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Financial Planning for the Green Bay Transit System

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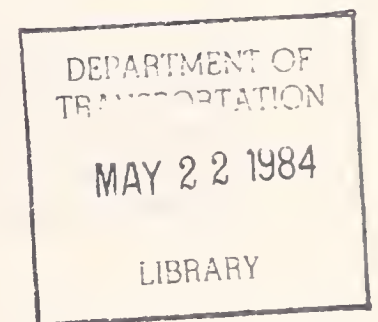


83-15

Financial Planning for the Green Bay Transit System

Final Report
January 1983

Prepared by
Brown County Planning Commission
100 North Jefferson Street
Green Bay, Wisconsin 54301



Prepared for
Office of Planning Assistance
Urban Mass Transportation Administration
U.S. Department of Transportation
Washington, D.C. 20590

In Cooperation with
Technology Sharing Program
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The contents of this report reflect the views of the Brown County Planning Commission, which is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the U. S. Department of Transportation. This report does not constitute a standard, specification, or regulation.

FOREWORD

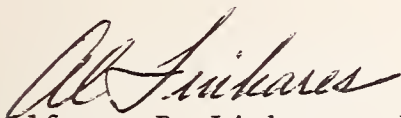
Long-range financial planning has become very important to many transit systems throughout the country. To assist these systems, UMTA has been funding, through the Section 8 Technical Studies Program, local studies to develop system financial plans which will provide the necessary funding for transit service in the coming years.

This document summarizes the development of a five-year financial plan for the Green Bay Transit System in Green Bay, Wisconsin. We believe that this report is an excellent example of financial planning in small transit systems and will be interesting to these systems.

Additional copies of this report are available from the National Technical Information Service (NTIS), Springfield, Virginia, 22161 at cost.



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CHAPTER I
INTRODUCTION

A. STUDY PURPOSE AND OBJECTIVES

The main purpose of this study is to develop a Green Bay Transit System financial plan for the 5 year period of 1982-1986, which will offset the anticipated federal operating assistance cutbacks and maintain an adequate level of service as recommended in the 1982-1986 Transit Development Study (TDP).

A nationwide survey of small transit systems similar to the Green Bay operation was carried out to determine the level of service and revenue sources of other systems, and to investigate potential new revenue sources currently not being used in Green Bay.

The study reviews past expense and revenue trends, develops and evaluates a number of fare increase alternatives, and analyzes potential new revenue sources in terms of charter bus operations, group bus tours, Packer game service, and school bus service. Existing revenue generators such as employee shuttle bus service and on-bus advertising are also addressed.

The overall study objectives are as follows:

1. Reduce operational deficits and the dependence on federal transit aid through increased user fees, new revenue sources such as charter and tour bus service, and improved operational efficiency.
2. Provide the financial resources to implement and maintain the service improvements recommended in the 1982-1986 Green Bay Transit Development Program.
3. Minimize local property tax outlays in offsetting federal transit aid reductions.
4. Provide continued full employment for transit system personnel through the implementation of new services such as charter and tour buses, under which user fees cover the full operational cost, and no public subsidy is required.

B. 1982-1986 TRANSIT DEVELOPMENT PROGRAM RECOMMENDATIONS

A detailed study of the Green Bay Transit System operations, including bus route performance and service hour productivity, and service potential for future residential and commercial/industrial growth areas was carried out by the Brown County Planning Commission during 1981. The end result was a transit service and facilities improvement plan for the Green Bay Transit System over the 5 year period of 1982-1986. Recommended system

changes were designed to achieve an optimum level of transit service based on likely reductions in federal and local budget restraints. See the final report entitled, Transit Development Program 1982-1986, Green Bay Urbanized Area, Brown County Planning Commission, December, 1981 for details on the study recommendations. The T.D.P. report is currently being used by the Green Bay Transit Commission as a guide in making bus route and service changes plus carrying out capital improvements. A summary of the T.D.P. service and capital improvement recommendations is as follows:

1. SERVICE CHANGES

<u>Recommendation</u>	<u>Status</u>
Eliminate a poor performance Ashwaubenon/De Pere Route	Implemented January 2, 1982
Initiate a new Libal/De Pere Route through an unserved high ridership potential area of Allouez	Implemented January 2, 1982
Initiate a new Green Bay/Ashwaubenon Route from Green Bay along Broadway Street to Bay Park Square Shopping Center	Implemented January 2, 1982
Reduce evening and Saturday headway times from 30 minutes to 60 minutes	Implemented January 2, 1982
Revise the Edison Route and initiate new service in southeastern Green Bay between Main Street and Finger Road	Implemented August 23, 1982
Revise the N.W.T.I. route to provide service to Packerland Industrial Park	To be considered for implementation in 1984, after opening of new Post Office facility

2. CAPITAL IMPROVEMENTS

<u>Recommendation</u>	<u>Status</u>
Construction of downtown Adams Street transitway bus staging and passenger transfer area	Under construction, to be completed in December, 1982
Bus garage expansion with automatic bus washer, new fuel station, and additional bus parking area	Programmed for 1983, UMTA Sec.3/Sec.5 Grant filed in September, 1982
Bus rehabilitation	6-1967 models programmed for 1985

C. NATIONWIDE SURVEY OF SMALL TRANSIT SYSTEMS

A survey of transit systems, similar in size to Green Bay, was carried out to investigate new revenue resources, compare operations and fare levels in other areas, and to find out how other systems are planning to cope with the proposed federal funding cutbacks.

A total of 88 survey forms were mailed to areas with an urbanized area population of less than 200,000. Of these 88 forms, 50 were returned from the following regions and states:

<u>REGION</u>	<u>STATE</u>	<u># OF SURVEY FORMS RETURNED</u>
East	Pennsylvania	3
	Connecticut	1
	New Hampshire	1
	West Virginia-	1
	Kentuck-Ohio (Tri-	
	State Transit)	
	Maine	1
	New York	<u>1</u>
	TOTAL	8

REGION	STATE	# OF SURVEY FORMS RETURNED
South	Florida	3
	Georgia	3
	North Carolina	2
	Arkansas	1
	Mississippi	1
	Louisiana	1
	South Carolina	<u>1</u>
	TOTAL	12
West/Southwest	California	3
	Texas	2
	Idaho	1
	Alaska	<u>1</u>
	TOTAL	7
Midwest (including WI)	Michigan	4
	Illinois	3
	Iowa	2
	Nebraska	2
	Kansas	1
	Missouri	1
	Minnesota	1
	Wisconsin	<u>9</u>
	TOTAL	23
GRAND TOTAL		50

A copy of the survey form can be seen in Appendix B. Survey results are summarized in the following section and throughout the study report in specific chapters addressing fares, charter service, etc.

A direct question was asked on how their transit system anticipated offsetting the proposed federal transit funding cutbacks, and the response was as follows:

TABLE 1
ACTIONS TO OFFSET FEDERAL OPERATING ASSISTANCE
CUTBACKS FOR SURVEYED SYSTEMS

PER CENT OF TOTAL SYSTEMS	ACTIONS
73%	Fare increases
63%	Service reductions or consolidations
63%	Increase ridership through marketing
35%	Other methods of increasing revenue: Lobby to get state funding for transit; lobby legislature for local option tax; lobby for legislation enacting transit authority tax, state gas tax, or local sales tax for transit; pass area wide mileage; increase advertising revenue; increase proportion of local funds from member jurisdictions; provide maintenance services for all county or city non-transit vehicles.
31%	Initiate or increase special charter, contract school, and tour services.

Some of the methods for changing the tax structure of the systems are not allowed under existing Wisconsin state law. A millage tax cannot be levied for a specific program such as a transit operation. There is no state statute for the creation of a metro transit authority and the only taxes allowed, in addition to an overall property tax levy, is a wheel tax and a room tax. The wheel tax would be a local motor vehicle registration fee charged to local residents in addition to the state registration fees. The City of Green Bay currently charges a motel/hotel room tax and uses the funds to support the Green Bay Area Visitor and Convention Bureau. In consideration of the few taxing options available; and the fact that urban communities of Allouez, Ashwaubenon, and De Pere all pay the City of Green Bay for the full local cost of the service within their communities; revisions to the local tax revenue funding structure were not considered in this study. However, fare increases, marketing efforts, and new service such as charter and tours are addressed in the study.

In comparing the level of transit service provided by the Green Bay Transit System to the other small systems across the nation, Green Bay is quite similar to the majority of the systems. See Appendix B for the survey results on the level of service provided and system efficiency (passengers/miles).

D. FEDERAL OPERATING ASSISTANCE PROGRAM

1. HISTORY AND BACKGROUND

Section 5 of the Urban Mass Transportation Act of 1964 was enacted by Congress in November, 1974. It made available for the first time federal funds for transit operating costs. This federal operating assistance program provides funding up to 50 per cent of an urban area's transit system deficit. The deficit is basically total eligible operating expenses minus farebox revenue. Major objectives of the funding program were to allow transit systems to improve service levels, increase ridership, and stabilize fare increases. Since 1975, annual appropriations of Section 5 funds have been apportioned to urbanized areas under a formula based 50 per cent on population and 50 per cent on population density. For areas of 200,000 or more population, the annual federal funding allocation is made directly to the urbanized area. In urban areas less than 200,000 population, the funding allocation is apportioned directly to the Governor of each state, who in turn determines the amounts to be made available to each urbanized area within the state. In Wisconsin, the Governor has delegated this federal funding distribution responsibility to the Secretary of Transportation.

The Surface Transportation Act of 1978 made a number of changes to the UMTA Section 5 funding program. The major change was to divide the Section 5 Program into four categories, or "tiers". Originally, Section 5 funds had been allocated to urbanized areas in a single lump sum for capital projects on an 80/20 matching basis or for operating assistance on a 50/50 matching basis. This allocation method was continued for the first category of Section 5 funding, known as the "basic" or Tier I funding. The distribution of Tier I funds among urbanized areas continues to be on the population and population density formula created in 1974. The second category of Section 5 funds, Tier II, is also for capital or operating projects and are to be distributed by the population/population density formula. The basic difference between the first and second tier distributions is, however, that 85 per cent of the funds earmarked for the second tier are to be distributed to urbanized areas of more than 750,000 population and the remaining 15 per cent to urbanized areas less than 750,000 population.

The third category of Section 5 funds is earmarked only for capital or operating projects for commuter railroad or fixed guideway transit services. Finally, Tier IV is a "bus project" category under which funds can be only used for bus related capital grant projects on an 80/20 matching basis.

2. FEDERAL FUNDING LEVELS AND PROPOSED LEGISLATION

The City of Green Bay received its first Section 5 operating funds for calendar 1975 operations in the amount of \$98,088, and subsequently, has received annual federal grants totalling \$3,181,000 over the eight year period of 1975 to 1982. See Chapter II for details on the annual federal funding amounts. Results of our national survey of small transit systems, in terms of federal funding as a per cent of total operating expense, can be seen on Table 2. In 1982, the average federal operating funds received by small transit systems funded 29 per cent of their total operating expense. Green Bay is above the national average with 33 per cent of expenses being funded with federal funds. Green Bay and other small transit systems have become greatly dependent on federal operating assistance.

The existing federal transit funding authorization bill, which includes the Section 5 program, expired on September 30, 1982. In April, 1982, a new transit authorizing bill was proposed by the Reagan Administration for period of 1983 to 1986. Under the Reagan Administration proposal, operating assistance for Fiscal Year 1983 is to be cut back 33 per cent from the 1982 appropriation level, with an additional 33 per cent cutback in 1984, and complete elimination by 1985. A new Section 9 block grant program for the purchase of buses, garage construction, and major spare bus parts is also included. Block grant funds for urbanized areas under 200,000 population would be allocated directly to the state and then apportioned to individual urban areas, similar to the existing Section 5 distribution procedure.

There is considerable bipartisan congressional support for the continuation of federal operating assistance. Numerous House and Senate committee appropriation bills have been drafted and debated over the past six months. Major actions taken before the 97th Congress recessed in October were as follows:

- a. The House passed its version of the U. S. Department of Transportation appropriation bill on September 21.
- b. The Senate Appropriations Committee reported its version on September 16, but it has not yet been acted upon by the full Senate.
- c. A "Continuing Resolution" passed by both the Senate and the House provides temporary funding for the period of October 1, 1982 through December 17, 1982.

The 97th Congress returned to work on November 29 for a "lame-

TABLE 2
1982 FEDERAL TRANSIT FUNDING LEVELS OF SURVEYED SYSTEMS

REGION (U.S.)	TOTAL # OF RESPONSES	FEDERAL FUNDING AS PER CENT OF TOTAL OPERATING EXPENSE							TOTAL %	FEDERAL FUNDING AVERAGE
		0%	1-9%	10-19%	20-29%	30-39%	40-49%	50-59%		
EAST	6	0	0	17%	0	66%	17%	0	100%	33%
SOUTH	10	20%	0	0	20%	40%	20%	0	100%	28%
WEST/SOUTHWEST	5	0	0	20%	40%	40%	0	0	100%	25%
MIDWEST (Includes WI)	20	0	5%	15%	25%	35%	20%	0	100%	31%
TOTAL	41	5%	2%	12%	22%	42%	17%	0	100%	29%
Wisconsin (Includes Green Bay)	8	0	0	12.5%	25%	37.5%	25%	0	100%	31%
Green Bay	1									33%

X

duck" session. Among those measures to be taken up is a new appropriation bill for the U. S. Department of Transportation which includes all of the federal transit aid programs. If the House and Senate can reach agreement on an appropriation's bill, there is still no guarantee that President Reagan will sign it. A strong possibility exists that the lame-duck session of Congress will pass another continuing resolution and, therefore, allow the 98th Congress to finalize a FY 1983 federal budget along with a new appropriation's bill for the U. S. Department of Transportation. Needless to say, an estimate of the 1983 to 1986 federal funding levels is very difficult to determine at this time. In considering the recent actions taken by the House and the Senate Appropriations' Committee, plus the administration budget proposals, there appears to be two basic funding options. The transit funding being proposed by Congress could possibly provide Section 5 operating assistance (Tier I and II) for 1983 through 1986 at an annual level slightly below the 1982 appropriation. This is probably the best we could hope for. On the other extreme, the Reagan Administration proposal could be enacted which would completely phase out Section 5 operating assistance by 1985.

These two federal funding options were used for the purposes of this study to develop the alternative 1982-1986 Green Bay Transit System financing plans contained in Chapter IX. Federal funding levels for Green Bay, under each option, can be seen on the following Table 3:

TABLE 3
1983-1986 UMTA SECTION 5 FUNDING ESTIMATES
FOR GREEN BAY

YEAR	SECTION 5 (TIER I & II ALLOCATIONS)	
	CONGRESS PROPOSAL	ADMINISTRATION PROPOSAL
1983	650,000	435,000
1984	650,000	221,000
1985	650,000	0
1986	650,000	0

The existing Urban Mass Transportation Administration 5 operating assistance program allows unexpended federal funding allocations to be carried over into future grants over a period of three years. Green Bay Transit has a total of \$330,692 of carryover funds as of September 30, 1982, for use in future operating grants. See Appendix A for details on the carryover federal funds.

E. STATE OPERATING ASSISTANCE

The State of Wisconsin has an excellent operating assistance program. Results of the national survey of small transit systems showed that 1983 state transit funding in Wisconsin averaged 30 per cent of the total operating expenses, which is twice the national average of 15 per cent. See Table 4 for details on the survey results.

The state operating assistance program was developed in 1973, prior to any federal operating assistance legislation. From 1974 through 1982, Green Bay will have received \$2,440,500 in state transit aid from the Wisconsin Department of Transportation. This financing has helped Green Bay and other Wisconsin transit systems to improve and expand transit service and maintain reasonable fare levels. In contrast, our survey of the southern states showed a surprising 90 per cent of the systems with no state aid and fare levels of 60 cents to 80 cents very common.

The state funding formula has been revised over the years from two-thirds of the operating deficit, to 72 per cent of the non-federally funded deficit with supplemental payments for increased ridership (Offner Formula), and finally 30 per cent of the operating expense.

The existing formula of 30 per cent operating expense, recently enacted for calendar year 1982, provides an excellent incentive for local systems to increase revenues and lower operating deficits. In previous years, increased revenues from fares and on-bus advertising, reduced the deficit and the corresponding state funding level. State funding is authorized under a two year bi-annual budget process. Existing funding covers the period of July, 1981 through March, 1983. A five cents state gas tax increase, along with a motor vehicle registration fee increase from \$18.00 to \$25.00, has definitely helped the state transportation fund from which the operating assistance is drawn. Hopefully, the Governor and State Legislators will continue the transit operating assistance program at the 30 per cent of operating expense level. For the purpose of estimating the future state funding levels, it was assumed that the 30 per cent formula would remain over the period of 1983-1986.

TABLE 4
1982 STATE TRANSIT FUNDING LEVELS OF SURVEYED SYSTEMS

REGION (U.S.)	TOTAL # OF RESPONSES	STATE FUNDING AS PER CENT OF TOTAL OPERATING EXPENSE							STATE FUNDING AVERAGE	
		0%	1-9%	10-19%	20-29%	30-39%	40-49%	50-59%		TOTAL %
EAST	6	17%	33%	17%	33%	0	0	0	100%	12%
SOUTH	10	90%	0	10%	0	0	0	0	100%	1%
WEST/SOUTHWEST	5	40%	0	0	20%	0	40%	0	100%	22%
MIDWEST	20	10%	10%	5%	10%	55%	10%	0	100%	26%
TOTAL	41	34%	10%	7%	12%	27%	10%	0	100%	15%
Wisconsin (Includes Green Bay)	8	0	0	0	25%	75%	0	0	100%	30%
Green Bay	1					X			100%	30%

CHAPTER II

TRANSIT SYSTEM EXPENSE AND REVENUE TRENDS

A. TRANSIT SYSTEM OPERATING EXPENSES

1. 1974-1981 OPERATING EXPENSES

With 80 per cent funding from an Urban Mass Transportation Administration Section 3 capital grant, the city purchased the financially depressed bus system from the Wisconsin Public Service Corporation on December 31, 1973. The bus garage was rented from Wisconsin Public Service until 1975 when the city purchased the building. Table 5 outlines the Green Bay Transit System operational expenses over the 8 year period of 1974 to 1981.

Labor cost includes the salary and fringes for bus drivers, garage mechanics, and office personnel. As a percentage of total operating expense, labor cost has remained somewhat constant, ranging from a low of 69 per cent in 1974 to a high of 74 per cent in 1978.

Contract services include the management fee for Wisconsin Michigan Coaches, Inc., cost of a financial auditor, and city labor negotiator. An initial management contract was signed in 1974, and subsequently renewed 3 times covering the periods of 1975-1977, 1978-1980, and 1981-1983. Labor cost of bus drivers, mechanics, and office personnel increased 380 per cent over the 8 year period of 1974 to 1981. In comparison, contract services increased 154 per cent over the same time period. Materials and supplies grew by 317 per cent, and insurance cost rose by 545 per cent. The largest percentage increase of all the operational cost elements was bus fuel and oil, amounting to a very high 926 per cent increase. The expense per mile was kept at or below \$1.00 from 1974 through 1978; then inflation, gas prices, and expanded evening service pushed the expense per mile up 68 cents over the following three years, to \$1.65 in 1981. With additional bus routes, expanded service hours, and a larger bus fleet, it was necessary to increase the number of bus drivers, garage mechanics, and office personnel to operate the system.

Following is a comparison of 1974 and 1981 operations and

TABLE 5
1974-1981 GREEN BAY TRANSIT OPERATING EXPENSES

OPERATING EXPENSE	CALENDAR YEAR							1974-1981 CHANGE	
	1974	1975	1976	1977	1978	1979	1980		1981
Labor (Salary & Fringes)	\$281,577 69%	\$406,032 74%	\$531,705 74%	\$601,062 72%	\$757,331 74%	\$900,665 68%	\$1,093,689 68%	\$1,350,630 70%	+\$1,069,053 (+380%)
Contract Services (Management, Audit, etc.)	\$26,400 6%	\$33,395 6%	\$37,356 5%	\$39,370 5%	\$63,753 6%	\$56,399 4%	\$59,524 4%	\$67,177 3%	+\$40,777 (+154%)
Materials, Supplies, Advertising, and misc. cost	\$25,453 6%	\$40,009 7%	\$42,753 6%	\$52,114 6%	\$53,505 5%	\$114,123 9%	\$126,770 8%	\$106,133 6%	+\$80,680 (+317%)
Insurance (Vehicle and Building)	\$11,182 3%	\$17,390 3%	\$28,237 4%	\$54,329 6%	\$44,690 4%	\$76,063 6%	\$62,693 4%	\$72,183 4%	+\$61,001 (+545%)
Utilities and Garage Rent	\$36,048 ¹ 9%	\$11,380 2%	\$22,785 3%	\$23,013 3%	\$30,752 3%	\$37,265 3%	\$43,721 3%	\$45,922 2%	+\$9,874 (+27%)
Bus Fuel and Oil	\$28,340 7%	\$42,931 8%	\$56,049 8%	\$68,326 8%	\$86,356 8%	\$133,333 10%	\$213,149 13%	\$290,828 15%	+\$262,488 (+926%)
TOTAL	\$408,886 100%	\$551,137 100%	\$718,885 100%	\$838,214 100%	\$1,036,387 100%	\$1,317,847 100%	\$1,599,546 100%	\$1,932,873 100%	+\$1,523,987 (+373%)
Revenue Miles	478,884	623,423	821,590	836,905	1,063,000	1,072,000	1,152,000	1,167,900	+689,016 (+144%)
Expense/Mile	\$0.85	\$0.88	\$0.87	\$1.00	\$0.97	\$1.23	\$1.39	\$1.65	+80.85 (+94%)

¹ Garage rented from Wisconsin Public Service Corporation for \$36,000 per year.

personnel:

	1974	1981	PERCENT CHANGE
# of Buses	12	26	+117%
Bus Routes	10	14	+ 40%
Daily Schedule Hours	124	297	+140%
Daily Route Miles	1637	4058	+148%
Bus Drivers	20 ¹	50	+145%
Garage Personnel	5	11	+100%
Office Personnel	2	5	+150%
Management	1 1/2	1 1/2	0%

2. OPERATIONAL EFFICIENCY

In analyzing the expense trends over the period of 1974 to 1981, Green Bay Transit has done its best to provide good transit service in the most cost efficient manner. See Table 6 for comparisons with other small transit systems in Wisconsin. Green Bay has consistency ranked near the top in holding down the expense per mile and increasing the operating ratio (expenses divided by revenues).

An operational performance audit of the Green Bay Transit System was conducted in December, 1980 by ATE Management and Service Co., Inc. under contract with the Wisconsin Department of Transportation. A performance audit report was published in September, 1981 with a number of recommendations on management planning, improved revenue security, purchasing procedures, employee performance checks, driver training, improved storeroom security, revised staff responsibilities, plus the hiring of a street supervisor and a maintenance/storeroom clerk. A large majority of the recommendations have been implemented outside of hiring additional staff.

An overview of the Green Bay Transit System operation by ATE was as follows:

"The management of the Green Bay Transit System is to be commended for doing an outstanding job in every functional area audited. The deficiencies noted, and corresponding recommendations are primarily the result of limited staff and resources. Vehicle and building maintenance is well above average; schedules are built as efficiently as possible, given labor

¹Includes full and part time drivers.

TABLE 6
COMPARATIVE OPERATIONAL EFFICIENCY WITH
OTHER WISCONSIN TRANSIT SYSTEMS

CALENDAR YEAR 1980

WISCONSIN TRANSIT OPERATION	EXPENSE PER MILE	EXPENSE PER PASSENGER	OPERATING RATIO (EXPENSE/REVENUE)
Appleton	\$1.61	\$.91	33
Eau Claire	1.39	.86	41
Fond du Lac	1.69	1.21	21
Janesville	1.83	1.40	17
Kenosha	1.59	1.18	22
LaCrosse	1.54	.86	35
Manitowoc	1.31	.91	26
Oshkosh	1.77	.89	31
Racine	1.50	.70	35
Sheboygan	1.52	.77	30
Wausau	1.41	.59	39
<hr/>			
Green Bay	1.37	.82	35
Average	1.54	.92	30
Green Bay Rank	2nd	4th	Tied for 3rd

contract restrictions; and daily transit operations are conducted effectively. In all cases, management personnel are knowledgeable, hard working and dedicated."

Based on the ATE performance audit and comparisons with other small transit operations in Wisconsin, it can be concluded that the Green Bay Transit System is operating in the most efficient manner and no additional recommendations can be made for performance improvements. Wisconsin Michigan Coaches, Inc. is providing excellent professional management service in maintaining a very efficient operation.

B. TRANSIT SYSTEM OPERATIONAL FUNDING SOURCES

1. 1974-1981 OPERATING REVENUES AND PUBLIC ASSISTANCE

In 1974, the farebox revenue covered 50 per cent of the costs, with no federal funds, and state funding amounting to 25 per cent of the costs. The overall study goal is to again achieve a 50 per cent farebox level by 1986. Urban Mass Transportation Administration Section 5 federal funds were first made available in 1975, with increased funding levels through 1981. State funding has also increased from \$101,473 in 1974 to \$409,497 in 1981, but remained somewhat constant as a per cent of total costs.

On-bus advertising revenue has grown substantially from \$3,539 in 1974 up to \$17,310 in 1981. Employer contract revenue for shuttle bus service between parking lots and the St. Vincent/Bellin Hospital area became a new revenue source in 1980 and 1981.

Other non-farebox revenue includes the Wisconsin Public Service Corporation repayment of the bus system purchase price in the amount of \$253,150 over the five year period of 1974 through 1978. See Table 7 for details on the 1974-1981 GREEN BAY TRANSIT OPERATIONAL FUNDING SOURCES.

2. FUNDING COMPARISONS WITH OTHER SYSTEMS

The national survey of small transit systems included questions on sources of operational funding. Results were compiled by region as shown on Table 8. Federal funding averaged 29 per cent of the total cost, with state funding averaging 15 per cent, local 24 per cent, and farebox 32 per cent. Wisconsin is slightly above average in federal funding, but state funding levels are twice the national average resulting in lower than average local funding, Green Bay receives above average federal funds, high state

TABLE 7
1974-1981 GREEN BAY TRANSIT OPERATIONAL FUNDING SOURCES

	CALENDAR YEAR							1974-1981 CHANGE	
	1974	1975	1976	1977	1978	1979	1980		1981
OPERATING REVENUES									
Farebox Revenue	\$202,516 50%	\$226,218 41%	\$276,338 38%	\$289,740 35%	\$354,995 34%	\$407,730 31%	\$503,521 31%	\$526,063 27%	+\$323,547
On Bus Advertising	\$3,539 1%	\$2,585 1%	\$3,954 1%	\$2,890 1%	\$6,269 1%	\$8,240 1%	\$15,689 1%	\$17,310 1%	+\$13,771
Employer Contract Service (Hospitals)	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	\$7,694 0%	\$26,059 1%	+\$26,059
Other Non-farebox Revenue (Fare Subsidy, Rent, etc.)	\$50,030 12%	\$57,890 10%	\$60,260 8%	\$69,460 8%	\$66,129 6%	\$21,815 2%	\$22,423 2%	\$57,226 3%	+\$7,196
SUBTOTAL	\$256,085 63%	\$286,693 52%	\$340,552 47%	\$362,090 44%	\$427,393 41%	\$437,785 34%	\$549,327 34%	\$626,658 32%	+\$370,573 +145%
PUBLIC ASSISTANCE									
Local Municipality Funds	\$51,328 12%	\$47,340 8%	\$65,025 9%	\$112,743 13%	\$88,763 9%	\$156,396 11%	\$130,423 8%	\$126,849 7%	+\$75,521
State Funds (Operating and Demo)	\$101,473 25%	\$119,016 22%	\$128,263 18%	\$93,884 11%	\$190,806 18%	\$287,678 22%	\$393,641 25%	\$510,970 26%	+\$409,497
Federal Funds (UMTA Sec. 5)	0 0%	\$98,088 18%	\$185,045 26%	\$269,497 32%	\$329,425 32%	\$435,989 33%	\$526,337 33%	\$668,396 35%	+\$668,396
SUBTOTAL	\$152,801 37%	\$264,444 48%	\$378,333 53%	\$476,124 56%	\$608,994 59%	\$880,063 66%	\$1,050,401 66%	\$1,306,215 68%	+\$1,153,414 +755%
TOTAL FUNDING (OPERATING EXPENSE)	\$408,886 100%	\$551,137 100%	\$718,885 100%	\$838,214 100%	\$1,036,387 100%	\$1,317,848 100%	\$1,599,728 100%	\$1,932,873 100%	+\$1,523,987 +373%

TABLE 8
1982 OPERATIONAL FUNDING SOURCES OF SURVEYED SYSTEMS

REGION	TOTAL RESPONSES	FEDERAL (UMTA)	STATE	LOCAL	FAREBOX	TOTAL PERCENT
East	6	33%	12%	19%	36%	100%
South	10	28%	1%	35%	36%	100%
West/Southwest	5	25%	22%	20%	33%	100%
Midwest (Includes Wisconsin)	20	31%	26%	19%	24%	100%
TOTAL	41	-	-	-	-	-
AVERAGE	-	29%	15%	24%	32%	100%
Wisconsin (Includes Green Bay)	8	31%	30%	13%	26%	100%
Green Bay	1	33%	30%	3%	34%	100%

funding, extremely low local funding and an above average farebox revenue. Local municipality funding in the Green Bay urban area will amount to only three per cent of total revenue in 1982. Low municipality funding is a direct result of an excellent state transit operating assistance program which funds 30 per cent of operating expenses, and full federal funding still available in 1982 as a result of carryover funds from previous years. The Federal Section 5 funding has covered 50 per cent of the eligible operating deficit (expenses minus farebox revenue), since 1975. This federal funding source could be totally eliminated by calendar 1985 as explained previously in Chapter I. The following chapters will investigate financing alternatives to replace the potential loss of federal funds and maintain a good level of transit service.

CHAPTER III

FAREBOX REVENUE INCREASE ANALYSIS

A. EXISTING AND PAST TRANSIT FARES

As shown on Table 9, the Green Bay Transit fares remained constant over the 12 year period of 1968 through 1979. During this same time period, there were substantial service improvements and bus route expansions implemented. When the City of Green Bay took over the operation of the private bus system in 1973, ridership was at an all time low of 647,000 passengers, and revenue miles amounted to only 435,000 per year. By 1979, ridership rose to 1,800,000 and annual revenue miles climbed to 1,100,000. With increasing federal and state operating assistance, there was no need to raise fare levels to offset rising operational expenses.

In 1980, the zone fare system was eliminated and standard fares were increased by five cents. In 1982, the standard fares were again increased by five cents. Therefore, the only across-the-board increase on a flat fare system occurred in January, 1982. At the same time, a large number of service changes, such as adding the Libal Street route, expanding the Ashwaubenon route, revising the Green Bay-Ashwaubenon route, and reducing evening and Saturday frequency were also implemented. The five cents fare increase, combined with service improvements, has resulted in an estimated 11 per cent ridership increase for calendar 1982, from 2,232,700 riders in 1981 to 2,469,800 in 1982.

The Green Bay Transit system has no past data to estimate the impact future fare increases will have on ridership levels. We must rely on the experiences of other transit systems and the numerous research studies conducted on "fare elasticities".

B. RIDERSHIP DEMAND FACTORS

The demand for public transit is influenced by numerous factors, including the level of fares and service provided. In an attempt to estimate the relative response of transit ridership to changes in transit fares and service levels, the concept of elasticity is used. Elasticity is widely used by economists to indicate the proportional change in the sale of a product resulting from a change in its price. The elasticity of transit demand is defined as the ratio of the percentage change in transit ridership to the percentage change in fares or service. In Green Bay, the service level will be held constant over the period of 1982 through 1986. Therefore, the only factors affecting ridership levels will be fare increases, marketing efforts, plus auto travel and parking cost. When service and fare changes occur at the same time, it is very difficult to determine their individual impacts on ridership changes.

TABLE 9
GREEN BAY TRANSIT FARES
FROM THE PERIOD OF 1968 TO 1982 (15 YEARS)

TRANSIT FARES	1968 TO 1979	FARE CHANGE	1980	FARE CHANGE	1981	FARE CHANGE	1982	OVERALL 1968-1982 CHANGE (ZONE 1)
1. ADULT FARES								
Cash	Zone 1-30¢/Zone 2-45¢/ Zone 3-60¢	Zones Dropped + 5¢ on Zone 1 Rate	35¢	No Fare Increase Began Sale of Monthly Passes	35¢	+5¢	40¢	+10¢
Ticket	Zone 1-25¢/Zone 2-37.5¢/ Zone 3-50¢	Zone 1 Rate	30¢ (5 for \$1.50)		30¢ (5 for \$1.50)	+5¢	35¢ (5 for \$1.75)	+10¢
Monthly Pass	Not Available		Not Available		\$12.00	+\$3.00	\$15.00	-
2. STUDENT FARES								
Cash	Zone 1-20¢/Zone 2-30¢ Zone 3-40¢	Zones Dropped +5¢ on Zone 1 Rate	25¢	No Fare Increase Began Sale of Monthly Pass	25¢	+5¢	30¢	+10¢
Ticket	Zone 1-15¢/Zone 2-22.5¢/ Zone 3-30¢	Zone 1 Rate	20¢ (5 for \$1.00)		20¢ (5 for \$1.00)	+5¢	25¢ (5 for \$1.25)	+10¢
Monthly Pass	Not Available		Not Available		\$8.00	+\$3.00	\$11.00	-
3. ELDERLY AND HANDICAPPED¹								
Cash	1968 to 1975 1976 to 1979 30¢/45¢/60¢ 10¢/15¢/20¢ (Adult Fare)	Zones Dropped +5¢ on Zone 1 Rate	15¢	No Fare Increase Began Sale of Monthly Passes	15¢	+5¢	20¢	-10¢
Ticket	25¢/37.5¢/ 50¢	Zone 1 Rate	15¢ (5 for 75¢)		15¢ (5 for 75¢)	+5¢	20¢ (5 for \$1.00)	-5¢
Monthly Pass	Not Available		Not Available		\$6.00	+\$3.00	\$9.00	-

¹1968 to 1975 Elderly and Handicap paid standard Adult Fares, reduced half fare rate was implemented in 1976

Over the years, there have been numerous research studies and resulting formulas for predicting the impact of fare changes on transit ridership. The Simpson and Curtin Formula has been the most widely accepted industry standard for estimating the percentage decrease in ridership as a function of the percentage increase in fares. The basic rule of thumb is that transit ridership will decrease 0.3 per cent for every one per cent increase in fares. But several studies have shown that there is a much wider variation in transit fare elasticities based on the size of city, population characteristics, income levels, proportion of work trips, extent of ridership peaks, and decentralization of area employment.

An excellent study report on fare and service elasticities entitled, Patronage Impacts of Changes in Transit Fares and Services, was published in September, 1980 by Ecosometrics, Inc., under contract with the Urban Mass Transportation Administration. This study pulled together various research studies and survey data on transit demand elasticities and developed the following findings:

1. Transit demand is inelastic to fare changes: transit fare elasticities range in value from -0.04 to -0.87 with a mean of -0.28 +/- 0.16. These results from 67 case studies are very close to the Simpson and Curtin fare elasticity of -0.30 per cent. In all cases, fare increases reduced the transit system's operating deficit.
2. Small cities have larger fare elasticities than large cities: Fare elasticities vary by city size and are appreciably larger in small and medium size cities than in large cities. Bus passengers in large cities where traffic congestion and parking are problems will more easily accept (inelastic) higher fares.
3. Of all trips purposes, the work trip is the most inelastic:

Work trips	-0.06 to -0.14
School trips	-0.19 to -0.44
Shopping trips	-0.17 to -0.29

With increased fares more people making shopping trips will find alternative transportation, whereby work trips will be more stable.

4. Higher income groups are only slightly more fare elastic than low income groups:

Less than \$5000	-0.09 to -0.29
\$5000 to \$14,999	-0.14 to -0.36
More than \$15,000	-0.15 to -0.38

5. Fare Elasticity decreases with age:

1-16 years	-0.31 to -0.32
17-24 years	-0.24 to -0.30
25-44 years	-0.10 to -0.28
45-64 years	-0.12 to -0.18
More than 65 years	-0.12 to -0.16

The elderly are more transit dependent, whereby children will either ride less or have their parents drive them.

6. Short-distance trips are more elastic than long-distance trips:

Trips less than one mile	-0.55
Trips between one and three miles	-0.29

Since short-distance trips are nearly twice as responsive to fare changes as long-distance trips, fares could be reduced for short-distance trips and increased for longer trips. Overall ridership could be increased with no change in revenue.

One of the major recommendations of the Ecosometrics study is that transit systems should take advantage of the varying fare elasticities by length of trip, time of day, and type of route in establishing a multi-level fare policy designed to increase transit revenues with minimum ridership loss. Higher fares during peak periods and for longer trips would be two ways of eliminating a flat fare system and minimizing ridership loss. The study also stressed that a policy of rapid and large fare increases will result in ridership loss and increased operating cost per passenger, stimulating further fare increases as well as reductions in transit service.

This is basically the same financial cycle that the Wisconsin Public Service Corporation was caught in during its operation of the private Green Bay Bus System during the 1960's and up to the city take-over in 1973. As ridership dropped, service was cut and fares were increased. From this perspective, it is extremely important that existing service levels are not reduced

over the upcoming five year period of potential fares' increases and federal funding cutbacks.

C. GREEN BAY TRANSIT FARE ELASTICITY

As stated previously, Green Bay Transit has to carefully examine the ridership impact of fare increases. There are uncertainties in the long-run effects of any fare increase plan implemented to offset the elimination of federal operating assistance.

A fare elasticity value was estimated for the Green Bay system based on the mean value of -0.28 (from experimental estimation method on 67 case studies) and adjusted according to local ridership and transit trip characteristics. Adjustment factors, obtained from the previously cited Ecosometrics study, were used to estimate the local elasticity impact based on trip length, trip purpose, passenger age, passenger type (choice or captive), and route type. Ridership characteristics and trip data were obtained from an on-bus survey conducted in 1981 as part of the 1982-1986 Transit Development Program for the Green Bay Transit System (See Table 10 for details on the elasticity calculations). The short term local fare elasticity factor was estimated to be -0.25. For every one per cent increase in transit fares, ridership will drop .25 per cent. An example would be if the standard adult fare in Green Bay were increased from 40 cents to 50 cents (a 25 per cent increase), the ridership loss would be as follows:

25 per cent x (-.25) = 6.25 per cent ridership drop
1982 estimated ridership = 2,310,000
2,310,000 x 6.25 per cent = 144,375 ridership loss in 1983

Many public transit analysts have argued that the greater the fare increase and the "higher the fare level", the greater the decline in transit riding. Other researchers claim that the average fare before the fare increase does not have any effect on the size of the fare elasticity. For the purposes of estimating the full impact of future ridership loss as a result of Green Bay Transit fare increases, the following elasticity values were used for rising fare levels over the five year period.

<u>Fare Range</u>	<u>Elasticity</u>
40¢ to 50¢	-.25
50¢ to 60¢	-.30
60¢ to 70¢	-.35

TABLE 10
 GREEN BAY TRANSIT FARE ELASTICITY CALCULATIONS
 ADJUSTMENT FACTORS FOR ESTIMATING DISAGGREGATE
 FARE ELASTICITIES

CHARACTERISTIC	1.OVERALL ADJUST- MENT FACTOR	2.LOCAL PERCENTAGE	1x2	LOCAL ADJUST- MENT FACTOR
Trip Length	Short Distance = 1.43 (Less than 1 mile)	20%	.29	<u>.82</u>
	Long Distance = .66 (Greater than 1 mile)	80%	.53	
Trip Purpose	Shopping/Other = 1.29	49%	.63	<u>.92</u>
	School = 1.00	26%	.26	
	Work = .50	25%	.03	
Riders Age	1-16 = 1.37	23%	.32	<u>.95</u>
	17-24 = 1.15	23%	.26	
	25-44 = .70	43%	.30	
	45-65 = .63	7%	.04	
	65+ = .59	5%	.03	
Rider Type	Choice = 1.31	56%	.73	<u>1.01</u>
	Captive = .63	44%	.28	
Route Type	Intra-C.B.D. = 1.39	0%	.00	<u>.75</u>
	Intra Suburban = 1.32	10%	.13	
	Non-C.B.D. Oriented = 1.16	20%	.23	
	C.B.D. Oriented = .56	70%	.39	

Mean Value of $-0.28 + 0.16$ from Quasi-Experimental Estimation method based on 67 case studies
 Average Local Adjustment Factor = $.82 + .92 + 1.01 + .75/5 = .89$
 Local Fare Elasticity = $.89 \times (-0.28) = -0.25$

D. ALTERNATIVE FARE POLICIES

1. FARE STRUCTURE

The only feasible fare structure alternatives would be to maintain the flat fare system for the urban area or establish a zone system based on distance. A zone fare system was used from the beginning of Wisconsin Public Service Corporation bus service in 1937 up to 1980. The zones were set by municipality boundaries and not strictly by distance. In 1979, a ride from Green Bay (Zone 1) to De Pere (Zone 3) cost 60 cents, where a longer ride within Green Bay from N.W.T.I. to U.W.G.B. was only 30 cents with a free transfer downtown. The municipality zones were difficult to administer, from the bus driver collecting the different zone fares, to the office personnel calculating zone revenue for credit to local municipalities. Considering the area size, plus geographic and social characteristics, the flat fare is by far the easiest to administer, and it treats all urban area municipalities equally.

A distance charge could be implemented by eliminating free transfers and charging a small fee. In our survey of small transit operators, only seven out of 50 systems charge for transfers, with a common fee of 10 cents. In 1981, there were 434,900 transfers made out of 2,232,700 bus passengers. Approximately 10 per cent of the bus passengers had to transfer to reach their destination. At 10 cents per transfer, the additional income would only amount to \$43,490. Riders who use monthly passes do not use transfers and would not be charged a fee.

2. FARE INCREASE ALTERNATIVES

A series of three transit fare increase alternatives were developed for the five year period of 1982-1986.

Alternative number one raises the existing 40 cents adult use fare by 10 cents over the five year period; alternative number two raises fares a total of 20 cents up to the 60 cents level; and alternative number three has the highest total increase of 30 cents, from 40 cents in 1982 to 70 cents in 1986. All three alternatives reach a 50 cents level by 1984, and begin charging a 10 cents transfer fee in 1985. See Tables 11 to 13 for details on the three fare increase alternatives.

TABLE 11
ALTERNATIVE #1 TRANSIT FARE INCREASE

	1982	FARE CHANGE	1983	FARE CHANGE	1984	FARE CHANGE	1985	FARE CHANGE	1986
1. ADULT FARES									
Cash	40¢	+5¢	45¢	+5¢	50¢	0	50¢	0	50¢
Ticket	35¢ (5 for \$1.75)	+5¢	40¢ (5 for \$2.00)	+5¢	45¢ (5 for \$2.25)	0	45¢ (5 for \$2.25)	0	45¢ (5 for \$2.25)
Monthly Pass	\$15.00	+\$2.00	\$17.00	+\$2.00	\$19.00	0	\$19.00	0	\$19.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
2. STUDENT FARES									
Cash	30¢	+5¢	35¢	+5¢	40¢	0	40¢	0	40¢
Ticket	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	+5¢	35¢ (5 for \$1.75)	0	35¢ (5 for \$1.75)	0	35¢ (5 for \$1.75)
Monthly Pass	\$11.00	+\$2.00	\$13.00	+\$2.00	\$15.00	0	\$15.00	0	\$15.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
3. ELDERLY AND HANDICAPPED									
Cash	20¢	+5¢	25¢	+5¢	30¢	0	30¢	0	30¢
Ticket	20¢ (5 for \$1.00)	+5¢	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	0	30¢ (5 for \$1.50)	0	30¢ (5 for \$1.50)
Monthly Pass	\$9.00	+\$2.00	\$11.00	+\$2.00	\$13.00	0	\$13.00	0	\$13.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢

TABLE 12
ALTERNATIVE #2 TRANSIT FARE INCREASE

	1982	FARE CHANGE	1983	FARE CHANGE	1984	FARE CHANGE	1985	FARE CHANGE	1986
1. ADULT FARES									
Cash	40¢	+5¢	45¢	+5¢	50¢	+5¢	55¢	+5¢	60¢
Ticket	35¢ (5 for \$1.75)	+5¢	40¢ (5 for \$2.00)	+5¢	45¢ (5 for \$2.25)	+5¢	50¢ (5 for \$2.50)	0	50¢ (5 for \$2.50)
Monthly Pass	\$15.00	+\$2.00	\$17.00	+\$2.00	\$19.00	+\$2.00	\$21.00	0	\$21.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
2. STUDENT FARES									
Cash	30¢	+5¢	35¢	+5¢	40¢	+5¢	45¢	+5¢	50¢
Ticket	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	+5¢	35¢ (5 for \$1.75)	+5¢	40¢ (5 for \$2.00)	0	40¢ (5 for \$2.00)
Monthly Pass	\$11.00	+\$2.00	\$13.00	+\$2.00	\$15.00	+\$2.00	\$17.00	0	\$17.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
3. ELDERLY AND HANDICAPPED									
Cash	20¢	+5¢	25¢	+5¢	30¢	+5¢	35¢	+5¢	40¢
Ticket	20¢ (5 for \$1.00)	+5¢	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	+5¢	35¢ (5 for \$1.75)	0	35¢ (5 for \$1.75)
Monthly Pass	\$9.00	+\$2.00	\$11.00	+\$2.00	\$13.00	+\$2.00	\$15.00	0	\$15.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢

TABLE 13
ALTERNATIVE #3 TRANSIT FARE INCREASE

	1982	FARE CHANGE	1983	FARE CHANGE	1984	FARE CHANGE	1985	FARE CHANGE	1986
1. ADULT FARES									
Cash	40¢	+5¢	45¢	+5¢	50¢	+10¢	60¢	+10¢	70¢
Ticket	35¢ (5 for \$1.75)	+5¢	40¢ (5 for \$2.00)	+5¢	45¢ (5 for \$2.25)	+10¢	55¢ (5 for \$2.75)	+10¢	65¢ (5 for \$3.25)
Monthly Pass	\$15.00	+\$2.00	\$17.00	+\$2.00	\$19.00	+\$4.00	\$23.00	\$4.00	\$27.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
2. STUDENT FARES									
Cash	30¢	+5¢	35¢	+5¢	40¢	+10¢	50¢	+10¢	60¢
Ticket	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	+5¢	35¢ (5 for \$1.75)	+10¢	45¢ (5 for \$2.25)	+10¢	55¢ (5 for \$2.75)
Monthly Pass	\$11.00	+\$2.00	\$13.00	+\$2.00	\$15.00	+\$4.00	\$19.00	+\$4.00	\$23.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢
3. ELDERLY AND HANDICAPPED									
Cash	20¢	+5¢	25¢	+5¢	30¢	+10¢	40¢	+10¢	50¢
Ticket	20¢ (5 for \$1.00)	+5¢	25¢ (5 for \$1.25)	+5¢	30¢ (5 for \$1.50)	+10¢	40¢ (5 for \$2.00)	+10¢	50¢ (5 for \$2.25)
Monthly Pass	\$9.00	+\$2.00	\$11.00	+\$2.00	\$13.00	+\$4.00	\$17.00	+\$4.00	\$21.00
Transfer Charge	0	0	0	0	0	+10¢	10¢	0	10¢

E. FARE INCREASE ALTERNATIVE EVALUATION

1. REVENUE AND RIDERSHIP IMPACT

Fare elasticities of $-.25$ to $-.35$ were used to estimate the ridership loss due to the fare increase. With constant service levels over the five year period, no additional passengers can be expected from new routes or expansions. Minimum annual ridership increases in the range of two to three per cent were included in the estimates due to increased use of new routes, such as the East Town Loop, Libal Street, and Green Bay/Ashwaubenon; student growth at U.W.G.B. and N.W.T.I. ; opening of the new downtown state office building in 1983 with 400 employees; convenience of the Adams Street transitway; and general marketing efforts.

All three alternatives have the same fare increases, ridership, and revenue for 1982, 1983, and 1984. Alternative number one remains somewhat stable during 1985 and 1986, whereby alternatives number two and three continue fare increases and ridership loss. Alternative number one has a ridership gain of 10 per cent over the five year period with farebox revenue increasing 40 per cent. Alternative number two has a ridership gain of only one per cent and a farebox revenue gain of 69 per cent. Alternative number three has a ridership loss of five per cent and the highest farebox revenue gain of 98 per cent. See Table 14 for the revenue and ridership impact calculations of each alternative.

Operational expenses were also estimated for the five year period assuming constant revenue miles and annual inflation factors of eight per cent. A per cent farebox calculation was made for each alternative by dividing the estimated annual farebox revenue by the total operating expenses. Alternative number one increases its per cent farebox during the 1982/1983/1984 fare increase years and then falls back when the fares stabilize and the operating expenses continue to increase during 1985 and 1986. Under alternative number two, the per cent farebox increases from 26 per cent in 1982 up to 31 per cent in 1986, and alternative number three reaches the highest per cent farebox with 36 per cent in 1986.

The 1982-1986 Transit Development Program for the Green Bay Transit System contains the following objective: "The percentage that fares comprise of total revenues should not decline and should be staged over the five years so that by 1986, fares will comprise 50 per cent of total operating costs."

Alternative number three best approaches the 50 per cent goal, with alternative number two close behind.

TABLE 14
ALTERNATIVE FARE REVENUE AND RIDERSHIP IMPACT

FARE ALTERNATIVES	1982	1983	1984	1985	1986
<u>ALTERNATIVE #1</u>					
Fare Increase & Adult Fare	+5¢, 40¢	+5¢, 45¢	+5¢, 50¢	0, 50¢	0, 50¢
# of Passengers	2,470,000	2,608,800	2,635,000	2,661,400	2,715,000
Average Fare	22¢	25¢	28¢	28¢	28¢
Farebox Revenue	\$543,500	\$639,100	\$737,800	\$745,200	\$760,200
Per cent Farebox	26%	27%	29%	27%	26%
<u>ALTERNATIVE #2</u>					
Fare Increase & Adult Fare	+5¢, 40¢	+5¢, 45¢	+5¢, 50¢	+5¢, 55¢	+5¢, 60¢
# of Passengers	2,470,000	2,608,800	2,635,000	2,556,000	2,486,000
Average Fare	22¢	25¢	28¢	31¢ (10¢ Transfer)	35¢ (10¢ Transfer)
Farebox Revenue	\$543,500	\$639,100	\$737,800	\$843,500	\$920,000
Per cent Farebox	26%	27%	29%	31%	31%
<u>ALTERNATIVE #3</u>					
Fare Increase & Adult Fare	+5¢, 40¢	+5¢, 45¢	+5¢, 50¢	+10¢, 60¢	+10¢, 70¢
# of Passengers	2,470,000	2,608,800	2,635,000	2,476,900	2,342,000
Average Fare	22¢	25¢	28¢	36¢ (10¢ Transfer)	44¢ (10¢ Transfer)
Farebox Revenue	\$543,500	\$639,100	\$737,800	\$941,000	\$1,077,000
Per cent Farebox	26%	27%	29%	34%	36%

2. FARE LEVELS IN OTHER AREAS

In our survey of small transit operators across the nation, a total of 50 systems provided information on their 1981 and 1982 fare levels. A summary of the survey results are as follows:

- a. A total of 35 out of 50 systems had fare increases in 1982 ranging from five cents to 30 cents.

1981-1982 Fare Increase Increments

<u>INCREMENT</u>	<u># OF SYSTEMS</u>	<u>PER CENT</u>
+5¢	7	20%
+10¢	18	51%
+15¢	6	17%
+20¢	2	6%
+25¢	0	0%
+30¢	<u>2</u>	<u>6%</u>
Total	35	100%

Eighty per cent of the systems implementing fare increases had increments of 10 cents or more.

- b. The 1982 fare levels for the 50 systems showed that 74 per cent of the systems have adult fares equal to or greater than 50 cents. Only 24 per cent of the systems have a 1982 adult cash fare less than or equal to the Green Bay Transit fare of 40 cents.

1982 Transit System Fares

	<u>Adult Fare</u>	<u>Student Fare</u>	<u>E & H Fare</u>
30¢ or less	2%	45%	90%
35¢	12%	11%	2%
40¢	10%	15%	4%
45¢	2%	4%	0%
50¢	35%	15%	2%
55¢	0%	2%	2%
60¢ or more	39%	8%	0%

The Green Bay student fare of 35¢ and elderly and handicapped fare of 20 cents are more in line with other systems. A total of 56 per cent of the systems have elderly and handicapped fares less than 30 cents.

F. RECOMMENDED FARE INCREASE PLAN

In analyzing the ridership and financial impact of the three fare increase alternatives, alternative number two (60¢) maintains ridership levels and provides increased farebox revenue to offset federal funding cutbacks and rising operational costs. Alternative number one (50¢) produces slightly higher ridership levels, but does not generate sufficient revenue to close the gap between farebox revenue and operating cost. Alternative number three (70¢) produces the highest farebox revenue, but ridership would drop below existing levels and the high fare would financially burden the low-income, elderly, and handicapped individuals currently dependent on transit service.

The recommended fare increase plan is alternative number two (60¢) with a five cents per year increase over the five year period. The 60 cents adult fare level by 1986 is not out of line with current fares charged by small transit systems across the nation. As previously cited, 74 per cent of the systems have current adult fares at 50 cents or more, with 39 per cent at or above the 60 cents level.

CHAPTER IV

CHARTER BUS OPERATIONS

A. FEDERAL RULES AND REGULATIONS

In 1966, the City of San Diego, California filed a capital grant application under the Urban Mass Transportation Act of 1964 for federal funding on the purchase of eight specially designed charter buses. A lawsuit was then filed against the city, contesting its authority to engage in charter bus operations.

On December 7, 1966, a legal opinion was issued by the Comptroller General of the United States on the purchase of buses and equipment with federal funds, intended for substantial use in charter bus business. A direct quote from the legal opinion is as follows:

"As indicated above, it is clear that under the Act in question, grants may not legally be made to purchase buses to be used 'exclusively' in the operation of charter bus service. However, in view of the purposes of the act involved, it is our opinion that a city which has purchased with grant funds buses needed for an efficient mass transportation system, is not precluded by the act from using such buses for charter service during idle or off-peak periods when the buses are not needed for regularly scheduled runs. As indicated above, such a use would appear to be an 'incidental' use".

The Comptroller General's legal opinion, therefore, interpreted the Urban Mass Transportation Act of 1964, as specifically disallowing the use of federal assistance for the purchase of buses intended for charter service. But the legal opinion allowed, and even encouraged, the "incidental" use of buses for charter as long as the service does not detract from or interfere with regular urban transit service for which the equipment is needed.

With the advent of federal operating assistance in 1975, and continued capital grant assistance, the Urban Mass Transportation Administration published charter bus rules and regulations, 49 C.F.R. Part 604, in the Federal Register on April 1, 1976. Under the regulations, Federal Section 5 funds may only be used to support regular urban transit service and not charter operations. A subsequent revision and clarification of the 1976 regulations was published by UMTA in the January 19, 1981 Federal Register.

The UMTA regulations list general guides for allowed incidental use of buses for charter service as follows:

1. Off-peak weekday periods when buses are not needed for rush hours. Charter operations during peak periods may be operated if the transit system has no less than 110 per cent of the buses needed to meet daily peak demand. Buses stock-piled for emergency use may not be used for charters.
2. Weekday charters cannot travel any more than fifty miles beyond the grantee's urban area.
3. Weekday charter use of a specific bus cannot be any more than six hours per day.

This incidental use restriction applies to all UMTA recipients operating charter service with vehicles purchased with federal assistance, whether such service is inside or outside their urban area.

Another major provision of the charter regulations is the protection of private operators in the "intercity charter bus industry" from being driven out of business through competition with public operators using federal subsidies. Public operators are allowed to carry out incidental charter operations with federally financed buses, but cannot use Federal Section 5 operating assistance to reimburse the cost of providing charter service. A private operator who disagrees with the public charter operations in terms of rates, service area, or incidental use may file a complaint with UMTA. UMTA regulations do specify that a public operator who can show that it derived \$15,000 or less in gross annual revenues from charter bus operations during its most recently completed fiscal year will have a complete defense to any complaint concerning any aspect of its charter bus operations.

There are two distinct levels of public charter operations specified in the UMTA regulations, one is service entirely within the urban area and the other is service outside the urban area. The Green Bay Urbanized Area, as defined by the Bureau of Census and recognized by UMTA for allocation of Section 5 funds, includes the entire Village of Howard, City of Green Bay, Village of Ashwaubenon, Town of Allouez, City of De Pere, and portions of the Town of Bellevue. UMTA regulations and rules for charter service entirely within the urban area are substantially less than for operations outside the urban area. The requirements for starting

the two levels of charter service are as follows:

1. CHARTER BUS OPERATIONS WITHIN URBAN AREA:

- a. Publish and mail to private charter operators a one-time notice of charter service within the urban area.
- b. File with UMTA, information on the charter service, including urban area boundaries, charter rates, and equipment use.
- c. Sign an agreement with UMTA on the proposed charter service, subject to incidental use restriction and the statutory requirements.
- d. The public operator may be exempted from public hearing and annual notice requirements, depending upon the level of charter service to be operated.

2. CHARTER BUS OPERATIONS OUTSIDE URBAN AREA:

- a. Provide written notice to all private charter bus operators operating in the urban area, publish a notice in local newspapers on the proposed service.
- b. Conduct a public hearing on the proposed service.
- c. Comply with rate-comparability or certification-of-cost requirements in establishing the charter rate. Rate change options are as follows:

Rate-comparability. The rate charged must be higher than the lowest rate charged by the three largest private operators providing the same or similar service in the area.

Certification-of-cost. The revenues from the public charter operation must equal or exceed the cost of providing the service. The operator must include the actual operational cost plus certain as-if-private costs, such as taxes and depreciation.

- d. Comply with incidental use restrictions on vehicle use, miles from urban area, and daily hours of operation per bus.

- e. File with UMTA a detailed application on proposed charter service.
- f. Sign an agreement with UMTA on charter operations, and maintain detailed financial records to demonstrate that the charter rate is in compliance with the terms of the agreement.
- g. Provide an annual notice to private charter operators on rate changes and level of service.

B. CHARTER SERVICE PROVIDED BY OTHER SMALL TRANSIT SYSTEMS

Based on our national survey of small transit operators, a total of 40 out of 50 systems (80 per cent) provide local charter service. The charter rates varied substantially from a low of \$12.00 per hour in Wheeling, New York to a high of \$50.00 per hour in Columbus, Georgia. An overall 1982 average hourly rate amounted to \$28.00 per hour. See Table 15 for information on the charter rates for the various systems. Wisconsin transit operators currently providing charter service include Oshkosh, Racine, Kenosha, Eau Claire, and Fond du Lac. An average charter rate for the five Wisconsin systems is \$25.00 per hour. The annual charter income from the 40 transit systems ranged from \$1400.00 to \$156,000, with an overall average of \$30,200.

Annual charter revenue being generated by the five Wisconsin systems is as follows:

<u>City</u>	<u>Actual 1981 Charter Revenue</u>	<u>Estimated 1982 Charter Revenue</u>
Fond du Lac	\$ 2,200	\$ 1,350
Eau Claire	3,500	3,500
Kenosha	6,000	7,000
Racine	13,430	15,567
Oshkosh	37,600	35,600

TABLE 15
CHARTER RATES OF SMALL TRANSIT OPERATIONS

CHARTER RATE PER HOUR	# OF SYSTEMS	LOCATIONS
\$50.00	1	Columbus, Georgia
\$45.00	2	Ann Arbor, Michigan, Springfield, Illinois
\$44.00	1	Monterey, California
\$40.00	1	Macon, Georgia
\$37.50	1	Duluth, Minnesota
\$35.00	3	Bay City, Michigan, Sarasota County, Florida, Savannah, Georgia
\$34.00	1	Greenville, South Carolina
\$33.00	2	Lancaster, Pennsylvania, Jackson, Mississippi
\$30.00	6	Melbourne, Florida, Laredo, Texas, Waco, Texas Battle Creek, Michigan, Oshkosh, Wisconsin, Decatur, Illinois
\$28.50	1	Lincoln, Nebraska
\$27.00	1	Racine, Wisconsin
\$25.00	10	Huntington, West Virginia, Erie, Pennsylvania, Urbana, Illinois, Little Rock, Arkansas, Bradenton, Florida, Cedar Rapids, Iowa Pensacola, Florida, Monroe, Louisiana, Topeka, Kansas, Kenosha, Wisconsin
\$23.00	2	Eau Claire, Wisconsin, Saginaw, Michigan
\$22.00	1	Fond du Lac, Wisconsin
\$19.00	1	Fayetteville, North Carolina
\$18.00	3	Altoona, Pennsylvania, Springfield, Missouri, Boise, Idaho
\$16.00	1	Winston-Salem, North Carolina
\$15.00	1	Sioux City, Iowa
\$12.00	<u>1</u>	Wheeling, New York
TOTAL SYSTEMS	40	

Overall Average Hourly Rate = \$28.00

Average Midwest Rate = \$28.00

C. GREEN BAY AREA PRIVATE CHARTER OPERATORS

There are four private charter operators in the Green Bay urban area who offer local charter service. These companies are as follows:

1. Wisconsin Michigan Coaches, Inc.
725 Smith Street, Green Bay
Minimum three hours, rate of \$22.50 per hour.
Use air conditioned 46 passenger motor coaches for local and nationwide service.
2. Lamers Bus Lines, Inc.
2407 South Point Road, Green Bay
Minimum four hours, rate of \$21.50 per hour for the first four hours and \$20.00 per hour for each additional hour.
Use air conditioned 39 passenger motor coach for both local and nationwide service.
3. Jelco Wisconsin, Inc.
2260 Lime Kiln Road, Green Bay
Minimum two hours, rate of \$10.00 per hour for the first two hours and \$4.00 per hour for each additional hour. Additional cost for insurance and sales tax is added to the total charge.
Use yellow school buses for local and statewide service.
4. Greyhound Bus Lines
800 East Cedar Street, Green Bay
Minimum three hours, rate of \$30.00 per hour for first three hours and \$22.50 per hour for each additional hour.
Use air conditioned motor coaches for both local and nationwide service.

D. RECOMMENDED GREEN BAY TRANSIT CHARTER SERVICE

In consideration of the UMTA charter service regulations, charter service provided by other small transit operators, and the existing private charter operators in Green Bay, the following recommendations were formulated.

The Green Bay Transit System should establish a local charter bus service within the Green Bay Urbanized Area boundaries. UMTA incidental use restrictions on charter service outside the urban area, limits travel to no more than 50 miles from the urban limits. Outside of Door County, there are very few major attractions within 50 miles of Green Bay. Also, UMTA charter regulations on service outside the urban area are substantially more burdensome because of increased competition with private operators. Green Bay Transit charter service within the urban area can raise additional revenues for the transit system and provide continued full employment for existing bus drivers, mechanics, and office personnel. Also, charter service staying within the urban area will not financially impair any of the existing private charter operators.

Even though UMTA does not require a rate-comparability analysis for charter service staying within the urban area, to avoid any complaints from private charter operators, the rate charged should be higher than the lowest rate charged by the three largest private operators. As indicated in the previous section, there are four private charter operators in the Green Bay area, with the three largest being Wisconsin-Michigan Coaches, Inc., Lamers, Inc. and Greyhound Bus Lines. Lamers has the lowest rate of \$21.50 for the first four hours and \$20.00 for each additional hour, followed by Wisconsin-Michigan Coaches with an hourly rate of \$22.50, and Greyhound with a rate of \$30.00 for the first three hours and \$22.50 for each additional hour.

The recommended rate for the Green Bay Transit System charter service is \$25.00 per hour with a minimum of two hours. This rate is higher than both Lamers and Wisconsin-Michigan Coaches, and is compatible with the average rate charged by other small transit operators in Wisconsin. The 1982 operational cost per hour is \$21.00, and the extra \$4.00 per hour will cover non-operational costs such as equipment depreciation. This charter rate of \$25.00 per hour will have to be reviewed on an annual basis, increased on an annual basis, and increased in proportion to rising operational costs.

E. PROJECTED CHARTER REVENUE

Charter revenue estimates were based on an escalating hourly rate (corresponding to annual operating expense increases), local demand for charter service, and charter revenues collected by five small transit operators in Wisconsin. The local charter service business is assumed to begin slowly and gradually increase over the five year period. The continuing efforts of the Green Bay Visitor and Convention Bureau to bring in more state and national convention business to the Green Bay area will be a major factor in increasing the demand for local charter service. Also, the ability of the City of Green Bay to obtain financing and a private developer for construction of a major hotel/convention center in downtown Green Bay will play a major role in increasing local charter business.

Charter revenue estimates can be seen on Table 16.

TABLE 16
 1982-1986 PROJECTED CHARTER REVENUES
 FOR THE GREEN BAY TRANSIT SYSTEM

YEAR	HOURLY RATE	NUMBER OF HOURS	CHARTER REVENUE
1982	\$25	0	\$ 0
1983	\$25	16	\$ 400
1984	\$27	148	\$4,000
1985	\$29	241	\$7,000
1986	\$31	290	\$9,000

CHAPTER V
GROUP BUS TOURS

A. FEDERAL RULES AND REGULATIONS

Section 12(c)(6) of the Urban Mass Transportation Act of 1964 specifically excludes sightseeing service from the definition of mass transportation. Therefore, it is ineligible to be funded with federal Section 5 operating assistance. This type of service is not covered by the UMTA charter regulations, but the use of federally financed urban transit buses for sightseeing tours must be "incidental to regularly scheduled service".

B. TOUR SERVICE PROVIDED BY OTHER SMALL OPERATORS

Out of the 50 small transit operators surveyed only Duluth, Minnesota operates tour service. The Duluth Transit System operates two scheduled daily tours from June through August, and on weekends during September. Their five hour tour includes a drive around the city with stops at an historic mansion and Enger Tower. The tour ends with an excursion boat ride on the Lake Superior Harbor. Groups of 35 or more are also accommodated on any non-scheduled tour day. The tour fee is \$18.95 for adults and \$11.95 for children under 11 years old. Included in the fee is the excursion boat ride and a picnic lunch on the boat.

C. EXISTING BUS TOURS IN THE GREEN BAY AREA

There currently are no private bus companies operating scheduled tours within the Green Bay urban area. The only known attempt at establishing scheduled tours in the Green Bay area was made by the Green Bay Area Visitor and Convention Bureau in 1972. In the summers of 1972 and 1973, two and one half hour bus tours were run. The tour began at the Brown County Arena, stopped at the Railroad Museum, St. Norbert's Abbey, the Cotton House, U.W.G.B. Campus, Wildlife Sanctuary, and the Port of Green Bay. A private charter bus operator was contracted to provide the transportation and the tours were advertised in the Visitor and Convention Bureau's Visitor's News, and at all area hotels. Evaluations from people taking the tour were excellent, but the tours were discontinued after the second summer due to lack of riders and operating costs.

The Green Bay Area Visitor and Convention Bureau is a non-profit corporation dedicated to the solicitation of conventions, creation of visitor attractions, and overall service to area visitors. They have an excellent public relations and marketing program with visitor guides and brochures. Any scheduled tours conducted by Green Bay Transit should be closely coordinated with the Green Bay Area Visitor and Convention Bureau.

D. AREA ATTRACTIONS

There are numerous new and expanded attractions in the Green Bay area since the last tours were operated 10 years ago. Heritage Hill State Park, the new Neville Public Museum to be opened in 1983, and River Queen boat trips down the Fox River were not in existence 10 years ago, plus major improvements and expansions have been carried out on the Green Bay Packer Hall of Fame and the Rail America Museum.

In discussions with the Green Bay Area Visitor and Convention Bureau staff, there is a need for organized tour packages to accommodate incoming convention groups. Also, one of the objectives of the Bureau is to have more local residents attend attractions such as the Green Bay Packer Hall of Fame and the Rail America Museum. Recent surveys conducted by the Bureau have indicated that only 5 per cent of the people going through the Packer Hall of Fame and Rail America are from Brown County. Scheduled tours would provide a good opportunity for local residents to see area attractions at lower group rates. (See Table 17 for usage rates of area attractions over the period of 1977 through 1979.) Tours of local industry, such as paper mills and dairy product processing plants, would also be of interest to area residents, tourists and convention groups.

A major new attraction, which began operations in the Spring of 1982, is the River Queen riverboat. The 150 passenger paddle-wheel excursion boat provides 3 daily sightseeing tours down the Fox River between De Pere and Wrightstown from June through August. Regularly scheduled 1 hour tours cost \$4.00 per person, and the 2 hour tour cost is \$5.00 per person.

Based on a telephone survey of area industry, plus local museums and historic places, the following attractions should be considered in establishing group bus tours:

1. Proctor and Gamble. Public tours currently available on summer weekdays at 10:00 A.M. and 1:30 P.M. A one and one half hour tour of the paper mill includes a 20 minute slide presentation. No fee for the tour.
2. Morning Glory Dairy. Morning tours are available by appointment. A 45 minute tour of the dairy plant to watch the production of cottage cheese, ice cream, and milk bottling. No fee for the tour.

TABLE 17
GREEN BAY AREA ATTRACTIONS

ATTRACTION	ATTENDANCE-USAGE			SIZE	MANAGEMENT
	1977	1978	1979		
Bay Beach	617,056	820,714	782,639	23 Acres	City of Green Bay
Brown County Arena Events	438,110	472,514	433,463	0	Visitor and Convention Bureau
Wildlife Sanctuary	256,204	209,611	399,763	526 Acres	City of Green Bay
Packer Hall of Fame	71,223	70,384	61,879	-	Visitor and Convention Bureau
Heritage Hill State Park	Not Open	15,522	45,095	43 Acres	Heritage Hill Corporation
Neville Public Museum (Jefferson St. site)	22,201	31,405	29,608	-	City of Green Bay (New Museum under County Ownership and Management
Railroad Museum	22,054	26,722	24,019	22 Acres	Visitor and Convention Bureau

Source: Green Bay Area Visitor and Convention Bureau

3. Larsen Company. Public tours by appointment are available for the vegetable canning plant. No fee for the tour, approximate tour length - 1 hour.
4. St. Norbert Abbey. Public tours through the Abbey complex are available by appointment. No fee for the tour, approximate tour length - 1 hour.
5. University of Wisconsin - Green Bay Campus. Tours oriented to future college students are conducted on weekdays. Tour guides are available by appointment for the one and one half hour tour, which includes the sport center. A short one hour tour is also available, which excludes the sport center. A drive through the 600 acre campus without leaving the bus, could also be made.
6. WLUK T.V. - Channel 11. Public tours are available on weekdays between 8:00 A.M. and 4:00 P.M. There is no fee for the tour of the TV station and the length of the tour is 45 minutes.
7. Heritage Hill State Park. Historic tour through the turn of the century village. Tour guides are available for groups. The park is open daily with the following rates:

Individual \$3.00 per person

For groups greater than 24 \$2.25 per person

Allow one and one half hours for tour.

8. Rail America. The railroad museum offers many attractions from walking through numerous historic steam engines and passenger rail cars, to a train ride around the site. Open daily with tour guides available for groups. Group rate for 25 or more people is \$2.50 per person, regular individual rate is \$3.50 per person. Allow 1 hour for tour and train ride.
9. Green Bay Packer Hall of Fame. The Packer Hall of Fame is open daily. No guide would be necessary through the numerous exhibits, films, and games on the Green Bay Packers and the National Football League. Normal length of stay for groups is one to one and one half hours. The rate structure is as follows:

Adults (+13 years old) - Regular = \$4.00. Group - \$3.00 per person

Children (6-12) - regular = \$2.25. Group = \$1.75 per person

Elderly - Regular and Group fee = \$3.00 per person.

A group consists of 20 or more people.

10. Neville Public Museum. The new museum is currently under construction on the west bank of the Fox River. Current plans call for a grand opening of the new facility in April, 1983. Tour guides for groups will be made available. Time allowed for the tour would be one to one and one half hours. At this time no fee is anticipated for use of the museum.
11. Bay Beach Wildlife Sanctuary. This wildlife and nature area is a major attraction for local residents. The sanctuary contains a nature center, water ponds for ducks and geese, a small animal zoo, and numerous nature trails. Tour guides are available for groups, and nature educational programs are also available. In July, 1982, ground will be broken for construction of a new nature center with an auditorium and observation decks. Improvements will also be made to the nature trails and animal zoo. There is no fee for use of the city owned wildlife sanctuary, and a normal group tour would take 1 hour.

E. RECOMMENDED GREEN BAY TRANSIT BUS TOURS

The Green Bay Transit System should establish group bus tours of area industry and attractions listed in the previous section. This effort should be closely coordinated with the Green Bay Area Visitor and Convention Bureau.

A variety of different tour combinations can be offered with varying fees. The total length of the tour should not exceed 4 hours and the total fee should be set at a rate to fully cover operating costs. To take advantage of the group rates offered at Heritage Hill State Park, Rail America, and the Green Bay Packer Hall of Fame, the minimum tour group would have to consist of at least 25 people. When available, the new advanced design air conditioned Neoplan buses should be used for the tours. The Neoplan buses have a capacity of 40 people, and are more fuel efficient than the heavier wheelchair lift equipped 1980 RTS General Motors buses. Both the advanced design Neoplan and GMC buses are equipped with speakers and a public address system which can be easily operated by the bus driver. The group fee charged for the tour would have to cover bus driver labor cost, fuel, administration and marketing cost, plus group admission fees for certain attractions. A varying fee scale could be established according to the size of the group. The standard hourly charge for the bus driver and fuel would be the same as the \$25 per hour charter rate. Some

suggested tour groupings and fees are as follows:

Tour #1: 4 hour tour including a drive through U.W.G.B. Campus, Bay Beach Wildlife Sanctuary, Neville Public Museum, and a one hour ride on the River Queen.

Tour rates: 25 people = \$8.00 per person
30 people = \$7.50 per person
35 people = \$7.00 per person
40 people = \$6.50 per person

Tour #2: 4 hour tour including Morning Glory Dairy, St. Norbert Abbey, and Heritage Hill.

Tour rates: 25 people = \$6.25 per person
30 people = \$5.75 per person
35 people = \$5.25 per person
40 people = \$4.75 per person

Tour #3: 4 hour tour including Heritage Hill, Green Bay Packer Hall of Fame, and a one hour ride on the River Queen.

Tour rates: 25 people = \$13.25 per person
30 people = \$12.75 per person
35 people = \$12.25 per person
40 people = \$11.75 per person

Tour #4: 4 hour tour including Proctor and Gamble, Neville Public Museum, and Larsen Canning Company.

Tour rates: 25 people = \$4.00 per person
30 people = \$3.50 per person
35 people = \$3.00 per person
40 people = \$2.50 per person

Information on available tour packages could be advertised by the Green Bay Area Visitor and Convention Bureau as part of their promotional brochures and visitor guides. Conventions held at area motels and the Brown County Arena bring in a substantial number of visitors. See Table 18 for a summary of conventions held in the Green Bay area during 1982.

Another major group likely to take advantage of the bus tours are the senior citizens of Brown County. Sign up sheets and information on group tours could be posted at the 10 elderly housing apartment complexes located in Brown County and the Brown County Commission on Aging Senior Center.

TABLE 18
CALENDAR 1982 GREEN BAY AREA CONVENTIONS

MONTH	NUMBER OF CONVENTIONS ¹			NUMBER OF PEOPLE ATTENDING
	National	State	Regional	
January	0	3	2	1675
February	0	4	1	1725
March	0	8	4	4895
April	0	9	1	4040
May	0	6	0	2575
June	1	9	0	3525
July	3	2	3	6650
August	2	0	0	1350
September	1	9	2	2850
October	2	4	3	4075
November	0	0	1	200
December	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	9	54	17	33,560

¹Excludes Bowling, Hockey, Pool, and Racketball Tournaments plus dog shows

F. PROJECTED BUS TOUR REVENUE

As explained previously, the total tour charge would be based on the group admission fee for various attractions and the operational cost of the bus. The per person charge would vary according to the size of the group. Reduced rates for children under 12 should also be considered. The transit system would not receive a profit from the group admission fees charged for the Packer Hall of Fame, Rail America, Heritage Hill, and the River Queen riverboat ride. Free advertising of the city transit tours should be requested from the management of the paying attractions.

The city transit tours will provide a public service to area residents; improve tourist and convention business; promote area businesses and attractions; plus provide continued employment for bus drivers, mechanics, and transit office personnel.

The prevailing charter rate should be used to calculate the hourly operational cost of the tours. The charter rate fully covers the bus driver and office administration labor cost, gas and oil, plus the depreciation cost of the bus.

Future revenue generated by bus tour is very difficult to calculate. Since the group admission fees for the attractions is basically passed through from the individual to the management of the attraction, it was not included in the revenue estimates. Tour revenue was, therefore, based only on the hourly charter rate and the number of 4 hour tours. See Table 19 for the tour revenue estimates.

TABLE 19
1982-1986 PROJECTED BUS TOUR REVENUE
FOR THE GREEN BAY TRANSIT SYSTEM

YEAR	HOURLY RATE	NUMBER OF TOURS	NUMBER OF TOURS	TOTAL REVENUE	"NET" REVENUE ¹ (PROFIT)
1982	\$25	0	0	0	0
1983	\$25	10	40	\$1000	\$200
1984	\$27	30	120	\$3000	\$600
1985	\$29	35	140	\$4000	\$800
1986	\$31	40	160	\$5000	\$1000

¹A 20 per cent profit margin is assumed, which would be incorporated into the tour fees

CHAPTER VI

EMPLOYER SUBSCRIPTION SERVICE

A. GREEN BAY TRANSIT SUBSCRIPTION SERVICES

Employer subscription service is similar to charter service but is operated on a scheduled daily basis. Green Bay Transit has provided subscription service to both St. Vincent and Bellin Hospitals. In late 1980 and throughout 1981, St. Vincent Hospital contracted with Green Bay Transit to provide employee shuttle bus service from a rented parking lot to the hospital. St. Vincent Hospital paid the full operational cost of the daily shuttle service in the amount of \$7,694 in 1980 and \$26,059 in 1981. The service was operated over the same time period when the hospital was constructing a multi-level parking ramp on a surface parking lot next to the hospital. When the parking ramp was opened in late 1981, St. Vincent Hospital no longer had a need for the employee bus shuttle service.

Bellin Hospital, located adjacent to St. Vincent's, contracted with Green Bay Transit for an employee shuttle service between a rented surface parking lot and the hospital over the six month period of March, 1982 through August, 1982. Two standard size 35 foot buses provided 6.5 hours of shuttle service per day, with hospital employee ridership amounting to 300 people per day. Both hospital administration and the employees were pleased with the service. The employees were provided free parking and express bus service from the parking lot to the hospital. Bellin Hospital was billed \$21.00 per hour, which covered the full operating cost of service. Over the six month period, the shuttle service cost the hospital \$32,800. Bellin requested discontinuance of the service due to both the service costs and complaints from residents living on the shuttle service routes. Residents near the hospital area complained of bus noise and speed. As a result of the numerous complaints, Green Bay Transit had to alter and lengthen the shuttle routes to a point where the hospital employees began complaining about the additional travel time on the non-direct routes. Bellin Hospital purchased a small mini-bus and continued the employee shuttle service using parking lot attendants to drive the mini-bus.

B. FUTURE POTENTIAL OF SUBSCRIPTION SERVICE

In a small urban area, the only factor which would provide an incentive for a business or industry to consider contracting for employee subscription bus service is a severe "parking" problem. In both the St. Vincent and Bellin Hospital situations, the lack of off-street employee parking and long term street parking restrictions in the surrounding Astor neighborhood area created a need for park and ride employee shuttle service.

St. Vincent Hospital has solved its parking problem with the construction of an eight million dollar parking amp. Bellin Hospital is currently studying a number of alteratives to resolve their parking problems, including the consruction of a new parking ramp, expanded surface parking lots nearthe hospital, and continuation of their own employee shuttle servie.

In 1980, the 50 largest industries in the Green Bay Urbanized Area were interviewed by the Brown County Planning Commission staff as part of a ridesharing feasibility study. They were questioned on transportation problems, the number of employees, shift times, parking availability, and accessibility to city transit service. Almost all of the companies indicated that they provide private free employee parking and do not have any parking shortage problems. The larger paper mills, such as Procter and Gamble have surface parking lots located a few blocks from the plant and have received employee complaints about walking in the winter months and vandalism to their vehicles. Cly St. Vincent and Bellin Hospitals indicated severe employee paking shortages for their combined 2600 employees.

In summary, the potential for future employer subscription service does not look bright. Green Bay Transit should cntinue to offer subscription to any interested employer and advenise the availability of the service. In the future, the only employee parking shortage may be in downtown Green Bay. But, withthe excellent transit service provided to the downtown area, noindividual downtown employer would consider paying for special employee shuttle bus service.

C. PROJECTED SUBSCRIPTION SERVICE REVENUE

Projected subscription service revenue is as follows:

<u>CALENDAR YEAR</u>	<u>TOTAL REVENUE</u>	<u>"NET" REVENUE (PROFIT)</u>
1982	\$32,800	0
1983	0	0
1984	0	0
1985	0	0
1986	0	0

CHAPTER VII

PACKER GAME SERVICE

A. PREVIOUS PACKER GAME SERVICE

From the late 1940's up to 1969, the Wisconsin Public Service Corporation provided special service to Sunday Green Bay Packer games. Regular scheduled fixed route Sunday service was also operated during this time period. Extra Packer game buses would start at the end of each bus line and travel downtown on the regular routes picking up people along the way. After picking up a substantial number of passengers downtown (mainly from downtown motels) the buses would carry standing loads to the stadium. The buses were parked at the stadium during the game, and the bus drivers were provided free game tickets. After the game, the loaded buses went back downtown and then out to the ends of the regular routes.

Very little information is available on the financial success of the service. Based on financial losses of the overall bus system, Wisconsin Public Service Corporation discontinued all Sunday and evening service, along with the special Packer game buses in 1970. Based on discussions with bus drivers who drove Packer game buses, the service was well received by area residents. Most buses had standing loads, and extra buses were often added to serve the people staying at downtown motels.

B. RECOMMENDED PACKER GAME SERVICE

With increased traffic delay and parking problems encountered by the 55,000 Packer fans attending the four regular season home games each fall, there is a good ridership potential to provide Packer game fixed route service. The service should begin at convenient park and ride lots near U.S.H. 41, S.T.H. 29/32, and S.T.H. 54/57 and I-43.

Four potential routes could be run for the games. Beginning points for each route would be at the following designated and advertised parking lot areas: Route #1 - U.W.G.B. campus, Route #2 - East Town Shopping Mall, Route #3 - Rock Garden Supper Club, Route #4 - Howard Johnson's Motel. At least 2 buses per route would be required to provide the service.

Each bus would travel the designated fixed route to Lambeau Field, unload the passengers and park at the stadium. After the game, the people would be transported back along the fixed route to the parking lot starting point.

A round trip fee would be charged to fully cover the operational cost of the service. Since Sunday is not a regular service day, the bus drivers will have to be paid at overtime rates and a

dispatcher will have to be on duty during the approximate five hours of operation. An adult fare in the range of \$2.00 per round trip will have to be charged for the service. Zone rates could be established, based on distance from the stadium. Special Packer game bus service tickets should be sold at the ticket outlets for round trips or single rides. Cash fares should also be accepted at a higher rate.

C. PROJECTED PACKER GAME SERVICE REVENUE

A good marketing program; cooperation from the Green Bay Stadium Commission, the Green Bay Packer Corporation, and area motels; plus agreements for use of parking lots from the private owners are all key elements in the success of the proposed service. At this stage, it is very difficult to estimate the potential revenues to be generated by the new service.

Assuming the service begins in the Fall of 1983 for four regular season Packer games, and the eight buses carry loads of 40 people per bus, with an average fare of \$2.00, the revenue for the four games would amount to \$2,600. This is not a substantial revenue figure in comparison to the total system operation, but it would serve the general public in providing safe transportation to the Packer games, reduce stadium parking demand and traffic congestion, and provide increased work opportunities for the bus drivers. Assuming the demand for the Packer game service grows over the years, revenue estimates for the five year period are as follows:

<u>CALENDAR YEAR</u>	<u>TOTAL REVENUE</u>	<u>"NET" REVENUE (PROFIT)¹</u>
1982	0	0
1983	\$2600	\$500
1984	\$3600	\$700
1985	\$4000	\$800
1986	\$5000	\$1000

¹A 20 per cent profit margin is assumed, which would be incorporated into the fares charged.

CHAPTER VIII
OTHER REVENUE SOURCES

A. SCHOOL BUS SERVICE

1. FEDERAL REGULATIONS

The Urban Mass Transportation Administration published school bus operative rules and regulations, 49 C.F.R. PART 605, in the Federal Register on April 1, 1976.

These regulations prohibit any public transit system which has received federal assistance from engaging in school bus operations exclusively for the transportation of students, in competition with private school bus operators. The only cases where the regulation does not apply is if the public body operates the school system in the area to be served and also provides a separate and exclusive school bus program for their school system; or, if the private school bus operators are unable to provide adequate transportation, at reasonable rates, and in conformance with applicable safety standards. Even if a federally-assisted public operator meets one of the above exemptions, the operator cannot use buses, facilities, or equipment purchased with Urban Mass Transportation Administration federal funds.

In the Green Bay Urban area, private school bus operators contract directly with the 5 unified school districts. Green Bay Transit cannot operate exclusive school bus service in the urban area, nor compete with the private school bus operators.

2. STUDENT TRANSPORTATION

Green Bay Transit provides student transportation as part of their regular fixed route service. Extra tripper buses are added to routes during periods of high student ridership when the regular bus cannot handle the load. Public transit service to elementary and secondary schools in the area has been a prime criteria in establishing new bus routes since the city operation began in 1973. Currently, all junior and senior high schools in the Green Bay School District have direct public transit service, along with a majority of elementary schools. Student ridership has grown from 38 per cent of all transit passengers in 1975, to 56 per cent in 1981.

Increased use of the transit system by students can both reduce the school district's transportation costs and increase transit system farebox revenues. In the 1980/81 school year, the contractual cost of having private bus

operators transport students in the Green Bay Unified School District amounted to \$234 per student for approximately 18,000 students.

UMTA also has specific regulations on the provision of school tripper service. In the Summer of 1981, Green Bay Transit provided school tripper service on its regular Ashwaubenon route for elementary school children attending a six week summer school session. In previous years, the Ashwaubenon School District contracted with a private school bus operator for summer school transportation. Since Green Bay Transit provided 30 minute service on a loop route through the village, the school administration decided to have the students use the public transit system. The private operator, Lamers Bus Lines, Inc., lost his summer school contract and filed a complaint with UMTA against the Green Bay Transit System.

A decision on the Lamers' complaint was issued on May 30, 1982 by UMTA as follows:

- a. Green Bay conducted a legitimate tripper service.
- b. A route extension of 1.3 miles and a new bus loading area at the school were permitted modifications if they had been made known to the public.
- c. Special fare collection procedures for the six week summer school session are not prohibited by regulation as long as the students using the tripper service pay the same fare as any other student using the system.
- d. Destination signs on buses which include the word "school" are not permitted by regulation.

3. RECOMMENDED STUDENT TRANSPORTATION PROVISIONS

All future student transportation provided by the Green Bay Transit System will have to be operated as regular fixed route transit service. Following are some measures which can be carried out to further increase the student contribution to the farebox revenue:

- a. Continue to provide school tripper service during the regular school year and for special summer school sessions. Comply with UMTA regulations on tripper service.

- b. Promote and encourage increased student usage by establishing ticket sales outlets at the schools.
- c. Develop a closer working relationship with the five area school districts in providing school transportation for students residing within non-busing boundary areas, planning transit service for future school sites, and in the school district purchase of tickets for distribution to students.

B. ON-BUS ADVERTISING

Green Bay Transit has a very good on-bus advertising program. Revenues from selling advertising space on the outside panels of the buses has grown from \$3,539 in 1974, up to a projected \$18,000 in 1982. Area business has found bus advertising to be a very effective marketing tool. Transit system management rents the advertising space directly to the businesses without an advertising agency involved. Prior to the city operation of the system in 1973, the private operator contracted with an advertising agency to solicit and manage the on-bus advertising. A common advertising agency commission is 50 per cent of the revenue. Wisconsin Michigan Coaches, Inc. management personnel has established an on-bus advertising program which has been used as a model by other Wisconsin cities.

On December 12, 1979, the Green Bay Transit Commission established a policy of not allowing any on-bus advertising which promotes alcoholic beverages, smoking materials, plus religious and political persons or items. The advertising policy applies to both the outside rented space and the inside free public announcement space.

The local advertising market has weakened over the past year due to the economy. This trend will be reversed as the economy improves, and the demand for on-bus advertising space will be stronger. Projected on-bus advertising revenue for the five year period of 1982 1986 is as follows:

<u>CALENDAR YEAR</u>	<u>TOTAL REVENUE</u>	<u>"NET" REVENUE (PROFIT)</u>
1982	\$18,000	\$17,600
1983	\$18,000	\$17,600
1984	\$22,000	\$21,600
1985	\$24,000	\$23,500
1986	\$25,000	\$24,500

C. BUS MAP SALES

Green Bay Transit bus maps have always been distributed free to the general public. Prior to 1980, the bus maps were basically one folded sheet of paper with little information.

Over the three year period of 1977 to 1980, a major transit system marketing study was undertaken by the University of Wisconsin-Green Bay by contract with the City of Green Bay. The Wisconsin Department of Transportation provided 90 per cent financing of the \$60,000 study under the state transit demonstration grant program. Results of the marketing effort produced a new image for the transit system, including system logo and color, radio advertisements, and a completely new bus map and time schedule. The cost of painting the buses, running radio ads, plus developing and reproducing 60,000 copies of a new "transit guide" were all financed under the state grant. Graphics and reproduction cost of the transit guide amounted to approximately \$25,000. The multi-colored transit guide is easy to read and provides an excellent source of route and time information to the bus passenger. It has also won a number of national awards for its graphics excellence.

The transit guide is now being updated due to east side bus route changes planned for the Fall of 1982, the downtown Adams Street transitway, and proposed fare increases for January, 1983. The cost of updating the map and printing 15,000 copies will be approximately \$4000. Reprinting the transit guides in 1983, with minor revisions, will cost \$1800 for 15,000 copies.

In light of future budget constraints, it is recommended that a fee of 25 cents per transit guide be charged. The 25 cents charge will not be a hardship on passengers, and will reduce wasteful use of the previously free transit guides.

Projected revenue from sale of the transit guides over the five year period of 1982-1986 is as follows:

<u>YEAR</u>	<u>CHARGE</u>	<u>NUMBER SOLD</u>	<u>TOTAL REVENUE</u>	<u>"NET" REVENUE¹ (PROFIT)</u>
1982	25¢	0	0	0
1983	25¢	10,000	\$2,500	\$1,300
1984	25¢	10,000	2,500	1,200
1985	25¢	10,000	2,500	1,100
1986	25¢	10,000	2,500	1,000

¹An eight per cent per year printing cost increase is assumed.

CHAPTER IX

1982-1986 OVERALL FINANCIAL ALTERNATIVE PLANS

A. ALTERNATIVE FINANCING PLANS

In order to develop a series of alternative plans for financing the transit system operation over the period of 1982 through 1986, some basic assumptions on the level of service and operational expenses had to be made. The level of service in terms of revenue miles operated was held constant over the period of 1983 to 1986. Service improvements recommended in the 1982-1986 Transit Development Program will all be implemented by the end of 1982, outside of minor route revisions to improve ridership and efficiency.

Total operational expenses were estimated based on a somewhat stable operational level and transit system personnel requirements. Inflation factors of eight per cent per year were used in calculating an overall expense per mile. Expenses not eligible for state or federal operating assistance include charter service, tours, and employer subscription service. The cost of operating these special services would be 100 per cent covered by user fees charged.

The level of service and expense is the same for all three financing plans.

Major variables for each alternative plan include farebox revenues, federal Section 5 operating assistance, and the local municipality funding. It was assumed that the state operating assistance formula would remain the same, funding 30 per cent of the eligible operating expenses.

Assumptions used in each of the three operational financing plans are as follows:

1. FINANCING PLAN #1

This plan assumes the Reagan administration proposal for complete phaseout of federal operating assistance by 1985 is approved and implemented. The state funding formula would remain at 30 per cent of expenses to help offset the federal cutbacks, and the alternative #3 fare increase (as detailed in Chapter III) would be implemented to reach the 70 cents adult fare level by 1986. Charter, tour and Packer game service would all be implemented as recommended in the study. See Table 20 for details on expenses, revenues, and public financing.

In terms of federal assistance, this alternative presents the "worst case" situation, which requires the highest transit fare increases.

2. FINANCING PLAN #2

Congressional proposals to continue federal operating assistance at current 1982 allocation levels formed the basis for this alternative. A moderate fare increase to 60 cents was assumed along with continued state assistance amounting to 30 per cent of expenses. Similar to financing Plan #1, the recommended charter, tour, and Packer game services would be implemented. See Table 21 for details on expenses, revenues, and public financing.

3. FINANCING PLAN #3

This plan is the same as Plan #2, except for a smaller fare increase. A small fare increase to 50 cents was assumed, along with continued federal funding at 1982 levels, state funding at 30 per cent of expenses, plus implementation of the recommended charter, tour, and Packer game services. See Table 22 for details on the expenses, revenues, and financing.

B. FINANCING PLAN COMPARISONS

A complete federal funding phaseout, as reflected in financing Plan #1, will require a substantial local funding increase from \$97,863 in 1982 to \$915,570 in 1986. The transit riders would also be financially burdened with a very high 70 cents adult fare. As shown previously in Chapter III, a 70 cents adult fare would result in a 1986 ridership level of only 2,342,000, which is five per cent less than existing ridership levels.

Financing Plan #2, with a 1986 60 cents fare level and continued federal funding, has a local funding increase from \$97,863 in 1982 to \$416,473 in 1986. The five cents per year fare increase is not sufficient to offset the rising operational cost, but as a public service, the low income and elderly bus riders would still be able to afford bus transportation and ridership would increase.

Financing Plan #3, with a 50 cents fare and continued federal funds, is similar to Plan #2 outside of a lower farebox revenue and higher local funding. With a federal funding allocation of \$656,097, and state funding based directly on expenses, farebox revenue is tied directly to local funding. If the fares are

increased, and a substantial ridership loss does not occur, every dollar increase in the farebox reduces local municipality funding by a dollar. See Table 23 for a financial comparison of calendar year 1986 under the three financing plans.

TABLE 20
 OPERATIONAL FINANCING PLAN #1
 FEDERAL CUTBACKS AND 70 CENTS FARE

	1982	1983	1984	1985	1986
<u>1. REVENUES</u>					
Farebox Revenue	\$ 543,466	\$ 639,096	\$ 737,800	\$ 941,000	\$ 1,077,000
Advertising Revenue	18,000	18,000	22,000	24,000	25,000
Other Revenues (Charter Tours, etc.)	102,192	31,100	44,000	54,000	58,000
TOTAL OPERATING REVENUES	\$ 663,658	\$ 688,196	\$ 803,800	\$ 1,019,000	\$ 1,160,000
<u>2. EXPENSES</u>					
Total Miles Operated	1,184,900	1,270,000	1,270,000	1,270,000	1,270,000
Operating Expense Per Mile	\$1.73	\$1.85	\$2.00	\$2.16	\$2.33
TOTAL OPERATING EXPENSE	\$2,044,519	\$2,353,472	\$2,540,000	\$2,743,200	\$2,959,100
<u>3. PUBLIC FUNDING</u>					
UMTA Section 5 Funds	\$ 668,217	\$ 819,765	\$ 174,294	\$ 0	\$ 0
State Funds	614,781	705,562	759,900	819,660	883,530
Local Municipalities:					
a. Green Bay	78,900	112,825	646,577	729,240	738,132
b. Allouez	4,740	7,530	43,148	48,664	49,258
c. Ashwaubenon	8,960	12,820	73,464	82,856	83,866
d. De Pere	5,263	6,774	38,817	43,780	44,314
LOCAL MUNICIPALITY SUBTOTAL	\$ 97,863	\$ 139,949	\$ 802,006	\$ 904,540	\$ 915,570
TOTAL PUBLIC FUNDING	\$1,380,861	\$1,665,276	\$1,736,200	\$1,724,200	\$1,799,100

TABLE 21
 OPERATIONAL FINANCING PLAN #2
 CONTINUED FEDERAL FUNDING AND 60 CENTS FARE

	1982	1983	1984	1985	1986
<u>1. REVENUES</u>					
Farebox Revenue	\$ 543,466	\$ 639,096	\$ 737,800	\$ 843,500	\$ 920,000
Advertising Revenue	18,000	18,000	22,000	24,000	25,000
Other Revenues (Charter Tours, etc.)	<u>102,192</u>	<u>31,100</u>	<u>44,000</u>	<u>54,000</u>	<u>58,000</u>
TOTAL OPERATING REVENUES	\$ 663,658	\$ 688,196	\$ 803,800	\$ 921,500	\$1,003,000
<u>2. EXPENSES</u>					
Total Miles Operated	1,184,900	1,270,000	1,270,000	1,270,000	1,270,000
Operating Expense Per Mile	\$1.73	\$1.85	\$2.00	\$2.16	\$2.33
TOTAL OPERATING EXPENSE	\$2,044,519	\$2,353,472	\$2,540,000	\$2,743,200	\$2,959,100
<u>3. PUBLIC FUNDING</u>					
UMTA Section 5 Funds	\$ 668,217	\$ 848,958	\$ 877,664	\$ 656,097	\$ 656,097
State Funds	614,781	705,562	759,900	819,660	883,530
Local Municipalities:					
a. Green Bay	78,900	89,290	79,520	278,900	335,761
b. Allouez	4,740	5,960	5,307	18,611	22,406
c. Ashwaubenon	8,960	10,146	9,035	31,688	38,149
d. De Pere	<u>5,263</u>	<u>5,360</u>	<u>4,774</u>	<u>16,744</u>	<u>20,157</u>
LOCAL MUNICIPALITY SUBTOTAL	\$ 97,863	\$ 110,756	\$ 98,636	\$ 345,943	\$ 416,473
TOTAL PUBLIC FUNDING	\$1,380,861	\$1,665,276	\$1,736,200	\$1,821,700	\$1,956,100

TABLE 22
 OPERATIONAL FINANCING PLAN #3
 CONTINUED FEDERAL FUNDING AND 50 CENTS FARE

	1982	1983	1984	1985	1986
<u>1. REVENUES</u>					
Farebox Revenue	\$ 543,466	\$ 639,096	\$ 737,800	\$ 745,200	\$ 760,200
Advertising Revenue	18,000	18,000	22,000	24,000	25,000
Other Revenues (Charter, Tours, etc.)	102,192	31,100	44,000	54,000	58,000
TOTAL OPERATING REVENUES	\$ 663,658	\$ 688,196	\$ 803,800	\$ 823,200	\$ 843,200
<u>2. EXPENSES</u>					
Total Miles operated	1,184,900	1,270,000	1,270,000	1,270,000	1,270,000
Operating Expense Per Mile	\$1.73	\$1.85	\$2.00	\$2.16	\$2.33
TOTAL OPERATING EXPENSE	\$2,044,519	\$2,353,472	\$2,540,000	\$2,743,200	\$2,959,100
<u>3. PUBLIC FUNDING</u>					
UMTA Section 5 Funds	\$ 668,217	\$ 848,958	\$ 877,664	\$ 656,097	\$ 656,097
State Funds	614,781	705,562	759,900	819,660	883,530
Local Municipalities					
a. Green Bay	78,900	89,290	79,520	358,150	464,590
b. Allouez	4,740	5,960	5,307	23,900	31,000
c. Ashwaubenon	8,960	10,146	9,035	40,693	52,790
d. De Pere	5,263	5,360	4,774	21,500	27,893
LOCAL MUNICIPALITY SUBTOTAL	\$ 97,863	\$ 110,756	\$ 98,636	\$ 444,243	\$ 576,273
TOTAL PUBLIC FUNDING	\$1,380,861	\$1,665,276	\$1,736,200	\$1,920,000	\$2,115,900

TABLE 23
 FINANCIAL PLAN COMPARISONS
 FOR CALENDAR 1986

<u>1986 TRANSIT OPERATIONS</u>	<u>PLAN #1</u>	<u>PLAN #2</u>	<u>PLAN #3</u>
1. Adult Fare	70¢	60¢	50¢
2. Ridership	2,342,000	2,486,000	2,715,000
3. Total Expenses	\$2,959,100	\$2,959,100	\$2,959,100
4. Total Revenue	\$1,160,000	\$1,003,000	\$843,200
5. Public Funding	\$1,799,100	\$1,956,100	\$2,115,900
6. Public Funding Summary			
UMTA Section 5	0	\$656,097	\$656,097
State	\$883,530	\$883,530	\$883,530
<u>Local:</u>			
a. Green Bay	\$738,132	\$335,761	\$464,590
b. Allouez	49,258	22,406	31,000
c. Ashwaubenon	83,866	38,149	52,790
d. De Pere	<u>44,314</u>	<u>20,157</u>	<u>27,893</u>
LOCAL TOTAL	\$915,570	\$416,473	\$576,273

CHAPTER X

SUMMARY AND CONCLUSIONS

Based on the review of past revenue and expense trends, survey results of 50 similar sized transit operations across the nation, current federal funding legislation, and the financial calculations shown in Chapter IX, the following study conclusions can be made.

A. PUBLIC FUNDING REQUIREMENTS

Federal operating fund levels experienced by transit systems across the nation over the past seven years will never be the same. New funding legislation is currently being debated by Congress and the Reagan Administration, which varies from a complete phaseout of federal operating funds by 1985 to continued funding at a 1982 allocation level. The three financing plans contained in Chapter IX reflect the different federal funding levels. In order to maintain existing service levels, and charge an equitable fare, the City of Green Bay and other local municipalities will have to fund a larger portion of the total operation. Under the recommended financing Plan #2, with a maximum 60 cents adult fare and continued federal funding, the local municipality funding will rise from \$98,000 in 1982 up to \$416,000 in 1986, which represents a 324 per cent increase over the five year period. Following is a comparison of funding sources between the existing 1982 level and projected 1986 based on financing Plans #2 and #1 (70 cents fare, no federal funds).

GREEN BAY TRANSIT OPERATIONS

<u>FUNDING SOURCE</u>	<u>1982</u>	<u>PLAN #2 1986</u>	<u>PLAN #1 1986</u>
Federal	33%	22%	0%
State	30%	30%	30%
Local Municipalities	5%	14%	31%
Farebox	27%	31%	36%
Other Revenue	<u>5%</u>	<u>3%</u>	<u>3%</u>
TOTAL	100%	100%	100%

The State of Wisconsin has an excellent transit operating assistance program, which funds 30 per cent of expenses. This state program is expected to continue on the same formula basis. In 1982, the combined local funding from the farebox, municipalities, and other revenue amounted to only 37 per cent of the operational cost, with 63 per cent coming from state and federal sources. In comparison with other small systems across the nation, the national average amounted to 56 per cent local funds and 44 per cent federal/state funding.

B. TRANSIT FARES

The demand for public transit is influenced by numerous factors, including the level of fares and service provided. If the level of service is held constant, high fare increases will reduce ridership and possibly create a net revenue loss. The concept of fare elasticity, as explained in Chapter III, is critical in developing a plan for increased fares. Over the 12 year period of 1968 through 1979, the Green Bay Transit adult cash fare remained at 30 cents. Fare increases in 1980 and 1982 has brought the fare up to 40 cents. Based on the survey of 50 small transit systems, with comparable levels of service, over 74 per cent of the systems had adult cash fares of 50 cents or more in 1982, with 39 per cent of the systems charging 60 cents or more. The 1982 40 cents fare in Green Bay is low compared to other areas. A recommended 20 cents fare increase, five cents per year between 1983 and 1986, will not place a great financial burden on the transit rider. The increased farebox revenue received from the higher fares will help to offset the federal funding reductions and rising operational costs.

C. OPERATIONAL EXPENSES

Based on past operating expense trends and an operational performance audit conducted by ATE Management and Service Co. in 1980, Green Bay Transit has done its best to provide good transit service in the most cost efficient manner. Green Bay has consistency ranked near the top among Wisconsin cities in holding down the transit operation expense per mile and expense per passenger. Since 1973, Wisconsin Michigan Coaches, Inc. has provided an excellent professional management service for the City of Green Bay in maintaining one of the most efficient operations in the State of Wisconsin.

D. CHARTER AND TOUR SERVICES

The recommended new services such as local charter and area tours will not be major revenue generators. The combined revenue from charter and tours is estimated to range from \$1400 in 1983 to \$14,000 in 1986. The 1986 estimate represents only one per cent of the total operating revenues. Even if these somewhat conservative estimates were to double, the special service revenue would still be very small compared to estimated 1986 farebox revenues of approximately one million dollars.

Even though the revenues received from these special services are small, there are still benefits in providing charter and

tour services for the community. Scheduled group tours will help promote Green Bay as an attractive convention city, and also make local residents more aware of fine historic places, schools, parks, and industries in the area. Tours can also be very beneficial in providing the elderly, handicapped, and students with transportation to area attractions at reduced group rates.

Charter service for convention groups can assist the Brown County Visitor and Convention Bureau in attracting and scheduling conventions for the Green Bay area.

The fees charged for both charter and tour services will cover 100 per cent of the operational cost and vehicle depreciation.

APPENDIX A
UMTA SECTION 5 FUNDING

TABLE A-1
 UMTA SECTION 5 FUNDING BALANCE SHEET
 GREEN BAY URBANIZED AREA

YEAR	FUNDING ACTION	TIER I OPERATING	TIER II OPERATING/ CAPITAL	TIER IV CAPITAL
1981	1. New FY 81 Allocation	\$ 581,738	\$ 58,393	\$319,001
	2. Unobligated Carryover	379,634	0	0
	3. Deobligated Grant Funds	<u>75,180</u>	<u>0</u>	<u>0</u>
	TOTAL UMTA FUNDS AVAILABLE	\$1,036,552	\$ 58,393	\$319,001
	APPROVED UMTA GRANTS:			
	#WI-05-4068 (81 Operating)	\$ 752,133	0	0
	Funding Balance as of 9/30/81	\$ 284,419	\$ 58,393	\$319,001
1982	1. New FY 82 Allocation	\$ 599,636	\$ 56,461	\$249,843
	2. Unobligated Carryover	211,388	58,393	319,001
	3. Deobligated Grant Funds	<u>73,031</u>	<u>0</u>	<u>0</u>
	TOTAL UMTA FUNDS AVAILABLE	\$ 884,055	\$114,854	\$568,844
	APPROVED UMTA GRANTS:			
	#WI-05-4079 (82 Operating)	\$ 609,824	\$ 58,393	\$ 0
	#WI-05-0025 (Transitway Capital)	<u>0</u>	<u>0</u>	<u>\$439,120</u>
	TOTAL GRANT FUNDING	\$ 609,824	\$ 58,393	\$439,120
	Funding Balance as of 9/30/82	\$ 274,231	\$ 56,461	\$129,724

APPENDIX B
LEVEL OF SERVICE
NATIONAL SURVEY RESULTS

PUBLIC TRANSIT REVENUE RESOURCE SURVEY
FOR GREEN BAY, WISCONSIN

Transit System Name: _____

Transit System Location: _____

Contact Person: _____ Phone: _____

<u>1. OPERATIONAL STATISTICS</u>	<u>1981</u>	<u>1982</u>
A. Number of Bus Routes	_____	_____
B. Headway Time: Non-Peak	_____	_____
Peak	_____	_____
C. Operating Time: Weekdays	_____	_____
(Ex. 6:00 A.M.-6:00 P.M.) Saturday	_____	_____
Sunday	_____	_____
D. Annual Revenue Miles	_____	_____
E. Annual Passengers	_____	_____

<u>2. FARE AND SERVICE RATES</u>	<u>1981</u>	<u>1982</u>
Adult Fare	_____	_____
Student Fare	_____	_____
E & H Fare	_____	_____
Other Fares	_____	_____
Charter Service Rate	_____	_____
Scheduled Tour Rate	_____	_____

<u>3. SOURCE OF OPERATING REVENUE</u>	<u>1981</u>	<u>1982</u>
A. Federal Sec. 5 Funds	_____	_____
B. State Funding	_____	_____
C. Local Funding: 1. Property Tax	_____	_____
2. Sales Tax	_____	_____
3. Vehicle Tax	_____	_____
Total	_____	_____
D. Farebox Revenue: 1. Standard Fares	_____	_____
2. Transfer Charge	_____	_____
Total	_____	_____

(OVER)

1981

1982

E. Special Service Revenue

1. Special Event Charter

2. Contract School Service

3. Contract Employer Service

4. Scheduled Tours

Total

Comment: _____

F. Other Revenue

1. Advertising: a. Outside Bus

b. Inside Bus

c. Shelters, Benches, etc.

2. Bus Map Charges

Total

Comment: _____

4. How does your transit system anticipate offsetting the proposed federal transit funding cutbacks

_____ Service Reductions

_____ Fare Increases

_____ Increase Ridership Through Marketing Efforts

_____ Initiate or Increase special charter and tour services

Comment: _____

1. Number of Bus Routes

	% OF TOTAL SYSTEMS SURVEYED	
	<u>1981</u>	<u>1982</u>
< 10	16%	16%
10-14	50%	50%
15-19	16%	14%
20-24	8%	12%
< 24	<u>10%</u>	<u>8%</u>
Total	100%	100%

Green Bay 14 routes in 1981
15 routes in 1981

2. Operating Time

	% OF TOTAL SYSTEMS SURVEYED	
	<u>1981</u>	<u>1982</u>
Evening Service*	67%*	67%*
Saturday Service	92%*	92%*
Sunday Service	24%	22%

*Evening Service: After 6:30 P.M.

Green Bay operated evening and Saturday Service in 1981 and 1982

3. Headway Times

Minutes	PER CENT OF TOTAL SYSTEMS SURVEYED			
	Peak Hours		Non-Peak Hours	
	1981	1982	1981	1982
10	2%	2%	0	0
15	6%	4%	2%	2%
20	10%	8%	0	0
25	2%	2%	4%	4%
30	48%	50%	34%	28%
35	2%	2%	4%	4%
40	0	0	4%	2%
45	4%	4%	4%	4%
50	0	0	0	2%
60	4%	6%	20%	28%*
15-25	2%	2%	0	0
15-30	2%	2%	0	0
15-45	2%	2%	0	0
15-60	0	2%	0	2%
20-60	0	0	2%	2%
30-45	0	0	2%	2%
30-60	14%*	10%*	20%*	14%
30-90	0	2%	2%	4%
60-30-20	<u>2%</u>	<u>2%</u>	<u>2%</u>	<u>2%</u>
Total	100%	100%	100%	100%

Green Bay Headway Times are as follows:

Weekday	City Routes		De Pere/Allouez/Ashwaubenon**	
	1981	1982	1981	1982
6:00 A.M.-6:00 P.M. (Peak)	30 min.	30 min.	60 min.	60 min.
6:00 P.M.-10:00 P.M. (Non-Peak)	30 min.	30 min.	60 min.	60 min.
Saturdays 8:00 A.M.-6:00 P.M. (Non-Peak)	30 min.	60 min.	60 min.	60 min.

*Green Bay Headway Times

**Does not include the Ashwaubenon Loop which runs on a 30 minute headway within the Village

4. Annual Passengers

	<u>% OF TOTAL SYSTEMS SURVEYED</u>	
	<u>1981</u>	<u>1982</u>
< 1m	14%	14%
1.00m - 1.49m	37%	37%
1.50m - 1.99m	6%	6%
2.00m - 2.49m	17%*	15%*
2.50m - 2.99m	2%	6%
3.00m - 3.49m	10%	8%
3.50m - 3.99m	8%	6%
> 4.00m	<u>6%</u>	<u>8%</u>
Total	100%	100%
 <u>Average Annual</u>		
Passengers	2,031,343	2,041,615
1981-1982 Average % Change: +.5%		
Green Bay Ridership	2,200,324	2,310,400
	+ 5% Change	

5. Annual Revenue Miles

	<u>% OF TOTAL SYSTEMS SURVEYED</u>	
	<u>1981</u>	<u>1982</u>
500,000	8%	15%
500,000 - .99m	48%	42%
1.00m - 1.49m	23%*	25%*
1.50m - 1.99m	17%	12%
2.00m	<u>4%</u>	<u>6%</u>
Total	100%	100%
 <u>Average Annual Revenue Miles</u>		
<u>1981</u>	<u>1982</u>	<u>Average % Change</u>
1,042,065	1,014,040	-2.6%
Green Bay Revenue Miles	<u>1981</u> 1,240,773 (Actual)	<u>1982</u> 1,160,000 (Projected) -6.5% Change

*Green Bay Ridership

6. Passengers/Mile

% OF TOTAL SYSTEMS SURVEYED

	1981	1982
.5 - .7	4%	4%
.8 - 1.0	0	2%
1.1 - 1.3	19%	8%
1.4 - 1.6	17%	15%
1.7 - 1.9	23%	25%
2.0 - 2.2	13%	17%
2.3 - 2.5	10%	11%
2.6 - 2.8	6%	8%
2.9 - 3.1	6%	8%
3.2 - 3.4	<u>2%</u>	<u>2%</u>
Total	100%	100%

Average Overall
Passengers/Mile: 1.8 1.9

1981-1982 Per Cent Change: + 5.57

Average Passengers/Mile

<u>Region</u>	<u>1981</u>	<u>1982</u>	<u>Change</u>
East	2.1	2.2	+4.7%
South	1.7	1.7	0
West/ Southwest	1.7	1.9	+11.7%
Midwest (Includes WI)	1.8	2.0	+11.1%
<u>Average</u>	<u>1.8</u>	<u>2.0</u>	<u>+11.1%</u>
Wisconsin (Includes Green Bay)	1.8	2.1	+16.6%
Green Bay	1.8	2.0	+11.1%

APPENDIX C

REFERENCES

REFERENCES

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