Appendix A

Council Minutes and EPC Reports

Minute No. 619
Report - Executive Policy Committee - September 22, 2004

Item No. 5 Rapid Transit
File TT-5.1

COUNCIL DECISION:

Council amended the recommendation of the Executive Policy Committee and adopted the following:

1. That the re-allocation of $43 million from the Funding Agreement be approved, in principle, toward community recreation and leisure facility projects that are eligible under Federal Infrastructure Programs, in accordance with the process for fund allocation to be informed by the current Public Use Facility Study process, and direct the Chief Administrative Officer and the Executive Policy Committee Secretariat to report to Council through the Executive Policy Committee with a plan for the allocation of the funds.

2. That the allocation of $7.5 million from the Funding Agreement be approved toward transit modernization initiatives, and that the Transit Department submit these proposed improvements to Council and also pursue funding for transit modernization from other sources, including the Green Municipal Funds Program and Transport Canada.

3. That Executive Policy Committee Secretariat be directed to pursue a funding agreement with the Federal and Provincial governments to formally identify eligible projects and funding particulars for Council approval.

4. That the establishment of a Rapid Transit Task Force ("Task Force") be endorsed, consisting of members of Council to be appointed by the Mayor, to report to the Executive Policy Committee by no later than June 2005 on various rapid transit options for Winnipeg ("the study"), with analysis of relative costs and benefits, to consult with the public and to develop and recommend a long-term funding plan to support the full implementation of a rapid transit system which plan should include strategies for obtaining combined financial contributions from other governments and/or private partners of no less than 67% of the total system cost over a period of years.

5. That the Task Force return to the Executive Policy Committee for direction with respect to budgetary requirements and contracting procedures in connection with the study, and that monies for the study be found from the approved unexpended capital budget for rapid transit.

6. That the Executive Policy Committee forward the Task Force Report and its own recommendations to Council for final approval.

Report - Executive Policy Committee - September 22, 2004

COUNCIL DECISION (continued)

7. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing, including execution of any documents related thereto.

Minutes – Executive Policy Committee – November 17, 2004

REPORTS

Minute No. 20 Civic Environmental Committee - Rapid Transit Task Force File E-7

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

The Executive Policy Committee referred the following recommendation of the Civic Environmental Committee to the Administration for review and report back, namely:

1. The scope of review for the Rapid Transit Task Force include the potential use / preservation of abandoned rail corridors in Winnipeg.

DECISION MAKING HISTORY:

Moved by Councillor Steeves,

That the following recommendation of the Civic Environmental Committee be referred to the Administration for review and report back, namely:

1. The scope of review for the Rapid Transit Task Force include the potential use / preservation of abandoned rail corridors in Winnipeg.

Carried

CIVIC ENVIRONMENTAL COMMITTEE RECOMMENDATION:

On November 8, 2004, the Civic Environmental Committee was advised of the upcoming Plan Winnipeg Public Hearing to consider the proposed amendment to Plan Winnipeg by deleting lands known as the "Oak Point Transit Corridor", and that there are several rail corridors in Winnipeg that have the potential either now or at some future date to be integrated into a comprehensive rapid transit system.

The Civic Environmental Committee passed the following resolution:

WHEREAS Council has endorsed the establishment of a Rapid Transit Task Force that is to report to EPC by no later than June 2005 on various rapid transit options for Winnipeg;

AND WHEREAS there are several rail corridors in Winnipeg that have the potential either now or at some future date to be integrated into a comprehensive rapid transit system;

AND WHEREAS the Canada Transport Act Review of potential uses of abandoned rail corridors has identified these lands "as unique urban resources with the potential to significantly improve urban transportation networks" and that "it would be short-sighted to allow them to be abandoned for public use without extensive review and discussion on a corridor-by-corridor basis";

AND WHEREAS the Prime Minister's Caucus Task Force on Urban Issues has recommended that special emphasis should be placed to "ensure that unused rail rights-of-way and corridors are preserved and made available at net salvage value or at no cost for future transit or be developed into recreational trails";

AND WHEREAS the federal government in the U.S. has used gasoline tax revenue to financially support the preservation of more than 1200 abandoned rail corridors for use as transit right-of-ways and recreational trails;

DECISION MAKING HISTORY (continued):

AND WHEREAS the Government of Canada has made a commitment to transfer a portion of federal gasoline tax revenues to Canadian cities and that a portion of these revenues will likely be dedicated to transit;

AND WHEREAS rapid transit has the potential to mitigate increased congestion and greenhouse gas emissions due to significant increases in traffic on the regional street system from proposed new developments in Winnipeg such as the redevelopment of the Kapyong Barracks and the proposed Waverley West development;

AND WHEREAS the City has made a commitment through Plan Winnipeg Policies 3A-03 and 3A-04 to integrate land use, urban design and transportation planning to protect traffic flows from significant increases in volume as a result of new development;

THEREFORE BE IT RESOLVED THAT:

1. The scope of review for the Rapid Transit Task Force include the potential use / preservation of abandoned rail corridors in Winnipeg.

2. No action be taken until the Rapid Transit Task Force review is complete so that the use of corridors in the long term is not compromised.

Minute No. 72
Report – Executive Policy Committee – December 1, 2004

Item No. 2 Rapid Transit Task Force – Approval of Funding Support
File TT-5.1

COUNCIL DECISION:

Council concurred in the recommendation of the Executive Policy Committee and adopted the following:

1. That up to $220,000.00 from available funds in the 2001 Southwest Corridor Capital Project be approved to support the Rapid Transit Task Force that was established by Council on September 29, 2004.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report – Executive Policy Committee – December 1, 2004

DECISION MAKING HISTORY:

Moved by His Worship Mayor Katz,

That the recommendation of the Executive Policy Committee be adopted.

The motion for the adoption of the item was put and declared carried.

Councillors Benham and Gerbasi asked to be recorded as having voted against the item in accordance with Rule 50.7 of the Procedure By-law.

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On December 1, 2004, the Executive Policy Committee concurred in the administrative recommendation and submitted the matter to Council.

COUNCIL:

On September 29, 2004, Council adopted the following:

1. That the re-allocation of $43 million from the Funding Agreement be approved, in principle, toward community recreation and leisure facility projects that are eligible under Federal Infrastructure Programs, in accordance with the process for fund allocation to be informed by the current Public Use Facility Study process, and direct the Chief Administrative Officer and the Executive Policy Committee Secretariat to report to Council through the Executive Policy Committee with a plan for the allocation of the funds.

2. That the allocation of $7.5 million from the Funding Agreement be approved toward transit modernization initiatives, and that the Transit Department submit these proposed improvements to Council and also pursue funding for transit modernization from other sources, including the Green Municipal Funds Program and Transport Canada.

3. That Executive Policy Committee Secretariat be directed to pursue a funding agreement with the Federal and Provincial governments to formally identify eligible projects and funding particulars for Council approval.

Report – Executive Policy Committee – December 1, 2004

DECISION MAKING HISTORY (continued):

4. That the establishment of a Rapid Transit Task Force ("Task Force") be endorsed, consisting of members of Council to be appointed by the Mayor, to report to the Executive Policy Committee by no later than June 2005 on various rapid transit options for Winnipeg ("the study"), with analysis of relative costs and benefits, to consult with the public and to develop and recommend a long-term funding plan to support the full implementation of a rapid transit system which plan should include strategies for obtaining combined financial contributions from other governments and/or private partners of no less than 67% of the total system cost over a period of years.

5. That the Task Force return to the Executive Policy Committee for direction with respect to budgetary requirements and contracting procedures in connection with the study, and that monies for the study be found from the approved unexpended capital budget for rapid transit.

6. That the Executive Policy Committee forward the Task Force Report and its own recommendations to Council for final approval.

RE: Rapid Transit Task Force - Approval of Funding Support

FOR SUBMISSION TO: Executive Policy Committee

ORIGINAL REPORT SIGNED BY: Chair, Rapid Transit Task Force

REPORT DATE: Friday, November 26, 2004

RECOMMENDATION(S):
That up to $220,000 from available funds in the 2001 Southwest Corridor Capital Project be approved to support the Rapid Transit Task Force that was established by Council on September 29, 2004.

Report Summary

Key Issues:
On September 29, 2004, Council approved the establishment of a Rapid Transit Task Force, consisting of members of Council appointed by the Mayor, to report to the Executive Policy Committee by no later than June 2005, on various rapid transit options for Winnipeg.
On September 22, 2004, Executive Policy Committee directed the Task Force to return to EPC for direction with respect to budgetary requirements and contracting procedures in connection with the study.
The EPC motion from September 22, 2004 also directed that " monies for the study be found from the approved unexpended capital budget for rapid transit."
The report recommends that available funds from the 2001 Southwest Corridor Capital Project be approved to support the Rapid Transit Task Force.

Implications of the Recommendation(s):

General Implications

X None
For the organization overall and/or for other departments
For the community and/or organizations external to the City
Involves a multi-year contract

Comment(s):

Policy implications

X No
Yes
Comment(s):

Environmental implications

X No
Yes
Comment(s):

Human Resources implications

X No
Yes
Comment(s):

Financial Implications

X Within approved current and/or capital budget
Current and/or capital budget adjustment required

Comment:

Report

REASON FOR THE REPORT:

On September 22, 2004, Executive Policy Committee directed the Rapid Transit Task Force to return to EPC "for direction with respect to budgetary requirements and contracting procedures" in connection with the study. The EPC motion further directed that " monies for the study be found from the approved unexpended capital budget for rapid transit."

HISTORY:

On September 29, 2004, Council approved the establishment of a Rapid Transit Task Force, consisting of members of Council appointed by the Mayor, to report to the Executive Policy Committee by no later than June 2005, on various rapid transit options for Winnipeg.

DISCUSSION:

The approved Council motion supporting the establishment of a Rapid Transit Task Force states that the primary tasks of the task force are:
To report on "various rapid transit options for Winnipeg;"
To provide an analysis of the "relative costs and benefits;"
To "consult with the public;"
To recommend "a long-term funding plan to support the full implementation of a rapid transit system" in Winnipeg.

The Task Force will consist of three Council members:
Chair: Councillor Russ Wyatt
Member: Councillor Jenny Gerbasi
Member: Councillor Mike Pagtakhan
supported by a six-person Advisory Council:

Dr. Jino Distasio	Sandy Hopkins
John Mann	Deborah Goodfellow
Russ Malkoske	Dr. Barry Prentice

In addition, the Task Force has retained the McGowan Russell Group to provide project coordination services, the IBI Group to provide technical support, and BDO Corporate Finance Inc. to provide financial analysis. The EPC Secretariat will provide operational and logistical support to the Task Force and the CAO Secretariat will serve as the liaison with the administration.

The total budget for the Task Force is $220,000 to cover administrative, communication, consultant services, public engagement, printing, and technical support costs. It is recommended that available funds from the 2001 Southwest Corridor Capital Project be used to support the Rapid Transit Task Force.

Council has directed the Task Force to report back no later than June 2005 and to provide interim reports as necessary.

Project Name: Rapid Transit Task Force **First Year of Program: 2004**

	2004	2005	2006	2007	2008
Capital					
Capital Expenditures Required	$ 220,000	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	220,000	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs: Debt & Finance Charges	$ -	$ 53,656	$ 53,656	$ 53,656	$ 53,656
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ -	$ 53,656	$ 53,656	$ 53,656	$ 53,656
Less: Existing Budget Amounts	-	53,656	53,656	53,656	53,656
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments:

a.) Up to $220,000 from funds available from the Southwest Corridor Capital Project has been identified to support the Rapid Transit Task Force.

b.) A 3% charge for interest and administrative expenses is applicable on capital expenditure.

c.) The direct costs noted above reflect anticipated internal financing, calculated at an interest rate of 7% per annum over 5 years.

(Original signed by R. Abeysekera)
Manager of Finance & Administration
Corporate Services Dept.

IN PREPARING THIS REPORT THERE WAS CONSULTATION WITH, AND CONCURRENCE BY:
EPC Secretariat
CAO Secretariat
Winnipeg Transit
Corporate Finance

THIS REPORT SUBMITTED BY:

Department
Division
Prepared by:
File No.

Appendix B

Advisory Council Member Biographies

Rapid Transit Task Force
Advisory Council Member's Biographies



Dr. Jino Distasio

Dr. Jino Distasio is the Acting Director of the Institute of Urban Studies, University of Winnipeg. Over the last four years he successfully guided research initiatives that focused on housing market assessments, neighbourhood change analysis, urban transportation planning and inner city revitalization. Recently, he completed an Aboriginal Mobility study that surveyed nearly 1300 people and spanned three years. His current research is centered on sustainable transportation, rooming houses, and residential hotels in both Canada and the United States. His previous work experience includes teaching at the Universities of Winnipeg and Manitoba and working at Canada Mortgage and Housing Corporation. He also held various professional management and contract research positions.



Deborah Goodfellow

Deb Goodfellow first began her real estate career in 1981. She currently serves as the broker for Goodfellow & Goodfellow Real Estate Ltd. that she co-owns with her husband, Bob. Deb has past experience as a banker, holding such positions as an assistant manager of consumer finance and a regional marketing officer, that provided a great base for her eventual transition into real estate sales. Deb has also been the recipient of numerous real estate awards over the years and also adds value to Bob and his team.

Besides acting as a selling broker, Deb is quite involved with the governance of the real estate industry. She served on The Winnipeg Real Estate's Board of Directors in 1995 and 1996 and was re-elected to serve as a Board of Director for the 1999-2000 term. She has served as the chairperson for The Winnipeg Real Estate Board's Investigative Committee ('96) and co-chair ('95), Affordable Housing Committee ('98), Hearings ('99) and MLS/WREN ('99). She has also served on both The Programs and Public Relations Committees at the Winnipeg Real Estate Board. Deb served as the Secretary-Treasurer for the Manitoba Real Estate Association (2002), President-Elect (2003) and currently serves as the President of The Manitoba Real Estate Association (2004). She takes an active interest in the direction, growth and evolution of both her company and the real estate industry in which she serves. Deb is also on the Board of Directors for the Lady Bug Foundation.



Sandy Hopkins

Mr. Hopkins is a consultant and senior executive with broad experience in corporate governance, strategic planning, business planning, general management, supply chain management, logistics, marketing, organization, process management, sales, and community affairs. Sandy has successfully completed projects for many organizations as diverse as airport authorities, the Canadian Wheat Board, national industry associations, an aerospace company, the Manitoba Arts Council, the Winnipeg Chamber of Commerce, the Winnipeg Symphony Orchestra and a charitable entity that delivers highly sophisticated programs for troubled youth.

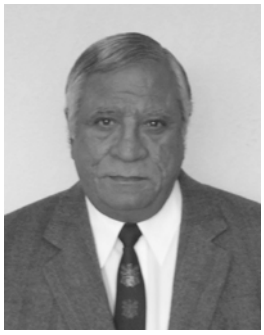
Sandy brings twenty-eight years business experience. During the last fourteen years he has been a consultant to both trucking companies on strategic and business planning issues and to manufacturers on supply chain strategies. Over the last seven years he has also developed a corporate governance and strategic planning practice for not-for-profit and non-profit organizations and has been in leadership positions on a number of high profile community projects and organizations. In addition Sandy has served as President of the Winnipeg Chamber of Commerce, Board Chair of the Winnipeg Airports Authority and Chair of the Winnipeg Public Library Board. He has won many prestigious awards including the Queens Golden Jubilee Award, the Winnipeg Community Service Award, and the Winnipeg Chamber of Commerce Distinguished Long Service Award.



Russell E. Malkoske

Russell Malkoske has worked as an insurance adjuster since 1972 and is currently the senior adjuster and managing proprietor for QA Adjusting Company. Russell's 30-year career in the field of loss adjustment has included a considerable amount of travel that has provided him with the opportunity to experience transit issues in many locals.

A past board member of the Canadian Association of Fire Investigators and the Insurance Council of Manitoba, Russell is currently the president of the Insurance Institute of Manitoba and serves on the Canadian Independent Adjusters Association National Executive, the Board of the Civil Services Commission and the Winnipeg French Quarter BIZ. Russell is very active in his community, taking a leadership role in the community club and coaching youth sport.



John Mann

John Mann emigrated to Canada in 1971 from England where he had worked as a bus driver. Prior to living in England, John received his B.A. and B.ED in India where he was employed as a school teacher. In Canada, John worked as a miner at INCO for more than 20 years. He now lives in Winnipeg and has been retired for twelve years.

John has extensive volunteer board experience having served on the Thompson General Hospital Board, the Government of Manitoba Venture Capital Board, the Manitoba Highways Traffic Board and on the local Executive of the United Steelworkers of America #6166. He has always been strongly involved in his community and was recognized for his community leadership accomplishments when he was named Thompson's Man of the Year and won the Steelworkers Merit Award in 1983.



Dr. Barry Prentice

Barry E. Prentice is the former Director of the Transport Institute and a Professor, in the I.H. Asper School of Business. His major research and teaching interests are logistics, transportation economics, urban transportation, economic development and trade policy.

Dr. Prentice has authored or co-authored more than 150 research reports, journal articles and contributions to books. His scholarly work has been recognized for excellence in national paper competitions and awards. In 1999, National Transportation Week named him Manitoba Transportation Person of the Year.

Dr. Prentice has served on the Boards of Directors of several transportation organizations: Winnipeg Airports Authority, Inc. (1994-2002), National Transportation Week (Canadian President, 2001 and 2003), and the Canadian Transportation Research Forum (Past President, 1997). He is Associate Editor of the Journal of Transportation Research Forum, and Honourary President of the Canadian Institute for Traffic and Transportation (2001-03). In addition, Dr. Prentice has served on the Winnipeg TransPlan 2010, the Mid-Continent International Trade Corridor Task Force and expert committees. In 1999 and 2003, he received University of Manitoba Outreach Awards.

Appendix C

Renewals of Regional Streets (5 Yr. Program)

Renewals of Regional Streets
(5 Year Program)

Street	From	To	Area
Archibald Street	CP Railway Underpass	Plinguet Street	E
Bishop Grandin Boulevard	River Road	St. Anne's Road	E
Concordia Avenue	Gateway Road	Molson Street	E
Dakota Street	Bishop Grandin Boulevard	Meadowood Drive	E
Goulet Street	Rue Des Meurons	Tache Street	E
Hespeler Avenue	Henderson Highway	Redwood Bridge	E
Marion Street	CNR Sprague Tracks	Dupuy Avenue	E
Regent Avenue East	Madeline Street	Moroz Street	E
St. Mary's Road	Dunkirk Drive	Greendell Avenue	E
St. Mary's Road	St. Anne's Road	Fermor Avenue	E
Broadway	Osborne Street	Sherbrook Street	N
Ellice Avenue	Century Street	Ferry Road	N
Erin Street	Wolever Avenue	Portage Avenue	N
Inkster Boulevard	Main Street	Lansdowne Avenue	N
Logan Avenue	Trinity Street	McPhillips Street	N
Logan Avenue	Electa Street	Keewatin Street	N
McGregor Street	Redwood Avenue	Dufferin Avenue	N
McPhillips Street(N/B) (concrete repairs only)	Swailes Avenue	Murray Road	N
Notre Dame Avenue	Keewatin Street	Dublin Avenue	N
Notre Dame Avenue	Portage Avenue	Isabel Street	N
Oak Point Highway(N/B)	Logan Avenue	Inkster Boulevard	N
Oak Point Highway(S/B)	Logan Avenue	Inkster Boulevard	N
Portage Avenue (E/B)	Rouge Road	School Road	N
Portage Avenue(E/B)	Strathcona Street	Borrowman Place	N
Portage Avenue(W/B)	McGee Street	Minto Street	N
Saskatchewan Avenue	Sturgeon Creek Bridge	Perimeter	N
Selkirk Avenue	Main Street	Salter Street	N
Vaughan Street (concrete repairs only)	Graham Avenue	York Avenue	N
William Avenue	Sherbrook Street	McPhillips Street	N
Bison Avenue (E/B)	Waverly Street	Pembina Highway	S
Bison Avenue(W/B)	Waverly Street	Pembina Highway	S
Chancellor Matheson Road	University Crescent	Pembina Highway	S
Corydon Avenue	Cambridge Street	Kenaston Boulevard	S
Grant Avenue	Pembina Highway	Stafford Street	S
McGillivray Boulevard	Waverly Street	Pembina Highway	S
Pembina Highway(S/B)	Grant Avenue	Harrow Street	S
Taylor Avenue(E/B)	Waverly Street	Wilton Street	S
Tuxedo Boulevard	Corydon Avenue	Kenaston Boulevard	S
University Crescent (N/B)	Markham Road	Pembina Highway	S
Waverley Street (S/B)	Bishop Grandin Boulevard	Bison Avenue	S
Waverley Street(N/B)	Bishop Grandin Boulevard	Bison Avenue	S

NOTE: this list is sorted alphabetically by area and by street name.

Source: City of Winnipeg Public Works Department

Appendix D

Preliminary Public Consultation Process Summary



PRELIMINARY PUBLIC CONSULATION PROCESS SUMMARY

FEBRUARY 25, 2005

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Rapid Transit Task Force
Preliminary Public Consultation Process Summary

1.0 Public Meeting Workshops Introduction

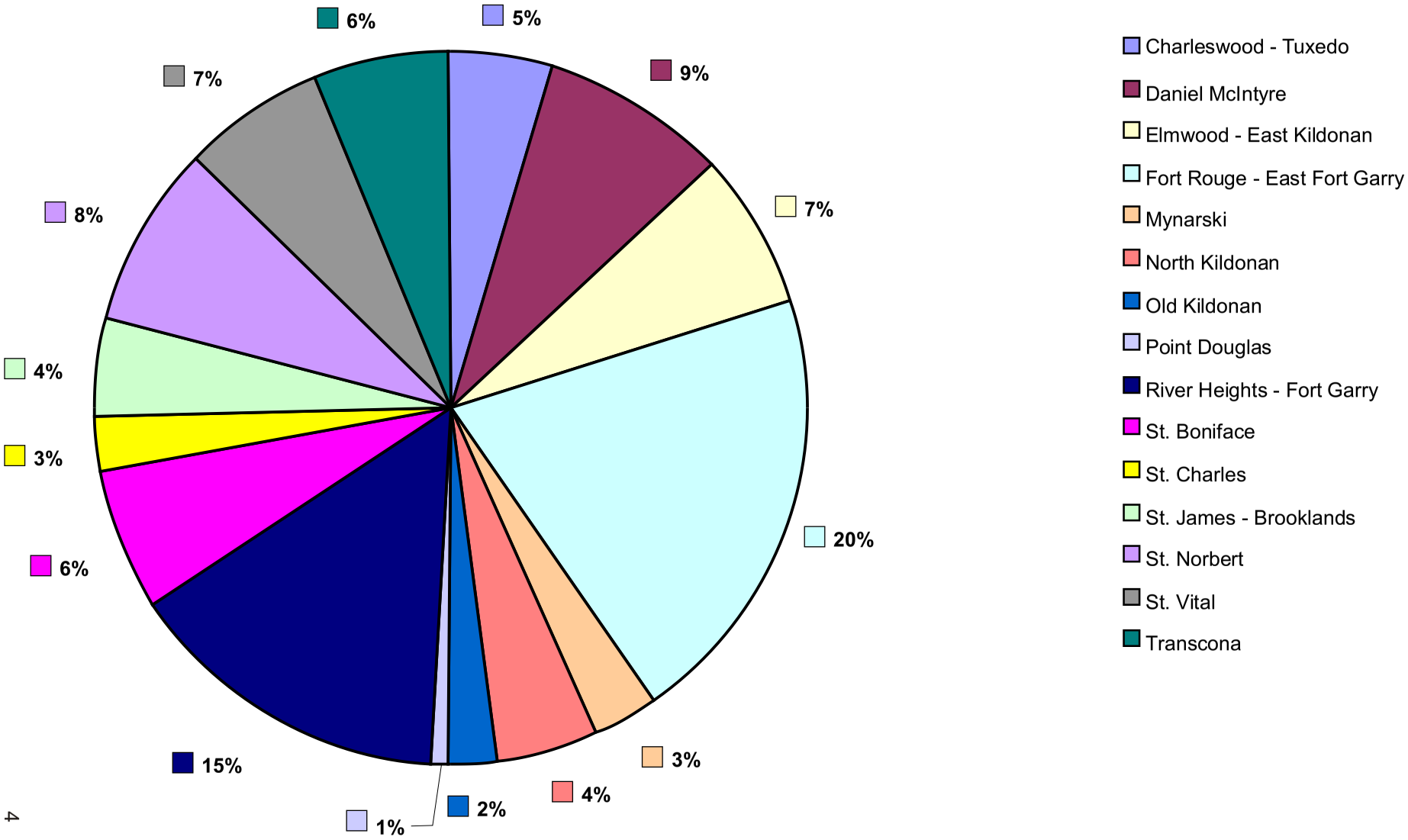
The purpose of the Public Meeting Workshops was to determine the public's views and attitudes towards Winnipeg's Existing Transit Service and proposed Rapid Transit in Winnipeg. The workshop format consisted of a brief introduction, outlining the mandate of the Rapid Transit Task Force and purpose of the workshop, followed by group discussions focusing on the strengths and weaknesses of the Existing Transit Service and key service attributes for Rapid Transit in Winnipeg (summarized in Section 2.0) and ending with a questionnaire based upon the working group discussions (summarized in Section 3.0).

There were three hundred and thirty four (334) participants in the ten (10) Workshops held City wide from January 20 to February 8, 2005. 'Sign In' sheets were used to track the number of participants and their addresses within Winnipeg. The percentage of each Municipal Ward in attendance was as follows:

Charleswood – Tuxedo – 5%	River Heights – Fort Garry – 15%
Daniel McIntyre – 9%	St. Boniface – 6%
Elmwood – East Kildonan – 7%	St. Charles – 3%
Fort Rouge – East Fort Garry – 20%	St. James – Brooklands – 4%
Mynarski – 3%	St. Norbert – 8%
North Kildonan – 4%	St. Vital – 7%
Old Kildonan – 2%	Transcona – 6%
Point Douglas – 1%	

The Workshops were widely advertised through the newspapers (Free Press, Sun and all local newspapers through paid advertisements and news articles), radio (paid advertisements on CJOB and news spots on CBC), television (televised news coverage of the first workshop on A Channel and CKY), 200 notices posted in community centres, libraries, arenas, universities, colleges, high schools, senior centres, bus shelters and workshop venues, e-mails to public interest groups and information posted on the Rapid Transit web site.

Question 2.
Municipal Ward Participation



2.0 Summary of Public Workshop Discussion Results

Group discussions were facilitated by members of the Task Force support team who recorded each group's views on the strengths and weaknesses of the Existing Transit Service and key service attributes for Rapid Transit in Winnipeg. A total of forty seven (47) groups participated over the course of the ten Public Meeting Workshops. The results represent only the views and attitudes of those who chose to attend the workshops and cannot be generalized to the entire population of Winnipeg.

The findings of the group discussions may be summarized as follows:

- The groups identified 56 strengths and 77 weaknesses of the Existing Transit System.

Strengths of the Existing Transit System

- 89.4% of the groups identified 'Courteous/friendly/skilled Drivers'
- 78.7% of the groups identified 'Navigo/website'
- 72.3% of the groups identified 'Regular Fares'

Weaknesses of the Existing Transit System

- 85.1% of the groups identified 'Frequency of Buses'
- 78.7% of the groups identified 'Comfort of Stops'
- 72.3% of the groups identified 'Transfer Points – Timing of Buses'

Key Attributes of Winnipeg's Rapid Transit System

- 85.1% of the groups identified 'Speed (total trip time competitive to car)'
- 80.9% of the groups identified 'Comfortable Stations'
- 72.3% of the groups identified 'Environmental Impact'

The following charts summarize the findings of the working group discussions. The percent calculation indicated in the last column of each chart represents the percentage of working groups that raised the issue as a concern.

Strengths of the Existing Transit System
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	% [*1]
Courteous / Friendly / skilled Drivers (announce stops)	4	8	6	3	6	4	3	3	3	2	**42**	89.4%
Navigo / website	2	5	6	3	5	3	6	3	2	2	**37**	78.7%
Regular Fares	3	5	5	1	6	5	4	1	2	2	**34**	72.3%
Telebus (including access in yellow pages)	2	6	5	3	4	2	4	3	2	2	**33**	70.2%
Low Floor (accessible) Buses / priority seating	2	3	3	2	2	4	5	3	2	2	**28**	59.6%
1 hour transfer	3	4	4	3	2	3	4	2	1	1	**27**	57.4%
Express & Super Express Routes	1	3	2	1	2	4	4	3	1	1	**22**	46.8%
Direct Communication between Bus Driver and Dispatch (ie Safety, problems, public security)	1	1		1	1	1	1	2		2	**10**	42.6%
Comfort on Bus (heat, seats, etc.)	1	3	4	1	2	2	3	1	2		**19**	40.4%
Frequency at Rush Hour	1	2	5	1	2	4	1	2	1		**19**	40.4%
Reliable Schedules / service (usually on time)	1	3	2	1	3	2	2	2	2	1	**19**	40.4%
Service to Major Destinations (hospital, school, downtown, shopping)	1	5	3		3		2		3	1	**18**	38.3%
Downtown Spirit		2	1	1		3	5		2	2	**16**	34.0%
Safety on Buses	1	1	3		2	2	2	2	1	1	**15**	31.9%
Frequency (Older Neighbourhoods, major routes)	1	3	3	1	1	1	1	1	2	1	**15**	31.9%
Reduced Fares for Seniors and Students		1	2	1	1	3	2	1	2	1	**14**	29.8%
Request a stop	1		1	1	2	2	4		1	2	**14**	29.8%
Special Event Buses	1	3	1	1	1	1	2	1	1	2	**14**	29.8%
Diamond Lanes	2	2	1	1	2	2	2	1			**13**	27.7%
Passes and Tickets		2	2	1		1	3	2	2		**13**	27.7%
Comfort at Stops (heated shelters)	2		2		3		2	2	1		**12**	25.5%
Route Network System		4	2		1	2		1	1	1	**12**	25.5%
Bike Racks on buses	1	2	2	2	2				1	1	**11**	23.4%
Ecopass		2	1	2	1	1	1	1	2		**11**	23.4%
Less Stressful than Driving (weather, traffic, can read etc.)	3	1	1		1	2		2	1		**11**	23.4%
Transit Priority Signals	1	1	2	1	1		2	1	1		**10**	21.3%
Park and Ride	1	1	1		1	2	1	2			**9**	19.1%
Route / Schedule information at Stops and mailed out		1	1	1			3	2			**8**	17.0%
Environmentally Friendly	1	1	1		1	1	1	2			**8**	17.0%
Clean Buses					1		2		2	1	**6**	12.8%
Stop Locations (every 150m in inner city)	1				3		1			1	**6**	12.8%
Transfer points		2		1	2	1					**6**	12.8%
Accessibility of Stops (snow clearing)		1	1		1	1					**4**	8.5%
Graham Avenue Mall			1	1		1	1				**4**	8.5%
Signage on Buses (back of bus, side, etc.)		2	1							1	**4**	8.5%
Cross-town Routes						1	2		1		**4**	8.5%
DART		1		1	1				1		**4**	8.5%

Strengths of the Existing Transit System
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	% [*1]
Support Local Business with New Flyer						2	1		1		**4**	8.5%
Adaptable (integrated into a larger system)	1			1			1				**3**	6.4%
Total Trip Time		1						1	1		**3**	6.4%
Bus Culture interesting / diverse people							1	1	1		**3**	6.4%
Publicly owned System	1							1	1		**3**	6.4%
Safety at Stops		1	1								**2**	4.3%
Substantial number of buses		1			1						**2**	4.3%
Convenient Routes	1	1									**2**	4.3%
Operational hours									2		**2**	4.3%
Handi-Transit		2									**2**	4.3%
Colour of Buses (white)									1	1	**2**	4.3%
Luggage Rack in new buses							1				**1**	2.1%
Feeder Bus Network	1										**1**	2.1%
Busology Signs						1					**1**	2.1%
Charter Services							1				**1**	2.1%
Decorum of passengers has improved				1							**1**	2.1%
Existing Rail Lands & lines available for future development	1										**1**	2.1%
Places to buy tickets and passes						1					**1**	2.1%
Splash Dash	1										**1**	2.1%
Total Number of Groups	6	8	6	3	5	5	6	3	3	2	**47**	

1. Percentage of the 47 groups that identified each strength

Weaknesses of the Existing Transit System
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	% [*1]
Frequency of buses (off peak and weekend, no 24 hr service, shift workers, buses of different routes all travel at the same time on major roads)	4	8	6	1	5	4	4	3	3	2	**40**	85.1%
Comfort at Stops (heated shelters, disrepair, take into account seniors)	4	5	6	3	5	3	5	2	2	2	**37**	78.7%
Transfer points - timing of buses, communication between buses, should be timing points	3	6	6	2	3	4	5	3	1	1	**34**	72.3%
Total Trip Time / speed	4	2	4	1	5	4	3	3	1	2	**29**	61.7%
Comfort on Bus (heat, air conditioning, seats, start stop motion, bumpy ride)	2	5	3	1	5	5	3	1	1	2	**28**	59.6%
Feeder Bus Network - need more, poorly connected, infrequent, poor suburb service	4	5	3		1	2	2	2	2	1	**22**	46.8%
Route Network System - planning, routes not direct enough, confusing, not enough	3	2	5		2	4	3	1	1	1	**22**	46.8%
Fares too high (go up every year, not fair for off peak service)	1	4		3	3	1	3	2	2	1	**20**	42.6%
Reduced Fares for Seniors and Students - too high or should be free -should include low income people	4	2	2	3	1	1	2	2	2	1	**20**	42.6%
Advertising to attract riders (stigma attached to riding bus, only for the poor, customer service downtown, also on buses)	1	4	1	1	1	2	5		3	1	**19**	40.4%
Diamond Lanes (need more, need to be enforced, should not have bikes and emergency vehicles, poor identification)	1	4	3	1	3	2	1		2	1	**18**	38.3%
Reliability of Schedules / service (usually not on time, bad weather makes worse)		2	5	1	3	1	2	1	1	2	**18**	38.3%
Not enough Route / Schedule information at Stops and on buses - express route colouring	2	3	3	1		1	3	1	2	1	**17**	36.2%
Crosstown Routes - (need more, more direct)		1	3		4	2	2	2	1	2	**17**	36.2%
Frequency at Rush Hour (full buses, more buses, longer rush hour, buses of different routes all travel at the same time on major roads)		2	2	1	1	2	2	3	2	1	**16**	34.0%
Safety on Buses - not enough straps or safety measures, start / stop too fast, undesirable passengers, need transit police	1	4	2	2	3		1	1		1	**15**	31.9%
Size of buses used (empty big buses, too many full buses need larger)		2		1	2	1	3	1	3	2	**15**	31.9%
Buses on congested streets	2	2	2		2	2	3		1	1	**15**	31.9%
Environmental concerns (lack of fuel efficiency, type of fuel, older buses, idling	2	4	1		2	2	1	1	1	1	**15**	31.9%

Weaknesses of the Existing Transit System
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	% *1
Dirty Shelters / stops		3	2	1	2		2	2	1	1	**14**	29.8%
Lack of planning for new subdivisions / developments, roads, signals to incorporate transit	3	3	2		2		2		2		**14**	29.8%
Accessibility of Stops (snow clearing, lack of sidewalks)	1		3	1	2	2	1		2	1	**13**	27.7%
Dirty Buses (inside and out)	1		2	1	1	2	2	1		2	**12**	25.5%
Safety at Stops (real and perceived)			1	1	2	1	2	2	1	2	**12**	25.5%
Passes and Tickets - need day passes, not enough discount from fares, need better on board /preboard payment options		2	2		1	2		2	2	1	**12**	25.5%
Discourteous Drivers (don't lower buses, unhelpful, cranky, rude, stop short, drive too fast)	2	1	2	1		2	1	1	1	1	**12**	25.5%
Bike Racks on buses - need more, don't know what bus they are on, not good for transferring passengers, too long to get bike off rack		2	3		2	1		1	1	1	**11**	23.4%
Routes need to be changed	1		2		1	2	2	1	1	1	**11**	23.4%
Ads on outside of buses that block windows		2	2	1		2		1	1	1	**10**	21.3%
Bus colour not good (can't see white in winter, not aesthetically pleasing, need to be consistent)	2		3			1	2	1	1		**10**	21.3%
Lack of incentive to choose bus over car	1	3			2	1	2		1		**10**	21.3%
Yellow stripe on back door exits		2	1			1	1	2	1	1	**9**	19.1%
Service to Major Destinations (hospital, schools, downtown, shopping)		3			3		1	2			**9**	19.1%
Park and Ride (need more & parking plugs, poor locations, should not conflict with shopping centres)	1	1			1	3	1	2			**9**	19.1%
Accessibility of Buses (not enough low floor, adequate enforced space for wheelchairs)		3	2	2	1	1					**9**	19.1%
Express & Super Express Routes - inadequate, should have priority over regular buses	1	2	2		2					1	**8**	17.0%
City too auto friendly (parking on major routes, etc.)	1	5							2		**8**	17.0%
No communication to riders at stops about cancelled buses or bus times or type of bus for access (real-time display)	2	2	2	1							**7**	14.9%
Bus Design needs to be improved (levels, aisle, doors, racks)				1	2			1	1	1	**6**	12.8%
Handi-Transit (needs improvement)			2	2	1					1	**6**	12.8%
No Audio system on bus (music, phone, announcing stops)	1		2			1				1	**5**	10.6%
Too many stops	1		3						1		**5**	10.6%
Lack of passengers courtesy				2	2		1				**5**	10.6%
Not in Service buses going by			2	1			1			1	**5**	10.6%
Can't see out back window			2								**2**	8.5%
No racks for shoppers / luggage	1		1			1			1		**4**	8.5%

Weaknesses of the Existing Transit System
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	% [*1]
Transit Priority Signals - not enough, need more planning			1		1		1			1	**4**	8.5%
Navigo / website - not accurate			2	1			1				**4**	8.5%
Special Event Buses (not waiting after events, not available for cultural events, free new years eve)		2	1				1				**4**	8.5%
Telebus (doesn't update real-time, information in phone book not easy to understand)		1				2	1				**4**	8.5%
Lack of alternate transportation consideration (planning of bike routes, bike parking, walkways, etc.)	1				1	1			1		**4**	8.5%
Need more ads inside bus			1			1			1	1	**4**	8.5%
DART - frequency, interferes with other buses		3									**3**	6.4%
Downtown Spirit (useless, or not advertised enough)			1					1	1		**3**	6.4%
No commercial services at stops (vendors)	1						1			1	**3**	6.4%
Low Floor Buses do not hold as many people		1		1							**2**	4.3%
Signage on Buses (back of bus, side, etc.)	1									1	**2**	4.3%
1 hour transfer not long enough						1	1				**2**	4.3%
Ecopass (charged as taxable benefit to user from employer, schools should have it)							1		1		**2**	4.3%
Lack of Innovation	1								1		**2**	4.3%
Lack of Provincial & Federal Funding						1	1				**2**	4.3%
Places to buy tickets and passes			1				1				**2**	4.3%
Schedules are written on 24 hr clock				1		1					**2**	4.3%
Bus egress should only be back door		1									**1**	2.1%
Graham Avenue Mall - should be transit only		1									**1**	2.1%
Low ceilings on new buses	1										**1**	2.1%
Not enough stops			1								**1**	2.1%
Terminals at shopping centres -interfere with cars		1									**1**	2.1%
Animals not allowed			1								**1**	2.1%
Baby strollers block aisle										1	**1**	2.1%
Existing Rail Lands & lines available for future development not been held for future use							1				**1**	2.1%
Gave up trolley system				1							**1**	2.1%
Lack of business support (blue looney)		1									**1**	2.1%
Lighting on buses too bright in morning										1	**1**	2.1%
Splash Dash					1						**1**	2.1%
Total Number of Groups	6	8	6	3	5	5	6	3	3	2	**47**	

1. Percentage of the 47 groups that identified each weakness

Key Service Attributes for Rapid Transit
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	%[*1]
Speed -total trip time competitive to car	4	8	5	3	3	4	6	2	3	2	**40**	85.1%
Comfortable stations (heated shelters, commercial amenities, washrooms, phones, wi-fi connections, make Graham enclosed)	2	5	6	3	5	5	5	2	3	2	**38**	80.9%
Environmental impacts considered (hydro powered, clean fuel, recycled materials)	2	6	6	3	4	4	3	3	2	1	**34**	72.3%
Dedicated lanes / separated from traffic	1	4	6	1	5	4	4	3	3	1	**32**	68.1%
Convenient routes (cross town and ring routes to connect City)	4	5	3	2	2	3	5	1	3	2	**30**	63.8%
Creative fares, promotions and enticements (make bus passes tax deductible, yearly passes	2	4	4	3	4	4	4	1	2	2	**30**	63.8%
Frequency (between 5 and 10 min.)	5	6	5	1	2	2	4	1	2	1	**29**	61.7%
Feeder routes		5	4	2	4	4	5	1	2	1	**28**	59.6%
Realtime display and route information, gps tracking (weather conditions)		5	5	2	3	4	3	2	2	1	**27**	57.4%
Park and ride (indoor or plugs)	2	4	3	3	1	3	4	3	2	1	**26**	55.3%
Image enhancement of system to attract car drivers	3	4	5	2	3	2	3		3	1	**26**	55.3%
Comfortable vehicles (including racks on buses, leg room, etc.)		3	5	3	2	3	2	3	2	2	**25**	53.2%
Comprehensive planning program for alternate transportation (multiuse paths, bike storage)	2	3	5	3	2	1	4	2	2	1	**25**	53.2%
Low Fares (affordability of service, or more service for cost, free transit)	1	3	4	3	4	1	3	1	3	2	**25**	53.2%
Safety	2	3	6	2	3		3	1	3	2	**25**	53.2%
System should service major destinations (downtown, shopping, airport, hospitals, schools, recreation)	1	4	4	2	1	2	3	3	2	1	**23**	48.9%
Accessibility to stops, vehicles & destinations (physical, language	2	5	4	3	2	1	2		2	1	**22**	46.8%
Immediate response required with a long term vision	3		4	2	1	3	3	3	2	1	**22**	46.8%
Political will - shift government focus from auto to transit (Increase parking fees, lower hidden subsidies, increase gas tax, government funding to Transit)	2	6	5	2	1	1	1		3	1	**22**	46.8%
Adaptability (to light rail, future expansion, alternate modes	2	3	1	1	2	2	4	2	2	2	**21**	44.7%
Integrated with city planning (flexible to population, integrated into shopping areas)	2	1	5			2	5	2	2	1	**20**	42.6%
Electronic payment options preboarding or ticket purchase	1	4	5	1	1	3		1	1	2	**19**	40.4%
Variety of vehicle sizes (articulated, smaller)	1	3	4	1	2	1	1	2		2	**17**	36.2%
Regional hubs	1	2	5	1	1	2	1	2		1	**16**	34.0%
Use existing abandoned rail lines (land assembly)	1	2	3	2	1	2	3	1			**15**	31.9%
24 hour service	1	4	2		3		3			1	**14**	29.8%

Key Service Attributes for Rapid Transit
Working Group Discussion Results

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Summary	%[*1]
Reliable schedules and system	1	5	2	1		2	2		1		**14**	29.8%
Economically viable (use existing infrastructure, build on existing services)	1		2		1	4	1	2	1		**12**	25.5%
Local industry benefits from impact (use technology developed here)	1	1	1	1	2	2	1	1	1		**11**	23.4%
Better transfer connections (better communication between buses, indoor stations)	1	1	3	1	2	2					**10**	21.3%
Grade separation (whole system or intersections)			2	1	1	2		2	1		**9**	19.1%
Bike access on vehicles (better front rack or in vehicle)	2	1	1			1	2		1		**8**	17.0%
Should be LRT or rail	1		1			1	1	2	1	1	**8**	17.0%
Fewer transfers (or none)			2	2		2	1		1		**8**	17.0%
Public Private partnerships in development and operation	1	2	1	1	2		1				**8**	17.0%
Use new technology to promote transit use	2	1	2		2						**7**	14.9%
Door to Door Service		1	2	1	1		1				**6**	12.8%
Emergency services have access	2	1			1	1	1				**6**	12.8%
Block off cars from downtown	1		1	1						1	**4**	8.5%
Enjoyable experience	1	1			1				1		**4**	8.5%
Noise pollution to be addressed	1	1	1							1	**4**	8.5%
Publicly owned system	1			1							**2**	4.3%
Direct connection to existing buildings									1		**1**	2.1%
Longer stop times at stations/ stops	1										**1**	2.1%
Personal rapid transit								1			**1**	2.1%
Total Number of Groups	6	8	6	3	5	5	6	3	3	2	**47**	

1. Percentage of the 47 groups that identified each attribute.

3.0 Summary of Questionnaire Findings

The questionnaire, refer to attached sample, was designed to determine the respondent's views on the strengths and weaknesses of the Existing Transit system and provide specific feedback on service attributes critical to the development of a Rapid Transit System for the City of Winnipeg.

The questionnaire was filled out by two hundred and eighty six (286) workshop participants and one hundred and forty seven (147) website respondents (total 433 completed questionnaires). The results represent only the views and attitudes of those who chose to attend the workshops and visit the website and cannot be generalized to the entire population of Winnipeg.

The highlights of the questionnaire findings are:

- 15% of respondents do not use the Winnipeg Transit System.
- Of the 85% that use Transit, the majority (35%) use it only once or twice a week. Only 23% use Transit more than 10 times per week.
- The majority use Transit to go to work/school (40%) and for environmental (26%), cost/affordability (24%) and/or convenience (23%).

<u>What respondents like best about the Existing Transit Service:</u>
- 'Convenience' (50.8%)
- 'Bus Drivers' (17.9%)
- 'Fares' (16.6%)

<u>What one thing respondents would change or improve about the Existing Transit Service:</u>
- 'Development of Dedicated Bus Lanes/BRT System' (28.9%)
- 'Frequency' (22.2%)
- 'Speed' (11.1%).

<u>Strongest service attribute of the Existing Transit System:</u>
- 'Safety on Board Vehicles' (58.1%)
- 'Reliability' (45.9%)
- 'Accessibility' (40.5%).

<u>Weakest service attribute of the Existing Transit System:</u>
- 'Comfort of Bus Stops' (60.4%)
- 'Frequency of Service' (59.8%)
- 'Speed' (51.0%).

<u>99% of respondents supported the development of improved Transit facilities.</u>

<u>95% of respondents supported the development of a Rapid Transit System.</u>

When asked to rank service attributes by order of importance:

1) 'Speed' (average ranking 3.17, 25.1% of respondents ranked #1)
2) 'Reliability' (average ranking 3.80, 13.6% of respondents ranked #1)
3) 'Frequent Service' (average ranking 3.87, 17.4% of respondents ranked #1).

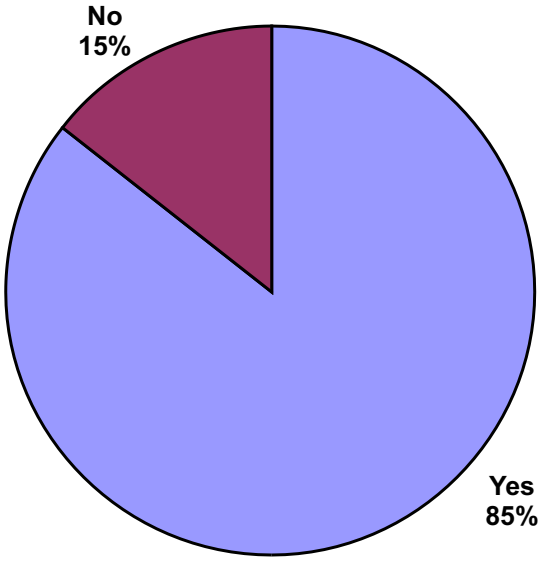
- 74.8% of respondents provided comments/ideas regarding Transit as follows:
    - 19.5% felt that speed and reliability are absolutely critical
    - 19.2% felt that the City must make Transit/Rapid Transit a priority (studied enough) and that development of a Rapid Transit System must start now
    - 17.0% felt that a BRT system (similar to original plans, Ottawa, Australia) should be implemented
    - 11.5% felt that low fares and affordability are critical
    - 11.5% felt that convenient/direct routing is essential
    - 11.1% felt the system must be environmentally friendly and that RT is a priority for environmental concerns

City Image

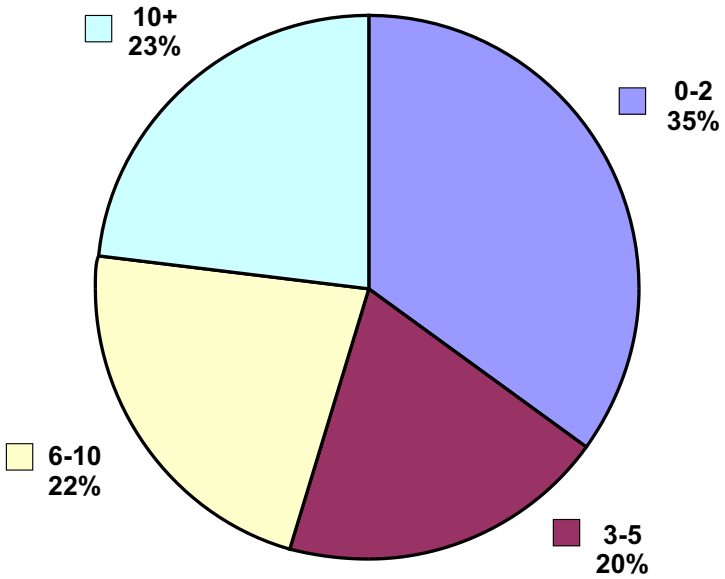
- It is important to note that the issue of the City's image, and the idea that Rapid Transit increases citizen's pride and confidence in the future of their City, was raised by participants and respondents even though the question was never posed.

Following are graphs and charts summarizing the findings of the Questionnaire.

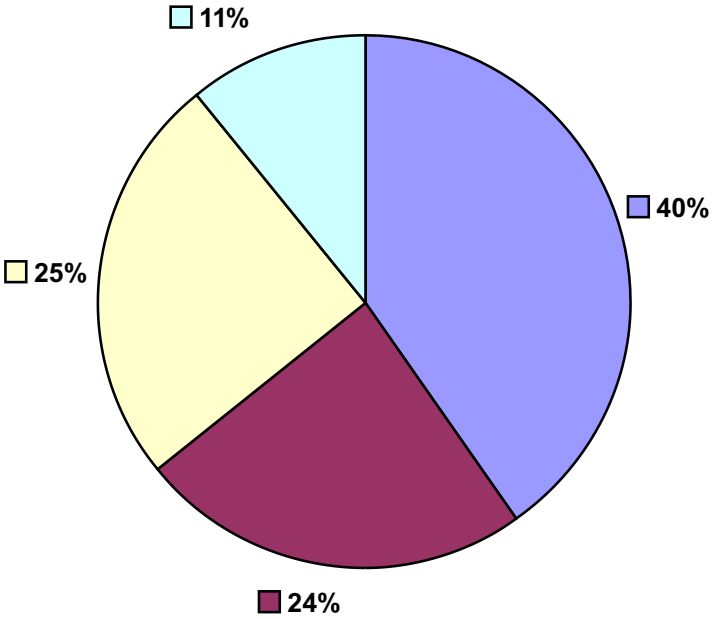
Question 3.
Do you use the Winnipeg Transit System?



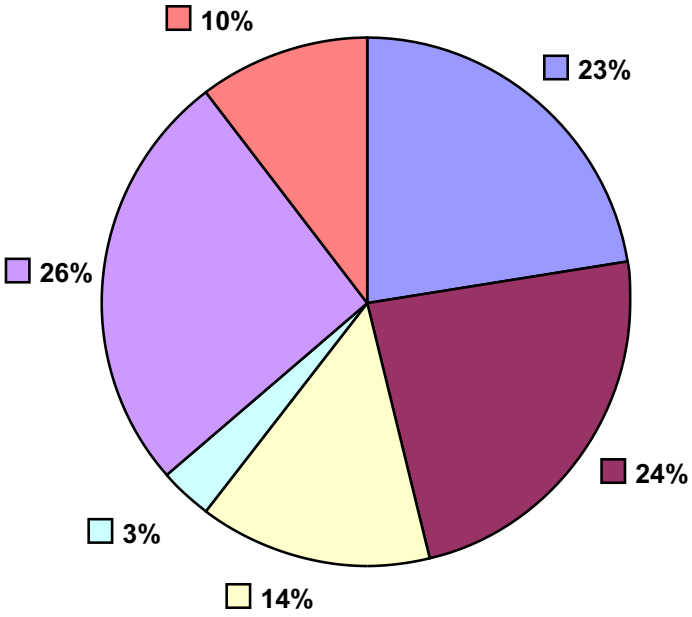
Question 3a.
Weekly Transit Trips



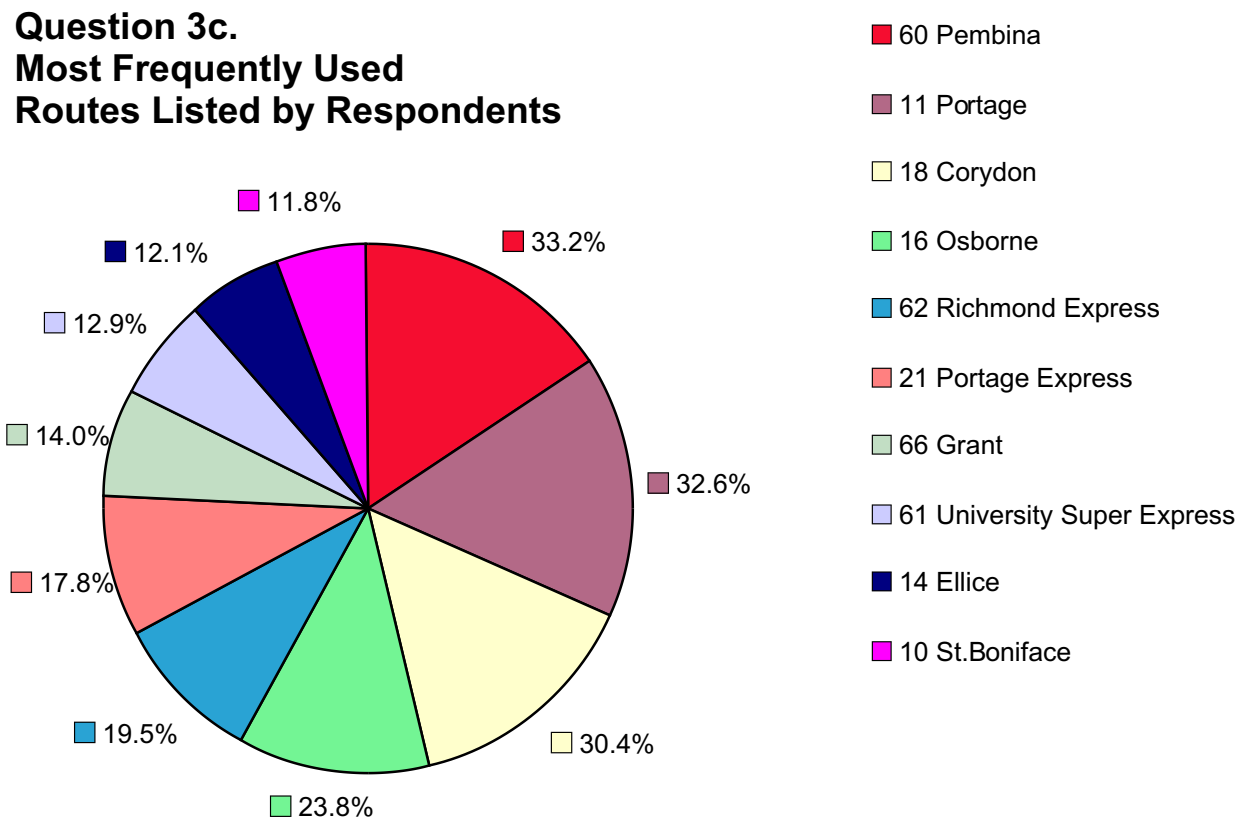
Question 3b.
Destination of Transit Trip



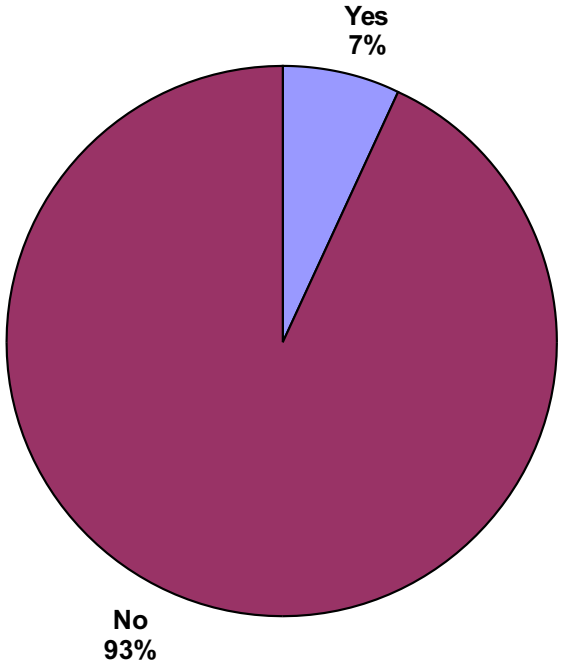
Question 3d.
Why do you use Transit



Question 3c.
Most Frequently Used
Routes Listed by Respondents



Question 4
Park and Ride Users



Question 5.

What do you like best about the Existing Transit Service?

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	Summary	%
Convenience	12	20	20	5	8	9	10	6	6		60	156	50.8%
Bus Drivers	6	3	6	6	1	2	2	1	1	8	19	55	17.9%
Fares[4]	8	3	7	1	7	3	2		5	1	14	51	16.6%
Reliability	2	3	5		5	1		1	4	3	10	34	11.1%
Navigo	2	3	3	2	1		4		2	2	12	31	10.1%
Less Stress [5]	2	2	3		3		2	1	1		12	26	8.5%
Bus Comfort	1	6	3	3	2	1	1	1			6	24	7.8%
Environmentally Friendly	2	1	1	1	1	1		1			10	18	5.9%
Express Service	1	1			1	1	1	1		2	10	18	5.9%
Nothing[7]	1	1					4		1	1	10	18	5.9%
Telebus		2		1	1			1		1	5	11	3.6%
Rush Hour Service	2			1	1	2	1			1	1	9	2.9%
Safety	3	2			1						3	9	2.9%
Accessibility [3]				1		1				1	5	8	2.6%
No Parking Costs[1]	1				1	2		1	1		2	8	2.6%
Passengers										2	6	8	2.6%
Accessibility [2]		1		2	2	1					1	7	2.3%
Speed		1				1		1	1		3	7	2.3%
Downtown Spirit					1	1	2					4	1.3%
DART Service		1	1								1	3	1.0%
Flexibility		2					1					3	1.0%
Frequency of Service										1	2	3	1.0%
Routes										2	1	3	1.0%
Bus Pass Options		1									1	2	0.7%
Heated Bus Shelters		1				1						2	0.7%
New Added Service					1					1		2	0.7%
Special Event Service[6]		1										1	0.3%
Travel Time					1							1	0.3%

[1] - No parking costs refers to downtown parking costs

[2] - Accessibility refers to location of stop in relation to rider's home

[3] - Accessibility refers to the ability of persons with disabilities to access and use system

[4] - Fares includes, cost of ride, affordability, price

[5] - Less stress refers to no parking worries, someone else drives

[6] - Free Rides to sports, special events

[7] - Nothing refers to remarks eluding to or including sarcasm, eg. Hmm, Not much

Question 6.

What do you like least about the Existing Transit Service?

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	Summary	%
Frequency	4	9	13	3	1	7	6	2	4	6	43	98	31.0%
Speed/Too Slow	8	5	7	3	8	6	11	2	4	7	17	78	24.7%
Bus Transfer/Route Coordination	3	6	7	2	3	7	4	4	3	2	28	69	21.8%
Shelters[2]	4	4	2	3	6	3			2	1	11	36	11.4%
Lack of Off Peak Service	2	5	4	1	4		2	1		2	15	36	11.4%
Fares	4	1	1	2			2		1	2	22	35	11.1%
Scheduling of Buses	2	2	2		3	1	1			2	12	25	7.9%
Overcrowded Bus	1	3	1	1	1	2		1		1	12	23	7.3%
Routing			2	1	2			1		2	9	17	5.4%
Not Convenient	1	1	2		3	1	2		1		6	17	5.4%
Bus Design	1	3		1	1	5		1			3	15	4.7%
Reliability		2	1		3				1		7	14	4.4%
Traffic Congestion		1	3				2			3	4	13	4.1%
Lack of Crosstown Routes	2	1	3	1	1	1					3	12	3.8%
Bus Comfort	2	1	1			1		1			6	12	3.8%
Environmental Practices	2	1								2	4	9	2.8%
Lack of Universal Access		1	1	2						1	3	8	2.5%
Lack of Feeder Buses	1		1		1	1		2			1	7	2.2%
System Design		2	1	1	1						1	6	1.9%
Enforcement of Dedicated Lanes	1			1			1		1		2	6	1.9%
Lack of 24 Hour Service	1	1	1				1				1	5	1.6%
Cleanliness of Vehicles										3	2	5	1.6%
Accessiblity[1]	1				2						2	5	1.6%
Lack of Service to Suburbs			1		3							4	1.3%
Bad Urban Planning[3]		1	1		1						1	4	1.3%
Parked Cars/respect for cyclists		2		1								3	0.9%
Lack of Park and Ride	2										1	3	0.9%
Lack of Funding For Maintenance		1	1									2	0.6%
Lack Of Ammenities										1	1	2	0.6%
Image									1		1	2	0.6%
Low Ridership									1			1	0.3%
Lack of Rapid Transit										1		1	0.3%
Lack of Express Buses								1				1	0.3%
Exact Fare Policy									1			1	0.3%

[1] - Accessibility refers to inconvenience with walking distance to initial stop, as well as distance from final stop

[2] - Shelters refers to cleanliness, lack of shelters, improper placement of shelters, lack of heated shelters, vandalized

[3] - Bad Urban Planning refers to urban sprawl, infrastructure upgrade

Question 7.

What is the one thing you would change or improve?

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	Summary	%
Develop Dedicated Bus Lanes	8	16	6	6	7	3	4	1	5	4	34	94	28.9%
Frequency	5	6	11	3	6	2	5	2	2	2	28	72	22.2%
Speed	2	3		1	5	2	6	3	6	1	7	36	11.1%
Fares	3	2	4				3	1	1		14	28	8.6%
Bus Transfer/Route Coordination			2		2	3	4	2	3		9	25	7.7%
Routes	1	1	1	1	1		1			1	15	22	6.8%
Add More Express Service	2		1	1	2	1	2	2		1	5	17	5.2%
Crosstown Routes	5	2	2		2	1		1			3	16	4.9%
Service		1	2		3	1		1	1		7	16	4.9%
Add More Buses To All Routes	2	2	3	1		1	2		1		3	15	4.6%
Shelters		4	1	1	1	1			1		6	15	4.6%
Feeder Routes		1	3	1	2	2					4	13	4.0%
Better City Planning/Development		1	2		3	2	1			1	2	12	3.7%
Development of LRT	3	1			1	1				1	5	12	3.7%
Environmental Issues	3				2	1	1	1			3	11	3.4%
Climate Controlled Vehicles		3	1		2		1				1	8	2.5%
Convenience			2		1				1		4	8	2.5%
Posted Routes at Stops		2	3			1					2	8	2.5%
Flexibility	1	2	1		2						1	7	2.2%
Longer Service Hours	1	1	1				1			1	2	7	2.2%
More Sunday Weekend Service	1			1	1	1		1			2	7	2.2%
People's Habits				1	1					2	2	6	1.8%
Better Marketing	1	2		1								4	1.2%
Bicycle Lanes		1				1				1	1	4	1.2%
Reduce Need to Transfer	1		1		2							4	1.2%
Lack of Political Will					1					1	1	3	0.9%
Reinstate Previous Proposal		2									1	3	0.9%
Traffic	1				1		1					3	0.9%
Bus Cleanliness	1										1	2	0.6%
Development of Rapid Transit								2				2	0.6%
Image									1	1		2	0.6%
Park and Ride/ Plug ins						2						2	0.6%
Remove Old Buses								1			1	2	0.6%
Ban cars during snow storms										1		1	0.3%
Ban Curb Side Parking		1										1	0.3%
Bike Racks on Buses		1										1	0.3%
Colour of Buses						1						1	0.3%
Cost Effective					1							1	0.3%
Development of Transit Hubs										1		1	0.3%
Lack of Respect from City											1	1	0.3%

Question 7.

What is the one thing you would change or improve?

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	Summary	%
Larger Vehicles (Capacity)										1		1	0.3%
Lighting at Bus Stops										1		1	0.3%
More Facilities					1							1	0.3%
More Participation in Ecopass										1		1	0.3%
Accessibility Issues											1	1	0.3%
Station/Stop Cleanliness										1		1	0.3%

Question 8.

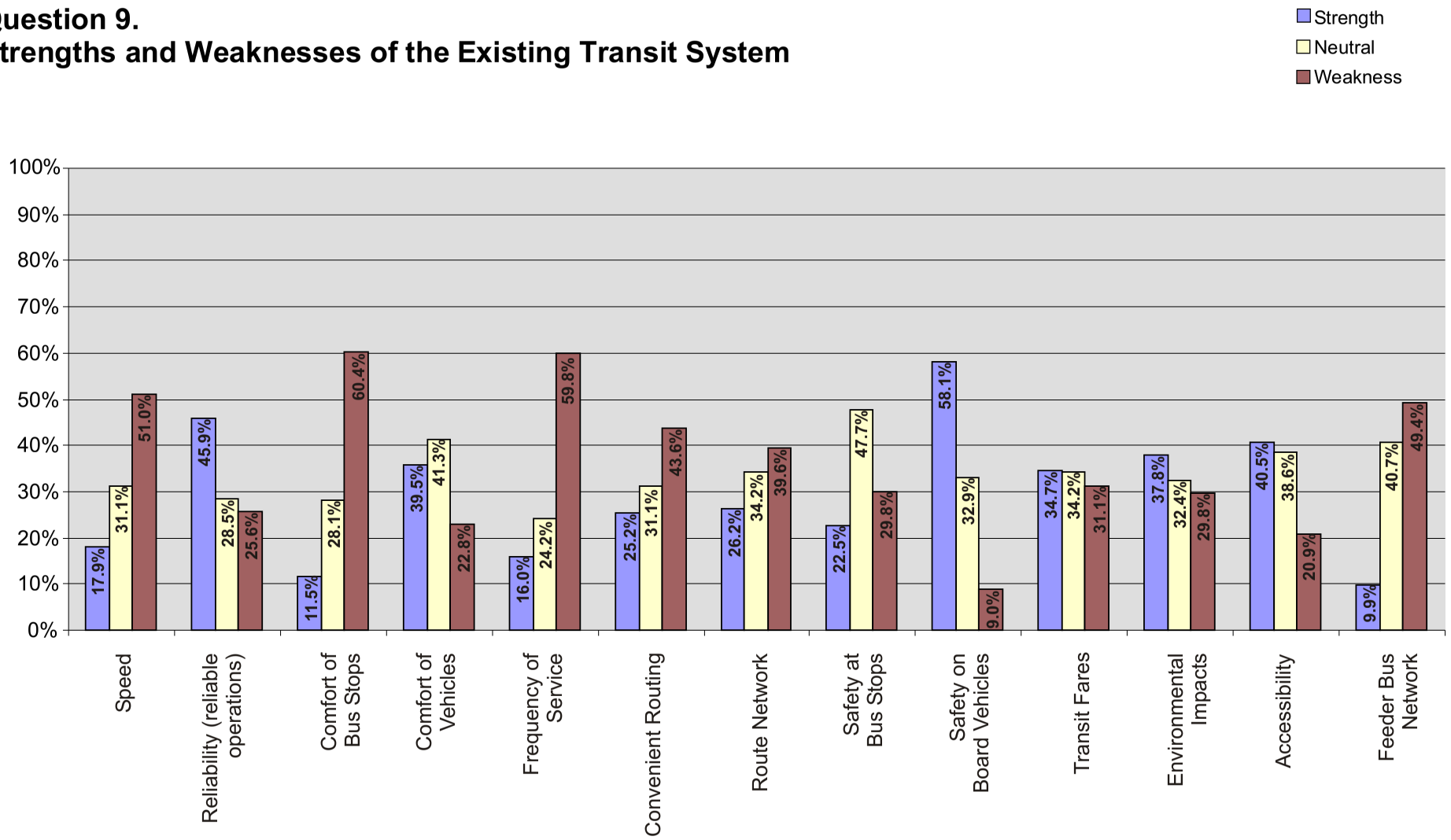
What do you believe is the single biggest problem of the Existing Transit Service?

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	Summary	%
Speed	2	7	6		13	8	9	1	5	5	20	76	23.4%
Frequency	5	11	11	2	1	1	6	1	2	4	15	59	18.2%
Traffic[1]	1	4	4	1	4		2		1	1	19	37	11.4%
Fares	5	3	2	4	1	1	2				14	32	9.8%
Poor Image	1	3	4	4	2	1	1	2	3	1	8	30	9.2%
Routing	3	2	2		2		2		1	4	9	25	7.7%
Antiquated System/Needs Update	6	1	1			2		1			12	23	7.1%
Low Ridership	3	3	3	2	2		1			2	5	21	6.5%
Better System Planning	2	3	3	2	1	1	4				3	19	5.8%
Lack of Political Will	3	1	1	1		1	2				10	19	5.8%
Inconvenient	3		1		1	1	1	1	1		9	18	5.5%
Route Timing For Transfer	1	2	2	1	1		4			1	3	15	4.6%
Lack of Crosstown Service	2	2			2	4					4	14	4.3%
Lack of Funding		2	1		1		3	1	1		3	12	3.7%
Less Off Peak Service	1	2		1	2	1	3					10	3.1%
Shelters[2]	1	3		1					1	2	2	10	3.1%
Reliability	1	1			1						4	7	2.2%
Climate		1			1				1		3	6	1.8%
Not Sustainable	1	1			1				1		1	5	1.5%
Not Viable in Outskirt Communities										1	4	5	1.5%
Safety					1						4	5	1.5%
Cheaper to Drive					1		1				1	3	0.9%
Environmental Pollution	1	1			1							3	0.9%
Inconsiderate Bus Riders			1	1	1							3	0.9%
Lack of Posted Schedules at Stops		1	1								1	3	0.9%
Overcrowded buses						1				1	1	3	0.9%
Diamond Lanes			1		1							2	0.6%
Scheduling										1	1	2	0.6%
That Transit Has To Make Money		1								1		2	0.6%
Bus Cleanliness	1											1	0.3%
Confusing Bus Number System					1							1	0.3%
No Rapid Network					1							1	0.3%
Reliability						1						1	0.3%
Type of Vehicle										1		1	0.3%

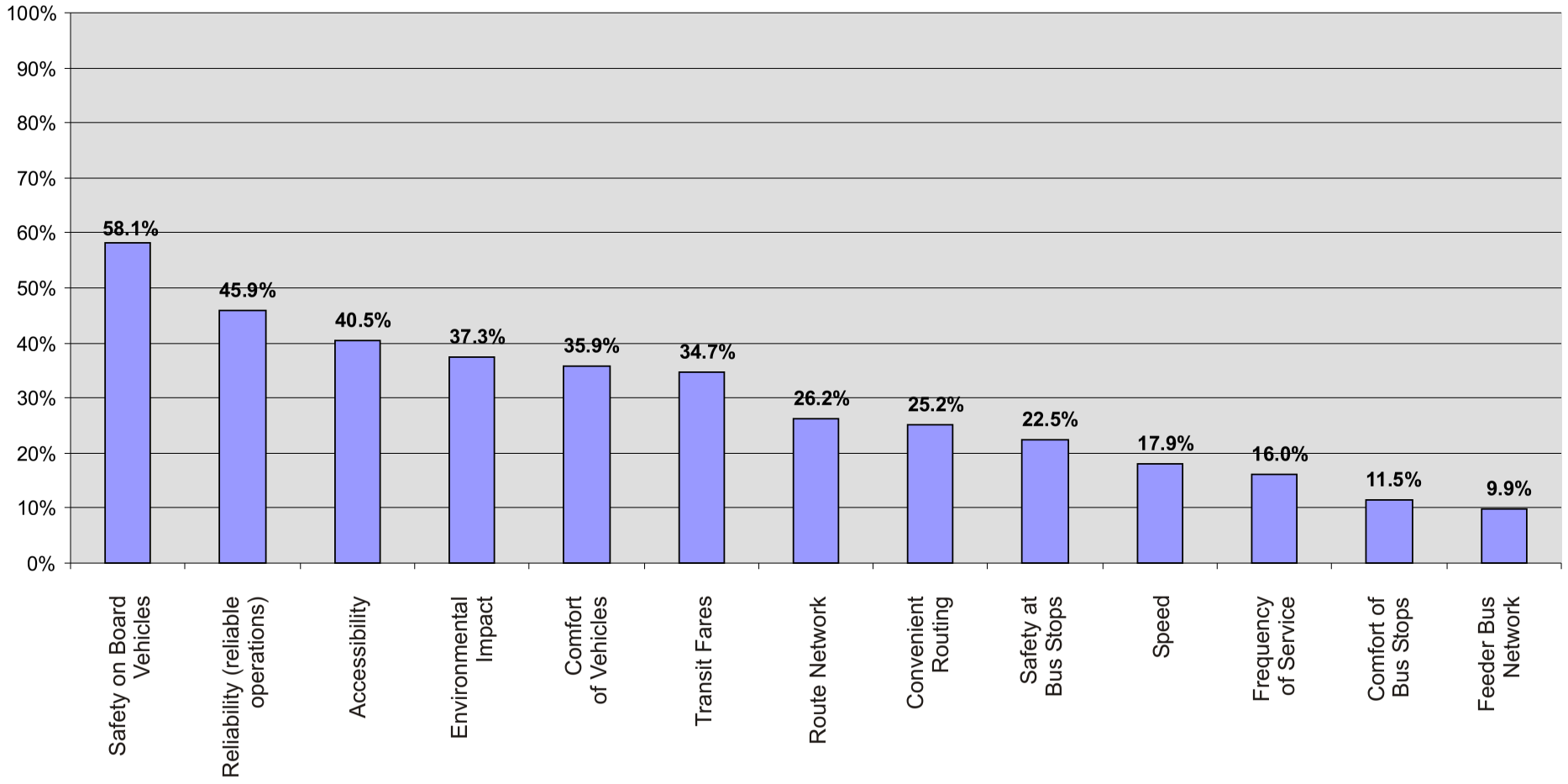
[1] - Traffic refers to congestion, sharing the roadway, cars

[2] - Shelters Includes, benches, heated, doors, lighting, maintenance

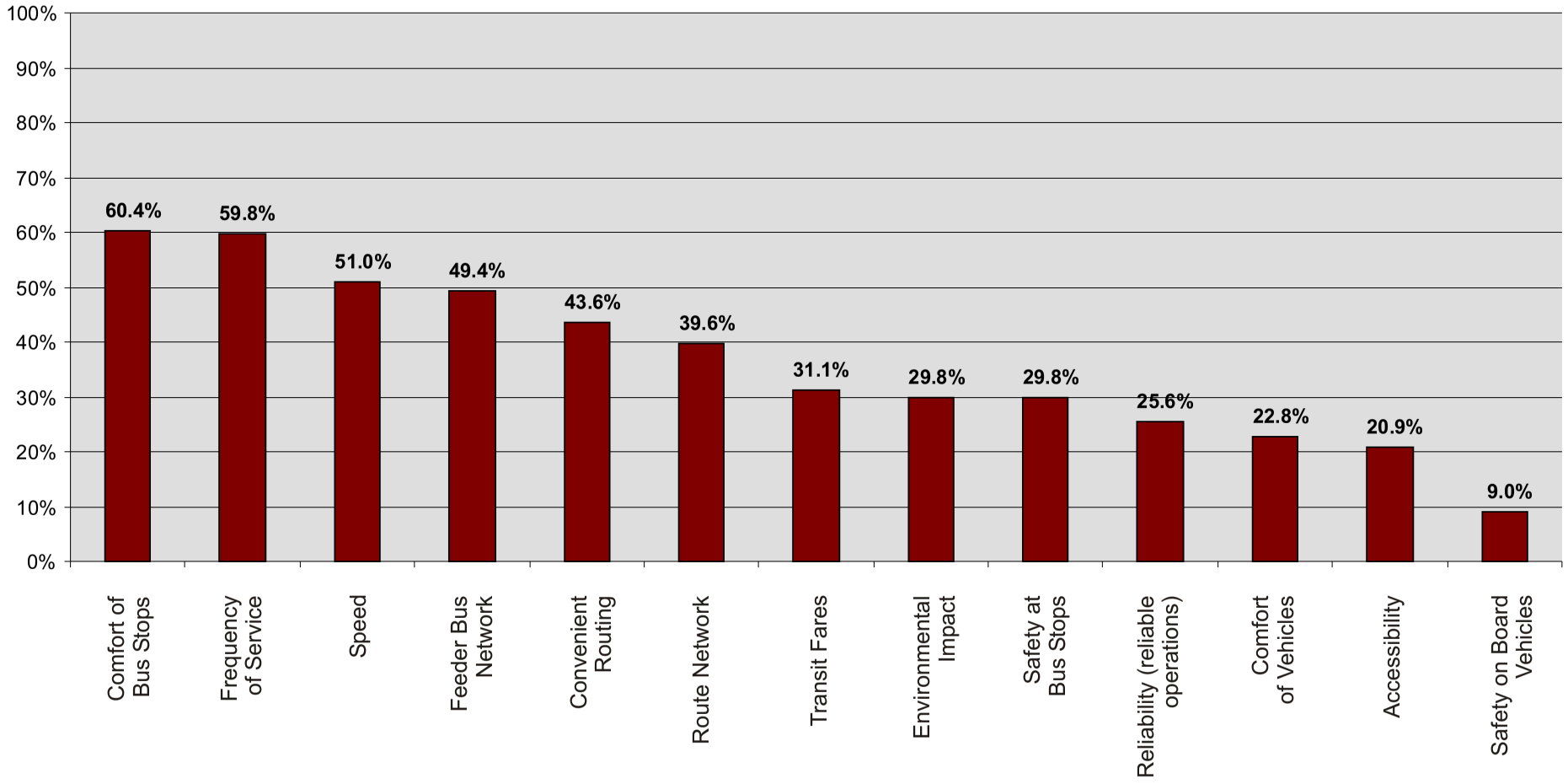
Question 9.
Strengths and Weaknesses of the Existing Transit System



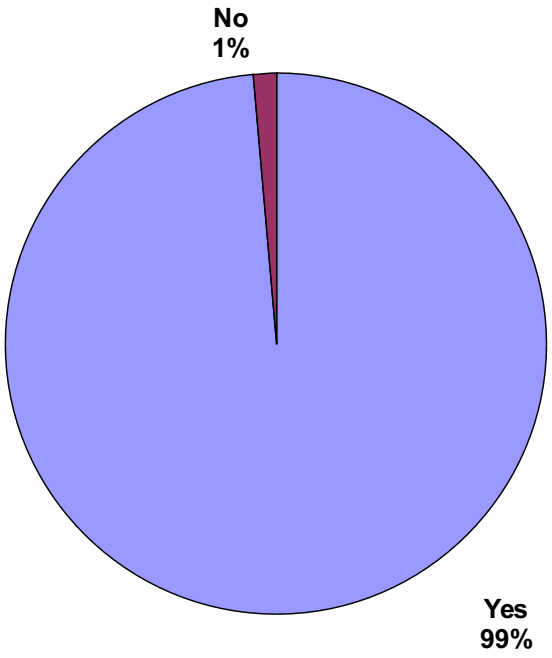
Question 9.
Strengths of the Existing Transit System



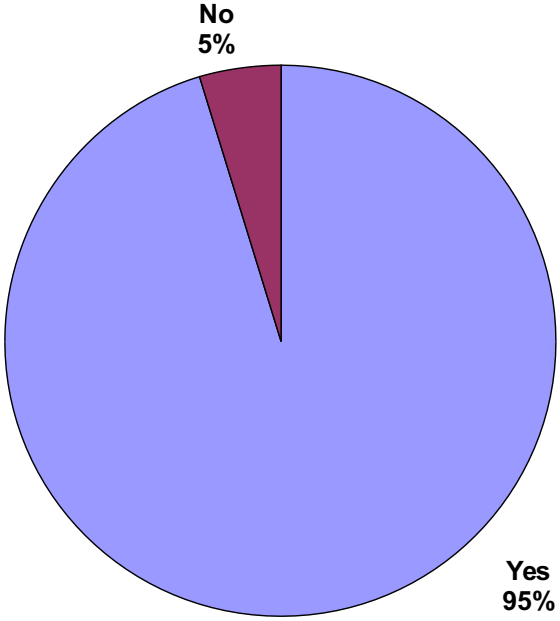
Question 9.
Weaknesses of the Existing Transit System



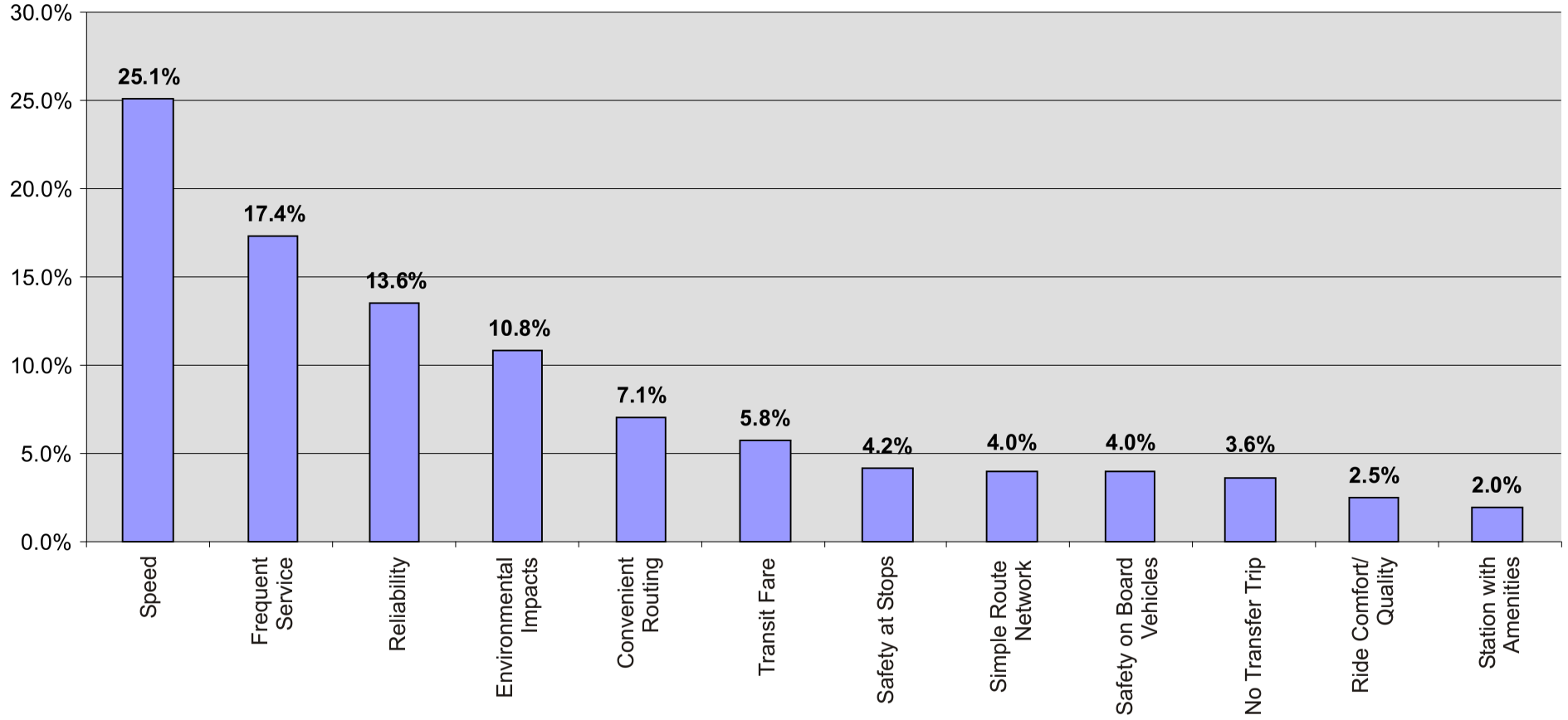
Question 10.
Do you support improved Transit Facilities?



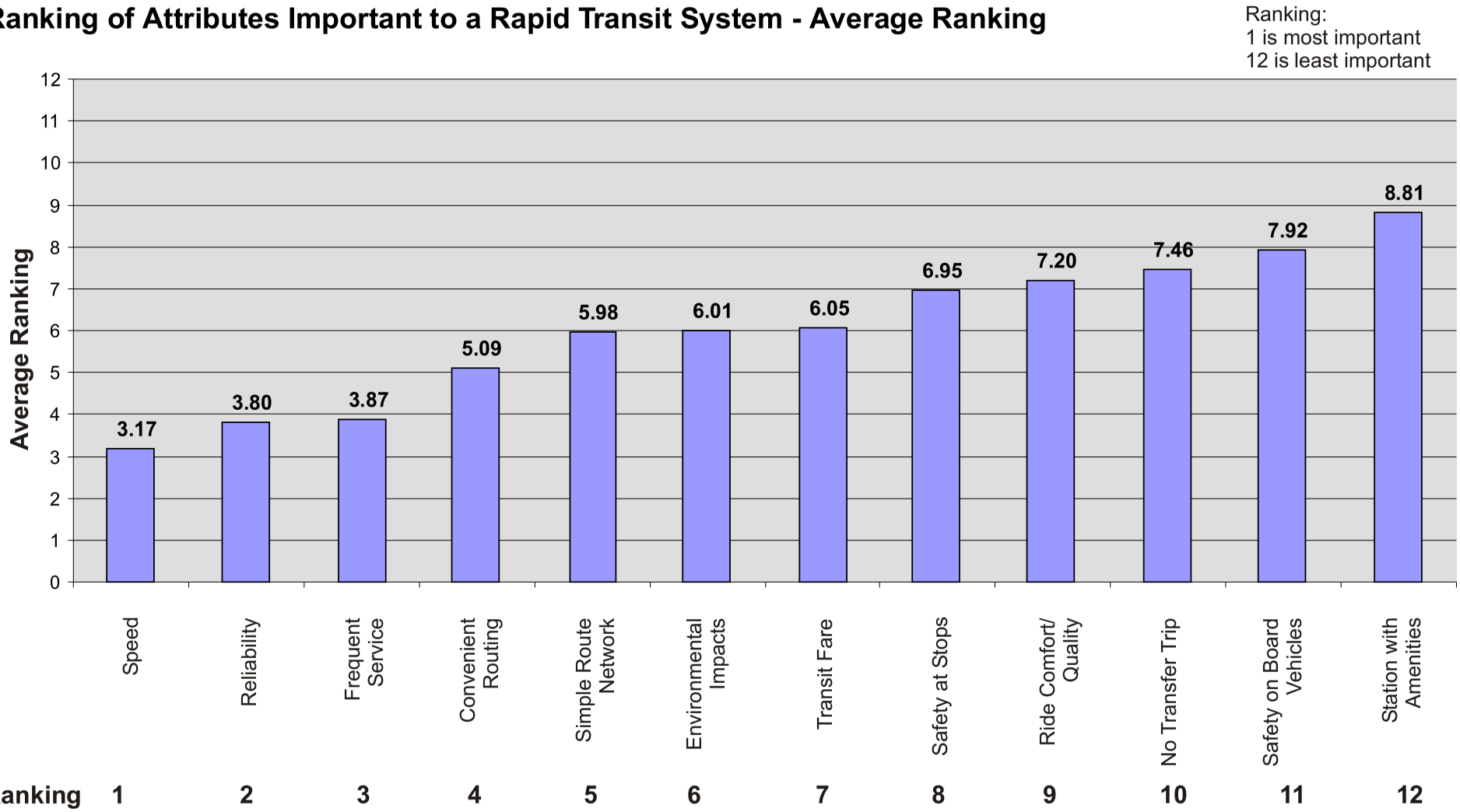
Question 11.
Do you support a Rapid Transit System?



Question 12.
Percentage of Respondents that Ranked each Attribute as #1 in Importance for a Rapid Transit System



Question 12.
Ranking of Attributes Important to a Rapid Transit System - Average Ranking



Question 13
Comments/Ideas on Rapid Transit

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	**Summary**	%[*1]
Speed and reliability (all seasons, faster than car)	6	6	11	2	9	6	8	3	5		7	**63**	19.5%
Do something now. City has to make Transit/Rapid Transit a priority (studied enough)	5	8	5	3	6	3	4		1	1	26	**62**	19.2%
BRT (similar to system that was scrapped, Ottawa, Australia)	4	10	7	1	2	3	2	1	2	3	20	**55**	17.0%
Low fares/affordability (free passes to people on fixed incomes)	4	2	5	1	5	4	6	1	1		8	**37**	11.5%
Convenient/direct routing	1	5	5	1	3	1	4		3	2	12	**37**	11.5%
Environmentally friendly	4	2	3		4	2	2	3		1	15	**36**	11.1%
Dedicated corridors required (to bypass congestion)	3	3	4	1	3	2	4	3	2	2	6	**33**	10.2%
LRT (utilize existing tracks and rail rights of way, develop dual tracks in existing rights of way)	4	4	2		1	2		2	2	1	13	**31**	9.6%
Upset about cancellation of original BRT project (money left on table, lack of vision, etc.)		7	2	2	2		1	1			14	**29**	9.0%
Frequency		3	7		1	2	3	3	2	1	7	**29**	9.0%
RT is linked to a progressive City image. Increases pride and improves life in a City.	1	3	1	1	4	2	1	1	4	1	10	**29**	9.0%
Bicycle/pedestrian paths	2	4	2	3	1	1	1	1	2		10	**27**	8.4%
Feeder bus system must be reliable, accessible, frequent, use smaller buses	5	3	4		1	2	1	2		1	8	**27**	8.4%
Scalable System (BRT affordable beginning to expand to other technologies (LRT,etc) if required in future)	1	1	3			3		1	2	2	11	**24**	7.4%
Integrate Transit and land use planning (plan for future/catalyst for dense development along RT corridors, integrate Transit into new subdivisions)	1	3	2	1	1	1	2	1		2	10	**24**	7.4%
Stations (attractive, comfortable human scale, amenities)	2	1	3	2	3	1	1	2	3	1	4	**23**	7.1%
Disincentives for auto use (gas tax, higher parking rates, etc.). Reduce cars on road	3	2	1	1	1		1	4			5	**18**	5.6%
Park and ride (secure with plugs)	3				1	4		1	1		7	**17**	5.3%
Image (attractive, vibrant, innovative, progressive) Must appeal to middle/upper middle class	4	1				1			3		8	**17**	5.3%
Safety (cameras for security)	1	1	3		2	2		3	1	1	3	**17**	5.3%
RT must service all major downtown and suburban destinations	4	1							1	2	7	**15**	4.6%
Fare incentives (passes in partnership with employers and universities) Structure to attract workers		1		1		1	2	1	1	2	5	**14**	4.3%
Integration of RT with regular transit service. RT must dovetail seamlessly into existing service. Convenient transfers.		3	3				4	1			3	**14**	4.3%

Question 13
Comments/Ideas on Rapid Transit

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	**Summary**	%[*1]
New technology (GPS, real time information displays, enunciators)	1	2	1	1			1		2		5	**13**	4.0%
Modern, comfortable buses to improve service/ridership)		2	2	1			1		2		5	**13**	4.0%
Preserve land for future RT expansion (rail corridors, etc.)			1	1		3	2	2			4	**13**	4.0%
RT system that is comparable to or better than a car	2	2			1				2		5	**12**	3.7%
Affordable system (reasonable cost to build and maintain, easily/quickly implemented)		1	3		1	2	1			2	2	**12**	3.7%
Universally accessible buses, stops, stations	1	2	1	1		1	1	1	1		2	**11**	3.4%
Inner circle route to provide convenient/direct service from suburb to suburb and from all parts of City to UofM			1	1	2	2	3	1	1			**11**	3.4%
BRT using existing roadways/do not need major, expensive new roads (expand express routes, additional enforced diamond lanes, bigger stations, Transit priority measures)	2	2		2	1	2					1	**10**	3.1%
Stations must be easily accessible/connect to walk/bike paths, feeder routes, park and ride facilities		2	1					2	1		4	**10**	3.1%
Bus stops with heated shelters and benches	1	3	2	2	1	1						**10**	3.1%
More enforced diamond lanes and signal priority for buses (to support RT)		3	2				2				3	**10**	3.1%
System should address present and future needs, allowing for future expansion, phased implementation	2	1			1		2	2			1	**9**	2.8%
System should support local industries (New Flyer) Buy locally	3			1	1	1			2		1	**9**	2.8%
Longer operating hours			2	1			1	1		1	3	**9**	2.8%
Marketing/promotion/advertising of new RT system is critical to promote ridership and public acceptance of system	1		1		2	2	2	1				**9**	2.8%
No Rapid Transit System (improve existing)	1	1				1					5	**8**	2.5%
New RT system must benefit all parts of City		2					1		1	1	2	**7**	2.2%
Combination of BRT and LRT		1			3	1			1			**6**	1.9%
Must be significant/noticeable so changes peoples perception about Transit and encourages them to use RT									1		5	**6**	1.9%
System powered by electricity (BRT or LRT)						1		1		1	3	**6**	1.9%
Clean, well maintained	1	1			1				1	1	1	**6**	1.9%
Investigate private, public partnerships (inc. rent commercial space at stations)	2	1					1	1			1	**6**	1.9%

Question 13
Comments/Ideas on Rapid Transit

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	**Summary**	%[*1]
Subway (alone or combined with LRT/monorail or for Downtown core only)						4			1			**5**	1.5%
Electronic fare collection to save time		1		1							3	**5**	1.5%
Develop jitney service for feeder bus system (in areas that are currently poorly serviced or unserviced)		1	2			1	1					**5**	1.5%
RT will improve Downtown business area/ spur development in Downtown core			2							1	2	**5**	1.5%
Transit needs should always take priority over car											5	**5**	1.5%
Finance RT using federal gas tax, tax on parking spaces (downtown and at malls)		2					1			1	1	**5**	1.5%
More direct express routes from suburbs to downtown (Ft. Richmond, Transcona, Unicity)				2	1			1	1			**5**	1.5%
Rail based RT system (not LRT) like O'Train, Ottawa											4	**4**	1.2%
Bike racks on bus/at station	1			1			1				1	**4**	1.2%
Communication between buses/connections/transfers	1	1									2	**4**	1.2%
Access for emergency vehicles	1					1			1		1	**4**	1.2%
Encourage/educate youth to use Transit	1				1	1	1					**4**	1.2%
Obtain funding support from all levels of government		2			1		1					**4**	1.2%
Electric street car or trolley bus	1	1									1	**3**	0.9%
Grade separated corridor						1			1		1	**3**	0.9%
Clear priority seating. Enforceable rules			2								1	**3**	0.9%
Flexibility	1	1			1							**3**	0.9%
Features for visually impaired		1								2		**3**	0.9%
Adequate size of vehicle so people do not have to stand			2					1				**3**	0.9%
Storage/room for bags/luggage			1		1						1	**3**	0.9%
Easy to understand/simple routes and maps			1			1					1	**3**	0.9%
Public must be informed/consulted at all stages in development of RT plans	1		1	1								**3**	0.9%
Tax deductible bus pass										1	2	**3**	0.9%
Monorail system (Stephen Juba)											2	**2**	0.6%
Just fixing existing is not enough		2										**2**	0.6%
Use centre medians for RT system							2					**2**	0.6%
Slightly higher fare to pay for better service		1			1							**2**	0.6%
Experiment with lower fare to boost ridership							1				1	**2**	0.6%
Multiple door loading to save time		1		1								**2**	0.6%
Extend skywalk system/pedestrian tunnel to connect RT											2	**2**	0.6%
Expand RT outside City										1	1	**2**	0.6%
Downtown hub/hub where all buses meet										2		**2**	0.6%

Question 13
Comments/Ideas on Rapid Transit

	Jan-20	Jan-24	Jan-25	Jan-26	Jan-27	Jan-31	Feb-02	Feb-03	Feb-07	Feb-08	Email	**Summary**	%[*1]
Priority BRT route Downtown to U of M											2	**2**	0.6%
Priority BRT routes are those that service the busiest corridors first			2									**2**	0.6%
Develop recreation centres, libraries, community police, etc. at major stations		1						1				**2**	0.6%
Make City Councilors use Transit (no paid parking)		1								1		**2**	0.6%
No parking on main thoroughfares (put on side streets)		2										**2**	0.6%
More buses on express routes to U of M					1	1						**2**	0.6%
Change numbering system (do not use same number for different routes)					1		1					**2**	0.6%
Sell post secondary passes at more convenient locations (convenience stores)				1		1						**2**	0.6%
Meet needs of Winnipeggers (do not imitate other cities)					1							**1**	0.3%
Do not use Fort Rouge Yards									1			**1**	0.3%
All attributes listed in Question 12			1									**1**	0.3%
No transfer trip									1			**1**	0.3%
Safe pedestrian crossings for transfers							1					**1**	0.3%
Solar powered bus										1		**1**	0.3%
Wind powered train											1	**1**	0.3%
Develop efficient systems into Waverley West and the Airport	1											**1**	0.3%
N/S and E/W routes crossing in Downtown						1						**1**	0.3%
Routing as per Plan Winnipeg (policy plate C)					1							**1**	0.3%
Encourage community life	1											**1**	0.3%
Promote the DART service		1										**1**	0.3%
Transit workers must be involved in the process									1			**1**	0.3%
City vote/referendum on RT									1			**1**	0.3%
Institute tolls for rural commuters									1			**1**	0.3%
Law that motor vehicles must yield to buses											1	**1**	0.3%
Free electricity from Manitoba Hydro					1							**1**	0.3%
Amalgamate and expand Downtown shuttle				1								**1**	0.3%
Add routes to neighbouring municipalities											1	**1**	0.3%
Create fun things to do on bus											1	**1**	0.3%
Vary height of seats on bus for seniors/children											1	**1**	0.3%

1. Percentage of the respondants that identified each issue.

Rapid Transit Task Force
Preliminary Public Consultation Process
Questionnaire

1. _____ _____
Name Address

2.Which Municipal Ward of Winnipeg do you live in? Please refer to Ward Map

☐ Charleswood - Tuxedo	☐ North Kildonan	☐ St. Charles
☐ Daniel McIntyre	☐ Old Kildonan	☐ St. James - Brooklands
☐ Elmwood - East Kildonan	☐ Point Douglas	☐ St. Norbert
☐ Fort Rouge - East Fort Garry	☐ River Heights - Fort Garry	☐ St. Vital
☐ Mynarski	☐ St. Boniface	☐ Transcona

3. Do you use the Winnipeg Transit System? ☐ Yes ☐ No If yes,

a) Approximately how many times per week do you use Transit?
☐ 0- 2 ☐ 3- 5 ☐ 6-10 ☐ 10+

b) Where do you go? (Check all applicable boxes)
☐ Work/ School ☐ Recreation Activities ☐ Shopping

☐ Other_____

c) Which bus routes do you use?_____

_____

d) Why do you use the Winnipeg Transit System (check all applicable boxes)
☐ Convenience ☐ Cost / Affordability ☐ No access to a vehicle
☐ Cannot Drive ☐ Environmental Decision ☐ Other_____

4. Do you use the Winnipeg Transit System Park and Ride Facilities? ☐ Yes ☐ No

5. What do you **like best** about the **Existing Transit Service**?_____

_____

6. What do you **like least** about the **Existing Transit Service**?_____

_____

7. What is **one** thing you would **change or improve**?_____

_____

8. What do you believe is the **single biggest problem** of the **Existing Transit Service**?_____

_____

9. The following is a list of Transit service attributes previously identified in other data collection. Identify the degree to which each is a **Strength** or **Weakness** in the **Existing Transit System**.

	Very Weak	Weak	Neutral	Strong	Very Strong
Speed	☐	☐	☐	☐	☐
Reliability (reliable operations)	☐	☐	☐	☐	☐
Comfort of bus stops	☐	☐	☐	☐	☐
Comfort of vehicles	☐	☐	☐	☐	☐
Frequency of Service	☐	☐	☐	☐	☐
Convenient Routing	☐	☐	☐	☐	☐
Route Network	☐	☐	☐	☐	☐
Safety at bus stops	☐	☐	☐	☐	☐
Safety on Board Vehicles	☐	☐	☐	☐	☐
Transit Fares	☐	☐	☐	☐	☐
Environmental Impacts	☐	☐	☐	☐	☐
Accessibility	☐	☐	☐	☐	☐
Feeder Bus Network	☐	☐	☐	☐	☐

10. Do you **support** the development of **improved Transit facilities** for the City of Winnipeg? ☐ Yes ☐ No

11. Do you **support** the development of a **Rapid Transit System** for the City of Winnipeg? ☐ Yes ☐ No

12. When considering a **Rapid Transit System** for Winnipeg, **what service attributes** are **most important** to you? **Rate the importance** of each of the following **attributes** in order from 1 to 12 with 1 being most important and 12 being least important.

Speed		Simple Route Network	
Reliability		Convenient Routing	
No Transfer Trip		Safety at Bus Stops	
Ride Comfort/Quality		Safety on board vehicles	
Station with Amenities		Transit Fare	
Frequent Service		Environmental Impacts	

13. Are there any **comments/ideas** that you would like to make regarding **service attributes** that are **critical** to the development of a **Rapid Transit System** for the City of Winnipeg? (Please continue on the reverse of page if necessary)

_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix E

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City of Winnipeg

THE FEASIBILITY OF AN URBAN DIESEL PASSENGER RAIL SERVICE IN THE SOUTHWEST CORRIDOR

REPORT

MAY 6, 2005

IBI GROUP

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1. BACKGROUND

Winnipeg has been planning exclusive bus lanes in the southwest corridor from the central area to the University of Manitoba since the early 1970s. The bus roadway would be located in a corridor adjacent to the CN rail lines. Although it was not called Bus Rapid Transit or BRT originally, it now meets the modern definition. The concept is to build a BRT route incrementally with the first section of exclusive bus roadway to be built between Union Station and Jubilee Avenue; from that point southwards buses would operate on exclusive lanes on Pembina Highway. In the longer term, the separate transit roadway could be extended.

With the possible construction of the first section of busway imminent, city staff and elected officials have looked at possible alternatives to the BRT in this corridor. Studies have been done on the potential costs and implications of a Light Rail Transit (LRT) line.

The purpose of this report is to examine the possible costs and other implications of putting a diesel passenger rail service into operation in the corridor. A diesel light rail service could potentially use existing trackage and facilities. This report provides an overview of the application of the concept to the southwest corridor.

This is a preliminary feasibility study to describe in strategic terms the possible introduction of diesel passenger rail service between the University of Manitoba and Winnipeg Union Station, including an order of magnitude estimate of the capital costs for construction, vehicles and property acquisition. In preparing these estimates we state as clearly as possible the assumptions on which the estimates are made, including the frequency of service, the number of train sets, station and passing sidings deemed appropriate by us in light of the corridor length and available infrastructure, diesel train technology and operating characteristics, and anticipated capacity and ridership levels. The study also provides an order of magnitude estimate of the annual operating and maintenance costs for the diesel rail service, as described. This is not been an in-depth study but rather a preliminary examination of the concept.

2. URBAN PASSENGER RAIL TECHNOLOGY

Most of our urban areas are crossed by a number of railway lines. Because of the changing economics of rail transportation, many of these lines are today lightly used. Can these lines be used for urban public transport?

2.1 Commuter Rail



In Toronto, Montreal and Vancouver, a number of commuter rail lines have been developed on radial railway lines. These typically use heavy railway equipment using locomotive hauled trains and, in most cases, double deck coaches. They carry passengers over relatively long distances into major central business districts (CBDs). Toronto's GO Transit system began operation in 1967 and has now been extended to seven radial lines. Montreal has had two major commuter rail lines for over a century. They have been upgraded and supplemented by three new commuter rail services. West Coast Express is the commuter rail service in Vancouver; this initial line was inaugurated in 1995.

2.2 Light Rail Transit

Another major development in North American public transport that has occurred in recent years is the introduction of Light Rail Transit (LRT) lines. The LRT concept is the use of streetcar-like vehicles operating with priority, on their own rights-of-way or in reserved lanes on streets. The modern LRT renaissance in North America was led by Calgary and Edmonton in the early 1980s. Subsequently more than fifteen modern LRT systems have been developed across North America as well as major upgrades to older systems.

Typically these LRT systems are fully electrified, double track lines. The theoretical capacity of such a line is in the order of 10,000 to 15,000 persons per hour per direction (pphpd). Usually much of the line is on new right-of-way. In many cases railway rights-of-way have been used, either replacing the freight rail tracks or sharing the corridor. Capital costs for LRT can be substantial, from $25 million to $100 million per kilometre. A major part of the cost of these systems is the electrification and power supplies required.



Calgary LRT

2.3 Diesel Light Rail

The combination of these concepts leads to a natural question, “can a lower cost light rail service be provided on existing trackage using diesel power to remove the need for electrification?” A test of this concept was undertaken in Calgary in the 1990s at the south end of the south-east LRT line. A diesel car shuttle was put in place to link the southern-most station of the LRT to areas further out. The test was successful in proving the concept. However, because of the limited service that could be provided by a diesel shuttle and the need to transfer, the final decision was to extend the LRT line which has subsequently been implemented.



Calgary Test of Diesel LRT

THE O TRAIN

The first modern test of diesel light rail in North America was developed in Ottawa. The O Train was implemented in 2001. This is an 8 kilometre route that links the South Transitway (Ottawa’s Bus Rapid Transit service) with the West Transitway, serving Carleton University at the midpoint of the route. The University is a major traffic generator on the route. IBI Group was responsible for the initial feasibility study and operations planning for the line.

The line used was a Canadian Pacific Railway (CPR) branch freight line. An agreement was made to lease the use of the line during transit service periods. Freight trains were restricted to late at night when passenger trains were not in service. The tracks and signal system were refurbished. Five new stations were constructed with basic platforms and access systems.

Service is provided approximately 18 hours per day. Running time is approximately 13 minutes for an average speed including stops of 37 km/h. During most of the day, a 15 minute interval service is in place. Three modern three-section European design diesel railcars (the “Talent” model) were obtained from Bombardier. Initially they were leased but now have been purchased. Bombardier also supplies all maintenance services for the cars. Similarly the use of the line was on a lease basis from CPR but the line was subsequently purchased by the City. By leasing the vehicles and the line, initial capital costs were kept to a minimum. Similarly, the existing trackage and the signal system were utilized and subsequently the rail was upgraded.

Although the initial system concept contemplated using hired CPR crews to operate the trains, it was subsequently decided that OC Transpo bus drivers would be trained to operate the vehicles. The seniority list for operating the O Train is integrated with that of other bus driver duties.

Initial capital costs were kept to a minimum as the concept was seen as a pilot project. The initial cost was in the order of $21 million. Because of the way in which the project was set up, this capital cost did not include the purchase of the vehicles, the purchase of the line, construction of maintenance facilities or purchase of any land. If not successful, the pilot project could have been terminated after 2 or 3 years of experience without major costs. Subsequently the city has invested more money in terms of providing continuous welded rail ($2.3 million) and purchasing the vehicles ($18 million) and is in the process of purchasing the line from CPR.

The concept for the line is relatively simple. It is a single track line with a passing siding at the central station, Carleton University. The two trains in service start at the same time from each end of the line, pass at the central location and then carry on to the other end of the line where they reverse.

The line has been seen as a major success. Currently, approximately 8,500 persons per day use this service. It is fully integrated with other services of OC Transpo, the municipal transit operator in Ottawa. The city now plans to double-track the line, electrify it and extend it at both ends to make it a much more major component of the urban transit system. Instead of a 15 minute service, peak headways of five minutes or less will be offered.

THE NEW JERSEY RIVER LINE

The next major diesel commuter service in North America was the River Line that links Camden (within the Philadelphia urban area) with Trenton in New Jersey, running along the Delaware River. This line opened in March of 2004. It is a 34 mile (54 kilometre) route using mainly lightly used rail freight lines but also running on street trackage in Camden and in one town along the route. The capital cost of this line is U.S. $1.1 billion.



The River Line

The line has a total of 20 stations. End to end running time is approximately 1 hour and 13 minutes for an average operating speed of approximately 44 km/h. Ridership at the end of 2004 was about 5,000 boardings per day.

New Jersey Transit has exclusive use of the line to run light rail services from 6:00 am to 10:00 pm each day and all of Saturday night and Sunday morning. Freight trains can use the line at other times.

Service is provided by 20 articulated cars provided by Adtranz, now a part of Bombardier but at the time of purchase an independent company.

OTHER LINES

A number of other diesel light rail lines are being investigated across North America. The one closest to fruition is a line in Southern California, linking Escondido with Oceanside in northern San Diego County (California) along 22 miles (35 kilometres) of existing freight lines. The system will use 12 diesel multiple unit vehicles, the "Desiro" model purchased from Siemens. The current estimate for the cost of this project is $350 million.



Siemens Desiro

2.4 Diesel Light Rail Rolling Stock

As discussed above, the two existing diesel light rail lines in service in North America as well as the Escondido line all use European rolling stock. These have been manufactured to European standards. As such, they do not meet the standards of Transport Canada and the Federal Railway Administration (FRA) in the United States, particularly for end to end rigidity (buff loading). This is usually referred to as "non-compliant" rolling stock as it does not comply with current regulations. This means that normally they cannot operate in mixed traffic with other heavy rail passenger and freight services. There are at least three potential suppliers of such diesel light rail rolling stock:

- Bombardier with the Talent railcar used in Ottawa;
- Adtranz (Bombardier) with the car used on the River Line;
- Siemens Transportation with the Desiro railcars being supplied to the Oceanside-Escondido line.



Colorado Rail Car

These European based manufacturers have talked about the possibility of developing a compliant design (compliant with Transport Canada/FRA standards) for a diesel rail car but this has not yet been achieved. A recent conversation with Bombardier indicates that they have no immediate plans to continue this development.

A compliant diesel multiple unit has been developed by Colorado Rail Car Manufacturing, LLC, located in Fort Lupton, Colorado. A limited number of sales of these vehicles have been made. The single deck version of this rail car has a price tag of US$3.9 million.

3. DIESEL LIGHT RAIL IN THE SOUTHWEST CORRIDOR

We have investigated on a preliminary basis the possibility of a Diesel Light Rail line in the Southwest corridor in Winnipeg using the practices developed in Ottawa and have, in the context of earlier work by Winnipeg staff and consultants, developed a potential concept for such a service. The line would link Union Station (the CN station) with the University of Manitoba. This line is approximately 12 kilometres long. The route is shown on Map 1. The line would follow the two CN rail routes: the main line from Union Station to approximately Jubilee Avenue and the CN Letellier Subdivision, a branch line leading to the American border, from Jubilee Avenue to the turnoff to the University. The following

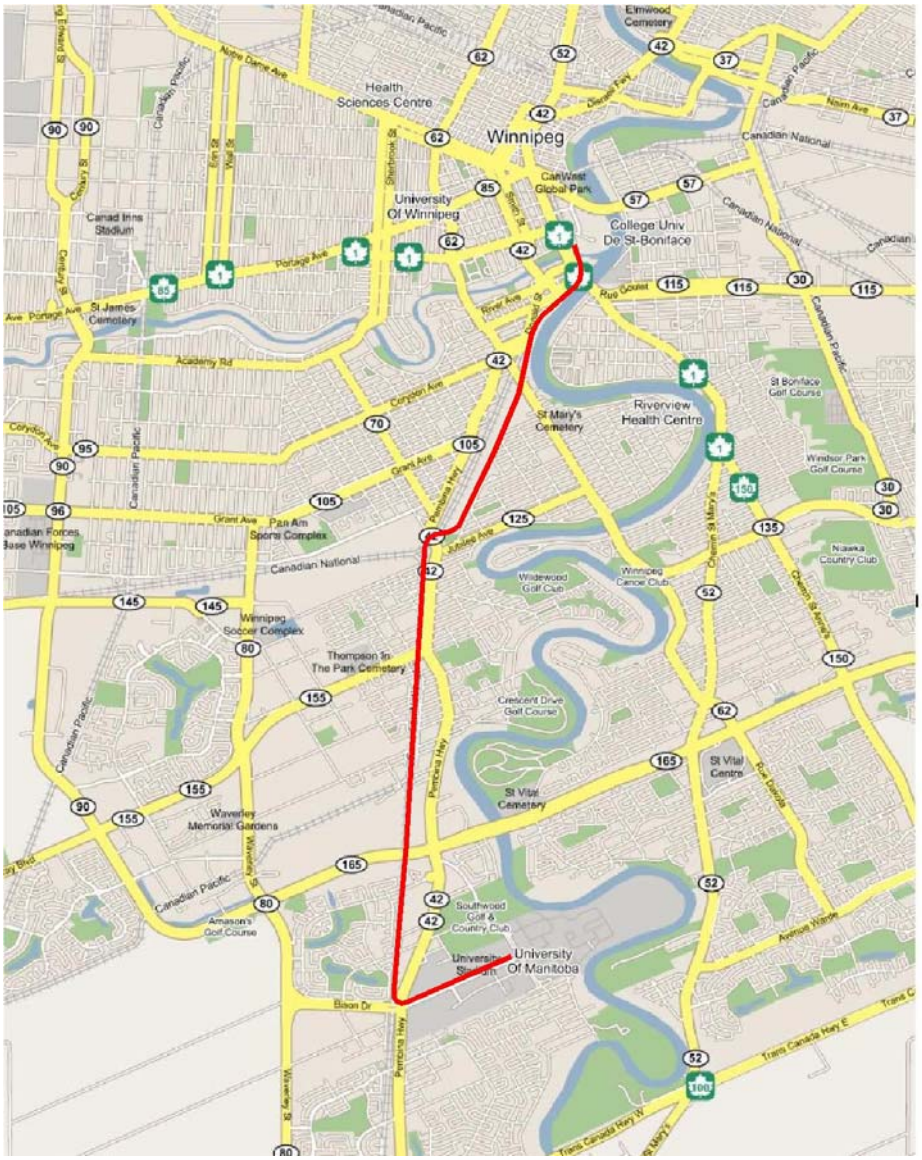


Corydon Ave./Donald St.

describes the concepts for the line developed in the various sections:

- From Union Station to the crossing of Osborne Street, we have assumed that a new track will be required as the CN line in this section is the main transcontinental line and carries heavy traffic. In addition, if non compliant cars are used, the passenger service would have to be segregated from main line traffic. New bridges would be required over the Assiniboine River, Main Street, and Osborne Street. Previous studies have indicated there is room between the CN line and Queen Elizabeth Way/Stradrook Avenue/Corydon Avenue for a right-of-way. In the vicinity of Osborne Street, the line will have to pass from the west side of the CN main line to the east side, probably crossing on an overhead structure.

Map 1 – Diesel Light Rail Route



- From Osborne Street to Jubilee Avenue there is a corridor on the southeast side of the CN Fort Rouge Yard which can accommodate a transitway whether bus, LRT or diesel rail. The existing bridge over Pembina Highway at Jubilee Avenue would probably have to be widened or a new structure constructed.

- From approximately Jubilee Avenue to Bison Drive, the line would follow the existing CN Letellier Subdivision. It is expected that the city will be able to purchase the Letellier Subdivision from CN in order to obtain exclusive use for urban transit. The Letellier Subdivision is an existing single track line that connects Winnipeg to the US border. It is possible that some CN movements might be permitted to use the line during late night hours to connect to industries in the Fort Garry Industrial Park.



Letellier Subdivision

- Just before Bison Drive, the service would turn to the east, cross over Pembina Highway and then travel along the side of Chancellor Matheson Road on a new right-of-way. We have assumed that a grade separation would be constructed over Pembina Highway. This line would continue past University Crescent to come to a terminal station in the University area.



Chancellor Matheson Road

3.1 Stations

The purpose of providing rapid transit service in this corridor is to provide higher levels of service in term of speed. Diesel railcars have lower acceleration than buses or LRT vehicles. Therefore the inclusion of a large number of stations would reduce average speed and make the service less attractive to users. We have therefore developed a concept with a limited number of stations. Under this concept stations would be located at

- Union Station;
- Osborne Street;
- Jubilee Avenue/Pembina Highway;
- McGillivray Boulevard;
- Bishop Grandin Boulevard;
- Pembina Highway/Bison Drive; and
- University.

This represents a station spacing of approximately 2 kilometres. With this broad stations spacing, Winnipeg Transit would probably choose to continue transit services along Pembina Highway.

3.2 Operating Characteristics

Running time would be approximately 21 minutes for an average speed of 34 km/h.

We propose a basic 15 minutes frequency of service during most of the day. To operate such a service, three trains would be required. This implies that four trains should be purchased so that there is a spare/maintenance allowance.

The new line and the Letellier Subdivision would be single track. A greater frequency than about 15 minutes would require major sections of double track if a reliable service is to be offered. With a 15 minutes service and a 45 minute round trip, there would be three trains in service. Each train would have to pass trains operating in the other direction twice along the route. We have assumed short sections of double track or double track stations to permit passing adjacent to the Jubilee Avenue/Pembina Highway crossing and then in the area of the Bishop Grandin Boulevard Station.

A 15 minute service would have an approximate comfortable capacity of 800 passengers per hour per direction (pphpd) if single car trains are used. For example, the Bombardier Talent vehicle has a capacity of 137 seats and standing room for approximately 150 persons at 4 persons per m^2 for a total capacity of 287 passengers. This would not be a comfortable load for normal operations; therefore we have assumed a loading standard of approximately 200 passengers per car. Crush capacity could be considered a bit higher than this. If greater demand is to be accommodated, trains could be made up of two units. This would require all stations to be twice as long. Rolling stock requirements would also be effectively doubled. This has not been included in the cost analysis below.

Park and Ride facilities could potentially be located adjacent to the Bishop Grandin Boulevard station and possibly at the crossing of the Pembina Highway at Bison Drive.

3.3 Grade Crossings

The Letellier Subdivision railway line in the section to be used by the passenger service today has 11 grade crossings. These are located at:

- Markham Road;
- Chancelor Drive;
- Chevrier Boulevard;
- Clarence Avenue;
- Waller Avenue;
- McGillivray;
- Southwood Avenue;
- Waterford Avenue;
- Summerville Avenue;
- Windermere Avenue; and
- Byng Place

In addition there could be an at grade crossing of University Crescent and driveway crossings of the section along Chancellor Matheson Road. There are several options to dealing with the number of crossings:

- Leave all roads in place, realizing that each crossing will be closed eight times per hour and will require appropriate warning signals and barriers;
- Grade separate certain of the crossings and close other roads;

In this analysis we have assumed the first option.

This large number of level crossings poses potential problems for the operations. The first potential problem is the possible safety hazard. As noted the crossings would close approximately eight times per hour (four trains in each direction). This would not create a significant delay problem for traffic as the crossing would be closed for only very short periods of time, similar to a traffic signal. The potential problem is the exposure that this presents for possible accidents. We have therefore included a substantial cost to improve crossing protection to include crossing gates in our estimates of capital cost.

The large number of grade crossings also potentially impacts regulatory approval of the line. If the line is to be operated under federal regulations (as it is today), any changes in configuration would require the approval of the Canadian Transportation Agency and Transport Canada safety officials. They may be reluctant to approve changes for an operation using non compliant diesel rail cars. The line could be operated under provincial jurisdiction but again, a safety case would have to be made.

4. CAPITAL COSTS

We have estimated “order of magnitude” capital costs for the service as described in the previous section. These costs do not have the benefit of any field investigation. They therefore must be viewed as being very approximate. In doing this analysis we have assumed that the Letellier Subdivision would be purchased by the City of Winnipeg. We understand that there is a possibility of the existing rail traffic on this line being transferred to a parallel routing, making the Letellier Subdivision available for a diesel service LRT. There is a further possibility; the right-of-way is wide enough that two tracks could be included, one for the existing CN freight services and one for the diesel LRT service. This would create higher costs than those shown below.

The first section of Exhibit 1 shows expected track costs. These have been estimated on the basis of the following unit costs:

- $600,000 per kilometre of line for roadbed preparation;
- $1 million per kilometre for construction of subgrade, ballast, ties and track.

We have assumed that a completely new subgrade and track would be required from Union Station to the intersection with the Letellier Subdivision adjacent to Jubilee Avenue and that new ballast, ties and track would be required on the Letellier Subdivision. A detailed inspection of the existing Letellier Subdivision infrastructure was not undertaken because of snow cover but, by appearance, it did not appear to be in good condition.

Six major new grade separations are foreseen:

- At the crossing of the Pembina Highway adjacent to Bison Drive;

- At the second crossing of Pembina Highway adjacent to Jubilee Avenue;
- Over Osborne Street;
- A rail to rail grade separation transferring the line from the southeast side of CN main line to the northwest side, in the area of the crossing of Osborne Street;
- Over Main Street;
- Over the Assiniboine River.

Cost allowances for the grade separations have been included as shown on Exhibit 1. The costs shown are very broad estimates.

The Letellier Subdivision currently does not have any signals. The northern part is controlled on a line of sight basis. The rest of the line is controlled by an Occupancy Control System (OCS) supervised by a CN rail traffic controller. We have assumed that an Absolute Block System (ABS) could be put in place. Under this system, the first train to occupy each block would stop subsequent trains from entering the block.

As discussed previously, there are twelve at grade crossings on the Letellier Subdivision. We believe that very much enhanced crossing protection would be required and have estimated this as $500,000 per crossing.

We have not included any capital cost for maintenance facilities. It is probable that maintenance would be contracted out either to the car supplier or to a local agency such as VIA or CN, both of whom operate rail car shops adjacent to this line. This is in accordance with the practice in Ottawa where maintenance is supplied by Bombardier, using premises rented from the CPR. Thus the total cost of maintenance, including the supply of the maintenance facilities is included in operating costs.

Seven stations will be located along the line. We have estimated these at $200,000 each as they will be simple single platforms with bus shelter type facilities. In addition, modifications will be required at Union Station to handle passengers.

The total of all these factors comes to $69 million. To this, we have added a 20% contingency. With contingency, the total comes to $83 million.

Rolling stock has also been included at a total cost for four three segment rail cars of $20 million.

The total with rolling stock is $103 million. This works out to an amount just over $8.5 million per kilometre.

Excluded from these costs are land purchase for rights-of-way including the CN Letellier Subdivision and other sections, stations, park and ride lots and maintenance facilities.

The Ottawa system started at a total capital cost of approximately $22 million or $4 million per kilometre but this did not include:

- Heavy refurbishing of the track;
- Purchase of the rolling stock.

Both of these upgrades were done later.

Exhibit 1 – Estimation of Capital Costs

Infrastructure Costs						
Segment From	**To**	**Length (km)**	**Type**	**Roadbed ($millions)**	**Guideway ($millions)**	**Total ($millions)**
University	Bison Drive	1.6	New	$1.0	$1.6	$2.6
Bison Drive	Jubilee Avenue	5.9	Existing		$5.9	$5.9
Jubilee Avenue	Osborne Street	2.6	New	$1.5	$2.5	$4.0
Osborne Street	Union Station	2.0	New	$1.2	$2.0	$3.2
Subtotal		12				$15.7

Major New Grade Separations		
	Pembina Highway/Bison Drive	$4.0
	Pembina Highway/Jubilee Avenue	$4.0
	Osborne Street	$4.0
	Rail to rail grade separation	$10.0
	Main Street	$6.0
	Assiniboine River	$8.0

Signals ABS		$5.0
Crossing Protection	12.0 @ $500,000	$6.0
Maintenance Facilities *		$0.0
Stations	7 @ $200,000 **	$1.4
Total Infrastructure		$69.1
Contingencies/design	20%	$13.8
Total with contingencies		$82.9
Rolling Stock	4 trains @ $5,000,000	$20.0
Total with Rolling Stock		$102.9

***** assumes maintenance contracted out
****** Union Station Modifications

5. OPERATING COSTS

The reported operating cost for the Ottawa O Train in 2004 was approximately $10.63 per train kilometre excluding lease costs for the rolling stock and for the line. We have estimated the train-kilometres based upon the following characteristics of service:

- 15 minute service from 6:00 am to 10:00 pm with 45 minute service until midnight on weekdays;
- 15 minute service on Saturdays from 6:00 am to10:00 pm with 45 minute service until midnight;
- 45minute service on Sundays from 8:00 am to midnight.

The number of annual train-kilometres is approximately 532,000.

Using the O Train actual cost of running operating costs of $10.63 per train-kilometre (not including lease costs and right-of-way property taxes), this works out to an annual cost of approximately $5.7 million. The Ottawa costs include all costs associated with maintenance of the rolling stock which is being done on a contract basis.

6. POTENTIAL RIDERSHIP

Material supplied to us from the City of Winnipeg indicates that 2002 winter bus passenger ridership in the southwest corridor is approximately 1,150 passengers per hour per direction (pphpd) in the a.m. peak hour at the maximum load point along Pembina Highway. The two way daily ridership for the southwest corridor is 22,000 passengers. This represents the total of all the routes that are using the Pembina Highway. When Routes 65 and 66 which branch off onto Grant Avenue are excluded, the corresponding numbers are reduced to 950 pphpd and 18,800 passengers per day respectively.

For the future, the City of Winnipeg Transit Department has estimated that the ridership at the maximum load point along Pembina Highway will be 1,400 passenger per hour per direction in the am peak hour (pphpd) and 27,300 daily passengers for the year 2021 without implementing a BRT, and 2,000 pphpd and 38,200 daily passengers with the assumption of full BRT operation by 2021. BRT opening day ridership levels are estimated at 1,200 pphpd and 23,500 in the corridor for a short term opening horizon for the BRT.

Only a proportion of these riders are destined to the University, to areas adjacent to the Diesel LRT stations or to the area south of Bison Drive.

The above forecasts for ridership have been made assuming a one minute headway on a BRT system. As noted above, we have postulated a 15 minute headway on the Diesel Light Rail service, reflecting the single track operation assumed. The following table summarizes these numbers:

Ridership in the Pembina Highway Corridor

	AM Peak Hour (pphpd)	Daily
2002 Usage	1,150	22,000
2002 w/o Routes 65/66	950	18,800
BRT Opening Day	1,200	23,500
2021 Base Case	1,430	27,300
2021 BRT	2,000	38,200

Source: City of Winnipeg Bus Rapid Transit System Development Technical Memo No. 1: Transit Demand Forecasting, MRC, 27 August 2004

Assuming that the Diesel Light Rail service could attract half the patronage of the BRT system, opening day ridership would be approximately 600 pphpd in the peak and 12,000 daily and year 2021 ridership would be 1,000 pphpd and 19,000 daily.

Assuming that there is a net $1.00 per boarding allocated to this system, the initial revenue might work out to approximately $3.6 million representing a 63% operating cost ratio.

7. POSSIBLE EXTENSION INTO THE CENTRAL AREA

The concept as developed to this point does not penetrate the central area but stops at the southeast corner of the central area. The line could possibly extend further to penetrate the central area. It would require another passing facility in the vicinity of Union Station and a dedicated lane along one of the streets in the downtown area. The train would be a substantial presence in the downtown area. It does have a diesel motor and is of considerable length. The River Line in New Jersey shows, however, that street running with diesel multiple units can occur. This line has street running in two sections of the route.



Street Operations on the River Line In New Jersey

A number of routes into the central area were investigated. A possibility would be to enter the downtown via Smith or Donald Streets. These are both one way streets and have property access on both sides so it is difficult to determine the best location for a possible track. These routes therefore do not appear to be feasible. Another possibility might be to come down the east side of the CN tracks through the Forks area and then turn onto York Avenue or St. Mary Avenue. This is physically possible as there is an existing underpass on York Avenue (photo). However, the wide turning radius will require a considerable amount of space in the Forks area.

Another possibility would be to use Main Street, probably going down the centre of the road. This appears to be possible but has a number of problems:

- It interferes with left turns;
- Any stops will have to be in the centre of the street;
- Turning onto one of the east/west streets will be difficult or impossible as the turning radius of these vehicles is quite high: for the Bombardier Talent vehicle it is 120 m and for the Siemens Desiro it is 125 m.

Such an extension into the central area would significantly improve the utility of the service. It would, however, also increase both capital costs and operating costs. At least one more train would have to be added. Also at least one additional station could be needed

We have done some additional costing of a downtown extension, assuming a Main Street routing to a location



York Avenue Underpass

adjacent to the intersection of Graham Avenue and Main Street. There would be two stations in this section adjacent to Union Station and a terminal at Graham Avenue. Such an extension would eliminate the need for the new bridges over Main Street and the Assiniboine River. We have assumed that the existing Main Street bridge across the Assiniboine River would be able to carry the railway service. A passing track would be required adjacent to Union Station. The line north to the terminal would be single track including a single track terminal station.

If the two bridges and modifications to Union Station can be eliminated from the project, then there should be no extra costs for infrastructure. In fact, there may be a saving in the order of $10 million. One additional train would be required at a price tag of approximately $5 million. Additional operating costs would be in the order of $2 million per year.

8. IMPLICATIONS

We understand that the purpose of this investigation is to supply information for comparison with the proposal for Bus Rapid Transit (BRT) and conventional electric light rail transit (LRT). When making these comparisons, however, the difference between the types of service that can be operated must be kept in mind.

A BRT system can provide very frequent service. For example, in Ottawa, approximately 3 buses per minutes operate along the most intensively used parts of the Transitway system. Buses can branch off the BRT alignment to serve origins and destinations not directly adjacent. The capacity of a BRT system can be 10,000 pphpd or more.

A double track LRT system also can provide very frequent service, as low as 2 minutes between trains. It can also supply high levels of capacity, 15,000 pphpd or more.

The concept described in this report is for a miucg less intensive service using an existing single track railway with additional sections of single track added at either end. A single track line has a limited capacity and cannot be used for a frequent service. With a single track alignment operating a frequency better than 15 minutes is difficult. As described, using single unit trains, the capacity is about 800 pphpd. With two unit trains, the capacity could be twice that. It still does not approach the capacity of BRT or LRT.

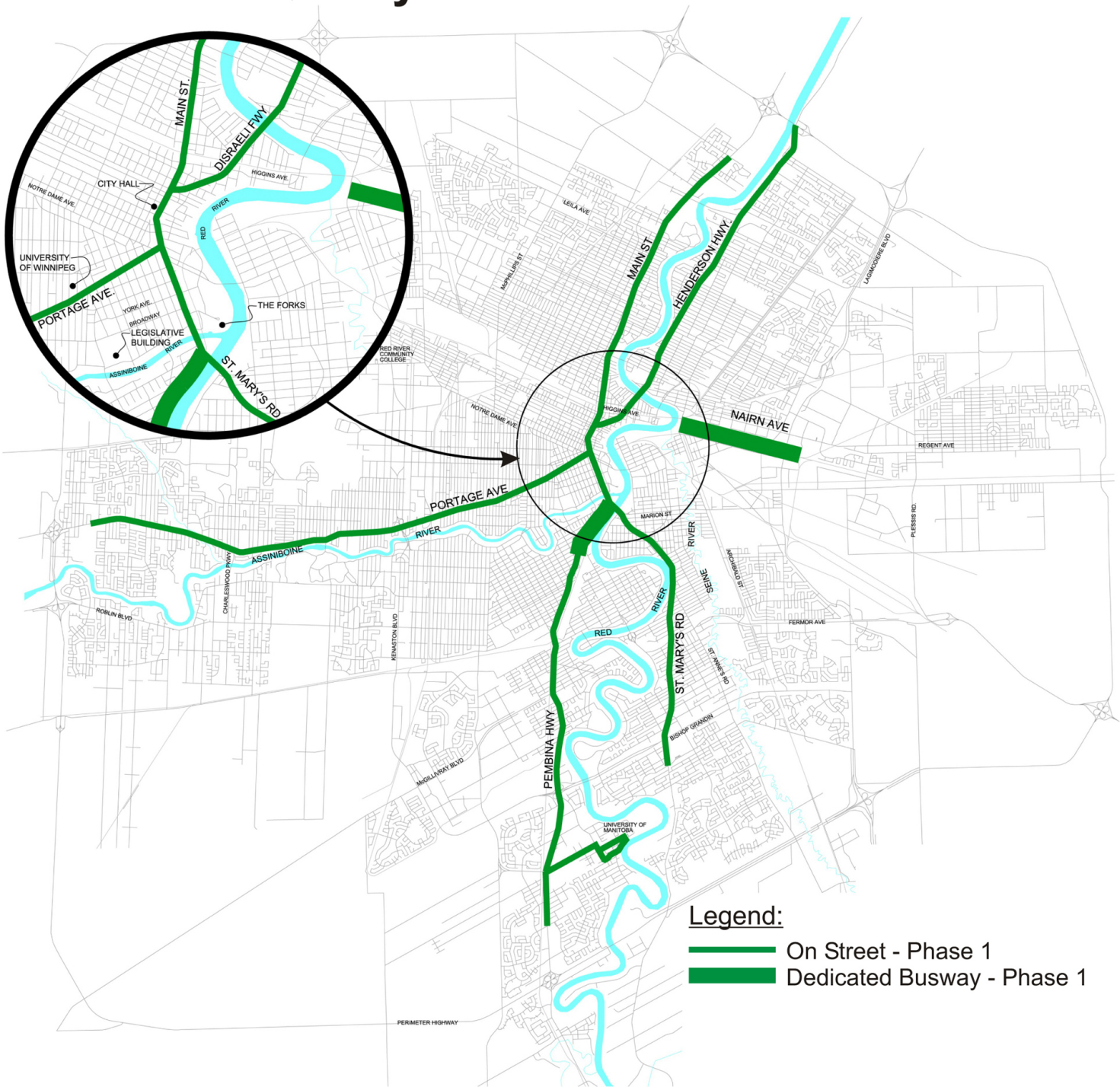
Some comparisons should also be made with Ottawa. The initial costs of the Ottawa system were $21 million for an 8 kilometre route. Subsequently Ottawa has invested $20 million to install welded rail and to purchase the vehicles and is in the process of purchasing the line from CPR. In this report, we have estimated a total of $103 million for a 12 kilometre route for Winnipeg without including the cost of purchase or lease of the line. There are two reasons for this difference:

- Almost half the route is on new alignment rather than utilizing existing trackage;
- No new structures were required in Ottawa whereas six major structures are needed in the Winnipeg situation.

Appendix F

Preliminary Rapid Transit Vision for Public Review

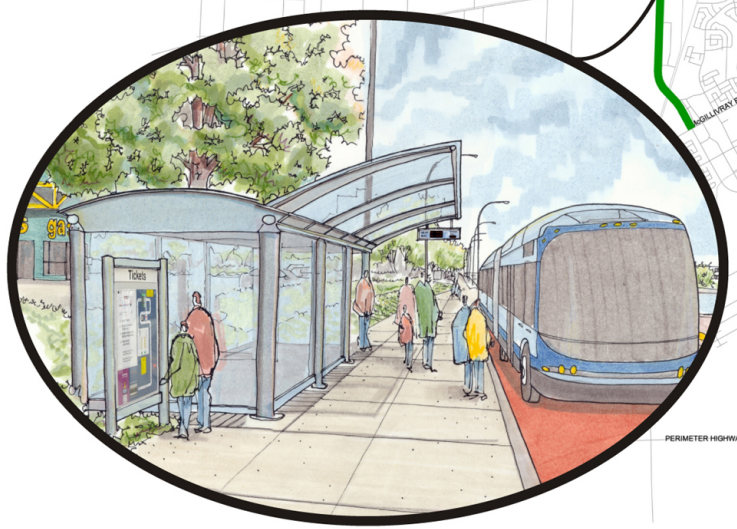
Phase One: Quality Corridors



Phase Two: Quality Corridors



Phase Three: Quality Corridors and Downtown LRT



Legend:

- On Street - Phase 3
- Dedicated Busway - Phase 3
- Downtown Light Rail Transit - Phase 3
- On Street - Phase 1 & 2
- Dedicated Busway - Phase 1 & 2

Appendix G

Final Public Consultation Results



FINAL PUBLIC CONSULTATION RESULTS

MAY 20, 2005

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Rapid Transit Task Force
Final Public Consultation Results

1.0 Public Open Houses Introduction

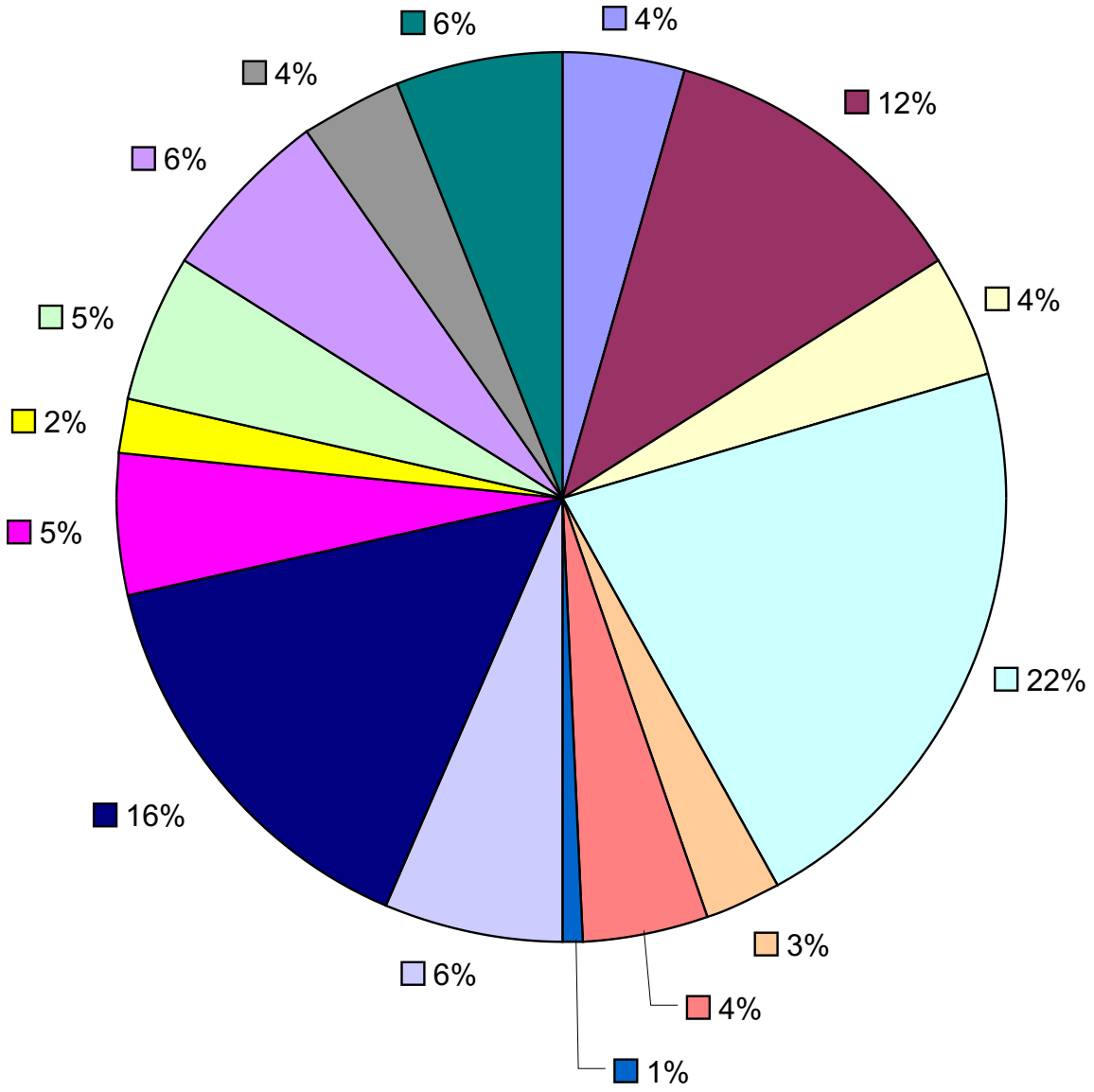
The purpose of the Public Open Houses was to present the 'Made in Winnipeg' Rapid Transit System Concepts being considered by the Task Force and provide an opportunity for the citizens of Winnipeg to provide feedback. The open house format consisted of presentation boards outlining the mandate of the Rapid Transit Task Force, background information used by the Task Force to analyze the various options, the Rapid Transit System Concepts being considered by the Task Force, order of magnitude costs for these concepts and the 'Next Steps' in the process. An Exit Survey was conducted to gauge support of participants for the concepts presented (summarized in Section 2.0).

There were two hundred and seventy nine (279) participants in the two (2) open houses held at the Winnipeg Convention Centre on May 14 and May 16, 2005. The percentage of each Municipal Ward in attendance was as follows:

Charleswood – Tuxedo – 4%	River Heights – Fort Garry – 16%
Daniel McIntyre – 12%	St. Boniface – 5%
Elmwood – East Kildonan – 4%	St. Charles – 2%
Fort Rouge – East Fort Garry – 22%	St. James – Brooklands – 5%
Mynarski – 3%	St. Norbert – 6%
North Kildonan – 4%	St. Vital – 4%
Old Kildonan – 1%	Transcona – 6%
Point Douglas – 6%	

The open houses were advertised through the newspapers (Free Press, Sun through paid advertisements and news articles), 200 notices posted in community centres, libraries, universities, colleges, senior centres and transit shelters, e-mails to public interest groups and public workshop participants and information posted on the Rapid Transit web site.

Question 2.
Municipal Ward Participation



- Charleswood - Tuxedo 4%
- Daniel McIntyre 12%
- Elmwood - East Kildonan 4%
- Fort Rouge - East Fort Garry 22%
- Mynarski 3%
- North Kildonan 4%
- Old Kildonan 1%
- Point Douglas 6%
- River Heights - Fort Garry 16%
- St. Boniface 5%
- St. Charles 2%
- St. James - Brooklands 5%
- St. Norbert 6%
- St. Vital 4%
- Transcona 6%

2.0 Summary of Exit Survey Findings

The exit survey, refer to attached sample, was designed to gauge support of respondents for the Rapid Transit System Concepts being considered by the Task Force.

The exit survey was filled out by one hundred and eighty seven (187) public open house participants. The results represent only the views of those who chose to attend the open houses and cannot be generalized to the entire population of Winnipeg.

The highlights of the Exit Survey findings are:

Overall Concept

59.9% of respondents indicated they either Strongly Supported or Supported the Overall 'Made in Winnipeg' Rapid Transit System Concepts.

23.1% of respondents indicated they either Disagreed or Strongly Disagreed with the Overall 'Made in Winnipeg' Rapid Transit System Concepts.

17.0% of respondents indicated they were Neutral on the Overall 'Made in Winnipeg' Rapid Transit System Concepts.

Phase 1

69.2% of respondents indicated they either Strongly Supported or Supported Phase One Quality Corridors.
20.9% of respondents indicated they either Disagreed or Strongly Disagreed with the Phase One Quality Corridors.
9.9% of respondents indicated they were Neutral on the Phase One Quality Corridors.

Phase 2

65.7% of respondents indicated they either Strongly Supported or Supported Phase Two Quality Corridors.
17.4% of respondents indicated they either Disagreed or Strongly Disagreed with the Phase Two Quality Corridors.
16.9% of respondents indicated they were Neutral on the Phase Two Quality Corridors.

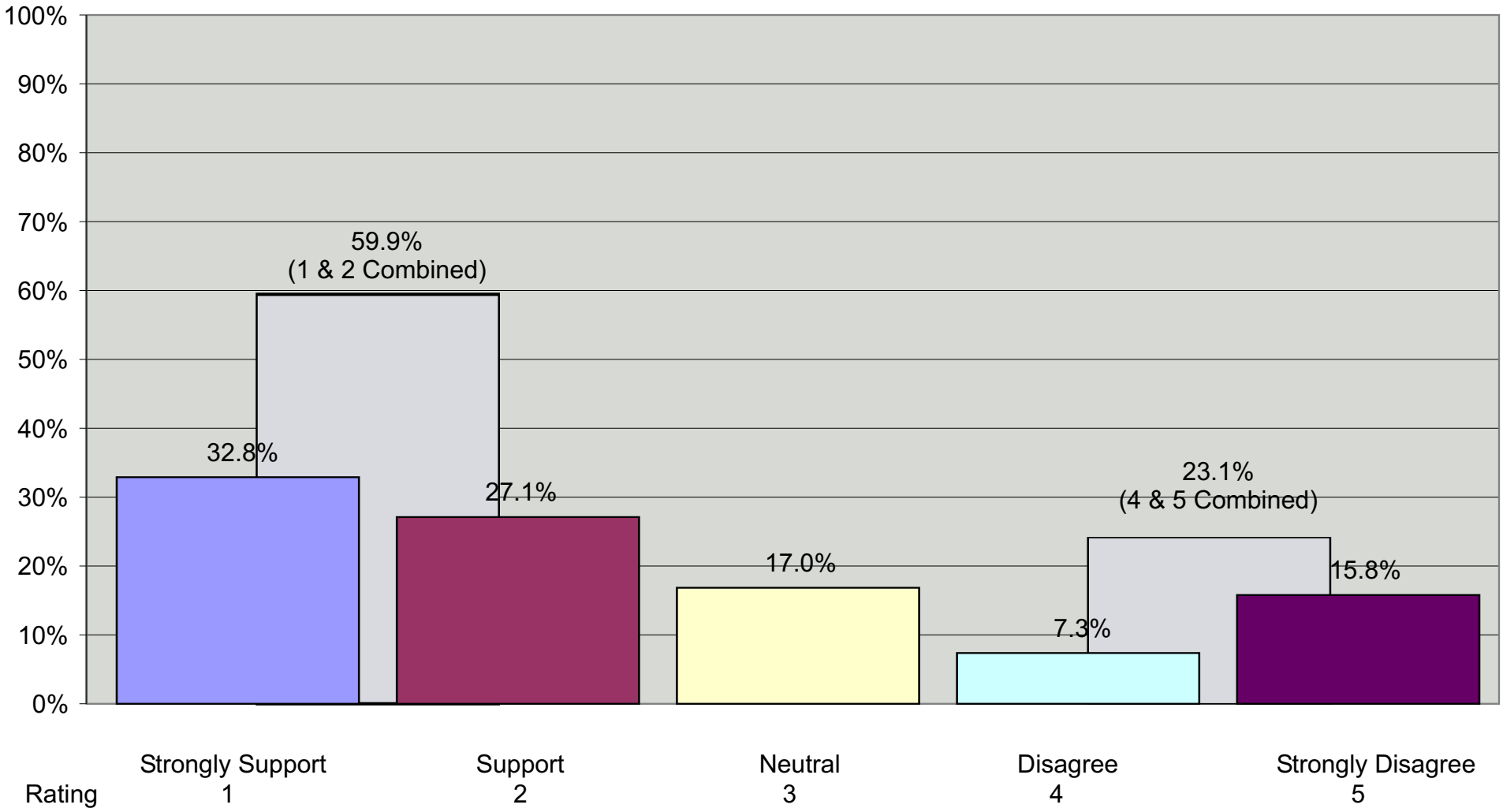
Phase 3

58.0% of respondents indicated they either Strongly Supported or Supported Phase Three Quality Corridors and Downtown LRT.
25.3% of respondents indicated they either Disagreed or Strongly Disagreed with the Phase Three Quality Corridors and Downtown LRT.
16.7% of respondents indicated they were Neutral on the Phase Three Quality Corridors and Downtown LRT.

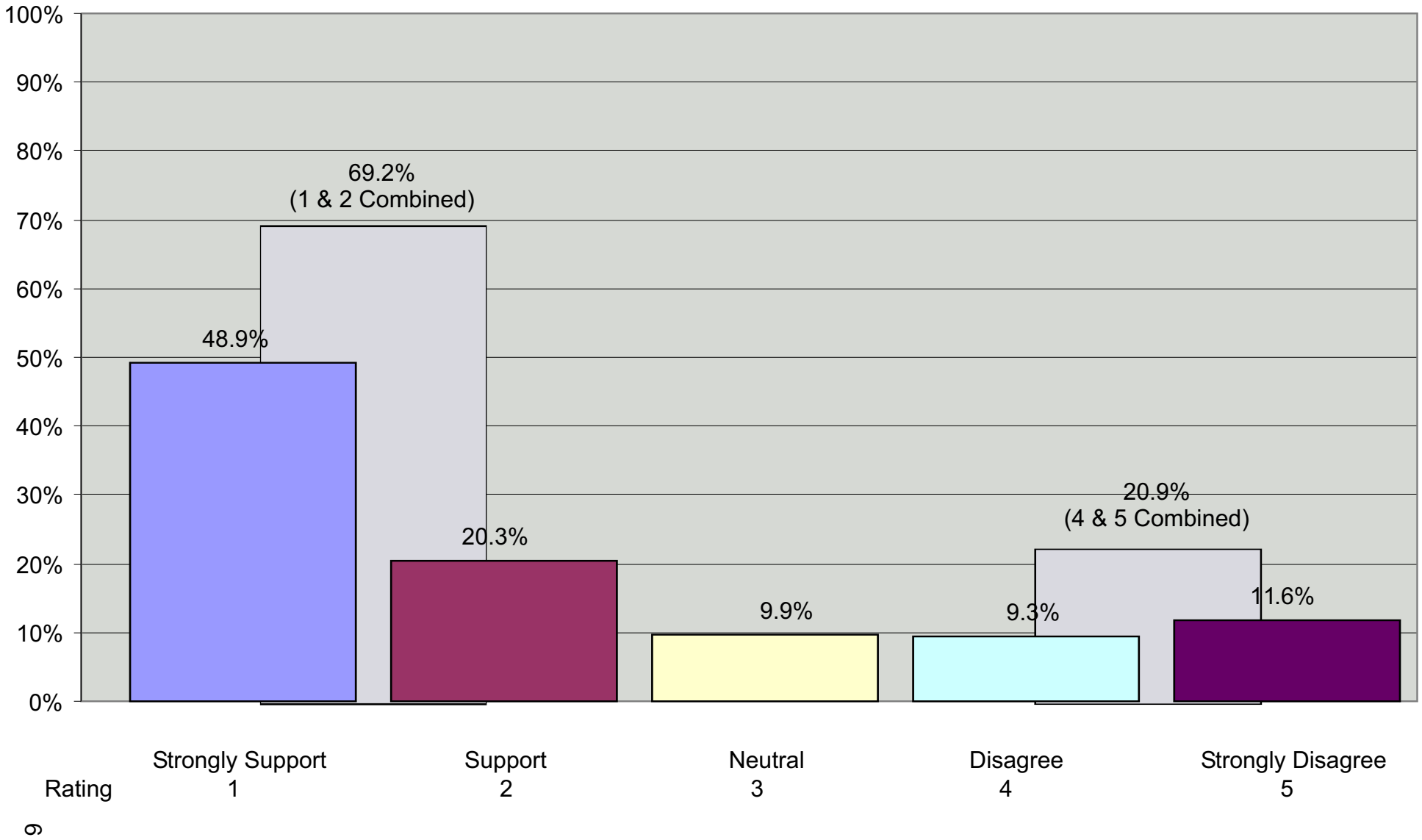
80.2% of respondents provided comments/ideas regarding Rapid Transit as follows:

- 19.3% reinforced their support for all three phases
- 12.7% were not in support of the Downtown LRT as part of Phase Three
- 12.0% felt that Winnipeg requires a Light Rail Transit System
- 9.3% felt that the City must make Rapid Transit a priority and that development of a Rapid Transit System must start now
- 8.7% felt that connections to Waverley West and the Airport are critical
- 7.3% felt that Rapid Transit should be integrated with land use planning, providing a catalyst for future development
- 6.7% felt that low fares and affordability are essential

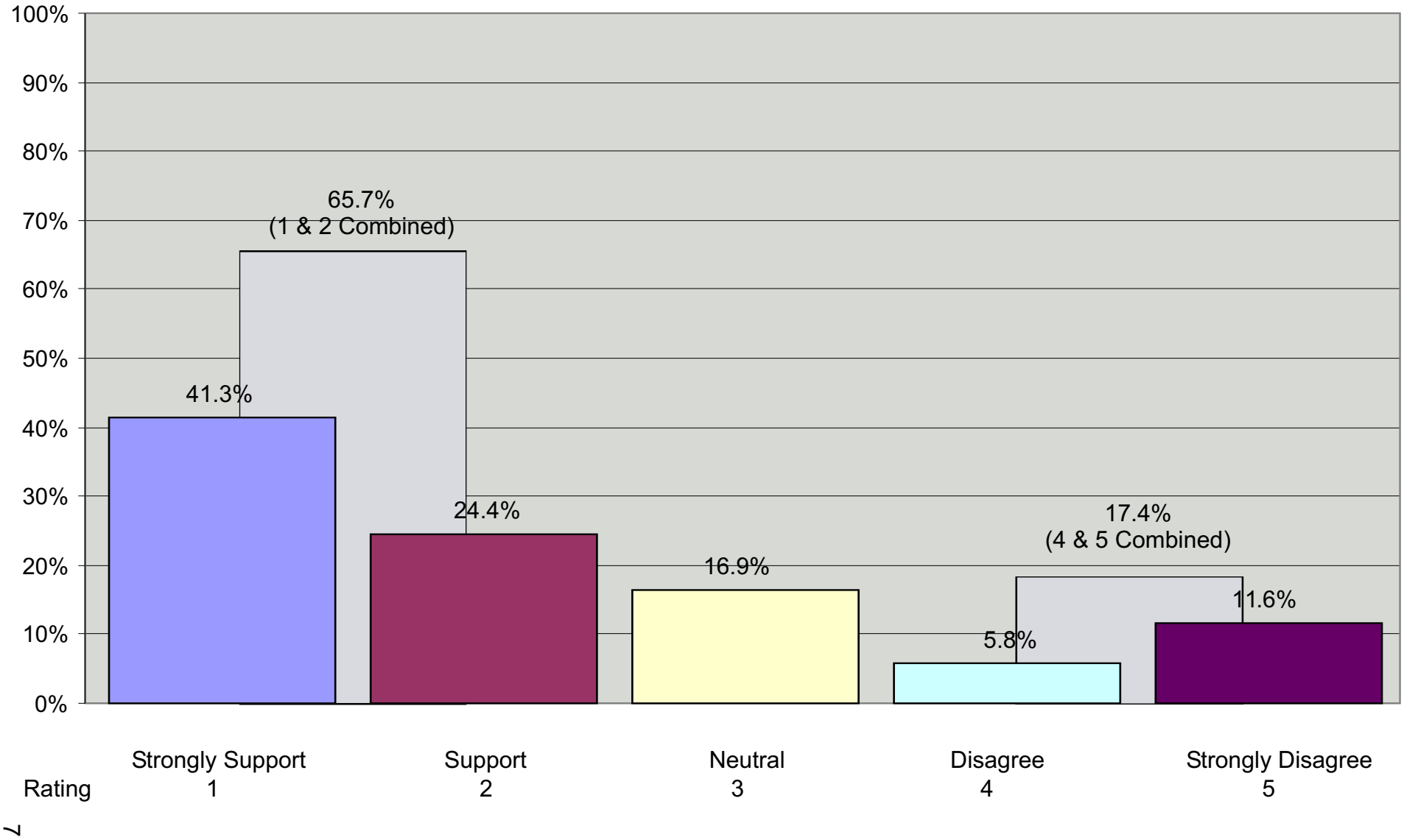
Question 3. a)
Do you support the overall 'Made in Winnipeg' Rapid Transit System Concepts as presented?



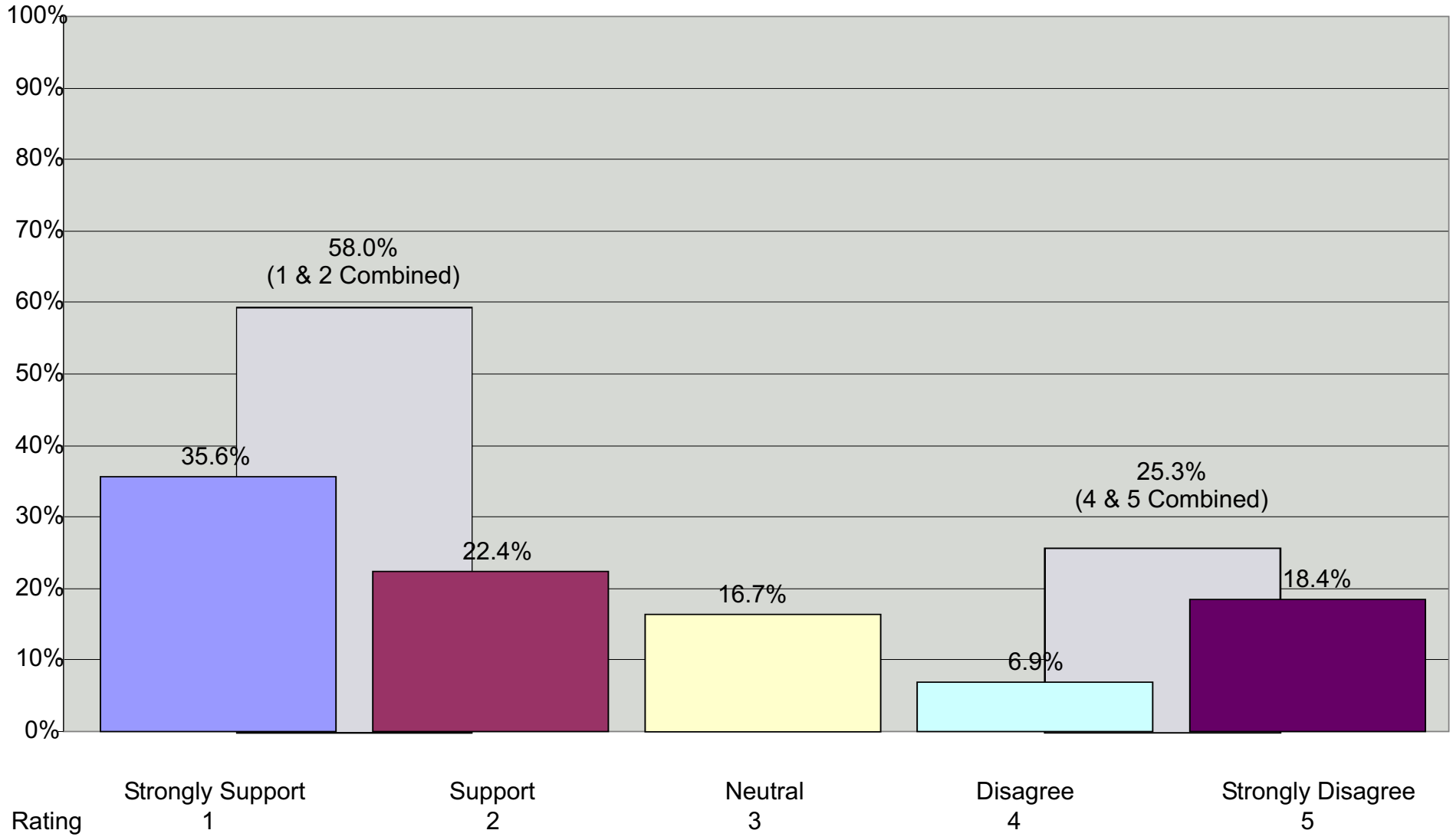
Question 3. b)
Phase One
Do you support the development of City Wide Quality Corridors on Pembina (including busway through Confusion Corner to Downtown), St. Mary's, Regent/Nairn, (including busway from Archibald to Kildonan Place), Henderson, Main and Portage?



Question 3. c)
Phase Two
Do you support the development of City Wide Quality Corridors on Regent/Nairn (including busway from Higgins to Archibald), Higgins, St. Anne's, McPhillips, Notre Dame, Balmoral/Isabel and Downtown?



Question 3. d)
Phase Three
Do you support the completion of City Wide Quality Corridors (Marion/Goulet, Archibald, Kenaston, Broadway, Vaughan/Osborne and Pembina (including busway from Confusion Corner to Bison Drive) and the development of Downtown Light Rail Transit?



Question 4
Comments/Ideas on Rapid Transit System

The percentage indicated refers to the percentage of respondents that identified each issue

	Summary	%
All Three Phases Support	29	19.3%
Downtown LRT Against	19	12.7%
LRT System Only	18	12.0%
Do something now. City has to make Transit/Rapid Transit a priority (studied enough)	14	9.3%
Develop efficient systems into Waverley West and the Airport	13	8.7%
Integrate Transit and land use planning (plan for future/catalyst for dense development along RT corridors, integrate Transit into new subdivisions)	11	7.3%
Low fares/affordability (Assist people on low incomes)	10	6.7%
Stations must be easily accessible/connect to walk/bike paths, feeder routes, park and ride facilities	9	6.0%
Original BRT project (money left on table, greater vision, etc.)	9	6.0%
Speed and reliability (all seasons, faster than car)	7	4.7%
RT will improve Downtown business area/ spur development in Winnipeg	7	4.7%
Park and ride (secure with plugs)	7	4.7%
Fare incentives (passes in partnership with employers and universities, seniors) Structure to attract workers	7	4.7%
Bike Lanes	7	4.7%
All Three Phases Against	7	4.7%
Adequate size of vehicle so people do not have to stand	7	4.7%
Universally accessible buses, stops, stations	6	4.0%
Quality Corridor Support	6	4.0%
Quality Corridor Against	6	4.0%
Frequency	6	4.0%
Dedicated corridors required (to bypass congestion)	6	4.0%
Busway Corridor Support	6	4.0%
Bicycle/pedestrian paths	6	4.0%
More Bike Paths/Recreation Detail	5	3.3%
Did Not Like Survey	5	3.3%
Bus stops with heated shelters and benches	5	3.3%
Bike Lanes By Diamond Lanes	5	3.3%
Stations (attractive, comfortable human scale, amenities, well lit)	4	2.7%
Preserve land for future RT expansion (rail corridors, etc.)	4	2.7%
Phase 3 First	4	2.7%
Not Enough Passenger and Financing Data	4	2.7%
New technology (GPS, real time information displays, enunciators)	4	2.7%
Modern, comfortable buses to improve service/ridership)	4	2.7%
Environmentally friendly	4	2.7%
Downtown LRT Support	4	2.7%
Disincentives for auto use (gas tax, higher parking rates, etc.). Reduce cars on road	4	2.7%
Diamond Lane Against	4	2.7%
Develop jitney service for feeder bus system (in areas that are currently poorly serviced or unserviced)	4	2.7%
Convenient/direct routing	4	2.7%
Build More Over and Underpasses/Expand Roads	4	2.7%
Articulated Buses Support	4	2.7%
Subway	3	2.0%
RT is linked to a progressive City image. Increases pride and improves life in a City.	3	2.0%

Question 4
Comments/Ideas on Rapid Transit System

The percentage indicated refers to the percentage of respondents that identified each issue

	Summary	%
Rapid Transit Service To Charleswood	3	2.0%
Phase 1 Support	3	2.0%
Pay/ Fix Roads and Other Infrastructure First	3	2.0%
No transfer trip	3	2.0%
N/S and E/W routes crossing in Downtown	3	2.0%
More Choices of RT Models Needed	3	2.0%
Misc Surveys	3	2.0%
Integration of RT with regular transit service. RT must dovetail seamlessly into existing service.	3	2.0%
Increase Housing to 7 Per Acre	3	2.0%
Image (attractive, vibrant, innovative, progressive) Must appeal to middle/upper middle class	3	2.0%
Grade separated corridor	3	2.0%
Feeder bus system must be reliable, accessible, frequent, use smaller buses	3	2.0%
Diamond Lanes Will Not Increase Speed	3	2.0%
Diamond Lane Support	3	2.0%
Clean, well maintained	3	2.0%
Bus Drivers are Great	3	2.0%
Bike racks on bus/at station	3	2.0%
What are the Travel Time Savings	2	1.3%
What are the Dates To The Phases	2	1.3%
System should support local industries (New Flyer) Buy locally	2	1.3%
System should address present and future needs, allowing for future expansion, phased implementation	2	1.3%
Scalable System (BRT affordable beginning to expand to other technologies (LRT, etc) if required in future)	2	1.3%
RT must service all major downtown and suburban destinations	2	1.3%
Plan Time Frame Too Long	2	1.3%
Pembina LRT Only	2	1.3%
Pembina Completed First	2	1.3%
Pembina BRT Only	2	1.3%
New technology (GPS, real time information displays, enunciators, posted schedules adequate) Against	2	1.3%
Need Cost Benefit Analysis	2	1.3%
Must be significant/noticeable so changes peoples perception about Transit and encourages them to use RT	2	1.3%
More Support To Transit	2	1.3%
Longer operating hours	2	1.3%
Experiment with lower fare to boost ridership	2	1.3%
Evaluate As You Go Policy In All Phases	2	1.3%
Encourage/educate youth to use Transit/Eco Knowledge	2	1.3%
Encourage community life	2	1.3%
Electronic fare collection to save time	2	1.3%
Downtown LRT with Hubs to Suburbs	2	1.3%
Develop recreation centres, libraries, community police, etc. at major stations	2	1.3%
Communication between buses/connections/transfers	2	1.3%
BRT using existing roadways/do not need major, expensive new roads (expand express routes, additional enforced diamond lanes, bigger stations, Transit priority measures)	2	1.3%

Question 4
Comments/Ideas on Rapid Transit System

The percentage indicated refers to the percentage of respondents that identified each issue

	Summary	%
Access for emergency vehicles	2	1.3%
What are the Transportation Goals of the Plan	1	0.7%
Transit Should Be Reverse Flow System	1	0.7%
Transit needs should always take priority over car	1	0.7%
Time Frame Info Needed	1	0.7%
Telebus Voice Too Soft On Phone	1	0.7%
System should be prototype/showcase/economic spinoffs	1	0.7%
System powered by electricity (BRT or LRT)	1	0.7%
Show Data on Climate Change Goals	1	0.7%
Shopping Centers Linked By A Single Bus Route	1	0.7%
Shift Policy to Ped./Bike/Transit/Auto	1	0.7%
Sell post secondary passes at more convenient locations (convenience stores)	1	0.7%
Safety (cameras for security)	1	0.7%
Safe pedestrian crossings for transfers	1	0.7%
Routing as per Plan Winnipeg	1	0.7%
Rapid Transit Service All Day	1	0.7%
Public must be informed/consulted at all stages in development of RT plans	1	0.7%
Public Display of Final Plan	1	0.7%
Priority BRT routes are those that service the busiest corridors first	1	0.7%
Portage Avenue Should Be in Phase 1	1	0.7%
Poor Diamond Lane Selection	1	0.7%
Phase Three Hindered By Downtown Parking	1	0.7%
Phase Three First With Route to Airport	1	0.7%
Phase I And 2 Together	1	0.7%
Phase 3 Should Be Subway	1	0.7%
Phase 1, 2, and 3 Should Have More Engineering Data	1	0.7%
Passenger Heavy Rail	1	0.7%
Park And Rides Closer to Downtown	1	0.7%
Oak Point Sub Division Missing In Plan	1	0.7%
No Rapid Transit System (improve existing)	1	0.7%
No parking on main thoroughfares at peak hours, (put on side streets)	1	0.7%
Multiple door loading to save time	1	0.7%
More Regular Cleaning of Bus Shelters	1	0.7%
More Protection For Bus Drivers	1	0.7%
More On Street Parking Info	1	0.7%
More enforced diamond lanes and signal priority for buses (to support RT)	1	0.7%
More direct express routes from suburbs to downtown (Ft. Richmond, Transcona, Unicity)	1	0.7%
More buses on express routes to U of M	1	0.7%
Marketing/promotion/advertising of new RT system is critical to promote ridership and public acceptance of system	1	0.7%
Magnetic-Levitation Train	1	0.7%
LRT Fort Rouge to Downtown	1	0.7%
LRT (utilize existing tracks and rail rights of way, develop dual tracks in existing rights of way)	1	0.7%
Lower Property Taxes	1	0.7%
Law that motor vehicles must yield to buses	1	0.7%
Innovative Tax Incentives	1	0.7%
Inner circle route to provide convenient/direct service from suburb to suburb and from all parts of City to U of M	1	0.7%

Question 4
Comments/Ideas on Rapid Transit System

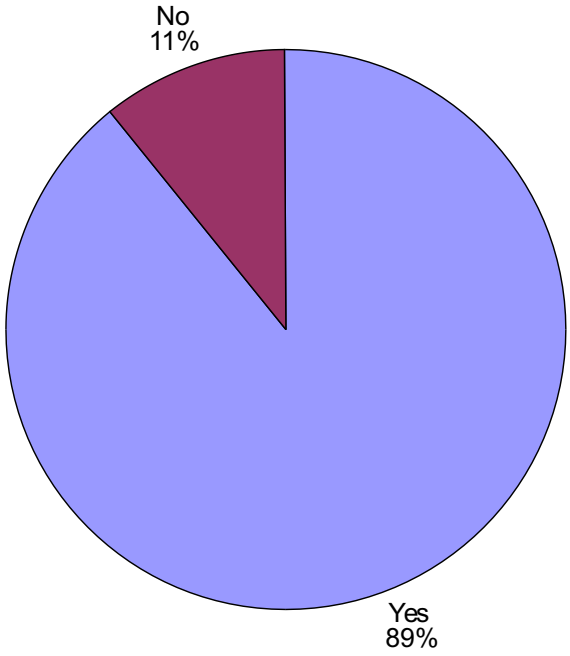
The percentage indicated refers to the percentage of respondents that identified each issue

	Summary	%
Include Spence Street in Plan	1	0.7%
Graham Avenue Mall Bus Only	1	0.7%
Government, Business, School Leaders To Sell Plan	1	0.7%
Front and Rear Panel of Bus Painted Orange	1	0.7%
Expand Navigo	1	0.7%
Electric street car or trolley bus	1	0.7%
Downtown LRT Should Be Heritage	1	0.7%
Display Long Term Costs of BRT over LRT	1	0.7%
Diesel O Train Possible	1	0.7%
Diamond Lanes Only Interim Measure For Busways	1	0.7%
Diamond Lanes in Winter Won't Work	1	0.7%
Current Bus Service Is Great	1	0.7%
Create TOD Tax Incentives	1	0.7%
Create fun things to do on bus	1	0.7%
Convenient and Close Stops To Hospitals	1	0.7%
Change numbering system (do not use same number for different routes)	1	0.7%
Change Name Of Confusion Corner	1	0.7%
Busways not needed	1	0.7%
Busway Funds Into Diamond Lane Enforcement	1	0.7%
Busway Corridor Against	1	0.7%
Automated Transfers	1	0.7%
Articulated Buses (Phase 1, Osborne and Vaughn)	1	0.7%
Airport RRC Route Needed	1	0.7%
Airport LRT or BRT Route Included	1	0.7%
Affordable system (reasonable cost to build and maintain, easily/quickly implemented)	1	0.7%
Absence of Land Info	1	0.7%

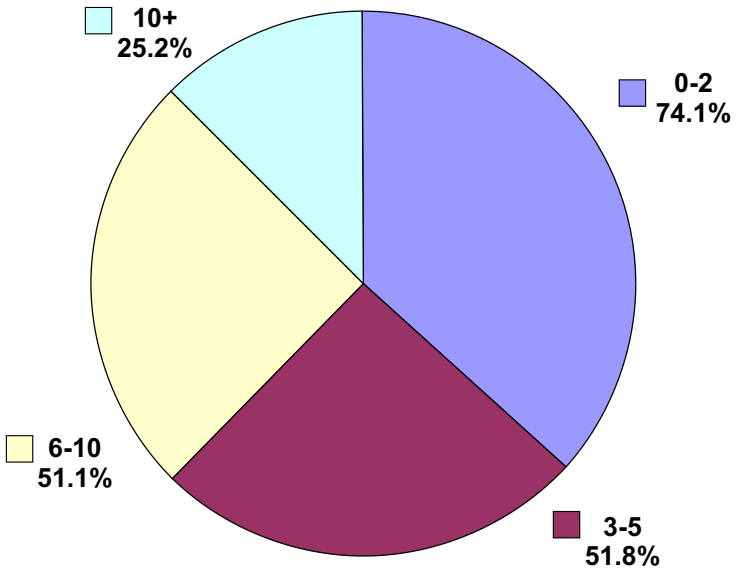
3.0 Profile of Survey Respondents

- 11% of respondents do not use the Winnipeg Transit System
- Of the 89% that use Transit, the majority (74.1%) use it only once or twice a week. Only 25.2% use Transit more than 10 times per week
- The majority use Transit to go to work/school (74.1%) with recreation activities (51.8%) and shopping (51.1%) as other important destinations.
- The majority of respondents (70.1%) were male.
- Broad representation from all age groups was noted with the majority in the 25-34 (20.5%) and 45-54 (21.6%) age categories.
- All income levels were represented. The majority of respondents are in $40,000-$59,999 (24.4%) and $80,000 and over (22.0%) levels

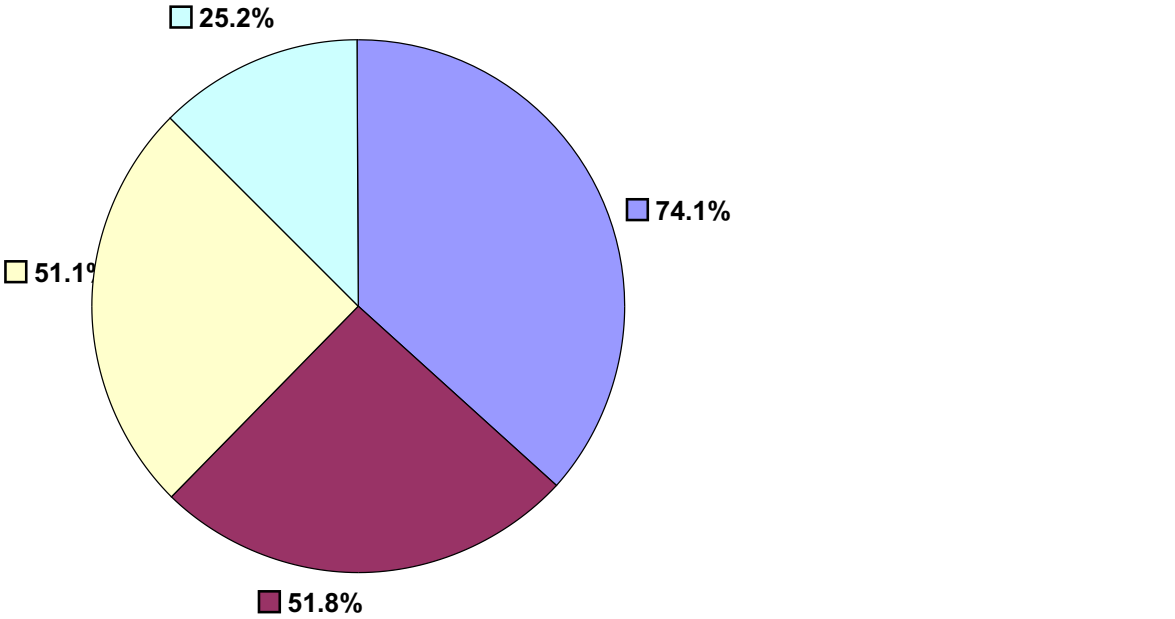
Question 2.
Do you use the Winnipeg Transit System?



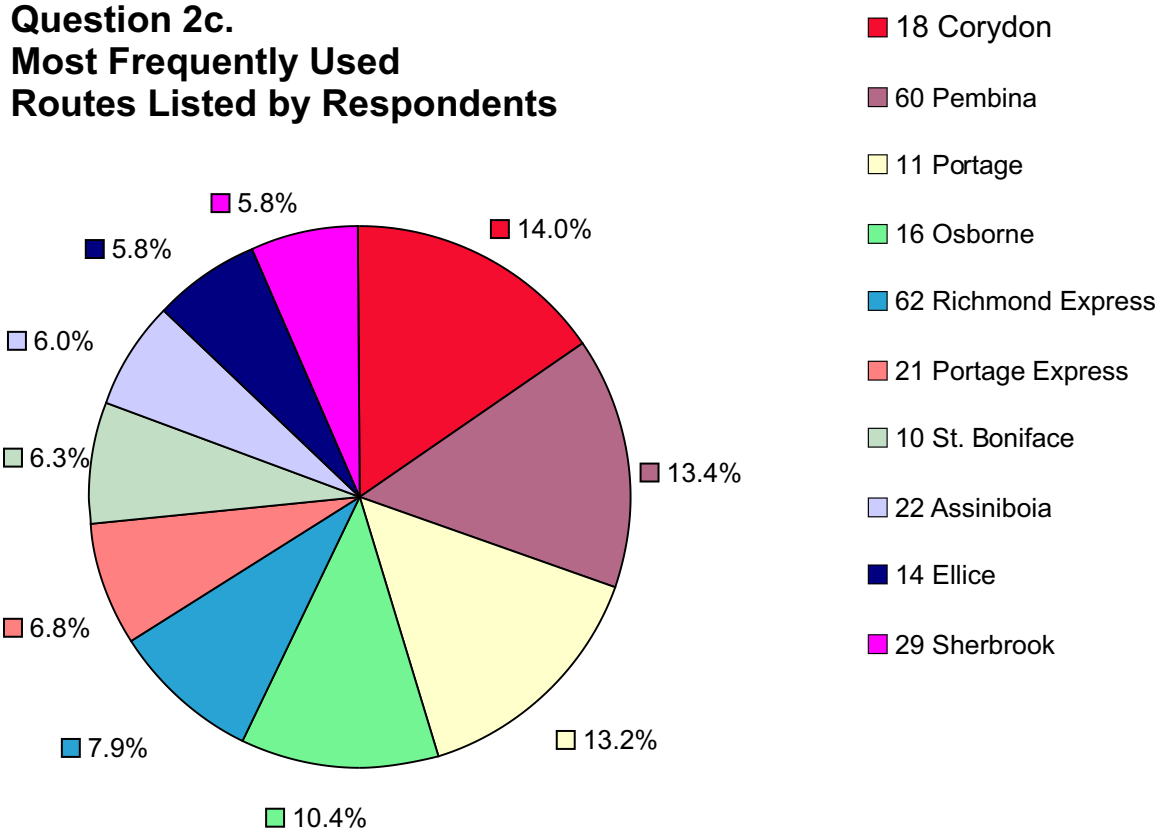
Question 2a.
Weekly Transit Trips



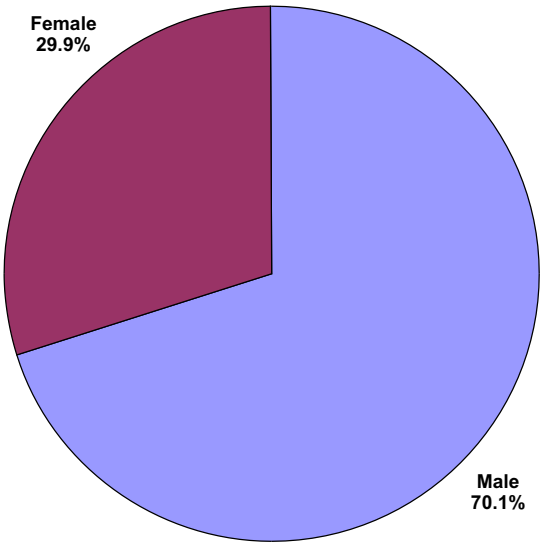
Question 2b.
Destination of Transit Trip



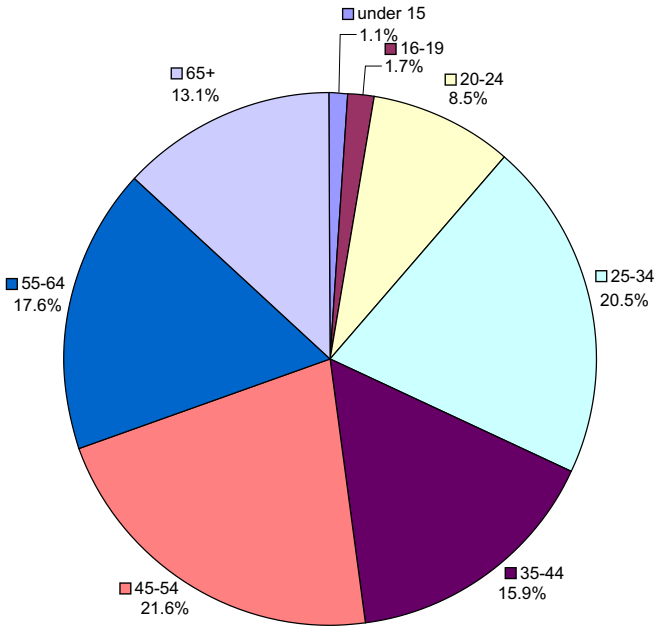
Question 2c.
Most Frequently Used
Routes Listed by Respondents



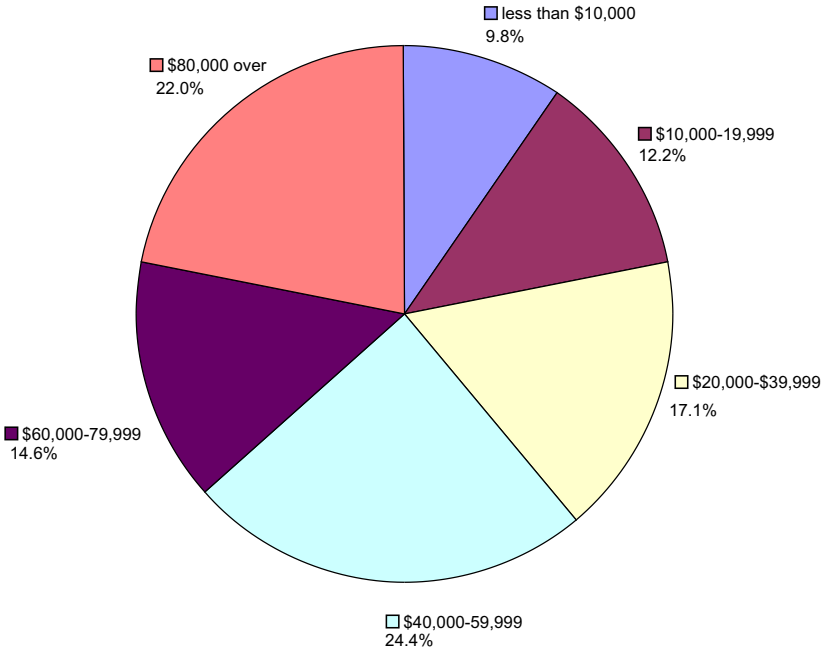
Question 5.
Gender of Respondents



Question 6.
Age of Respondents



Question 7.
Income of Respondents



Rapid Transit System Concepts
Public Open House
Exit Survey

1. Which Municipal Ward of Winnipeg do you live in? Please refer to Ward Map

☐ Charleswood - Tuxedo	☐ North Kildonan	☐ St. Charles
☐ Daniel McIntyre	☐ Old Kildonan	☐ St. James - Brooklands
☐ Elmwood - East Kildonan	☐ Point Douglas	☐ St. Norbert
☐ Fort Rouge - East Fort Garry	☐ River Heights - Fort Garry	☐ St. Vital
☐ Mynarski	☐ St. Boniface	☐ Transcona

2. Do you use the Winnipeg Transit System? ☐ Yes ☐ No
IF YES,

a) Approximately how many times per week do you use Transit?

☐ 1- 2 ☐ 3- 5 ☐ 6-10 ☐ 10+

b) Where do you go? (Check all applicable boxes)

☐ Work/ School ☐ Recreation Activities ☐ Shopping

☐ Other_____

c) Which bus routes do you use?_____

_____

3. For the following questions please respond by circling the number that best reflects your level of support using the following scale:

Strongly Support				Strongly Disagree
1	2	3	4	5

a) Do you support the overall 'Made in Winnipeg' Rapid Transit System Concepts as presented?	1	2	3	4	5
b) Phase One Do you support the development of City Wide Quality Corridors on Pembina (including busway through Confusion Corner to Downtown), St. Mary's, Regent/Nairn, (including busway from Archibald to Kildonan Place), Henderson, Main and Portage?	1	2	3	4	5
c) Phase Two Do you support the development of City Wide Quality Corridors on Regent/Nairn (including busway from Higgins to Archibald), Higgins, St. Anne's, McPhillips, Notre Dame, Balmoral/Isabel and Downtown?	1	2	3	4	5
d) Phase Three Do you support the completion of City Wide Quality Corridors (Marion/Goulet, Archibald, Kenaston, Broadway, Vaughan/Osborne and Pembina (including busway from Confusion Corner to Bison Drive) and the development of Downtown Light Rail Transit?	1	2	3	4	5

4. Are there any **comments/ideas** that you would like to make regarding the development of a **Rapid Transit System** for the City of Winnipeg? (Please continue on the reverse page if necessary)

Personal Information: **(Please read Note below)**

5. Male ☐ Female ☐

6. How old are you?

☐ Under 15 ☐ 16-19 ☐ 20-24 ☐25-34 ☐35-44 ☐ 45-54 ☐ 55-64 ☐ 65+

7. Which of the following best describes you total household income during 2004? (please check only one)

Less than $10,000	☐
$10,000 to $19,999	☐
$20,000 to $39,999	☐
$40,000 to $59,999	☐
$60,000 to $79,999	☐
over $80,000	☐

The personal information in the Survey (Questions 5, 6 and 7) is confidential and is collected under the authority of "The Freedom of Information and Protection of Privacy Act." This information is helpful in developing a profile of survey respondents and in interpreting responses on the survey. While the information will be kept confidential, you are not obligated to answer questions 5, 6 and 7. The balance of the information in the Questionnaire (Questions 1-4) will be processed and disseminated anonymously.

Appendix H

Capital Cost Assumptions

ORDER OF MAGNITUDE CAPITAL COST ASSUMPTIONS[4]

PHASE ONE

Dedicated Busways[1]	
1. Southwestern	$84 million
2. Eastern - Stage 1	$30 million
Sub-total Dedicated Busways	**$114 million**
On Street Improvements[2]	
1. Southwestern	$2.0 million
2. Eastern - Stage 1	$5.5 million
3. St. Mary's	$7.0 million
4. Portage	$9.5 million
5. Henderson	$9.5 million
6. Main	$7.5 million
Sub-Total On Street Improvements	**$41 million**
Park and Rides and Enhanced Stations with Amenities[3]	**$10 million**
SUB-TOTAL PHASE ONE	**$165 million**

PHASE TWO

Dedicated Busways	
1. Eastern - Stage 2	$30 million
Sub-Total Dedicated Busways	**$30 million**
On Street Improvements	
1. Eastern - Stage 2	$12.5 million
2. St. Anne's	$3.5 million
3. McPhillips	$7.5 million
4. Notre Dame/Cumberland/Balmoral	$14.2 million
5. Marion/Goulet/Archibald	$10.5 million
6. Kenaston	$13.5 million
7. Downtown Quality Corridors	$5.3 million
Sub-Total On Street Improvements	**$67 million**
Park and Ride and Enhanced Stations with Amenities[3]	**$8 million**
SUB-TOTAL PHASE TWO	**$105 million**
TOTAL PHASES ONE AND TWO	**$270 million**

Notes

1. Order of Magnitude cost information for the dedicated busways was extrapolated from cost information contained in 'Winnipeg's Bus Rapid Transit Project' (referenced in Appendix E)
2. Order of Magnitude cost information for the on street improvements were based upon the following Order of Magnitude Unit Costs provided by the City of Winnipeg Public Works Department (intersection and pavement costs) and Transit Department (stop costs)
   Stops - $130,000.00 ea., Stops Downtown - $120,000.00 ea., Transit Signal Priority Intersections - $50,000.00 ea., Diamond Lane - Existing Pavement - $215,000.00/km, Diamond Lane - Reconstruct Existing Pavement as Coloured Concrete - $850,000.00/km, Diamond Lane - New Lane Coloured Concrete - $1,950,000.00.00/km
3. Order of Magnitude cost information for park and rides and enhanced stations with amenities was extrapolated from cost information contained in 'Winnipeg's Bus Rapid Transit Project' (referenced in Appendix E)
4. Order of Magnitude Costs have a margin error of -5% to +30%

Appendix I

Financing Alternatives Report

July 22, 2005
Private & Confidential

Rapid Transit Task Force

Financing Alternatives

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Appendix A
Appendix B
Financing Alternatives

Notice to Reader

All dollar amounts presented in the Rapid Transit Task Force – Financing Alternatives Report (the "Report") represent order of magnitude costs and are high level estimates only. All component costs, incremental operating revenues and costs presented in the Report are as provided and estimated by the Rapid Transit Task Force (the "Task Force"). Alternatives for financing are illustrative only, based on market conditions and interest rates from April 2005, and actual transactions may vary significantly. Information obtained from third parties is assumed to be reasonable and has not been independently verified for accuracy or completeness in any way.

Task Force Phases

Based on the mission and objectives, the Task Force has identified three phases for Rapid Transit:

Phase	Components	Order of Magnitude Cost
Phase 1	City Wide On Street Improvements	$ 41 M
	Full Southwestern Busway	84 M
	Portion of Eastern Busway	30 M
	Park and Rides and Enhanced Stations with Amenities	10 M
Subtotal		**$165 M**
Phase 2	City Wide On Street Improvements	$ 67 M
	Full Eastern Busway	30 M
	Park and Rides and Enhanced Stations with Amenities	8 M
Subtotal		**$105 M**
Total		**$270 M**
Phase 3	Complete Study of Future Rapid Transit Needs	

Source: Rapid Transit Task Force

Task Force Phases (cont'd)

The order of magnitude component costs do not include any costs related to buses. It is expected that the current Transit fleet and replacement policy will meet the demands created by these phases. However, Transit will perform an in-depth study to determine bus requirements and impacts on the system.

Winnipeg Transit System's Historical Capital Costs and Operating Costs Funding

- Transit systems across North America face a capital funding challenge stemming from the basic fact that transit fares cover only a limited portion of the operating costs – on the average, less than 40% of its operating costs.
- Winnipeg's Transit System fares usually trend at 53% of its operating funds. The remainder of the operating funds come from the City (30%), and the Province of Manitoba (the "Province") (17%.) (See Appendix A).
- Historically capital costs have been financed on a pay-as-you-go basis with the costs being shared by the City and the Province. (See Appendix B).

A City Comparison – Operating and Capital Cost Financing

Operating costs in comparable cities are funded as follows:

Operating Funds

Vancouver	Farebox	37.6%
	Property tax	25.9%
	Fuel tax	33.0%
	Hydro levy	2.0%
	Sales tax	1.5%
Calgary and Edmonton	Farebox	42.0%
	City	58.0%
Montreal	Farebox	50.0%
	City	40.0%
	Provincial	10.0%

A City Comparison – Operating and Capital Cost Financing (cont'd)

Capital costs in comparable cities are funded as follows:

Capital Costs

Vancouver	100% funded by the Province of BC most of the time. Buses and trains funded on a pay-as-you-go basis.
Calgary and Edmonton	The Province funds 5 cents per litre of gasoline sold in the cities towards roads and transit. This has resulted in approximately $75M for Edmonton annually and $90M for Calgary. Calgary spent $118M last year in transit related capital expenditures.
Montreal	Mostly financed by the Province.

Recent Developments in Transit

Recent developments in transit and the associated capital costs and financing for comparable cities are as follows:

a) Halifax

Established two Bus Rapid Transit corridors from Sackville and Cole Harbour areas to downtown Halifax.

Budget Costs

Vehicles	$ 9.0 M	
Stations/parking	2.5	
Road/bike infrastructure	1.3	
Project management	0.5	
Total	**$13.3 M**	

Capital Funding

Halifax RM	$ 8.39 M	63.0%
Transport Canada	4.10	31.0%
Province of Nova Scotia	0.78	6.0%
Ecology Action Centre	0.03	0.0%
Total	**$13.3 M**	

Recent Developments in Transit (cont'd)

b) Ottawa

An expanded rapid transit network by interconnecting existing and planned corridors. The additional network would be roughly 4 times the size of Ottawa's current rapid transit and would use Light Rail Transit. The expansion is part of the City's Transportation Master Plan to be completed in 2021.

Budgeted Capital Costs

Transit and light rail construction	$ 2,555	M
Light rail maintenance and control facilities	100	
Park and ride lots	50	
Light rail vehicles	630	
Bus rapid transit vehicles	53	
Total	**$ 3,388**	**M**

Recommended Funding - 1/3rd each level of government

- Ontario government – Transit Investment Partnership ("TIP")
- Federal government – Strategic Infrastructure Fund ("CSIF")
- City of Ottawa

Recent Developments in Transit (cont'd)

c) York Region (North of Toronto)

Develop a rapid transit network throughout the York region. Will be developed over the next 20 years and will link urban centres of Markham, Richmond Hill, Vaughan and Newmarket along four major corridors and link York to the various subway and transit stations.

Budgeted Capital Costs	**BRT**	**BRT & LRT**
Regional roads	$ 2,323 M	$ 2,323 M
Regional transit	797	2,735
Go rail expansion	296	296
Total	**$ 3,416 M**	**$ 5,354 M**

Recent Developments in Transit (cont'd)

c) York Region (North of Toronto) – cont'd

Financing

- Public-Private Partnership – the partnership pairs the Region of York with an AECOM Enterprises-led joint venture on this Design-Build-Operate-Maintain initiative.
- York Region will maintain control over the determination of the public needs, priority setting and other public policy elements.
- A guaranteed maximum price is set by the Public Private Partnership and any cost overruns become the responsibility of the private sector.
- The governments of Canada, Ontario and York Region have contributed $50M each for a total of $150M for the initial phase which will provide fast, reliable and comfortable bus rapid transit.

Recent Developments in Transit (cont'd)

d) Vancouver

A rail rapid transit line that will connect Vancouver, Richmond and the Airport. The line will be 19.3 km long with 16 stations and will provide transit capacity equivalent to 10 arterial road lanes. The line is expected to be operational in November 2009, just in time for the 2010 Olympics.

Budgeted Cost - $1.72 B

Financing

BC government	$ 300 M	17.3%
Federal government (CSIF)	426	25.1%
Translink	300	17.3%
Vancouver International Airport	300	17.3%
Subtotal	1,326	77.0%
Private partner – any excess	394	23.0%
Total	**$ 1,720 M**	

Recent Developments in Transit (cont'd)

d) Vancouver

Financing – cont'd

- Chose a Private Public Partnership because they estimated that involving the private sector would achieve a transit system at a lower cost and with less risk to the taxpayer than a project funded and managed solely by the public sector.
- Private sector involvement is a Design-Build-Finance-Operate ("DBFO").
- SNC-Lavalin/Serco team was selected to be the private partner.
- The agencies will retain a long term interest in the RAV line and provide the basis for the private partner to operate under an operating agreement. Translink will continue to set schedules and fares and be responsible for marketing the service. It will receive the revenue collected from fares.
- The private sector involvement includes an operating contract of 35 years and is responsible for designing and building the system and for maintaining it and ensuring it performs to standard. They are also responsible for raising the funding needed over and above the agencies' contributions. In return, they receive payments from Translink and the other agencies.

City of Winnipeg Financing Plan

- The City issues debt for two main purposes related to capital expenditures - (1) tax supported debt related to capital projects that will be serviced from the tax-supported operating budget; and (2) self-supporting debt related to capital projects that will be serviced from revenues from the City's utility operations.
- Issued debt should have the following terms:
  - Callable redeemable debt.
  - Amortization period of less than 20 years.
  - The amortization period of the debt cannot exceed the life of the asset.

Credit Rating – City of Winnipeg

- The City currently maintains relationship with Standard and Poor's ("S&P") and Moody's Investor Service ("Moody's").
- The City has been given the following ratings:
  - S&P – AA rating
  - Moody's – Aa2

Infrastructure Grants

Programs that could be considered are listed below. It should also be noted that program and program details are subject to change and some are currently being redefined.

- Currently there are three main programs:
  1. Canada – Manitoba Infrastructure Program
  2. Canada Strategic Infrastructure Fund
  3. Municipal Rural Infrastructure Fund
- Recently, a new deal for cities and communities was announced:
  - Gas tax
  - Additional support for Public Transit
- Also recently, The Federation of Canadian Municipalities announced changes to the Green Municipal Funds

1. Infrastructure Grant – Canada – Manitoba Infrastructure Program

Objectives

- Enhance the quality of Canada's environment.
- Support long-term economic growth.
- Improve community infrastructure.
- Build 21st century infrastructure through best technologies, new approaches and best practices.

Focus

- Primary focus is on green municipal infrastructure.

1. Infrastructure Grant – Canada – Manitoba Infrastructure Program (cont'd)

Structure

- $180M fund, funded through matching 1/3 federal-provincial contributions in partnership with local community applicants such as municipal governments and other community organizations.

Projects funded to date

- Certain of the projects funded in Winnipeg include:
  - Millenium Library
  - St. James Assiniboia Centennial Pool
  - Waterfront Drive
- It is believed that there is little left in this fund.

2. Infrastructure Grant – Canada Strategic Infrastructure Fund

- There are five investment categories under the Canadian Strategic Infrastructure Fund ("CSIF").
- One of the categories most relevant to the Task Force is the following:
  - Local Transportation Infrastructure
    - Investments may be made in large scale projects that facilitate the safe and efficient movement of goods and people, ease congestion or reduce the emission of greenhouse gases and airborne pollutants. Major investments in public transportation in Canada's major urban centres will help our communities work better and be healthier places to live.

2. Infrastructure Grant – Canada Strategic Infrastructure Fund (cont'd)

- Funding investment criteria:
  - Maximum of 50% of eligible costs.
  - Large scale projects only (Manitoba large scale project is defined to be at least $25M).
  - Emphasis on partnerships with any combination of municipal, provincial and territorial governments and the private sector.
  - Costs are generally shared by three levels of government.
  - Investments are to be geared towards sustaining economic growth and supporting an enhanced quality of life for Canadians.

2. Infrastructure Grant – Canada Strategic Infrastructure Fund (cont'd)

Winnipeg projects agreed to date include:

	Total Project Cost	CSIF Contribution
Kenaston Underpass	$39.0 M	$13.0 M
GEC-Waste Water System	$72.0 M	$24.0 M

3. Infrastructure Grant – Municipal Rural Infrastructure Fund

- $1B fund structured to provide a balanced response to local infrastructure needs in urban and rural Canada.
- Each province to receive $15M with the remainder to be allocated on a per capita basis.
- At least 80% of the funds are dedicated to municipalities with a population of less than 250,000 people.
- To be used for cost shared projects with the Government of Canada contributing 1/3 of project eligible costs.
- Across Canada, a minimum of 60% of funding will target “green infrastructure” (water, wastewater, solid waste, energy and public transit).
- Winnipeg’s share of this fund is approximately $8M and although all of the funds are not allocated as of yet, there are applications currently in process for these funds.

Recently Announced - Infrastructure Grant Gas Tax

- The federal government announced on February 1, 2005 a new deal for cities and communities, with $5 billion from the gas tax slated to benefit municipalities over a five year period starting in 2005.
- The funds are for capital projects that will enhance sustainability, environment, social and cultural environments of municipalities.
- This new funding will support Environmental Sustainable Municipal Infrastructure ("ESMI") and will complement, not replace, existing federal Infrastructure programs. Each province and territory will work with its cities and communities to identify their priorities and by doing so, will work toward a broader, national objective of sustainability.
- Details of the program are not finalized as of yet.
- Preliminary assessments by the City of Winnipeg indicate that Manitoba's share will be as follows:

	Total over 5 years	**Yearly funding as of Year 5**
Manitoba	$167.3M	$66.9M

Recently Announced - Additional Support for Public Transit

- Minister of State (Infrastructure and Communities) John Godfrey has started negotiations with the provinces and territories to invest up to $800 million, over two years, in public transit.
- These funds are separate from, and in addition to, the $5 billion over five years in federal gas tax money announced in February for environmentally sustainable municipal infrastructure.
- The investment of up to $800 million will be allocated to the provinces and territories on a per capita basis and it is proposed that within each province and territory the funds be distributed to municipalities and transit agencies based largely on transit ridership.
- The funding is provided under Bill C-48 for the environment, including public transit, currently being considered by Parliament.
- The total amount of support available for transit will depend on the available surplus in the current fiscal year and in 2006 – 07.
- Manitoba's allocation of the up to $800 million in transit funding is estimated to be approximately $29 million, of that approximately $27 million is estimated for the City of Winnipeg.

Recently Announced - Federation of Canadian Municipalities Green Municipal Funds

- The Green Municipal Funds (GMF) supports partnerships, leveraging both public and private sector funding to encourage municipal actions to improve air, water and soil quality, and to reduce greenhouse gas emissions.
- In the 2005 Budget, the Government of Canada contributed an additional $300 million to the endowment; $150 million of this enhancement will be targeted towards loans for brownfields remediation and development.
- Federation of Canadian Municipalities is in the process of re-aligning its business development strategy and operations with new criteria which will be published as soon as they are finalized.
- New Intents to Apply will be accepted in autumn of 2005.
- Winnipeg projects approved by GMF to date and pending City Council approval:
  - $12M loan and $3M grant to replace 30 diesel buses with 20 articulated, 18-metre diesel-electric hybrid buses.

Financing Framework

- The City and the Task Force have committed to develop financing alternatives based on:
  - 2/3 of the component costs being funded by grants from the provincial and federal governments.
- The financing alternatives that follow therefore, refer to the remaining 1/3 of the component costs that would represent the City's share.

Financing Alternatives for Component Costs

- The remaining 1/3 of the component costs could be financed by the City via the following alternatives:
  1. City of Winnipeg Annual Capital budget ("pay-as-you-go")
  2. Bank Debt
  3. Operating Lease
  4. Serial Debt
  5. Bullet Debt Issue

Note: There are a number of other alternatives available to the City. The above list and the terms to follow were derived after having discussions with various investors and the City. Actual transactions may vary significantly.

Financing Alternative #2 – Bank Debt

Terms

- 12 – 20 years of amortization.
- Interest rate of prime less 1% for shorter terms, prime plus ½% for longer amortization periods.
- Guarantee provided by the Province and/or the City.

Advantages

- Flexible in terms of use.
- Flexible amortization periods.
- Improves short-term cash flow.

Disadvantages

- Increases public debt.

Rapid Transit Task Force – Reducing the Interest Rate Risk

There are several options available in order to reduce interest rate risk:

1. Interest Rate Swap
2. Forward Rate Option – Interest Rate Futures

Rapid Transit Task Force – Reducing the Interest Rate Risk (cont'd)

Interest Rate Swap

- Often used to re-allocate exposure to interest-rate fluctuations, typically by exchanging fixed-rate obligations for floating rate obligations.
- One party exchanges a stream of interest for another stream, to reduce the interest rate risk.
- Can be fixed-to-floating, fixed-to-fixed or floating-to-floating rate swaps.

Rapid Transit Task Force – Reducing the Interest Rate Risk (cont'd)

Forward Rate Option – Interest Rate Futures

- The interest rate on money to be loaned in the future under a contract made today.
- Locks in the interest rate based on the market rate today for some time in the future.
- Such contracts are typically a private arrangement made with a financial institution rather than in the public futures market.

Financing Alternative #3 – Operating Lease

Terms

- 12 years.
- 6% interest rate (based on current market conditions and interest rates).
- No residual value.

Types of Investment

- Buses, trains, equipment, etc.

Advantages

- Maintain control over the project.
- Can generate revenues to reduce financing costs via the sale of allowable depreciation tax benefits to private taxpayers.
- A portion of this tax benefit can be returned to the public sector through a lease agreement that will result in lower financing cost.

Financing Alternative #4 – Serial Debt

Terms

- Interest rate of 4.5% (as obtained from the City of Winnipeg, based on current interest rates and the City's credit rating).
- Annual principal and interest payment.
- Amortization period – 10 years.
- Can be issued in varying amounts.

Advantages

- Flexible amounts can be issued.
- Lower interest costs.

Disadvantages

- Shorter amortization period.
- Increase in debt.

Financing Alternative #5 – Bullet Debt Issue

Terms

- Principal to be repaid at the end of the term.
- Annual interest payments.
- 20 year term.
- Issuance costs to be incurred.
- Sinking fund to be created for eventual payment of the principal – annual sinking fund payment.
- Interest cost will be approximately 5.5%, including issuance costs (as obtained from the City based on current interest rates, market conditions and credit rating).
- 4% earned on sinking fund (as obtained from the City based on current interest costs).

Advantages

- Longer amortization period.

Financing Alternative #5 – Bullet Debt Issue (cont'd)

Disadvantages

- Issuance costs.
- Longer amortization period therefore higher interest costs.
- Increase of debt.

Rapid Transit Task Force – Financing Alternatives for Operating Costs

- There are two alternatives for financing the annual operating costs:
  1. City of Winnipeg annual operating budget
  2. Sharing of taxes with the Province
- Approximate revenue streams, as estimated by the City of Winnipeg personnel for the City of Winnipeg only, would be as follows:

Fuel tax sharing	Approximately $10M annually for every 1 cent fuel tax
Motor vehicle license fee sharing	Approximately $3.3 M annually for every $10 fee per license
Sales tax sharing	Approximately $85M for every 1% in sales tax

Appendix A

Appendix A

The City of Winnipeg - Transit System Operating Funds

	$			
Year	Transit System Generated	City of Winnipeg	Provincial Operating Grants	Total
1992	41,719,272	20,822,951	17,600,000	80,142,223
1993	42,369,579	20,983,299	16,787,500	80,140,378
1994	43,347,428	20,292,920	16,671,205	80,311,553
1995	41,773,993	26,524,994	16,908,940	85,207,927
1996	44,223,495	25,997,694	16,338,470	86,559,659
1997	47,330,679	27,421,233	16,365,116	91,117,028
1998	48,427,644	24,810,325	16,339,000	89,576,969
1999	49,497,253	24,937,807	16,339,000	90,774,060
2000	50,649,014	27,099,804	16,339,000	94,087,818
2001	52,093,761	29,064,879	16,854,000	98,012,640
2002	51,880,984	29,080,826	16,854,000	97,815,810
2003	53,711,211	31,882,724	17,354,000	102,947,935
2004	57,635,675	32,854,438	16,854,000	107,344,113
2005 - Budget	57,243,960	33,830,967	19,355,400	110,430,327

Year	Transit System Generated	City of Winnipeg	Provincial Operating Grants	Total
1992	52%	26%	22%	100%
1993	53%	26%	21%	100%
1994	54%	25%	21%	100%
1995	49%	31%	20%	100%
1996	51%	30%	19%	100%
1997	52%	30%	18%	100%
1998	54%	28%	18%	100%
1999	55%	27%	18%	100%
2000	54%	29%	17%	100%
2001	53%	30%	17%	100%
2002	53%	30%	17%	100%
2003	52%	31%	17%	100%
2004	54%	31%	16%	100%
2005 - Budget	52%	30%	18%	100%

Source: Winnipeg Transit

Appendix B

Appendix B

The City of Winnipeg - Transit System
Capital Costs

$

Year	City	Province	Total
1992	4,110,000	3,808,000	7,918,000
1993	4,227,000	4,492,000	8,719,000
1994	6,245,000	3,008,000	9,253,000
1995	2,865,000	2,239,000	5,104,000
1996	3,644,000	2,985,000	6,629,000
1997	5,329,000	3,000,000	8,329,000
1998	6,929,000	3,000,000	9,929,000
1999	7,426,000	3,000,000	10,426,000
2000	8,227,000	3,100,000	11,327,000
2001	6,911,000	4,000,000	10,911,000
2002	5,511,000	5,400,000	10,911,000
2003	13,134,000	3,100,000	16,234,000
2004	14,093,000	3,000,000	17,093,000
2005 - Budget	15,494,000	3,840,000	19,334,000

%

Year	City	Province	Total
1992	52%	48%	100%
1993	48%	52%	100%
1994	67%	33%	100%
1995	56%	44%	100%
1996	55%	45%	100%
1997	64%	36%	100%
1998	70%	30%	100%
1999	71%	29%	100%
2000	73%	27%	100%
2001	63%	37%	100%
2002	51%	49%	100%
2003	81%	19%	100%
2004	82%	18%	100%
2005 - Budget	80%	20%	100%

Source: Winnipeg Transit

Financing Alternatives

Rapid Transit Task Force - Phase One

(in Millions)

Component Costs:

City Wide on Street Improvements	41.0000
Full Southwestern Busway	84.0000
Portion of Eastern Busway	30.0000
Park and Rides and Enhanced Stations with Amenities	10.0000
Total Component Costs	165.0000

Source: Rapid Transit Task Force

Component costs to be funded by the three levels of government.

City of Winnipeg	55.0000
Province of Manitoba	55.0000
Federal Government	55.0000
	165.0000

City of Winnipeg Annual Capital Budget, 2006 - 2010 average	202.0090
Transit Annual Capital Budget, 2006 - 2010 average	18.8088

Source: 2005 Capital Budget and 2006 to 2010 Five-Year Capital Forecast

Incremental Cash Flow:

The Rapid Transit Task Force has stated that incremental annual revenue and expenses cannot be estimated until functional design studies, including cost benefit analysis, and detailed ridership studies are completed for each route, therefore have not been included in the following analysis. Although, the task force assumes that the incremental annual revenue streams will be greater than the incremental annual expenses and there will be no increase in the annual transit subsidy in terms of operations.

Alternative One: City of Winnipeg Annual Capital Budget ("pay-as-you-go")

The City of Winnipeg annual payments to be funded by the annual capital budget, over 10 years.

		% of City Capital Budget	% of Transit Capital Budget
City of Winnipeg	55.0000		
Payment period (years)	10		
Annual payment	$5.5000	2.72%	29.24%

Alternative Two: Bank Debt

The City of Winnipeg component costs to be funded by a long-term note from a chartered bank.

Amount to be financed	55.0000		
Amortization period (years)	15		
Interest rate (prime of 4.25% plus 0.5%)	4.75%		
Annual payment	$5.2097	2.58%	27.70%

Alternative Three: Operating Lease

The City of Winnipeg component costs to be funded by an operating lease.

Amount to be financed	55.0000		
Amortization period (years)	12		
Interest rate	6.00%		
Residual value	-		
Annual payment	$6.5602	3.25%	34.88%

Alternative Four: Serial Debt

The City of Winnipeg component costs to be funded by the issuance of serial debt.

Amount to be financed	55.0000		
Amortization period (years)	10		
Interest rate	4.50%		
Annual payment	$6.9508	3.44%	36.96%

Alternative Five: Bullet Debt Issue

The City of Winnipeg component costs to be funded by the issuance of bullet debt.

Amount to be financed	55.0000		
Amortization period (years)	20		
Interest rate	5.50%		
Annual payment:			
Interest	3.03		
Sinking Fund Payment	1.85		
Annual payment	$4.8800	2.42%	25.95%

Adding differences due to rounding

See Notice to Reader

Rapid Transit Task Force - Phase Two

(in Millions)

Component Costs:

City Wide on Street Improvements	67.0000
Full Eastern Busway	30.0000
Park and Rides and Enhanced Stations with Amenities	8.0000
Total Component Costs	105.0000

Source: Rapid Transit Task Force

Component Costs to be funded by the three levels of government.

City of Winnipeg	35.0000
Province of Manitoba	35.0000
Federal Government	35.0000
	105.0000

City of Winnipeg Annual Capital Budget, 2006 - 2010 average	202.0090
Transit Annual Capital Budget, 2006 - 2010 average	18.8088

Source: 2005 Capital Budget and 2006 to 2010 Five-Year Capital Forecast

Incremental Cash Flow:

The Rapid Transit Task Force has stated that incremental annual revenue and expenses cannot be estimated until functional design studies, including cost benefit analysis, and detailed ridership studies are completed for each route, therefore have not been included in the following analysis. Although, the task force assumes that the incremental annual revenue streams will be greater than the incremental annual expenses and there will be no increase in the annual transit subsidy in terms of operations.

Alternative One: City of Winnipeg Annual Capital Budget ("pay-as-you-go")

The City of Winnipeg annual payments to be funded by the annual capital budget, over 10 years.

		% of City Capital Budget	% of Transit Capital Budget
City of Winnipeg	35.0000		
Payment period (years)	10		
Annual payment	$3.5000	1.73%	18.61%

Alternative Two: Bank Debt

The City of Winnipeg component costs to be funded by a long-term note from a chartered bank.

Amount to be financed	35.0000		
Amortization period (years)	15		
Interest rate (prime of 4.25% plus 0.5%)	4.75%		
Annual payment	$3.3152	1.64%	17.63%

Alternative Three: Operating Lease

The City of Winnipeg component costs to be funded by an operating lease.

Amount to be financed	35.0000		
Amortization period (years)	12		
Interest Rate	6.00%		
Residual Value	-		
Annual payment	$4.1747	2.07%	22.20%

Alternative Four: Serial Debt

The City of Winnipeg component costs to be funded by the issuance of serial debt.

Amount to be financed	35.00000		
Amortization period (years)	10		
Interest rate	4.50%		
Annual payment	$4.4233	2.19%	23.52%

Alternative Five: Bullet Debt Issue

The City of Winnipeg component costs to be funded by the issuance of bullet debt.

Amount to be financed	35.00000		
Amortization period (years)	20		
Interest rate	5.50%		
Annual payment:			
Interest	1.93		
Sinking Fund Payment	1.18		
Total Annual payment	$3.1004	1.53%	16.48%

Adding differences due to rounding

See Notice to Reader

Appendix J

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