

BLOOMINGTON-NORMAL COMMUNITY TRANSPORTATION NEEDS ASSESSMENT

EXECUTIVE SUMMARY

Prepared for

BLOOMINGTON-NORMAL PUBLIC TRANSIT SYSTEM

Prepared by

Perteet Engineering, Inc.
and

Carolyn Browne Associates

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EXECUTIVE SUMMARY

The Community Transit Needs Assessment was carried out for the Bloomington-Normal Public Transit System between February and December, 2001 by Pertee Engineering, Inc. of Everett, Washington. This Executive Summary briefly describes the methodology used in the development of the Needs Assessment, summarizing the findings and conclusions of the study process and integrating the findings of the Illinois State University Shuttle Bus Study completed in mid-2002. The final section presents the proposed cash flow program describing the revenues and expenses reflecting the staged implementation of recommended services and facilities.

Study Findings

A number of transit needs were identified by stakeholders in the Bloomington-Normal region, including the following:

- ❑ Later evening service on weekdays and Saturdays
- ❑ More direct routing
- ❑ Improved travel times
- ❑ Improved frequency of service
- ❑ Improved services for college students
- ❑ Improved service to employment sites
- ❑ Sunday service

As a response to those identified needs, a program of transit improvements was developed which follows the proposed implementation schedule shown in *Figure i*, that summarizes the recommended transit enhancement program elements, showing the added vehicle requirements for peak service, exclusive of spares or replacement buses.

Year	Recommendation	Buses	
		Add	Total
2001/2002	Existing system, 6AM to 6 PM, 60-minute frequency		15
2002/2003	No changes		15
2003/2004	Add two ISU-funded campus shuttles, streamline Nite-Ride, add ISU-funded student universal access	4	19
2004/2005	Add evening and night service to midnight		19
2005/2006	No changes		
2006/2007	Streamline existing service network	4	23
2007/2008	Add 30-minute peak and early morning (5AM) service	15	38
2008/2009	Add 30-minute mid-day and Saturday service		38
2009/2010	Add new routes in north Normal, west Bloomington	5	43
2010/2011	Add Sunday service		43

Figure i
Recommended B-NPTS Service Improvements

The benefits of the implementation and operation of these improved services include:

- ❑ Improved access to employment opportunities throughout the Bloomington-Normal service area,
- ❑ Improved transit travel times that are more competitive with those of other travel modes,
- ❑ Improved ease of understanding of available system services,
- ❑ Improved convenience, making transit travel more attractive to both current and potential new riders,
- ❑ Improved system ridership, particularly among college students and employees,
- ❑ Reduced demand for parking on the ISU campus and at other significant travel destinations
- ❑ Establishment and promotion of financial partnerships with ISU and other local colleges

College Partnership

A critical element of the recommended plan is a significant increase in ridership by college students as well as the general public. The B-NPTS system has, along with ISU, developed a mutually beneficial *Nite Ride* system over the past several years. The next steps are campus shuttles and a funding program, known as ***universal access***, that is currently used in other college towns, such as Champaign-Urbana and Gainesville, Florida. Universal access is a funding program whereby transit fares are prepaid by the college for students, staff and faculty and a university ID card is accepted *in lieu* of a cash fare. The college usually collects the funds through student activity fees or parking fees. Discussions with ISU indicate the program could be initiated as early as the fall of 2003.

This program is intended to be the first step in a partnership between the City of Bloomington, the Town of Normal and Illinois State University in promoting and funding public transportation services in the Bloomington-Normal area. It is anticipated that the success of these joint programs will induce other local colleges to take part in developing such programs for their own students, faculty and staff.

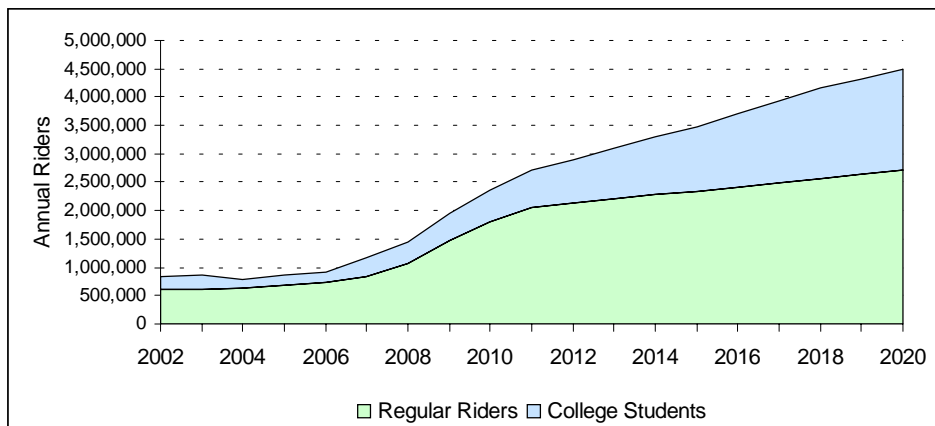


Figure ii
Estimated B-NPTS Ridership, 2002-2020

Figure ii depicts the estimated ridership on the enhanced B-NPTS system from 2002 through 2020.

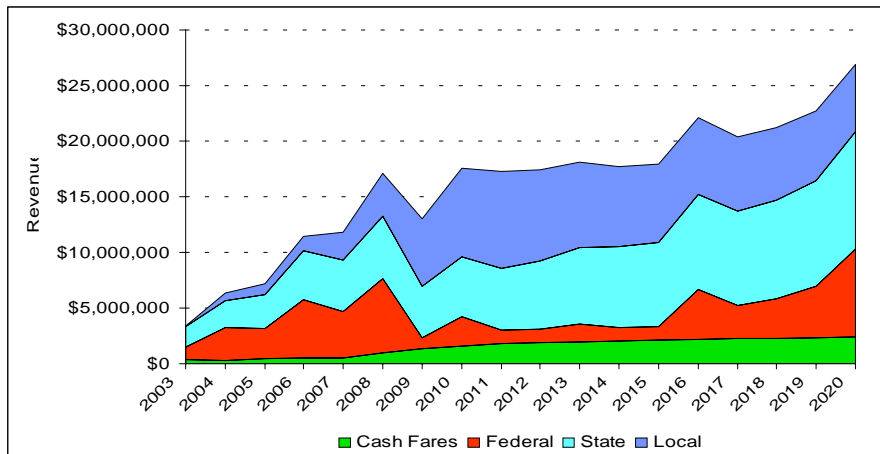


Figure iii
Estimated Program Costs and Funding Sources, 2003-2020
Best Case Funding Scenario

The costs to each of the constituent municipalities for the local share of funding of both operations and capital costs for the next decade have been estimated for two differing funding scenarios. *Figure iii* depicts the estimated revenue requirements and sources for the enhanced system under the Best Case Scenario from 2003 through 2020.

The Best Case Scenario assumes the following conditions:

- ❑ Federal formula funds are applied entirely to operating assistance
- ❑ Federal capital grant funds are available to cover 80% of all capital costs
- ❑ State operating assistance is available to cover 55% of system operating costs
- ❑ State operating assistance may increase a maximum of 10% annually
- ❑ State funding is available to cover 20% of all capital costs for which federal capital funding assistance has been secured
- ❑ ISU funds 100% of the local costs of both college shuttle routes
- ❑ ISU finds 100% of their student universal access participation at the system average fare

Figures iv-a and *iv-b* show the relative contributions of the City of Bloomington, the Town of Normal and the third local partner, ISU, to the estimated local transit investment requirements under the Best Case scenario. Under the Best Case scenario, as State operations funding increases over time, the local share to the municipalities will decrease. This phenomenon is illustrated in *Figure iv-b*.

Year	Total	Bloomington	Normal	ISU
2001/2002	\$ 511,137	\$ 271,210	\$151,433	\$ 88,494
2002/2003	226,598	87,655	48,943	90,000
2003/2004	742,182	49,844	27,831	664,507
2004/2005	999,624	179,034	99,965	720,625
2005/2006	1,252,449	118,299	66,053	1,068,097
2006/2007	2,473,119	877,667	490,055	1,105,397
2007/2008	3,896,668	1,666,419	930,463	1,299,786
2008/2009	6,067,866	3,004,308	1,677,487	1,386,071
2009/2010	7,950,777	4,162,977	2,324,442	1,463,358
2010/2011	8,666,708	4,564,159	2,548,446	1,554,103
Average	\$3,278,713	\$1,498,157	\$836,512	\$944,044

Figure iv-a
Estimated Local Transit Investment Requirements, 2002-2011
Best Case Funding Scenario

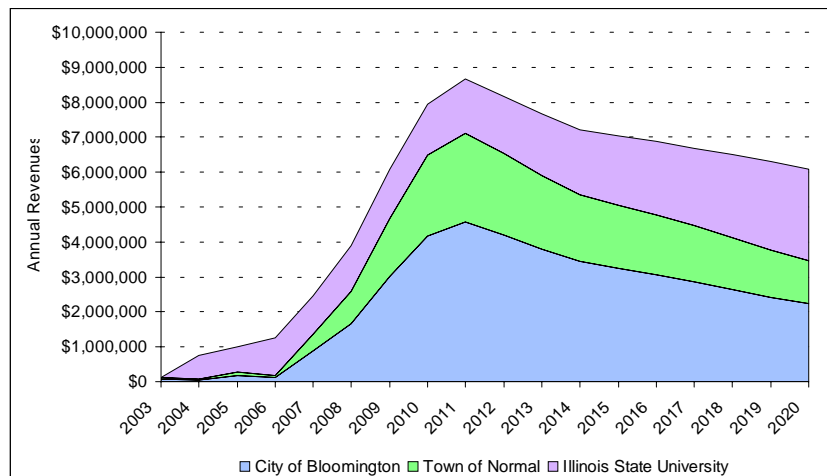


Figure iv-b
Estimated Local Investment Requirements
Best Case Funding Scenario, 2003-2020

The Worst Case Scenario assumes the following conditions:

- State operating assistance is available to cover 55% of system operating costs
- State operating assistance may increase a maximum of only 3% annually
- Federal formula funds are applied entirely to operating assistance
- Federal capital grant funds are not available to cover any capital costs
- State funding is not available to cover any capital costs
- ISU funds 100% of the local costs of both college shuttle routes
- ISU funds 100% of their student universal access participation at the system average fare

Figures v-a and **v-b** show the relative contributions of the City of Bloomington, the Town of Normal and ISU to the estimated local transit investment requirements under the Worst Case scenario. Because of limitations on the annual growth in IDOT operations funding, the largest local investments occur in the early years of enhanced operations, as reflected in these figures. That local share drops steadily after the major period of new service implementation in 2012.

Year	Total	Bloomington	Normal	ISU
2001/2002	\$ 511,137	\$ 271,210	\$ 151,433	\$ 88,494
2002/2003	226,597	87,654	48,943	90,000
2003/2004	742,182	49,844	27,831	664,507
2004/2005	1,126,134	260,215	145,294	720,625
2005/2006	7,096,093	3,868,165	2,159,831	1,068,097
2006/2007	7,359,991	4,013,573	2,241,021	1,105,397
2007/2008	12,135,774	6,953,453	3,882,535	1,299,786
2008/2009	7,590,866	3,981,617	2,223,178	1,386,071
2009/2010	11,744,320	6,597,293	3,683,669	1,463,358
2010/2011	11,048,202	6,092,363	3,401,736	1,554,103
Average	\$5,958,130	\$3,217,539	\$1,796,547	\$944,044

Figure v-a
Estimated Local Transit Investment Requirements, 2002-2011
Worst Case Funding Scenario

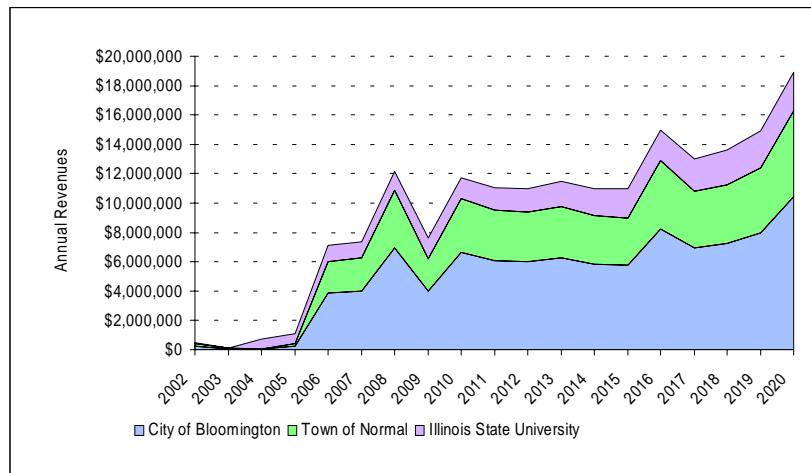


Figure v-b
Estimated Local Investment Requirements
Worst Case Funding Scenario, 2003-2020

In the Worst Case scenario, periodic vehicle replacement costs will keep the local share of investment significantly higher as shown in **Figure v-b**. Both figures depict the annual estimated local transit investments in inflated dollars for the period 2002 through 2020.

Project Methodology

The Needs Analysis was completed in three phases: a data gathering phase, a data analysis phase and a development of recommendations phase. The Needs Assessment project was initiated with a kickoff meeting with B-NPTS staff and the Board of Trustees in March, 2001.

The data gathering phase commenced with stakeholder interviews with key community leaders, business persons and others. Numerous separate meetings with stakeholders were held to identify important issues, projects and plans which could impact B-NPTS operations over the next few years.

Other data gathering tasks in the project included:

- ❑ The gathering of information by the McLean County Regional Planning Commission (MCRPC) in support of the Needs Assessment project, including population, employment and other demographic information.
- ❑ Completion of a boarding and alighting count of all regularly scheduled B-NPTS services in May, 2001. This data was entered into a ridership database and several reports and graphical depictions of that data were produced. A series of route profiles were produced, describing the ridership on each B-NPTS route and summarizing the ridership productivity of the entire system.
- ❑ An on-board rider survey was conducted and analyzed to determine the attitudes, awareness and opinions of system riders and to determine the approximate level of their support for potential transit improvements.
- ❑ A random-sample telephone survey of 400 Bloomington and Normal residents was conducted in May, 2001 to identify major issues of importance to community residents, to ascertain the attitudes, awareness and opinions of citizens toward potential transit service improvements and to gauge their willingness to support increased public subsidies of transit operations and facilities.
- ❑ A random sample telephone survey of 200 Illinois State University and Heartland College students was conducted in September, 2001 to identify major issues of importance to, and the service needs of, college students in the Bloomington-Normal area.
- ❑ On-site observations of transit operations were conducted throughout the spring of 2001, including the riding of B-NPTS buses. Conversations with drivers aboard B-NPTS buses were also held during this period in order to determine as much about existing B-NPTS fixed-route operations as possible.
- ❑ During the course of the project, the consultants met with B-NPTS staff and the Board of Trustees on a monthly basis to review interim products and findings with project participants.

The data analysis phase consisted of the analysis of stakeholder comments, the outputs from the telephone surveys of the general public and students, analysis of the web-based surveys of the general public, employers and students and the additional employment and demographics information gathered by the consultant, the McLean County Regional Planning Commission and by the Chamber of Commerce.

In the recommendations phase, as the result of the gathering and analysis of data from as many community sources as possible, three service scenarios were developed to address the transit needs identified in the first and second phases of the project. These scenarios were presented to the Board of Trustees and were modified based upon discussions with that body. The final recommended alternative was then identified and analyzed in more detail.

The recommended alternative exhibits the following characteristics:

- ❑ A reduction in out-of-direction route deviations
- ❑ A reduction in overlapping services
- ❑ Improved travel times
- ❑ Extra routes to maintain the existing service area coverage
- ❑ Improved peak and midday service frequencies
- ❑ Added evening services
- ❑ Added Sunday services
- ❑ New routes to improve coverage of the urban service area

Upon further review by the Board of Trustees, the recommended alternative was approved. A proposed cash flow program was then prepared for this alternative, identifying the costs, revenues and revenue sources necessary to support the staged implementation and continued operation of the recommended services and programs.

Service Objectives

In the development of the preferred alternative, a number of objectives were identified. These objectives were voiced by the interviewed stakeholders, and were confirmed in the various surveys and other data gathering activities conducted subsequent to the stakeholder interviews. Those objectives are briefly described below.

- ❑ **Span of Service** – add service to midnight on weekday and Saturday nights and on Sundays to 7 PM
- ❑ **Route Design** – simplify and streamline the existing route network alignments and eliminate duplication of services along many roadways
- ❑ **Levels of Service** – improve the frequency of services provided during weekday and Saturday operating periods
- ❑ **Service Area** – improve the route coverage within the existing service area and expand into industrial/employment areas adjacent to the existing service area

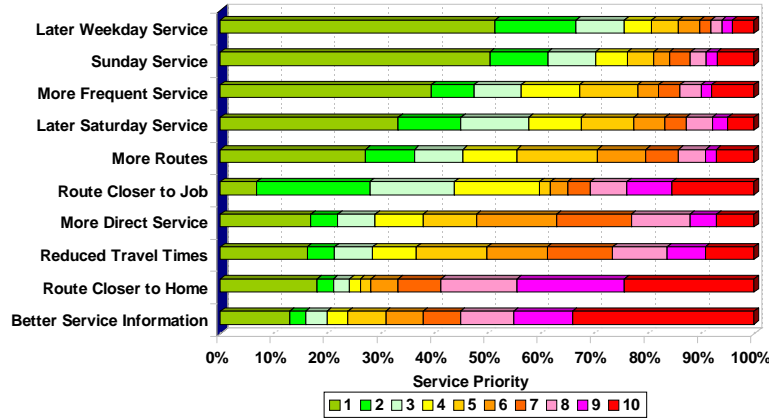


Figure vi
Riders' Rating of Potential Service Improvements
(1=very important)

- ❑ **Markets** – expand the market for transit services by providing services and programs directed at the needs of college students and increase the services directed at commuters
- ❑ **Facilities** – improve the provision of passenger amenities to support expanded transit operations
- ❑ **Governance** – identify alternative mechanisms for the funding and management of transit operations

Existing Services

The boarding and alighting counts conducted during the first few days in May, 2001 identified ridership levels and patterns on existing B-NPTS services. A number of route profiles were prepared to compare ridership and schedule performance of all B-NPTS routes individually and relative to each other.

The boarding and alighting data was also used to compare ridership between routes graphically, as depicted in *Figure viii* on the following page. The boarding and alighting data also allowed a number of observations to be made about the ridership patterns along individual routes and about the nature of ridership system-wide. Among the findings of this analysis were:

- ❑ The B-NPTS system is not dependent upon peak period commuters to form the bulk of its daily ridership.
- ❑ While many riders do use B-NPTS to commute, those commutes tend to take place during the entire day and not only during regular commute hours in the morning and evening periods.
- ❑ Ridership tends to be concentrated at a few heavily-used transit locations, with rider activity relatively infrequent elsewhere. Major transit destinations in the Bloomington-Normal area include:
 - Downtown Bloomington Transit Center
 - Downtown Normal Transit Center
 - Illinois State University main campus

- Tri-Towers residence area (ISU)
- Heartland College
- College Hills Mall
- Eastland Mall
- Wal-Mart
- State Farm Corporate Headquarters

Route	Total Weekday				Riders per		
	Trips	Hours	Miles	Riders	Trip	Hour	Mile
A Green	50	24.3	302.4	522	10.4	21.5	1.7
B Red	28	23.7	286.6	395	14.1	16.7	1.4
C Purple	28	23.3	301.8	256	9.1	11.0	0.8
D Pink	24	12.0	109.2	186	7.8	15.5	1.7
E Blue	24	11.8	163.7	160	6.7	13.6	1.0
F Brown	26	23.4	299.9	240	9.2	10.3	0.8
G Yellow	26	23.3	297.3	267	10.3	11.4	0.9
H Orange	26	24.2	294.6	220	8.5	9.1	0.7
Total	232	165.9	2,055.5	2,246	9.7	13.5	1.1

Figure vii
B-NPTS Rider Profiles

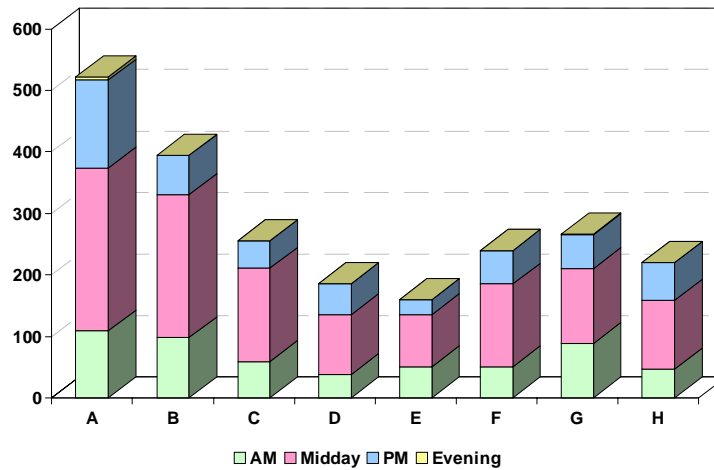


Figure viii
On-Board Ridership by Route by Time of Day

Recommended Actions

The following section describes the recommended actions, the estimation of operating and capital costs associated with the implementation of the recommendations and the development of a financial program identifying the annual revenues and expenses associated with the implementation and continued operation of the recommended services and facilities.

It is recommended to implement the routes, service span and service frequencies included in the Enhanced Alternative. Specific details of that recommendation are described below.

B-NPTS Regular Service Recommendations

The service recommendations are divided into four categories:

- ❑ **Span of Transit Services** – provide service to 9:30 PM on weekdays and Saturdays via extension of fixed route service and from 9:30 PM to 1 AM via a taxi scrip program, provide morning service one hour earlier on weekdays and Saturdays and provide hourly service on Sundays until 7 PM

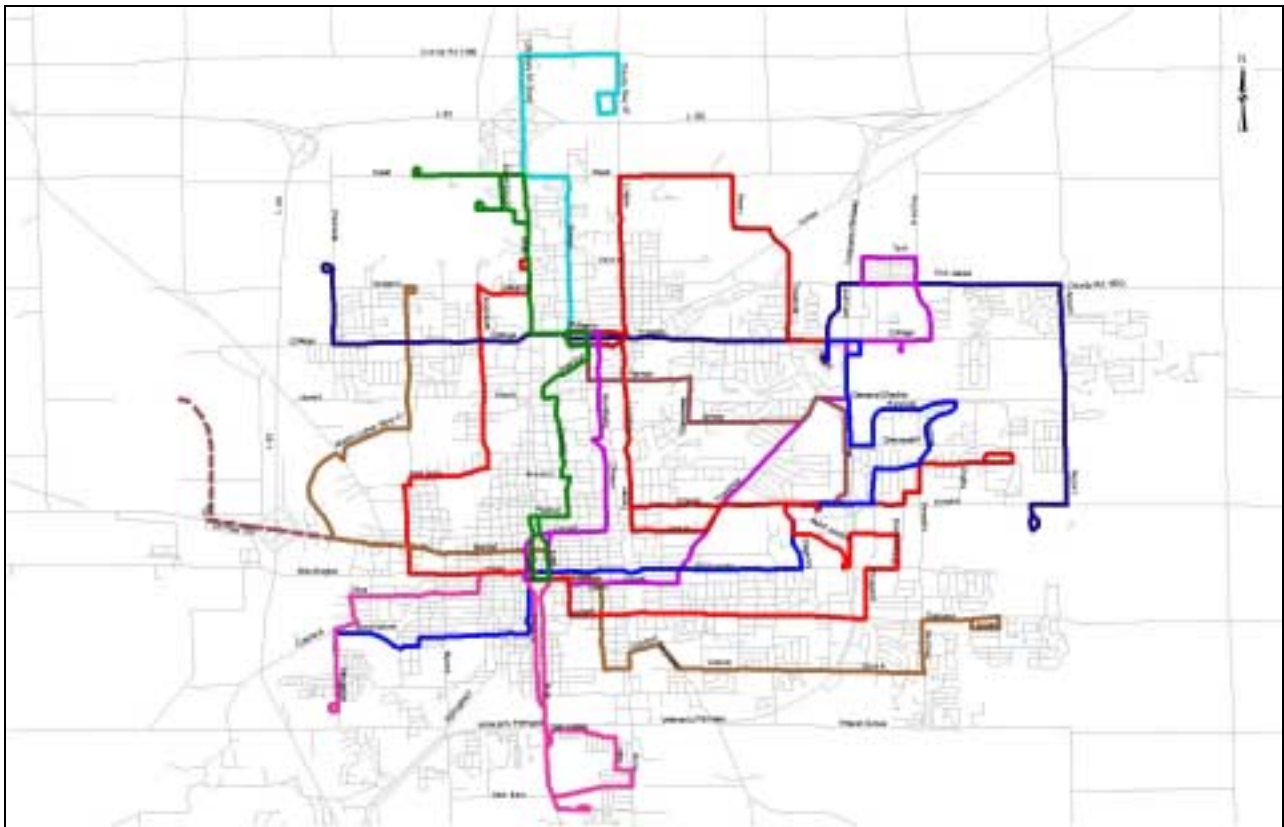


Figure ix
Recommended Fixed Route Services

- ❑ **Alignment Modifications to Existing Fixed Route Services** – redesign the existing route network to reduce duplication of service, improve travel times and make the system easier to understand (see Figure ix)
- ❑ **Increased Frequency of Service** – provide service every half hour on all routes weekdays and Saturdays between 6 AM and 7 PM
- ❑ **New Routes** – add two new routes to extend the existing service area.

The redesigned fixed route network is shown in ***Figure ix***.

University Student Services Recommendations

A number of recommendations are made to develop programs aimed predominantly at developing the university student market:

ISU-Funded Shuttles

Working with the administration at Illinois State University, two shuttle routes have been designed to help alleviate parking pressures on the University campus by improving transit circulation in and around the ISU campus:

- **Campus Shuttle** - designed to improve student circulation through the main ISU campus area. This route is designed in a figure-eight alignment, serving most of the activity areas on the main ISU campus and providing service every 10-12 minutes. **Figure x** depicts the alignment of this shuttle. This shuttle is designed to operate 7 days a week during the regular school year during periods when classes are in session. It is recommended to provide service from 7AM until 1 AM during this period. Currently, ISU and B-NPTS are developing plans to operate this service approximately 12 hours per day starting in September, 2003. It is recommended, when funding becomes available, to expand this shuttle to the full 18-hour design service span.



Figure x
Proposed ISU Campus Shuttle

- **Raab Road Shuttle** - designed to connect the main ISU campus with off-campus student housing and with peripheral campus parking adjacent to Raab Road. The alignment of this shuttle is similar to B-NPTS Route A, but is intended to operate during the same time periods as the campus shuttle, including late night and Sunday periods when B-NPTS Route A does not provide service. (see **Figure xi**.) As with the campus shuttle, plans are under way to provide service on this route beginning in September, 2003 for approximately 12 hours per day. Ultimately, it is recommended to expand this service period to operate until approximately 1 AM.

It is recommended that both shuttles be funded by Illinois State University and operated by B-NPTS under a contractual agreement with the University. In order to qualify for State of Illinois operations funding, these routes are designed to be open to the general public during all periods of their operation.

Early implementation of campus shuttle services will provide an expansion of the service base upon which state operations funding assistance is calculated. Since other systemwide improvements must be postponed until an expanded maintenance and operations facility is available, the growth in state funding appropriations needed to fund those improvements will be calculated on a larger base and reduce the local funding obligations to Bloomington and Normal in later years.

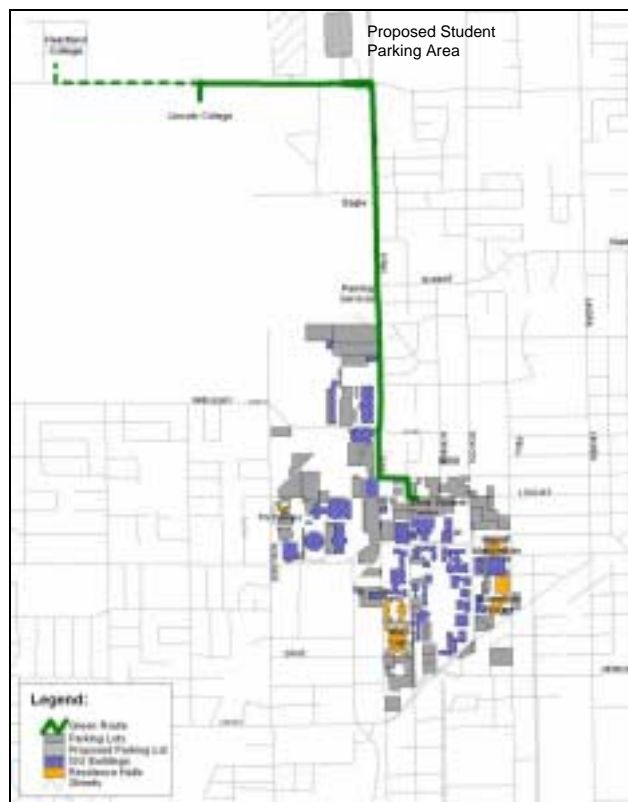


Figure xi
Proposed ISU Raab Road Shuttle

Recommended Nite Ride Modifications

The current Nite-Ride route, currently funded by ISU student services and operated during late evening hours when ISU is in session, is unnecessarily circuitous. While the original route alignment was designed to include a number of student housing areas, current riders are focusing their trip making to the areas between the ISU campus and the commercial areas in the Veterans Parkway area.

It is recommended to significantly modify the existing route alignment to provide much more direct service between the ISU campus and the commercial destinations which

predominate in current users priorities. Such modifications can also significantly reduce travel times for these trips and permit a significant increase in service frequency at little or no additional cost. The revised route alignment, designed to operate at 30-minute intervals during the Nite-Ride service period, is depicted in *Figure xii*.



Figure xii
Proposed Nite Ride Modified Alignment

Capital Equipment and Facility Recommendations

The following recommendations have been made to improve the infrastructure for the improved level of transit services:

- ❑ **Revenue vehicles** – replace the existing fleet by 2007, expand the system to 52 buses and 9 vans by 2010, and replace those new buses and vans as they reach the end of their depreciated life of 12 years for buses, 5 years for vans (see *Figure xiii*)
- ❑ **Maintenance Facility** – build and equip a new maintenance/operations facility to permit the storage and maintenance of an expanded fleet (60-70 vehicles) as well as an expanded administrative and supervisory staff. The financial plan shows a new expanded facility in place in 2007, at which point additional system expansion can take place. However, in order to meet this schedule, a decision to place a new maintenance facility in the FY 2004 TIP needs to be made by March, 2003. Any delay in this process will result in a postponement of all further system improvements requiring additional vehicles.
- ❑ **Passenger Shelters** – to be provided at all stops having more than 25 daily boardings. As a start toward the completion of that program, it is recommended that a minimum of two passenger shelters be added to the B-NPTS inventory each year until that criteria has been satisfied.
- ❑ **Bus Stop Signs** - official bus stops should be designated along each B-NPTS route at a spacing of approximately 9 stops per mile and identified with a bus stop sign of sufficient size and design as to be readily seen and noticed by vehicles and pedestrians passing along the bus route. Each sign should include, at a minimum, the B-NPTS name and/or logo, the telephone information number and the number of the route(s) serving each stop.

- **Transit Centers** - significantly upgrade of the two downtown transit centers at the time of the streamlining of the system route alignments. Larger, distinctively-designed shelters, with large signs bearing the B-NPTS name and logo, posted schedules for each route, waste receptacles, newspaper vending machines, public telephones and improved low-altitude lighting should be incorporated into each improved facility.

Year	Fixed Route		Demand Response	
	Expansion	Replacement	Expansion	Replacement
2003				5
2004	4	6		
2005		5		
2006		5		
2007	5	4		
2008	17		1	5
2009				
2010	6		1	
2011				1
2012			1	
2013				6
2014			1	
2015				1
2016		10		1
2017		5		1
2018		5		6
2019		9		1
2020		17		1
Totals	32	66	4	26

*Figure xiii
Vehicle Purchase and Replacement Schedule*

Policy Recommendations

In addition to the service and capital improvements described above, the following recommendations are also made for additional or expanded B-NPTS programs and policies:

- **Fares** – should be increased to \$0.75 in FY 2005 and to \$1.00 in FY 2008.
- **Monthly Pass** – a monthly pass should be offered, priced on the basis of 44 rides per month as shown as the “Cash Basis” in the table below and should be discounted 30% from the full cash basis (see *Figure xiv*).
- **Marketing** - B-NPTS should immediately create and fill the position of Director of Marketing to coordinate all marketing activities of the B-NPTS system, including :
 - working with local retailers on joint transit/retail promotions,
 - developing, printing and distributing passenger timetables and route maps,
 - arranging for multiple pass, schedule, timetable and map distribution outlets,

- developing promotional and advertising campaigns for B-NPTS services,
- acting as liaison with local media,
- marketing existing and expanded system services to the public and to work with area schools and employers to develop cooperative programs of marketing transit to students and employees.

Fare Class	Year	Cash Fare	Cash Basis	Pass Price
Full fare	2001/2002	\$0.50	\$22.00	\$15.00
	2006/2007	\$0.75	\$33.00	\$23.00
	2009/2010	\$1.00	\$44.00	\$31.00
Student, Senior, Disabled	2001/2002	\$0.25	\$11.00	\$8.00
	2006/2007	\$0.40	\$17.60	\$12.00
	2009/2010	\$0.50	\$22.00	\$15.00

*Figure xiv
Proposed B-NPTS Fare Schedules*

- **University Student Transit Services** – develop a joint program with local colleges and universities whereby a percentage of college student student fees may be directly dedicated to public transportation purposes. The program could include the direct subsidy of college-related services and the funding of a program providing universal access to transit routes and services for eligible students, faculty and staff . The universities and colleges would directly reimburse B-NPTS, via a portion of student activity fees, for the equivalent fare revenue for use of this program by their students. In consultation with Illinois State University, a recommendation for the development of a student universal access program at ISU has been included in the recommendations and financial program.

Service Implementation Schedule

In consultation with the B-NPTS Board of Trustees, a program of service prioritization and implementation was developed. As a result of the November, 2001 Board of Trustees Workshop, a number of recommended actions and a preliminary schedule of implementation was proposed by the Board for inclusion in the program of recommended actions.

This suggested implementation program has been refined based upon a number of constraints:

- The availability of sufficient revenue vehicles to operate recommended services
- The lag time for ordering and receiving additional revenue vehicles
- The limitations on state funding of operations based upon anticipated local sales tax collections and the ceiling on annual state funding growth
- The ability to manage significant growth in services in any one year
- The availability of adequate physical facilities to administer, maintain and store sufficient revenue vehicles to operate recommended services

Bloomington-Normal Community Transit Needs Analysis
Final Project Report
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Service Element	Added Revenue Hours	Added Estimated Riders	Added Peak Buses	Added Operating Cost	Cost/ Passenger
Existing Weekday Service Baseline	42,504	670,000	14	\$ 1,980,686	\$ 2.96
Existing Saturday Service Baseline	8,736	67,000		\$ 407,098	\$ 6.08
Existing Tripper Service Baseline	506	10,240	1	\$ 23,580	\$ 2.30
FY 2002 Total (existing service)	66,016	824,027	15	\$ 3,076,346	\$ 3.73
No changes					
FY 2003 Total	66,016	824,027	15	\$ 3,076,346	\$ 3.73
Add ISU Campus Shuttles 12 hours per day	12,240	367,200	4	\$ 570,384	\$ 1.55
FY 2004 Total	78,256	1,191,227	19	\$ 3,646,730	\$ 3.06
Add weekday evenings to existing network until 9:30PM	12,500	67,000		\$ 583,000	\$ 8.70
Add Saturday evenings to existing network until 9:30 PM	2,600	6,700		\$ 122,000	\$ 18.21
Add weekday nights to existing network, 9:30PM to midnight via taxi scrip program	0	3,800		\$ 24,000	\$ 6.32
Add Saturday nights to existing network, 9:30PM to midnight via taxi scrip program	0	1,200		\$ 8,000	\$ 6.67
FY 2005 Total	93,356	1,269,927	19	\$ 4,383,730	\$ 3.45
(Construct new operating base)					
Extend ISU Campus Shuttles to 18 hours per day	6,120	122,400		\$ 285,192	\$ 2.33
FY 2006 Total	99,476	1,392,327	19	\$ 4,668,922	\$ 3.35
Streamline weekday service	18,216	330,310	4	\$ 1,131,821	\$ 3.43
Streamline Saturday service	3,744	59,885		\$ 232,627	\$ 3.88
FY 2007 Total	121,436	1,782,522	23	\$ 6,033,370	\$ 3.38
Add 30-minute service during weekday peak hours	22,770	187,600	15	\$ 1,061,082	\$ 5.66
Add weekday early morning service (5AM)	4,554	46,900		\$ 212,216	\$ 4.52
Add Saturday early morning service (5 AM)	936	4,690		\$ 43,618	\$ 9.30
FY 2008 Total	149,696	2,021,712	38	\$ 7,350,286	\$ 3.64
Add 30-minute weekday service 9AM to 3 PM	25,806	469,000		\$ 1,202,560	\$ 2.56
Add 30-minute service Saturdays	9,984	46,900		\$ 465,254	\$ 9.92
FY 2009 Total	185,486	2,537,612	38	\$ 9,018,100	\$ 3.55
New and extended weekday routes	16,698	54,371	5	\$ 848,866	\$ 15.61
New and extended routes Saturday daytime	3,432	5,437		\$ 174,470	\$ 32.09
FY 2010 Total	205,616	2,597,420	43	\$ 10,041,436	\$ 3.87
Add weekday early morning service to new and extended routes	5,000	938		\$ 45,000	\$ 47.97
Add Saturday early morning service to new and extended routes	6,000	94		\$ 6,600	\$ 70.36
Add Sunday service to all routes	17,280	20,027		\$ 1,090,440	\$ 54.45
FY 2011 Total	233,896	2,618,479	43	\$ 11,183,476	\$ 4.27

Figure xv
Service Implementation Schedule

The implementation schedule for recommended services and a summary of services is shown in *Figure xv*. The actual new services for each year are indicated in boldface. Subtotals for each fiscal year describe the service in place as of June 31 of that year.

Financial Program

A number of funding assumptions have been made in the development of the financial program. Chief among these is the assumption of the Best Case funding scenario that the Federal Transit Administration will continue to fund 80% of all capital project expenditures in the plan, with the State of Illinois funding the remaining 20%. Under these assumptions, no local funds would be required for capital projects except for the 14 replacement buses currently programmed to be delivered in FY 2004 and 2005. In that case, the local obligation has been identified as \$334,365.

In the Worst Case funding scenario, it has been assumed that after 2005, federal formula funds and capital grants will no longer be available to assist in funding capital projects. Without federal funding, the State of Illinois would also decline to participate in such funding. All capital funding will therefore necessarily come exclusively from local sources. In both funding scenarios, it has been assumed that the State of Illinois will not contribute matching funds for capital projects that have not secured federal funding.

While federal and state programs are currently in place to fund capital projects, *those programs depend upon federal discretionary funds, for which local jurisdictions must apply through the capital grants process, on a project-by-project basis*. Since these grant applications must compete with similar program applications from other jurisdictions, *there is no guarantee that adequate funds will be made available to B-NPTS from Federal sources in every instance*.

The proposed financial program is built on the following elements:

Revenues

System revenues were forecast for each year in the duration of the Community Transportation Needs Assessment. These revenues can originate in a number of separate ways, including:

- ❑ **Fares** - based upon anticipated ridership and the most recent fare collections, calculating the average fare paid per rider. Assumptions were made for increases or decreases in the average fare paid over the life of the Needs Analysis Plan, including assumed full fare increases to \$0.75 in 2005 and to \$1.00 in 2008.
- ❑ **Non-operating revenues** – such as advertising, rental and lease income or interest income
- ❑ **Operating Subsidy Revenues** - available to defray the costs of providing public transportation services. These originate from a number of local, regional, state or federal funding programs. Sources of operating subsidies have been identified and included in the financial program along with estimates of revenues available to the system operations by year.
- ❑ **Capital Subsidy Revenues** - capital expenditures covered by federal, and local programs, which defray some of the costs of capital acquisitions. Since the entire cost of the capital asset is included in capital cost estimates, the entire revenue stream

associated with those assets is also included, both local funds as well as federal, state or local matching funds.

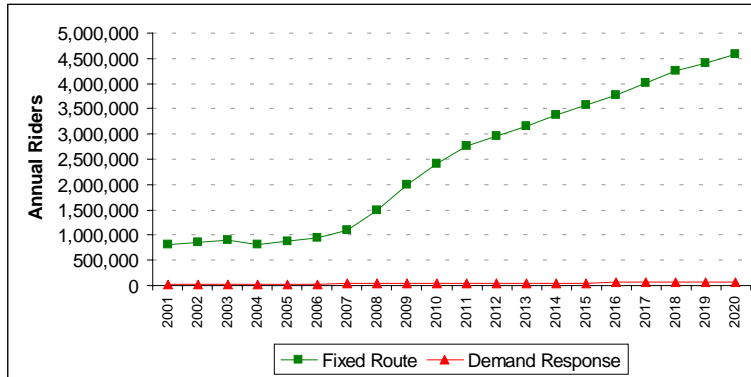


Figure xvi

Estimated B-NPTS Ridership, Recommended Plan, 2001-2020

Expenses

This section describes the costs of operating the recommended services and of the cost of providing and maintaining the capital facilities necessary to support those operations.

- **Operating Expenses** - anticipated expenses of system operation, by year, estimated for the duration of the B-NPTS Community Transportation Needs Assessment, including:
 - Fixed route service expenses
 - Non-fixed route service expenses
 - Other operating expenses - Because of the nature of operating cost allocation models, the estimates for service operating costs will include most ongoing system operations costs, including administration, maintenance and marketing costs. Only extraordinary future expenditures representing programs beyond simple expansions of existing ones will be separately delineated in the financial plan.
- **Capital Expenses** - the design, construction and/or purchase cost of all capital assets identified in the Community Transportation Needs Assessment. In general, costs were based upon estimated existing costs for purchase, design and/or construction, inflated by an assumed rate of inflation for each major cost category:
 - Revenue vehicles
 - Passenger facilities
 - Maintenance and operations facilities
 - Transit center improvements

Cash Flow Plan

A multi-year cash flow plan has been constructed using the inputs described above. In some cases, fundamental changes to some sources of funds may be made. Whenever appropriate, such changes have been clearly documented and included in the financial program. Estimated revenues and expenses are shown for the years 2002-2011 for the Best Case Funding Scenario in *Figure xvii* and for the Worst Case Funding Scenario in *Figure xiii*.

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Best Case Scenario	2003	2004	2005	2006	2007	2008	2009	2010	2011
Revenues									
Operating									
Fares	\$351,068	\$292,457	\$474,760	\$506,356	\$503,719	\$953,608	\$1,312,714	\$1,593,415	\$1,820,656
Fixed Route	\$335,346	\$276,214	\$448,388	\$478,893	\$471,792	\$909,176	\$1,266,317	\$1,544,945	\$1,769,998
Trippers	\$4,403	\$4,301	\$6,528	\$6,528	\$6,528	\$8,704	\$8,704	\$8,704	\$8,704
Paratransit	\$11,320	\$11,942	\$19,843	\$20,935	\$25,399	\$35,728	\$37,693	\$39,766	\$41,954
Subsidy	\$2,794,022	\$4,495,314	\$5,502,228	\$6,388,734	\$8,081,496	\$9,933,895	\$12,568,500	\$14,940,628	\$16,192,240
Federal	\$918,000	\$936,360	\$955,087	\$974,189	\$993,673	\$1,013,546	\$1,033,817	\$1,054,493	\$1,075,583
State	\$1,739,425	\$2,642,899	\$3,138,619	\$3,452,481	\$3,797,729	\$4,177,502	\$4,595,252	\$5,054,777	\$5,560,255
Bloomington Local Share	\$87,655	\$161,419	\$441,423	\$573,659	\$1,401,920	\$2,209,412	\$3,563,591	\$4,728,045	\$5,135,075
Normal Local Share	\$48,943	\$90,130	\$246,473	\$320,309	\$782,777	\$1,233,649	\$1,989,769	\$2,639,954	\$2,867,224
Campus Shuttles	\$0	\$605,120	\$623,274	\$962,958	\$991,847	\$1,021,602	\$1,052,251	\$1,062,773	\$1,073,401
Universal Access	\$0	\$59,386	\$97,351	\$105,139	\$113,550	\$278,184	\$333,821	\$400,585	\$480,702
Other	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500
Interest	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
Miscellaneous	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Capital									
Subsidy	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Federal Committed	\$240,000	\$2,000,000	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0
Federal Uncommitted	\$0	\$20,000	\$913,697	\$4,245,832	\$3,206,880	\$5,654,917	\$20,000	\$1,543,148	\$85,691
State	\$60,000	\$266,168	\$165,771	\$1,061,458	\$801,720	\$1,413,729	\$5,000	\$385,787	\$21,423
Bloomington Local Share	\$0	\$153,259	\$61,303	\$0	\$0	\$0	\$0	\$0	\$0
Normal Local Share	\$0	\$85,574	\$34,229	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating	\$3,162,591	\$4,805,271	\$5,994,488	\$6,912,590	\$8,602,715	\$10,905,003	\$13,898,715	\$16,551,543	\$18,030,396
Total Capital	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Total Revenues	\$3,462,591	\$7,330,271	\$7,969,488	\$12,219,881	\$12,611,315	\$17,973,650	\$13,923,715	\$18,480,478	\$18,137,510

Best Case Scenario	2003	2004	2005	2006	2007	2008	2009	2010	2011
Expenses									
Operating									
Fixed Route	\$2,653,761	\$4,281,177	\$5,454,671	\$6,356,579	\$7,870,171	\$10,150,483	\$13,121,559	\$15,595,332	\$17,064,623
Regular	\$2,459,418	\$3,344,501	\$4,369,311	\$4,869,524	\$6,379,886	\$8,379,619	\$10,989,889	\$13,172,051	\$14,465,570
Trippers	\$24,287	\$25,016	\$25,766	\$26,539	\$27,335	\$28,155	\$29,000	\$29,290	\$29,583
Nite Ride	\$170,057	\$100,359	\$103,370	\$106,471	\$0	\$0	\$0	\$0	\$0
Campus Shuttles	\$0	\$605,120	\$623,274	\$962,958	\$991,847	\$1,021,602	\$1,052,251	\$1,062,773	\$1,073,401
Campus Evening	\$0	\$100,359	\$103,370	\$106,471	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$105,822	\$229,580	\$284,616	\$471,103	\$721,106	\$1,050,419	\$1,331,219	\$1,496,070
Paratransit	\$508,829	\$524,094	\$539,817	\$556,011	\$732,544	\$754,520	\$777,156	\$956,210	\$965,773
ADA	\$494,006	\$508,826	\$524,091	\$539,813	\$695,010	\$715,860	\$737,336	\$893,651	\$902,588
Contingency	\$14,823	\$15,268	\$15,726	\$16,198	\$37,534	\$38,660	\$39,820	\$62,559	\$63,185
Overhead	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital									
Vehicles	\$300,000	\$2,500,000	\$1,250,000	\$1,344,995	\$2,433,600	\$5,218,667	\$0	\$1,903,935	\$82,114
Programmed Bus Fleet Replacement	\$0	\$1,500,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0
Programmed Bus Fleet Expansion	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Unprogrammed Bus Fleet Replacement	\$0	\$0	\$250,000	\$1,300,000	\$1,081,600	\$0	\$0	\$0	\$0
Unprogrammed Bus Fleet Expansion	\$0	\$0	\$0	\$0	\$1,352,000	\$4,780,672	\$0	\$1,824,979	\$0
Programmed Van Fleet Replacement	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Programmed Van Fleet Expansion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Unprogrammed Van Fleet Replacement	\$0	\$0	\$0	\$0	\$0	\$364,996	\$0	\$0	\$82,114
Unprogrammed Van Fleet Expansion	\$0	\$0	\$0	\$0	\$0	\$72,999	\$0	\$78,956	\$0
Service/Supervisory	\$0	\$0	\$0	\$44,995	\$0	\$0	\$0	\$0	\$0
Facilities	\$0	\$25,000	\$25,000	\$1,712,296	\$25,000	\$1,849,979	\$25,000	\$25,000	\$25,000
Park and Ride	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Transfer Centers	\$0	\$0	\$0	\$1,687,296	\$0	\$1,824,979	\$0	\$0	\$0
Shelters	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Bus Stop Signs	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$700,000	\$2,250,000	\$1,550,000	\$0	\$0	\$0	\$0
Buildings	\$0	\$0	\$700,000	\$1,750,000	\$1,050,000	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$0
Capital Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating	\$3,162,591	\$4,805,271	\$5,994,488	\$6,912,590	\$8,602,715	\$10,905,003	\$13,898,715	\$16,551,543	\$18,030,396
Total Capital (less Depreciation)	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Total Expenses	\$3,462,591	\$7,330,271	\$7,969,488	\$12,219,881	\$12,611,315	\$17,973,650	\$13,923,715	\$18,480,478	\$18,137,510

Figure xvii
Proposed Cash Flow Program
Best Case Funding Scenario, 2002-2011

Bloomington-Normal Community Transit Needs Analysis Final Project Report Executive Summary

Worst Case Scenario	2003	2004	2005	2006	2007	2008	2009	2010	2011
Revenues									
Operating									
Fares	\$351,068	\$292,457	\$474,760	\$506,356	\$503,719	\$953,608	\$1,312,714	\$1,593,415	\$1,820,656
Fixed Route	\$335,346	\$276,214	\$448,388	\$478,893	\$471,792	\$909,176	\$1,266,317	\$1,544,945	\$1,769,998
Trippers	\$4,403	\$4,301	\$6,528	\$6,528	\$6,528	\$8,704	\$8,704	\$8,704	\$8,704
Paratransit	\$11,320	\$11,942	\$19,843	\$20,935	\$25,399	\$35,728	\$37,693	\$39,766	\$41,954
Subsidy	\$2,794,022	\$4,495,314	\$5,502,228	\$6,388,734	\$8,081,496	\$9,933,895	\$12,568,500	\$14,940,628	\$16,192,240
Federal	\$918,000	\$936,360	\$955,087	\$974,189	\$993,673	\$1,013,546	\$1,033,817	\$1,054,493	\$1,075,583
State	\$1,739,425	\$2,642,899	\$2,751,869	\$2,834,425	\$2,919,457	\$3,007,041	\$3,097,252	\$3,190,170	\$3,285,875
Bloomington Local Share	\$87,655	\$161,419	\$689,601	\$970,266	\$1,965,507	\$2,960,497	\$4,524,858	\$5,924,564	\$6,594,545
Normal Local Share	\$48,943	\$90,130	\$385,046	\$541,758	\$1,097,462	\$1,653,025	\$2,526,502	\$3,308,043	\$3,682,134
Campus Shuttles	\$0	\$605,120	\$623,274	\$962,958	\$991,847	\$1,021,602	\$1,052,251	\$1,062,773	\$1,073,401
Universal Access	\$0	\$59,386	\$97,351	\$105,139	\$113,550	\$278,184	\$333,821	\$400,585	\$480,702
Other	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500
Interest	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
Miscellaneous	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Capital									
Subsidy	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Federal Committed	\$240,000	\$2,000,000	\$800,000						
Federal Uncommitted		\$20,000	\$913,697						
State	\$60,000	\$266,168	\$165,771						
Bloomington Local Share	\$0	\$153,259	\$61,303	\$3,405,688	\$2,572,319	\$4,535,950	\$16,043	\$1,237,798	\$68,735
Normal Local Share	\$0	\$85,574	\$34,229	\$1,901,602	\$1,436,281	\$2,532,696	\$8,958	\$691,138	\$38,379
Other									
Total Operating	\$3,162,591	\$4,805,271	\$5,994,488	\$6,912,590	\$8,602,715	\$10,905,003	\$13,898,715	\$16,551,543	\$18,030,396
Total Capital	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Total Revenues	\$3,462,591	\$7,330,271	\$7,969,488	\$12,219,881	\$12,611,315	\$17,973,650	\$13,923,715	\$18,480,478	\$18,137,510
Expenses									
Operating									
Fixed Route	\$2,653,761	\$4,281,177	\$5,454,671	\$6,356,579	\$7,870,171	\$10,150,483	\$13,121,559	\$15,595,332	\$17,064,623
Regular	\$2,459,418	\$3,344,501	\$4,369,311	\$4,869,524	\$6,379,886	\$8,379,619	\$10,989,889	\$13,172,051	\$14,465,570
Trippers	\$24,287	\$25,016	\$25,766	\$26,539	\$27,335	\$28,155	\$29,000	\$29,290	\$29,583
Nite Ride	\$170,057	\$100,359	\$103,370	\$106,471	\$0	\$0	\$0	\$0	\$0
Campus Shuttles		\$605,120	\$623,274	\$962,958	\$991,847	\$1,021,602	\$1,052,251	\$1,062,773	\$1,073,401
Campus Evening		\$100,359	\$103,370	\$106,471					
Contingency		\$105,822	\$229,580	\$284,616	\$471,103	\$721,106	\$1,050,419	\$1,331,219	\$1,496,070
Paratransit	\$508,829	\$524,094	\$539,817	\$556,011	\$732,544	\$754,520	\$777,156	\$956,210	\$965,773
ADA	\$494,006	\$508,826	\$524,091	\$539,813	\$695,010	\$715,860	\$737,336	\$893,651	\$902,588
Contingency	\$14,823	\$15,268	\$15,726	\$16,198	\$37,534	\$38,660	\$39,820	\$62,559	\$63,185
Overhead	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital									
Vehicles	\$300,000	\$2,500,000	\$1,250,000	\$1,344,995	\$2,433,600	\$5,218,667	\$0	\$1,903,935	\$82,114
Programmed Bus Fleet Replacement		\$1,500,000	\$1,000,000						
Programmed Bus Fleet Expansion		\$1,000,000							
Unprogrammed Bus Fleet Replacement			\$250,000	\$1,300,000	\$1,081,600				
Unprogrammed Bus Fleet Expansion					\$1,352,000	\$4,780,672		\$1,824,979	
Programmed Van Fleet Replacement	\$300,000								
Programmed Van Fleet Expansion									
Unprogrammed Van Fleet Replacement						\$364,996			\$82,114
Unprogrammed Van Fleet Expansion						\$72,999		\$78,956	
Service/Supervisory				\$44,995					
Facilities	\$0	\$25,000	\$25,000	\$1,712,296	\$25,000	\$1,849,979	\$25,000	\$25,000	\$25,000
Park and Ride									
Transfer Centers				\$1,687,296		\$1,824,979			
Shelters		\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Bus Stop Signs		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Other									
Other	\$0	\$0	\$700,000	\$2,250,000	\$1,550,000	\$0	\$0	\$0	\$0
Buildings			\$700,000	\$1,750,000	\$1,050,000				
Equipment				\$500,000	\$500,000				
Capital Reserve									
Depreciation									
Total Operating	\$3,162,591	\$4,805,271	\$5,994,488	\$6,912,590	\$8,602,715	\$10,905,003	\$13,898,715	\$16,551,543	\$18,030,396
Total Capital (less Depreciation)	\$300,000	\$2,525,000	\$1,975,000	\$5,307,291	\$4,008,600	\$7,068,646	\$25,000	\$1,928,935	\$107,114
Total Expenses	\$3,462,591	\$7,330,271	\$7,969,488	\$12,219,881	\$12,611,315	\$17,973,650	\$13,923,715	\$18,480,478	\$18,137,510

Figure xviii
Proposed Cash Flow Program
Worst Case Funding Scenario, 2002-2011

Program Follow-Up

It is not intended that the program described in the Community Transit Needs Analysis be a static product. Environmental conditions and public perceptions can be expected to change over time and those changes need to be continually monitored in order to assure the maintenance of a viable public transportation system. It is recommended that the following activities be conducted on a regular basis.

Market Research

In order to ensure that enhanced system operations continue to meet expectations set for them, it is recommended that B-NPTS follow a consistent program of rider counts and periodic rider and public surveys. Fare box counts of ridership, by route, should be undertaken at least quarterly. In addition, an annual audit of student universal access participation is necessary to the determination of ISU contributions to operating revenues.

Additionally, a complete boarding and alighting survey, such as the one undertaken for this project should be completed at least once every three years. This will permit B-NPTS and its stakeholders to periodically evaluate system services and utilization, ensuring that riders and potential riders are being served in the most cost effective and cost efficient manner and are provided services that meet their changing transportation needs.

To this end, periodic surveys of riders and non-riders should be conducted at least once every five years to validate assumptions made on the basis of ridership and other environmental data. An on-board survey can easily be conducted at the same time as boarding and alighting counts. A random sample telephone survey of households every five or six years is also recommended to monitor the public perception of public transportation operations and to monitor the level of support in the community at large.

In addition, it is recommended that Illinois State University periodically survey its students to determine whether services are meeting their needs and to help identify meaningful improvements.

Program Evaluation

B-NPTS needs to maintain a consistent schedule for re-evaluation of the service enhancement program. The service and financial programs are based upon an estimate of future population and employment growth and upon assumptions concerning the nature of Federal, State and local funding programs. All of these can be expected to change over time and the changes should be reflected in a periodic updating of the program.

It is recommended that minor updates be conducted every five years and a major revisiting of the service, capital and financial program be undertaken at least every ten years.

