

Direction

TO THE FUTURE



**The Guide to Better
Transit for Winnipeg**

FINAL Report

January 7, 2000

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Direction To The Future

The Guide To Better Transit For Winnipeg

Final Report of the Working Group on Public Transportation Policy

1.	EXECUTIVE SUMMARY	4
1.1.	Introduction.....	4
1.2.	The Benefits of Public Transit.....	5
1.3.	Winnipeg's Urban Travel Market.....	6
1.4.	Factors Affecting Ridership.....	7
1.5.	Framework for Increasing Ridership	8
1.6.	Recommended Improvements	9
1.6.1.	Making Ongoing Improvements to Service	9
1.6.2.	Making Transit Service Easier to Use	10
1.6.3.	Making the Service More Affordable.....	10
1.6.4.	Making the Service More Productive	13
1.6.5.	Making a Commitment to Affordable High Speed Transit	14
1.7.	Funding Of The Transit System.....	15
1.7.1.	Historical Funding of Transit Operations	15
1.7.2.	Funding of Transit Capital Requirements	16
1.7.3.	Improving the Funding of Transit Operations	16
1.7.4.	A Revised Approach for Funding Major Transit Improvements	19
1.8.	Review of Public Transportation Priorities	19
2.	THE ROLE OF PUBLIC TRANSIT IN WINNIPEG	20
2.1.	The Urban Travel Market and Winnipeg's Urban Transportation System	20
2.2.	Use of Public Transit by Winnipeggers	21
2.3.	Trends in Annual Ridership	24
2.4.	Interaction Between Land Use Planning and Transportation Planning	24
2.5.	Focusing on Public Transit's Strengths	27
3.	FACTORS AFFECTING RIDERSHIP.....	28
3.1.	Controllable Factors.....	28
3.2.	Uncontrollable Factors	30

FOR THE FUTURE



Direction To The Future

4.	INCREASING TRANSIT RIDERSHIP	31
4.1.	Developing Supportive Conditions	31
4.2.	Improving Transit Service in Winnipeg.....	33
5.	RECOMMENDED IMPROVEMENTS	35
5.1.	Making Ongoing Improvements to Service	35
5.1.1.	Route Network Improvements	35
5.1.2.	Regular Bus Replacement	36
5.1.3.	Assignment of Low-Floor Buses to the Same Service Each Day	36
5.1.4.	Upgrades of Major Stops	37
5.1.5.	More Transit Shelters	37
5.1.6.	New Transit Terminals	38
5.2.	Making Transit Service Easier to Use	38
5.2.1.	Non-Traditional Service Delivery (eg. DART)	38
5.2.2.	Park and Ride	39
5.2.3.	Bike Racks on Buses	39
5.2.4.	Map and Timetable Improvements	40
5.2.5.	Posted Information at Bus Stops	40
5.2.6.	Transit Day Pass	40
5.2.7.	Internet Web Site	41
5.2.8.	Improved Telebus System	41
5.2.9.	Automated Trip Planning Service	42
5.2.10.	Automated Next Stop Displays on Buses.....	42
5.2.11.	Real Time Schedule Displays	42
5.2.12.	New Fare Collection System	43
5.3.	Making the Service More Affordable	43
5.3.1.	Relationship Between Fares and the Funding of the Transit Service	43
5.3.2.	Level of Discount for the Reduced Cash Fare	44
5.3.3.	Fares for Post-Secondary Students	45
5.3.4.	Employer-Sponsored Fare Program	47
5.4.	Making the Service More Productive	47
5.4.1.	Transit Priority Measures	47
5.4.2.	Increased Promotion of Transit Services.....	49
5.4.3.	Upgrade of the Radio System and Automatic Vehicle Location	49
5.4.4.	Replacement of North Garage	50
5.4.5.	Alternative Fuels	50
5.5.	Making a Commitment to Affordable High Speed Transit	51
5.5.1.	Expansion of Express Services.....	52
5.5.2.	On-Street Rapid Bus	52
5.5.3.	Rapid Transit	53



Direction To The Future

6.	A MULTI-YEAR TRANSIT IMPROVEMENT PLAN	54
7.	FUNDING OF THE TRANSIT SYSTEM	55
7.1.	Funding of Transit Operations	55
7.1.1.	Transit Operating Costs	55
7.1.2.	Transit Revenues	58
7.1.3.	Revenue/Cost Ratio for Regular Transit	59
7.1.4.	Benchmark Comparisons for Regular Transit Service	60
7.2.	Funding of Transit Capital Requirements	61
7.2.1.	Bus Replacement Program	61
7.2.2.	Innovative Transit Program	62
7.3.	Improving the Funding of Transit Operations	63
7.3.1.	A Revised Approach for Funding Handi-Transit Service	64
7.3.2.	A Revised Approach for the Funding of Regular Transit Service	65
7.3.3.	Impacts	67
7.4.	Funding Major Transit Improvements	68
8.	RECOMMENDED FUNDING SOURCES FOR IMPROVEMENTS TO REGULAR TRANSIT	70



1. Executive Summary

1.1. Introduction

Direction to the Future -The Guide to Better Transit for Winnipeg is the final report of the Working Group on Public Transportation Policy. The report summarizes the findings of the Working Group and outlines recommendations for a long term public transportation framework in Winnipeg for consideration by City Council.

The Working Group was established by City Council on December 16, 1998 following recommendation of the Executive Policy Committee:

“That the Transit Department be directed to explore and report to the Standing Policy Committee on Public Works by May 1, 1999 on strategies to increase ridership and stabilize transit fares. The aim of achieving reduced fares without increasing the mill rate support during forthcoming years would be given priority.”

At the same meeting, Council amended the above clause to include the following:

“That the Standing Policy Committee on Public Works be requested to undertake the formation of a working group, including representatives from University/College students and the Transit Department to review and submit recommendations on a discount transit fare package prior to September 1999.”

The members of the Working Group include:

Chairperson	▶	Councillor Peter De Smedt
Working Group Members	▶	Councillor Jae Eadie Councillor Jenny Gerbasi Councillor Mark Lubosch Rick Borland, <i>Director of Transit</i>
Technical Support from Transit Department	▶	Bill Menzies, <i>Manager of Planning and Schedules</i> Nick lafolla, <i>Manager of Marketing and Customer Services</i>

During the March - December, 1999 time period, the Working Group:

- a) Reviewed those factors that influence transit ridership levels, such as land use, transportation system development, parking availability, demographics, transit service competitiveness, and fare policy.
- b) Reviewed those factors that determine the financial performance of the transit system, such as operating and capital requirements, provincial and municipal funding policies, and transit fare policy.
- c) Identified and evaluated policy options to attain the goals specified in the directives.
- d) Consulted with stakeholders.

The Working Group recognizes Winnipeg’s fundamental urban transportation objectives as follows:

- ▶ To provide effective and efficient mobility for the movement of persons and goods which is affordable and accessible;
- ▶ To reduce traffic congestion through the provision of sufficient capacity in the transportation infrastructure;
- ▶ To minimize the overall investment in transportation infrastructure;
- ▶ To reduce emissions of air pollutants (carbon dioxide, volatile organic compounds, nitrous oxides and chlorofluorocarbons) related to urban transportation;
- ▶ To reduce energy use related to urban transportation;
- ▶ To complement and support the objectives of Plan Winnipeg.



1. Executive Summary

This report makes a number of recommendations to create conditions supportive of increased transit use as part of the ongoing physical and economic development of Winnipeg. Factors that can be controlled and influenced by City policy such as land use decisions, parking policies, investment in infrastructure as well as transit fares and service quality are the primary focus in this regard. Recommended improvements are centred on the following themes:

- ▶ Making ongoing improvements to service
- ▶ Making the service easier to use
- ▶ Making the service more affordable
- ▶ Making the service more productive
- ▶ Making a commitment to affordable high speed transit

Specific improvements are focused where the potential to attract new ridership is highest, with priority for trips made:

- ▶ To, from and within the downtown
- ▶ Along the major radial travel corridors of the City
- ▶ To and from major centres of employment, education, health care and shopping

Revised approaches to funding regular transit service, Handi-Transit service, and major transit improvements are also recommended.

The reader of this report is reminded that the mandate of the Working Group on Public Transportation Policy was to study and make recommendations regarding the “regular” fixed route transit system. The City’s policy and long range plan for Handi-Transit, the parallel transit system for physically disabled persons, was approved by City Council on September 21, 1994 with the adoption of the final report of the Task Force Reviewing Handi-Transit Issues.

1.2. The Benefits of Public Transit

Transit is well-recognized for many of its traditional benefits. It is a safe, reliable and accessible form of transportation for all ages. It reduces traffic congestion, air pollution and use of fossil fuels. It can carry many passengers at a time - specifically during weekday rush hours - and can reduce the City’s need to invest in road and bridge capacity.

However, public transit provides other potential benefits that are not as well recognized or understood. Public transit is space-efficient and cost-efficient, and enhances both public safety and the economic development and revitalization of downtown.

To be completely realized, these benefits require additional ridership. In short, transit improvements help achieve sustainable development and lead to an improved urban environment. To attract increased ridership, supportive conditions for public transit must be created and transit improvements must be focused in those areas that generate the greatest benefits.





1. Executive Summary

1.3. Winnipeg's Urban Travel Market

Transit Users

In general, a high proportion of Winnipeggers use Winnipeg Transit services with 6 people in 10 reporting that they use transit at least occasionally. About 4 people in 10 make at least one trip on transit each week, while about one-third of the population makes regular use of the system. Further analysis of ridership indicates that:

- ▶ People tend to use transit more when they are young than when they are older;
- ▶ More women than men use transit;
- ▶ The most frequent users are teenagers and young adults, with 50% to 60% considered regular riders;
- ▶ 45% to 50% of those in their 20s are regular riders;
- ▶ For females 25 years and older, about 1/3 are regular riders;
- ▶ For men 25 years and older, their usage decreases with age.



Types of Trips Made

Urban travellers do not use the same mode of transportation for all types of trips:

- ▶ About 14% of Winnipeggers are completely dependent upon transit for all their trips;
- ▶ An additional 11% of Winnipeggers use transit to make all their work/school trips, but may not use transit for other purposes;
- ▶ A further 22% of Winnipeggers use transit to make some of their trips, but they also choose to drive, walk, or cycle for various other trips.

Major Destinations

While transit's overall share of the city-wide work and post-secondary trip market is currently 20%, it is much higher in areas of concentrated employment or student populations. For example, transit carries approximately one-third of all employees to the downtown area and a similar proportion of students to the University of Manitoba, and to Red River College. At the University of Winnipeg, almost 60% of the students use transit.



1. Executive Summary

1.4. Factors Affecting Ridership

Since 1995, annual transit ridership in Winnipeg has stabilized somewhat, following a significant decline that occurred between 1987 and 1995.

Some factors affecting ridership are beyond the City's control. These include demographics, employment levels in the local economy, the nature of employment, automobile operating costs, and parking availability and costs.

Other factors such as policies and actions taken by the City in the areas of land use, transportation infrastructure investments, parking policy, transit fares, and transit service quality, affect ridership directly and are within the control of the City.

Land Use Planning

Inter-relationships between land use patterns, transportation supply, and the choice of transportation mode means the City directly influences the demand for transportation:

- ▶ Land use decisions determine the density of the City and the proximity of residences to employment and major activity centres. These, in turn, affect the amount of travel and average trip lengths.
- ▶ The City's decisions about the nature and mix of transportation infrastructure and services supplied directly affects the transportation mode choices made by Winnipeg residents.

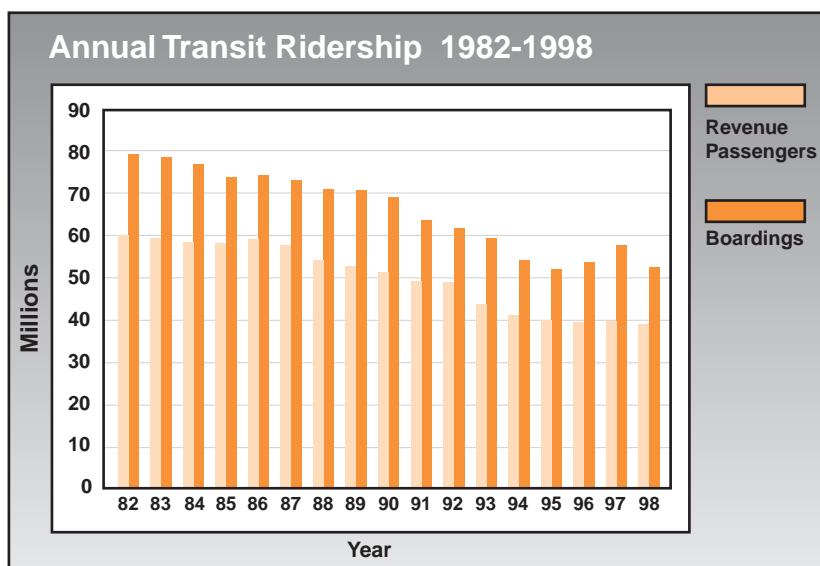
Past Decisions

As the "Baby Boom" generation grew and had families of their own, the City met their demand for single family housing by expanding suburban developments.

In order to accommodate increased travel activity in these areas, the City made significant investments in new roads, road widenings, bridges and underpasses, without a parallel investment in the public transit system.

Making significant investments in road infrastructure without parallel investments in transit services has had major consequences. Traffic congestion is minimal and travel by auto around the City is easier than ever. More car travel has increased traffic in residential areas, reduced pedestrian activity on sidewalks, and affected the viability of street-front businesses downtown. Meanwhile, Transit struggled to serve these additional needs within existing budgets, and for those with the financial means, the automobile has become a more attractive option.

The geographic area requiring municipal services has grown larger, but without an equivalent growth in population and assessment base. As a result, the City's financial capacity to deliver the necessary services has diminished. Further financial implications included increased debt charges for new roads, bridges and underpasses, resulting in a diminished capability to provide needed maintenance of existing infrastructure.





1. Executive Summary

Indirect Costing

A complicating characteristic of urban transportation is that users do not directly pay for all of the costs incurred by their travel. These costs include the capital costs of urban transportation infrastructure, the operation and maintenance of transportation facilities, air, water and noise pollution created by vehicular transport, ambulance and health system costs resulting from accidents, and the costs of traffic policing.

Many of these external costs are borne by the general population - not the users alone, a factor that tends to favour travel by auto.



This results in travel behaviours that have implications well beyond the transportation sector.

1.5. Framework for Increasing Ridership

While an understanding of all factors affecting transit ridership is important, it is necessary to focus on those factors that may be controlled/influenced by City policy.

City Council and the City's administration need to continue to collaborate with developers, the business community, and the public to create conditions that support increased transit use and that make Winnipeg a more liveable city.

The development of these supportive conditions requires that:

- ▶ Land use planning be more fully integrated with transportation planning.
- ▶ Pedestrian facilities be improved.
- ▶ Transit be more fully integrated in the downtown, at major activity centres, and on neighbourhood main streets.
- ▶ Individual and group modes of travel be more fully integrated.
- ▶ Any increase in the supply of long term parking in the downtown be minimized.

Recommendations:

- ▶ ***That conditions supportive of increased transit use be created as part of the ongoing physical and economic development of Winnipeg.***
- ▶ ***That specific improvements to transit service be focused where the potential to attract new ridership is highest. Priority for improvement should be for trips made:***
 - ***To, from, and within the downtown;***
 - ***Along the major radial travel corridors of the City;***
 - ***To and from major centres of employment, education, health care, and shopping.***



1. Executive Summary

1.6. Recommended Improvements

To provide real benefits to passengers, transit improvements must be focused on the following fundamentals:

- ▶ Improving speed and reliability
- ▶ Improving comfort, convenience, safety, and accessibility
- ▶ Improving user information
- ▶ Improving productivity

This report makes a variety of recommendations centred on the following themes:

- ▶ Making ongoing improvements to service
- ▶ Making the service easier to use
- ▶ Making the service more affordable
- ▶ Making the service more productive
- ▶ Making a commitment to affordable high speed transit

The Committee's recommendations are summarized in sections 1.6.1 to 1.6.5 and details are contained in the complete report.

1.6.1. Making Ongoing Improvements to Service

Operational improvements must be made to the transit system on an ongoing basis to meet the travel needs of passengers.

Recommendations:

- ▶ Facilitate route network improvements
- ▶ Continue regular bus replacements
- ▶ Assign low floor buses to same service each day
- ▶ Upgrade major bus stops
- ▶ Add more transit shelters
- ▶ Build new transit terminals





1. Executive Summary

1.6.2. Making Transit Service Easier to Use

To increase ridership, transit service must be made more convenient to users.

Recommendations:

- ▶ Further explore non-traditional service delivery opportunities (eg. DART)

- ▶ Expand the park and ride program

- ▶ Consider expanding the "bike racks on buses" program

- ▶ Continue to improve map and timetable information

- ▶ Continue expansion of bus stop information program.

- ▶ Assess the potential for a Transit "Day Pass"

- ▶ Improve the Telebus System

- ▶ Further develop the Transit web site

- ▶ Investigate automated trip planning for the Transit web site

- ▶ Implement automated next stop displays on buses

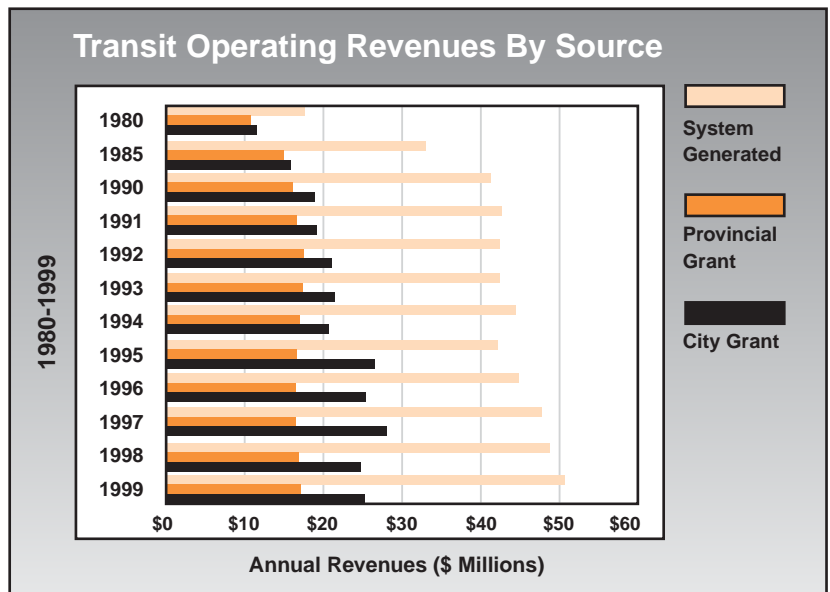
- ▶ Explore real-time schedule displays at bus stops

- ▶ Implement a new fare collection system

1.6.3. Making the Service More Affordable

Relationship Between Fares and Funding of the Transit Service

Transit service is funded from three major sources: system generated revenues (primarily fares), a Provincial grant, and a grant from the City (funded through property taxes). During the 1990s, the Provincial grant was reduced three times, currently has been frozen for four years, and remains at its lowest level since 1990 and 6.4% lower than its level in 1992. At the same time, the City's grant has varied depending upon the needs of the Transit operation. Since 1997, the City's contribution has decreased by 9.1%. To balance these funding cuts, fare increases have been implemented every year.



While small increases in fares appear not to have significant impacts on some ridership groups, the effect of the cumulative increases in fares over the past

decade seems to have resulted in reduced ridership levels amongst certain groups of passengers — particularly young people and those on limited incomes.



1. Executive Summary

• Level of Discount for the Reduced Cash Fare

In 1995, a new transit fare structure was implemented that included the introduction of discounted tickets, weekly passes, and the “power hour” transfer. In addition, a set of ratios between the adult cash fare and all other fare categories was defined. At that time, reduced fares (for children, high school students, and senior citizens) were set at 60% of the corresponding adult fares. In 1998, the reduced cash fare category was eliminated, although reduced tickets and passes were maintained.

After public dissatisfaction and loss of ridership, Council decided to reinstate the reduced cash fare at 80% of the adult cash fare for 1999 - and keep tickets and passes at 60%. It was hoped that this change would help recover some of the losses incurred. However, preliminary results for 1999 indicate that this is unlikely.

Recommendation:

► **Because of the budgetary impact, the level of the reduced cash fare not be further reduced and be maintained at 80% of the adult cash fare.**



• Fares for Post-Secondary Students

Over 40% of students at the major post-secondary institutions ride transit. They pay regular adult fares and generate approximately \$6.3 million in fare revenues each year. On a number of occasions, student associations have requested that the City introduce discounted transit rates for post-secondary students as they struggle to cover tuition and living costs.

In 1996-97, the Transit Department worked with the University of Manitoba and the University of Winnipeg student associations, and the University administrations, to develop a proposal that would provide discounted transit fares to students, maintain existing transit revenues, and generate some surplus funds to improve transit service to the universities. The proposal required that a mandatory Transportation

Levy be paid by all students as part of their student fees. The value of the levy was approximately 50% of the equivalent cost of using an adult monthly bus pass for the eight month school year. In the end, the student associations decided against a mandatory fee and did not put the proposal to a student referendum.

Because the proportion of post-secondary students already using transit is quite high, it is unlikely that a discount would attract sufficient new users and new revenue to offset the loss of existing revenues resulting from the fare discount. Therefore, a discount to post-secondary students would mean a net revenue loss to transit. While the magnitude of the loss would depend on the value of the discount, it would not be reasonable to compensate this shortfall with an increase in fares for other passengers, or a reduction in transit service levels.



1. Executive Summary

The Working Group considered an option that would involve a contribution from the student associations, at a lesser amount than that proposed in 1996-97. If all students were to pay a small transit levy as part of their student fees, discounted fares could be provided for students who are transit users. While the estimates would vary slightly for each institution, a 20% fare discount would require a levy of about \$50 for the academic year for each registered student.

This option was reviewed with representatives of the students associations of the University of Manitoba, the University of Winnipeg, and Red River College. For the following reasons, none of the student associations is prepared to support this approach:

1. The net reduction in transit fares for a full academic year (20% discount less the value of the levy) would amount to only a \$40 to \$50 savings for each student that uses transit. When compared to escalating tuition costs, this is not viewed as a significant saving by students.

2. Not only would a mandatory levy effectively reduce the value of the fare discount for students who are transit users, it would increase the student fees of those who are not transit users. Consequently, the concept of a mandatory fee will not find support amongst students at the three post-secondary institutions.

Despite concerted efforts in 1996-97 and in 1999, it has not been possible to identify an arrangement to provide discounted transit fares to post-secondary students without realizing a revenue loss for the transit system. While discounted fares will result in some increased ridership, the higher use is unlikely to be sufficient to compensate for the loss of revenue due to discounted fares. Consequently, the implementation of discounted fares for post-secondary students will require increased operating grants to transit by the City and/or the Province.

Because the financial difficulties faced by students are real and because post-secondary students constitute a significant segment of transit ridership in Winnipeg, it is recommended that a discounted post-secondary pass be implemented for students attending the University of Manitoba, the University of Winnipeg, and Red River College. It is estimated that the implementation of such a pass on a trial basis for the 2000-2001 academic year at a 20% discount from the regular monthly pass rate would require an annual increase in the transit grant of \$700,000.

Recommendation:

► ***That a post-secondary pass, discounted at a value of 20% from the equivalent cost of regular monthly passes, be implemented for students attending the University of Manitoba, University of Winnipeg, and Red River College during the 2000-2001 academic year.***

• Employer-Sponsored Fare Program

Many employers offer free or subsidized parking as a benefit to their employees. In several jurisdictions, employer-sponsored bus pass programs have been implemented to reduce commuting costs for transit users, to reduce the demand for parking, to provide a more equitable benefit program to employees, and to make the purchase of transit passes more convenient.

Such a program would require identification of potential employer participants, the design, production, and distribution of informational and promotional materials, and the development of an administrative system to support the program.

Recommendation:

► ***That an employer-sponsored transit fare program be investigated for Winnipeg (preferably in conjunction with a decision by the Federal Government to treat employer-paid transit passes as a non-taxable benefit).***



1. Executive Summary

1.6.4. Making the Service More Productive

• Transit Priority Measures

Transit priority measures implemented to date in Winnipeg have worked successfully and enjoy public support.

Recommendation:

▶ *That further transit priority measures be implemented to improve the speed and reliability of transit service.*

• Upgrade of the Radio System and Automatic Vehicle Location

Installed in 1982, the existing two-way bus radio system is approaching the end of its useful life.

Recommendation:

▶ *That the existing two-way bus radio system be replaced with one that includes automatic vehicle location (AVL) capability.*

• Alternative Fuels

Recent testing and demonstrations involving the use of hydrogen as an alternative fuel for transit buses look promising.

Recommendation:

▶ *That when technologically practical and economically feasible, Winnipeg Transit consider converting to hydrogen on a phased-in-basis.*

• Increased Promotion of Transit Services

Transit service can be made more productive if additional passengers can be attracted to utilize the existing capacity. New customers need to be recruited.

Recommendation:

▶ *That sufficient funds be provided in the transit operating budget so that additional effective promotion initiatives can be undertaken.*

• Replacement of North Garage

The antiquated transit operating centre at Main Street and Carruthers Avenue needs to be upgraded/replaced. With the closure of St. James garage, additional capacity is also required at this location.

Recommendation:

▶ *That the transit garage located at Main & Carruthers be replaced by a more modern facility by 2010.*



1. Executive Summary

1.6.5.

Making a Commitment to Affordable High Speed Transit

If additional ridership is to be attracted to public transit, then measures must be taken to improve the **performance** of the transit system. Improved performance — including faster speeds, improved reliability, a more accessible system, improved user information, improved waiting facilities, etc. — is essential to make transit a competitive and attractive option for urban travel.

The key to improving transit performance in Winnipeg is **speed**. As the built-up city has expanded, transit service has become increasingly less competitive with automobiles in terms of travel time. For trips that can be made by transit in 35 minutes or less (including walk, wait, and in-vehicle time), transit use is quite high. For trips that take longer than 35 minutes by transit, transit use is much lower. Because of the geographical expansion that has occurred in recent decades, **less than half** of Winnipeg's current population is located within 35 minutes of downtown by transit.

A commitment to high speed transit requires the operation of buses in congestion-free corridors.

Recommendations:

- ▶ ***That opportunities for expanded express services be identified and, where feasible, implemented.***
- ▶ ***That the feasibility of On-Street Rapid Bus be studied and, where feasible, implemented.***
- ▶ ***That the City determine the conditions and time frames for proceeding with a busway system with particular reference to the Southwest Transit Corridor as the first stage in its development.***
- ▶ ***That efforts be made to identify alternative mechanisms to fund high speed transit — including dedicated revenue streams, public-private partnerships, the granting of development rights on City-owned land adjacent to the corridor, and partnerships with senior levels of government.***





1. Executive Summary

1.7. Funding Of The Transit System

1.7.1. Historical Funding of Transit Operations

The annual transit operating budget contains the following major components:

- ▶ Regular Transit Operating Costs
- ▶ Handi-Transit Operating Costs
- ▶ Debt Costs and Contributions to the Bus Replacement Reserve

A number of factors must be considered within these operating costs. Despite an expanded geographical area, regular transit operating costs in the past 20 years have remained stable by controlling the amount of service provided and the close supervision of input costs.

Between 1982 and 1999, the number of bus hours operated per square kilometre of service area has decreased from 6,003 to 4,730, a **21% reduction in real service levels**. At the same time, between 1980 and 1999, the Handi-Transit budget has more than tripled from 2% to 7% of total Transit system costs.

The creation of the Transit Bus Replacement Reserve in 1994, to begin paying cash for new buses, has also driven Transit system costs upward. The short-term impact has been increased costs, since both the new bus replacement reserve costs and the debt cost incurred on past bus purchases, must be included in the budget. Although this “pay-as-you-go” policy creates short term financial pain, it is a very beneficial long term policy.

Between 1980 and 1999, the total Transit Operating Budget has decreased from 13.9% of the total City's tax supported expenditures to 13.4%. Within the Transit budget, there have been some considerable variations as follows (measured as a proportion of total City tax supported expenditures):

- Regular Transit Operating Costs **-16%**
- Handi-Transit Operating Costs **+200%**
- Debt and Bus Replacement Reserve **+100%**

Transit Revenues

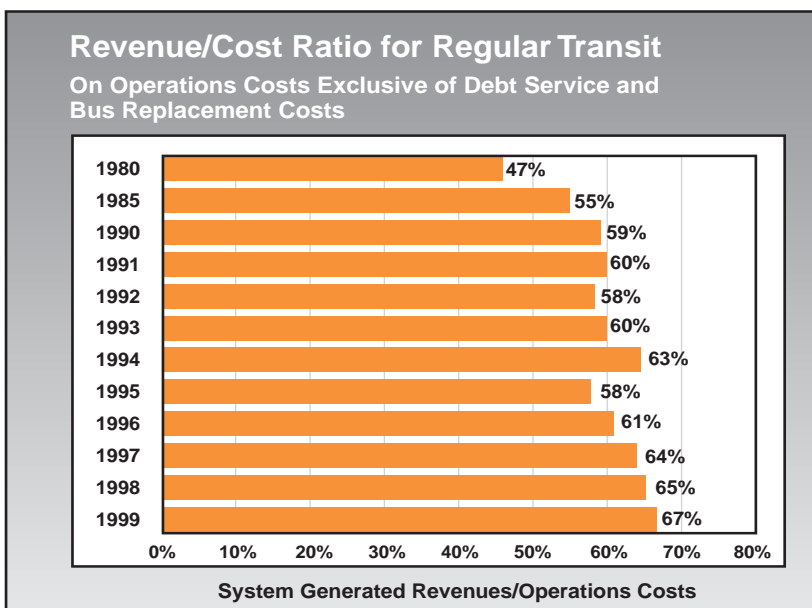
The operation of transit service is funded from three major sources each year: system generated revenues derived from passenger fares, advertising on buses, shelters

and benches; a Province of Manitoba operating grant; and a City of Winnipeg operating grant.

During the latter part of the 1990s, the proportion of total revenues accounted by system generated revenues has increased, while the proportion borne by government grants has decreased.

Revenue/Cost Ratio for Regular Transit

During the 1990s, annual transit fare increases increased the revenue/cost ratio of regular transit (from 47% to 67% between 1980 and 1999), and reduced the requirement for public funding of the service. As a result, the cost to the user for riding regular transit has increased at a rate much greater than that of inflation.





1. Executive Summary

1.7.2. Funding of Transit Capital Requirements

Major capital requirements for transit are funded through the City's Capital Estimates. The Innovative Transit Program (which has been in place since the early 1980s at annual levels of \$500,000 to \$600,000) is the main source of funding for making capital improvements to the transit system. Projects funded by the program fall into two categories.

a) Improvements that provide direct benefits to passengers

Examples include the Telebus System, heated passenger shelters, upgraded waiting areas at major bus stops, new transit terminals at major activity centres, Park and Ride lots, the Transit web site, etc.

b) Improvements that increase the productivity of service delivery

Examples include an Automated Scheduling System, Diamond Lanes, Transit Priority Signals, the Handi-Transit Trip Confirmation System, the Computerized Response System for managing customer complaints/commendations, etc.

In comparison to previous years, the 2000-2005 Capital Program includes a reduction in the budgeted amounts for the Innovative Transit Program. Such reductions would make it impossible to implement many of the recommendations contained in this report.

Recommendation:

▶ ***That the investment in the Innovative Transit Program be adequate to facilitate the recommendations of this report.***

1.7.3. Improving the Funding of Transit Operations

During the past two decades, a number of inter-related factors have combined to create significant financial pressures on the funding of transit service in Winnipeg. These include:

- ▶ Decentralized development requiring more dispersed service and resulting in lost ridership;
- ▶ No concurrent investment made in the transit system to keep it competitive with the automobile;

▶ A continual demand for increased Handi-Transit service levels;

▶ The transition from debt financing to "pay-as-you-go" financing of bus replacements;

▶ Government initiatives to reduce general taxation levels, reducing levels of funding from the City and from the Province.

It is important that the City's public transportation policy be used strategically to help achieve broader objectives (such as the economic development of downtown) and to make Winnipeg a more livable city. To do this, it is essential that increased ridership be attracted to the system. Not only must the improvements recommended in this report be implemented, but the funding of transit must be arranged in a manner that makes it possible to achieve the intended goals.



1. Executive Summary

• A Revised Approach for Funding Handi-Transit Service

Because of growth in the demand for Handi-Transit service, an increasing portion of the transit budget is accounted for by Handi-Transit costs. Since 1992, the Provincial Transit Operating Grant has decreased by 6.4%, or 27% when adjusted for inflation. As a result, the increased cost of Handi-Transit service has been largely offset by fare increases on both regular transit and Handi-Transit and by increased funding by the City of Winnipeg.



During the past decade, the Provincial government has adopted a policy of reducing the reliance on institutional care for the elderly and for those with disabilities, and placing an increased emphasis on home care. This Provincial policy has placed a significant increased demand on Handi-Transit service, in particular to accommodate medical and therapy trips.

The Canadian Charter of Rights and Freedoms legislation requires that all individuals be treated equally and that reasonable accommodation be provided for those persons with special needs. The report of the *Task Force Reviewing Handi-Transit Issues*, adopted by Council on September 21, 1994, defined the characteristics of a transportation service for physically disabled persons that is reasonably equivalent to the service provided to able-bodied persons by the regular fixed route system. For the City and the Province to meet this obligation, it is recommended that the following approach be used for the future funding of the Handi-Transit service:

Recommendations:

- ▶ **The City and the Province each make annual dedicated Handi-Transit Operations Grants**
- ▶ **That a multi year agreement be negotiated between the City and the Province to ensure consistent, reliable Handi-Transit system funding.**





1. Executive Summary

• A Revised Approach for the Funding of Regular Transit Service

Over the past decade, a reinforcing spiral of fare increases and service reductions has developed. While the revenue/cost ratio of regular transit has increased to 67% (based on 1999 budget data), it has been accomplished at the cost of reduced ridership.

Recommendation:

That the following approach for funding regular transit be adopted:

Service Level Policy:

a) The core operating budget for regular transit service be based on the operation of 1.3 million bus hours each year. This is the amount of service required to operate current levels of service.

b) Within the core annual service of 1.3 million bus hours, the Transit Department continue its practice of implementing routing and frequency improvements by diverting resources from under-utilized services to more productive ones. It should be noted, however, that the scope for funding service improvements in this manner is limited.

c) The Transit operating budget be increased as necessary to fund service expansions required for the introduction of service in new areas or for the expansion of the hours of operation in existing areas.

Fare Policy:

a) Fare levels be based on a revenue/cost target of 66% for regular transit. The revenue part of the ratio would be based on system generated revenues (fares, advertising, and charter revenue). The cost part of the ratio would be based on the operating costs of regular transit, exclusive of debt service charges and the annual contribution to the Transit Bus Replacement Reserve. This approach will moderate pressures for future fare increases.

b) The existing arithmetic relationships between the adult cash fare and all other fare categories be maintained.

Subsidy Policy:

a) The City provide a fixed dedicated annual grant for regular transit each year calculated as follows:

50% of Budgeted Sharable Deficit

Plus 100% of City Contribution to the Transit Bus Replacement Reserve

Plus 100% of City Debt Service Costs for Bus Replacement

where the Budgeted Sharable Deficit is defined as:

Regular Transit Total Costs

Less City Contribution to the Transit Bus Replacement Reserve

Less City Debt Service Costs for Bus Replacement

Less System Generated Revenues

b) The Province provide a fixed dedicated annual grant for regular transit each year equal to 50% of the Budgeted Sharable Deficit (as defined above)

c) The Province maintain its current policy of providing a Provincial Support Grant to offset the cost of the Provincial Payroll Tax.



1. Executive Summary

1.7.4.

A Revised Approach for Funding Major Transit Improvements

Despite stated City priorities for investment in the transportation system, very little investment in the transit system has been made during the past several decades. Improved transit service is important in the achievement of the City's urban development and quality of life goals. If transit improvements are to be achieved, then new mechanisms for funding the development of the overall urban transportation system need to be implemented.

In the transition to new methods, the following fundamentals for funding urban transportation must apply:

- ▶ Instruments be used that provide incentives to transportation users to make environmentally sustainable choices;
- ▶ The burden of funding the transportation system be shifted to those who generate the greatest costs (those who make extensive use of the system, who travel during peak periods, etc.);
- ▶ Any growth in aggregate taxation be minimized;
- ▶ Funds raised for transportation purposes be invested in accordance with stated City priorities.

Recommendations:

▶ **That dedicated revenue streams be established to fund two priorities for investment in the transportation system: Maintenance of Existing Infrastructure and Improvements to the Transit System.**

▶ **In particular, it is recommended that negotiations be undertaken with the Provincial Government to identify potential dedicated revenue streams. These revenues should be allocated as follows:**

- **80% of the funds to a Roadway and Bridge Maintenance Reserve to fund major repair and maintenance of regional roadways and bridges (in support of the first priority of Plan Winnipeg).**
- **20% of the funds to a Public Transit Infrastructure Reserve to fund major improvements to the transit system (in support of the second priority of Plan Winnipeg).**

Since the transit system carries 20% of peak period travel in Winnipeg, the same percentage of the generated funds should be allocated for major improvements in the transit system, such as the phased construction of the busway rapid transit network and its subsequent maintenance.

Sources of dedicated funding might include:

- ▶ A reallocation of a portion of the existing provincial or federal gasoline tax
- ▶ An auto registration tax
- ▶ Revenues resulting from Kyoto Protocol emissions trading

A transition to the use of dedicated revenue streams to fund the City's priorities for investment in the transportation system (maintenance of existing infrastructure and transit improvements) will require negotiation with Provincial and Federal Governments.

Recommendation:

▶ **The City initiate discussions with the other levels of government consistent with the above noted approach and recommendations so that urban transportation investments are made in a more effective and sustainable manner.**

1.8. Review of Public Transportation Priorities

As the City develops and changes, it must continuously review and reassess its key directions and policies. The Standing Committee on Public Works should request

updates to this report as required to ensure the policies, actions, and priorities identified remain consistent with the City's overall directions and policies.



2. The Role of Public Transit in Winnipeg

2.1. The Urban Travel Market and Winnipeg's Urban Transportation System

The urban travel market includes all trips made in Winnipeg. The market is a derived one: urban travel is not a goal in itself, but a prerequisite activity to accomplish another purpose (work, study, shop, etc.).

The size and nature of the market are determined by population size, demographic characteristics, employment levels, land use patterns, the characteristics of the transportation system, user costs, weather, special events, and general economic conditions. The urban travel market varies by season, by day of the week, and by hour of the day.

Conceptually, the urban travel market is measured by the number of person *trips* made in the urban area during a specified period of time. Citizens and visitors, or *users*, employ a variety of transportation services, or modes, to make *person trips* for specific *purposes* through the *urban transportation system*.

It is important that, in any analysis of the urban travel market, a distinction between *trips* and *users* be drawn. *Trips* are used to measure travel *activity* in the market. The behaviour of *users* determines the volume and types of *trips* made. Users do not necessarily use the same mode for all types of trips nor do they necessarily use the same mode at all times for a single trip purpose. This implies that, if certain types of travel behaviour are to be encouraged in pursuit of a vibrant and healthy city, then the circumstances that determine the *travel choices made by users* must be understood and influenced.



The City of Winnipeg is responsible for the planning, development, operation, and maintenance of Winnipeg's urban transportation system. Governed by current policy outlined in **Plan Winnipeg...**

Toward 2010, the Transit Department and the Public Works Department are jointly charged with carrying out the City's responsibilities related to the movement of people and goods. Winnipeg's fundamental urban transportation objectives are:

- ▶ To provide effective and efficient mobility for the movement of persons and goods which is affordable and accessible.
- ▶ To reduce traffic congestion through the provision of sufficient capacity in the transportation infrastructure.
- ▶ To minimize the overall investment in transportation infrastructure.
- ▶ To reduce emissions of air pollutants (carbon dioxide, volatile organic compounds, nitrous oxides, and chlorofluorocarbons) related to urban transportation.

- ▶ To reduce energy use related to urban transportation.
- ▶ To complement and support the objectives in Plan Winnipeg.

Within this framework, the historical role of public transit in Winnipeg has been:

- ▶ To provide transportation for those who do not have access to other modes.
- ▶ To provide a level of service during weekday peak periods that minimizes the City's investment in roadway and bridge capacity.
- ▶ To reduce pollution created by the urban transportation system
- ▶ To reduce energy used for urban transportation.



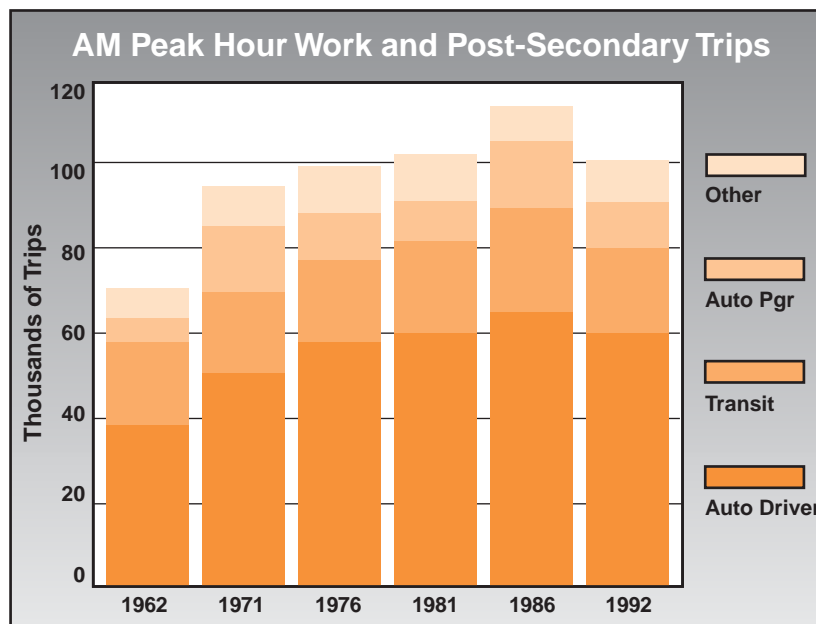
2. The Role of Public Transit in Winnipeg

2.2. Use of Public Transit by Winnipeggers

The transportation system is designed to accommodate peak travel demands. Peak travel is largely determined by patterned trips to work and post-secondary institutions. To monitor this, the City of Winnipeg conducts periodic origin-destination surveys of these types of trips.

The accompanying graph shows the distribution of city-wide peak period work and post-secondary trips amongst the major modes for each year during which a survey has been conducted.

As Winnipeg expanded in population and geographic area, the number of trips made in the work and post-secondary sector of the travel market grew until the late 1980's. Since then, the amount of travel has levelled off. Changes in the demographic profile of Winnipeg account for most of this change. In the early 1990's, however, the economic recession was an important factor in the decline in traffic levels. Between 1962 and 1992, transit's share of these trips declined from 28% to 20% of the total.



While transit's share of the city-wide work and post-secondary trip market is currently 20%, it is higher in areas where employment or student populations are concentrated. For example, the transit market share is 35% in downtown, 32% at the University of Manitoba, 56% at the University of Winnipeg, 35% at Red River College, 25% at St. Boniface College, and 22% at the Health Sciences Centre.

While the City's periodic origin-destination surveys provide an overall measure of the proportion of work and post-secondary trips accounted by the major modes on an average autumn weekday, they provide little information about transportation users or about overall patterns of travel behaviour amongst Winnipeggers.

The Transit Department conducts surveys every other year to measure general travel behaviours, reasons for use/non-use of transit, and attitudes about public transportation. The following information is based on the results of the most recent survey.



2. The Role of Public Transit in Winnipeg

Intensity of Transit Use by Winnipeggers

A high proportion of the population makes use of transit services in Winnipeg.

About 6 in 10 people report that they use transit at least occasionally.

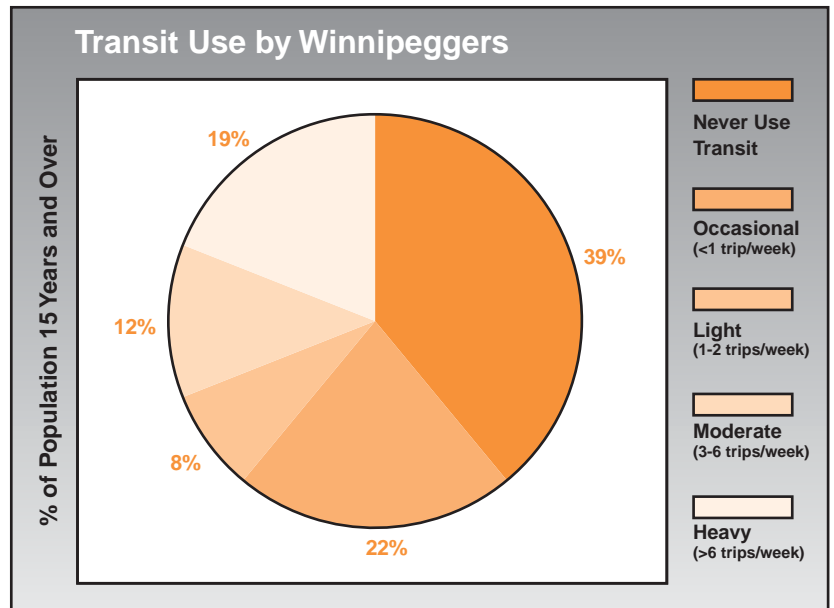
About 4 in 10 people make at least one trip on transit each week.

About 3 in 10 people make very regular use of the system (3 or more one-way trips each week).

As suggested by this graph, one of the keys to increased ridership is the creation of conditions that encourages occasional and light users to travel more frequently on the transit system.

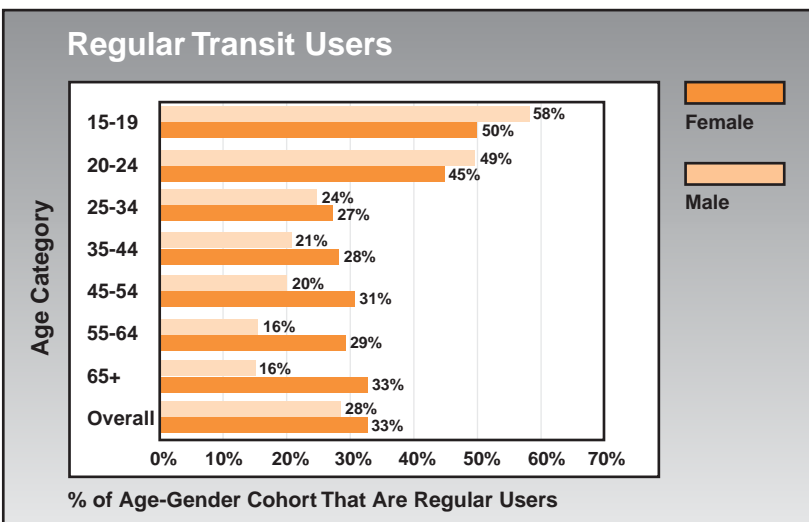
Demographics and Transit Use

Transit ridership is significantly affected by the demographics of the population. The graph shows the proportion of the population in each age cohort that uses transit regularly (3 or more one-way trips each week).



In most age categories, a higher proportion of women than of men use transit regularly. As the population ages, the proportion that continues to use transit on some regular basis decreases. More than half of teenagers and those in their early 20's are regular users of transit. For men over 25, transit use declines with age. For women over 25, about a third are regular users.

Young people are obviously an important transit market. In particular, those aged 15 to 24 years are the most intensive users of transit service. In the mid-1980's, the population of this age group in Winnipeg was about 108,000. Since then, it has declined to about 86,000. This shift of the "baby boom" population from an age group that uses transit extensively to one that uses transit much less frequently is a major reason that transit ridership declined significantly in the decade between 1986 and 1995.



Population forecasts for Winnipeg project that the size of this age cohort will increase to about 105,000 by 2011. This change will likely result in some growth in ridership over the next decade or so. If ridership rates can be increased amongst those in their late 20's, in particular, then there is good potential to improve aggregate ridership levels over the next several years.



2. The Role of Public Transit in Winnipeg

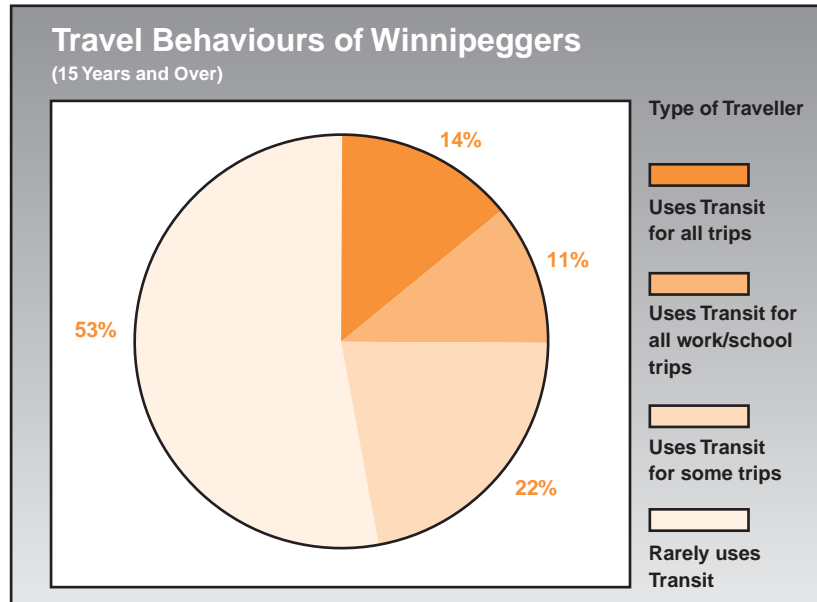
While growth in the younger cohorts of the population will have positive impacts on ridership, older cohorts will continue to account for the largest part of Winnipeg's population. In particular, those aged 45 - 64 will be the fastest growing part of the population over the next decade. While older citizens do not use transit as intensively as younger people, a high proportion are occasional and light users of the service. As this group ages, accessibility to transit will become increasingly important.

Travel Behaviours of Winnipeggers

Urban travellers do not necessarily use the same mode for all types of trips nor do they necessarily use the same mode at all times for a single trip purpose. The accompanying graph shows the patterns of mode choice made by Winnipeggers (aged 15 years and greater) for work, education, and other (shopping, personal business, medical, recreation) trips.

The population's travel behaviours can be summarized as follows:

- ▶ About 14% of Winnipeggers are completely dependent on transit for their travel. These persons use transit to make **all their trips** for all purposes.
- ▶ About 22% of Winnipeggers report that they use transit to make some of their trips. On certain days, they drive, walk, or cycle; on other days, they use transit to make their trips.
- ▶ About 11% of citizens use transit to make **all their work/school trips**. A portion of this group uses transit only to make work/school trips; they do not use transit for other purposes. Others in this group use transit to make all their work/school trips and some of their other trips.
- ▶ About half of the population reports that they rarely use transit. While they do not normally use transit to make any type of trip, they might use it when their cars are unavailable or are being repaired.



A relatively small proportion of the population (14%) is completely dependent on transit for their travel. With ever-increasing auto ownership levels, this suggests that most transit users have a choice as to whether they use the transit system or not. If transit service does not meet their needs, then most have access to alternative means of transportation.

In addition, a substantial proportion of the population uses transit to make only some of their trips. If infrequent users can be persuaded to use the system more often, then there is high potential to significantly increase overall ridership levels.



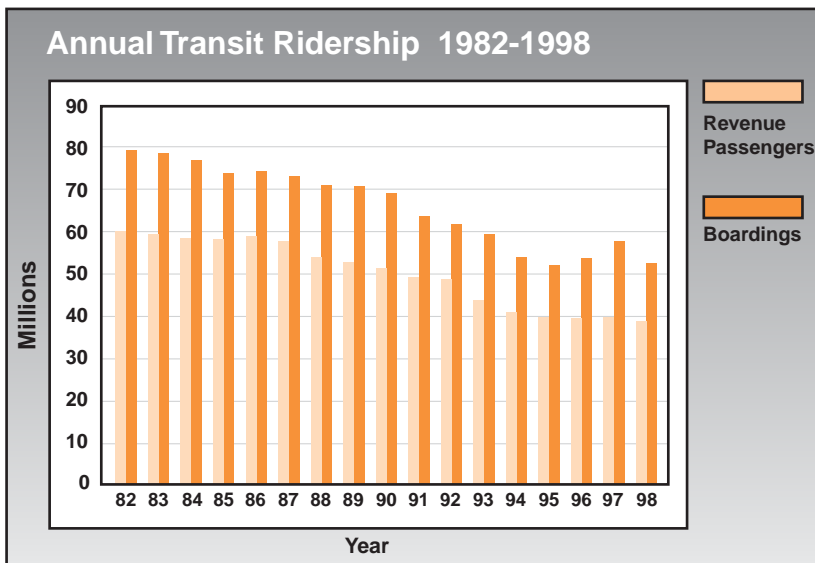


2. The Role of Public Transit in Winnipeg

2.3. Trends in Annual Ridership

Two measures of transit ridership are used. **Revenue-passengers** measure the number of passengers paying cash, ticket, or pass fares when boarding the transit system. It is a measure of the number of paid fares and does not include the number of transferring passengers. **Boardings** measure the number of passengers paying a transit fare or presenting a transfer slip when boarding the transit system. While annual transit ridership in Winnipeg has stabilized since 1995, a significant decline was experienced between 1987 and 1995.

A portion of the ridership loss is explained by the demographic changes discussed above. As important a factor, however, has been the impact of decisions made with respect to land use and urban form during the past several decades in Winnipeg.



Consequently, an understanding of the interaction between land use planning and transportation planning is fundamentally important in the development of a future role for public transit in Winnipeg.

2.4. Interaction Between Land Use Planning and Transportation Planning

Urban transportation is a complex issue that involves public and private interests.

The City plays a major public role in the **supply of infrastructure** (streets, bridges, lanes, sidewalks, parking facilities, traffic control devices, buses, and cycle paths) and in the **supply of services** (public transit, Handi-Transit, traffic operations, and the regulation of on-street parking and loading, private approaches, truck routes, and signs).





2. The Role of Public Transit in Winnipeg

The private sector also plays an important role in the **supply of infrastructure** (off-street parking facilities, terminals) and in the **supply of services** (taxis, couriers, delivery services, charter bus services).

The **demand** for urban travel is predominantly influenced by land use patterns, the nature of the local economy, workforce and school participation rates, and the demographic characteristics of the population. The choices of travel mode made by the city's residents are affected by trip lengths, the perceived quality of available travel options, auto availability, and direct user costs.

Because of the interrelationship amongst land use patterns, transportation supply, and mode choice, the City directly influences the **demand** for urban transportation:

- ▶ Land use decisions determine the density of the city and the proximity of residences to employment and major activity centres. These, in turn, affect the amount of travel and average trip lengths.
- ▶ The City's decisions about the **nature** and **mix** of transportation infrastructure and services to supply directly determine the relative quality of service of the major modes of travel. This, in turn, influences the mode choices made by residents.

A complicating characteristic of urban transportation is that externalities are significant. That is, users of urban transportation do not **directly** pay for all of the costs incurred by their travel. As examples, users do not directly pay for the capital costs of urban transportation infrastructure, for the operations and maintenance of transportation facilities, for air, water and noise pollution created by vehicular transport, for ambulance and health system costs resulting from accidents, or for the costs of traffic policing.

Because these external costs are borne by the general population rather than by users, they distort the choices made by individual travelers. This results in aggregate travel behaviours that have implications beyond the transportation sector.

During the past few decades, the developed area of the city has expanded at a rate much greater than that of population growth. This growth accommodated an increased demand for suburban single family housing as the "Baby Boom" generation moved through the family formation stage of the life cycle.

As part of this decentralization, the City made large investments in road widenings and new roads, bridges and underpasses to accommodate increased travel activity and longer trip lengths. Because no concurrent parallel investments were made to improve public transit and because the externalities described above have underpriced automobile use, the proportion of urban travel made by automobile has dramatically increased.

These land use and transportation decisions have had profound impacts. The expansion of roadway and bridge capacity has made it very easy to get around the city by car. In comparison to other major Canadian cities, traffic congestion is not a major problem in Winnipeg. While this is often touted as an advantage of living in Winnipeg, there have been other important impacts:

- ▶ The expansion of the roadway and bridge network has stimulated further decentralization of residences, employment, and commercial activity in Winnipeg. This has increased the geographic area to which municipal services must be delivered. Because the population and the assessment base have not kept pace with growth in service area, the City's financial capacity to deliver municipal services has diminished.
- ▶ The new roads, bridges, and underpasses have been financed through debt. Annual debt charges are a significant burden and further constrain the City's capacity to deliver municipal services (including alternative modes of transportation).



2. The Role of Public Transit in Winnipeg

▶ The decentralization of the city made possible by the expanded transportation infrastructure has had a negative impact on inner city neighborhoods and the downtown.

▶ The increasing proportion of trips made by automobile has decreased the number of pedestrians on city sidewalks and degraded the pedestrian environment. This, in turn, has reduced informal surveillance, increased concerns about personal safety, and decreased the viability of street-front retail businesses.

▶ Traffic levels have increased in local residential areas.

▶ The large investment in new roads, bridges, and underpasses has diverted funds required for maintenance of existing infrastructure.

▶ Air, water, and noise pollution levels resulting from urban transportation have increased.



These impacts illustrate that transportation decisions affect many aspects of urban life. Consequently, it is important that urban transportation policy in general, and public transportation policy in particular, be developed within the broader context of major issues of concern to Council and citizens. These include more efficient service delivery, affordable municipal government, infrastructure renewal, public safety, economic development, downtown revitalization, renewal of older neighbourhoods, and environmental stewardship.

Winnipeg is expected to grow at a very moderate rate over the next several years. As the demographic profile of the population ages, housing, employment, and lifestyle needs will differ from those of the recent past. As concerns about greenhouse gas emissions grow, municipal governments will be required to play an important role in the implementation of policies that meet the country's commitments in the Kyoto Protocol.

The City's urban transportation policies and practices, therefore, must be supportive of broader initiatives to improve the quality of life in Winnipeg, to meet the needs of citizens, and to honour global commitments.



2. The Role of Public Transit in Winnipeg

2.5. Focusing on Public Transit's Strengths

The traditional benefits of public transit are well recognized. Public transit:

- ▶ provides transportation for those who do not have access to other modes,
- ▶ provides a level of service during weekday peak periods that minimizes required investment in roadway and bridge capacity, and
- ▶ reduces traffic congestion, air pollution, and the use of fossil fuels.

However, public transit provides other potential benefits that are not as well understood:

- ▶ Public transit is **space-efficient**. Less land is required to move a small number of transit vehicles than to move a large number of automobiles carrying the same number of people. Land not required for transportation can be freed up for other active uses or for public open space.
- ▶ Public transit is **cost-efficient**. Since transit is more frugal with resources such as land and energy, it is often more cost effective to meet a mobility need with transit rather than through road widening or extensions. More compact higher density development provides a significant cost saving for transit as well as other services such as sewer and water, roads, utilities, emergency services, and public schools. Other benefits resulting from increased development densities include protection of land devoted to agriculture, protection of sensitive areas, and increased opportunities for cycling and walking.



- ▶ Public transit **enhances public safety**. Transit use encourages, and benefits from, greater pedestrian activity, greater public presence on the sidewalks, and greater informal surveillance and personal safety in public spaces.

- ▶ Improved public transit is essential for the **economic development and revitalization of downtown**. Better transit expands the market for downtown businesses and expands access to labour for downtown employers. Transit infrastructure in the downtown requires less space and is less intrusive than automobile infrastructure. Streets can be made more pedestrian friendly. The need for monthly parking can be reduced. Surface parking can be freed up for more valuable uses. High transit use increases the level of pedestrian activity which, in turn, makes streets safer and makes street level businesses more viable. A revitalized downtown has positive impacts on surrounding inner city neighbourhoods.

In short, good transit helps achieve sustainable development and an improved urban environment. In many cases, the quality of the environment, the quality of life, the economic competitiveness, the health of the central business district, and the vitality of the community in transit-oriented urban areas are higher than those in automobile-oriented cities.

Because these benefits are consistent with the priorities of Council and *Plan Winnipeg*, the Working Group recommends that, in addition to the traditional goals, public transportation policies and practices be used strategically to help achieve broader objectives to make Winnipeg a more livable city.

In practice, these benefits can be achieved only if additional ridership can be attracted to the system. To attract increased ridership, supportive conditions for public transit must be created and transit improvements must be focused in those areas that generate the greatest benefits.



3. Factors Affecting Ridership

There are many factors that affect the level of transit ridership. Some are controllable and can be influenced by policies and actions taken by the City. There are other factors, however, that are not controllable.

3.1. Controllable Factors



Urban Form

There is a strong positive relationship between urban density and the level of transit ridership. Higher residential and employment densities make it feasible to operate frequent transit service throughout the day. Higher levels of transit service, in turn, attract higher transit use. The spatial location of land uses is also important. Developments (residential, commercial, or employment) isolated from existing built-up areas are expensive for transit to serve with frequent service throughout the day. Because it is responsible for land use planning within its boundaries, the City can directly influence, over time, urban form.

Nature of Transportation Infrastructure Investment Made by the City

The types of transportation investments made by government directly affect the quality of service that can be provided by the various modes. During the past two decades, significant investment has been made in the expansion of road and bridge capacity in Winnipeg. During the same time period, there has been minimal investment in transit improvements that would make transit travel times competitive with those by automobile. In combination with the decentralization of the city, transit has become a less attractive mode of travel. The City can directly influence the nature of infrastructure investment through the transportation framework adopted in *Plan Winnipeg* and in the capital spending decisions it makes each year.

Parking Policy

The availability and cost of monthly parking, particularly in the downtown, has a significant impact on mode choice. During the past two decades, the number of parking spaces in the downtown has increased significantly and has been associated with lower transit mode splits for downtown work trips. While the City cannot directly control the amount of long term parking provided by private interests, it can use zoning regulations to influence the location, nature, and amount of parking built by developers.

Transit Fares

The rate of change in transit fares, in comparison to increases in the general cost of living and to the cost of auto operation and parking, does affect transit ridership. During the 1990's, transit fares increased at a rate much higher than that of the Consumer Price Index for Winnipeg and much higher than that for auto operating costs. Some transit users, such as students and those on limited incomes, are more sensitive to fare increases than are other users. Transit fare levels are affected by the costs of transit service delivery, the level of Provincial grants, and Council targets for the mill rate.



3. Factors Affecting Ridership

Transit Service Quality

The quality of transit service delivery directly affects ridership levels. Service must be delivered with the following attributes if existing ridership is to be retained and new users are to be attracted to the system.

Attribute	Service is of High Quality When . . .
Coverage	<p>The walk to and from transit stops is a reasonable distance.</p> <p>The route network operates in very close proximity to major destinations.</p>
Comfort	<p>The waiting areas at bus stops are clean, attractive, well-lit and accessible.</p> <p>Transit shelters are placed at busy and/or exposed stops.</p> <p>Transit shelters are well-maintained.</p> <p>Modern accessible buses in good repair are used to provide service.</p> <p>Bus interiors and exteriors are clean and well-maintained.</p> <p>Buses are operated safely.</p>
Travel Time	<p>Buses operate at frequent intervals.</p> <p>Routes are direct.</p> <p>Buses are not delayed by traffic and parked cars.</p> <p>Transit priority measures are used to speed up bus service.</p> <p>Travel by transit is as fast as travel by car.</p>
Reliability	<p>All scheduled trips are operated.</p> <p>Vehicle breakdowns are minimized.</p> <p>The service operates on time.</p> <p>Transfer connections are made.</p> <p>Transit priority measures are used to eliminate schedule delays.</p>
Convenience	<p>Route, schedule, and fare information is readily available.</p> <p>Information posted at transit stops is current and easy to understand.</p> <p>The need to transfer is minimized.</p> <p>Transfers can be made at the same stop or the same intersection.</p> <p>Fares are reasonable.</p> <p>Fare options are easy to understand and flexible.</p>
Accessibility	<p>A network of well-maintained sidewalks provides access to transit stops.</p> <p>Stop platforms and shelters are well designed and maintained in good repair.</p> <p>Accessible buses are used to provide service.</p> <p>Service schedules identify the trips operated by accessible buses.</p> <p>High quality snow removal on sidewalks allows wheelchair access to regular transit.</p>
Courtesy	<p>Passengers are treated politely and respectfully by transit staff.</p> <p>Staff provide reliable information to customers.</p> <p>Complaints are investigated promptly and corrective action is taken.</p>

FOR THE FUTURE



3. Factors Affecting Ridership

3.2. Uncontrollable Factors

Demographics

Transit is used most extensively by those who are young and those who are old. Since the mid-1980's, the demographics in Winnipeg have worked against transit. A significant portion of the population moved from an age group that uses transit most to an age group that uses transit least. Population forecasts for Winnipeg for the next 15 years suggest that this trend will reverse; the number of young people in the population will increase moderately. In addition, the number of elderly will increase substantially.

Employment Levels in the Local Economy

When employment levels are high, there is more urban travel than when employment is low. As the size of the urban travel market increases, transit ridership grows (although transit's market share might not grow at the same time). When economic activity decreases, entry level employees are usually the first ones to lose jobs. Because a high proportion of entry level workers are transit users, a downturn in the economy has a negative impact on transit ridership.



Nature of Employment

Changes in the types of work (part-time jobs with variable shifts, contract work, home-based work, etc.) have decreased the amount of patterned work travel. Many of these work trips occur at locations or at times that are difficult to serve by public transit.

Parking Availability and Costs

Only about a third of workers pay their own parking costs in Winnipeg. Free parking spaces or directly subsidized parking is often provided as an employee benefit. As a competitive measure, most shopping areas provide free or subsidized parking to their customers.

Automobile Operating Costs

When making mode choices, urban travelers often compare only the out-of-pocket costs of automobile operation (fuel, routine maintenance, and insurance) to the costs of using transit. During the past decade, these costs have increased at a rate much less than that of transit fare increases.



4. Increasing Transit Ridership

While an understanding of all the factors affecting transit ridership is important, it is necessary to focus on those factors that are controllable and that can be influenced by City policies and practices. To attain the benefits identified above, the Working Group recommends that a strategy to increase public transit's share of the urban travel market include the following components:

Recommendation:

▶ ***That conditions supportive of increased transit use be created as part of the ongoing physical and economic development of Winnipeg.***

▶ ***That specific improvements to transit service be focused where the potential to attract new ridership is highest. Priority for improvement should be for trips made:***

- ***To, from, and within the downtown;***
- ***Along the major radial travel corridors of the City;***
- ***To and from major centres of employment, education, health care, and shopping.***

4.1. Developing Supportive Conditions



City Council and the City's administration need to continue to collaborate with developers, the business community, and the public to create conditions that support increased transit use and that make Winnipeg a more livable city. The development of these supportive conditions requires that:

a) The current update to *Plan Winnipeg* include a transportation framework that contributes to the revitalization of downtown, supports the renewal of older neighbourhoods, improves public safety, and gives priority to transportation investments that are financially and environmentally sustainable.

While the current version of *Plan Winnipeg* is consistent, in general, with this condition, Winnipeg's transportation system has developed, during the past two decades, in a manner that is inconsistent with this vision. Improved public transit has an important role to play if several of the broader goals of Council are to be

achieved. The City's transportation framework is being reviewed as part of the current update of *Plan Winnipeg*. It is important that the priorities for investment specified in the revised transportation framework be consistent with and be supportive of these other important urban objectives.

b) Land use planning be more fully integrated with transportation planning.

As part of development planning, transit operating requirements (collector roadways, turnaround loops, sidewalks, pedestrian walkways, bus stop areas) must be included, denser development and major activity centres should be located in close proximity to transit service (especially to future rapid transit corridors), all development must be located within a reasonable walking distance of existing or planned transit service, and new development should be contiguous to existing services.



4. Increasing Transit Ridership

c) Pedestrian facilities be improved.

Transit users are pedestrians at the start and end of their trips. Sidewalks and pedestrian walkways should be located and designed to encourage walking trips and to shorten walking distances to transit stops. Comfortable and safe waiting areas should be provided for transit passengers. Where warranted, protected walkways and protected transit waiting areas should be provided.

d) Transit be more fully integrated in the downtown, at major activity centres, and on neighbourhood main streets.

In these areas, transit plays a key role. Sufficient space must be provided on sidewalks at transit stops to accommodate waiting passengers, passing pedestrians, and waiting amenities. Waiting areas must be integrated into existing and future developments. Transit routes must operate in very close proximity to the major destinations. Traffic operations and on-street parking must be arranged to ensure that transit vehicles operate on schedule and at reasonable speeds. In the downtown, convenient shuttle service must provide an efficient internal transportation link.



e) Individual and group modes of travel be more fully integrated.

Urban transportation can be improved by more fully integrating the various modes of transportation. The linking of existing cycle paths with new ones adjacent to major roadways and transit corridors can provide an improved network for cyclists. The construction of park and ride sites in suburban areas can effectively integrate automobile and transit use. The creation of a multi-modal terminal can integrate intercity modes with local transportation.

f) Further growth in the supply of long term parking in the downtown should be minimized.

Transit use is inversely related to the supply of long-term parking in the downtown. Despite provisions in *Plan Winnipeg* to limit the downtown parking supply, the number of monthly parking spaces has increased significantly since 1981. While there are legitimate needs for short-term parking in the downtown to support downtown businesses, further growth in the supply of long-term parking in the downtown should be minimized.



4. Increasing Transit Ridership

4.2. Improving Transit Service in Winnipeg

While it is important for Council to implement transit supportive policies that create an environment for increased transit ridership, it is essential that improvements be made to transit service to keep existing customers and to attract new riders.

To provide real benefits to passengers, transit improvements must be focused on the following fundamentals:



a) Improving Speed and Reliability

The key to increasing transit's share of urban travel is to make significant improvements in the speed and reliability of transit service. When transit travel times are made competitive with automobile travel times in major travel corridors, significant modal shifts can be attained.

Reliable service means that buses arrive at stops on schedule (which minimizes waiting times for passengers) and that consistent running times are operated along the route from one day to the next (which makes connections more reliable for transferring passengers).

Improvements in speed and reliability attract ridership and increase passenger revenue. At the same time, higher operating speeds result in reduced running times and potential savings in operating costs. Initiatives that attract ridership and control costs concurrently, therefore, are essential to implement. Such measures as on-street traffic priorities for transit and high speed transit are particularly important.

b) Improving Comfort, Convenience, Safety, and Accessibility

Transit travel includes the walk to the bus stop at the start of the trip, the wait at the bus stop, the ride on the bus, and the walk from the bus stop at the end of the trip. Improving each part of transit travel is important. In particular:

- ▶ The regular transit system must be made more accessible. In addition to low-floor buses, accessible paths must be provided to and from bus stops. Such paths must be of good design and must be maintained in a manner that permits unimpeded use during all seasons.
- ▶ Safe, well-lit, attractive, and comfortable waiting areas must be provided for passengers. Major stops must include heated shelters, benches, transit signs with posted route and schedule information, planters, public telephones, newspaper boxes, and other amenities.

- ▶ An up-to-date, modern fleet of accessible buses is required. It is essential that the fleet be renewed with 30 new low-floor buses each year to provide improved accessibility for an aging population.
- ▶ The route structure must be continually adapted to reflect changes in land use and employment, to deliver passengers in close proximity to their destinations, to reduce the number of transfers, and to improve integration with other modes.
- ▶ The fare structure must provide customers with affordable and flexible fare options with convenient methods of payment.



4. Increasing Transit Ridership

c) Improving User Information

One of the barriers to transit use is the lack of easily accessed user information about routes, schedules, and fares. It is important that existing information sources (maps, timetables) be improved, that route and schedule information be posted at more transit stops, that the Telebus system be improved, and that new information technology be used to provide transit information in innovative ways.



d) Improving Productivity

Improvements in productivity result in better service at lower cost. In particular, the application of new technology in the areas of customer information, automated vehicle location, radio communications, service monitoring, fare payment, equipment maintenance, and service logistics, and the operation of transit service at higher speeds provide opportunities to realize real productivity gains.





5. Recommended Improvements

The Working Group recommends that the City implement the transit improvements outlined in this section. While each has a direct impact on one or more of the four transit fundamentals outlined on the previous page, the initiatives are centered on the following themes:



- Making Ongoing Improvements to Service***
- Making the Service Easier to Use***
- Making the Service More Affordable***
- Making the Service More Productive***
- Making a Commitment to Affordable High Speed Transit***

5.1. Making Ongoing Improvements to Service



5.1.1. Route Network Improvements

There are a number of land use changes in the city to which the transit network needs to be adapted. New or expanded service needs to be developed for a number of growing residential and industrial/commercial areas. The residential areas include Dakota Crossing, Lakes of River Park South, Whyte Ridge, Lindenwoods, Crestview, Richmond West, Royalwood, Amber Trails, and Tyndall Park. The industrial and commercial areas include Scurfield Industrial Park, the Kenaston-McGillivray-Lowson area, St. Boniface Industrial Park, Terracon Place, the St. James commercial area, and the Brookside-Inkster area.



In addition, there are a number of areas in the city in which existing routes need to be reorganized to provide better service. These include routes that operate in the area bounded by Portage, Balmoral, the CPR Mainline, and King Edward/Century, routes that operate to the University of Manitoba, and routes that operate in Transcona-Lakeside Meadows-Mission Gardens.

Recommendation:

► **The Transit Department is to continue its ongoing program to facilitate route network improvements.**

FOR THE FUTURE



5. Recommended Improvements

5.1.2. Regular Bus Replacement

To improve accessibility to transit service, the City is committed to the conversion of the regular transit fleet to low-floor buses as part of the regular bus replacement plan. As of 1999, about 23% of the fleet is composed of low-floor buses. At the current replacement rate of 30 buses per year, the fleet will be completely converted by 2013. Due to budget constraints and lengthy lead times for the delivery of new vehicles, the number of replacement buses acquired between 1994 and 1999 was significantly less than that required. As a consequence, maintenance costs increased. In the

future, it is important that buses be replaced on a regular basis to minimize overall life-cycle costs. To ensure the timely delivery of replacement buses at the lowest cost, it is recommended that the Transit Department continue its practice of issuing multi-year tenders. The next bus replacement tender should be issued for the 2000 - 2002 budget years. The current bus replacement plan assumes an average life of 18 years per bus. As maintenance experience is gained with recently-acquired low-floor buses, this assumption will need to be re-assessed.

Recommendation:

► **The Transit Department is to continue its program of regular bus replacements.**

5.1.3. Assignment of Low-Floor Buses to the Same Service Each Day

In 1995, Winnipeg Transit started a gradual conversion of its fleet from high floor buses to low-floor ones. This conversion is required so that passenger needs can be met as Winnipeg's population ages. The low-floor buses provide easier access for a wide range of passengers. These include persons who have difficulty walking or climbing steps, those who use wheelchairs, those who carry packages, those who are accompanied by young children, and persons who transport children in carriages.

To date, the low-floor buses have been operated on all routes in the transit system to provide an opportunity for all passengers to become familiar with their features. Now that there is a significant proportion of the fleet that is low-floor, it is important to implement a plan to assign buses to the same service each day, to communicate this plan to the public, and to specify trips operated by low-floor buses in transit schedule information.

Recommendation:

► **The Transit Department develop and implement a plan to dispatch low-floor buses to the same service each day.**

To provide opportunities for Handi-Transit registrants to use fixed route service, it is particularly important that low-floor buses be assigned to routes that serve major trip origins and destinations of Handi-Transit users.



5. Recommended Improvements

5.1.4. Upgrades of Major Stops



During the past seven years, a number of major bus stops have been upgraded to provide safe, well-lit, attractive, and comfortable waiting areas. These stops have been upgraded as single projects funded by the Innovative Transit Program, as part of larger projects (such as the Graham Mall, PortageScape, North Main redevelopment, Main-Norwood Bridges), or as part of the construction of exclusive transit terminals at shopping centres and post-secondary institutions. It is important that this program be continued at major stops yet to be upgraded in the downtown, at major activity centres, and along major neighbourhood main streets. In the latter case, it is important that transit stops be upgraded as general



streetscaping initiatives are undertaken in established commercial areas (such as was done in the Osborne Village and on Corydon Avenue).

Recommendation:

► **The Transit Department is to continue its program of upgrading major bus stops.**

5.1.5. More Transit Shelters

In Winnipeg's climate, it is important that adequate protection from the elements be provided at as many bus stops as possible. There are approximately 600 transit shelters for the 4,300 bus stops in the city. About 400 of the shelters are owned and maintained by the Transit Department; the other 200 are owned and maintained by Mediacom in exchange for

advertising rights. Approximately 10 to 15 new shelters are acquired each year through the Innovative Transit Program. While the City should continue to acquire new shelters in this manner, it is important that the Transit Department investigate further opportunities to partner with private interests to increase the number of transit shelters.

Recommendation:

► **The Transit department is to continue its program of adding more transit shelters.**

FOR THE FUTURE



5. Recommended Improvements

5.1.6. New Transit Terminals

Over the past decade, exclusive transit terminals have been built in partnership with private interests at Polo Park, Garden City Shopping Centre, Kildonan Place, St. Vital Centre, the University of Manitoba, and Red River College. These terminals permit transit service to be provided in close proximity to the major entrances of these activity centres and to be operated in

isolation from surrounding traffic congestion on the parking lots and internal streets of these complexes. The transit terminal at Garden City is in a state of poor repair and needs to be replaced with one that provides better access/egress for buses. In addition, new terminals are required to be built at Unicity Shopping Centre and at the University of Winnipeg.

Recommendation:

► **The Transit Department is to continue its program of building new transit terminals at major sites.**

5.2. Making Transit Service Easier to Use

For many people, transit service is not perceived as convenient to use. To eliminate this barrier, it is essential that the system be made easier to use. In particular, it is recommended that the following be implemented:

5.2.1. Non-Traditional Service Delivery (eg. DART)

Since 1996, the Transit Department has tested a new concept of service delivery in low density areas during periods of low demand. Regular fixed route service has been replaced by a flexible dial-a-ride service (DART) that operates on demand when and where required. The major benefits to users are more direct travel, greatly reduced walking distances, and a more secure ride. Experience to date has shown that the service

works best during evenings and Sundays/Holidays when most passengers are making outbound trips to their homes. There are several areas of low residential density for which this approach to service delivery (or variations of it) should be considered. Such areas as Westwood, St. Charles, Crestview, North Kildonan, All Seasons Estates, and the Pulberry-River Road area are potential candidates for this type of service.

Recommendation:

► **Further explore non-traditional service delivery opportunities (eg. DART).**





5. Recommended Improvements

5.2.2. Park and Ride

Six Park and Ride sites have been funded through the Innovative Transit Program in various parts of the city: Main & Jefferson, Charleswood Centre, Southdale Centre, Kildonan Place, Grant & Cambridge, and St. Mary's & Vista. At each of these sites, an agreement has been entered into with a private sector partner. The parking lot owner makes available a number of parking spaces (usually 20 to 30 adjacent to an express bus stop) for use by transit passengers between 6:00 am and 6:00 pm on weekdays. The private partner agrees to maintain the parking lot, to clear the lot of snow during the winter, and to administer the issuance of Park and Ride tags to passengers. The Transit Department is responsible for

upgrading the adjacent bus stop (illuminated signage, bus stop platform improvements, route and schedule information, benches, and waste receptacles) and for installing signs on the parking lot that identify the designated parking spaces. The integration of the two major urban travel modes (automobile and transit) is an effective way to increase transit ridership. The Park and Ride program should be expanded, particularly in the Portage Avenue, Pembina Highway, and Henderson Highway corridors.

Recommendation:

- ▶ **Expand the park and ride program.**



5.2.3. Bike Racks on Buses

To promote further integration of travel modes (cycling and transit), a pilot test of bike racks on buses is being carried out on the 18 North Main - Corydon route that serves downtown, Kildonan Park and

Assiniboine Park. The results of this test should be assessed to determine the warrant for further expansion of this concept.

Recommendation:

- ▶ **Consider expanding the "bike racks on buses" program.**



5. Recommended Improvements

5.2.4. Map and Timetable Improvements

Comprehensible route and schedule information is critical to attract additional ridership. Specific initiatives to be undertaken include an updated design of paper timetables and the system route map, the creation of special purpose

route maps for specific market segments (a tourist map, for example), and wider distribution of route maps. Sponsorship opportunities for these widely used materials also need to be explored to minimize costs.

Recommendation:

▶ **Continue to improve map and timetable information.**

5.2.5. Posted Information at Bus Stops

During the past decade, route and schedule information has been posted at many major bus stops. This initiative has reduced the uncertainty about expected bus arrivals at stops and, as a result, has been very well received by passengers. This program should be expanded.



Recommendation:

▶ **Continue expansion of program to place information at bus stops.**

5.2.6. Transit Day Pass

The current transit fare structure offers single ride cash fares, single ride tickets, a 5-day weekday pass, a 7-day super pass, and a monthly

pass. For added convenience, the feasibility of a Day Pass needs to be assessed. This fare medium should be targeted primarily at tourists.

Recommendation:

▶ **Assess the Potential for a Transit "Day Pass".**



5. Recommended Improvements

5.2.7. Internet Web Site

The Transit Department has recently developed a web site from which passengers are able to view and print route maps, timetables, and stop-specific schedules. Access to the internet is growing at a rapid rate. It is important that the transit web site be continually improved to provide convenient access to transit service information.

Recommendation:

► Further develop the Transit Web Site.



5.2.8. Improved Telebus System



The Telebus system is an automated telephone information service that announces bus departure times for any bus stop in the system. During the busiest months, more than 30,000 calls are received each day on Telebus. The original system was supplied in 1986 by a commercial vendor. In November 1999, this system was replaced with an updated one developed in-house by transit staff. In addition to providing the departure times for the next two or three buses at the time of the call, the new system also enables callers

to obtain information for departure times up to one week in advance. With new technology now in place for Telebus, it is possible to add new features to the system. It is important that the capabilities of Telebus be expanded to provide improved transit information (eg. real time schedule information, fare information) to customers.

Recommendations:

► Expand the features of the Telebus System



5. Recommended Improvements

5.2.9. Automated Trip Planning Service

This is a computer application that automatically finds the best path through the transit network between a specified trip origin and trip destination. Initially, this application should be used by staff

working at the Transit Information Service to assist passengers plan their trips. After testing by Transit Information staff, this service should be incorporated into the Transit internet web site.

Recommendation:

- ▶ **Investigate Automated Trip Planning for Transit's Web Site.**

5.2.10. Automated Next Stop Displays on Buses

An impediment to transit use is the uncertainty many people have about where and when to alight from a bus. For new users, unfamiliarity with the transit network makes it difficult to know precisely when the bus arrives at the destination bus stop. On buses with standing loads or during inclement weather when the bus windows are fogged, this uncertainty is experienced by all passengers.

The implementation of automatic vehicle location technology (see below) permits the name of the next stop to be displayed to passengers on an on board display as a bus progresses along its route. This technology, common in European transit systems, reduces uncertainty for users and permits occasional and regular passengers alike to use transit with confidence.

Recommendation:

- ▶ **Implement Automated Next Stop Displays on Buses.**

5.2.11. Real Time Schedule Displays

Another application made possible by automatic vehicle location is the display of real time schedule information at bus stops and at activity centres. When service is delayed, the schedule times of expected bus arrivals are updated automatically and displayed on monitors that can be seen by

waiting passengers. During the next few years, developments in wireless technology will simplify the design and reduce the implementation costs of this type of system. Real time schedule displays provide more reliable information to customers and reduce the uncertainty associated with using public transit.

Recommendation:

- ▶ **Explore Real-Time Schedule Displays at Bus Stops and Activity Centres.**



5. Recommended Improvements

5.2.12. New Fare Collection System

The existing fare collection system uses technology that is many decades old. While the current equipment is very reliable and does not require much maintenance, new developments in smart card technology will make it possible to provide more convenient fare payment options for passengers in

the future. While the technology and its associated institutional arrangements are not expected to mature for a number of years, it is important that the Transit Department monitor developments in this field and plan for a transition to a new system as the technology becomes proven.

Recommendation:

► **Implement a New Fare Collection System.**

5.3. Making the Service More Affordable

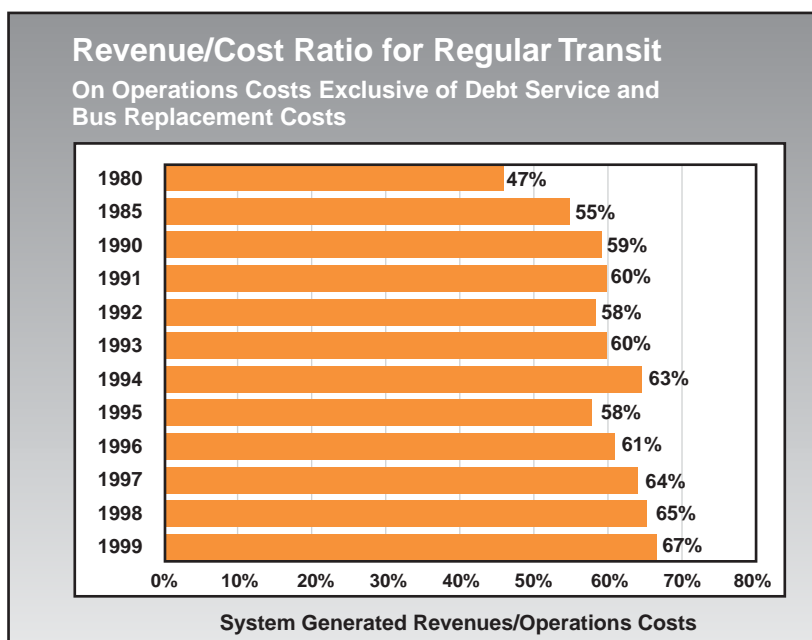
5.3.1. Relationship Between Fares and the Funding of the Transit Service

The transit service is funded from three major sources each year. These include system generated revenues (primarily fares), a provincial grant, and a grant from the City's general revenue fund.

During this same period, Council has placed priority on reducing the level of property taxation. To reduce the level of general revenue fund support required for transit, service levels were reduced permanently in 1994 and fare increases have been

implemented annually throughout the past decade. As shown in the graph below, the portion of transit operating costs covered by system generated revenues (primarily fares) for the regular transit system has increased above the 65% level.

Because of a change in the funding formula for transit, the Province reduced its grant by 2 ½ % in 1993, by a further 2% in 1994 and froze it at that level for 1995. In 1996, this grant was reduced by a further 2% (in line with reductions in provincial grants to municipalities, schools, health care and post-secondary education) and has remained at that level for 1997, 1998, and 1999.

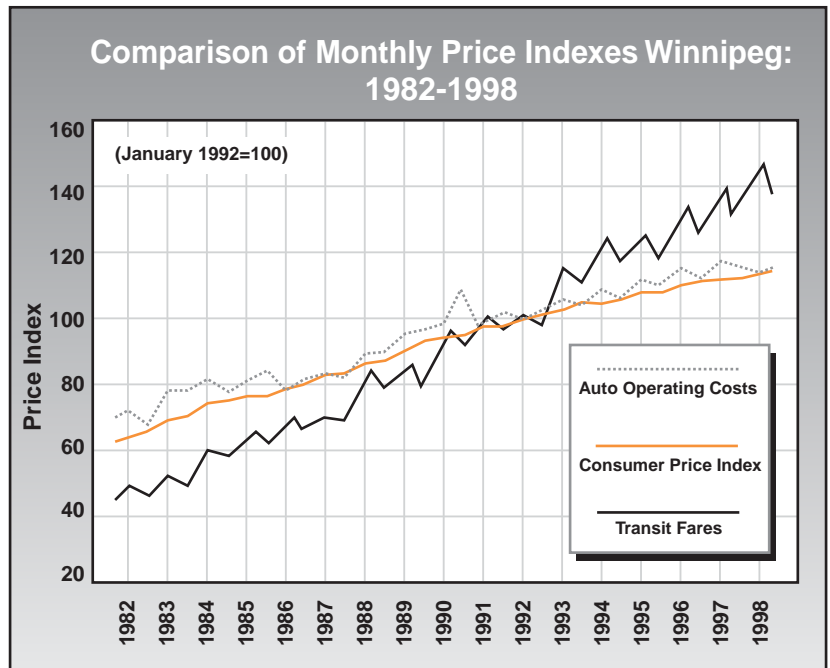




5. Recommended Improvements

Since the 1980's, the rate of transit fare increases has been much greater than that for the consumer price index in Winnipeg, and much greater than the rate of increase in automobile operating costs. This is illustrated in the accompanying chart.

While small increases in fares appear not to have significant impacts on some ridership groups, the effect of the cumulative increases in fares over the past several years seems to have reduced ridership levels amongst certain groups of passengers, such as young people and those on limited incomes. These financial relationships have a direct impact on the affordability of transit service for certain segments of the population. This is discussed more fully in the sections that follow.



5.3.2.

Level of Discount for the Reduced Cash Fare

In 1995, a new transit fare structure was implemented that included the introduction of discounted tickets, weekly passes, the "power hour" transfer, and a set of defined ratios between the adult cash fare and all other fare categories. At that time, the reduced fares (for which children, high school students, and senior citizens are eligible) were set at a value of 60% of the corresponding adult fares.

In 1998, the reduced cash fare category was eliminated. The other reduced fare categories (tickets, weekly pass, and monthly pass) were maintained at prices that were

60% of the corresponding adult fares. The intent of this strategy was to generate sufficient revenues to meet budgeted targets for the level of property tax support for the Transit Department without raising fares by a higher amount for all passengers. Because the proportion of children, high school, and senior citizen passengers paying cash was quite low and because the other reduced fare categories were still available for these passengers to use, the judgement was that this "deep discounting" strategy would generate the required revenues and, at the same time, impact the least number of passengers.

It was estimated that, compared to a 5-cent increase in the reduced cash fare, this strategy would generate an additional \$700,000 in revenue in 1998 and would result in about a 3% reduction in reduced ridership. In fact, ridership declined by almost 7% and only an additional revenue of \$25,000 in excess of what a 5-cent increase was projected to generate was realized. Fortunately, the Transit Department was able to make sufficient operational economies so that, at year end, there was a small operating surplus for 1998.



5. Recommended Improvements

After much consideration, it was the decision of Council to reinstate the reduced cash fare at a value of 80% of the adult cash fare for 1999. The other reduced fare categories were maintained at a value of 60% of the corresponding adult fares. It was expected that this change would increase reduced ridership by 3% in 1999 and would result in approximately the same passenger revenue had only the single cash fare (\$1.55 in 1999) been maintained.

Preliminary results for 1999 indicate that the 3% ridership increase amongst the reduced categories of passengers is unlikely to be realized. Because of the resulting impact on the transit budget and because of Council's goal to contain the level of property taxation in 2000 and in subsequent years, it is difficult to recommend at this time that the level of the reduced cash fare be reinstated to 60% of the adult cash fare.

Recommendation:

► **Because of the budgetary impact, the level of the reduced cash fare not be further reduced and be maintained at 80% of the adult cash fare.**

5.3.3. Fares for Post-Secondary Students

Over 40% of students at the major post-secondary institutions ride transit. They pay regular adult fares and generate approximately \$6.3 million in fare revenues each year. On a number of occasions, student associations have requested that the City introduce discounted transit rates for post-secondary students as they struggle to cover tuition and living costs.

In 1996-97, the Transit Department worked with the University of Manitoba and the University of Winnipeg student associations, and the University administrations, to develop a proposal that would provide discounted transit fares to students, maintain existing transit revenues, and generate some surplus funds to improve transit service to the universities. The proposal required that a mandatory Transportation Levy be paid by all students as part of their student fees. The value of the levy was approximately 50% of the equivalent cost of using an adult monthly bus pass for the eight



month school year. In the end, the student associations decided against a mandatory fee and did not put the proposal to a student referendum.

Because the proportion of post-secondary students already using transit is quite high, it is unlikely that a discount would attract sufficient new users and new revenue to offset the loss of existing revenues resulting from the fare discount. Therefore, a discount to post-

secondary students would mean a net revenue loss to transit. While the magnitude of the loss would depend on the value of the discount, it would not be reasonable to compensate this shortfall with an increase in fares for other passengers, or a reduction in transit service levels.





5. Recommended Improvements

The Working Group considered an option that would involve a contribution from the student associations, at a lesser amount than that proposed in 1996-97. If all students were to pay a small transit levy as part of their student fees, discounted fares could be provided for students who are transit users. While the estimates would vary slightly for each institution, a 20% fare discount would require a levy of about \$50 for the academic year for each registered student.

This option was reviewed with representatives of the student associations of the University of Manitoba, the University of Winnipeg, and Red River College. For the following reasons, none of the student associations is prepared to support this approach:

a) The net reduction in transit fares for a full academic year (20% discount less the value of the levy) would amount to only a \$40 to \$50 savings for each student that uses transit. When compared to escalating tuition costs, this is not viewed as a significant saving by students.

b) Not only would a mandatory levy effectively reduce the value of the fare discount for students who are transit users, it would increase the student fees of those who are not transit users. Consequently, the concept of a mandatory fee will not find support amongst students at the three post-secondary institutions.



Despite concerted efforts in 1996-97 and in 1999, it has not been possible to identify an arrangement to provide discounted transit fares to post-secondary students without realizing a revenue loss for the transit system. While discounted fares will result in some increased ridership, the higher use is unlikely to be sufficient to compensate for the loss of revenue due to discounted fares. Consequently, the implementation of discounted fares for post-secondary students will require increased operating grants to transit by the City and/or the Province.

Because the financial difficulties faced by students are real and because post-secondary students constitute a significant segment of transit ridership in Winnipeg, it is recommended that a discounted post-secondary pass be implemented for students attending the University of Manitoba, the University of Winnipeg, and Red River College. It is estimated that the implementation of such a pass on a trial basis for the 2000-2001 academic year at a 20% discount from the regular monthly pass rate would require an annual increase in the transit grant of \$700,000.

Recommendation:

► ***That a post-secondary pass, discounted at a value of 20% from the equivalent cost of regular monthly passes, be implemented for students attending the University of Manitoba, University of Winnipeg, and Red River College during the 2000-2001 academic year.***



5. Recommended Improvements

5.3.4. Employer-Sponsored Fare Program

Many employers offer free or subsidized parking as a benefit to their employees. This access to free or inexpensive parking reduces commuting costs for automobile users and provides a disincentive to transit use. In several jurisdictions, employer-sponsored bus pass programs have been implemented to reduce commuting costs for transit users, to reduce the demand for parking, to provide a more equitable benefit program to employees, and to make the purchase of transit passes more convenient. The nature of these programs vary. In some instances, employers provide a direct subsidy to employees for the purchase of

bus passes. In others, employees are able to buy annual passes through a payroll deduction plan.

It is recommended that an appropriate program be developed for Winnipeg, including identification of potential employer participants, the design, production, and distribution of informational and promotional materials, and the development of an administrative system to support the program. It is important that this program be coordinated with related initiatives, such as the *Green Commuting Project* being undertaken by *Resource Conservation Manitoba*

and efforts by the Federation of Canadian Municipalities and the Canadian Urban Transit Association to persuade the Federal Government to treat employer-paid transit passes as a non-taxable benefit for employees.

Recommendation:

► **That an Employer-sponsored Transit Fare Program be investigated for Winnipeg (preferably in conjunction with a decision by the Federal Government to treat employer-paid transit passes as a non-taxable benefit).**

5.4. Making the Service More Productive

5.4.1. Transit Priority Measures

The transit system must attract passengers while, at the same time, control operating costs. In most instances, one of these goals can be attained only at the expense of the other. Attracting ridership, for example, requires some combination of service expansion or fare reductions. This often worsens the financial performance of the transit system, however. Improving the financial performance of the system, on the other hand, usually requires some combination of service cuts or fare increases. The result is often a decline in ridership that ultimately leads to a downward spiral of deteriorating service and increasing fares.

There are very few techniques that transit systems can use to attract ridership and control costs **concurrently**. One of the techniques that can be used, however, is transit priority.

The implementation of transit priority has two major impacts:

1. Bus running times are reduced; this improves the **speed** of transit service.
2. On-time performance of buses is improved; this improves the **reliability** of transit service.

Improvements in **speed** and **reliability** make transit travel more competitive with automobile travel and **attract ridership**. If bus running times can be decreased by using transit priority measures to attain higher operating speeds, then fewer buses are required to provide the same service frequency on the route. In other words, the same service level can be provided at a lower cost. Alternatively, the same number of buses can be used to provide more frequent service.



5. Recommended Improvements



In most instances, isolated priority measures have only a limited impact on transit performance. If several transit priority initiatives can be arranged such that buses operating on a common routing can take advantage of the combined measures, then the potential impact on speed and reliability is much greater. For a particular routing pattern, therefore, it is important that buses have access to a series of transit priority measures.

Transit priority measures have the greatest impact on those streets on which a large number of routes operate. Because transit vehicles carry a very large proportion of the person-movements on such streets, and because buses carry more people than other vehicles in relation to their use of road space, the efficiency of the overall transportation system is improved by providing priority to transit. For these reasons, transit priority measures are usually implemented in central business districts and in

other congested areas, such as shopping centres, medical centres, and universities.

There are different types of priority measures and several have been implemented in Winnipeg during the past few years. The different types include *turn prohibition exemptions* for buses, *pulling away priority* (where general traffic must yield to buses merging left or pulling out of a bus bay), *transit-only signals* (Kildonan Place, St. Vital Centre), *transit-actuated signals* (Osborne & River, Portage & Vaughan, Provencher & Tache, St. Mary's & Enfield), *queue bypass lanes* (Pembina & University Crescent), *diamond lanes* (Main Street, Osborne Street), *transit only streets* (Graham Transit Mall), and *reserved right-of-ways* (busways, for example).

Because the priority measures implemented to date in Winnipeg have worked successfully and enjoy public support, it is recommended that further measures be implemented to improve the speed and reliability of transit service. Note that this recommendation is consistent with current transportation engineering practice to give precedence to the efficient movement of people and goods over the efficient movement of vehicles in the operation of the transportation system.

Recommendation:

► **That further transit priority measures be implemented to improve the speed and reliability of transit service.**



5. Recommended Improvements

5.4.2. Increased Promotion of Transit Services

Transit service can be made more productive if additional passengers can be attracted to existing capacity. While aggregate ridership levels are relatively stable over time, the level of customer “churn” (the number of new customers starting to use the system vs. the number of existing customers terminating their use of transit) is quite high. If ridership is to be increased, then new customers need to be recruited in greater number to replace the ones that leave. Therefore, it is essential that the transit system inform potential customers of the types of services available and the benefits of using transit.

While standard user information such as maps and timetables are necessary, they are not sufficient to attract new customers to the system. This is particularly true for special service for special events or for more complex services like DART. Due to budget constraints, there have been no funds for service promotion included in the operating budget of the Transit Department for the past several years. It is recommended that sufficient funds be provided in the transit operating budget so that more effective promotion initiatives can be undertaken.

Recommendation:

▶ ***That sufficient funds be provided in the transit operating budget so that additional effective promotion initiatives can be undertaken.***

5.4.3. Upgrade of the Radio System and Automatic Vehicle Location

The existing two-way radio system was installed in the transit fleet in 1982 and is approaching the end of its useful life. The system is essential to manage on-street operations each day and is an important safety feature for the public, passengers, and bus operators. The system needs to be replaced with a more up-to-date one that includes an automatic vehicle location (AVL) capability. AVL uses global positioning satellites to track the position of all buses on the street system. This improves the

capabilities of the Transit Control Centre to monitor the operation of service and to provide more responsive service in cases of traffic delays, passenger overloads, and inclement weather. Equally as important, AVL is a building block system required for the provision of real-time information directly to passengers at activity centres, at bus stops, and on board transit vehicles. See the previous discussion (5.2.10 and 5.2.11) about real time schedule displays and automated next stop displays on buses.

Recommendation:

▶ ***That the existing two-way bus radio system be replaced with one that includes automatic vehicle location (AVL) capability.***



5. Recommended Improvements

5.4.4. Replacement of North Garage



The transit garage located at Main & Carruthers needs to be replaced by a more modern facility by 2010. Since the St. James Garage was closed in 1994, the two remaining garages (Fort Rouge Garage and North Garage) have been operating at full capacity to accommodate the current fleet of 535 buses. Although the situation is manageable, some operational difficulties are created by the current arrangement. For example, there is little space

available to store new buses for pre-servicing prior to the scrapping of older buses. The parking of buses in their proper tracks in the garages can also be difficult at peak times. While the most cost-effective size of the replacement garage needs to be determined, it is also important that alternative sites be assessed to minimize the aggregate operational costs of bus pull-out and pull-in distances to route terminals.

Recommendation:

► **That the transit garage located at Main & Carruthers be replaced by a more modern facility by 2010.**

5.4.5. Alternative Fuels

In recent years, there has been a significant amount of research and testing in alternative fuels for transit buses. The various alternatives include methanol, compressed natural gas, electric battery power, clean diesel technology, and hydrogen fuel cells. Recent bus purchases by the Transit Department have specified clean diesel technology for the engines. Used with low sulphur fuel, this option currently provides the best

combination of reliability, cost-effective operation, and emissions reductions. The most promising technology, however, is the hydrogen fuel cell. When it moves from the prototype to the production stage, its cost will become affordable. Within the next decade, it should be feasible to convert to this low-emissions technology.

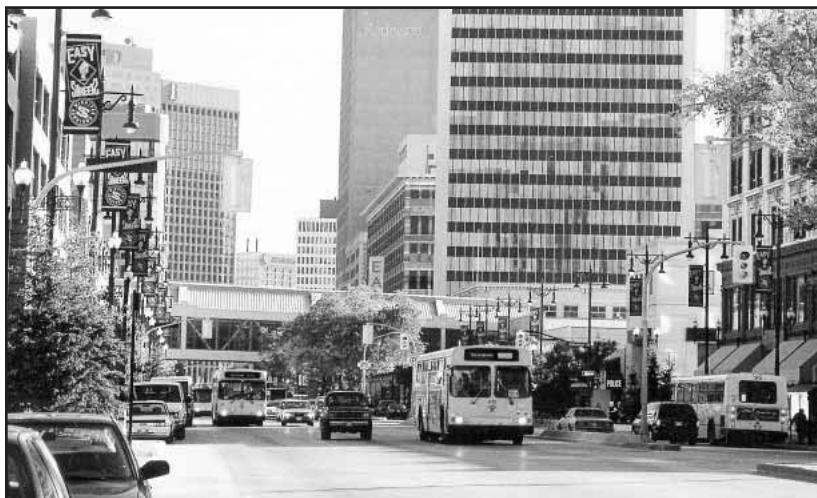
Recommendation:

► **That when technologically practical and economically feasible, Winnipeg Transit consider converting to hydrogen on a phased-in-basis.**



5. Recommended Improvements

5.5. Making a Commitment to Affordable High Speed Transit



If additional ridership is to be attracted to public transit, then measures must be taken to improve the **performance** of the transit system. Improved performance (faster speeds, improved reliability, more accessible system, improved user information, improved waiting facilities, etc.) is essential to make transit a competitive and attractive option for urban travel.

Public transit is an important part of Winnipeg's transportation system. About 20% of all work trips in the city are made by transit. For work trips made to the downtown, the transit mode split is 35%. For certain types of trips, transit should be the travel mode of choice. These include trips to downtown, trips along the major radial regional streets, and trips to concentrated areas of employment, shopping, and education. It is important that transit improvements be focused so that transit's share of these types of trips is increased.

The key to improving transit performance in Winnipeg is **speed**. As the built-up city has expanded, transit service, in comparison to automobile travel, has become increasingly uncompetitive in terms of door-to-door travel time. Research conducted by the Transit Department shows that, for those trips that can be made by transit in 35 minutes or less (including walk, wait, and in-vehicle time), the transit mode split is quite high. For trips that take longer than 35 minutes by transit, the transit mode split is much lower. The problem is that, as the city has spread out geographically, overall trip lengths have increased and the proportion of the total trips that transit (operating in mixed traffic) can service in 35 minutes or less has decreased markedly. In fact, **less than half** of the current population is located within 35 minutes of downtown by transit.

Higher speeds and service reliability are the base upon which improved transit performance must be built. Other factors, such as high quality user information, comfortable and attractive waiting areas, and modern accessible buses are also very important. However, the impact of these latter attributes is limited if the base of speed and reliability does not exist.

A commitment to high speed transit requires the operation of buses in congestion-free corridors. In ascending order of effectiveness, it includes the following components:

- ▶ Expanded express services.
- ▶ On-street rapid bus services to improve the speed, on-time performance, and comfort of mainline transit routes.
- ▶ Rapid transit in selected radial corridors to make transit travel competitive with automobile travel.



5. Recommended Improvements

5.5.1. Expansion of Express Services

During weekday peak periods, an extensive network of 17 express routes operates in the major travel corridors of the city. Limited express services operate on Portage Avenue and Pembina Highway during off-peak periods. In comparison to routes that operate locally, express routes provide some time savings to passengers. Because they share the roadway with other vehicles, however, express services are subject to traffic delays and are not competitive with travel times by automobile. There is scope, however, to expand the network of express services, particularly during the day on weekdays and Saturdays. Opportunities for expanded express services need to be identified and, where feasible, implemented.



Recommendation:

► ***That opportunities for expanded express services be identified and, where feasible, implemented.***

5.5.2. On-Street Rapid Bus

In those travel corridors in which no rights-of-way exist for rapid transit and on those streets on which high volumes of buses operate, *On-Street Rapid Bus* services offer the potential to improve transit travel times. *On-Street Rapid Bus* services include an integrated system of bus priority measures (diamond lanes, transit signal priorities, queue jumpers, etc.), upgraded bus stops,

and real-time passenger information displays to improve the speed, on-time performance, and comfort of mainline on-street transit service. While individual examples of these features have been used successfully in Winnipeg, they have not yet been applied to a complete route in a major corridor. The feasibility of *On-Street Rapid Bus* needs to be studied and, where feasible, implemented.

Recommendation:

► ***That the feasibility of On-Street Rapid Bus be studied and, where feasible, implemented.***



5. Recommended Improvements

5.5.3. Rapid Transit

To significantly reduce transit travel times, rapid transit is needed in heavily travelled corridors. Express services operated in mixed traffic, while helpful in improving transit speeds, do not provide sufficient time savings to make transit travel competitive with auto travel.

In cities of Winnipeg's size, the two most common rapid technologies used are busway systems (Ottawa is a good example) or Light Rapid Transit (LRT) systems (Calgary is a good example).

A busway system is a dedicated series of roadways for the exclusive use of buses. The buses can be of any type (diesel, natural gas, trolley, etc.) or size (standard or articulated). Buses can circulate in residential areas on the regular street system, then operate at very high speeds on the busway into the downtown. Busways permit the design of very flexible transit services that minimize the need for passengers to transfer between vehicles. Consequently, busways work well in corridors that have relatively low population densities.

LRT is a rail-based system that uses dedicated rail vehicles on the track. LRT is usually supplemented by an extensive feeder bus network. LRT systems work well in corridors that have a high population density where most passengers live within convenient walking distance of an LRT station.

Busway and LRT systems have similar passenger carrying capacities (up to 10,000 passengers per hour per direction). While the operating costs of the two systems are about the same, the capital costs of a busway system are about one-quarter of those of an LRT system.

Compared to LRT systems, busways are more flexible. A busway can be built in stages as funding permits. Each stage can be used immediately to improve transit travel speeds. A complete LRT line, on the other hand, must be built before it can be put into service. A major advantage of busways is that the existing fleet can be used to provide the service. LRT systems require the acquisition of a new set of specialized vehicles and the construction of a special facility to store and maintain the rail cars.

Compared to busways, LRT systems are more effective in serving existing high density neighbourhoods in the central part of the city, and in encouraging higher density development in the major radial corridors.

For the major corridors in Winnipeg, the busway system is the best initial choice for rapid transit. Busways can be converted to LRT should development densities increase in the transit corridors to levels that result in high volumes of passengers being resident or employed within convenient walking distance of the rapid transit stations.

While the first priority for rapid transit in Winnipeg is the Southwest Transit Corridor between the downtown and the University of Manitoba, a city wide busway network would include the Eastern Corridor (to Transcona), the Southeastern Corridor (to Windsor Park and Southdale), the Northeastern Corridor (to Elmwood, East Kildonan, and North Kildonan), the Northwest Corridor (to Inkster Industrial Park and the Maples), and a busway link between Grant and Portage Avenues in the CNR Oak Point subdivision that parallels Kenaston Boulevard.

While the Southwest Transit Corridor has been considered for implementation on several occasions by previous Councils, it has always been deferred so that other transportation projects (mainly new roads and bridges) could proceed. As part of its long term financial plan, Council is committed to decreasing the City's debt from levels accumulated by previous projects. Consequently, the funding of the Southwest Transit Corridor by the City remains problematic.

In addition to the obvious transportation and environmental benefits, it is well recognized, however, that rapid transit can have a very positive impact on the revitalization of downtown and can create opportunities for renewal in established neighbourhoods along its route. For this reason, it is important that efforts be made to identify alternative mechanisms to fund this important undertaking. Such options potentially include dedicated revenue streams, public-private partnerships, the granting of development rights on city-owned land adjacent to the corridor, and partnerships with senior levels of government.

Recommendations:

- ▶ ***That the City determine the conditions and time frames for proceeding with a busway system with particular reference to the Southwest Transit Corridor as the first stage in its development.***





6. A Multi-Year Transit Improvement Plan

Category	Ongoing	2000 - 2001	2002 - 2005	After 2005
Developing Supportive Conditions for Transit	Improved Land Use Planning Improved Pedestrian Facilities	Plan Winnipeg Update Review of Downtown Parking Policy Federal Tax Regulations for Employer Subsidized Transit Passes		
Making Ongoing Improvements to Service	Network Improvements Regular Bus Replacement Assignment of Low Floor Buses to Same Service Each Day Bus Stop Upgrades More Transit Shelters	Garden City Terminal Unicity Terminal Multi-Year Bus Tender for 2000 - 2002	U of W Terminal	
Making Transit Service Easier to Use	Non-Traditional Service Delivery Park and Ride Internet Web Site Map and Timetable Improvements More Posted Info at Stops	Bike Racks on Buses Transit Day Pass Improved Telebus System Automated Trip Planning Service	Next Stop Displays On Board Buses	Real Time Schedule Displays New Fare Collection System
Making the Service More Affordable		Post-Secondary Fare Discounts Employer Sponsored Fare Program		
Making the Service More Productive	Transit Priority Measures Increased Promotion		Upgrade of Radio System Automatic Vehicle Location	North Garage Replacement Alternative Fuels
Making a Commitment to High Speed Transit		Expansion of Express Services	On-Street Rapid Bus	Southwest Transit Corridor



7. Funding of the Transit System

7.1. Funding of Transit Operations

7.1.1. Transit Operating Costs

The annual transit operating budget can be classified into the following major components:

a) Regular Transit Operating Costs

These include the costs incurred for the daily operation of regular transit service.

b) Handi-Transit Operating Costs

These include the costs incurred for the daily operation of Handi-Transit service.

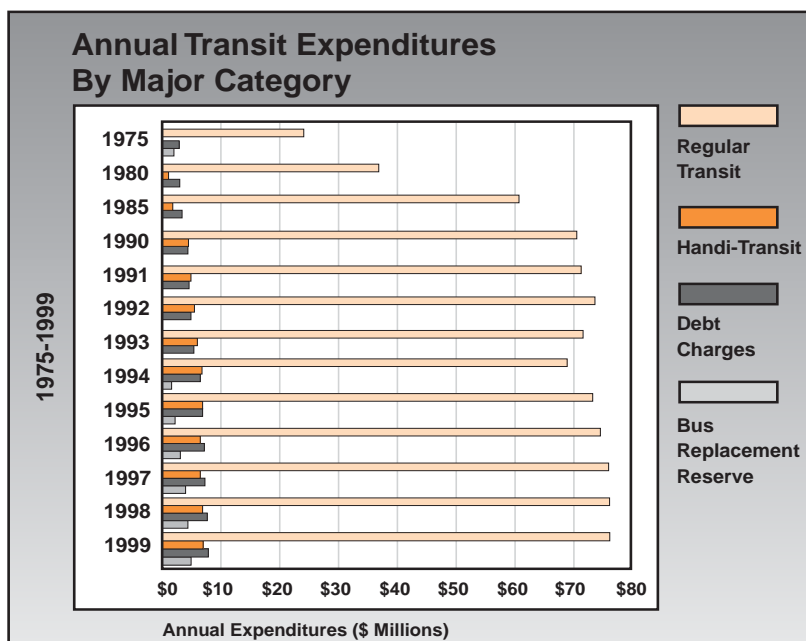
c) Debt Costs

These include the annual interest and principal charges resulting from long term debt incurred for capital projects (primarily bus replacements for the regular system).

d) Contributions to the Bus Replacement Reserve

In 1994, Council approved the creation of a Transit Bus Replacement Reserve to replace debt financing of bus replacements for the regular system with a "pay-as-you-go" approach. Annual contributions are made to this reserve from the operating budget of the Transit Department to cover the City's share of bus replacement costs. Since 1994, the contribution to the reserve has been increased each year to ensure that debt financing of bus replacements is completely eliminated by 2000.

The accompanying graph shows trends in these expenditures between 1975 and 1999.



A number of observations should be noted:

a) Stability in Regular Transit Operating Costs

Of the major types of operating costs, the most stable have been those incurred to operate regular transit service. During the past two decades, these costs have been contained by the deliberate control of the amount of service operated and by close supervision of input costs. As the geographical area of Winnipeg has expanded, new service has been "funded" in newly developing areas by offsetting reductions in service in the more established parts of the city.

Even though the geographical area required to be covered by the regular transit system has increased significantly during the past 20 years, the number of annual bus hours operated has decreased from 1,397,000 in 1982 to 1,290,000 in 1998 (a reduction of 8%). In fact, the number of bus hours operated per

square kilometre of service area has decreased from 6,003 in 1982 to 4,730 in 1998. This represents a 21% decrease in real service levels.

Over time, the effect has been to stretch a reduced number of bus hours over a larger service area. In the absence of any major investment to improve transit operating speeds (and, as a result, productivity), the service has become less competitive in terms of door-to-door travel times. As discussed earlier in this report, the impact on ridership levels has been negative.

Based on existing Council approved guidelines for walking distance to transit service, there are several developing areas within the city for which service expansion will be warranted during the next few years. Given the degree of rationalization of the regular transit network that has already taken place, remaining opportunities for service reductions in the established network are limited.



7. Funding of the Transit System

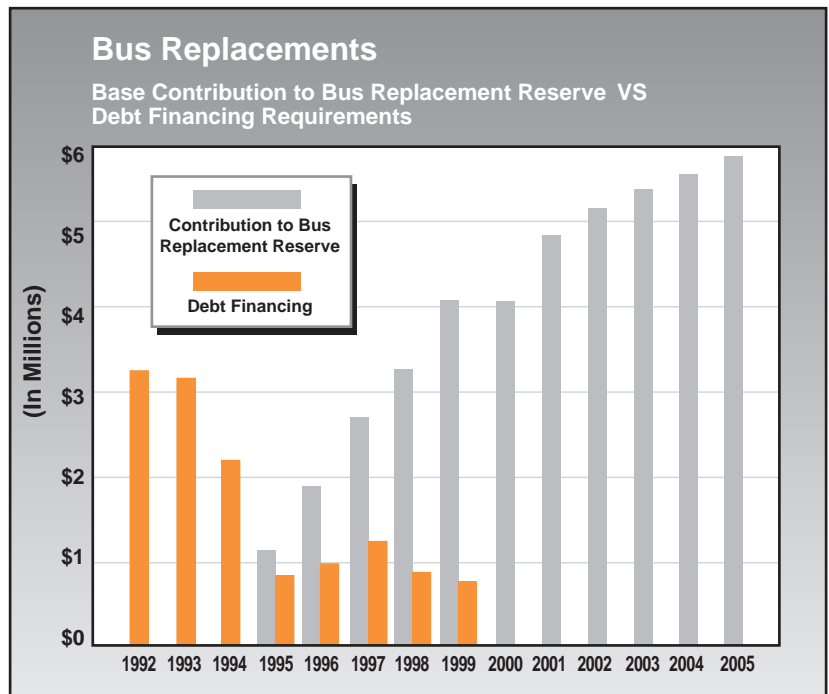
b) Increased Handi-Transit Costs

Since its inception in 1977, the demand for Handi-Transit service has increased as the population has aged and as the proportion of the population with physical disabilities has grown. Because of the nature of the demand (individual doorstep-to-doorstep trips), passenger loads on Handi-Transit vehicles, in comparison to those on regular transit, are quite small (typically 1 to 4 persons). Consequently, the most effective method of service delivery is the provision of "shared taxi" service in small, wheelchair-accessible vehicles. Because there is a competitive market of suppliers capable of providing this type of service, an initial expansion of Handi-Transit service was implemented through contracting in 1988. In 1996-97, the delivery of all Handi-Transit service was contracted out. While the conversion to contract operation has reduced the unit cost per passenger trip, growth in demand has increased aggregate Handi-Transit costs. Between 1980 and 1999, the proportion of the transit operating budget accounted by Handi-Transit costs has more than tripled from 2% to 7%.

c) Cash Financing of Transit Bus Replacement

The cost of transit bus replacement is shared on a 50-50 basis between the Province of Manitoba and the City of Winnipeg. Until 1994, the City completely debt financed its share of bus replacement costs each year. Because bus replacement is a recurring requirement of known magnitude each year, it is more cost-effective to pay cash for replacement buses. In 1994, therefore, Council approved the creation of a Transit Bus Replacement Reserve. Annual contributions are made to this reserve from the transit operating budget. The annual contribution has increased from \$1.059 million in 1994 to \$4.260 million in 1999. By 2000, the conversion to "pay-as-you-go" will be complete.

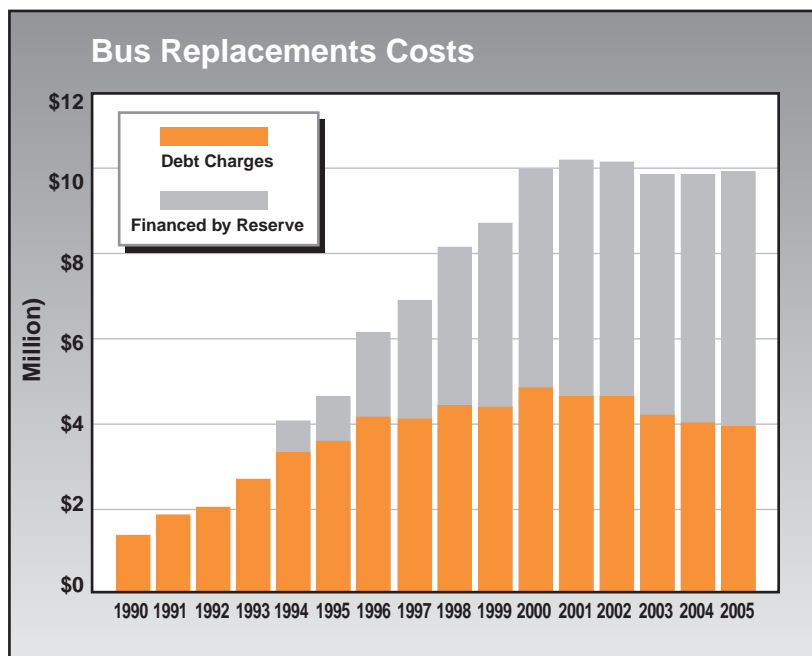
While this strategy will minimize bus replacement costs over the long term, the short term impact on the transit operating budget has been significant. In addition to the increased contributions from the operating budget to pay for new buses, there are significant interest and principal payments required to service the debt incurred for buses purchased in the past.





7. Funding of the Transit System

The accompanying chart shows the magnitude of the aggregate bus replacement costs (contributions to the bus replacement reserve plus debt servicing costs) for the years 1990 to 2005. As shown in the graph, aggregate costs will peak in 2001. Debt servicing costs will start to decline at the same time and will be completely eliminated by 2019.

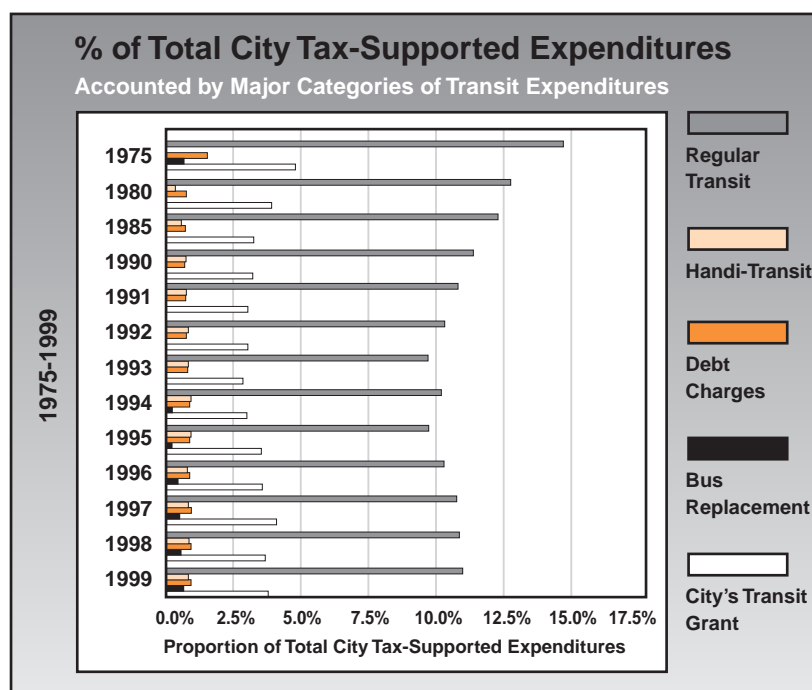


d) Transit Share of the City's Tax-Supported Expenditures

In aggregate, the proportion of the City's annual tax-supported expenditures accounted by the transit operating budget has declined during the past two decades. Amongst the major components of the transit budget, however, there are significant variations.

Transit Budget Component	Proportion of City's Tax-Supported Expenditures		
	1980	1999	% Change
Regular Transit Operating Costs	12.8%	10.8%	-16%
Handi-Transit Operating Costs	0.3%	0.9%	+200%
Debt Costs and Contributions to Transit Bus Replacement Reserve	0.8%	1.6%	+100%
Total Transit Operating Budget	13.9%	13.4%	-4%

The proportion of the City's tax-supported expenditures accounted by Handi-Transit, debt servicing, and bus replacement has increased. In comparison, there has been a significant reduction in the proportion accounted by regular transit service.





7. Funding of the Transit System

7.1.2. Transit Revenues

The operation of transit service is funded from three major sources each year:

► **System Generated Revenues including:**

- Fare revenue from passengers
- Revenue generated by advertising on board buses, on transit shelters, and on transit benches
- Revenue generated from chartered bus operation

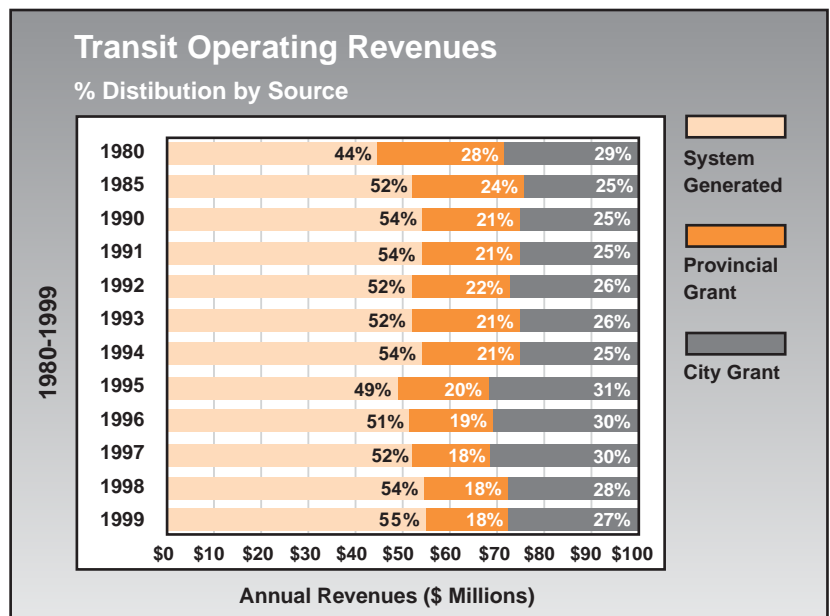
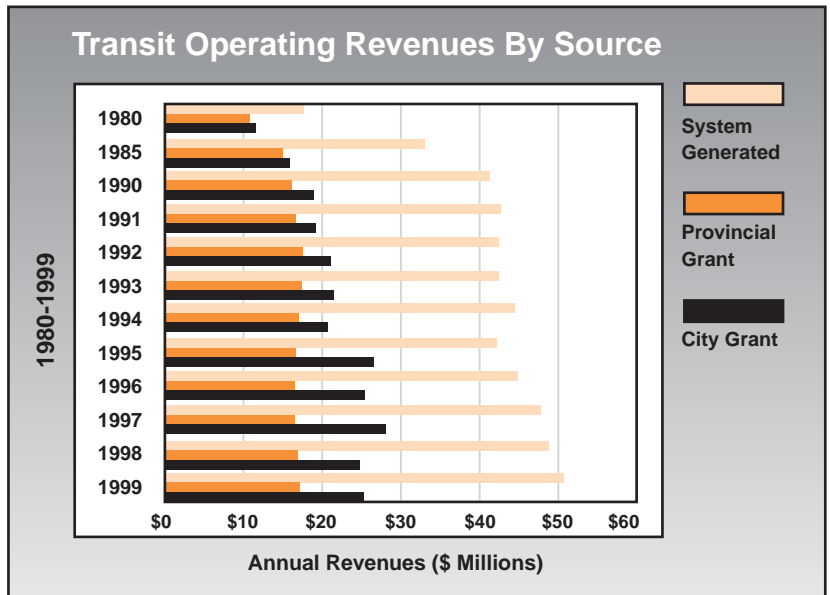
► **Province of Manitoba Operating Grant**

► **City of Winnipeg Operating Grant**

During the latter part of the 1990's, the proportion of total revenues accounted by system generated revenues has increased, while the proportion borne by government grants has decreased.

This is illustrated in the accompanying graph: ►

The following graph shows revenue trends between 1980 and 1999.



Direction

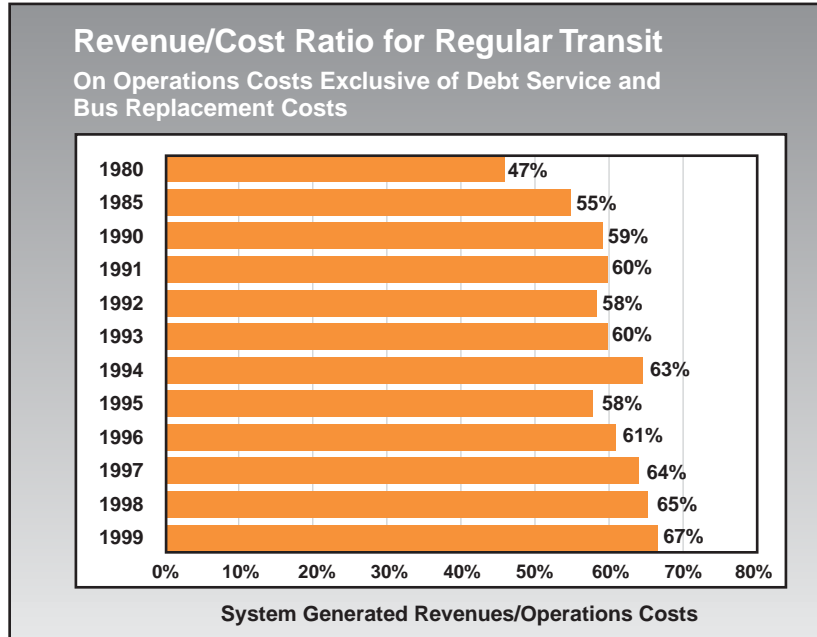


7. Funding of the Transit System

7.1.3. Revenue/Cost Ratio for Regular Transit

During the 1990's, transit fare increases were implemented at least annually. This approach increased the revenue/cost ratio of regular transit and reduced the requirements for public funding of the service. As described previously, however, the major forces driving the fare increases have been growth in Handi-Transit costs and step increases in contributions to the Transit Bus Replacement Reserve.

During the same time period, the operations costs of regular transit did not change significantly and, in fact, the amount of operated service decreased. Concurrently, the costs to the user of riding regular transit have increased at a rate much higher than that of inflation. The cumulative impact of these forces on regular transit ridership has been negative.



As shown in the graph above, the proportion of pure operations costs (exclusive of debt servicing and contributions to the Transit Bus Replacement Reserve) for regular transit covered by fares increased steadily during the 1990's. While accepted practice in the 1980's was to cover approximately 55% of pure

operations costs by system-generated revenues, the proportion of costs covered by system revenues has increased to more than 65% during the 1990's. The proportion borne by the Provincial grant and the City's grant has declined.



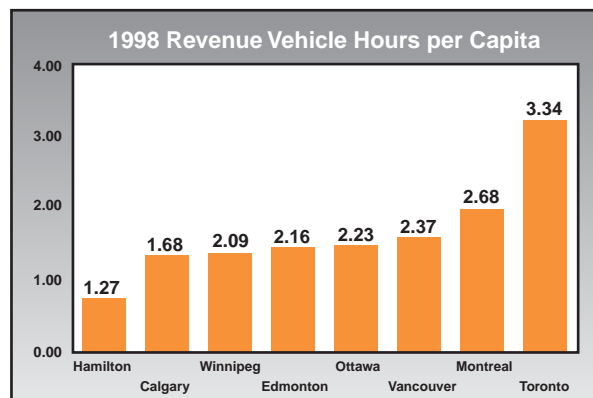
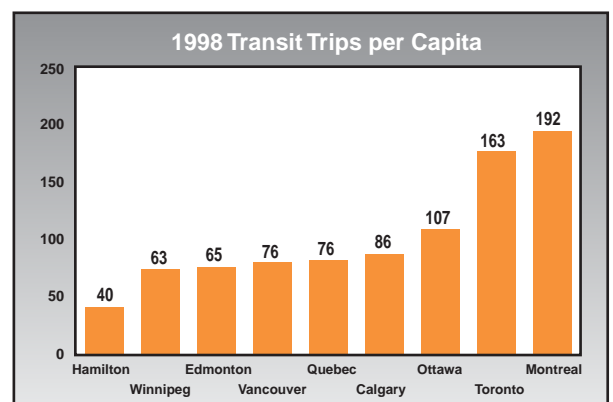
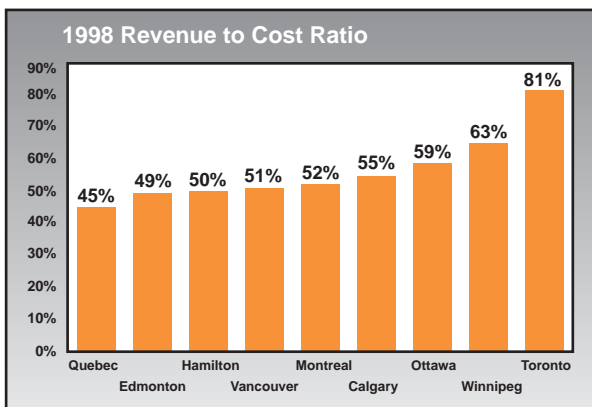
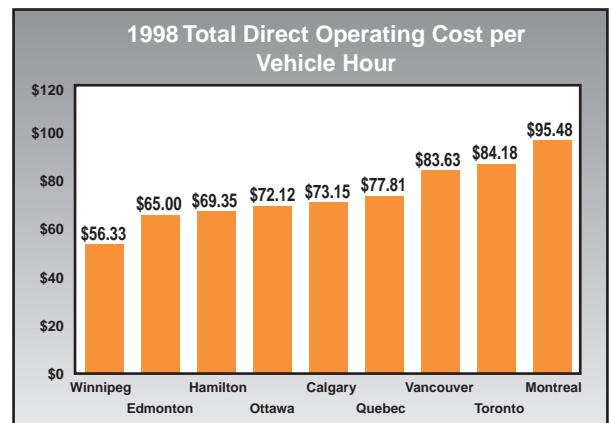
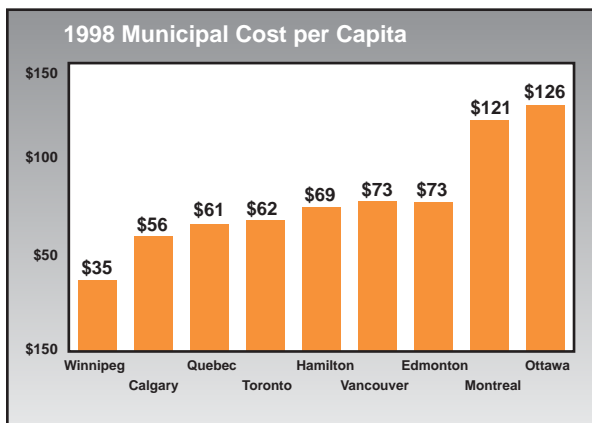
7. Funding of the Transit System

7.1.4.

Benchmark Comparisons for Regular Transit Service

The Canadian Urban Transit Association (CUTA) maintains a national transit statistical database that permits comparison amongst urban transit operators along a number of dimensions. The following graphs compare regular transit service in Winnipeg with that in other Canadian cities of similar or larger size for the most recent year for which data is available.

While Winnipeg's regular transit operation compares favourably on indicators related to cost, it does not fare as well on ridership and on the amount of service operated.



Direction



7. Funding of the Transit System

7.2. Funding of Transit Capital Requirements



Major capital requirements for transit are funded through the City's Capital Estimates. The capital program includes provision for specific projects, such as replacement of the fare collection

system and the replacement of transit buildings. It also includes funding for two recurring programs: the Transit Bus Replacement Program and the Innovative Transit Program.

7.2.1. Bus Replacement Program

As described previously, the costs of transit bus replacement are shared on a 50-50 basis between the Province of Manitoba and the City of Winnipeg. In 1994, the Transit Bus Replacement Reserve was established and, by 2000, the City will fund its share of bus replacement costs completely from the reserve. While the Transit Bus Replacement Program continues to be funded through the capital program, no debt financing will be necessary after 1999. Future budgets for bus replacement will be determined solely by prevailing bus acquisition costs.





7. Funding of the Transit System

7.2.2. Innovative Transit Program

The Innovative Transit Program has been in place since the early 1980's. Because it is the only available mechanism to fund improvements to the transit system, it is a very important program. In fact, it is recommended as the

source of funding for many of the improvements described earlier in this report.

A global amount for the program is approved by Council each year. Specific projects within each year's

program require approval by the Policy Committee on Public Works. After the capital budget is approved each year, the Transit Department submits a report to the Policy Committee on Public Works that recommends specific projects for funding.

Projects funded by the program fall into two categories:

a) Improvements that provide direct benefits to passengers

- Examples:
- Telebus System
 - Heated Passenger Shelters
 - Upgraded Waiting Areas at Major Bus Stops
 - eg. Osborne Junction, City Hall, Polo Park, University of Winnipeg, Airport, The Forks, Broadway & Osborne
 - New Transit Terminals at Major Activity Centres:
 - eg. Polo Park, Kildonan Place, St. Vital Centre, University of Manitoba, Red River College
 - Park and Ride Lots
 - Route and Schedule Information Kiosks at Major Bus Stops
 - Passenger Notice Boards on All Buses
 - Retrofitting Bus Stops for Accessible Low-Floor Routes
 - Route and Schedule Information on the Internet

b) Improvements that increase the productivity of service delivery

- Examples:
- Automated Scheduling System
 - Diamond Lanes
 - Transit Priority Signals
 - Handi-Transit Trip Confirmation System
 - Computerized Response System for Passenger Complaints

In comparison to previous years, the 2000-2005 Capital Program includes a reduction in the budgeted amounts for the Innovative Transit Program. Such reductions would make it impossible to implement

many of the recommendations contained in this report. The capital budget for the Innovative Transit Program has typically been in the range of \$500,000 to \$600,000 each year.

Recommendation:

► ***That the investment in the Innovative Transit Program be adequate to facilitate the recommendations of this report.***



7. Funding of the Transit System

7.3. Improving the Funding of Transit Operations

During the past two decades, a number of interrelated factors have combined to create significant financial pressures on the funding of transit service in Winnipeg. These factors include:

a) The decentralization of the city has required service to be provided over a more dispersed network. For the most part, service has been funded in new areas by reducing service in more established parts of the city. A decline in both the aggregate amount of service and in the density of service has had negative impacts on ridership and passenger revenue.

b) As the city decentralized, no concurrent investment was made in the transit system to keep travel by transit competitive with other modes in terms of travel time. The lack of "speed competitiveness" has made it difficult to attract new users and new passenger revenue to transit.

c) Primary cost pressures on the transit operating budget include:

▶ An increasing demand for Handi-Transit service that will continue over the long term.

▶ A series of significant cumulative annual increases between 1994 and 2000 to transition from debt financing to "pay-as-you-go" financing of bus replacements.



d) Government initiatives to reduce general taxation levels have resulted in reduced levels of funding, in particular from the Province of Manitoba.

e) The reduced levels of government funding have resulted in reduced service levels and a series of transit fare increases implemented at a rate greater than inflation. While fare revenues have covered a higher proportion of operating costs in recent years, this has had a negative impact on ridership levels.

It is important that the City's public transportation policy be used strategically to help achieve broader objectives (such as the economic development of downtown) and to make Winnipeg a more livable city. To do this, it is essential that increased ridership be attracted to the system. Not only must the improvements recommended earlier in this report be implemented, but the funding of transit must be arranged in a manner that makes it possible to achieve the intended goals.

Therefore, it is recommended that a number of changes be made in the funding of transit service. These are discussed in the following sections.



7. Funding of the Transit System

7.3.1.

A Revised Approach for Funding Handi-Transit Service

Because of growth in the demand for Handi-Transit service, an increasing portion of the transit budget is accounted by Handi-Transit costs. Since 1992, the provincial Transit Operating Grant has decreased by 6.4%, or 27% when adjusted for inflation. As a result, the increased cost of Handi-Transit service has been largely offset by fare increases on both regular transit and Handi-Transit and by increased funding by the City of Winnipeg.

During the past decade, the Provincial government has adopted a policy of reducing the reliance on institutional care for the elderly and for those with disabilities, and placing an increased emphasis on home care. This Provincial policy has placed a significant increased demand on Handi-Transit service, in particular to accommodate medical and therapy trips.



The Canadian Charter of Rights and Freedoms legislation requires that all individuals be treated equally and that reasonable accommodation be provided for those persons with special needs. The report of the Task Force Reviewing Handi-Transit Issues, adopted by Council on September 21, 1994, defined the characteristics of a transportation service for physically disabled persons that is reasonably equivalent to the service provided to able-bodied persons by the regular fixed route system. For the City and the Province to meet this obligation, it is recommended that the following approach be used for the future funding of the Handi-Transit service:

Recommendations:

- ▶ **The City and the Province each make annual dedicated Handi-Transit Operations Grants**
- ▶ **That a multi year agreement be negotiated between the City and the Province to ensure consistent, reliable Handi-Transit system funding.**



7. Funding of the Transit System

7.3.2.

A Revised Approach for the Funding of Regular Transit Service

The City's current budgeting practice for the Transit Department is to identify a target for property tax support for each budget year. The department is then required to develop a budget that meets that target.

A preliminary estimate of the required property tax support is calculated from the following:

- ▶ An estimate of system-generated revenues based on existing fare levels
- ▶ An estimate of the expected Provincial Transit Operating Grant
- ▶ An estimate of operating expenditures based on current service levels for both regular transit and Handi-Transit
- ▶ An estimate of Handi-Transit service expansion costs during the budget year
- ▶ An estimate of the required contribution to the Transit Bus Replacement Reserve

If the preliminary estimate of property tax support is higher than the target, then a number of options are evaluated. These include:

- ▶ Deferral of expenditures to future years
- ▶ Expenditure reductions (primarily cuts to regular transit service)
- ▶ Fare increases

These options are then considered by Council prior to a final budget being set.

As explained previously, the major factors affecting the operating budget of the Transit Department in recent years have been the funding of Handi-Transit service expansion, the transition from debt financing to "pay-as-you-go" financing of transit bus replacement, and Council's goal to reduce the level of property taxation.

Regular transit service has absorbed much of the impact of these forces. Over several years, a reinforcing spiral of fare increases and service reductions has developed. While the revenue/cost ratio of regular transit has increased to more than 65%, it has been accompanied at the cost of reduced ridership. When viewed in isolation, a high revenue/cost ratio is a commendable objective. Only in cities of high density and high traffic congestion, however, are such high revenue/cost ratios sustainable. In comparison to other Canadian cities, the revenue/cost ratio in Winnipeg is quite high. To break the spiral, a revised approach to the funding of regular transit is required so that service improvements can be implemented and the need for fare increases can be moderated.

Therefore, it is recommended that, in the development of the current estimates for the Transit Department each year, the following approach be used for regular transit:

(See next page for details)

FOR THE FUTURE



7. Funding of the Transit System

Recommendation:

That the following approach for funding regular transit be adopted:

Service Level Policy:

a) The core operating budget for regular transit service be based on the operation of 1.3 million bus hours each year. This is the amount of service required to operate current levels of service.

b) Within the core annual service of 1.3 million bus hours, the Transit Department continue its practice of implementing routing and frequency improvements by diverting resources from under-utilized services to more productive ones. It should be noted, however, that the scope for funding service improvements in this manner is limited.

c) The Transit operating budget be increased as necessary to fund service expansions required for the introduction of service in new areas or for the expansion of the hours of operation in existing areas.

Fare Policy:

a) Fare levels be based on a revenue/cost target of 66% for regular transit. The revenue part of the ratio would be based on system generated revenues (fares, advertising, and charter revenue). The cost part of the ratio would be based on the operating costs of regular transit, exclusive of debt service charges and the annual contribution to the Transit Bus Replacement Reserve. This approach will moderate pressures for future fare increases.

b) The existing arithmetic relationships between the adult cash fare and all other fare categories be maintained.

Subsidy Policy:

a) The City provide a fixed dedicated annual grant for regular transit each year calculated as follows:

50% of Budgeted Sharable Deficit

Plus *100% of City Contribution to the Transit Bus Replacement Reserve*

Plus *100% of City Debt Service Costs for Bus Replacement*

where the Budgeted Sharable Deficit is defined as:

Regular Transit Total Costs

Less *City Contribution to the Transit Bus Replacement Reserve*

Less *City Debt Service Costs for Bus Replacement*

Less *System Generated Revenues*

b) The Province provide a fixed dedicated annual grant for regular transit each year equal to 50% of the Budgeted Sharable Deficit (as defined above).

c) The Province maintain its current policy of providing a Provincial Support Grant to offset the cost of the Provincial Payroll Tax.



7. Funding of the Transit System

7.3.3. Impacts

As an illustrative example, the 1999 Current Estimates (see next table) would have been as shown had the following assumptions in funding policies been implemented:

- ▶ 66% Revenue/Cost ratio
- ▶ 75% Provincial funding of the net annual cost of Handi Transit
- ▶ 50/50 Province and City funding of Regular Transit Service (as indicated on previous page)

Funding of Transit Operations 1999 Budget Year

Proposal Based On:

R/C Target 66% for Regular Transit, 10% for Handi-Transit
 75% Provincial Cost Sharing on Handi-Transit
 50%-50% Cost Sharing of Regular Transit Gross Deficit less Bus Reserve and Bus Debt
 (assuming that the Province shares 50% of bus replacement costs as a capital grant)

	Regular Transit	Handi Transit	Total	Approved Budget	Change
Expenditures					
Operations Cost	\$73,991,808	\$6,259,204	\$80,251,012	\$80,251,012	
Bus Reserve	\$4,260,000	\$0	\$4,260,000	\$4,260,000	
Debt for Buses	\$6,107,000	\$0	\$6,107,000	\$6,107,000	
Other Debt	\$1,000,000	\$0	\$1,000,000	\$1,000,000	
Total Cost	\$85,358,808	\$6,259,204	\$91,618,012	\$91,618,012	
Revenues					
Revenue/Operating Cost Target	66%	10%	62%	63%	
System Generated Revenue	\$48,834,593	\$625,920	\$49,460,514	\$50,341,205	-\$880,691
Deficit					
Gross Deficit	\$36,524,215	\$5,633,284	\$42,157,498	\$41,276,807	\$880,691
Government Grants					
Provincial Grant	\$13,078,607	\$4,224,963	\$17,303,570	\$16,339,000	\$964,570
City Grant	\$23,445,607	\$1,408,321	\$24,853,928	\$24,937,807	-\$83,879
Bus Reserve	\$4,260,000		\$4,260,000		
Bus Debt	\$6,107,000		\$6,107,000		
Operations	\$13,078,607		\$13,078,607		
Total Government Grants	\$36,524,215	\$5,633,284	\$42,157,498	\$41,276,807	\$880,691



7. Funding of the Transit System

7.4. Funding Major Transit Improvements

Despite the priorities for investment in the transportation system outlined in Plan Winnipeg, very little new investment in the transit system has been made during the past several decades. Improved transit service is important if the urban development and quality of life goals outlined in Plan Winnipeg are to be achieved. Transit improvements are only effective if additional ridership can be attracted to the system, however. Increased ridership requires a commitment to high speed transit such as expanded express services, on-street rapid bus services, and the development of a busway rapid transit system.

If transit improvements are to be implemented, then new mechanisms for funding the development of the overall urban transportation system need to be considered. In Winnipeg, capital investments in streets and bridges are funded by a combination of property tax supported borrowing and Provincial grants for specific projects. Investments in the transit system (primarily bus replacement) are funded by the City and the Province.

Use of the urban transportation system results in a variety of significant indirect costs. Examples include emergency service and health care costs resulting from traffic accidents, court costs, traffic congestion, pollution, and urban sprawl.

Because there is no direct relationship between the amount a citizen pays in property and provincial taxes and his use of the transportation system, and because indirect costs resulting from use of the urban transportation system are not assigned to specific transportation users, there is no clear relationship between those who benefit from the transportation system and those who pay for it. As a result, the current methods used to finance the urban transportation system are not equitable.

It is clear, however, that there are certain indisputable facts:

- ▶ Those who make extensive use of the transportation system create more costs than those who make less use of the transportation system.
- ▶ Those who travel during peak travel times create more costs than those who travel during off-peak times.
- ▶ Those who travel in single-occupant vehicles create more costs than those who travel in multi-occupant vehicles.
- ▶ Those who travel by motorized means create more costs than those who travel by non-motorized modes.

Clearly, more equitable methods to fund urban transportation are required. It is important that, in the transition to new methods, the following fundamentals apply:

- ▶ Instruments be used that provide incentives to transportation users to make environmentally sustainable choices.
- ▶ The burden of funding the transportation system be shifted to those who generate the greatest costs (those who make extensive use of the system, who travel during peak periods, or who drive alone).
- ▶ Any growth in aggregate taxation be minimized.
- ▶ Funds raised for transportation purposes be invested in accordance with the priorities outlined in Plan Winnipeg.

In other cities, new approaches are being used to fund transportation facilities. In Vancouver, for example, the Greater Vancouver Transportation Authority has been established to develop and finance regional transportation including roads, bridges, transit, demand management, and air quality programs. The authority has access to a variety of funding sources including gasoline taxes, parking fees, hydro levies, non-residential property taxes, transit fares, vehicle charges, and property taxes on a benefiting area basis. A similar approach is used in Montreal.



7. Funding of the Transit System

Because the transit system carries 20% of peak period travel in Winnipeg, the same percentage of the generated funds should be allocated for major improvements in the transit system such as the phased construction of the busway rapid transit network and its subsequent maintenance.

Recommendations:

▶ ***That dedicated revenue streams be established to fund two priorities for investment in the transportation system: Maintenance of Existing Infrastructure and Improvements to the Transit System.***

▶ ***In particular, it is recommended that negotiations be undertaken with the Provincial Government to identify potential dedicated revenue streams. These revenues should be allocated as follows:***

- ***80% of the funds to a Roadway and Bridge Maintenance Reserve to fund major repair and maintenance of regional roadways and bridges (in support of the first priority of Plan Winnipeg).***

- ***20% of the funds to a Public Transit Infrastructure Reserve to fund major improvements to the transit system (in support of the second priority of Plan Winnipeg).***



Sources of dedicated funding might include:

- ▶ A reallocation of a portion of the existing provincial or federal gasoline tax
- ▶ An auto registration tax
- ▶ Revenues resulting from Kyoto Protocol emissions trading

A transition to the use of dedicated revenue streams to fund the City's priorities for investment in the transportation system (maintenance of existing infrastructure and transit improvements) will require negotiation with the Provincial and Federal Governments.

Recommendation:

▶ ***The City initiate discussions with the other levels of government consistent with the above noted approach and recommendations so that urban transportation investments are made in a more effective and sustainable manner.***



8. Recommended Funding Sources For Improvements To Regular Transit

Recommendation:

► The following table identifies the funding sources that are recommended to be used to implement the transit improvements identified in this report.

Category	Improvement	Funding Source	Currently Budgeted?
Developing Supportive Conditions for Transit	Improved Land Use Planning	n/a	n/a
	Improved Pedestrian Facilities	Public Works Capital Program	Partly
	Plan Winnipeg Update	n/a	n/a
	Review of Downtown Parking Policy	n/a	n/a
	Federal Tax Regulations	n/a	n/a
Making Ongoing Improvements to Service	Network Improvements in Existing Service Area	Current Estimates	Yes
	Service Expansion	Current Estimates	No
	Regular Bus Replacement Multi-Year Bus Tender	Bus Replacement Reserve	Yes
	Assignment of Low Floor Buses to the Same Service Each Day	Current Estimates	Yes
	Bus Stop Upgrades	Innovative Transit Program	No
	More Transit Shelters	Innovative Transit Program	No
	Garden City Terminal	Innovative Transit Program	Yes
	Unicity Terminal	Innovative Transit Program	Yes
	U of W Terminal	Innovative Transit Program	No
Making Transit Easier to Use	Non-Traditional Service Delivery in Existing Service Areas	Current Estimates	Yes
	Non-Traditional Service Delivery in New Areas	Current Estimates	No
	Park and Ride	Innovative Transit Program	Yes
	Map and Timetable Improvements	Current Estimates	Yes
	More Posted Info at Bus Stops	Current Estimates	Yes
	Bike Racks on Buses	Innovative Transit Program	No
	Transit Day Pass	Current Estimates	No



8. Recommended Funding Sources For Improvements To Regular Transit

Category	Improvement	Funding Source	Currently Budgeted?
Making Transit Easier to Use	Internet Web Site	Innovative Transit Program	Yes
	Improved Telebus System	Innovative Transit Program	Yes
	Automated Trip Planning Service	Innovative Transit Program	No
	Next Stop Displays on Board Buses	Capital Program	No
	Real Time Schedule Displays	Capital Program	No
	New Fare Collection System	Capital Program	No
Making the Service More Affordable	Post-Secondary Fare Discounts	Current Estimates	No
	Employer Sponsored Fare Program	Innovative Transit Program	Yes
Making the Service More Productive	Transit Priority Measures	Innovative Transit Program	No
	Increased Promotion	Current Estimates	No
	Upgrade of Radio System and Automatic Vehicle Location	Capital Program	Yes
	North Garage Replacement	Capital Program	No
	Alternative Fuels	Bus Replacement Reserve	No
Making a Commitment to High Speed Transit	Expansion of Express Services	Current Estimates	No
	On-Street Rapid Bus	Innovative Transit Program Capital Program Transit Infrastructure Reserve	No
	Busway Rapid Transit System	Capital Program Transit Infrastructure Reserve Public-Private Partnerships	No