kingston, and other communities also have contributed through the United Funds, which includes donations from the United Way and the Community Chest. The largest contract is with Kishwaukee College.³ MedVAC reimbursements were consistently \$8,000 annually. Van donations and contributions decreased in FY 2003-2004.

Exhibit III.14: Three-Year Operating Revenues

VAC Transportation Revenue			
Revenue Category	2001-2002	2002-2003	2003-2004
Government Grants	\$458,830	\$466,663	\$802,000
Local Government	\$152,500	\$177,500	\$198,500
Agency Contracts	\$103,650	\$144,000	\$84,000
United Funds	\$32,700	\$34,200	\$31,850
Van Donations	\$65,000	\$65,000	\$48,750
Special Agency Group Trips	\$32,000	\$20,000	\$18,000
MEDVAC Reimbursement	\$8,000	\$8,000	\$7,500
Contributions	\$10,000	\$7,500	\$7,500
Membership Drive	\$24,000	\$24,000	\$24,000
Fund Raising	\$1,000	\$2,000	\$2,000
Interest	\$2,000	\$1,000	\$1,000
Federal Fuel Tax Reimburs.	\$500	\$0	\$0
Insurance Reimburs.	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0
Total Revenues	\$890,180	\$949,863	\$1,225,600

Transportation Expense

Approximately sixty-five (65) percent of the transportation budget is expended on employee salaries and fringe benefits. The rising cost of insurance provoked a dramatic change in the expenses associated with Purchased Service. Vehicle insurance increased from \$39,000 in FY

³ In FY 2002-2003, Illinois Council on Developmental Disabilities (ICDD) was the largest contract revenue source, but in FY 2003-2004, ICDD was considered a government grant.

2001-2002 to \$100,000 in FY 2003-2004. The budget also includes carry-over expenses in 2002 and 2003.

Exhibit III.15: Three-Year Operating Expenses

TransVAC

VAC Transportation Expenses			
Expense Category	2001-2002	2002-2003	2003-2004
Personnel/Benefits	\$ 628,950	\$ 613,303	\$ 804,840
Materials & Supplies	\$ 127,380	\$ 130,500	\$ 133,840
Operations & Maintenance	\$ 49,100	\$ 56,000	\$ 70,500
Purchased Services	\$ 79,750	\$ 132,200	\$ 173,900
Other	\$ 10,000	\$ 17,860	\$ 42,860
Total Expenses	\$ 890,180	\$ 949,863	\$ 1,225,860

HUSKIE LINE

Huskie Line

The Northern Illinois University (NIU) Student Association operates a campus bus service that it calls the Huskie Line. The Student Association Mass Transit Board oversees its operations, which is funded through student fees. It contracts with a private operator who provides the vehicles as part of this contract.

The Huskie Line has thirteen (13) buses operating over seven (7) routes when school is in session. Maps showing these routes appear in the Appendix. During school hours, buses operate as frequently as every five (5) minutes on some routes. Ridership can exceed 17,000 passengers on a weekday during the school year.

During spring, summer, and winter semester breaks, the Huskie Line operates two or three buses on two routes. This is the Huskie Line's "Break Schedule," when classes are not in session and ridership is at its lowest.⁴ There is no service during Thanksgiving (a four day weekend), and Christmas breaks.⁵

Factors other than class schedules may also impact monthly ridership, including new Huskie Line runs (e.g., expanded hours of operation, new bus stops) or weather conditions.

Huskie Line Route 1

Exhibit III.16 is a comparison of ridership levels for Route 1 by month, during 2001, 2002, and 2003. Generally, ridership levels are the highest

⁴ The Break Schedule involves operating two routes with a maximum of three buses.

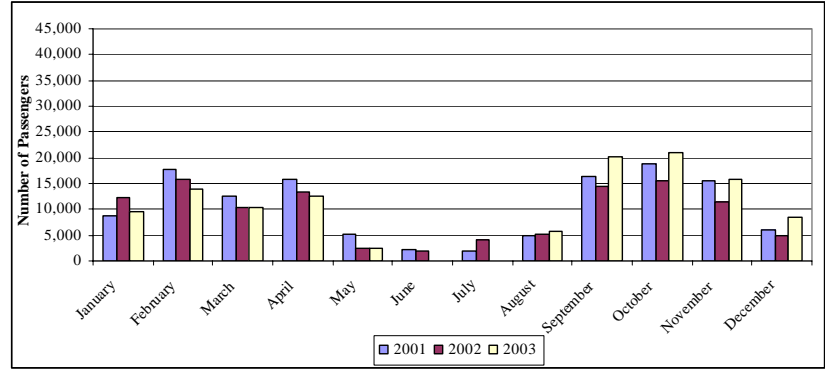
⁵ Thanksgiving break was November 27th through 30th in 2003. Christmas break 2004 was December 24th through January 2, 2004.

Huskie Line

during February, April, September, October, and November. And, they reach the lowest levels during May through August, and December. The route achieved its highest number of trips per month in October 2003.

Route 1 ridership was highest in 2001 when it served a reported 126,056 passenger trips. The ridership level in 2002 declined to 99,256 trips, and increased in 2003 when it provided 119,951 annual trips.

Exhibit III.16: Route 1 Monthly Ridership

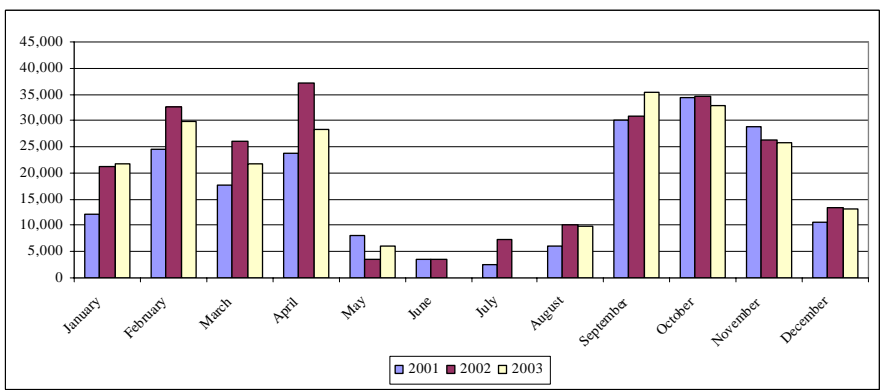


Huskie Line Route 3

Although Route 3 provides more trips, its ridership pattern is similar to Route 1. In 2002, monthly ridership was improved from 2001 for all months except May and November and peaked in April 2002, when Route 3 recorded 37,108 passenger trips.

Monthly ridership from February to April was higher in 2002 than 2003. In 2003, monthly ridership set a monthly record in November with 35,319 passenger trips. No trips were recorded for Route 3 during June and July 2003. Annual ridership was lowest in 2001, with 202,327 riders, and highest in 2002 with 246,961 annual passenger trips. There were 224,698 riders in 2003.

Exhibit III.17: Route 3 Monthly Ridership

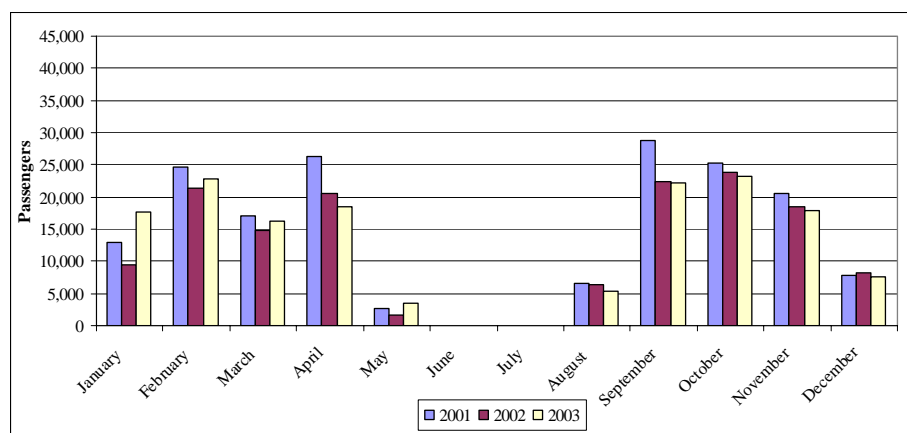


Huskie Line

Huskie Line Route 3A

Route 3A does not operate during the summer break, as reflected in the May, June, and July data. September 2001 had the highest ridership of the study period with 28,744 riders. The data reveals that 2001 was the most successful year for this route. There were 172,554 annual trips on Route 3A during 2001, compared to 147,389 in 2002 and 155,249 in 2003.

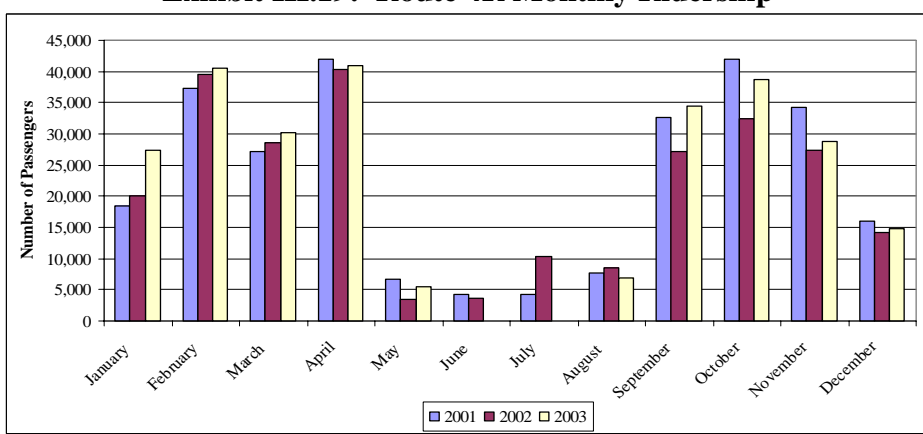
Exhibit III.18: Route 3A Monthly Ridership



Huskie Line - Route 4R

Route 4R operates Monday through Friday, with reduced service during the semester break. The route has high ridership levels. The highest monthly ridership occurred in April and October 2001 when the route provided 41,988 and 41,934 passenger trips, respectively. The highest monthly ridership in 2003 occurred in February and April. The route provided 272,541 passenger trips in 2001, 255,065 trips in 2002, and 268,364 trips in 2003.

Exhibit III.19: Route 4R Monthly Ridership

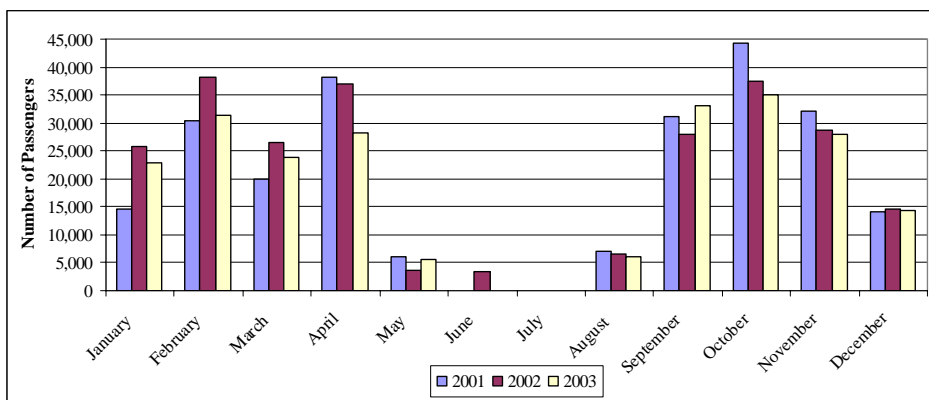


Huskie Line

Huskie Line– Route “4 AL”

Route 4 AL operates Monday through Friday. The route did not operate July service during any portion of the study period. And, according to the ridership data, Route 4 AL operated in June 2002, but not in June 2001 or 2003. Like Route 4R, ridership peaked in October 2001 with 44,275 passengers. The route’s most productive year for ridership was in 2002 when it recorded 250,076 passenger trips. There were 237,808 passengers in 2001, and 228,076 in 2003.

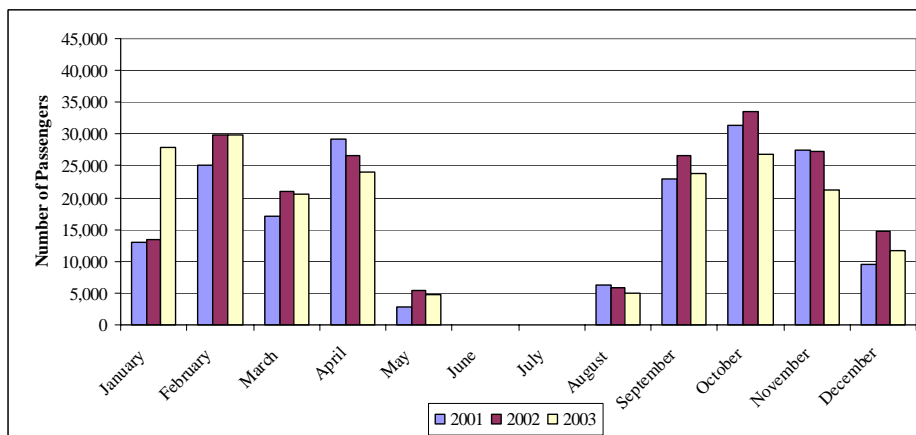
Exhibit III.20: Route 4 RL Monthly Ridership



Huskie Line Route “4 BR”

Route 4 BR did not operate during the break schedule, therefore, there is no ridership during June and July. Similar to the other divisions of Route 4, the 4 BR had the highest ridership during the fall months. October 2002 recorded the highest number of riders for the three-year period, with 33,500 passengers. The route recorded 203,961 passenger trips in 2002, which was its most successful year for ridership. The route carried 185,025 passengers in 2001, and 195,540 passengers in 2003.

Exhibit III.21: Route 4 BR Monthly Ridership

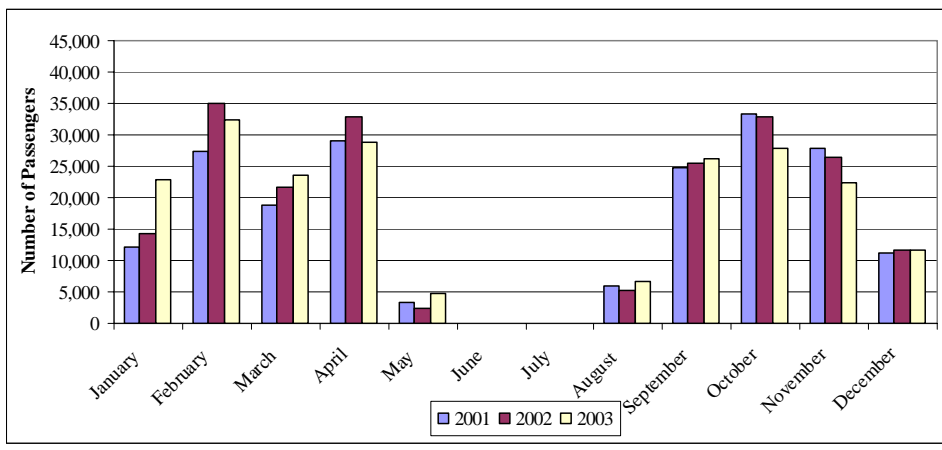


Huskie Line

Huskie Line Route “4 CL”

Route 4 CL operated Monday through Friday, and did not operate during Summer Break, as reflected in Exhibit III.22. Ridership in January and May 2003 improved significantly compared to earlier years. The month with the highest recorded ridership in 2001 was October, but February was the strongest month during 2002 and 2003. The highest annual ridership was in 2002 with 207,939 trips. There were 207,441 trips in 2003, and 193,761 in 2001.

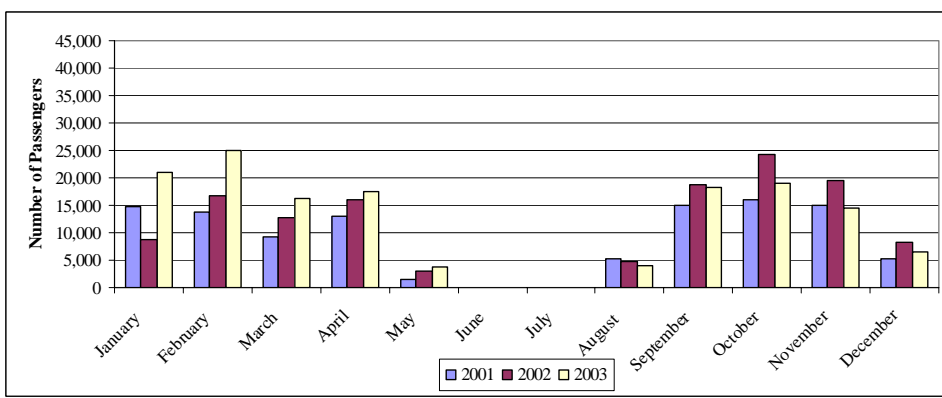
Exhibit III.22: Route “4 CL” Monthly Ridership



Huskie Line Route “4 DR”

Route 4 DR is a weekday only route, and it does not operate during Summer Break. Ridership is lower than the previous divisions of Route 4. Maximum monthly ridership for the three (3) year period was 24,983 passenger trips in February 2003. Monthly ridership during the first semester improved in 2003, but not during the second semester. Annual ridership is steadily improving as it was highest in 2003 with 145,998 passenger trips. There were 132,234 riders in 2002, and 108,873 in 2001.

Exhibit III.23: Route “4 DR” Monthly Ridership

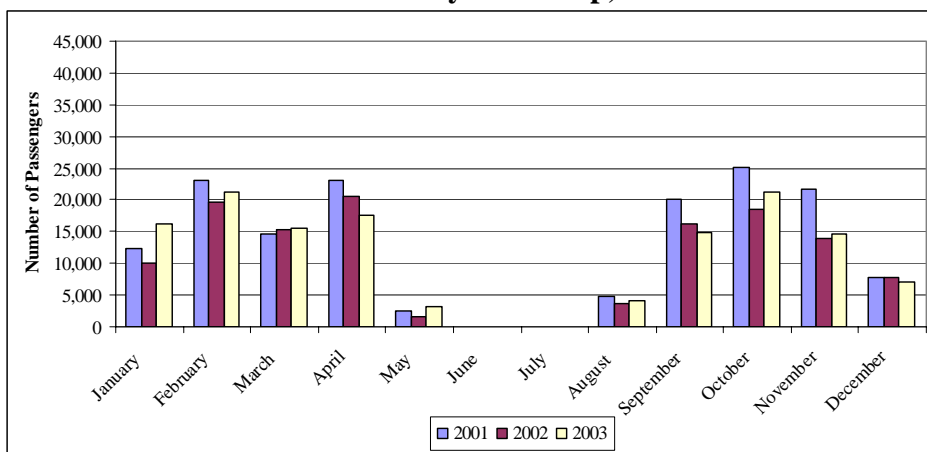


Huskie Line

Huskie Line Route “4 ER”

Route 4 ER also is a weekday route that does not operate during the break schedule. Every month of operation during the study period, with the exception of March and May, had the highest ridership during 2001. The route’s most successful month for ridership was October 2001 when it recorded 25,049 passenger trips. The route provided the most annual trips in 2001 with 155,042 total trips. Ridership declined to 126,921 in 2002, and then improved to 135,636 in 2003.

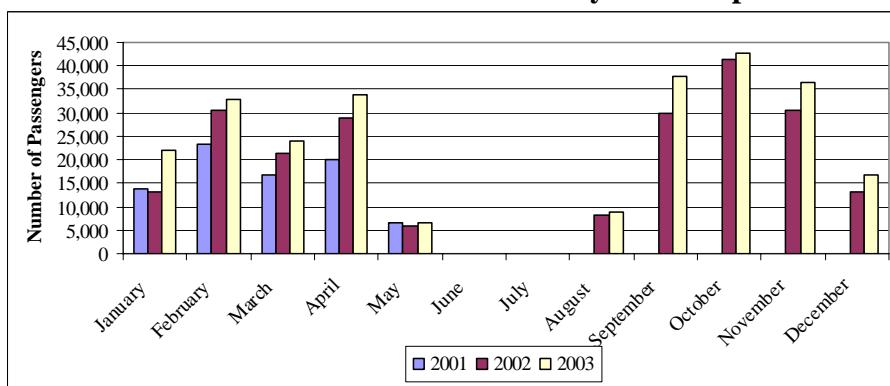
Exhibit III.24: Monthly Ridership, Route “4 ER”



Huskie Line Route 5

Route 5 operates Monday through Friday. This route is not included in the break schedule. Monthly ridership in 2002 and 2003 indicates a significant improvement from 2001. October 2003 was the most productive month with 42,774 passengers. Annual ridership was lowest in 2001 because it includes only first semester. The 2001 annual ridership was 79,928. It increased to 223,117 in 2002, and continued to improve in 2003 with a reported 262,097 annual passenger trips.

Exhibit III.25: Route 5 Monthly Ridership

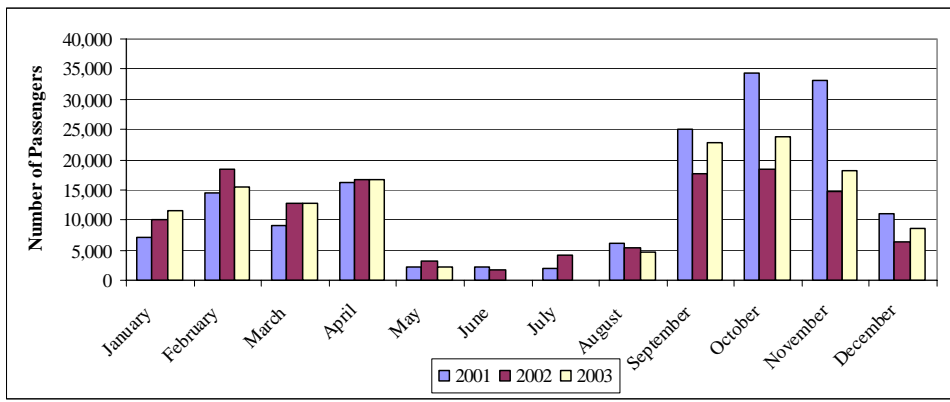


Huskie Line

Huskie Line Route 5A

Route 5A operates Monday through Friday and reduced service is included in the break schedule. Annual ridership was highest in 2001, lowest in 2002, and improved in 2003. The highest monthly ridership occurred in October 2001 when the route completed 34,344 passenger trips. November 2001 was also significant, recording 33,081 passenger trips. September, October, and November are the most productive months for the route.

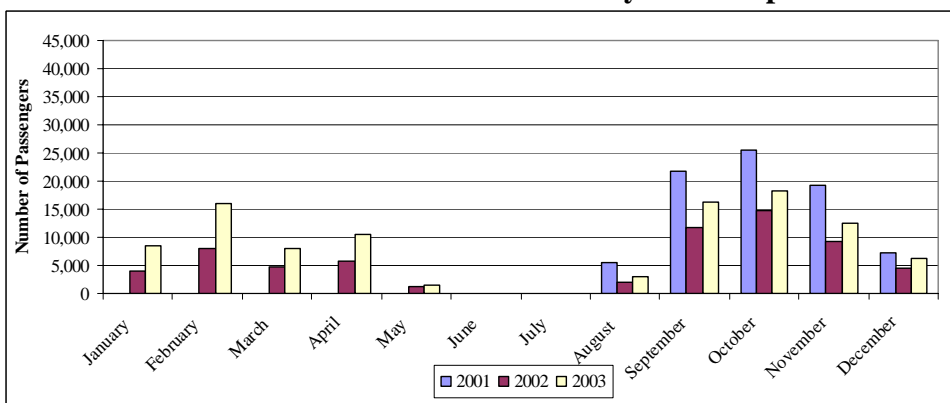
Exhibit III.26: Route 5A Monthly Ridership



Huskie Line Route 5B

Ridership on Route 5B is generally lower than 5A. The route operates on weekdays, but it has no service during the break schedule. Ridership data begins in August 2001. The route's most productive month was October 2001 when it provided 25,513 passenger trips. The route provided 79,216 annual passenger trips in 2001. There were 66,041 trips recorded in 2002, and 100,717 in 2003.

Exhibit III.27: Route 5B Monthly Ridership

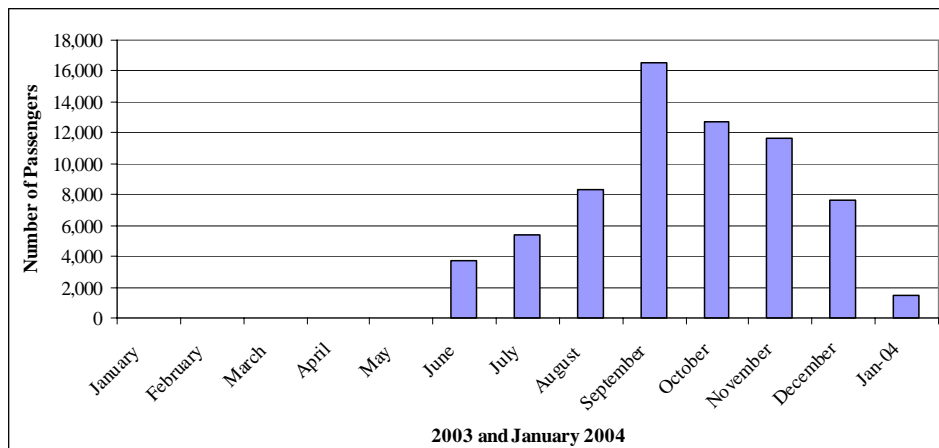


Huskie Line

Huskie Line Route 7

Route 7 operates weekdays, Saturdays, and Sundays. The only data provided for Route 7 was for second semester 2003. The route provided 67,375 trips between June 2003 and January 2004. Monthly ridership peaked in September with 16,532 passenger trips.

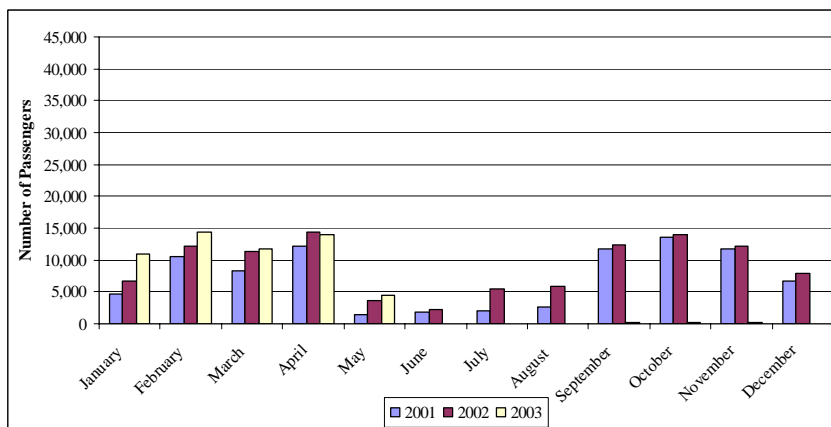
Exhibit III.28: Route 7 Monthly Ridership



Huskie Line Route 7A

Route 7A also operates seven (7) days per week. Ridership is low compared to the system's other routes, partially due to lack of ridership data for June through December 2003. Monthly ridership was consistently higher in 2002, compared to 2001. Monthly ridership was improving slightly in the first semester of 2003. The most productive month was February 2003 when it reported 14,472 passenger trips. Annual ridership in 2001 was 87,566. In 2002 there were 108,264 annual passenger trips. And, in the first five months of 2003, the route provided 56,191 passenger trips.

Exhibit III.29: Route 7A

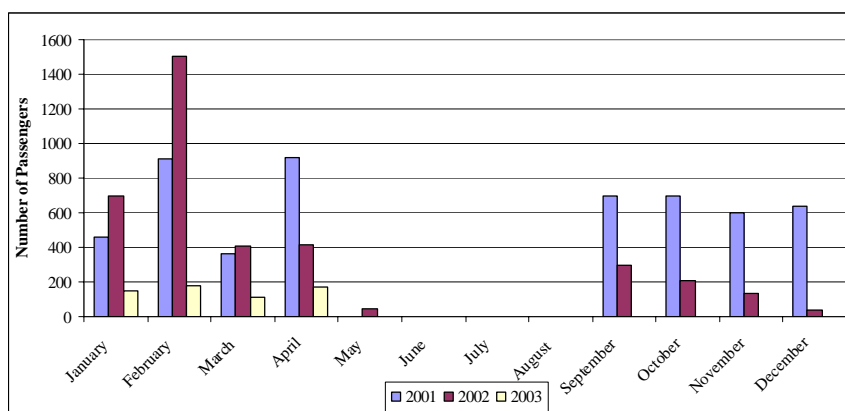


Huskie Line

Huskie Line Route 7B

Route 7B provided Saturday Service only. The route does not operate during the break schedule. Monthly ridership was lowest in 2003, and no data were provided for June through December that year. The highest monthly ridership was in February 2002, when the route provided 1,506 passenger trips. The first two weeks of February 2002 were significantly higher than other weeks. Annual ridership in 2001 was 5,286. The ridership decreased to 3,741 in 2002, and only 607 in the first semester of 2003.

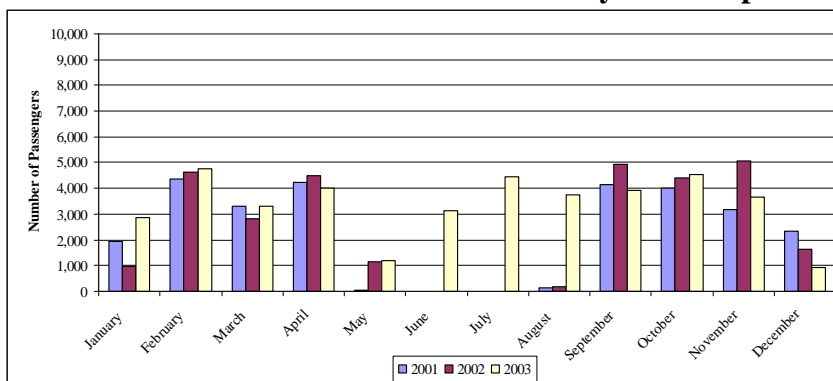
Exhibit III.30: Route 7B Monthly Ridership



Huskie Line Weekend Campus Circle Shuttle L – ‘WC Shuttle L’

The WC Shuttle L operates on Fridays, Saturdays, and Sundays. It was added to the break schedule in 2003, giving it the highest annual ridership to date. November 2002 had the highest monthly ridership for the study period, with 5,084 passengers. Monthly ridership remained relatively steady in 2003 with the exception of January, May, and December that had lower numbers. August ridership improved significantly in 2003, compared to the previous two years. Annual ridership in 2001 was recorded as 27,711 passengers. The 2002 ridership was 30,323.

Exhibit III.31: WC Shuttle L Monthly Ridership

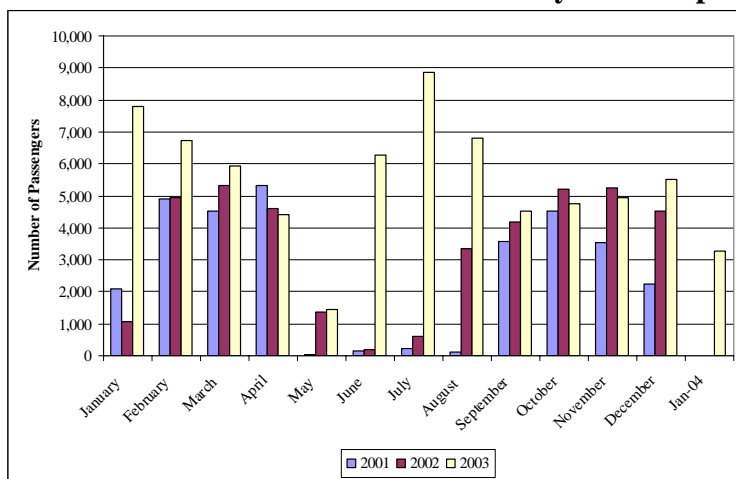


Huskie Line

Huskie Line Weekend Campus Shuttle Right – ‘WC Shuttle R’

The WC Shuttle R compliments Shuttle L and operates Friday through Sunday. Shuttle R has higher ridership than Shuttle L. The highest monthly ridership was in July 2003 with 8,864 passengers. Annual ridership in 2001 was reported as 31,286. Ridership increased in 2002 with 40,510 passengers. And, in 2003, the route provided 68,003 trips.

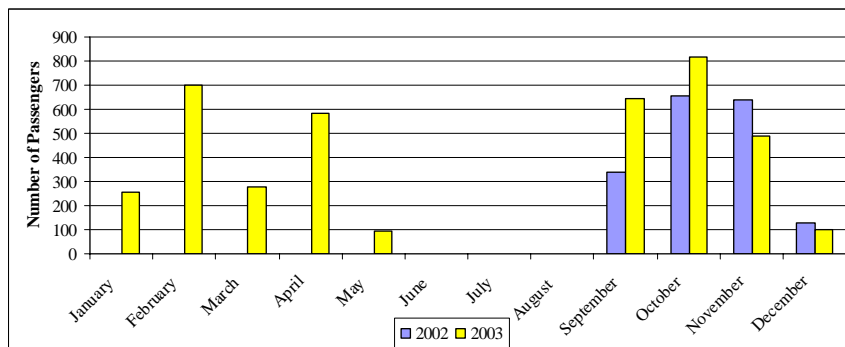
Exhibit III.32: WC Shuttle R Monthly Ridership



Huskie Line Fox Valley Shuttle – ‘FV Shuttle’

The FV Shuttle operates on Fridays, Saturdays, and Sundays, and it is not included in the break schedule. Ridership for the shuttle includes 2002 and 2003 data only. Monthly ridership improved in September and October 2003. It fluctuated in the first semester of 2003 between 100 and 700 passengers per month. The most productive month was October 2003, when the route provided 816 passenger trips. The route had 1,758 passengers during the second semester (September through December) of 2002. Annual ridership in 2003 reached 3,960. This route frequently has full buses, as many NIU students use this shuttle to connect to and from Metra trains from Chicago.

Exhibit III.33: FV Shuttle Monthly Ridership

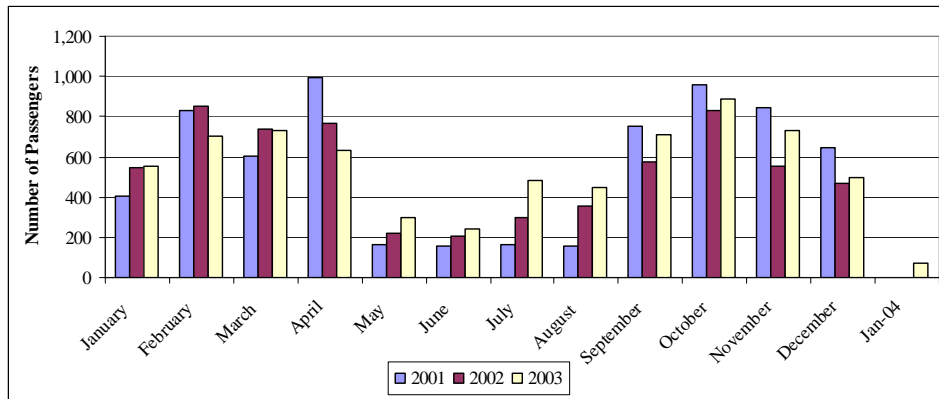


Huskie Line

Huskie Line Freedom Mobile

The Freedom Mobile is a demand response service for disabled persons that operates seven (7) days per week and is included in the break schedule. Monthly ridership reached its highest point during April 2001 with 993 passengers. In 2001, the Freedom Mobile provided 6,677 annual trips. There were 6,417 trips recorded in 2002. And, in 2003, the route improved to provide 6,917 annual passenger trips.

Exhibit III.34: Freedom Mobile Monthly Ridership



PEER COMPARISON

In order to compare characteristics of transit systems in peer counties, operating and ridership information were collected for transit systems that serve Kane, Champaign, Madison, McLean and McDonough Counties in Illinois. Descriptions of these systems appear below.

Champaign-Urbana Mass Transit District – Champaign County

The first board of trustees of the Champaign Urbana Mass Transit District was appointed December 15, 1970. By July 30, 1971, the system operated ten (10) buses. As the MTD improved, its relationship with the University of Illinois also continued to grow. In April of 1989, the students passed a referendum of a one year trial of the MTD providing a campus transportation system. The project proved to be a great success and remains in effect today.

The MTD carries more than 10 million passengers per year. It operates from the Illinois Terminal which was completed in 1999 and provides an enclosed transfer station, and an extra form of income through the leasing of office space. Illinois Terminal presently houses the Champaign-Urbana Mass Transit District, Greyhound, Burlington Trailways, The Bluebird Shuttle, Suburban Express, Amtrak, Subway Sandwich Shop, Cameron's Catering, After the Concert CDs and DVDs, and Champaign-Urbana Junior League.

**Peer
Comparison**

The Champaign-Urbana MTD operates twenty-three (23) fixed routes, including one (1) Airport Shuttle serving Willard Airport and the Springfield shelter stop. The Airport Shuttle operates only when the University of Illinois is in session.

The C-UMTD's primary vehicle model is the New Flyer D40LF, which is a low floor design bus. This bus is used in nearly all facets of daily operations. C-UMTD also operates twelve (12), 2001, 60-foot, New Flyer Articulated coaches. The "Artics" usually operate on the University of Illinois campus, transporting students from the dormitories to class. Late-Nite service is provided with Ford Econo-Line e-350's. Other vehicles in the fleet include 35 and 40-foot Flexible Metro buses, and Maxi-Vans.

Various fare options are available to students and the general public. University of Illinois students, faculty, staff, and retirees may ride any campus routes at any time with the I-Card. Fall, spring, and summer Seasonal Passes may be purchased for unlimited rides during the season. The Basic Fare for fixed route service is \$1.00 per one-way ride. Or, general public passengers may purchase eight (8) tokens for \$5.00. Persons sixty-five (65) years or older, Medicare cardholders, and persons with disabilities are eligible for unlimited free MTD access for three (3) years per application through the Dash Pass. Senior citizens must show proof of age or be a Medicare cardholder. Persons with Disabilities must submit appropriate paperwork to find out if they are eligible.

Go West Transit – McDonough County

Go West Transit serves the students of Western Illinois University (WIU). Its primary purpose is to transport students from their residences to the core areas of the WIU campus. Its secondary purpose is to transport students from residences to local Macomb merchants, including Wal-Mart, grocery stores and the YMCA. Go West Transit reports that it has had 1.09 million riders to date.

The system includes seven (7) fixed routes. Five (5) of the routes operate Monday through Friday between 7:00 a.m. and 5:00 p.m., with varying schedules. Three (3) routes operate on weekday evenings, with varying schedules. Four (4) routes operate on weekends.

Bloomington-Normal Public Transit System– McLain County

Bloomington-Normal Public Transit System operates nine (9) bus routes. Service is available during weekdays and weekends. The system's fleet consists of a variety of vehicles, many of which are capable of 'kneeling' to ease boarding for seniors and persons with disabilities. Demand response service is also available for people who are unable to manipulate the fixed routes. All buses are also equipped with a bike rack.

General Public passengers pay \$0.50 per one-way trip, and seniors and people with disabilities pay half price. In addition to the regularly scheduled bus routes, B-NPTS operates Nite-Ride, a limited evening bus service around the greater Illinois State University (ISU) campus area connecting with points north and east of the campus. The Nite-Ride operates during ISU school year. The service is available to students and other members of the community. Non-students pay the same fare that applies when they use the fixed route daytime services.

Madison County Transit District

The Illinois State Legislature created Madison County Transit District in 1980 to oversee the development of public transit in the County. Considerable focus was applied to redesigning and expanding the local fixed route transit system, and diversifying the transportation services offered to residents of Madison County. Demand Response service for persons with disabilities and older adults was introduced in 1985. New local shuttle service using small buses was initiated in 1986 and expanded during the years 1989 through 1993. Vanpool service was introduced in 1987 and expanded to include carpool matching assistance in 1993. One year later, MCT became the regional operator of the RideFinders program, a carpool matching service for the eight-county St. Louis metropolitan area.

Madison County Transit receives funds from a combination of Federal, State and local sources, including: Federal Congestion Mitigation and Air Quality Improvement (CMAQ) funds (for bus and van purchases needed for expanded transit services, ridesharing program administration and development of bicycle facilities), Federal Surface Transportation Enhancement funds (to develop bicycle trails in conjunction with highways and other transportation facilities), and local sales tax revenues (.0025 percent) collected in the sixteen (16) member townships of the District.

The Madison County Transit District operates twenty-one (21) fixed routes, plus demand-response service for persons with disabilities and seniors. It also provides shuttles to special events in St. Louis including major theatrical shows and Rams football games.

PACE - Kane County

Kane County residents have two options for Public Transportation: two (2) PACE fixed routes, and a Dial-A-Ride service in selected regions of the county. PACE Route 802 operates weekdays 5:00 a.m. to 7:00 p.m., and Saturdays between 6:00 a.m. and 5:30 p.m. It runs between Aurora and St. Charles, serving the Aurora Transportation Center, North Aurora, Batavia, Geneva Metra Station, St. Charles Business Park, Charlestowne

Peer
Comparison

Mall, and Kane County Judicial Center. PACE Route 921 provides peak hour shuttle service to and from Geneva Metra Station, Delenor Community Hospital, and the Kane County Judicial Center. Additional weekday service is provided on PACE route 802. There is no weekend service and no holiday service.

PACE's ADA Paratransit Services operate in all suburban areas that are within 3/4 mile of Pace's regular fixed routes and during the same days and hours as the regular fixed route service.

Dial-A-Ride service in Kane County is available in Aurora Township, Batavia, Dundee Township, Elgin, St. Charles, and Northwest Kane County. Each service area sponsors its Dial-A-Ride service. All Dial-A-Ride services are demand response trips that require one (1) or two (2) days advance reservation, and operate on weekdays. Dial-A-Ride service in Batavia and Northwest Kane County are open to the general public, and all other service areas are dedicated to serving seniors and people with disabilities.

Service and Performance Comparison

The peer group offers a comparison of different transit systems with some key similarities to DeKalb. McLain, Champaign, and McDonough Counties all have major Universities. While transit districts exist in McLain and Champaign Counties and provide transit to their Universities, Go West Transit in McDonough County is a University based service that provides public transit in the City of Macomb. The Madison County Transit District is located in suburban St. Louis, Kane County is adjacent to DeKalb County in suburban Chicago.

Exhibit III.35 shows ridership and operating statistics for transit systems in the peer group. Kane County is a relatively small part of the PACE system which serves most of the suburban Chicago area. Ridership reported for PACE includes the entire service area. Of the counties in the peer group, Champaign County has the highest level of transit ridership. The Champaign-Urbana Mass Transit District operates transit service in the urbanized portion of the County to communities that belong to the District. Its high ridership levels are a direct result of providing both on and off-campus service to the University of Illinois. The Bloomington-Normal Public Transit System has the lowest ridership levels of the group. It also serves a University, Illinois State, but at much lower levels of service than C-UMTD or the NIU Student Association.

**Exhibit III.35
Peer Group Comparison**

County	Transit System	Mode	Annual Unlinked Passenger Trips	Annual Vehicle Miles	Annual Vehicle Hours	County Population
McLain	Bloomington-Normal Public Transit	DR	25,265	112,037	7,748	150,433
		MB	809,958	694,608	56,491	
Champaign	Champaign-Urbana Mass Transit District	DR	38,664	111,559	14,295	179,669
		MB	10,003,819	2,594,982	220,482	
Kane	Pace, Suburban Bus Division	DR	938,024	5,105,635	356,246	404,119
		MB	31,080,731	22,192,365	1,456,491	
		MB	3,240,827	3,212,764	205,322	
		VP	1,132,168	6,462,720	207,517	
Madison	Madison County Transit District	DR	141,804	1,349,671	75,180	258,941
		MB	1,837,119	3,187,139	170,763	
		VP	118,383	691,384	18,583	
McDonough	Go West Western Illinois University	DR				32,917
		MB				
DeKalb	TransVAC Huskie Bus	DR	121,261			88,969
		MB	2,221,258	438,978	40,358	

DR-Demand Response, MB-Motor Bus, VP-Vanpool
Notes: PACE statistics are for entire service area. C-UMTD does not serve entire County. Go West ridership not reported.

IV. TRANSPORTATION NEEDS ASSESSMENT

The transportation needs assessment was primarily accomplished in three ways. First, an estimate of relative transit demand, or transit propensity, was done using relevant demographic data. Second, interviews and focus groups were held involving stakeholders and community leaders. Finally, past efforts to define transportation needs were reviewed and incorporated into the needs assessment.

TRANSIT PROPENSITY

To estimate relative demand for transit service throughout DeKalb County, the consultant team estimated transit propensity, which predicts relative demand for transit service, if it were available to the local population. The model was derived through the study “*Demand Estimating Model for Transit Route and System Planning in Small Urban Areas*,” Transportation Research Board, 730, 1979. The end result is an estimate of the relative propensity for transit for each census block group.

To calculate transit propensity, previously described 2000 U.S. Census data were used. These data included total population, number of households with persons over age 65, and the number of occupied housing units without available vehicles. The land area in square miles of each census division was also used in the computations. The zero-vehicle housing units, elderly population and land area were then entered into this quick response model to determine transit propensity per square mile. Exhibit IV-1 shows the transit propensity of each block group in DeKalb County.

Transit propensity is divided into five categories based on the results of the DeKalb County calculations. The highest transit propensity exists in block groups near downtown DeKalb, near Northern Illinois University, and near downtown Sycamore. Most of the remainder of DeKalb is in the second highest category.

INTERVIEWS AND FOCUS GROUPS

Several interviews and focus groups were held to help identify the transportation needs that exist in the DeKalb-Sycamore area. Interviews were being conducted concurrently with the development of the DeKalb Long Range Transportation Plan. In order to avoid duplication of efforts, the Long Range Plan consultant agreed to include transit questions in the interview. In addition, information collected at a transportation forum held by Opportunity House, Inc. is summarized in this section.

Transit Propensity

Interviews and Focus Groups

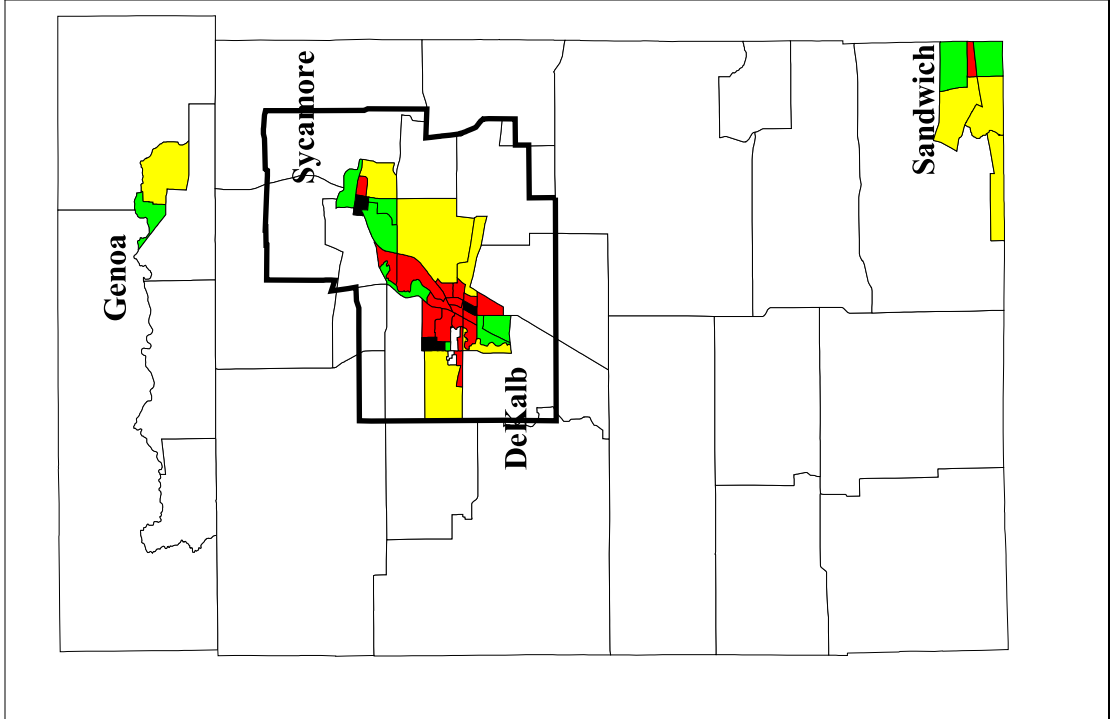
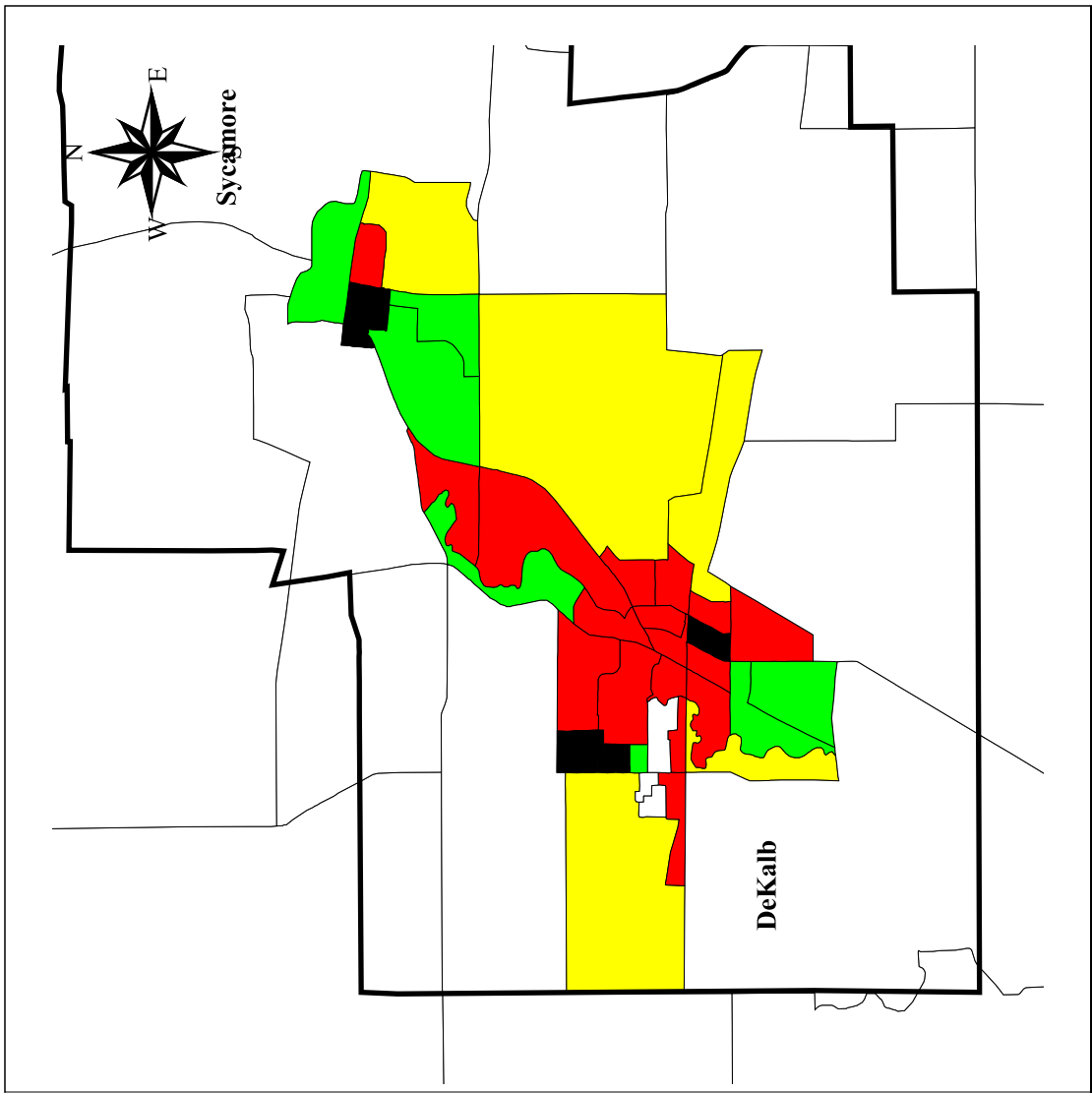
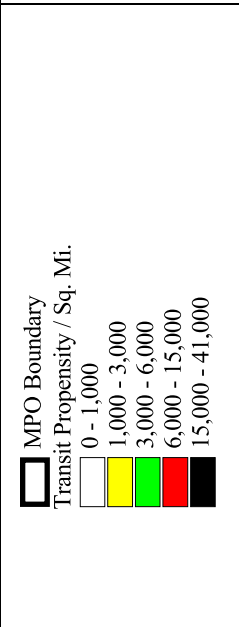


Exhibit IV-1
Transit Propensity
DeKalb-Sycamore
Urban Transit Plan



RLS & Associates, Inc.



**Interviews and
Focus Groups**

Community Agency Focus Group

A focus group meeting was held on May 19, 2004 with representatives of 13 human service agencies. Each of these representatives described his or her perception and/or presented collected data of DeKalb County's unmet transportation needs. The following agencies were represented:

- ◆ Family Service Agency
- ◆ DeKalb County EDC
- ◆ Safe Passage
- ◆ DeKalb County Health Department
- ◆ Kishwaukee College
- ◆ Illinois Employment and Training Center
- ◆ RAMP, Inc.
- ◆ DeKalb County Community Services Department
- ◆ Housing Authority of DeKalb County
- ◆ Opportunity House, Inc.
- ◆ DeKalb County Mental Health Board
- ◆ Ben Gordon Center
- ◆ Sycamore School District

Several attendees would like to see transit services operate during evenings and weekends. Weekday evening hours should be extended to 10:00 p.m. to provide better access to jobs and shopping locations. Transportation on Saturdays and Sundays would fill a similar void. Many agencies would also like improved access to their offices for their clients. Another improvement suggested by several agencies was to provide bus service to more destinations, particularly in the Sycamore area.

The need for more capital funding for vehicles was also mentioned as a problem for TransVAC and MedVAC. Many attendees also felt that any new or modified services should be aggressively marketed so those who need or want to use them know they exist.

VAC Board Transportation Subcommittee

Four members of the Transportation Subcommittee of the VAC Board comprised another focus group. It was felt that the primary mission of TransVAC is to serve seniors, disabled, and other low-income persons to provide access to necessary life sustaining activities including employment, shopping, and other services. Members felt that strengths of the TransVAC system include reliability, quality, safety, and its personal attention to its passengers. Weaknesses include its limited hours, sometime difficulty in getting through on the phones to make a reservation, and limited funding.

It was felt that TransVAC receives good support from local governments. The City of DeKalb provides funding and allows TransVAC to participate in its fuel purchase program. However, there is not enough capital

**Interviews and
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funding, and the fleet is aging. This will eventually result in increased operating and maintenance costs. Other operating cost issues include increased insurance and fuel costs. Attracting drivers is also an issue, since TransVAC wages are relatively low due to a tight operating budget. If there were additional funding, VAC would like to improve evening and weekend service, start service to a new Metra station in Elburn, improve the frequency of the Green Line, and extend it to Sycamore.

VAC Board members also discussed the possibility of creating a Transit District or starting a Transit Department within the County government structure as alternatives to the current organizational structure. They wanted these options addressed in the transit plan.

Northern Illinois University Student Association

An interview with representatives of the Northern Illinois University Student Association was conducted in cooperation with the DeKalb County Long Range Transportation Plan. The Student Association Mass Transit Board directs the Huskie Line Service. A survey is being planned to gather more information on the perceptions and use of the transit service. It was stated that student fees dedicated for the transit service generate almost \$4 million/year, and \$2.5 million/year of that amount is budgeted for bus operations.

In the past the transit system had provided more service throughout the community. By the late 1980's, this more comprehensive service ended. Currently the Route 7 is the only route that serves major non-campus destinations. According to those interviewed, this route is also the primary commuter route to campus for University staff and faculty.

NIU has approximately 25,000 students, 6,200 of which live in dorms. The Huskie Line also provides the Geneva Shuttle, which runs between the NIU campus and the Metra train Station in Geneva on weekends. The shuttle does manage to break even, charging \$7 per round trip to the general public, \$5 to NIU staff, and \$4 to NIU students.

The following issues relating to transportation service were identified:

- ◆ City of DeKalb has weight limits on some roads, which restrict bus access to important areas. For example, Hillcrest Drive between Normal Road and Garden Drive does not allow buses because it is structurally deficient.
- ◆ They would like to extend service to Sycamore and to neighborhoods in eastern DeKalb.
- ◆ They anticipate continued development of multi-family dwelling units on the west side, where transit service will be desired.
- ◆ There has been some interest in a downtown shuttle service.
- ◆ Traffic congestion is not a notable problem.

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- ◆ There has been an interest in providing service to Downtown Sycamore (County Courthouse).

DeKalb Community School District

An interview with the School District's Assistant Superintendent of Business and Finance was also conducted in cooperation with the DeKalb County Long Range Transportation Plan. The District has one high school at Fourth Street and Barb Boulevard. There are two Junior High Schools located at Eighth Street and Taylor Street and at First Street and Sycamore Road. There are six elementary schools varying in size between 250 and 470 students. Each Building is served by up to five buses. All Brooks Elementary School students are bussed due to busy roads and school separation from neighborhoods. Neither Bethany Road nor Sangamon Road has sidewalks.

The interviewer identified the following transportation issues:

- ◆ The district is required to bus students across railroad tracks. The State (IDOT) has a point system for assessing hazardous roads, which require a safety mitigation strategy for students crossing. This strategy may be bussing, but may first try to identify a safer alternative route. If the walking distance is greater than 1½ miles students are bussed. Applications are submitted to have hazardous pedestrian environments identified, IDOT determines, based on a point system if a site qualifies as hazardous.
- ◆ The City of DeKalb provides some crossing-guards.
- ◆ Sidewalks are needed on Bethany Road and Sangamon Road.
- ◆ Students on the east side of 4th Street (IL 23) are bussed to the west side to school because of safety hazards. The sidewalk on the east of the street is adjacent to the curb, with no barrier between the sidewalk and traffic.
- ◆ Speed is an issue on 1st Street. Hillcrest uses speed tables to address speed issues.
- ◆ Parking is an issue at the high school. The District does issue parking permits at a cost of \$25-\$35/year in 2004, but will likely increase to \$50-\$100/year.

Opportunity House Transportation Forum

On May 19th, 2004, Opportunity House conducted a transportation forum to discuss DeKalb County's public transportation needs. Discussions during the meeting were based on the Spring 2002 collaborative planning meetings that identified the lack of public transportation, and the effect on the working poor, low-income families, and individuals. The 2002 efforts were facilitated by Dr. Carolyn Beard of DeKalb County Special Education Association, and co-sponsored by the Transition Planning Committee and Opportunity House, Inc (also referred to as the Transportation Task Force). The forum was an opportunity for local

**Interviews and
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social service providers to identify and prioritize unmet transportation needs in the County.

The following priority ordering of unmet needs were established during the 2002 meeting:

- ◆ Increase public local support.
- ◆ Mass transit system for entire DeKalb County.
- ◆ Connection of Green Line to Sycamore
- ◆ Weekend transportation.
- ◆ Flexible transportation to meet individual needs.
- ◆ Transportation system that is available to all residents.
- ◆ Conduct survey (Questionnaire, interview, multimedia) of needs.
- ◆ Dispatch “call-for-ride” system with 24-hour, every day availability.
- ◆ Respond to demands and needs in rural areas.
- ◆ Transportation outside of DeKalb County (e.g. Ogle County)
- ◆ Influence of current services on future facilities and services planning.
- ◆ Increase rural and fixed routes.

Various unmet consumer needs regarding public transportation in DeKalb County also were identified through mail-out survey results that were received after the planning meeting. The mail-out survey was distributed at the forum and by the Voluntary Action Center. A total of 180 individuals responded to the survey. A significant percentage of the survey respondents identified the following issues:

- ◆ Weekend service between Sycamore and DeKalb – 87 percent of returned surveys.
- ◆ Increased evening service between 5:00 and 11:00 p.m. – 83 percent of returned surveys.
- ◆ Increased late night service – 25 percent of returned surveys.

Sycamore, Cortland, Sandwich, Shabbona, Waterman, Genoa, Kingston, Cherry Valley, and Malta were identified by the survey as areas needing increased public transportation. Popular destinations identified by the respondents as places that should be served by public transportation included: Tri-County Health Services, Kishwaukee College, DHS office on Afton Road, DeKalb Clinic North, DeKalb County Health Department, Sycamore Courthouse, and Kishwaukee Hospital (from Sycamore).

Survey respondents indicated they would use expanded transportation services to travel to leisure and recreational activities (76 percent of respondents, or 137 individuals), health care services and appointments (72 percent of respondents, or 130 individuals), and employment sites (64 percent of respondents, or 115 individuals).

Many individuals also offered information about various service needs and suggestions including: a community bus pass with discounted rates for

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economically disadvantaged consumers; a bike rack near bus stops; bilingual bus drivers; increased late hour service around the Northern Illinois University campus whenever the Huskie Line is not running; Saturday and Sunday service from Barb City Manor to the retail corridor on Sycamore-DeKalb Road; and, the need to teach students with disabilities how to access transportation.

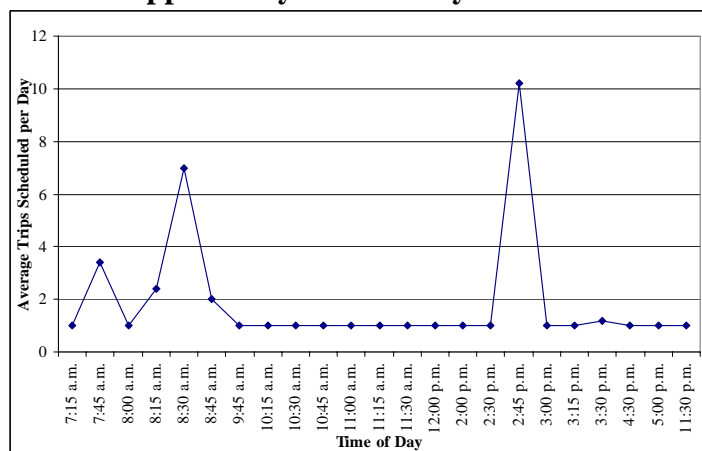
Participation in the forum represented a strong and diverse recognition from human services providers about the importance and impact of transportation service on individuals in DeKalb County. Many of the participants submitted letters to the Transportation Task Force or local governmental offices regarding unmet transportation needs for clients of their organizations (including Kishwaukee College), and the impact of reductions in transportation funding that took place in 2001. In some cases, the reduced funding for transportation forced organizations to increase the cost of providing transportation for their clients.

In-house Client Transportation to and from Work

When the transportation forum regrouped in 2004, Opportunity House formulated a breakdown by hour, of weekly scheduled rides to and from work that TransVAC is unable to serve. These trips average 182 each week and are provided by Opportunity House staff or family members.

Peak hours for Opportunity House provided work trips occur at: 7:45 a.m., with an average of three (3) trips scheduled per day; 8:15 a.m., with an average of two (2) trips scheduled per day; 8:30 a.m., with an average of seven (7) trips scheduled per day; 2:45 p.m., with an average of ten (10) trips scheduled per day; and 3:30 p.m., with an average of one (1) trip scheduled per day. Opportunity House provides the work trips between 7:15 a.m. and 11:30 p.m., Monday through Friday. Exhibit IV.2 illustrates the average number of trips, by time of day, during a one-week period that TransVAC is currently unable to provide.

Exhibit IV.2: Opportunity House Daily Scheduled Work Trips



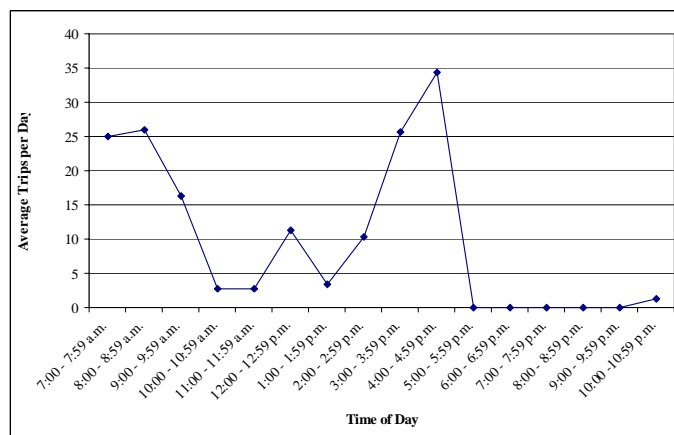
Source: Documentation compiled by Opportunity House, Inc. for Transportation Forum – May 19, 2004

Day Programming or Community Jobs

TransVAC provides the majority of transportation for Opportunity House clients traveling to and/or from Opportunity House for day programming, and transportation to and/or from community jobs. TransVAC provides approximately 476 trips weekly, compared to an average of 182 trips per week that Opportunity House provides. Client demands are stressing TransVAC and Opportunity House’s resources. As a result, some people ride on TransVAC for over an hour to get home, and Opportunity House is having difficulty scheduling rides with TransVAC for individuals new to the program.

Exhibit IV.3 depicts the average trips per day that TransVAC provided for Opportunity House’s day program clients and clients with jobs in the community. Peak service hours are between 7:00 a.m. and 9:00 a.m., and 4:00 p.m. to 5:00 p.m. Between 5:00 p.m. and 10:00 p.m., no trips are scheduled. One (1) trip per day is provided during the 10:00 p.m. hour. TransVAC averages 95 trips of this nature each day. Friday has the least amount of trips per day.

Exhibit IV.3: Average Daily Trips for Day Programs or Community Jobs, Provided by TransVAC



Source: Documentation compiled by Opportunity House, Inc. for Transportation Forum – May 19, 2004.

TransVAC Trips Scheduled upon Request

Opportunity House clients may schedule trips with TransVAC that are not standing order, or reoccurring trips. Trips of this nature are for client appointments, recreation, or personal reasons.

Seventy-six (76) percent of such trips requested by Opportunity House clients in 2003 were provided. TransVAC was able to provide a larger percentage of the trips requested between 5:00 p.m. and 11:00 p.m. than

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Focus Groups**

requests during daytime (before 5:00 p.m.) hours. According to Opportunity House records, fifty-four (54) percent of daytime trip requests were provided, compared to eighty-eight (88) percent of evening trips. Daytime trip requests outnumbered evening requests, 1,764 compared to 1,021.

The same requests were recorded for January through April 2004. If the trend continues, TransVAC will receive more trip requests of this nature in 2004 than in 2003. By April 2004, TransVAC provided twenty-one (21) percent of the trips requested during daytime hours, and eighty-four (84) percent of evening hour requests. Some 987 trip requests were placed during the first four months of 2004. If the current trend continues, TransVAC will average approximately 247 requests per month in 2004, compared to 232 requests per month during 2003.

City of DeKalb Staff

A City of DeKalb staff member responded to a series of questions on current and future transit service in the DeKalb-Sycamore area. It was felt that TransVAC's primary mission was to provide transportation for those with few or no other options, primarily low-income, seniors, and disabled persons. The need for more evening and weekend service was expressed, as was the need to expand route deviation service into Sycamore and to replace much of TransVAC's aging fleet. It was also felt that the City is currently an able recipient of transit funding and forming a Transit District was viewed as more of a long-term option.

SUMMARY

While much of the current demand for transit service is concentrated in the DeKalb-Sycamore urban area, information provided by the Opportunity House, Inc. and other agencies indicated that unmet transportation needs exist throughout DeKalb County. A variety of unmet demand exists. For example, additional on-demand transportation is desired that serve trips that are more spontaneous or a one-time occurrence. There is also a need to extend the Green Line, or some other fixed route service, to Sycamore. In addition, there is a desire for more evening and weekend transportation service for employment and other purposes. This variety of transit demand can only be met by a variety of types of transportation service improvements.

Summary

V. SERVICE ALTERNATIVES

GENERAL ISSUE IDENTIFICATION

The consultant team identified several issues facing further transit service development in the DeKalb-Sycamore area, based on its evaluation of the information and input received from this study's Technical Committee. These issues were used as parameters in the creation of four alternative scenarios for the expansion of transit service over the next five years and are described below.

- ◆ In 2000, the U.S. Census announced that it had designated the DeKalb-Sycamore urbanized area as a small urbanized area. Since the Federal Transit Administration treats its urban and rural funding differently, this designation significantly impacts DeKalb County's transit funding. This administrative change affects the amount and type of state and federal transit funding that is available in the DeKalb-Sycamore area and potentially allows for increased service levels, given the availability of state and federal urban transit funding.
- ◆ Several stakeholders have expressed a need for expanding evening transit services and for starting countywide services on Saturdays. Opportunity House, Inc. documented the extent for some of this need in one of its transportation forums.
- ◆ Several potential untapped markets for transit services should become the focus of targeted marketing efforts in the near future. These include the following:
 - Off-campus Northern Illinois University students,
 - Nursing home residents,
 - Community group home residents,
 - People needing transportation to work, and
 - Human service agency clients.
- ◆ A mix of transportation services is currently available in the DeKalb-Sycamore area. TransVAC and Huskie Bus provide many of these services.
- ◆ Service to the DHS office in Sycamore is available through TransVAC's demand response service. Service could be increased and served by other modes if additional funding became available.
- ◆ The Voluntary Action Center, which is an independent and private non-profit agency, provides TransVAC. It receives funding for TransVAC from a variety of sources, including the City of DeKalb and DeKalb County.
- TransVAC is primarily a demand response service, which is a service type widely used in rural areas. It is also used to provide paratransit services for the elderly or people with disabilities. TransVAC also operates route deviation service in DeKalb known as the Green Line.

General Issue Identification

- ◆ Huskie Bus provides campus circulator service as well as fixed route service to locations outside the campus. These services are provided by the Northern Illinois University Student Association and are targeted to the NIU student population, though they are currently open to the public. Although this open-door policy has been in place for several years, it can change at any time at the discretion of the Student Association.

In addition to these issues, the following systemwide objectives were used in the creation and evaluation of DeKalb County service improvement alternatives.

- ◆ TransVAC's primary mission is to provide public transportation throughout DeKalb County.
- ◆ Duplicate service and management should be avoided.
- ◆ Related to the previous objective, the ultimate transportation system should minimize administrative costs.
- ◆ The system should maximize the leveraging of federal and state funding.
- ◆ Access to and use of capital grant funding should be maximized so that adequate funding is available for replacing vehicles on a timely basis and for constructing maintenance and other facilities.

TRANSVAC PERFORMANCE ANALYSIS

The consultant team analyzed the performance of TransVAC's services to gain further input when it created organizational and service alternatives. This analysis was based on detailed annual performance reports that TransVAC collected, along with a trip-by-trip analysis of a sample operating day (June 30, 2004) that TransVAC's staff considered typical. This analysis' integrity is wholly dependent upon certain management and operational processes that TransVAC has employed. These practices are described below.

It should be noted that MedVAC is also a part of the overall TransVAC service. Originally it was a separate service to provide medical trips, mostly to locations outside of DeKalb County, using volunteer drivers. Through time, however, MedVAC has been incorporated into the TransVAC program.

Scheduling Techniques/Passenger Accounting Practices at VAC

Scheduling

Scheduling of demand responsive trips at TransVAC is done manually. Customers call the transportation office to make reservations for service.

General Issue Identification

TransVAC Performance Analysis

Trip requests may be either “on-demand” trips (*e.g.*, a single trip taken on a single day) or “standing orders” (*e.g.*, regularly scheduled repetitive trips whereby the customer does not need to call the transportation office after the first reservation). Standing orders are also referred to as subscription trips. This feature of TransVAC’s scheduling process is typical of demand response systems throughout the United States.

The scheduling technique used here is best described as “slot scheduling,” in which standing orders are pre-assigned to permanent runs.⁶ At TransVAC, drivers are permanently assigned to specific vehicle runs, so that subscription customers will likely have the same driver for each trip. These standing orders are arrayed against a run’s daily schedule in 15-minute time blocks. When on-demand trip requests are received, the call-taker/scheduler examines the schedule to determine when openings exist in the standing order schedule. This process is conducted by using an elaborately constructed, locally developed, visual aid tool. Located in the dispatch office, the Voluntary Action Center has a large platform with various metal boards representing each service day. Arrayed in a spreadsheet-like format, the board has signs taped to it, which show time blocks (in 15 minute intervals) along the board’s rows, while driver runs make up the columns.

These boards are mounted so that they may slide from one side to another. They are mounted on three tracks on the platform. Trip orders are written on paper slips, and then inserted into a clip. The clip has a magnet base that can then be attached to the metal board. Standing orders for a particular day are mounted. The scheduler can then look at the trip time requested by the passenger and determine, based on time availability and geographic location, the best run to assign the trip.

The day before the actual service day, driver manifests are prepared. A manifest is the chronologically ordered listing of trips that have been assigned to that run. Drivers use the manifest to move from point-to-point throughout the day and to record specific information regarding daily operations.

Manifest preparation can be time consuming. To simplify this function, TransVAC has prepared templates, using WordPerfect, that have all standing orders already entered on the sheet. The scheduler need only enter the on-demand trips for each run in order to complete the manifest. While this saves some time, TranVAC would benefit from a fully automated system.

⁶ A vehicle run represents all activities of a specific vehicle from vehicle pull-out to return to the garage.

Passenger Accounting

Passenger accounting refers to the collection of techniques and processes used to tabulate post-trip data and statistics necessary for proper evaluation of the transit system, to generate data necessary for reporting to various funding sources, and to collect data to support third party billing of demand response trips that are paid for directly by another human service agency.

TransVAC uses a straightforward passenger accounting system. Regularly scheduled services, such as the Green Line and the Kishwaukee College/DeKalb route simply tabulate the number of riders who board the bus at each bus stop on each trip. Demand response manifests are different.

The manifest form consists of two parts. The first part is designed to capture daily service data, as follows:

- ◆ Driver name
- ◆ Vehicle number assigned to run
- ◆ Date
- ◆ Beginning vehicle mileage at pull-out
- ◆ Time out
- ◆ Ending vehicle mileage at turn-in
- ◆ Time in
- ◆ Total time
- ◆ Total miles
- ◆ Gallons of fuel
- ◆ Total passenger trips (TransVAC total and MedVAC are totaled separately.)

The second part of the form sequentially lists the trips to be provided. The form lists, on a single line, the scheduled time of pick-up, name of the passenger and the pick-up address (in a single field on the form), the drop-off destination, and a series of check fields for the driver to record trip purpose. There are seven trip purposes:

- ◆ Medical
- ◆ Employment
- ◆ Nutrition
- ◆ Social/recreational activity,
- ◆ Education,
- ◆ Personal shopping, and
- ◆ Use by the general public.

**TransVAC
Performance
Analysis**

During the course of the operating day, the drivers note the number of passengers picked-up with the scheduled trip and note whether any passengers cancelled their trips or failed to show up.

At the end of the operating day, the manifest is turned in to the office where post-trip tabulation of transportation data occurs. In this area, TransVAC does use an automated process. In the mid-1980s, the agency acquired an IBM minicomputer and retained third party programming services to build a custom application for processing transit data and producing statistical reports. This application has been modified over the years; however, the vendor no longer supports the application. It is not known when the last upgrade/modification was made to this software, but it has been a minimum of ten years in the estimate of the consultant. Thus, no further changes, enhancements, or upgrades are possible.

This program generates a monthly “Service Summary” report. The report summarizes:

- ◆ Volunteer trips and volunteer labor donated;
- ◆ Geographic distribution (by town) of trip origins;
- ◆ Passenger trips by vehicle;
- ◆ Trips by passenger type, by geographic location (town), by month and year-to-date;
- ◆ Trips by passenger type, by trip origin (town); and
- ◆ Trip purposes.

At the end of the month, a monthly closeout procedure is employed. Once a month is closed out, data is not maintained on the system (only summary data used in year-to-date statistics). TransVAC prints out the report, and then makes a copy of the data on 5.25-inch floppy disks. However, the disks are formatted in a proprietary format and are not readable on the agency’s only other Windows OS machine that is equipped with a 5.25 disk drive. Moreover, VAC recycles these back-up disks periodically so that archive data is over-written.

Performance Evaluation Methodology

In conducting detailed analysis of TransVAC performance, the consultant team relied on original source documentation collected for all system operations on the sample day.

Additionally, costs are assigned to each run based on a fully allocated costing methodology. At the time of this report, reported 2004 expense data was not yet available.

TransVAC Performance Analysis

Results

Original data was tabulated for all runs other than the route deviation Green Line for the sample day (Exhibit V-1). The Green Line information was tabulated separately using four representative days.

The TransVAC system averaged about 3.32 passengers per vehicle hour. This is within the range of the expected level of ridership for paratransit systems, which is between 2.0 and 4.0 passengers per vehicle hour. Average ridership productivity levels will vary based on geography, population, population density, and other characteristics of their service area. As expected, group subscription or “special trips” provided the highest productivity, as these trips tend to be “many to one” type paratransit trips where a group is picked up and/or dropped off at a single location.

Additionally, the Kishwaukee College-DeKalb Area Bus Route seems to exhibit lower than expected productivity at 3.3 passengers per vehicle hour. It should be noted that this was in June 2004. However, after reviewing additional ridership data, which included some days during the fall semester, ridership was considerably higher, averaging over ten (10) passengers per vehicle hour. In addition, this is a service that is sponsored and paid for by Kishwaukee College.

All other ridership levels are within expected ranges for the type of service operated.

Recommendations

The overall performance of the TransVAC (including MedVAC) service is reasonably good for the type of service that it offers. However, based on this review, the following are recommended:

- ◆ The number of trips being scheduled and dispatched manually far exceeds that typically required to warrant application of automated scheduling software. TransVAC should immediately start budgeting for and program the acquisition of this type of software.
- ◆ Some variations appear in the report times, meal break times, and turn-in times shown in TransVAC operators’ work schedules. More consistency and attention to this factor in the scheduling process could improve productivity.
- ◆ Data collection practices should be modified and enhanced to collect data necessary to accurately monitor non-revenue or deadhead time and mileage. Management, particularly in demand response environments, should periodically review this data to reduce deadhead and improve productivity.

**TransVAC
Performance
Analysis**

Exhibit V-1
TransVAC Paratransit Performance Evaluation

Mode	Total Vehicle Miles	Total Paid Hours	Total Passengers	Passengers Per Vehicle Mile	Passengers Per Pay Hour	Average Miles per Pay Hour
Demand Response	1,463	103.05	288	0.20	2.79	14.20
Group Subscription	160	13.00	72	0.45	5.54	12.30
Fixed Route/Route Deviation	408	24.5	106	0.26	4.33	16.65
Total	2,031	141	466	0.23	3.32	14.45

**TransVAC
Performance
Analysis**

- ◆ Management should establish performance standards for services that operate in fixed route modes (even if classified as demand response for ADA purposes). For example, the current ridership on the Kishwaukee College-DeKalb route should cause TranVAC and Kishwaukee College to review the current contract and determine if the appropriate level of service is provided during the summers and other off-peak times when student enrollment is lower.
- ◆ TransVAC has no data recovery plan in its post-trip data entry functions. This circumstance is due to the use of outdated hardware and software. TransVAC should change, as soon as possible, to a Windows OS database platform for inputting and maintaining trip data to maximize the data's utility in service evaluation and as documentation to support contract charges to various grants. This should also include an automated back-up system. Alternatively, a manual back-up system consisting of a regular schedule of saving the entire system on USB drives or CD's can be implemented.

SERVICE ALTERNATIVES

**Service
Alternatives**

The consultant team has devised three (3) service alternatives for DeKalb County. These alternatives reflect an analysis of relevant data including demographic information, TransVAC's performance review, the unmet needs that human service agencies and current passengers expressed, and the opinions of the county's current transportation providers and community representatives. These alternatives also contain possible financial options, and their implications, which have resulted from the DeKalb-Sycamore area becoming an urbanized area.

These alternatives are designed to examine possible responses to the potential changes in federal and state funding as a result of the DeKalb-Sycamore area being designated an urban area. They explore different revenue sources for TransVAC and their impacts. As described in the following sections, they are different approaches to providing public transportation in DeKalb County.

Alternative I – Status Quo with Moderate Service Increase

Under this alternative, the City of DeKalb and DeKalb County remain as the primary recipients of federal and state transit funding. In this option, federal, state, and local funding to TransVAC increases moderately from its current levels and allows implementation of some of the desired service improvements. TransVAC will continue to provide demand response service to the City of DeKalb and DeKalb County and will continue to

**Service Alternatives
*I-Status Quo with
Moderate Service
Increase***

**Service Alternatives
I-Status Quo with
Moderate Service
Increase**

optimize FTA Section 5307 funding under its contract to the City of DeKalb and FTA Section 5311 funding through its contract with DeKalb County.

Description

The recommendations offered as Alternative I supplement the service currently provided while intending to maximize use of existing services. Under this alternative, TransVAC will:

- ◆ Continue to provide the public transportation service countywide;
- ◆ Expand its hours of operation; and
- ◆ Extend its route deviation service to Sycamore.

Huskie Bus will continue to provide its on- and off-campus service that is funded through student fees.

Service Efficiency. Some recommendations were made in the TransVAC Performance Analysis to improve service efficiency. These recommendations, including the purchase of scheduling software, are implemented in this alternative. They include:

- ◆ Acquisition and use of scheduling software;
- ◆ Update computer hardware and implement automated data back-up procedures;
- ◆ Implementation of more consistent scheduling practices; and
- ◆ Implementation of service standards.

Marketing and enhanced contract service. There are typically many potential riders who do not use transportation services like TransVAC and Huskie Bus because they do not realize that it is available for the general public. The perception of some is that TransVAC is limited to service for elderly or disabled individuals in the community, and that Huskie Bus is only available to NIU students. These misperceptions create an opportunity for TransVAC and Huskie Bus to market the service to new demographic sectors of the community, thereby expanding its ridership base.

For Huskie Bus, expanding service to the general public has the potential to increase farebox revenues and thereby decrease operating costs funded through NIU student fees. Increased ridership on TransVAC will have similar financial effects, but will also likely have service quality impacts unless service is increased. Generally in demand response services, as more passengers pick-ups are scheduled on each vehicle in service, passenger travel times typically increase as directness of travel is compromised.

**Service Alternatives
*I-Status Quo with
Moderate Service
Increase***

Through marketing activities and materials, TransVAC staff emphasizes that the system is open to all ages, all residents, and for all trip purposes. This particularly applies to the Green Line and Kishwaukee College route. Because the public will tend to perceive that the system is for use only by the elderly, disabled and low-income citizens, marketing activities and materials should specifically illustrate that trips are available for any purpose and for anyone within the service area. Efforts should target groups that are not currently using the system. Discussions with stakeholders indicate that those target groups may include the following:

- ◆ Employees working at employment locations in DeKalb County;
- ◆ People working, shopping, and doing business in Downtown DeKalb, Downtown Sycamore, along Sycamore Avenue and other commercial areas;
- ◆ Residents of group homes; and
- ◆ NIU students.

On the demand response portion of the service, it is important that TransVAC staff take precautions to ensure that marketing activities are balanced with system capacity. Currently, the system is operating at high capacity and there are concerns of not being able to provide for the service demand that could result from successful marketing efforts. Marketing efforts should be implemented in combination with recommendations for improving productivity in scheduling and trips. The priority for marketing should be for the Green Line and the Kishwaukee College routes where additional capacity exists.

TransVAC should also try to expand the number of purchase of service contracts that it provides since these contracts can increase the system's revenue and capacity. Any decisions that are made regarding contract rates should be reviewed at least annually to ensure that they reflect actual service costs, local economic and political conditions, local match requirements, and the system's desire to engage in the contracted service, such as splitting costs among two or more agencies through trip sharing. In these cases, consideration must be given to client-mixing issues.

Some agencies will not enter into contract agreements with agencies like TransVAC because they believe the contracts' fully allocated costs are too high. As a result, TransVAC may end up providing those trips as general public trips, with no special service. This is not TransVAC's most cost-effective alternative or the other agencies' most efficient alternative. TransVAC may therefore consider creative ways to make its contracts affordable to the agencies, while still recovering fully allocated costs. Examples may include trip-sharing, when possible.

**Service Alternatives
I-Status Quo with
Moderate Service
Increase**

Service Structure

Countywide Service. In this alternative, TransVAC staff will focus on expanding the hours and days of operation. This includes the start of TransVAC service on Saturdays and increasing service capacity weekday evenings.

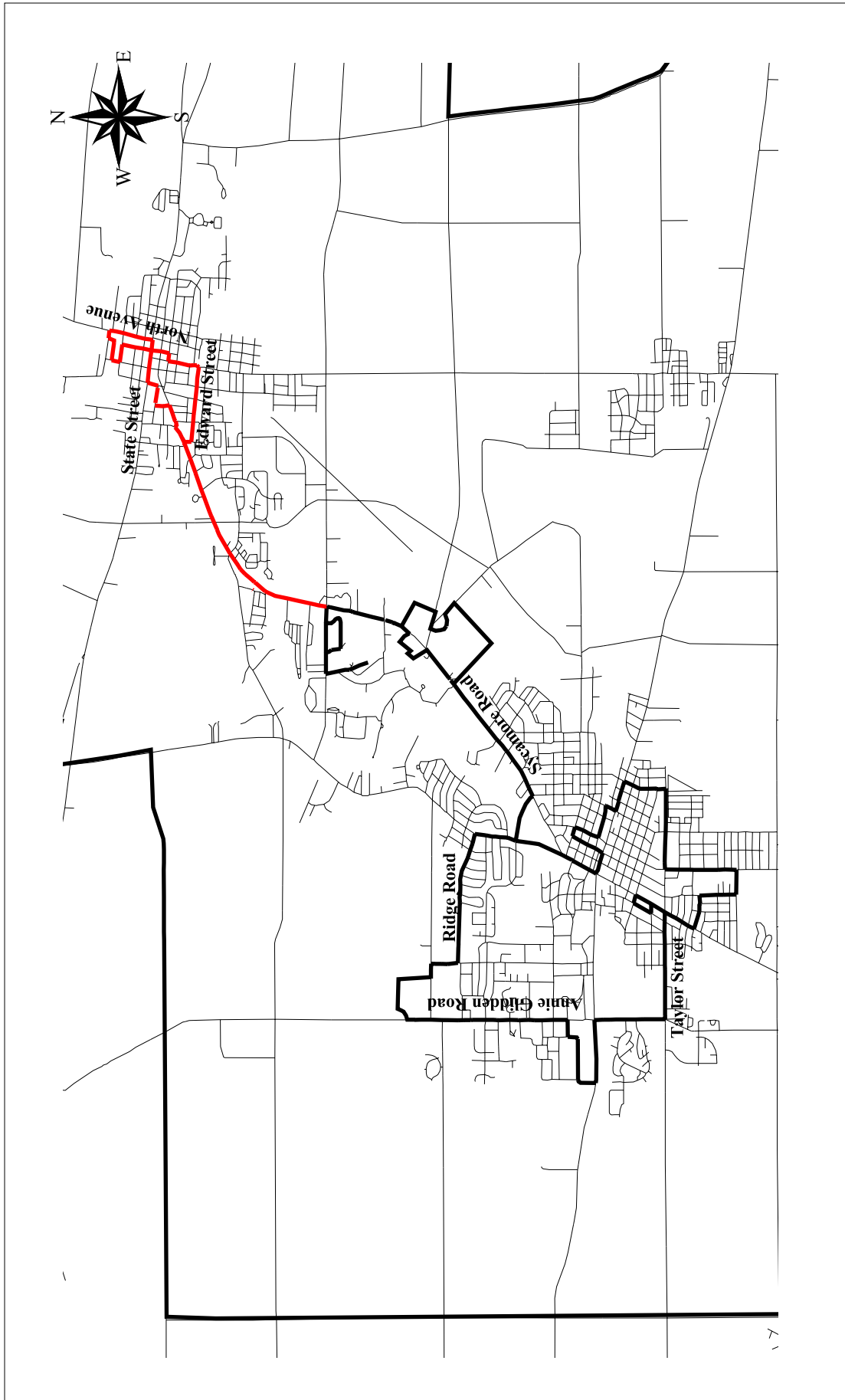
Green Line Extension. This route currently serves the City of DeKalb, with the exception of Kishwaukee Community Hospital, which is located a short distance outside City limits on Bethany Road. In this option, the Green Line is extended to Sycamore to primarily serve senior housing and human service agency facilities located in the vicinity of DeKalb Road and downtown Sycamore. Exhibit V-2 shows the alignment of this proposed route extension. In order to maintain 60-minute frequencies on this route, another vehicle will need to be added for the full 7:00 a.m. to 9:00 p.m. weekday operating period.

A profile of the level of service in this alternative appears in Exhibit V-3 below.

**Exhibit V-3
Alternative I Service Profile**

Service Span	Peak Vehicles	Revenue Hours	Revenue Miles	Type
5:00a-11:00p Weekdays	18	28,400	428,000	Countywide demand response, agency contracts, Green Line and Kishwaukee College route
7:00a-9:00p Weekdays	1	3,050	46,000	Extend Green Line
Weekdays to 11:00p	---	2,550	38,500	Improve Evenings
Saturdays 7:00a-6:00p	---	2,000	31,500	Begin Saturdays

The extension of operating hours to Saturdays and enhancing weekday evening service will not add peak period vehicles to the TransVAC operation, and will therefore not add to the fleet size. Extension of the Green Line to Sycamore, however, will require one additional vehicle in the peak hours, raising the overall peak requirement to nineteen (19). With these service improvements, overall service hours would increase by approximately 7,690 service hours annually, thus raising TransVAC's total to over 36,000 hours annually. Vehicle miles would also increase to approximately 545,000 miles annually from the current level of 428,000 miles.



Legend

-  MPO Boundary
-  Green Line Extension
-  Green Line



RLS & Associates, Inc.

Exhibit V - 2 Green Line Extension

**DeKalb-Sycamore
Urban Transit Plan**

**Service Alternatives
*I-Status Quo with
Moderate Service
Increase***

Organization and Staffing

The current organizational structure is assumed to remain intact in this alternative. This is depicted in Exhibit V-4. It shows that separate recipients exist for state and federal urban and rural funding. TransVAC currently uses both urban and rural funding sources, while Huskie Bus is funded separately through student fees. Both services are specialized to serve separate groups of people. TransVAC primarily serves seniors, disabled persons, and low-income populations, while Huskie Bus is designed primarily for Northern Illinois University students.

Ridership Implications

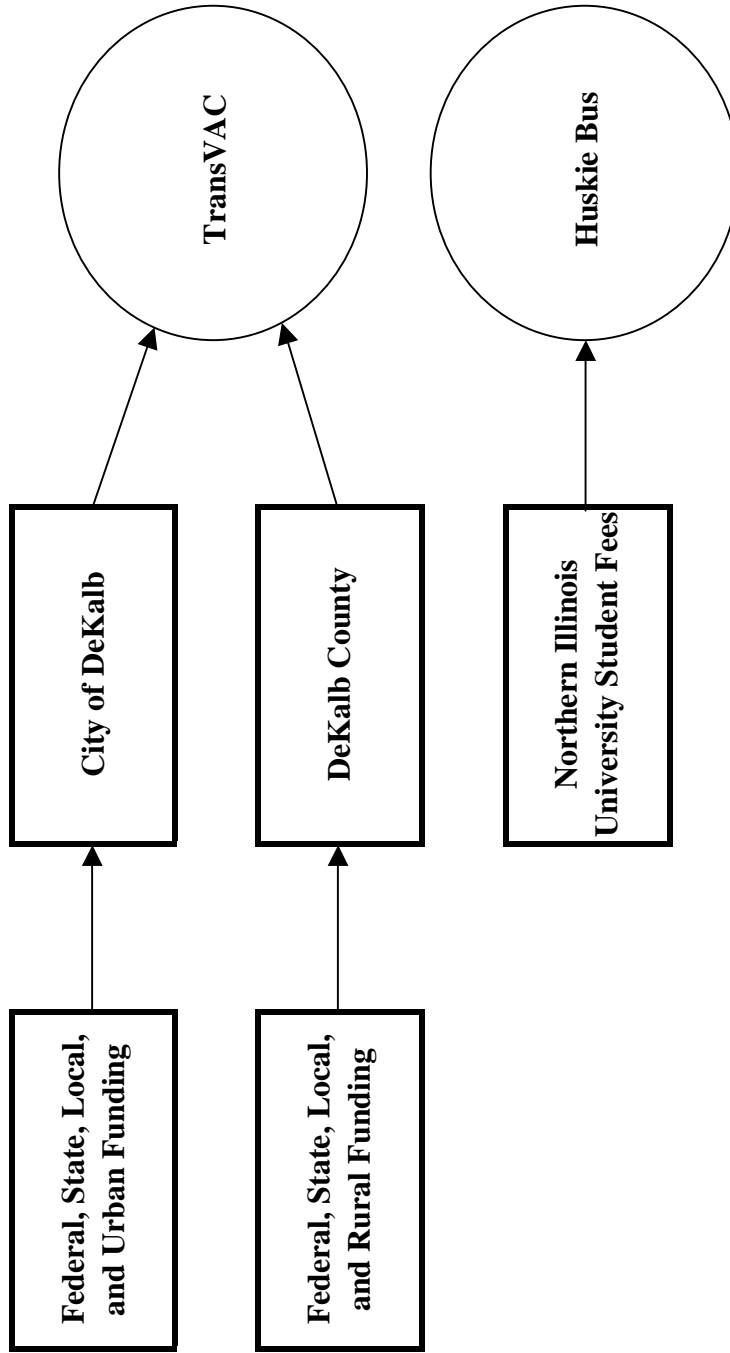
In this alternative, ridership is estimated to increase by nearly 26,000 passenger trips annually, which is nineteen (19) percent over the current annual ridership level of 121,000 trips. The consultant team applied a service elasticity factor of 0.7 to TransVAC's current ridership levels. The Green Line extension to Sycamore is estimated to increase ridership by approximately 12,000 trips, over the current 24,000 annual trip level. The remaining 14,000 passengers are projected to ride increased weekday evening and Saturday services.

Cost Implications

Alternative I's total estimated annual operating cost increase, based on TransVAC's average operating cost of \$39 per vehicle hour, is approximately \$300,000. This will increase TransVAC's total annual operating costs to \$1.5 million.

In this alternative, Federal Transit Administration funding, the State of Illinois' Downstate Operating Assistance Program (DOAP), farebox revenue, and local contributions also comprise significant portions of TransVAC's revenues. Contributions from local governments' general funds, advertising revenue, and other local funding are also included. Alternative I's estimated revenue is shown in Exhibit V-5. The Illinois Legislature has not yet approved Downstate Operating Assistance Program funding. However, it is likely that the City of DeKalb will request this funding in the future.

Exhibit V - 4
Alternative 1 - Organizational Structure



**Service Alternatives
*I-Status Quo with
Moderate Service
Increase***

**Exhibit V-5
Alternative I Revenue Sources**

Alternative I TransVAC Revenue	
Revenue Category	Amount
Government Grants	
-Title XX	\$52,500
-Title III-B	\$15,000
-IDOA Demo. Grant	\$27,000
-FTA Section 5307	\$400,000
-FTA SECTION 5311	\$300,000
-DOAP	\$300,000
-ICDD	\$7,500
Local Government	\$198,500
Agency Contracts	\$84,000
United Funds	\$31,850
Van Donations	\$48,750
Donations, Other Misc.	\$60,500
Total Revenues	\$1,525,600

Capital Requirements

This alternative will require a significant capital outlay for replacing TransVAC's aging fleet and expanding service by one vehicle. TransVAC operates a fleet of thirty-five (35) vehicles, with eighteen (18) vehicles needed during the weekday peak period. TransVAC will also need one additional vehicle during the peak periods in order to expand the Green Line into Sycamore. This will bring the peak vehicle requirement to nineteen (19) vehicles.

Most of TransVAC's fleet is beyond its useful life according to FTA standards⁷. Only eleven (11) of TransVAC's thirty-five (35) vehicles are within these standards. Only eight (8) of these vehicles will be within the FTA's useful life standard by 2009, the end of this TDP's five-year planning period. TransVAC acquired eleven (11) other vehicles prior to 1992. Replacing most of the current fleet over the next five years is a high priority. It should be noted that maintenance costs will significantly increase as vehicles go beyond their useful lives. To accomplish this goal, a significant amount of capital funding must be acquired.

⁷ FTA defines the useful life for each type of vehicle used in transit service based on operating and maintenance cost information collected from transit systems.

**Service Alternatives
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Moderate Service
Increase***

An application for funding for one (1) new vehicle has been submitted to IDOT, but it is not clear when this will be available. If received within the next five years, this will bring the number of vehicles within the FTA useful life standard to nine (9) in 2009. If the fleet were modernized, TransVAC could reduce the fleet to twenty-seven (27) vehicles, with a TransVAC peak requirement of nineteen (19) vehicles and a 20 percent spare ratio, and five (5) vehicles for MedVAC service. An additional eighteen (18) new vehicles will be needed over the next five years to modernize the fleet. If vehicles were replaced starting in 2006, a total of four (4) to five (5) vehicles will be needed each year for four years in order to bring the vehicle fleet within FTA useful life standards.

A variety of vehicles will be replaced during this time. The consultant team has assumed that fourteen (14) of these vehicles will be raised roof vans with a seating capacity of ten passengers and two wheelchairs, and that four (4) of these vehicles will be medium duty buses with a seating capacity of fourteen (14) passengers and two (2) wheelchairs. With an assumed average cost of \$55,000 each, these vehicles will collectively cost approximately \$1.0 million.

TransVAC will also need to build a storage and maintenance facility for its vehicles, but will need to first conduct a feasibility study to define this facility's size and function. The consultant team recommends exploring a number of cost-saving options, including sharing this facility with a municipality.

Summary of the Advantages and Disadvantages of Alternative I

The advantages of this alternative are:

- ◆ Through marketing efforts, more people will learn about the service, which will enhance ridership and productivity.
- ◆ Increasing the current level of FTA and IDOT operating funds will result in expanding the level of public transportation service in the DeKalb-Sycamore urban area and throughout DeKalb County.
- ◆ New state and federal funding can be used to replace aging TransVAC vehicles.

The disadvantages of this alternative are:

- ◆ Separate specialized services will continue to exist that will not leverage existing resources to maximize public transportation available to the general public.
- ◆ Multiple administrative bodies and service providers result in overlap of management and administrative functions.

Alternative II – Combined TransVAC/NIU Operations

Alternative II greatly increases Huskie Bus’ role in providing the DeKalb-Sycamore area’s public transportation services. Through a contractual arrangement between the City of DeKalb and the Northern Illinois University Student Association, Huskie Bus operates the DeKalb-Sycamore area’s local fixed route services. TransVAC continues to provide countywide demand response and agency contract services. In this alternative, TransVAC also provides complementary ADA paratransit services within the DeKalb-Sycamore area.

Description

The enhanced weekday evening and new Saturday service improvements included in Alternative I are also contained in this alternative. However, in place of the Green Line, a restructured Huskie Bus Route 7 would be extended into Sycamore.

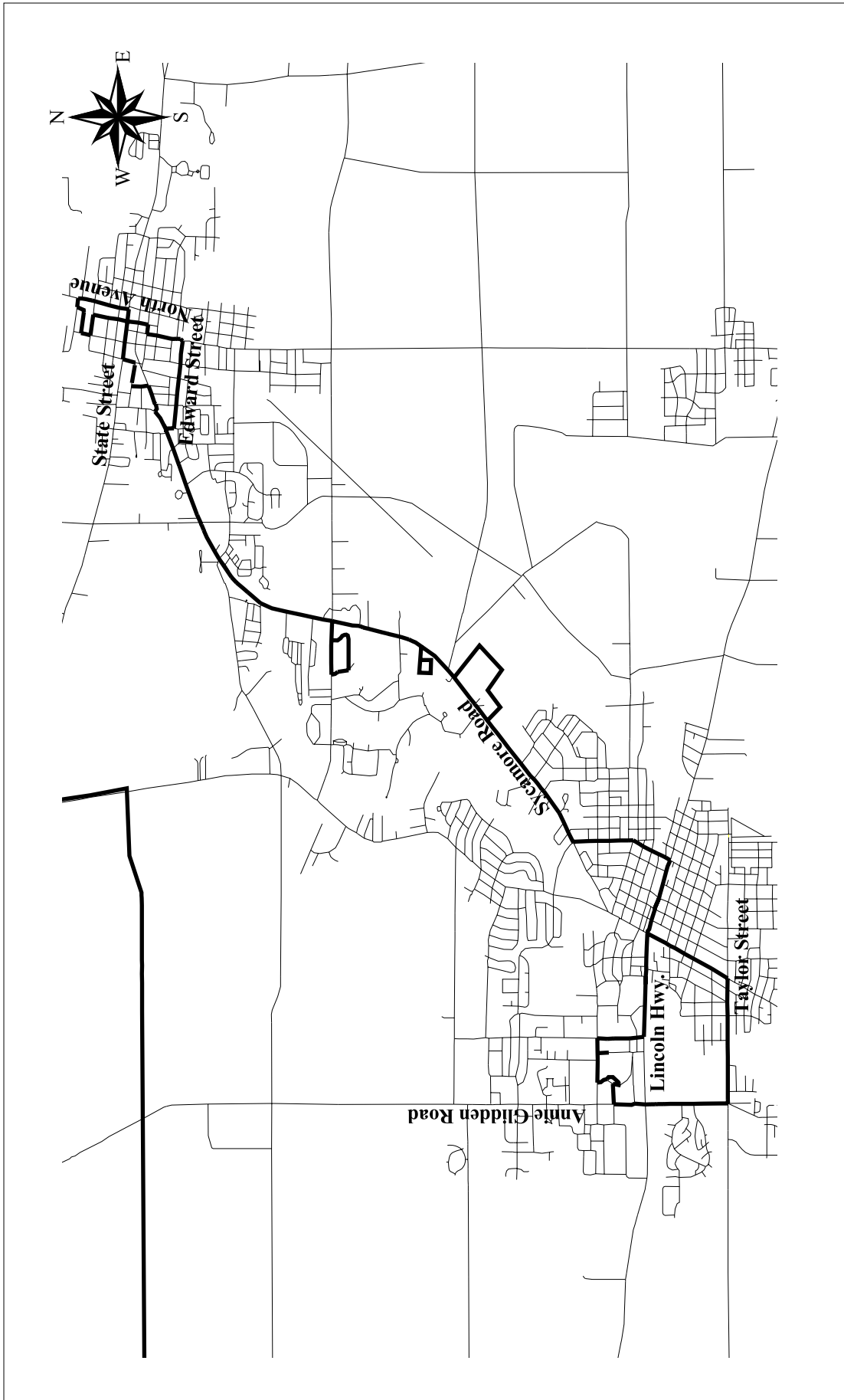
Service Structure

The DeKalb-Sycamore Route. Alternative II formally makes Huskie Bus a public transportation service and extends Huskie Bus Route 7 to Sycamore using DeKalb Avenue. In Sycamore, it would circulate through the city along several streets including Edward Street, Somonauk Street, Maple Street, Lucas Street, Main Street, and State Street. In DeKalb, it would circulate through the city using two separate loops. The first would run through eastern and southern DeKalb, and the second would serve northern and western DeKalb. Each would run through Northern Illinois University. Exhibit V-6 shows a potential alignment of the DeKalb-Sycamore Route, which is designed to serve Sycamore as well as DeKalb and Northern Illinois University.

A contract between the City of DeKalb and Huskie Bus to fund this route and permanently keep it open to the general public would be initiated. Huskie Bus would also provide special trips in the late evenings between downtown DeKalb and Northern Illinois University to serve downtown entertainment establishments that attract students.

ADA Complementary Paratransit. The DeKalb-Sycamore Route would require ADA complementary paratransit service since Alternative II would require it to change from a route deviated service to a fixed route service. However, TransVAC could provide this service since it is DeKalb County’s primary paratransit service provider. This service is provided to people who cannot use the fixed route transit service because of a physical or other disability.

Vanpool Connector Service. Vanpools will be used in this alternative to transport commuters to a new Metra Rail Station in Elburn when it is opened. These are operated using a volunteer driver, with passengers



**Exhibit V - 6 Dekalb-Sycamore
Route Alternative II**

**DeKalb-Sycamore
Urban Transit Plan**



Legend
 MPO Boundary
 Huskie Line 7

**Service Alternatives
II-Combined TransVAC/
NIU Operations**

paying for fuel and maintenance expenses. The operating agency would purchase 12 to 15 passenger vans for use in this program using Federal and/or local funding.

Countywide Demand Response. TransVAC will also improve countywide demand response public transportation services under this alternative. As in Alternative I, Alternative II will require enhanced weekday evening services along with new Saturday services. One common approach is to limit transportation to certain scheduled times, such as providing transportation services two to three times per week along major highway corridors or sections of the county. This will be less convenient than demand response services, in which passengers can request transportation at any time of the day. However, this approach will likely increase average passenger loads and cost less.

Agency Contract Service. As previously mentioned, this alternative contract service will continue to be an important part of TransVAC's services. While contract trips are open to the general public, they are designed for the special needs of particular client groups. Therefore, the contracting agency specifies, within specified parameters, the level of passenger assistance, among other things. Because of the specialized nature of contract trips, it is not expected that the general public will have much access to these services.

Alternative II's weekday and Saturday service profile is included in Exhibit V-7. TransVAC would operate approximately 29,000 vehicle revenue hours and 433,000 vehicle miles under this alternative. TransVAC's peak vehicle requirement would be reduced to fourteen (14). Huskie Bus would operate 6,120 revenue hours on the DeKalb-Sycamore Route on weekdays only. It is expected that the Northern Illinois University Student Association would continue to operate Huskie Bus Route 7 on weekends, as it is currently does, with no service to Sycamore.

**Exhibit V-7
Alternative II Service Profile**

	Service Span	Peak Vehicles	Revenue Hours	Revenue Miles	Type
TransVAC (including Alternative I improvements)	5:00a-11:00p Mondays-Saturdays	24	29,000	433,000	ADA Paratransit, Countywide Demand Response, Agency Contracts
DeKalb-Sycamore Route	7:00a-9:00p weekdays	2	6,120	92,000	Fixed Route operated by Huskie Bus
Elburn Metra Station Vanpool	6:00a-7:00a 5:00p-6:00p weekdays	1	N/A	N/A	Vanpool

Organization and Staffing

The organizational structure would change with a portion of the Huskie Bus system becoming part of the public transportation system, as depicted in Exhibit V-8. Extended Huskie Bus Route 7 would become the DeKalb-Sycamore Route. This portion of Huskie Bus' operation would be subject to FTA rules.

TransVAC would continue to provide agency contract service, as well as countywide demand response public transit service. But TransVAC would also provide ADA complementary paratransit service within one-half mile of the DeKalb-Sycamore Route's urbanized sections.

Each of the alternatives would require two FTA funding recipients. The City of DeKalb would continue to be the recipient of FTA Section 5307 urbanized area funding, while DeKalb County would continue to be the designated recipient of Section 5311 rural transportation funding.

Ridership Implications

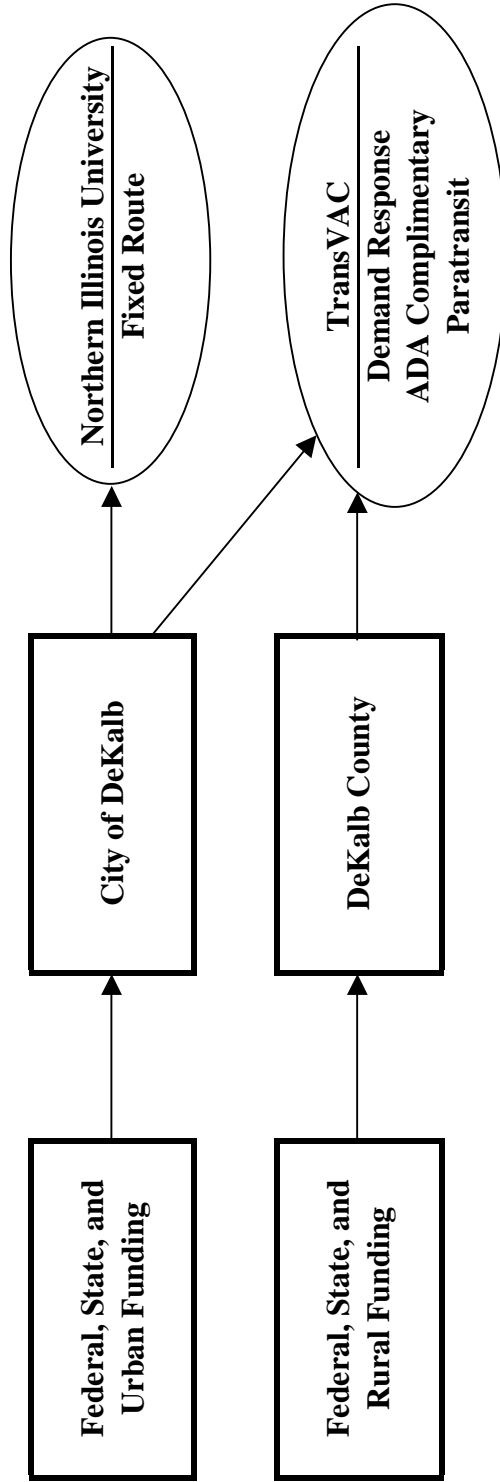
Public transportation ridership increases significantly in Alternative II, mostly in the urbanized area. Much of this is from increased Northern Illinois University student ridership that would result from combining the Green Line with Huskie Bus Route 7. Due to the Green Line's absorption into the DeKalb-Sycamore Route, TransVAC is projected to carry some 17,000 less trips in this alternative than is now provided. Projected ridership on the DeKalb-Sycamore Route is a combination of the current Green Line, Huskie Bus Route 7, and the application of an elasticity factor of 0.7 for the extension of service into Sycamore. The estimated total annual ridership for the DeKalb-Sycamore Route is 255,000.

Cost Implications

Alternative II's operating costs are about \$100,000 higher than Alternative I. This will indirectly result in increases in TransVAC's demand response services, as it would be able to divert some resources currently used on the Green Line. The DeKalb-Sycamore Route's total estimated operating costs would be approximately \$250,000 annually, given that the route would operate between 7:00 a.m. and 9:00 p.m. on weekdays with a 60-minute frequency. This would be the amount the NIU Student Association would need to operate this route.

A new local revenue source would become available if part of Huskie Bus' Route 7 would become part of the DeKalb-Sycamore Route. These revenues are used to match FTA Section 5307 and DOAP funding to finance the DeKalb-Sycamore route. In this way, the Student Association is able to leverage state and federal funding for service that is currently provided. Exhibit V-9 lists the revenues by source for Alternative II.

Exhibit V - 8
Alternative II - Combined NIU/TransVAC System



**Service Alternatives
II-Combined TransVAC/
NIU Operations**

**Exhibit V-9
Alternative II Revenue Sources**

TransVAC Revenues	
Revenue Category	Amount
Government Grants	
-Title XX	\$52,500
-Title III-B	\$15,000
-IDOA Demo. Grant	\$27,000
-FTA Section 5307	\$300,000
-FTA SECTION 5311	\$300,000
-DOAP	\$250,000
-ICDD	\$7,500
Local Government	\$198,500
Agency Contracts	\$84,000
United Funds	\$31,850
Van Donations	\$48,750
Donations, Other Misc.	\$60,500
Total TransVAC Revenues	\$1,375,600
Huskie Bus Revenues	
Revenue Category	Amount
FTA Section 5307	\$100,000
DOAP	\$50,000
NIU Student Association	\$75,000
Fares	\$25,000
Total HB Revenues	\$250,000

Capital Requirements

The peak period TransVAC vehicle requirement is two (2) less in Alternative II than in Alternative I. This is from the consolidation of the Green Line with Huskie Bus Route 7. The Huskie Bus contractor currently provides vehicles as part of the cost of operating bus service, so additional capital costs for the DeKalb-Sycamore route are not included in this alternative because these costs are a part of the operating contract.

Despite this reduction in the fleet requirement, TransVAC must still maintain an aggressive vehicle replacement schedule over the next five years to replace those that have reached the end or their useful life. An additional sixteen (16) new vehicles will be needed over the next five years to modernize the fleet. If vehicles were replaced starting in 2006, a total of four (4) vehicles will be needed each year for four years in order to bring the vehicle fleet within accepted standards.

A variety of vehicles will be replaced during this time. It is assumed that twelve (12) will be raised roof vans with a seating capacity of ten (10) passengers and two (2) wheelchairs, and four (4) will be medium duty buses with a seating capacity of fourteen (14) passengers and two (2)

wheelchairs. With an assumed average cost of \$55,000 each, total vehicle cost will be about \$0.9 million.

Summary of the Advantages and Disadvantages of Alternative II

The advantages of this alternative are:

- ◆ With the introduction of the NIU Student Association and its Huskie Bus service as part of the public transportation system, new local funding becomes available to match state and federal transit grants.
- ◆ The NIU Student Association uses state and federal funding for part of the transit service that is currently operated.
- ◆ This alternative reduces TransVAC's replacement vehicle needs.
- ◆ TransVAC simplifies its operations in this alternative by focusing on providing demand response paratransit service, while fixed route or route deviation service is provided by Huskie Bus.
- ◆ NIU students along with residents of the DeKalb-Sycamore area will have improved transit service.

The disadvantages of this alternative are:

- ◆ There is a change in the organizational structure that will need to be accomplished if this alternative is to be implemented. This can be difficult to do, and there is no assurance that the NIU Student Association, or the City of DeKalb, is willing to make this change.
- ◆ The City of DeKalb may have two separate contractors for its transportation services requiring two different procurement processes and service contracts. This will increase administrative time.
- ◆ This may be difficult to implement because of the high turnover of the members of the NIU Student Association Board of Directors. Generally, students will only serve on this Board for one or two years.

Alternative III – Mass Transit District

This alternative includes a significant change in the management structure through the creation of a Mass Transit District to service the DeKalb/Sycamore area. A local Mass Transit District in Illinois may be “created, composed of one or more municipalities, or one or more counties or any combination thereof...”⁸ In this alternative, a Mass Transit District is created to encompass the municipalities of DeKalb and Sycamore.

⁸ Illinois State Statutes, Chapter 70 ILCS 3610/3.

**Service Alternatives
II–Combined TransVAC/
NIU System**

**Service Alternatives
III – Mass Transit
District**

**Service Alternatives
III – Mass Transit
District**

Description

The roles and responsibilities of a Mass Transit District can vary significantly depending on how it is organized and what the transportation operating capabilities are of other organizations in the area. It can primarily function as a conduit for state, federal and local funding and contract with other transportation service providers to operate service. It can operate some transportation service and have cooperative agreements with other service providers in the area, or it can be the sole provider of transportation in its service area. The first approach does not create any new capability but rather transfers functions that are currently the responsibility of City and County governments. The latter approach is common among Illinois Mass Transit Districts, but because of the significant amount of change organizationally, will likely be difficult to achieve within the five-year planning period of this Transit Development Plan. Therefore, in this alternative, a Mass Transit District in the DeKalb-Sycamore area would assume operation of some transit services but would maintain cooperative arrangements with the TransVAC and the Huskie Bus system.

In Alternative III, the local Mass Transit District functions as the provider of fixed route service in the DeKalb-Sycamore area, outside of the NIU campus. Huskie Bus would continue to operate its on-campus routes. Also, TransVAC would continue to operate countywide public transportation; provide demand response ADA paratransit service in the DeKalb-Sycamore area on behalf of the Mass Transit District; and coordinate agency transportation services.

The new local Mass Transit District would operate a revamped fixed route service in DeKalb and Sycamore. These routes would replace the current Route 7 operated by Huskie Bus and the Green Line operated by TransVAC.

TransVAC would continue to operate demand response paratransit service in Alternative III as described in Alternative II. As the central provider of a coordinated transportation system in DeKalb County, TransVAC's primary focus will be on the transportation needs of human service agencies. In this alternative, TransVAC will function as an agency transportation brokerage and provide assistance to individuals who need transportation. A function of this brokerage will be to determine if individuals who need transportation, qualify under agency program eligibility standards. Using this approach, contract revenue can be expected to increase. TransVAC will also continue to provide public transportation service for residents of DeKalb County living outside the DeKalb/Sycamore urban area.

**Service Alternatives
III – Mass Transit
District**

Public transportation services that exist on the campus, and within the immediate vicinity of Northern Illinois University will continue to be provided by the Huskie Bus system. These routes will continue to be funded through student fees. However, in the long term, the creation of a Mass Transit District will improve the possibility of consolidating the NIU campus service with the public transportation system.

Service Structure

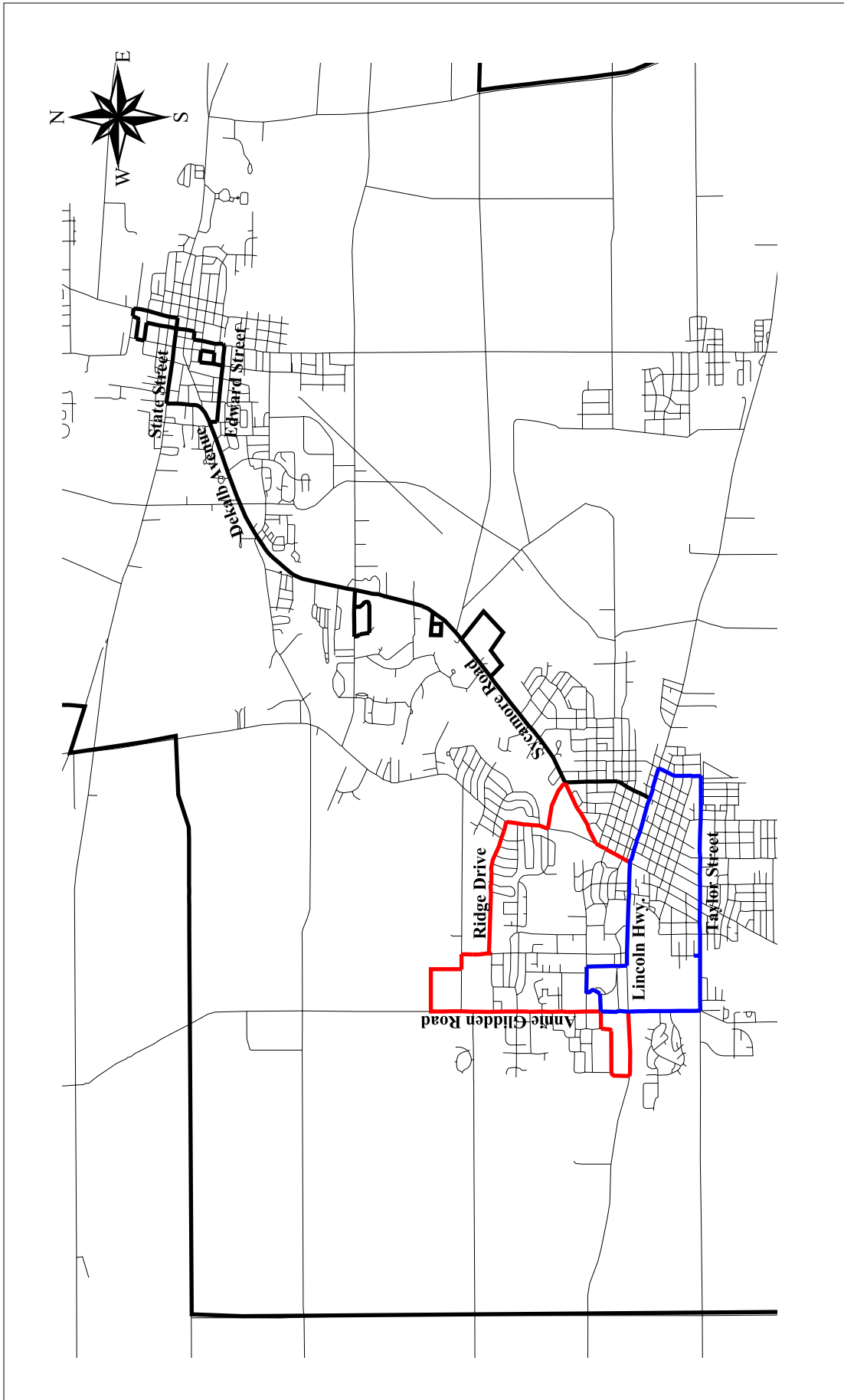
Fixed Route Service. The DeKalb-Sycamore route is operated every 30 minutes in this alternative. Two different alignments would exist in DeKalb. One would serve the north side of the City in the vicinity of the NIU campus. The other would serve the south and east sides of the City. Exhibit V-10 shows the alignment of the DeKalb-Sycamore route in this alternative.

ADA Complementary Paratransit. Similar to Alternative II, the DeKalb-Sycamore route is changed from route deviation to fixed route service in this alternative, and ADA complementary paratransit service will need to be provided. TransVAC is the primary paratransit service provider in DeKalb County and will provide the ADA-required paratransit service in the urban area in Alternative III. This service is provided to individuals who, because of a physical or other disability, are unable to use fixed route transit service.

Elburn Connector Service. In this alternative, the Mass Transit District operates scheduled shuttle service to the future Elburn Metra Station with stops in DeKalb and Sycamore. It is anticipated that the shuttle will meet two inbound trains to Chicago in the weekday mornings and two outbound trains from Chicago will be met in the weekday afternoons for the return trip. As demand dictates, weekend trips should be considered as well.

Countywide Demand Response. In this alternative, TransVAC will expand the hours and days of operation. This includes the start of TransVAC service on Saturdays, and the increase of service capacity during weekday evenings.

Coordination. In this alternative, TransVAC is the lead agency in the continuation of coordination among agency transportation providers, and other agencies with clients that have transportation needs. A transportation coordinator becomes a central broker of a network of specialized transportation services. The transportation coordinator will work with area agencies and community organizations to develop this network of transportation providers and encourage further coordination among the agencies. While there may be some trip sharing, the primary function is to assist individuals with transportation needs determine what, if any, programs and/or agency assistance they may qualify for. Other



<p>Exhibit V - 10 DeKalb-Sycamore Route Alternative III</p>	 <p>RLS & Associates, Inc.</p>	<p>Legend</p> <ul style="list-style-type: none">  MPO Boundary  Branch 2  Branch 1  Huskie Line 7
<p>DeKalb-Sycamore Urban Transit Plan</p>		

**Service Alternatives
III – Mass Transit
District**

coordination activities may include the continuation of past efforts in the following areas:

- ◆ Operate MedVAC program;
- ◆ Serve as information and referral;
- ◆ Explore trip sharing possibilities on a case-by-case basis;
- ◆ Review the potential for vehicle sharing;
- ◆ Conduct joint training; and
- ◆ Evaluate opportunities for joint purchasing.

The profile of the TransVAC system appears in Exhibit V-11 below.

**Exhibit V-11
Alternative III Service Profile**

	Service Span	Peak Vehicles	Revenue Hours	Revenue Miles	Type
TransVAC (including Alternative I improvements)	5:00a-11:00p Mondays-Saturdays	24	29,000	433,000	ADA Paratransit, Countywide Demand Response, Agency Contracts
MTD – DeKalb/ Sycamore Route	7:00a-9:00p weekdays	2	6,120	92,000	Fixed Route
MTD - Elburn Metra Station Shuttle	5:00a-7:00a 5:00p-7:00p weekdays	1	1,080	30,600	Fixed Route

Organization and Staffing

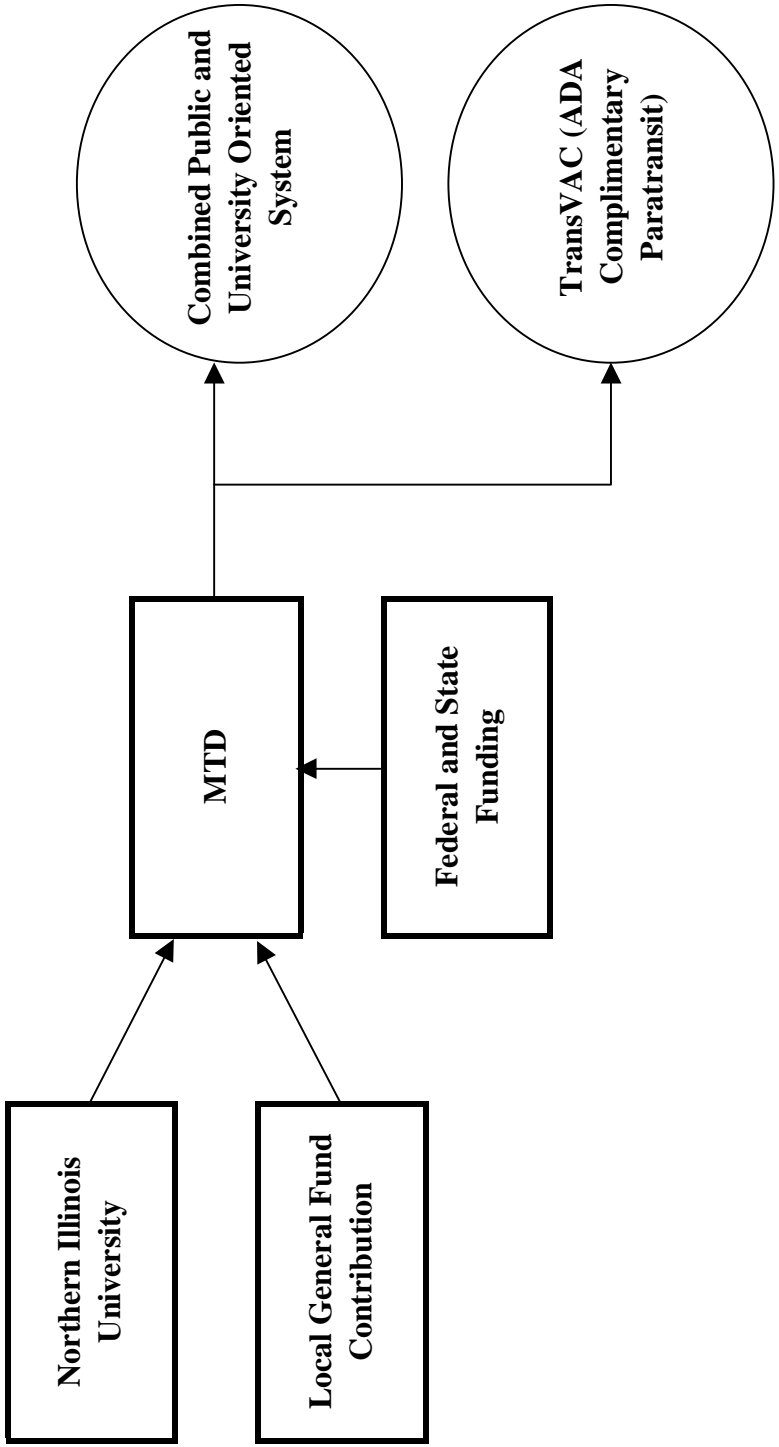
The creation of a Mass Transit District will significantly change the organizational structure in DeKalb County. It is a special purpose district formed under the authority of the Illinois State Statutes, with its own Board of Directors. As an independent body, it has the responsibility of developing and operating a public transportation system.

Exhibit V- 12 shows the organizational structure with a Mass Transit District (MTD) formed. The MTD would become the recipient of all state and federal public transit funding. Local governmental contributions for public transportation would also be administered by the MTD. TransVAC becomes a subcontractor of the MTD.

Ridership Implications

Alternative III has the highest level of service of the three alternatives. Total passenger boardings will likely increase in this alternative with the

Exhibit V - 12
Mass Transit District



**Service Alternatives
III – Mass Transit
District**

added service. Increasing the daytime frequency of the DeKalb-Sycamore route to every 30 minutes in the daytime will increase ridership by 81,000 over the 255,000 annual passenger boardings estimated for this route in Alternative II. This was estimated using a standard 0.7 service elasticity factor. In addition, the estimated ridership for the Metra Elburn Station shuttle is 15,000 passenger trips annually. This is based on an average of 30 passengers traveling in each direction on weekdays.

Cost Implications

Alternative III also has the highest operating costs, at \$1.9 million or \$700,000 higher than the current amount. This results from a higher level of transit service among the three alternatives. These include an estimated additional \$230,000 annually for the 30-minute daytime frequencies on the DeKalb-Sycamore route. The new Metra Elburn station shuttle service is estimated to cost \$51,000 annually.

The projected revenues for Alternative III are included in Exhibit V-13 below. As recipient of state, federal, and local municipal contributions for transit services, the MTD administers these grants and funds. A \$150,000 amount from the NIU Student Association is used to help finance the cost of the DeKalb-Sycamore route. Fares are also projected to reach \$50,000 on this route. A significant amount of funding also continues to be generated by TransVAC through fund raising, a portion of the Senior levy, contracts, and other special efforts.

**Exhibit V-13
MTD Operating Revenues – Alternative III**

MTD Revenues	
Revenue Category	Amount
FTA Section 5307	\$400,000
DOAP	\$500,000
FTA Section 5311	\$300,000
NIU Student Association	\$150,000
Local Government Contributions	\$112,500
Fixed Route Fares	\$50,000
TransVAC Contracts	\$84,000
TransVAC Generated Revenues	\$329,100
Total MTD Revenues	\$1,925,600

Capital Requirements

In order to operate the DeKalb-Sycamore route at 30-minute headways, four buses will be needed. One spare bus will also be needed, so MTD will need to maintain a fleet of five buses in this alternative. The cost of transit coaches between 30 and 35 feet in length are about \$250,000 each, or \$1.25 million for all five.

**Service Alternatives
III – Mass Transit
District**

Similar to Alternative II, the peak period TransVAC vehicle requirement is two less in Alternative III than in Alternative I. This is from the consolidation of the Green Line with Huskie Bus Route 7. Despite this reduction in the fleet requirement, TransVAC must still maintain an aggressive vehicle replacement schedule over the next five years to replace those that have reached the end or their useful life. An additional sixteen (16) new vehicles will be needed over the next five years to modernize the fleet. If vehicles were replaced starting in 2006, a total of four (4) vehicles will be needed each year for four years in order to bring the vehicle fleet within accepted standards.

It is assumed that twelve (12) will be raised roof vans with a seating capacity of ten (10) passengers and two (2) wheelchairs, and four (4) will be medium duty buses with a seating capacity of fourteen (14) passengers and two (2) wheelchairs. With an average cost of \$55,000, total vehicle cost will be about \$0.9 million.

Summary of the Advantages and Disadvantages of Alternative III

The advantages of this alternative are:

- ◆ Alternative III includes the highest level of transit service among the three alternatives.
- ◆ The participation of the NIU Student Association in the public transportation system creates a partnership with the City of DeKalb that results in the maximum possible leverage of state and federal transit funding.
- ◆ The creation of a Mass Transit District will add a degree of specialization that will often lead to the most effective and highest quality transit services possible.

The disadvantages of this alternative are:

- ◆ The operating and capital costs for Alternative III are the highest of the three alternatives.
- ◆ The creation of a Mass Transit District is a significant change in the organizational structure and may be difficult to implement.

SUMMARY OF ALTERNATIVES

The three alternatives present three different types and levels of service for TransVAC and DeKalb County. It should be recognized that three different organizational alternatives are matched with three different service levels. This does not have to be the case. For example, the highest operating and capital costs are associated with Alternative III – Mass

**Summary of
Alternatives**

**Summary of
Alternatives**

Transit District. These higher costs are a result of having more service included in this alternative and not a function of creating a Mass Transit District.

The first alternative assumes a moderate increase in the level of transit service. The organizational structure remains at the status quo. The second alternative presents a scenario where some Huskie Bus service becomes a part of the public transportation system. In the third alternative, a Mass Transit District is created, and the amount of transit service is further increased.

Exhibit V-14 shows a summary comparison of the three alternatives. Annual operating costs range from \$1.2 million annually for the current system projected to 2005 to \$1.9 million for Alternative III. Alternative III also has the highest capital costs with the purchase of five additional transit coaches. Alternatives II and III have the greatest annual ridership mostly as a result of the addition of the NIU student market.

**Exhibit V-14
Comparison of Alternatives**

Alternative	Annual Operating Cost	Five-year Capital Cost	Annual Ridership
Current LOS Projected	\$1,225,000	\$1.0 million	121,000
I - Status Quo/Moderate Service Increase	\$1,525,600	\$1.0 million	147,200
II - Combined TransVAC/NIU Operations	\$1,625,600	\$0.9 million	382,000
III - Mass Transit District	\$1,925,000	\$2.2 million	478,000

VI. IMPLEMENTATION PLAN

Based on information collected and analyzed, and local input received throughout the course of the creation of the TDP, Alternative I is considered the most viable option for the short term. While both Alternatives II and III were considered to have merit, their short-term viability is questionable. Therefore, each of these should be pursued as long-range options.

This section of the DeKalb-Sycamore Transit Development Plan details the recommended implementation program to be carried out over the next five years, from 2005 through 2009.

SERVICE IMPROVEMENTS

Service improvements that are part of Alternative I are included in the Implementation Plan. This involves continuation of demand response services in both the urban area and throughout DeKalb County. This is currently the core service provided by TransVAC.

Extend Green Line

Because of the increase in the time needed to operate the extension into Sycamore, an additional bus will be needed on the Green Line. It is also recommended that enough time be allocated in the schedule to provide a sufficient number of deviations to increase the service coverage area and thereby increase ridership on this route.

A key to increasing ridership on the Green Line is to provide reliable service while maximizing service coverage. Therefore, it is important that deviations do not cause buses to miss bus stops, so that every bus stop is served on every trip. The number and the length of deviations should also be reasonable to prevent buses from falling more than five to eight minutes behind schedule at any given bus stop. In addition, experience should be used to optimize bus stop placement. The City and its service provider should periodically review bus stop locations and remove and add bus stops as warranted.

Another key to the success of route deviation service is that it be incorporated as part of the overall TransVAC operation. Persons who request door-to-door service may be placed on the Green Line vehicle. Passengers who want a door-to-door trip will not see any difference in service, but those responsible for scheduling will realize an increase in efficiency. If it is planned properly, the vehicle scheduled to operate route deviation will pick-up many of the passengers who are requesting a Door-to-Door trip. For this reason, it is important that route deviation be operated as an integral part of the demand response service.

Service Improvements

**Service
Improvements**

Saturday Service

The expansion of demand response service hours to Saturdays is a top priority of human service agencies that serve DeKalb County. This will include offering demand response service from 7:00 a.m. to 6:00 p.m. each Saturday. Service should be offered on a countywide basis, in a similar manner as the core weekday demand response service. Initially, four vehicles should be in operation during an overlap period in the mid-day period. It is expected that two vehicles will be needed in the early mornings and the late afternoon times. Therefore, four drivers will be needed along with a dispatcher to add Saturdays to the schedule.

The amount of service to be provided should correspond to the demand that materializes. This should be reviewed periodically and the number of drivers and vehicles adjusted accordingly. Also, the potential of initiating additional purchase of service contracts for clients of human service agencies should be pursued. Revenues from these contracts can help offset the additional operating costs for this.

Increased Evening Service

Currently some trip denials are being experienced during the weekday evening hours. The addition of available vehicles will help solve this problem. Similar to the approach recommended for the Saturday service expansion, new purchase of service contracts with human service agencies should be pursued for these hours.

SERVICE EFFICIENCY AND MANAGEMENT IMPROVEMENTS

Fully Allocated Operating Costs

TransVAC should utilize a cost allocation model to estimate incremental service costs. Full cost accounting is particularly important to TransVAC because of a requirement to prepare a plan to allocate transit costs to the urban formula program (49 U.S.C. § 5307) and the nonurbanized area transportation program (49 U.S.C. § 5311). The Federal Transit Administration, in FTA Circular 9040.1E, requires that Section 5311 projects that include a portion of an urbanized area develop a cost allocation plan.

This cost allocation plan must be submitted to the Illinois Department of Transportation for approval. Where there is a question about the methodology, FTA would look to the state to make a determination as to the reasonableness of the cost allocation methodology.

FTA provides no guidance on this topic. However, experience working with FTA and several state DOTs has resulted in some common protocols

**Service Efficiency
and Management
Improvements**

to be used in such situations. The following guidance is used for urban/rural trip assignment and cost allocation purposes. This approach would be used on demand response services, as all fixed routes/route deviation services fall entirely within the urbanized area and will be assigned, by definition, to the Section 5307 program.

- ◆ TransVAC trips that originate and end in the urbanized area should be assigned to the Section 5307 program. This is the current practice.
- ◆ TransVAC trips that originate and terminate in the nonurbanized portions of DeKalb County should be allocated or assigned to the Section 5311 program. This is also the current practice.
- ◆ TransVAC trips that originate in the nonurbanized area and terminate in the urbanized or originate in the urbanized area and terminate in the nonurbanized *may* be allocated to the Section 5311 program. FTA states in its Section 5311 program circular, “since the goal of Section 5311 is to enhance access of people living in nonurbanized areas to activities, Section 5311 projects may include transportation to and from urbanized areas.” This has led to the so-called “one trip end” rule – if either the origin or destination of a trip is in the nonurbanized area, the trip may be assigned to the Section 5311 program.

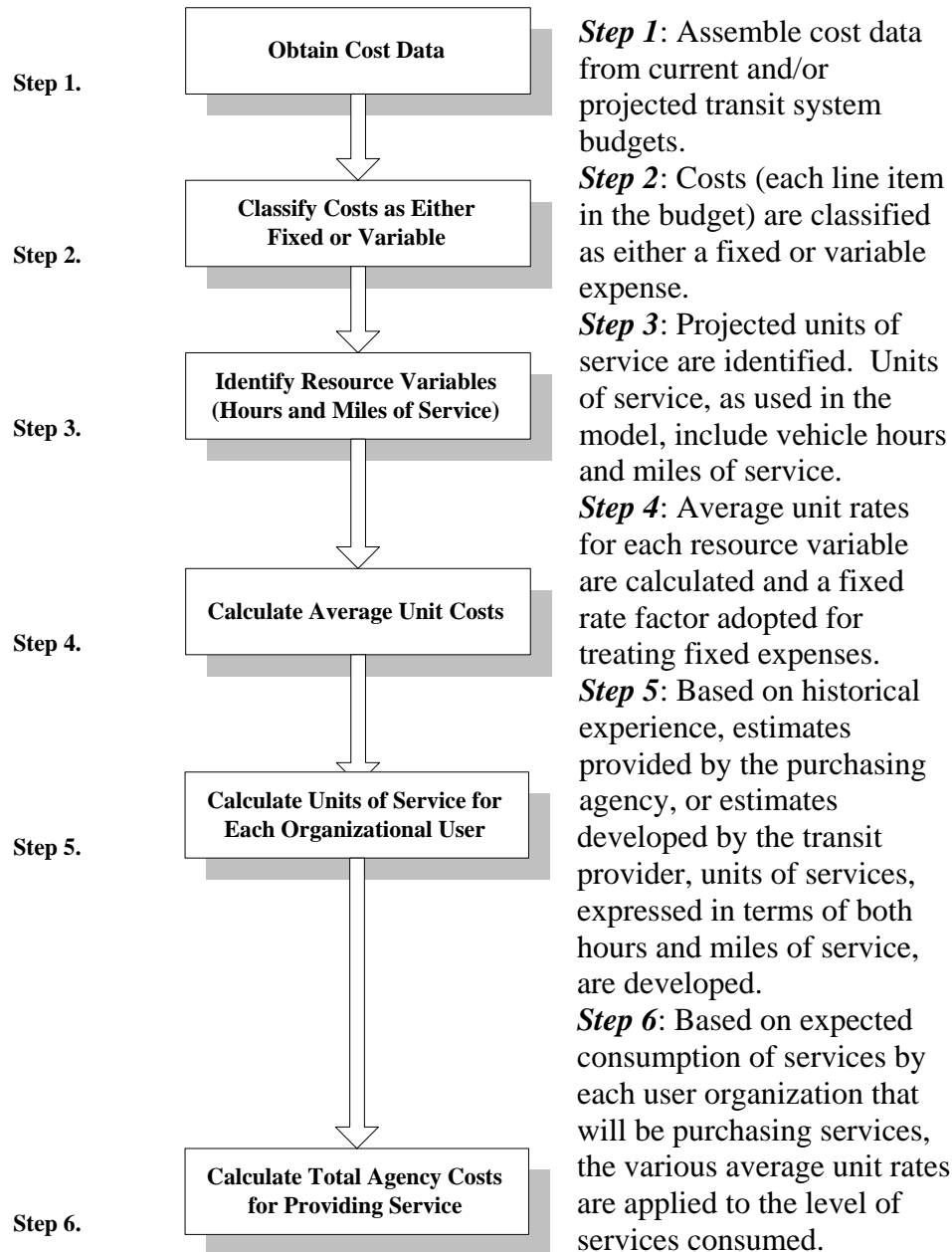
It should also be noted for purposes of determining urban or rural status of a trip, the urbanized area boundary is used, not the planning boundary established by the MPO. This boundary may extend beyond the urbanized area boundary to include areas expected to become urbanized within the next 20 years and/or include other non-attainment areas.

To the extent possible, TransVAC should attempt to claim as much service as possible under the nonurbanized area program. There are two reasons for this finding. First, Section 5311 permits TransVAC to claim project administration costs at a higher rate of Federal participation than is permitted under the Section 5307 program. Second, TransVAC can leverage its contract revenues to help offset the project matching requirements under the Section 5311 program. Special legislative provisions unique to the Section 5311 program permit a grantee to use revenues derived from providing service under contract to human service agencies to be used to meet all or part of the local matching share to Section 5311, even if the source of the contract revenues are other Federal funds. There is no similar provision in the Section 5307 program.

MedVAC services represent another demand response service operated as part of the TransVAC program. It is understood that MedVAC will continue to operate as a medical demand response transportation program, and will be open to the general public. As volunteers are primarily used to operate vehicles in MedVAC service, special treatment of this service must be accorded in any cost allocation plan.

A two-variable cost allocation model was used to conduct this analysis, as documented in the manual, *Comprehensive Financial Management Guidelines for Rural and Small Urban Public Transportation Providers*, developed by AASHTO/MTAP.⁹

The basic steps in the cost allocation model are outlined below.



⁹ *Comprehensive Financial Management Guidelines for Rural and Small Urban Public Transportation Providers*, prepared by the American Association of State Transportation Officials/Multi-State Technical Assistance Program (MTAP), September 12, 1992.

By following this methodology, the transit provider can accurately estimate the cost of any specific service component, such as the cost to operate an individual route on any given service day. The methodology is widely used and follows generally accepted accounting principles.

In this analysis, total service units for TransVAC were derived from the organization's year-to-date "Program Comparison" report. This report provides a summary, by month, of total miles and hours of transit service. The report for the year ended June 30, 2004 was used.

The methodology requires classification of each expense line item contained in TransVAC's financial statements. Costs are classified as either fixed or variable expenses. Further, variable expenses are broken down as being variable by miles of operation or hours of operation. For example, fuel is variable depending upon miles of operation whereas driver labor is variable by hours of operation. Fixed expenses are those that remain unchanged when small increments of service are added.

Based on a total reported expenditure of \$1,067,881 in FY 2003, the last reported period where audited data were available, it was estimated that \$404,130.00 were expended as fixed expenses while \$651,850.00 were variable operating expenses. The variable expense was further broken down as \$547,637.00 in variable-hours expenses while \$104,213.00 was identified as variable-miles expenses. Total TransVAC annual vehicle miles and hours were then applied to these variable expenses yielding the following cost factors:

- ◆ \$16.65 per vehicle hour;
- ◆ \$.20 per vehicle mile;
- ◆ 61.98% fixed cost factor.

Further, based on sample data, the following service units were computed.

**Exhibit VI-1
FY 2003 Units of Service Data**

Service Mode	Vehicle Hours	Vehicle Miles
Demand Response	20,763	300,289
Special/Group Subscription	1,352	16,632
Fixed/Flexible Routes	6,321	105,264
MedVAC	4,457	99,648
Total	32,893	521,833

Based on these service units and the cost factors, the fully allocated cost of TransVAC services is estimated as follows. The costs exclude vehicle depreciation that is included in VAC financial statements, which are not an allowable expense under any FTA program.

**Exhibit VI-2
Projected Fully Allocated Cost of Existing
VAC Transportation Services, FY 2003**

Service Mode	Fully Allocated Cost
Demand Response	\$657,136
Special/Group Subscription	\$41,846
Fixed/Flexible Routes	\$204,539
MedVAC	\$152,448
Total	\$1,055,968

The values computed in this model were then used to compute the detailed performance of individual services, based on a 100 percent sample of all trips performed on June 20, 2004.

Other Efficiency Measures

Based on a review of TransVAC operations, the following additional recommendations are made:

- ◆ Acquisition and use of scheduling software;
- ◆ Update computer hardware and implement automated data back-up procedures
- ◆ Implementation of more consistent scheduling practices; and
- ◆ Implementation of service standards. (Proposed service standards are included later in this section.)

ORGANIZATION AND STAFFING

The organizational structure remains essentially unchanged in this alternative. But it should be subject for review periodically. There are also certain circumstances where such a change would occur. The City of DeKalb may decide to switch service providers for the urban portion of the current system. This could be the result of a federal requirement to hold a competitive bid process for this service. This has ramifications for where local match for state and federal transit grants will be found since TransVAC directly provides some of this needed local funding.

Other circumstances relate to the organizational changes described in Alternatives II and III. Whether Huskie Bus becomes a participant in the public transportation system and/or if a Transit District is to be created, are changes that are worth keeping under consideration for future implementation. Both have advantages that may cause local decision makers to implement them on some future date.

Additional staff will be needed to implement the proposed service improvements. An estimated four (4) full time drivers (FTE's) will have to be added to provide additional weekday evening service, operate on Saturdays, and to extend the Green Line to Sycamore.

COST AND REVENUE PROJECTIONS

Exhibit VI-3 includes the projected vehicle hours, miles, and peak vehicle requirements for the 2005 to 2009 period. Increases in these service levels reflect the implementation of improved evening service in 2006, Saturday service in 2007, and the extension of the Green Line in 2008.

**Exhibit VI-3
Projected Service Levels**

	2005	2006	2007	2008	2009
Vehicle Hours	28,436	30,986	33,066	36,126	36,126
Vehicle Miles	428,185	466,583	497,903	543,980	543,980
Peak Vehicles	18	18	18	19	19

Operating costs are projected based on the phased implementation of proposed service improvements and by using a 2.5 percent annual inflation factor. These appear in Exhibit VI-4. Between 2005 and 2009, TransVAC operating costs increase from about \$1.3 million to over \$1.7 million annually. About \$300,000 of this increase is due to service increases, while \$100,000 represents inflationary increases.

Revenues from its various sources are also projected over the five-year period. These appear in Exhibit VI-5. Most revenues were kept at current levels through the five-year planning period, and increased only at a 2.5 percent inflation rate. The City of DeKalb is eligible to receive the State of Illinois Downstate Assistance Program (DOAP) funding and an application was made in 2004 for \$1.4 million annually. This source was assumed to increase to cover the cost of the service improvements, and replace most FTA Section 5311 funding, which will be needed for capital

**Organization and
Staffing**

**Cost and Revenue
Projections**

Exhibit VI - 4
Operating Cost Projections

Expenses	2005	2006	2007	2008	2009	2010
Personnel/Benefits						
Salaries	\$670,289	\$740,021	\$801,732	\$885,346	\$907,480	\$930,167
F.I.C.A.	\$47,560	\$52,508	\$56,887	\$62,819	\$64,390	\$66,000
Worker's Comp	\$51,250	\$56,582	\$61,300	\$67,693	\$69,386	\$71,120
Unemployment Benefits	\$5,125	\$5,658	\$6,130	\$6,769	\$6,939	\$7,112
Medical/Life Insurance	\$49,200	\$54,318	\$58,848	\$64,985	\$66,610	\$68,275
Uniforms	\$1,538	\$1,697	\$1,839	\$2,031	\$2,082	\$2,134
Subtotal	\$824,961	\$910,785	\$986,736	\$1,089,644	\$1,116,885	\$1,144,807
Materials and Supplies						
Fuel	\$76,875	\$84,873	\$91,950	\$101,540	\$104,078	\$106,680
Oil, Fluids, Lubricants	\$2,563	\$2,829	\$3,065	\$3,385	\$3,469	\$3,556
Vehicle Parts	\$41,000	\$45,265	\$49,040	\$54,155	\$55,508	\$56,896
Garage Supplies/Tools	\$3,075	\$3,395	\$3,678	\$4,062	\$4,163	\$4,267
Office Supplies	\$5,125	\$5,658	\$6,130	\$6,769	\$6,939	\$7,112
Building Supplies	\$8,200	\$9,053	\$9,808	\$10,831	\$11,102	\$11,379
Subtotal	\$136,838	\$151,073	\$163,671	\$180,741	\$185,259	\$189,891
Operations & Maintenance						
Vehicle Repair	\$25,625	\$28,291	\$30,650	\$33,847	\$34,693	\$35,560
Bldg./Equip. Maint.	\$8,200	\$9,053	\$9,808	\$10,831	\$11,102	\$11,379
Utilities	\$20,500	\$22,633	\$24,520	\$27,077	\$27,754	\$28,448
License & Fees	\$5,125	\$5,658	\$6,130	\$6,769	\$6,939	\$7,112
Building/Land Lease	\$513	\$566	\$613	\$677	\$694	\$711
Custodial	\$12,300	\$13,580	\$14,712	\$16,246	\$16,653	\$17,069
Subtotal	\$72,263	\$79,780	\$86,433	\$95,447	\$97,834	\$100,279
Purchased Services						
Professional Services	\$23,063	\$25,462	\$27,585	\$30,462	\$31,223	\$32,004
Corporate Insurance	\$14,760	\$16,296	\$17,654	\$19,496	\$19,983	\$20,483
Vehicle Insurance	\$102,500	\$113,163	\$122,600	\$135,386	\$138,771	\$142,240
Building Insurance	\$5,125	\$5,658	\$6,130	\$6,769	\$6,939	\$7,112
Public Information	\$2,306	\$2,546	\$2,759	\$3,046	\$3,122	\$3,200
Printing	\$2,306	\$2,546	\$2,759	\$3,046	\$3,122	\$3,200
Postage	\$3,588	\$3,961	\$4,291	\$4,739	\$4,857	\$4,978
Telephone	\$10,250	\$11,316	\$12,260	\$13,539	\$13,877	\$14,224
Tranvel & Training	\$7,688	\$8,487	\$9,195	\$10,154	\$10,408	\$10,668
Recognition	\$1,025	\$1,132	\$1,226	\$1,354	\$1,388	\$1,422
Memberships/Subscr.	\$1,538	\$1,697	\$1,839	\$2,031	\$2,082	\$2,134
Garbage Disposal	\$4,100	\$4,527	\$4,904	\$5,415	\$5,551	\$5,690
Subtotal	\$178,248	\$196,791	\$213,202	\$235,437	\$241,323	\$247,356
Other						
Carry Over Expense	\$28,557	\$31,527	\$34,156	\$37,719	\$38,662	\$39,628
Miscellaneous	\$15,375	\$16,975	\$18,390	\$20,308	\$20,816	\$21,336
Total	\$1,256,240	\$1,386,931	\$1,502,589	\$1,659,296	\$1,700,778	\$1,743,298

Note: A 2.5% annual inflationary increase is assumed.

Exhibit VI - 5
Revenue Projections

Revenues	2005	2006	2007	2008	2009	2010
Government Grants						
Title XX	\$53,813	\$55,158	\$56,537	\$57,950	\$59,399	\$61,478
Title III-B	\$15,375	\$15,759	\$16,153	\$16,557	\$16,971	\$17,565
IDOA Demo. Project	\$27,675	\$28,367	\$29,076	\$29,803	\$30,548	\$31,617
FTA Section 5307	\$410,000	\$20,250	\$20,756	\$21,275	\$21,807	\$22,570
FTA Section 5311	\$307,500	\$315,188	\$323,067	\$331,144	\$339,422	\$351,302
DOAP	\$0	\$549,338	\$664,996	\$789,513	\$798,001	\$806,701
ICDD	\$7,688	\$7,880	\$8,077	\$8,279	\$8,486	\$8,783
Subtotal	\$822,050	\$991,939	\$1,118,662	\$1,254,521	\$1,274,634	\$1,300,016
Local Government						
DeKalb County Sr. Levy	\$63,550	\$65,139	\$66,767	\$68,436	\$70,147	\$72,602
708 Board	\$24,600	\$25,215	\$25,845	\$26,492	\$27,154	\$28,104
City of DeKalb	\$76,875	\$28,797	\$29,517	\$30,255	\$31,011	\$32,096
City of Sycamore	\$15,375	\$15,759	\$16,153	\$16,557	\$16,971	\$17,565
DeKalb Township	\$16,913	\$17,335	\$17,769	\$18,213	\$18,668	\$19,322
Other Cities/Townships	\$6,150	\$6,304	\$6,461	\$6,623	\$6,788	\$7,026
Subtotal	\$203,463	\$158,549	\$162,513	\$166,576	\$170,740	\$176,716
Agency Contracts						
Kishwaukee College	\$30,750	\$31,519	\$32,307	\$33,114	\$33,942	\$35,130
Kishwaukee YMCA	\$10,250	\$10,506	\$10,769	\$11,038	\$11,314	\$11,710
Public Aid	\$14,350	\$14,709	\$15,076	\$15,453	\$15,840	\$16,394
Other	\$30,750	\$31,519	\$32,307	\$33,114	\$33,942	\$35,130
Subtotal	\$86,100	\$88,253	\$90,459	\$92,720	\$95,038	\$98,365
United Funds						
DeKalb	\$18,450	\$18,911	\$19,384	\$19,869	\$20,365	\$21,078
Sycamore	\$9,225	\$9,456	\$9,692	\$9,934	\$10,183	\$10,539
Genoa-Kingston	\$3,434	\$3,520	\$3,608	\$3,698	\$3,790	\$3,923
Other	\$1,538	\$1,576	\$1,615	\$1,656	\$1,697	\$1,757
Subtotal	\$32,646	\$33,462	\$34,299	\$35,156	\$36,035	\$37,297
Other Revenues	\$111,930	\$114,728	\$117,596	\$121,712	\$125,972	\$130,381
Total	\$1,256,189	\$1,386,931	\$1,523,529	\$1,670,685	\$1,702,420	\$1,742,774

costs, and City of DeKalb contributions. Nearly \$800,000 of DOAP funding will be needed to finance these operating costs by 2009. The remainder of the \$1.4 million will be needed for capital costs.

The revenue projection includes an assumption that inflationary increases will occur at a rate of 2.5 percent annually. This is not a guaranteed increase for most of these sources as only the DOAP has a built-in five (5) percent annual increase.

RIDERSHIP PROJECTION

The additional service is projected to add approximately 26,000 passenger trips to the system when fully implemented. The projected ridership levels appear in Exhibit VI-6. The increases in ridership also reflect the phased implementation of service improvements described above.

**Exhibit VI-6
Projected Ridership**

	2005	2006	2007	2008	2009
Ridership	121,000	128,595	134,791	147,215	147,215

CAPITAL IMPROVEMENTS

The projected capital expenses for the 2005 through 2009 are illustrated in Exhibit VI-7 below.

**Exhibit VI-7
Capital Improvements**

	2005	2006	2007	2008	2009
Vehicle Purchases	--	5 vans	4 buses	5 vans	4 vans

A number of vehicles will need to be acquired over the next five years for replacing the TransVAC aging fleet and expanding service by one vehicle. TransVAC operates a fleet of thirty-five (35) vehicles, with eighteen (18) being needed during the weekday peak period. One (1) additional vehicle will be needed in the peak periods to extend the Green Line into Sycamore.

As described in Alternative I in the previous section, most of TransVAC's fleet is beyond its useful life as defined by FTA standards. Only eleven (11) of TransVAC's thirty-five (35) vehicles fall within these standards. Only eight (8) of these vehicles will be within the FTA useful life standard by 2009. Eleven (11) other vehicles were acquired prior to 1992. Replacing most of the current fleet over the next five years is a high priority. In order to accomplish this, a significant amount of capital funding must be acquired.

**Cost and Revenue
Projections**

**Ridership
Projection**

**Capital
Improvements**

**Capital
Improvements**

It is not clear if or when an application for funding for one new vehicle will be approved by IDOT. If received within the next five years, this will bring the number of vehicles within the FTA useful life standard to nine (9) in 2009. If the fleet were modernized, TransVAC could reduce the fleet to twenty-seven (27) vehicles, with a TransVAC peak requirement of nineteen (19) vehicles, a 20 percent spare ratio, and five (5) vehicles for MedVAC service. With only nine (9) falling within the FTA standard, an additional eighteen (18) new vehicles will be needed over the next five years to modernize the fleet. If vehicles were replaced starting in 2006, a total of four (4) or five (5) vehicles will be needed each year for four years in order to bring the vehicle fleet within FTA useful life standards. If these vehicles are not replaced, TransVAC can expect that maintenance costs will increase significantly. This will drain operating costs and possibly result in service reductions.

A variety of vehicles will be replaced during this time. It is assumed that fourteen (14) will be raised roof vans with a seating capacity of ten passengers and two wheelchairs, and four (4) will be medium duty buses with a seating capacity of fourteen passengers and two wheelchairs. With an assumed average cost of \$55,000 each, total vehicle cost will be about \$1.0 million.

In addition to replacement vehicles, a transit operations facility will eventually be needed. If aggressively pursued, then it is possible that it can be completed within the five-year planning period. It is recommended that at least the initial feasibility studies be completed within this timeframe.

SERVICE STANDARDS

Performance Analysis

Exhibits VI-8 through VI-10 reflect a detailed analysis of TransVAC services on the sampled day. Three typical transit performance measurements were examined: cost efficiency, service effectiveness, and cost effectiveness were computed for all but MedVAC services. MedVAC services, with its reliance on volunteer driver labor and its longer trip distances, do not facilitate a peer comparison with all TransVAC services.

Cost Efficiency

This indicator is a measure of the amount of public transportation produced for the community in relation to the resources expended.

Service Standards

Exhibit VI-8
TransVAC Paratransit Performance Evaluation: Service Effectiveness

Mode	Total Vehicle Miles	Total Paid Hours	Total Passengers	Passengers Per Mile	Passengers Per Hour	Average Speed
Demand Response	1,463	103.05	288	0.20	2.79	14.20
Group Subscription	160	22.75	72	0.45	3.16	7.03
Fixed Route/Route Deviation	408	24.50	106	0.26	4.33	16.65
Total	2,031	150	466	0.23	3.10	13.51

*Detailed analysis by service type based on a 100 percent sample of all trips, June 30, 2004.

Exhibit VI-9
TransVAC Paratransit Performance Evaluation: Cost Efficiency

Mode	Total Vehicle Miles	Total Paid Hours	Total Passengers	Total Cost	Cost Per Mile	Cost Per Hour
Demand Response	1,463	103.05	288	\$ 3,252.67	\$ 2.22	\$ 31.56
Group Subscription	160	22.75	72	\$ 402.36	\$ 2.52	\$ 17.69
Fixed Route/Route Deviation	408	24.50	106	\$ 792.79	\$ 1.94	\$ 32.36
Total	2,031	150	466	\$ 4,447.82	\$ 2.19	\$ 29.59

*Detailed analysis by service type based on a 100 percent sample of all trips, June 30, 2004.

Exhibit VI-10
TransVAC Paratransit Performance Evaluation: Cost Effectiveness

Mode	Total Vehicle Miles	Total Paid Hours	Total Passengers	Total Cost	Cost Per Passenger
Demand Response	1,463	103.05	288	\$ 3,252.67	\$ 11.29
Group Subscription	160	22.75	72	\$ 402.36	\$ 5.59
Fixed Route/Route Deviation	408	24.50	106	\$ 792.79	\$ 7.48
Total	2,031	150	466	\$ 4,447.82	\$ 9.54

*Detailed analysis by service type based on a 100 percent sample of all trips, June 30, 2004.

Service Standards

Due to the higher than average speed recorded on the Green Route, it has the lowest cost per mile. Due to limited operating hours and runs of relatively short duration, group subscription or special trips are the second most efficient for the organization to provide.

Service Effectiveness

This is a measure of the consumption of public transportation services in relation to the amount of service available. Passengers per hour is the most commonly used measure of service effectiveness. Not surprisingly, fixed route services reflect the highest observed values here; however, the measures are well below productivity levels seen on most small urban fixed route services. This indicates a need to review the route and determine strategies to increase ridership, such as the marketing and promotion of the service, or decrease its level of service.

The same value for demand response services are within expected ranges.

Cost Effectiveness

Cost effectiveness is a measure of the consumption of public transportation services in relation to the resources expended. This measure is among the most common performance evaluation used in public transit performance evaluation. Again the measures reflect expected values, with demand response services showing the highest cost per passenger.

Once this data collection process has been completed, TransVAC should establish *performance standards* in each category listed above. Initially, these standards will be based on observed past performance, although this performance is limited in sample size. As time progresses and more data are collected and analyzed, these initial performance standards will be refined.

Recommended Performance Standards

TransVAC should institute a process of routing system performance evaluation. It is recommended that a form be prepared that would summarize system performance on a quarterly basis. The form would be modified to create a column for each month in the quarter and then a summary column for all three months. After one year, a new column would be added comparing the quarter's performance to the same quarter in the previous year.

Performance indicators should be calculated. It is recommended that the following measures be used:

Cost Efficiency

- Operating Cost/Vehicle Hour

Service Standards

- Operating Cost/Vehicle Mile

Service Effectiveness

- Passengers Per Hour
- Passengers Per Mile

Cost Effectiveness

- Cost Per Passenger

Once this data collection process has been completed, TransVAC should establish *performance standards* in each category listed above. Initially, these standards will be based on observed past performance, although this performance is limited in sample size. As time progresses and more data are collected and analyzed, these initial performance standards will be refined.

Periodic comparison of actual operating results with the adopted performance standard will give the system some indication as to how well it is performing. Poor performance should result in management action.

In setting initial standards, the range of observed performance was taken into consideration, particularly with respect to demand response mode. With fixed route or route deviation services, there are commonly accepted standards of performance in these categories.

Exhibit VI-11 reflects the recommended standards. It is not recommended that a performance standard be established for every indicator. Those that are recommended are listed below.

**Exhibit VI-11
Recommended Performance Standards**

Mode	Cost Per Mile	Cost Per Hour	Passengers Per Mile	Passengers Per Hour	Cost Per Passenger
Demand Response	\$ 2.65	\$ 31.00	0.20	3.00	
Group Subscription			0.30	0.40	
Fixed Route/Route Deviation			1.00	8.00	

**Implementation
Timeline****IMPLEMENTATION TIMELINE**

Exhibit VI-12 presents a suggested timetable for implementation of each of the selected service improvements. Actual implementation may vary depending on available local and state revenue and the corresponding capacity for DeKalb to implement the service. Likewise, some aspects of service expansion may be implemented in a different order as demand warrants. The timetable is provided as a suggested guide for implementation, but should be adjusted to fit the changing needs of the urban area and the remainder of DeKalb County. A review of this timeline should be conducted at least annually.

One of the first actions that needs to be taken is for the City of DeKalb to conduct a procurement process for the urban service portion of the current TransVAC operation. It is recommended that clarification of the need to conduct this bid process be obtained from the FTA. It is possible that some type of delay or waiver be granted. If none is granted then the City will need to issue a Request for Proposals, and conduct a review of submitted proposals and costs. It is possible that a new service provider will be selected, thus creating a situation where TransVAC provides the Section 5311 services, while the new operator runs a separate urban system.

Other implementation steps included in Exhibit VI-12 pertain to previously described service improvements, vehicle procurement and other capital improvements, and an on-going review of the organizational structure.

NON-TRANSPORTATION SOLUTIONS

In many instances, optimum placement and design of buildings that house major transit trip attractions can minimize operating costs for transit agencies. Currently, persons in DeKalb County must travel to another County for dialysis treatment because of lack of space at the current dialysis center in DeKalb. A new dialysis center in DeKalb County will not only be more convenient for residents but will save TransVAC operating costs. Human service agencies should be encouraged to consider client transportation costs in the decision where to locate their facilities and how the site is designed. Clustering several different human service agency offices on the same site is a practice that has, in other locations, improved the efficient use of transportation resources. These agencies should involve local transportation providers and planning officials early in the facility location and design process.

**Exhibit VI-12
Implementation Timeline**

Action	2005				2006				2007			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Service Bidding - FTA Clarification - Write RFP - Bid Responses - Selection												
Review Organizational Structure - Analyze Huskie Bus Options - Review Feasibility of Creating MTD												
Extend Green Line - Finalize Alignment and Schedule - Review Deviation Policy - Public Process - Start-up Promotion - Begin Operation - On-going Advertisment												
Begin Saturday Service - Identify Agency Contracts - Submit Cost Proposals - Public Process - Start-up Promotion - Begin Operation												
Expand Evening Service - Identify Agency Contracts - Submit Cost Proposals - Begin Operations												
Vehicle Replacement - Secure funding - Procurement Process - Vehicles in-service												
New Operations Facility - Feasibility Study - Secure Funding - Preliminary Design												

**Exhibit VI-12
Implementation Timeline (Continued)**

Action	2008				2009			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Service Bidding - FTA Clarification - Write RFP - Bid Responses - Selection								
Review Organizational Structure - Analyze Huskie Bus Options - Review Feasibility of Creating MTD								
Extend Green Line - Finalize Alignment and Schedule - Review Deviation Policy - Public Process - Start-up Promotion - Begin Operation - On-going Advertisement								
Begin Saturday Service - Identify Agency Contracts - Submit Cost Proposals - Public Process - Start-up Promotion - Begin Operation								
Expand Evening Service - Identify Agency Contracts - Submit Cost Proposals - Begin Operations								
Vehicle Replacement - Secure funding - Procurement Process - Vehicles in-service								
New Operations Facility - Feasibility Study - Secure Funding - Preliminary Design								

APPENDIX

GREEN LINE PASSENGER COUNT

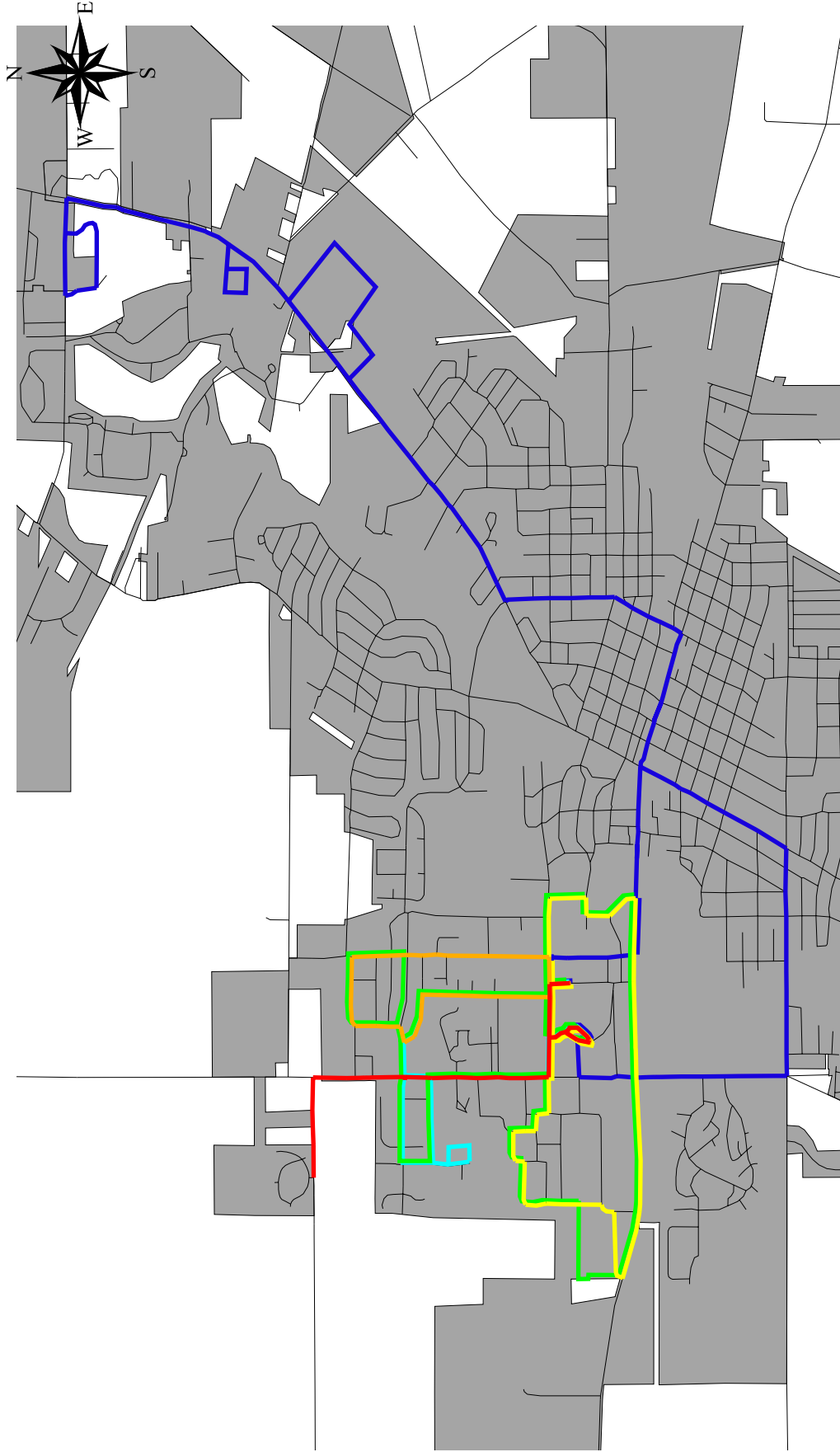
HUSKIE LINE ROUTE MAPS

Wednesday - July 7, 2004

#	Stop	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	Total
1	Health Service Drive @ BGC					1							1			2
2	Health Service Drive @ KHC Shelter			2							1					3
3	BP Service Station															0
4	Kishwaukee Health Services															0
5	Aldi (grass island)							1	2		3	1	1		2	10
6	Target - Main Door															0
7	Pier One Imports										1					0
8	Old Navy										1					1
9	Small's Furniture															0
10	Hopkins Park			2			2			2			1		1	8
11	Hillcrest @ Kindercare															0
12	N. 1 st Street @ Century 21															0
13	East Lincoln Hwy @ 2 nd St (Edward's)		1													1
14	3 rd St @ DeKalb Library									1						1
15	Locust @ 6 th St (SW Corner)															0
16	Lincoln Hwy @ 9 th St (SW Corner)															0
17	S. 10 th St @ Grove (SW Corner)							1								0
18	S. 10 th St @ Garden (SW Corner)															0
19	E. Taylor @ Springdale															0
20	E. Taylor @ Golden Years	1		2			1		1							6
21	S. 4 th St @ CLC															0
22	Barb Blvd across from DeKalb H.S.				1											0
23	S. 2 nd St @ Pine Acres															0
24	Milner @ S. 1 st St															0
25	Barb City Manor West entrance		1		2					1		1			1	6
26	W. Taylor @ Glidden Ave.															0
27	W. Taylor @ Riverside Apts				2											2
28	W. Lincoln Hwy @ Dollar Video					2				2						4
29	W. Lincoln Hwy @ Stadium View Apts															0
30	W. Lincoln Hwy @ Gideon Court	1					1		2	1						5
31	Stadium Drive @ NIU Physical Plant															0
32	Stadium Drive @ Annie Glidden					1										1
33	Annie Glidden @ Lucinda						1									0
34	Annie Glidden @ Crane Dr.	2														3
35	Annie Glidden @ University Village						1	1	1	1						4
36	Annie Glidden @ Varsity						1									1
37	Annie Glidden @ Arcadia		1						1							2
38	County Health Dept - Main							1	1							2
39	Dresser Court										1					1
40	Normal Rd @ Ridge	1														1
41	Ridge @ N. 1 st St (SW Corner)				4	2							1			8
42	N. 1 st St @ Windsor Dr.															0
43	Sycamore Rd @ Jewel						2									0
44	Sycamore Rd @ Road Ranger															0
45	Sycamore Rd @ China House Rest.					1										1
46	Greenwood Acres / Kohl's / Best Buy															0
47	Walmart - South Door					1	1			1	1		2			7
48	Northland Plaza @ Sears															0
49	Northland Plaza @ Borders								1							1
50	Northland Plaza @ Elder Beerman										1					1
51	Northland Plaza @ Claire's Boutique															0
52	Sycamore Rd @ Gateway Dr.															0
53	Bethany Rd @ American National Bank			1								1				2
54	Bethany Rd @ DeKalb MRI															0
55	Oak Crest - West Door															0
Total		5	3	7	10	8	10	4	9	9	9	3	6	0	4	87

Four-Day Average

#	Stop	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	Total
1	Health Service Drive @ KCH	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
2	Health Service Drive @ BEN GORDON	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
3	BP Service Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Kishwaukee Health Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Aldi (grass island)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
6	Target - Main Door	0	0	1	0	1	0	0	2	0	1	1	1	0	1	7
7	Pier One Imports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Old Navy	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
9	Small's Furniture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Hopkins Park	0	1	1	0	0	1	0	0	1	0	0	2	1	0	6
11	Hillcrest @ Kindercare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	N. 1 st Street @ Century 21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	East Lincoln Hwy @ 2 nd St (Edward's)	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
14	3 rd St @ DeKalb Library	0	0	0	1	1	0	0	0	1	1	0	0	0	0	4
15	Locust @ 6 th St (SW Corner)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16	Lincoln Hwy @ 9 th St (SW Corner)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	S. 10 th St @ Grove (SW Corner)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	S. 10 th St @ Garden (SW Corner)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	E. Taylor @ Springdale	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1
20	E. Taylor @ Golden Years	1	0	2	1	1	1	2	1	1	0	1	0	0	0	11
21	S. 4 th St @ CLC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22	Barb Blvd across from DeKalb H.S.	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
23	S. 2 nd St @ Pine Acres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Milner @ S. 1 st St	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Barb City Manor West entrance	0	1	0	2	0	1	0	0	0	0	0	0	0	1	5
26	W. Taylor @ Glidden Ave.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	W. Taylor @ Riverside Apts	1	0	0	1	0	0	0	0	0	0	1	0	0	0	2
28	W. Lincoln Hwy @ Dollar Video	0	0	1	0	1	0	0	0	1	0	0	1	0	0	2
29	W. Lincoln Hwy @ Stadium View Apts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	W. Lincoln Hwy @ Gideon Court	1	1	1	1	0	1	0	1	1	0	0	0	0	0	6
31	Stadium Drive @ NIU Physical Plant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Stadium Drive @ Annie Glidden	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Annie Glidden @ Lucinda	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
34	Annie Glidden @ Crane Dr.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
35	Annie Glidden @ University Village	0	0	1	0	0	1	1	0	1	0	0	0	0	0	4
36	Annie Glidden @ Varsity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
37	Annie Glidden @ Arcadia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
38	County Health Dept - Main	0	0	1	1	0	0	1	0	0	0	0	0	0	0	2
39	Dresser Court	0	1	0	0	0	1	0	0	0	0	1	0	0	0	2
40	Normal Rd @ Ridge	1	1	0	2	1	0	1	0	0	0	0	1	0	0	5
41	Ridge @ N. 1 st St (SW Corner)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	N. 1 st St @ Windsor Dr.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Sycamore Rd @ Jewel	0	1	1	0	1	1	0	0	0	0	0	1	1	0	4
44	Sycamore Rd @ Road Ranger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
45	Sycamore Rd @ China House Rest.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Greenwood Acres / Kohl's / Best Buy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	Walmart - South Door	0	0	1	2	1	2	0	2	1	2	1	1	1	0	12
48	Northland Plaza @ Sears	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Northland Plaza @ Borders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
50	Northland Plaza @ Elder Beerman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
51	Northland Plaza @ Claire's Boutique	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
52	Sycamore Rd @ Gateway Dr.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	Bethany Rd @ American National Bank	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
54	Bethany Rd @ DeKalb MRI	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
55	Oak Crest - West Door	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		4.75	4	10	11.5	8.5	8.5	4.5	9.5	10.5	6.75	5	6	1.75	1.75	93



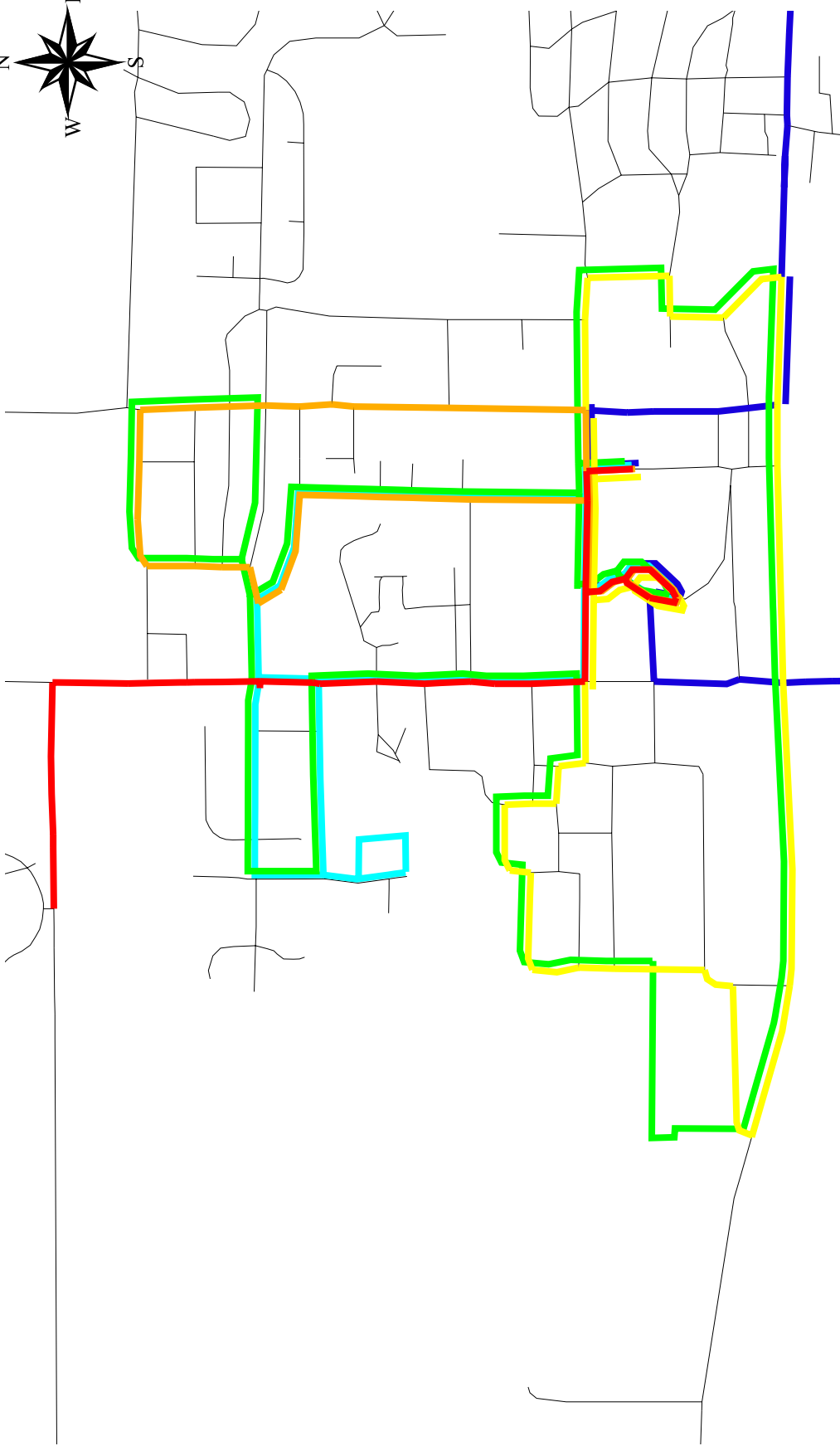
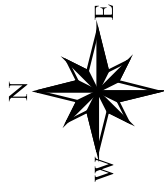
- Route 1
- Route 3/3A
- Route 4
- Weekend Route 4
- Route 5
- Route 7
- Cities and Towns



RLS & Associates, Inc.

Husky Line Route Alignments

DeKalb-Sycamore Urban Transit Plan



-  Route 1
-  Route 3/3A
-  Route 4
-  Weekend Route 4
-  Route 5
-  Route 7



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