Agenda – Executive Policy Committee – July 8, 2009

REPORTS

Item No. 4 Existing Infrastructure Deficit
File S-7

WINNIPEG PUBLIC SERVICE RECOMMENDATION:

That this report on a new estimate of the Existing Infrastructure Deficit be received as information.

ADMINISTRATIVE REPORT

ISSUE: EXISTING INFRASTRUCTURE DEFICIT – NEW ESTIMATE

CRITICAL PATH: SECRETARY OF STRATEGIC INFRASTRUCTURE RENEWAL – EXECUTIVE POLICY COMMITTEE - COUNCIL

AUTHORIZATION

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RECOMMENDATIONS

1. **That this report on a new estimate of the Existing Infrastructure Deficit be received as information.**

IMPLICATIONS OF THE RECOMMENDATIONS

- This report provides an estimate for the 2009 Existing Infrastructure Deficit.
- The Existing Infrastructure Deficit includes renewal, replacement and reconstruction of any existing infrastructure including new construction as a result of consolidation/closing of existing facilities.
- Cross departmental working group was established to determine the infrastructure deficit.
- The total infrastructure deficit for the City's existing infrastructure is estimated at $3.8 billion over the next 10 years, calculated in constant 2009 dollars.

REASON FOR THE REPORT:

The Secretary of Strategic Infrastructure Renewal requested an updated estimate for the Existing Infrastructure Deficit.

HISTORY

Defining the terms:

"Existing Infrastructure" includes renewal, replacement and reconstruction of any existing infrastructure including new construction as a result of consolidation or closing of existing facilities.

> For example, if two libraries were closed and a new regional library was built in the same vicinity, the new regional library is still considered a replacement of existing infrastructure and not considered new strategic infrastructure. Thus if the new construction does not increase the inventory of the asset group, then it is categorized as existing infrastructure work.

"New Strategic Infrastructure" includes new infrastructure to service growth and to meet new federal or provincial regulations. It does not include new construction to replace existing infrastructure or as a result of consolidation/closing of existing facilities.

"Infrastructure Deficit", as defined by Public Sector Accounting Board*, "is the added investment in (infrastructure) assets that would be required to maintain them at appropriate service levels and in a good state of repair". The City's asset management professionals used best practices to determine the funding level and timing with the goal of achieving the lowest long term preservation costs for the infrastructure.

* *The Public Sector Accounting Board (PSAB) issues standards and guidance with respect to matters of accounting in the public sector. PSAB issues such standards and guidance to serve the public interest by strengthening accountability in the public sector through developing, recommending and gaining acceptance of accounting and financial reporting standards of good practice.*

To estimate the infrastructure deficit the following method was used:

1) Identified the total required work (for both existing and new strategic) over the next 10 years in order to "maintain the infrastructure at an appropriate service level and in a good state of repair" and estimated the costs in 2009 dollars.
2) Determined the likely capital funding available by extending the 6 year capital budget to an estimated 10 year capital funding.
3) The required work minus the funding available over the next 10 years estimated the infrastructure deficit.

There have been previous estimates of Winnipeg's infrastructure deficit:

- Strategic Infrastructure Reinvestment Policy (SIRP) report (1998) and;
- New Deal information (2003)
- Adjusted for construction inflation of 2003 New Deal numbers, as well as new Federal Gas Tax funding and new Provincial capital funding (2007).

Infrastructure Deficit	Annual Deficit	10 Year Amount	
SIRP (1998) (renewal only)	$82 million	$0.8 billion	In 1998 dollars
New Deal (2003)	$188 million	$1.8 billion	In 2003 dollars
Adjusted 2003 New Deal (2009)	$250 million	$2.5 billion	In 2009 dollars

In the fall of 2008, Councillor Wyatt was named the Secretary of Strategic Infrastructure Renewal with the main goal of providing focused public policy solutions relating to the City's infrastructure deficit.

DISCUSSION:

Factors that have influenced the growth in the infrastructure deficit:

- Old infrastructure needs renewal – during the 1950s, 60s and 70s, the City experienced significant growth with corresponding new infrastructure being built as a result of the baby boomer generation. Much of this infrastructure is now 40 to 60 years old and needs renewal.
- Capital spending has been deferred – during the 1990s the City was borrowing large sums annually to build new infrastructure and renew existing infrastructure. With no population growth and the City's debt having grown to over $1 billion, the City stopped borrowing in 1997.
- Possible funding that could have been used for capital was used to balance the operating budget – with the debt being paid down over the last decade, the freed up interest payments were used to fund operations instead of increasing capital spending. As well, the increased GST exemption was used to fund operations.
- Asset management practices implemented – City Departments have set up asset management units and are implementing best practice to manage the City's infrastructure. This more detailed / sophisticated examination has resulted in additional infrastructure deficit items being identified.
- Construction inflation – Between 2000 and 2008, Winnipeg's overall construction inflation is estimated at 68%. Thus even if the City infrastructure deficit inventory backlog was not growing, it would still cost 68% more to repair today than it did in the year 2000.

Thus in addition to some capital projects being deferred, the City's financial debt of the 1990's has been replaced by an infrastructure debt.

<u>Capital Budget</u>
Over the past decade, the City of Winnipeg has increased its Capital Budget as shown in the chart below, from a total capital of $120 million in 2001 to that of $476 million in 2009. The recent increased funding is partially due to several large one time projects (new water treatment plant, upgrades to sewage treatment plants, Disraeli Bridge and rapid transit) which have been facilitated by increased capital funding from the federal and provincial governments.

Winnipeg's Capital Budgets, 2001 to 2009 (in millions $)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010F	2011F	2012F	2013F	2014F
Roads	31	68	52	32	55	62	157	180	97	65	65	68	66	69
Transit	11	11	19	14	15	32	42	17	165	28	27	27	29	30
Other Tax Supported	25	29	41	48	30	50	73	94	58	65	38	45	49	52
Water, Sewer, LD	53	62	61	111	198	164	156	131	157	153	257	246	165	81
Total	120	170	173	205	298	308	427	421	476	310	387	387	308	232

Even with recent increased capital spending, the forecasted budget years show a declining level of planned capital spending.

Construction Inflation

An aspect which is negatively affecting the buying power of the capital budget is construction inflation. Between 2000 and 2008, Winnipeg's overall construction inflation is estimated at 68%. Thus on average it costs 68% more in 2008 to renew an infrastructure item than it did in the year 2000. For comparison, Winnipeg's consumer price index (CPI) during this same period was 18%.

What is also concerning, for some service areas, the infrastructure deficit (or capital funding shortfall) is still growing and that the average condition of the infrastructure is declining.

Public Opinion Survey

The most recent Probe Research Omnibus poll, March 2009, on the most important issue or concern of Winnipeggers, shows Crime at 34% and Infrastructure at 33%. In essence these two issues are tied in first place as being the most important issue of Winnipeggers.

Best Practices

The Public Service's various service areas are either at or moving towards best practices with respect to asset management of the City's infrastructure. Industry standards exist for some service areas but not all.

Replacement Value

The City has calculated the replacement value for much of the City's infrastructure, but currently there are gaps. Over the next year, the City should be in a position to state the replacement cost of the City's existing infrastructure inventory. This would provide additional context to the significance of the infrastructure deficit.

Estimating the Infrastructure Deficit – New 2009 Estimate

In December 2008, the Public Service established an internal cross departmental working group of department heads, managers and specialist to review the condition of the City's infrastructure. This was the first time since SIRP that the departments met to discuss the infrastructure deficit. A consistent methodology was established, significant information sharing occurred and a more complete package was assembled. For example, the working group discussed how the "appropriate asset management condition" was to be determined. This was done by examining best practices, benchmarking against industry standards and determining an appropriate long term condition trend. This appropriate asset management condition is not pristine/new condition – it offers the lowest long-term preservation cost for the infrastructure.

But for illustrative purposes, the infrastructure deficit was calculated in two parts: the working group has estimated the additional funding (over and above the capital budget forecast) required over the next 10 years to maintain the infrastructure at its current condition. It has also estimated the additional funding required to maintain the City's infrastructure at an appropriate

asset management condition which in many cases is above the current condition. Both components together make up the total Infrastructure Deficit.

Existing Infrastructure Deficit (in 2009 dollars)

	Annual Deficit	10 Year Amount
Funding shortfall to maintain Infrastructure at current conditions (2008)	$200 million	$2.1 billion
Additional shortfall to maintain at appropriate asset management condition	$170 million	$1.7 billion
Total Existing Infrastructure Deficit	**$380 million**	**$3.8 billion**

Thus the total infrastructure deficit for the City's existing infrastructure totals $3.8 billion over the next 10 years, calculated in constant 2009 dollars. The table below shows the breakdown by service areas:

Existing Infrastructure Deficit – Detail by Service Areas
Unfunded projects over the next 10 Years, in 2009 $ millions

	Capital	Operating	Total
Bridges	$200	$15	$215
Roads - Regional	$925	$10	$935
Roads - Local & Lanes	$756	$32	$788
Active Transportation	$0	$0	$0
Transit	$75	$25	$100
Parks	$284	$125	$409
Riverbanks	$100	$0	$100
Land Drainage	$238	$0	$238
Flood Protection	$130	$0	$130
Buildings			
- Police	$120	$0	$120
- Fire Paramedic	$23	$0	$23
- Libraries	$19	$0	$19
- Pools, Arenas, Parks, Rec.	$277	$0	$277
- Parkades (3 city owned)	$0	$0	$0
- Administrative Bldgs	$72	$0	$72
Tax Supported Sub-Total	**$3,219**	**$207**	**$3,426**
Water - Treatment	$17	$0	$17
Water - Distribution	$141	$0	$141
Sewage - Collection	$164	$0	$164
Sewage - Treatment	$6	$0	$6
Solid Waste	$10	$0	$10
Utility Sub-Total	**$338**	**$0**	**$338**
Total Existing	**$3,557**	**$207**	**$3,764**

Appendix A helps to define the various service areas.

Financial Impact Statement **Date:** July 2, 2009

Project Name: Infrastructure Deficit

COMMENTS: Received as information

original signed by Radhika Abeysekera
Manager of Finance (Campus)

IN PREPARING THIS REPORT THERE WAS:

Internal Consultation With and Concurrence By:

- **Public Works**
- **Water and Waste**
- **Transit**
- **Community Services**
- **Planning, Property & Development**
- **Police Service**
- **Fire Paramedic Service**
- **Corporate Finance**

External Consultation With:
none

THIS REPORT SUBMITTED BY:

Department: Office of the CFO
Division:
Prepared by: Georges Chartier, City Economist
Report Date: July 2, 2009

File No.

Appendix A

Helping to Define the Services Areas

Service Areas	Components
Bridges	Bridges, structural culverts, overhead structures (signs)
Roads - Regional	Regional, Arterials, regional sidewalks, traffic signals
Roads - Local & Lanes	Local streets, back lanes, alleys, local sidewalks
Active Transportation	Regional bicycle paths / walkways
Transit	Bus purchases, rapid transit, bus shelters, bus garage
Water - Treatment	Water treatment plant, Shoal Lake intake, aqueducts, reservoirs, 3 regional pumping stations and reservoirs
Water - Distribution	Watermains, feedermains, fire hydrants, valves, river crossings
Sewage - Collection	sewermains, interceptors, forcemains, pumping stations, river crossings
Sewage - Treatment	3 sewage treatment plants
Land Drainage	Land drainage sewers, river outfalls, stormwater retention basins
Flood Protection	Primary dike, flood pumping stations
Solid Waste	Landfill
Parks	Regional and local parks, benches, playgrounds, sports fields, boulevards
Riverbanks	Riverbank stabilization along city owned property
Buildings	
- Police	Police stations
- Fire Paramedic	Fire stations, Ambulance stations
- Libraries	Libraries
- Pools, Arenas, Parks, Rec.	Arenas, Assiniboine Park, community centres, day care centres, senior centres, indoor pools, outdoor pools, wading pools, Parks buildings, sport field houses, golf courses
- Parkades (3 city owned)	Parkades, three owned by City
- Administrative Bldgs	Various city owned buildings used as city offices