Minutes – Executive Policy Committee – July 15, 2009

REPORTS

Minute No. 325 City of Winnipeg Municipal Utility
eFile GL-5.6.1

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

The Executive Policy Committee concurred in the recommendation of the Winnipeg Public Service and recommends to Council:

1. That an arm's length 100% city-owned utility corporation that the City cannot sell in whole or in part and ensures the protection of public health and the environment, be established.

2. That the Province of Manitoba be requested to pass a regulation under section 212 of The City of Winnipeg Charter to establish the corporation.

3. That City Council continues to have control over the Utility capital program, similar to the Manitoba Hydro capital governance model.

4. That the Chief Administrative Officer be authorized to enter into an asset management agreement with the utility corporation.

5. That City Council, by resolution, directs the utility corporation to seek Public Utility Board rate approval.

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

Minutes – Executive Policy Committee – July 15, 2009

DECISION MAKING HISTORY:

Moved by Deputy Mayor Swandel,

That the recommendation of the Winnipeg Public Service be concurred in and forwarded to Council.

Carried

The Executive Policy Committee received submissions regarding the proposed City of Winnipeg Municipal Utility from the following:

- Councillor Gerbasi, Fort Rouge - East Fort Garry Ward

The Executive Policy Committee received submissions in opposition to the proposed City of Winnipeg Municipal Utility from the following:

- Derwyn Davies
- Carolyn Garlich, Council of Women of Winnipeg
  and the Provincial Council of Women of Manitoba
- Jesse Hajer, Canadian Centre for Policy Alternatives – Manitoba.
- Mike Davidson, President, Canadian Union of Public Employees (CUPE) Local 500
- Diana Ludwick.
- Dr. Mary LeMaître, Development and Peace
- Barry Hammond
- David Goodwin, Wolseley Residents Association
  and the Social Planning Council of Winnipeg
- Tom Simms
- Paul Hesse, Sierra Club of Canada (Winnipeg Branch)
- Alanna Makinson

ADMINISTRATIVE REPORT

ISSUE: CITY OF WINNIPEG MUNICIPAL UTILITY

Critical Path: Executive Policy Committee - Council

AUTHORIZATION

Author	Department Head	CFO	CAO
M. Geer B. Gray H. Hunter	B. MacBride	M. Ruta	G. Laubenstein

RECOMMENDATIONS

The Public Service recommends that Council approve the following:

1. Establish an arm's length 100% city-owned utility corporation that the City cannot sell in whole or in part and ensures the protection of public health and the environment.

2. City Council requests the Province to pass a regulation under section 212 of The City Charter to establish the corporation.

3. City Council continues to have control over the Utility capital program, similar to the Manitoba Hydro capital governance model.

4. City Council authorizes the Chief Administrative Officer to enter into an asset management agreement with the utility corporation.

5. City Council, by resolution, directs the utility corporation to seek Public Utility Board rate approval.

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

IMPLICATIONS OF THE RECOMMENDATIONS

The implications of this recommendation, to the City are:

1. Using a corporate model for delivery of Utility services will enable the City to maintain and enhance water and waste services to protect public health and environmental stewardship as well as the additional benefits which include:

    - Positioning the Utility for future opportunities such as expansion into new services inside and outside of Winnipeg.
    - More flexibility in dealing with general business issues. Public Sector governance is restrictive leading to less flexibility in dealing with business issues.
    - Board Governance will typically incorporate a wider span of skill sets, from a variety of public and private industries, potentially leading to greater innovation and more objective decision making.
    - The proposed governance process would not be open to risk of influence by political agendas, but rather based on what will achieve best value for money for the utility in protecting human health and the environment.
    - Improved ability to strengthen management of over $1 billion in required upgrades and aid in meeting and maintaining environmental standards on time and on budget.
    - Enhanced transparency and protection of taxpayers through improved rate setting process and reaffirming City Council's September 24, 2008 decision to discontinue transfer of funds from the Utility.
    - Financial sustainability of the utility services as future rate increases will be directly tied to water and waste services.
    - Improved ability to focus solely on the long term sustainability of the municipal utility, respond quickly and make good business decisions faster.
    - Reduced operating and capital costs.
    - Generation of new revenue streams by seeking out opportunities to provide new utility services in Winnipeg and elsewhere, with benefits flowing back to ratepayers.
    - Encourage growth and innovation, resulting in an improved ability to attract and retain specialized utility, professional and technical staff and provide them with a challenging and rewarding work environment.

2. The Utility will realize financial benefits in the long term through business growth as it seeks out opportunities for work outside of the City. Where such retained earning are realized the Utility will be able to reinvest in enhanced services to Winnipeggers.

3. In the short term, operational changes that benefit utility staff, management and citizens will be realized as soon as the utility is established.

4. The arm's length nature of the organization will allow increased accountability but Council involvement in the day to day operation of the utility will be minimal.

5. Any future utility service agreements in the Capital Region or elsewhere would be the responsibility of the Utility and its Board to negotiate and conclude.

6. Future Strategic Partnership negotiations and agreements will be the responsibility of the Utility and its Board to conclude.

7. The Water and Waste utility assets will remain wholly owned by the City of Winnipeg.

8. Staff will be offered the opportunity to move to the new utility corporation. This transition will be managed in accordance with the respective collective bargaining agreements.

9. Decision to establish a100% city-owned Utility Corporation will enhance private sector interest in the strategic partnership model and reduce cost to the City as the private partner will not have to include costs for the risks inherent in dealing directly with a public body.

HISTORY

The City of Winnipeg, in April 2008, engaged Deloitte & Touche LLP (Deloitte) through RFP 222-2007 to investigate the concept of utilizing a Utility Corporation to provide utility services to the citizens of Winnipeg.

In November 2008, the recommendations provided in the Deloitte's Proof of Concept report were presented to Council for their consideration. Following their consideration, Council instructed the Public Service to explore the concept of a City-owned utility as an arm's length business model to operate City owned utilities and report back to Council with a business plan outlining what the utility would look like, how it would operate, and what legislative authorities are required to establish the utility.

The Public Service established a project team to carry out the research necessary to establish what benefits that a City owned Municipal Corporate Utility would deliver and develop a business plan. This report, and the attached business plan, presents the recommendations developed by the project team in consultation with the City's internal departments and independent advisors engaged to provide project specific advice relating to the financial and legal aspects of the project.

FINANCIAL IMPACT

Financial Impact Statement **Date:** June 24, 2009

Project Name: **First Year of Program** **2009**

CITY OF WINNIPEG MUNICIPAL UTILITY

	2009	2010	2011	2012	2013
Capital					
Capital Expenditures Required	$ 500	$ 2,500	$ -	$ -	$ -
Less: Existing Budgeted Costs	500	2,500	-	-	-
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	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Transition/start-up costs to be funded from existing capital budget.

original signed by Moira Geer CA
Department Controller

CONSULTATION

In preparing this Report there was consultation with:

Corporate Finance Department
Water & Waste Department
Corporate Support Services

SUBMITTED BY

Department: Corporate Finance
Division:
Prepared by: Moira Geer CA., Bryan R. Gray LL.B., Henry S. Hunter P.Eng.
Date: June 26, 2009
File No.



Z:\MASTER v Jun26 2009 FINAL.pdf

Municipal Utility Business Plan

26 June 2009



Table of Contents

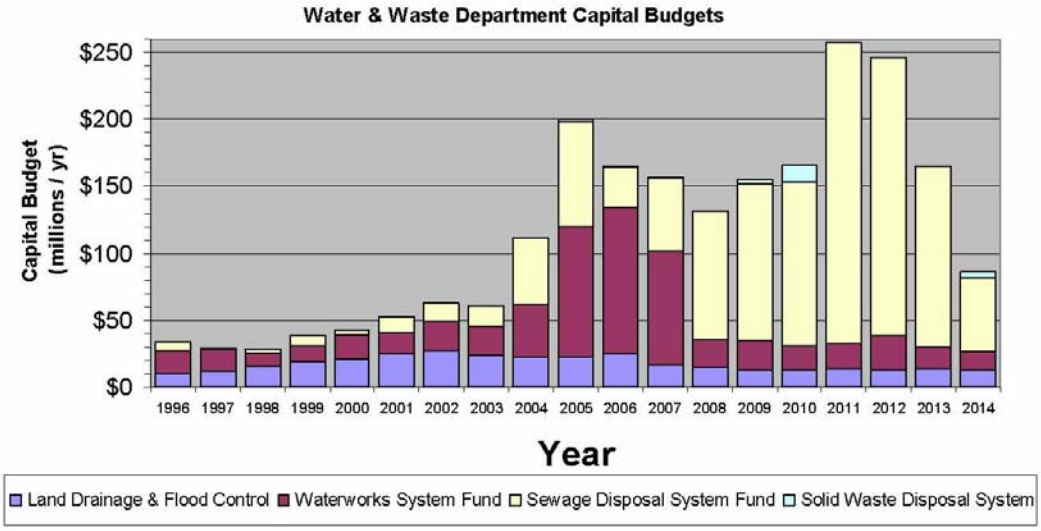
1. Executive Summary 1
2. Concept Overview, Goals, and Value Proposition 7
   2.1 Background 7
   2.2 Concept Overview 8
   2.3 Value Proposition 8
3. Project Approach 11
4. Purpose of the Business Plan 14
5. Overview of Current State 15
   5.1 Public Services 15
   5.2 Rate Setting 18
   5.3 Current Strengths and Weaknesses 19
6. Industry Overview 21
   6.1 Industry Characteristics 21
   6.2 Comparative Structures 22
   6.3 Benchmarking 23
   6.4 Industry Trends 23
   6.5 Environmental Scan 24
   6.6 Critical Success Factors 25
7. Business Model 26
   7.1 Services Description 26
   7.2 Infrastructure Requirements 27
   7.3 Organizational Design and Skill Requirements and Plan to Obtain 29
   7.4 Strategic Partnership 34
   7.5 Requirements for Services from the City 41
   7.6 Marketing and Business Development 45
8. Governance 47
   8.1 Ownership and Form 47
   8.2 Governance 47
   8.3 Board of Directors 49
9. Legal and Regulatory Environment 52
   9.1 Municipal Oversight 52
   9.2 Provincial Oversight 53
   9.3 Federal Oversight 54
   9.4 Rate Regulation 54
   9.5 Mandatory Sewage Treatment Upgrades 55
   9.6 Compliance 56

10. Financial Implications and Results 57
10.1 Historical Financial Information 57
10.2 Transaction to Establish the Utility 59
10.3 Key Assumptions 60
10.4 Impact of the New Structure 62
10.5 Potential Impact on Rate Revenue Requirements 63
11. Accountability/Reporting Framework 67
11.1 Overview of Accountability/Reporting Framework 67
11.2 Key Performance Measures 67
12. Implementation Plan 71
12.1 The Next 90 Days 73
12.2 Three Months to One Year Implementation Plan 74
12.3 Beyond One Year 74
13. Risk Assessment and Mitigation Strategies 75
13.1 Ongoing Risks – Steady State 75
13.2 Transitional Risks 79
14. Advancing the Business Plan 81
APPENDIX A - Summary of Key Assumptions 82
A.1 Overall Financial Analysis 82
A.2 Water Utility: Key Assumptions 84
A.3 Sewer Utility: Key Assumptions 86
A.4 Solid Waste: Key Assumptions 88
A.5 Garbage and Land Drainage: Key Assumptions 90

1. Executive Summary

On November 19th, 2008, City of Winnipeg ("City") Council provided the Public Service with a mandate to explore the concept of a City-owned Utility as an arm's length business model to operate City-owned utilities and report back to Council with a business plan outlining what the utility would look like and how it would operate, and what legislative authorities are required to establish the utility. In parallel, the Public Service was also directed by City Council to conduct a procurement process to secure a Strategic Partner to help deliver the wastewater capital projects.

The Water and Waste Department (the "Department") has an unprecedented capital program – while continuing to re-invest in existing infrastructure, the operations are expanding through construction and operation of a new water treatment plant and expanding wastewater operations to comply with new environmental license requirements. This trend is shown below in the capital budget comparison from 1996 to 2014.



In addition, resource requirements for the planning, design and execution of capital projects and operation and maintenance of new plants are increasing as the new facilities come online.

In light of these unprecedented challenges, the Public Service conducted the tasks delegated by City Council to explore a new management model that:

- Meets the challenges of the $1 billion accelerated capital program that will protect taxpayers and provide greater accountability and transparency; and

- Positions Winnipeg's utility services to move quickly to seize opportunities that will provide benefit to both citizens and the environment.

Recommendations

The research and analysis has shown that establishment of a 100% City-owned, arm's length Municipal Utility (the "Utility") will provide benefits over the existing department model. Therefore, the Public Service recommends the following:

- Establish an arm's length 100% City-owned Utility corporation that the City cannot sell, in whole or in part, and which ensures ongoing protection of public health and the environment.

- City Council request the Province to pass a regulation under section 212 of the City of Winnipeg Charter Act (the "Charter") to establish the Municipal Utility.

- City Council continue to have control over the Utility capital program, similar to Manitoba Hydro's capital governance model.

- City Council authorize the Chief Administrative Officer ("CAO") to enter into an asset management agreement with the Utility.

- City Council, by resolution, direct the Utility to seek rate approval by the Public Utilities Board ("PUB").

- City Council authorize Officers of the City to do all things necessary to implement the intent of the foregoing.

Current State and Challenges

The Water and Waste Department of the City currently provides a broad range of utility services to residents and businesses in Winnipeg, including water and wastewater services, solid waste collection and disposal, recycling, and land drainage and flood control. As evidenced by the significant and unprecedented increase in the capital program, a Municipal Utility model will address the existing and future challenges as well as benefit from future opportunities. Challenges include:

- Projects related to the City's water treatment plant resulted in significant cost overruns that were fully borne by the City.

- Rates for water and sewer services have increased nearly 50% over the past five years.

- Population growth in the south regions of the City is increasing capacity requirements.

- The Manitoba Environment Act requires the City to make upgrades to the City's wastewater treatment plants, which are estimated to cost $650 million, to meet nutrient and bio-solid removal standards mandated by the Province by the fixed dates of December 2012 and December 2014.

- Demographics of the current workforce and the labour force in general will create a human resource challenge. Based on years of service, 28% of the workforce is eligible to retire within four years.

Water and waste operations are unique when compared to other City departments given the dedicated revenue stream and long term nature of its significant capital projects. The arm's length Utility model will provide flexibility not possible in the current City department structure and allow the Utility to tailor its business processes and decision making to fit its needs. As such, the City needs to seek new and improved ways to manage its utility infrastructure and service delivery.

Benefits of a Municipal Utility Model

The benefits of moving to a Municipal Utility model include:

- Positioning the Utility for future opportunities such as expansion into new services within and outside Winnipeg.

- Positioning the Utility to have more flexibility in dealing with general business issues than is provided under public sector governance.

- Board governance will incorporate a wider span of skill sets, from a variety of public and private industries, which leads to greater innovative and more objective decision-making.

- Governance process that will not be driven by political timelines or agendas, but rather based on what will achieve best value for money for the Utility in protecting human health and the environment.

- Improved ability to strengthen management of over $1 billion in required upgrades and aid in meeting and maintaining environmental standards on time and on budget.

- Enhanced transparency of rate setting process and reaffirmation of City Council's September 24, 2008 decision to discontinue transfer of funds from the Utility.

- Financial sustainability of the utility services as future rate increases will be directly tied to water and waste services.

- Improved ability to focus solely on the long term sustainability of the Utility, respond quickly and make good business decisions faster.

- Reduced operating and capital costs.

- Generation of new revenue streams by providing new utility services in Winnipeg and elsewhere with benefits flowing back to ratepayers.

- Encourage growth and innovation, resulting in an improved ability to attract and retain specialized utility, professional and technical staff and provide them with a challenging and rewarding work environment.

Concept Overview

The plan is to establish a wholly owned arm's length Municipal Utility that would serve as an asset manager. The Utility will deliver water and waste services on behalf of the City under an Asset Management Agreement and will receive compensation from the City for the cost of providing the services that the City would have otherwise incurred to deliver the services itself. The cost of providing these services is expected to decrease under the asset management model with net benefit to Winnipeggers. The City will retain ownership of all current Department assets that will be managed by the Utility.

The Utility will be accountable to the City through its governance framework. The Utility will be governed by an independent Board appointed by City Council. City Council would not be involved in the day-to-day operations but would continue to give final approval to the Utility annual business plan and capital budget. The Utility will enter into a strategic partnership to source specialized private sector expertise and allow for risk sharing with the private sector in order to deliver major sewage treatment construction projects.

Under the asset management model, the City will retain rate setting authority, at least for the transition and start-up period. The Utility will also look for opportunities to enhance its rate setting openness and transparency. The rate setting process will benefit through the participation of the Utility's Board, whose members will possess appropriate business and industry expertise. When suitable statutory amendments are achieved, the option of having the independent and provincially appointed Public Utilities Board provide review and approval of utility rates will be implemented.

Business Model

Services. The Utility will maintain and enhance the water and waste services currently provided by the Department to the citizens of Winnipeg today.

Infrastructure. The Utility will gain access to the City's assets through the Asset Management Agreement with the City.

Organizational Design and Skill Requirements. The Utility will build upon the Department's existing organizational structure, adding new positions and responsibilities that reflect new regulatory and business development functions.

The City desires a smooth transfer of staff and will work with the Canadian Union of Public Employees ("CUPE") and the Winnipeg Association of Public Service Officers ("WAPSO") to develop employee transition agreements to outline the specific terms and

conditions under which the transition from the City to the Utility will occur. A joint labour-management committee will be established to negotiate and oversee the transition.

Strategic Partner. The procurement of a strategic partner is currently underway to potentially access global resources, capacity and experience that it can draw on to construct required capital projects and help optimize sewage treatment operations and maintenance as a whole.

Requirements for Services from the City. To deliver core water and waste services, the Utility requires information technology, human resources, finance and customer contact support services. Generally, the current means of providing support services will continue in the Utility model, resulting in the City continuing to provide some services to the Utility and the Utility providing some services with its own internal resources. The provision of these services will be formalized through service level agreements ("SLA's").

Financial Implications

In the short term, the Utility model, including the strategic partnership, can realize financial benefits primarily due to operating and capital cost savings. As well, the Utility model provides the benefit of net incremental revenue. While over time the financial improvements are expected to grow, the impact in the first five years is demonstrated below.

	2009	2010	2011	2012	2013	2014
Expenditure adjustments resulting from new model						
One-time transition costs	$ 500	$ 2,500	$ -	$ -	$ -	$ -
Costs to have rates reviewed by PUB	-	-	-	1,000	1,000	1,000
Savings in operating costs / synergies associated with Utility model	-	(862)	(1,319)	(1,360)	(1,387)	(1,471)
Savings from strategic partnerships – **financing costs**	-	(253)	(623)	(1,336)	(2,325)	(3,317)
Savings from strategic partnerships – **operations**	-	-	-	-	(720)	(720)
Other	458	(90)	(213)	(352)	(513)	(557)
Expenditure adjustments - Subtotal	**958**	**1,295**	**(2,154)**	**(2,048)**	**(3,945)**	**(5,065)**
Incremental revenue resulting from new model						
Incremental revenue – wholesale services to capital region	-	(45)	(230)	(496)	(771)	(1,060)
Available improvements – new model: Dollar costs (savings)	**$ 958**	**$ 1,250**	**$(2,384)**	**$(2,544)**	**$(4,716)**	**$(6,124)**

Implementation Plan

An initial implementation plan to establish the Utility has been developed and broken into three time horizons:

- **The next 90 days** – next steps to complete the development of the implementation plan and lay the foundation for the Utility to be created.
- **Between three months and one year** – pass regulation and complementary statutory amendments; establish the Utility, its management and Board; and begin operations to provide asset management services to the City and explore growth strategies.
- **Beyond one year** – growth strategy implementation and lay the foundation to transition rate setting from City Council to PUB, when suitable additional statutory amendments are achieved.

Risk Assessment

The Utility will have a comprehensive, coordinated and sustainable risk management process that will enable it to proactively and efficiently manage business risks. As an asset management business, the Utility will in some cases manage risks on behalf of the City. Risks and strategies to mitigate these risks have been identified for both ongoing operations and the transition to the Utility. With regards to the transition, the Utility will monitor and mitigate risks associated with the legal and regulatory environment; employee buy-in; public acceptance; financial benefit; and preparedness for the transition. Strong planning, ongoing discussions with regulators, and open and transparent communications will be essential to the success of the Utility

Conclusion

The Public Service recommends the establishment of a 100% City-owned, arm's length Municipal Utility that the City cannot sell in whole or in part. This will benefit citizens, ratepayers, and employees by making service more accountable and transparent, and ensuring the long term sustainability of the Utility.

2. Concept Overview, Goals, and Value Proposition

2.1 Background

The City of Winnipeg's (the "City's") Water and Waste Department (the "Department") currently provides a broad range of utility services to residents and businesses in Winnipeg, including services fully funded by utility rates such as water and wastewater services and services funded either fully or partially by property taxes and other sources of general revenue such as solid waste collection and disposal, recycling, and land drainage and flood control.

The Department is of a significant size, with over 930 budgeted full-time equivalent employees and a 2009 budget of $240 million, including operating expenses and reserves. In addition, some of the City's largest upcoming capital projects are within the Water and Waste Department, required to meet strict new public health or environmental regulations. These required upgrades, at the South End Water Pollution Control Center ("SEWPCC") and the North End Water Pollution Control Center ("NEWPCC"), are estimated to have a capital cost in excess of $650 million in addition to the ongoing annual capital costs.

The Department has faced and continues to face a number of key challenges, including:

- Projects related to the City's water treatment plant resulted in significant cost overruns that were fully borne by the City.
- Rates for water and sewer services have increased nearly 50% over the past five years.
- Population growth in the south regions of the City is increasing capacity requirements.
- The Manitoba Environment Act requires the City to make upgrades to the City's wastewater treatment plants to meet nutrient and bio-solid removal standards mandated by the Province by the fixed dates of December 2012 and December 2014.
- Demographics of the current workforce and the labour force in general will create a human resource challenge. Based on years of service, 28% of the workforce is eligible to retire within four years.

In November 2008, City Council passed a resolution aimed at exploring better ways to manage, upgrade and make the delivery of water and waste services more publicly accountable. This has resulted in the exploration of a new utility management model, where the City will maintain full ownership and control. This model also contemplates the involvement of the private sector as a Strategic Partner to bring innovation and risk management skills to the sewage treatment plant upgrade projects and to bring experience to the design and construction of wastewater treatment facilities.

2.2 Concept Overview

The vision for the new utility management model (the "Utility") is to be an entity owned solely by the City but operated at arm's length from the City. The Utility would be governed by an independent Board appointed by City Council. City Council would not be involved in the day-to-day operations but would continue to provide final approval to the Utility's annual business plan and capital budget. On behalf of the City, the Utility would provide the same services that the Department provides today. Over time, the Utility will generate new revenue streams by seeking out new service delivery opportunities.

The Utility would provide services to the City under an Asset Management Agreement and the Utility would enter into a strategic partnership to source specialized private sector expertise and allow for risk sharing with the private sector in order to deliver major sewage treatment construction projects. The Utility will deliver water and waste services on behalf of the City under an Asset Management Agreement and will receive compensation from the City for the cost of providing the services that the City would have otherwise incurred to deliver the services itself. The cost of providing these services is expected to decrease under the asset management model with a net benefit to Winnipeggers.

The City would retain all assets directly rather than have indirect ownership through the wholly owned City Utility.

Under the asset management model, the City will retain its water and sewer rate setting authority, at least for the transition and start-up period. The Utility will also look for opportunities to enhance its rate setting openness and transparency. The rate setting process will benefit through the participation of the Utility's Board, whose members will possess appropriate business and industry expertise. When suitable statutory amendments are achieved, the option of having the independent and provincially appointed Public Utilities Board provide review and approval of utility rates will be implemented.

An additional statutory amendment is proposed to mitigate risk related to establishing the asset management model. This amendment would provide the Utility and its employees the ability to discharge duties currently imposed on the City and employees and provide the Utility and employees with the same protections for things like entry onto private property and disruption in utility service that the City and City employees currently enjoy.

2.3 Value Proposition

The key goals of the Water and Waste Department include:

- To improve the state of the environment and to improve public health.
- To exceed customer's needs and expectations.
- To increase the efficiency and effectiveness of our services.
- To implement best practices throughout the department.
- To maintain a high quality working environment for staff.

- To improve information management in the Department.

The new model would build upon and enhance current departmental goals and service quality, providing the following benefits:

- **Meet, or exceed, utility service levels and regulatory requirements to protect public health and stewardship of the environment.** The City does not have the resources or capacity to project manage the delivery of the high value and short schedule projects to meet the strict new environmental requirements. The Utility model will increase the likelihood of successfully sourcing specialized expertise from the private sector to ensure all regulatory, construction, design and budget requirements are met.
- **Excellent, responsive service provision.** By having a service provider solely focused on utility service, rather than being one part of the many departments and operations of the City, the Utility will be better positioned to respond quickly and make better decisions regarding operations and service delivery.
- **Cost-effective and financially sustainable utility services.** Revenues will be used to improve services and re-invest in water and waste infrastructure. A capital program will be submitted for ratification by City Council. An Asset Management Agreement will outline the financial relationship between the City and the Utility.
- **Enhanced transparency of the rate setting process.** Future increases will be fully justified through a more transparent rate setting process by City Council, given the inclusion of the Utility's Board. When suitable statutory amendments are achieved, the option of having the independent and provincially appointed Public Utilities Board provide review and approval of utility rates will be implemented.
- **High quality working environment for staff.** Many of the water and waste employees have a high degree of technical training and hold required operator certifications. Demographics of the current workforce and the labour force in general will create a human resource challenge. The Utility model provides additional flexibility to attract and retain specialized utility and other staff with enhanced career opportunities through business growth.
- **Reduced risk on pending major wastewater treatment plant upgrades.** The dollar value and the complexity of the upgrades required to Winnipeg's north and south end sewage treatment plants is significant. The new arm's length management model would facilitate risk sharing/transfer with any potential private sector partner should such an agreement be approved.
- **Incorporation of innovative thinking and methods into the provision of utility-related lines of business.** The Utility will establish a goal of becoming a leader in innovation. Utility service opportunities in Winnipeg and elsewhere will be sought out in order both to create jobs within the operation and to flow benefits back to the City for the benefit of Winnipeggers.

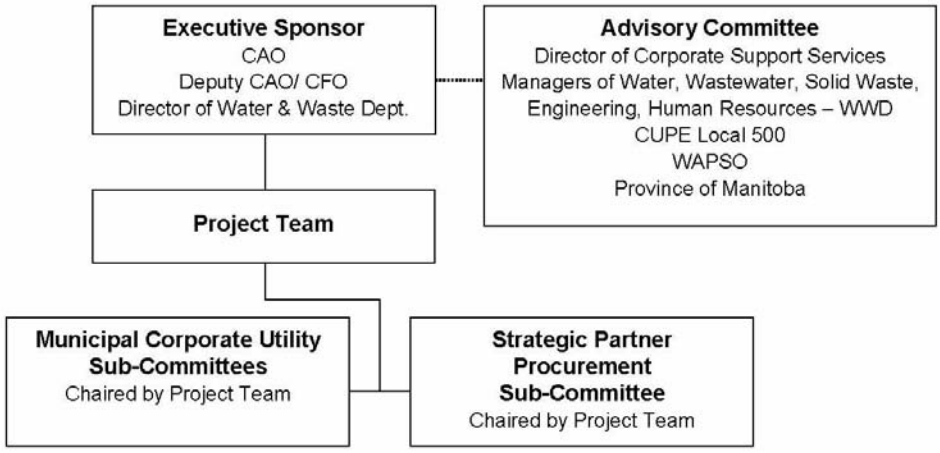
Water and waste operations are unique when compared to other City departments given the dedicated revenue stream and the long term nature of its significant capital projects. The arm's length Utility model will provide flexibility not possible in the current City department structure and allow the Utility to tailor its business processes and decision making to fit its needs. It is anticipated that the new Utility model will reduce overall operating and capital costs over time, and generate new revenue streams in the future that will offer more substantial financial benefits.

3. Project Approach

On November 19th, 2008, City Council provided the Public Service with a mandate to explore the concept of a City-owned utility responsible for water and waste services and report back to Council with a business plan outlining what the utility would look like and how it would operate. In parallel, the Public Service was also directed by City Council to conduct a procurement process to secure a Strategic Partner to carry out upgrades at the South End and North End wastewater treatment plants.

The project structure is illustrated in the following diagram and described in the paragraphs that follow.

Project Structure



The preparation of this business plan document was facilitated by the Project Team. The Project Team reported to an Executive Sponsor Group that included the City's Chief Administrative Officer ("CAO"), the Deputy CAO/Chief Financial Officer and the Director of the Water and Waste Department.

An Advisory Committee was established and included representation from the Canadian Union of Public Employees ("CUPE") and the Winnipeg Association of Public Service Officers ("WAPSO"), the City's Water and Waste Department, other City departments and the Province of Manitoba. The Advisory Committee received regular updates from the CAO and the Project Team throughout the project and provided feedback and advice to the Project Team.

Sub-committees were established by the Project Team for the following areas:

- Operations
- Human Resources
- Finance
- Legal/Governance
- Strategic Partner
- Support Services

The sub-committees reported to the Project Team and were responsible for collecting information, undertaking analysis, generating and reviewing options, and making recommendations to the Project Team. Sub-committee members included Water and Waste Department employees, other City employees, CUPE and WAPSO representation, and the Province of Manitoba.

In addition, specialized expertise was hired to assist the Project Team and the sub-committees in exploring legal and finance issues as required.

The Utility business plan project was launched by the Project Team in January 2009. The work to prepare the business plan was conducted over a period of approximately 6 months.

- While the Strategic Partner sub-committee began its work activities in January 2009 in parallel with the development of the business plan, it is continuing to move forward with the procurement of a Strategic Partner and expects to be in a position to select a Strategic Partner by December 2009 in accordance with its original mandate.

In addition to involving a broad range of key stakeholders in the business plan process through the project structure, the Project Team undertook a number of communication initiatives with stakeholders throughout the duration of the project. The objectives of these communication initiatives were to provide information on the Municipal Utility and solicit stakeholder feedback. Communication initiatives included:

- **Website.** Development of a City-owned Utility website accessible to the public. In addition to providing information, the website includes a "feedback" link where a user can email their comments to project leaders, and also contains a "contact us" link where the user can email the project leaders for additional information.
  - The website was visited 2,233 times from April 12, 2009 to May 31, 2009.
  - 37 emails were sent to the City-owned Utility inbox.
- **Internal Sessions.** The Project Team conducted 15 internal information sessions with Water and Waste and other City department staff – in total approximately 600 staff attended these presentations.

- **Public Consultations.** The Project Team advertised and conducted two public information sessions in June. These sessions provided the public with the opportunity to discuss the Municipal Utility model face-to-face with key City representatives.
- **Publications.** A discussion document titled, "Improving Winnipeg's Water & Sewer Services: A New Management Model for Public Discussion," was prepared and made available to the public online at www.winnipeg.ca and at the public discussions. The document encourages Winnipeggers to share their views by submitting written responses by mail or through the web survey designed for that purpose.

This document represents the Public Service's business plan for the Municipal Utility. The preparation of this business plan was facilitated by the Project Team, and this plan was prepared on a foundation of research and analysis and was shaped by input from key stakeholder groups.

4. Purpose of the Business Plan

This business plan has been prepared to facilitate decision making by the Public Service and by City Council on the establishment of an arm's length Municipal Utility. If Council approves the establishment of the Utility, this business plan identifies the transition and implementation plan to get there.

The Project Team has investigated the benefits of and requirements to transition the Water and Waste Department into an arm's length Municipal Utility. This business plan was developed as part of the Public Service's due diligence process. Based on the research and analysis conducted over a six month period, the Project Team recommends the City move to a Municipal Utility model.

Included in this business plan is an overview of the current Department, a description of the Utility concept and its value proposition, an overview of the industry, a description of the proposed business model including service offerings, the proposed governance model, an overview of the legal and regulatory environment, the financial implications, the proposed accountability/reporting framework, an implementation plan, and a risk assessment.

In summary, the Public Service is requesting approval from City Council to proceed with establishing a Municipal Utility to provide water and waste asset management services.

More specifically, the Public Service is requesting:

- Confirmation of Council's support of the Utility vision and goals as proposed by this business plan.
- Approval to proceed with additional work identified as remaining to be completed in this business plan.
- Approval to proceed with the implementation activities outlined in this business plan.

5. Overview of Current State

The Water and Waste Department is a large civic department of the City of Winnipeg. The Department's legal mandate is derived from the City of Winnipeg Charter Act and its mission is to serve the community by providing and continually improving services related to drinking water, wastewater, land drainage, and solid waste services to the citizens of Winnipeg. The Department is led by the Director of Water and Waste and currently reports administratively to the Chief Administration Officer and politically to the Standing Policy Committee on Infrastructure Renewal and Public Works. City Council has final authority to set water and sewer rates, and to approve by-law amendments which incorporate changes to existing rates for department services.

5.1 Public Services

The Department currently provides the following public services:

- Water supply, treatment, and distribution
- Wastewater collection and treatment
- Land drainage and flood control
- Solid waste collection
- Solid waste disposal
- Recycling and waste minimization

Each of these services is described further in the paragraphs that follow. Most services are provided directly by Department staff. Solid waste collection and recycling are contracted out to private companies, though the Department is responsible for customer service and contract administration.

5.1.1 Water Supply, Treatment and Distribution

The Department provides the citizens of Winnipeg with the supply, storage, treatment, pumping, distribution and metering of potable water in order to ensure a safe and adequate supply of water for residential and commercial use.

The City of Winnipeg gets its water from Shoal Lake, which is on the border between Manitoba and Ontario and covers 277 square kilometres. The intake for Winnipeg's water system is on Indian Bay on the western end of Shoal Lake and is only accessible by rail or boat. Water flows from Shoal Lake to Winnipeg by gravity through a 135 kilometre long aqueduct. The water is stored in Deacon Reservoir, a large reservoir that can hold 8.8 billion litres, enough water to supply Winnipeg for about 20 days. Water passes from Deacon Reservoir to three smaller reservoirs and pumping stations in different areas of the city. The four reservoirs have a capacity of approximately 9.5 billion litres.

In 2007, the Department served over 180,000 residential accounts and over 10,000 commercial and industrial accounts, pumping an average daily volume of water equal to 218 million litres per day.

The 2009 preliminary water supply, treatment and distribution services budgeted total expenditures[1] are approximately $84 million and are supported by water rate revenues. Water services maintains a retained earnings/working capital balance to fund capital projects on a pay as you go basis, as well as to provide a reserve to prevent significant rate increases in the event of major unforeseen expenditures or shortfalls in revenue.

5.1.2 Wastewater Collection and Treatment

The Department provides property owners with the collection, transmission, disposal, treatment and monitoring of wastewater in order to ensure environmentally appropriate handling of high volume sewage discharge.

During the 1930's, in response to public concerns, Winnipeg's first sewage collection and treatment system was constructed with 12 kilometres of collector sewers, 24 pumping stations and the North End Sewage Treatment Plant. Today, the City of Winnipeg has over 2,470 kilometres of pipeline to collect wastewater and operates three sewage treatment plants:

- North End Water Pollution Control Centre ("NEWPCC")
- South End Water Pollution Control Centre ("SEWPCC")
- West End Water Pollution Control Centre ("WEWPCC")

Winnipeg's wastewater collection system includes: combined sewers that collect both wastewater as well as surface runoff from rainstorms and snow melt; interceptor sewers that carry sewage in the combined sewer system to the NEWPCC; separate sewers where one pipe carries wastewater and a second pipe carries land drainage and surface runoff from rainstorms and snow melt; and land drainage sewers that carry rainfall and snow melt runoff from urban areas to the river system through a single system of pipes. Winnipeg's relatively flat terrain makes it necessary to pump wastewater to the interceptor sewers or to the water pollution control centres using lift stations. There are 76 wastewater pumping stations and 10 gravity-based wastewater diversion facilities located throughout Winnipeg.

In 2007, the Department processed over 293.4 million litres per day of wastewater and billed over 190,000 sewer accounts.

The 2009 preliminary wastewater collection and treatment budgeted total expenditures are approximately $108 million and are supported by sewer rate revenues. Wastewater services maintains a retained earnings/working capital balance to fund capital projects

[1] Budgeted total expenditures referred to in this section are sourced from the City's 2009 Preliminary Operating Budget (total expenses) and include salaries and benefits, debt and finance charges and other. The other expenses include items such as transfers to reserves and other service lines, chemicals, municipal taxes, fleet costs, facility charges, etc.

on a pay as you go basis, as well as to provide a reserve to prevent significant rate increases in the event of major unforeseen expenditures or shortfalls in revenue.

5.1.3 Land Drainage and Flood Control

The Department provides property owners with storm and flood water control in order to prevent flood damage to property.

In 2007, Winnipeg had 74 stormwater retention basins and 5 stormwater retention basin pumping stations. The City has 34 permanent flood pumping stations and 47 temporary flood pumping stations.

The 2009 budgeted total expenditures for land drainage and flood control services are approximately $14 million and are supported by wastewater rate revenue.

5.1.4 Solid Waste Collection

The Department provides garbage collection service to all residential locations. Single family locations with manual collection are serviced 50 times per year. Single-family locations with AutoBin collection are serviced on an as-required basis. Multi-family locations are collected either once or twice a week. City-owned facilities and small commercial locations are also eligible for this service on a user-pay basis.

Other miscellaneous services include bulky waste collection, dead animal collection from City right-of-ways and collecting appliances with Freon gas to ensure the Freon is extracted prior to recycling the appliance.

In 2007, solid waste collection service was provided to about 268,000 households and 300 small commercial clients and over 229,000 tonnes of garbage was collected. At December 31, 2007 the City had 9 garbage collection contracts.

The 2009 preliminary solid waste collection budgeted total expenditures are approximately $16.7 million and are primarily tax supported.

5.1.5 Solid Waste Disposal

The Department provides solid waste disposal services that conform to environmentally sound waste management practices. The Brady Road Landfill is the only active landfill in the City of Winnipeg which takes all of the residential and some of the commercial garbage (the remainder is disposed at private landfills in the Capital Region). The landfill is open every day of the year except for Christmas, New Years and Remembrance Day. This service also includes the maintenance and environmental monitoring of the 34 closed landfills within the City.

In 2007, the City disposed of 577,000 tonnes of solid waste. In 2007, the City had about 430 landfill accounts and 1,660 small commercial billings.

The 2009 preliminary solid waste disposal budgeted total expenditures are $8.6 million funded primarily through service revenue. The solid waste utility attempts to maintain a retained earnings/working capital balance to fund major unforeseen expenditures or shortfalls in revenue.

5.1.6 Recycling and Waste Minimization

The Department provides recycling services to residential locations, offering single family locations collection service 50 times a year. Multi-family locations have the option of cart or bin collection once per week. City-owned public facilities such as swimming pools and community clubs are also eligible for this service.

The recyclables are taken to a facility and separated into the various material types and sold. The Province of Manitoba, through the Manitoba Product Stewardship Corporation ("MPSC") funds 80% of the net cost of this service, based on a three year rolling average cost.

Other related waste minimization services include the Leaf-It depots, Chip-In depots, a back yard composting program and 7 general use recycling depots around the City.

Programs related to household hazardous waste and used oil recycling are provided by the Province of Manitoba.

In 2007, the City served approximately 268,000 households and collected 44,000 tonnes of residential recycling material.

The 2009 budgeted total expenditures for recycling and waste minimization are $11.2 million, supported by MPSC, the sale of recyclables and service revenues.

5.2 Rate Setting

The Department's current rate setting process for water and sewer services requires the generation of ten year projections that are reviewed annually. The projections include operating, capital, and capital reserve requirements. The projections are reviewed by the Standing Policy Committee on Infrastructure and Public Works. The projections and proposed rate changes, along with any proposed changes to fees and charges for related services such as water tank rental or leak testing, are forwarded to the Executive Policy Committee for review and approval. Once approved by the Executive Policy Committee the proposal is forwarded to City Council for approval.

The following principles are currently used to set water and sewer rates:

- **Self-Supporting.** Water and wastewater services do not receive subsidies from the mill rate.
- **Cost of Service.** Rates represent the operating and capital costs of providing water and wastewater services.

- **Working Capital Reserves.** Water and wastewater services maintain working capital reserves to protect their financial position and prevent significant rate fluctuations. On an annual basis, the Department strives to maintain a minimum combined working capital position of 11% of combined water and wastewater service revenue.
- **Ten Year Horizon.** Rates for water and wastewater services are planned over a ten year timeframe to mitigate the effects of year over year fluctuations and to coincide with longer term infrastructure development and renewal planning.
- **Infrastructure Renewal.** Watermain renewal and sewer system rehabilitation reserves were established to provide a consistent approach to financing infrastructure renewal. Reserve contributions are based on an asset management strategy developed by the Department and approved by City Council through the capital and operating budget process.
- **Transfers to Land Drainage and Fire Protection.** Water and wastewater services transfer funds to support the costs of the Land Drainage program and to maintain hydrants for fire protection.
- **Capital Reserve Funds.** Reserves are established to fund major capital projects. For specific and cost intensive projects, the Department's strategy is to fund a portion of the project through reserves and a portion through debt financing to facilitate an equitable approach for short and long term funding.

5.3 Current Strengths and Weaknesses

The Department today has a skilled, knowledgeable, experienced workforce. The Department is committed to professional development and many of the existing employees have specialized operations training, certifications, licenses and designations. The Department has developed and maintained positive relationships with regulatory officials. In addition, the Department has established good working relationships with other City departments and divisions. The Department places a strong focus on customer service, and operates with strong business acumen like a competitive provider rather than like a monopoly. The Department is well positioned for the future given investments in its information systems including its work management system, billing system, supervisory control and data collection systems, environmental management systems, and emergency preparedness plans. As well, accreditation of the laboratory ensures high quality data and accountability.

Going forward, the Department will be challenged by an aging workforce moving toward retirement and a smaller, more competitive labour market from which to recruit. Succession planning will become increasingly important given the workforce demographics. While the Department has strong operational skills today, it does not have the resources, or capacity, to manage high value, short schedule projects like those required to meet new stringent environmental requirements. As a City department, competing priorities from groups external to the Department can make it difficult to focus on Department priorities. Working within the constraints of the City's bureaucracy can be administratively burdensome and can result in a slow response to change. The Department relies on certain other City departments for certain services. As these service arrangements are not governed by service level agreements, they are

not always provided in a timely manner due to constraints on these other departments. In addition, the Department's ability to grow revenue and further leverage economies of scale is restricted based on population and economic growth in the City.

The Utility will build upon the current strengths of the Department. The Utility's operating model and implementation plan will address the Department's weaknesses and create an entity that is stronger, more responsive, transparent and sustainable.

6. Industry Overview

6.1 Industry Characteristics

6.1.1 North America

The water and wastewater industry is one of the oldest industries in North America. The structure of this industry is very fragmented and dominated by municipal systems. The primary business of a water utility is to collect, treat and distribute potable water to customers. Generally in North America, each state/province's public utilities commission gives a water utility the exclusive rights to service all customers in a designated area.

In North America, the water supply and treatment industry comprises numerous segments, with wastewater treatment, water supply distribution systems and water infrastructure accounting for a majority of the market. Other sectors of the water supply and treatment market include water infrastructure construction, water treatment equipment, water treatment chemicals, and contract operations and maintenance.

6.1.2 Canada

The water utilities industry can be defined as consisting of all water that is collected, treated and distributed to end-users. [2] The revenue generated by the Canadian water utilities industry is estimated to be $44 billion in 2007 using average annual end-user prices alongside consumption volumes. [3] The Canadian water utilities industry is forecasted to grow by 7.8% to reach a value of $47.4 billion in 2012.[4]

A vast array of companies provides products and services toward the collection, conveyance, treatment and monitoring/analysis of water and wastewater for multiple purposes and end-users. End-users in the residential, industrial and other sectors are viewed as buyers. Industrial use represents almost 88% of the water industry, followed by residential use at 11%, and agriculture use at 1.2%.

[2] Datamonitor, "Water Utilities in Canada," September 2008.
[3] Datamonitor, "Water Utilities in Canada," September 2008.
[4] Datamonitor, "Water Utilities in Canada," September 2008.

6.2 Comparative Structures

There is significant diversity in the types of delivery models used to provide water and wastewater systems and services in North America. Water supply in Canada may be provided by municipal departments/utilities, corporate utilities or public-private partnerships. A variety of structures have been used, reflecting differences in legal and regulatory environments. Some examples of municipal structures follow[5].

City	Business Model	Ownership (infrastructure)	Operator (infrastructure)	Operator's legal status	Legal framework	Owns shares	Rate approval
Municipal Operating Agency							
Toronto	Municipal Department	Municipal Government	Municipal Board and Council	Public Agency	Public	n/a	City council
Peterborough	PUC (hybrid)	Municipal Government	Delegated to PUC by municipal corporation	Public Agency	Public	n/a	City council
Kingston	Municipal Corporation	Municipal Government	PLC as permanent concessionaire	Corporation	Corporate	Local Government	City council
York	Municipal Utility	Municipal Governments	Region Committee and Department	Public Agency	Public	n/a	City council
Waterloo	Regional Government	Regional Government	Regional Committee and Department	Public Agency	Public	n/a	Regional council
Halifax	Regional Utility	Regional Government	Regional Committee	Corporation	Corporate	Local Government	Nova Scotia Utility and Review Board
Delegated Management							
Hamilton	Private Operator 1994-2004	Municipal Government	Temporary private concessionaires	Corporation	Corporate	Private Shareholders	City council
Peel	Private Operator (OCWA)	Municipal Government	Provincial Crown Agency as temporary concessionaire	Public Agency	Public	n/a	Regional council
Edmonton	Municipal Corporation (EPCOR)	Municipal Government	Independently operated	Corporation	Corporate	Local Government	City council (Edmonton) and Alberta Utilities Commission (outside of Edmonton)

Source: Adapted primarily from (Bakker, 2003a; Bakker & Cameron, 2002), Environment Canada (2001); www.region.waterloo.ca; www.region.york.on.ca; www.halifax.ca/hrwc; utility websites

Water utilities hold local monopolies and industry entry generally requires a new player to bid successfully for a contract with the relevant local authority to supply its geographical area rather than by attracting end-users directly.

[5] Municipal water supply infrastructure governance in Canada," Program on Water Governance website, http://www.watergovernance.ca/municipal/data.htm, accessed 28 April 2009

6.3 Benchmarking

Benchmarking is becoming an increasingly important component of performance management for many Canadian utilities. Through projects such as the National Water and Wastewater Benchmarking Initiative, municipalities have been able to benchmark metrics, identify and share best practices, and exchange ideas about utility management. The National Water and Wastewater Benchmarking Initiative has grown to include more than 40 of Canada's municipal and regional water, wastewater and stormwater utilities from coast to coast. The Utility will participate in relevant initiatives and benchmark its performance appropriately.

6.4 Industry Trends

Key industry trends are described in the paragraphs that follow.

Aging Infrastructure. Substantial portions of North American water systems are between 50 and 75 years old and aging infrastructure will be expensive to replace. Water lost from leaking, old pipes is costly and water main breaks disrupt service. A 2007 FCM-McGill survey estimated Canada's municipal infrastructure deficit for water supply, wastewater and storm water to be approximately $31 billion.

Increasingly Stringent Regulations. Public health and environmental regulations for water and waste services are becoming increasingly stringent and require significant investment in infrastructure to achieve.

Increasing Water Quality Standards. Increasingly stringent regulations pertaining to water quality will require new capital investment by the industry. Water quality issues and requirements in Canada vary by region.

Rapidly Rising Costs. In addition to significant costs to replace or upgrade existing infrastructure, the industry faces additional costs. Water and waste utilities face increases in labour, pension, and other employee related costs. Some companies also face higher energy and purchased water costs. Utilities must be able to restrain operating costs. Typically, regulators determine which costs are appropriate to recover through rate increases.

Increased Outsourcing. Water and wastewater treatment outsourcing is a growing trend and can be accompanied by acquisition. Market research firm Frost & Sullivan projects that water outsourcing services to the North America industrial market could grow at an annual rate of 10.5% through 2011. Some Canadian examples include:

- EPCOR Utilities ("EPCOR") has an agreement to provide wastewater treatment services to the Town of Banff, Alberta. EPCOR will operate and maintain the plant, and the town will retain ownership. This agreement is one example of small water systems operated by EPCOR on an outsourced basis.
- Seprotech Systems, Inc., a provider and operator of pre-engineered water and wastewater treatment facilities for land developers, and military and industrial markets, has acquired Envirosearch Operations Inc., an Ontario operator of water and wastewater treatment plants.

Increased Security Costs.[6] The industry is investing substantial sums to increase security at plants and reservoirs to guard against chemical or biological contamination of drinking water supplies. Expenditures include surveillance, monitoring technology, emergency response and cybersecurity.

Implementation of Smart Metering[7]**.** Smart meters and related applications provide for the exchange of data between the utility and the customer. Automatic meter reading ("AMR") helps a utility reduce the cost of collecting usage data for billing. Advanced meter infrastructure ("AMI") is able to identify potential pipe leaks before they occur, enabling better management of the distribution network and avoiding costly repairs following a water main break. Other benefits of AMI include improved water conservation, customer service and utility asset management. Implementation of AMR or AMI is a significant expense.

Water Conservation.[8] The Canadian Water and Wastewater Association is one of several entities that promote more efficient usage of water resources. Drought and other catastrophic weather-related events can affect water supply and lead to government-mandated conservation.

6.5 Environmental Scan

Several key strategic issues and implications for the Utility have been identified through a scan of the external environment and are described in the paragraphs that follow.

Escalating Costs. The Utility has an abundant, nearby source of water and does not need to be concerned about escalating costs of water procurement. Electricity can also be a major cost to a utility as a significant amount of power is required to operate the water and wastewater system. Winnipeg benefits from attractive electricity rates from Manitoba Hydro. However, the Utility could be impacted by potential escalation in other operating costs such as wages, pensions, security, chemicals, etc. A risk associated with rising costs is whether service rates can be adjusted to fully reflect these rising expenses.

Infrastructure Investment. Costly infrastructure upgrades, repairs and replacements will continue to be required by the Utility. Significant investment is required to meet strict new public health and environmental regulations. These upgrades will consider advanced technology which should result in greater efficiency.

Outsourced Operations. Manitoba has 400 public water systems, 1,500 semipublic systems and 35,000 private systems. The trend toward outsourced operation of smaller water delivery and treatment systems could be an opportunity for the Utility.

---

[6] City of Winnipeg Water Supply System 2007 Annual Report, March 31, 2008.
[7] Jim Bentein, "Smart Metering technology Developer Sees Growth," Energy Analects, September 8, 2008, copyright Nickles Energy Group.
[8] Canadian Water and Wastewater Association website, www.cwwa.ca

Consolidation. Across North America, the fragmented water services sector is undergoing consolidation. For example, American Water, based in New Jersey, is an investor-owned water and waste utility that already provides service to communities in Canada and also offers contract operations for municipalities. The Utility could play a role in consolidation, or alternatively, could find itself competing with another large water and wastewater provider.

New Services. Homeowners own the water pipe from the property line to the dwelling and are responsible for any repairs. Some utilities with service units have used this as an opportunity to sell insurance to protect the customer from potentially expensive repairs.

Industry Investment. Throughout North America, the value of water is expected to increase due to growing demand and relative scarcity, particularly in some regions. Investors are becoming increasingly interested in the sector and established players are looking for opportunities to expand. While the Utility will be 100% owned by the City of Winnipeg, there will be an opportunity for strategic partnerships, including new business lines to be added in the future.

6.6 Critical Success Factors

Critical success factors ("CSF's") are the skills, resources and activities that a business must excel at to be successful in the marketplace. Based on an examination of the industry, the following are CSF's for the water and waste industry:

- Protection of public health and the environment.
- Strong technical and management abilities.
- Strong planning skills, given the long term nature of the assets.
- Management of capital programs – both construction and operation.
- Appropriate infrastructure.
- Adequate capacity/supply.
- Efficient operations.
- Transparent and accountable operations.
- Sustainable financial management.
- Appropriate cost allocation methodology.

The Utility will develop implementation and strategic plans that take into account the industry landscape. The Utility will monitor the industry on an ongoing basis to identify emerging strategic issues and their implications and will reflect these appropriately in its plans.

7. Business Model

7.1 Services Description

The Utility will maintain and enhance the water and waste services currently provided by the Department to the citizens of Winnipeg today. These services are:

- Water supply, treatment, and distribution
- Wastewater collection and treatment
- Land drainage and flood control
- Solid waste collection
- Solid waste disposal
- Recycling and waste minimization

Water services will be provided directly by the Utility. Wastewater services will be provided by the Utility and/or in conjunction with a strategic partner engaged in a long term contract with the Utility.

In addition, the Utility would generate new revenue streams by helping communities outside of Winnipeg with service delivery, including providing staff training. The provision of services to other municipalities where a business case exists will allow the Utility to leverage the City's asset base and will provide an alternative to municipalities requiring significant investment in aging infrastructure or lacking specialized skills and resources. During the transition/implementation period, the Utility will determine how best to expand services within its legal framework and provide a net financial benefit to the Utility.

The Department has had ongoing discussions with municipalities in Winnipeg's Capital Region (the "Region") regarding the provision of water and waste services. The Region is located along the Assiniboine and Red Rivers with the northern part of the region bounded by the south basin of Lake Winnipeg. The Region is made up of the City of Winnipeg, the City of Selkirk, Town of Stonewall and the rural municipalities of Cartier, East St. Paul, Headingly, Macdonald, Ritchot, Rockwood, Rosser, St. Andrews, St. Clements, St. Francois Xavier, Springfield, Tache and West St. Paul.[9] The municipal arm's length utility model positions the Utility to continue to move these discussions forward and provide services to these municipalities in a business like manner. During the transition period, the Utility will determine how to expand services within its legal framework.

In the near term, the Utility could provide wholesale water and/or sewer services to the Region. While preliminary estimates include mainly communities North of Winnipeg, there would be further revenue potential via increased service offering or greater geographical expansion. Service expansion is discussed further in section 7.6 and financial implications are discussed in section 10.0 of this business plan.

[9] www.communityprofiles.mb.ca

The Utility will also pursue growth by exploring innovative new lines of utility related business such as municipal green energy where market demand is found to exist. Other lines of utility like business will be considered and may include: commercial and residential use of geothermal energy; capture and utilization of land and biogas for heating and or power generation. In addition to increasing the Utility's revenue base, these lines of business could contribute to City and Provincial efforts to reduce greenhouse gas emissions. New lines of utility like services may evolve in the future. These services will be explored while the Utility is being established. The new management model will have a business development office that will identify, qualify and pursue new lines of business.

7.2 Infrastructure Requirements

The establishment of the Utility is contingent on having access to certain assets which are owned by the City. The Utility will gain access to these assets through an Asset Management Agreement with the City.

Current Infrastructure and Capital Assets

The existing capital assets of the Water and Waste Department are generally comprised of long life assets. The net book value of these assets, as at the fiscal year ended December 31, 2008, are summarized in the table below.

CITY OF WINNIPEG
WATER & WASTE DEPARTMENT
CAPITAL ASSETS (in $000s)

For fiscal year ended December 31, 2008
Net Book Value

	Solid Waste	Sewer	Water	Land Drainage & Flood Control	Total
Land & Improvements (Non-Depreciated)	541	1,451	1,824	489	4,305
Land Improvements (Depreciated)	503	-	-	-	503
Building & Improvements	-	333	3,838	-	4,172
Water & Waste Facilities	-	720,123	521,932	724,494	1,966,549
Machinery & Equipment	3,380	219	1,172	-	4,771
Studies	-	3,118	5,012	1,772	9,902
Information Technology	88	190	300	1,095	1,673
Construction in Progress	4	29,287	254,099	1,632	285,022
	4,516	**754,722**	**788,176**	**729,483**	**2,276,897**

The Solid Waste assets include: the Brady Road landfill site; Brady Road buildings; weigh scale; recycling carts and bins; the landfill billing system; and the landfill monitoring information system.

The Sewer assets include: lift stations; Supervisory Control and Data Acquisition ("SCADA") systems; the North, West and South End Water Pollution Control Centers; and the collector, interceptor and forcemain network of pipes; catch basins; outfalls and manholes.

The Water assets include: the water treatment plant; pumping station sites; the aqueduct; railway and railway equipment (locomotives and rolling stock) to access the Shoal Lake aqueduct location; storage reservoirs; workshop, storage and garage buildings; feedermain network of distribution pipes, valves and pumps; and the aqueduct monitoring, computerized work management, computerized information and billing, and geographical information and SCADA systems.

The Land Drainage and Flood Control assets include: the flood pumping station, land drainage and retention basin sites; and the collector network of pipes, drains, valves and pumps.

Key Infrastructure Requirements and Plan to Obtain

Many of the assets and infrastructure are inter-related and will need to continue to operate in concert with each other. Some assets, such as certain portions of the sewer infrastructure provide both wastewater collection services as well as land drainage services since the sewers are combined.

As noted, the Utility will gain access to the assets through an Asset Management Agreement. Key characteristics of the Asset Management Agreement include:

- Definition of the contractual arrangement between the Utility and the City.
- Definition of the services that the Utility will provide to the City and how these services are to be provided, including:
  - Providing water and waste operations currently provided by the Department today.
  - Overseeing reconstruction and maintenance projects.
- Establishment of limits on use by the Utility of the City's assets.

The infrastructure and assets required to maintain and enhance the water and waste services currently provided by the Department to the citizens and businesses of Winnipeg today have sufficient capacity to serve communities outside Winnipeg. As such, there is minimal need for additional assets to realize new revenue streams by serving communities outside Winnipeg.

However, certain new lines of utility related business such as municipal green energy, commercial and residential use of geothermal energy, capture and utilization of land and biogas for heating and or power generation, will require additional assets and infrastructure. These requirements will be identified as part of the development of the business case and plan for these new lines of business.

The Department also utilizes assets of other City departments. The City's centralized Fleet Management Services supplies and maintains the vehicle needs of all City departments. As such, the Department does not currently own or lease any vehicles directly. These assets will continue to be accessed by the Utility, through a service level agreement with the City.

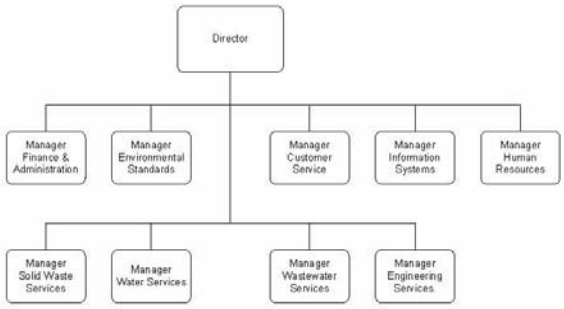
7.3 Organizational Design and Skill Requirements and Plan to Obtain

7.3.1 Current State Overview

The Department today is led by a Director and the existing management structure is illustrated in the diagram that follows.

Water and Waste Department

Management Structure



The Department had 827 active employees as of April 2009, with 88% holding permanent positions.[10] The table that follows lists employees by function type, by service area.

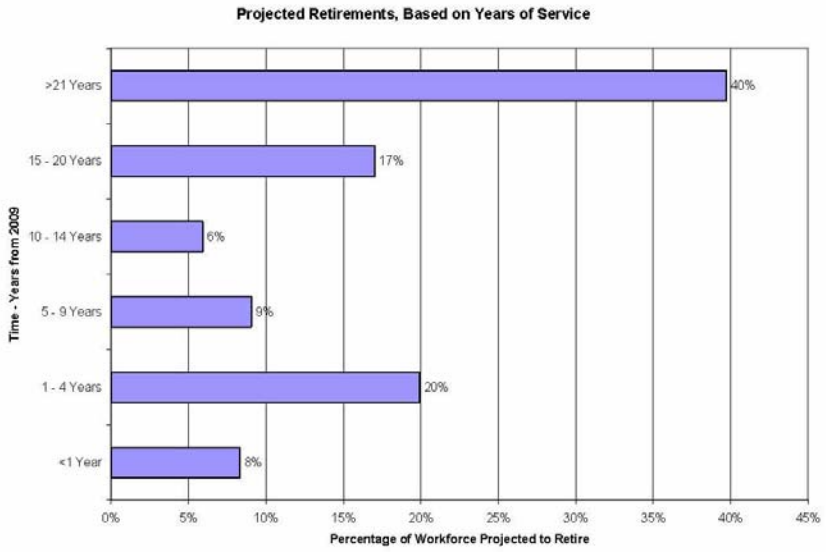
Employee Count		Active				
		Clerical	Labor	Middle/ Senior Mgmt	Trades/ Technical	Total
WW-UTILITIES CAPITAL	WW-UTILITIES CAPITAL	5	0	2	0	7
WW-OPERATIONS	WW-WASTE WATER SERV	0	134	27	67	228
	WW-WATER SERVICES	5	109	25	98	237
	WW- FINANCE & ADMIN	72	1	19	10	102
	WW-ENGINEERING	4	0	38	50	92
	WW-ENVIRONMENTAL	0	2	5	29	36
	WW-CUSTOMER SERVICES	34	0	7	0	41
	WW-INFO SYSTEMS	0	0	18	0	18
	WW-HUMAN RESOURCES	19	0	3	1	23
	WW-SOLID WASTE	0	37	4	2	43
	WW-OPERATIONS	134	283	146	257	820
Water & Waste		139	283	148	257	827

The majority of the Department's employees are union represented with approximately 83% of active Department employees represented by CUPE, and approximately 15% represented by WAPSO.[11]

[10] W&W Department Demographic Employee Data as of April 9, 2009.
[11] W&W Department Demographic Employee Data as of April 9, 2009.

While the Department has 827 active employees, the approved Department budget is for over 900 full-time equivalent employees. The majority of the vacancies are for water and wastewater services. Some of the difference between the number of approved positions and the number of actual positions is due to expected ramping up to staff the water treatment plant (timing difference). The remainder of the difference is due to challenges recruiting skilled trades and technical/professional people in a competitive labour market, existing recruitment processes, and availability of support services staff to dedicate to the process.

The aging demographics of its workforce and an industry shortage of skilled professional and technical staff in the water and waste industry nationally is creating a human resource challenge for the Department. Based on years of service (30 years), 8% of the current active workforce is projected to retire within a year, and an additional 20% is projected to retire in the next 1 to 4 years.



The Utility will be well positioned to address current and future human resource challenges.

7.3.2 Organizational Structure

The Utility will build upon the Department's existing organizational structure, potentially with new functions to address new responsibilities within the Utility such as new regulatory and business development functions. The Board will be responsible for approving the organizational structure.

7.3.3 Key Roles – New and Revised from Current State

The following paragraphs identify key positions that are new from the current state.

Chief Executive Officer ("CEO") – The CEO is the senior executive of the Utility, responsible for:

- Developing and recommending to the Board a long-term strategy and vision for the Utility that leads to the creation of value for the City of Winnipeg.
- Responsibilities held by the Director of the Water and Waste Department will be incorporated into this role.

General Counsel – the General Counsel is a member of the senior management team, responsible for:

- Providing leadership and strategic legal and business advice in the areas of corporate and regulatory compliance, corporate governance, and corporate finance.
- Working with the senior management team to provide solutions to legal issues identified in contractual negotiations and on-going programs and developing risk mitigation strategies as appropriate.
- Drafting, structuring, reviewing and negotiating strategic and complex agreements and transactions, including partnerships and acquisitions.
- Evaluating, selecting and monitoring outside legal counsel as needed.
- Organizing the Utility's Board, Committee and General meetings.
- Assisting with the preparation of rate applications and participating in hearings, when applicable.

Business Development, Manager – This position will be responsible for:

- Developing marketing and business development plans for the Utility, including setting annual business objectives. Plans will include expansion of existing services to new geographical markets, and over time will include the addition of new lines of business.
- Working closely with other senior management team members to ensure business development plans and operational plans are coordinated.
- Exercising regular oversight of marketing and business development plans.

7.3.4 Competency Requirements

The Department today has the majority of the knowledge, abilities, personal attributes and skills that are required by the Utility, including:

- Leadership
- Industry knowledge
- Operational skills and certification
- Administration
- Customer service
- Asset and resource management, including managing capital programs
- Planning and forecasting

There will be a need to acquire, develop and identify certain new or enhanced competencies that will be critical to allow the Utility to achieve its objectives. These additional key competencies are described in the following paragraphs:

- **Change leadership** – Ability to challenge the status quo and champion new initiatives; facilitate the change process and help others see the necessity and value of change; and proactively manage implementation. Anticipate and deal effectively with resistance to change. Build buy-in to change by preparing those affected. Set a positive and inspirational example for others.
- **Working with regulators** – Knowledge of all legislative and regulatory factors central to the industry, and how these affect the Utility's environment, strategy and processes. Ability to work with regulators (e.g. PUB) and establish appropriate processes when applicable.
- **Management of partnerships/alliances/joint ventures** – Knowledge of the business drivers and current developments in the establishment of partnerships/joint ventures/alliances with the industry. Ability to negotiate structure and monitor these arrangements to leverage expertise, creditability, technology and allow for risk sharing and increased market penetration.
- **Market expansion** – knowledge of how to introduce and position services successfully in new markets.
- **New business development** – Ability to conceive, develop and introduce a new line of business (includes market investigation and technical and financial feasibility studies).

7.3.5 Employee Transition Process

The City of Winnipeg's intent is to transition existing Department staff to the Utility. In the near term, pending statutory amendments, certain staff may need to be transitioned from the City in phases.

When the Utility becomes subject to PUB rate regulation, the Utility will require additional employees to assist in preparing rate applications, respond to PUB requests for information and prepare for hearings. As the Utility explores new markets and business lines, it is anticipated that the need for staff will grow over time, creating new career opportunities for current and future employees.

The City desires a smooth transfer of staff and will work with CUPE and WAPSO to develop employee transition agreements to outline the specific terms and conditions under which the transition from the City to the Utility will occur. The transition will be guided by the following principles:

- Provide employment to all existing Department staff.
- Respect the rights and privileges of employees granted by existing collective agreements. Any amendments to collective agreements would require mutual agreement.
- Maintain existing seniority, salaries and hours of work.
- If required, negotiate with providers to provide same or equivalent pension and benefit plans where possible.

Another component of the transition will be the development and implementation of a communications plan. The communications approach will include utilizing varying channels to provide information, deliver key messages, and obtain employee feedback.

The Department's employees, will over time, become employees of the Utility, with as seamless a transition as possible. New position descriptions will be prepared to reflect the Utility's structure, terminology, goals and strategies.

The Utility's Board will be responsible for hiring the CEO. The CEO's responsibilities will include performance management of the senior management team, including hiring for new senior management positions.

The City will establish a joint labour-management committee to negotiate a seamless employee transition.

7.3.6 Additional Transition Items

A phased approach will be taken to the transition. In the transition period, the Utility will prepare a transition management plan that will identify all transition activities, requirements for resources, budgets, and timing. The plan will:

- Ensure sufficient communication methods are established so that all staff are able to access transition information and have a forum for asking questions.
- Prioritize transition initiatives.

As the Utility becomes established, it will review its human resource policies and procedures and identify where they can be tailored to better reflect the uniqueness of the business and operations, rather than the broader needs of the overall City. The Utility will look to adapt its training, recruitment and compensation processes for increased

effectiveness and efficiency. In doing so, the Utility will have improved flexibility and an enhanced ability to attract and retain specialized utility and other professional staff.

7.4 Strategic Partnership

Irrespective of whether water and waste services are delivered in the future by the existing Department or through a Municipal Utility model, the City is pursuing a strategic partnership for the delivery of sewage treatment upgrades and expansions. The City desires access to global resources, capacity and experience that it can draw on to construct required capital projects and help optimize sewage treatment operations and maintenance as a whole.

While a strategic partnership could be formed with either a Municipal Utility or a municipal department, the Municipal Utility model offers the following advantages:

- Procurement procedures more customized to the Utility's needs make pursuing a partnership more attractive to the private sector and also enable delivery of the capital program to start quicker.
- The Utility's objective of service expansion will provide an opportunity for the strategic partner and help attract high calibre interest.
- The business to business nature of the relationship will be free from politics and more attractive to prospective partners.

7.4.1 Reasons for a Strategic Partner

The environmental license for the SEWPCC and NEWPCC requires that both of these sewage treatment facilities be upgraded to provide full biological nutrient removal ("BNR") by the end of 2012 and 2014 respectively. It is currently anticipated that the cost for expansions, upgrades and other associated work required to the City's sewage treatment facilities will be approximately $650 million based on using individual traditional Design Bid Build ("DBB") delivery models.

The expansion and upgrade requirements for the SEWPCC have been fully defined and could be delivered using a traditional Design Bid Build project delivery model or a Public-Private Partnership ("P3") model such as Design Build Finance Operate. However, the expansion and upgrade requirements for the NEWPCC have not been fully defined and work is ongoing to develop an implementation plan. The status of the NEWPCC planning and current lack of project definition make the use of the traditional DBB or P3 project delivery models risky due to cost and schedule uncertainty.

The Department does not currently have the specific process design experience or project management and engineering capacity to deliver these significant capital asset expansions and upgrades within the required timeframes. In addition, the Department's previous experience with the delivery of large capital projects using the traditional DBB method has resulted in significant cost increases ensuing from design omissions and changes in market conditions between design completion and construction commencement.

The sewage treatment plants and wastewater collection network are an integral part of the City of Winnipeg's flood defence system. The operations of the three sewage treatment plants should therefore, be under the control of a single operator to assure the effectiveness of the flood defence systems when required. The integrated nature of the wastewater collection and sewage treatment systems makes independent operation of each of the treatment plants complex and impractical.

Addressing these challenges requires a delivery model that enables:

- Simultaneous delivery of multiple projects.
- Predictable outcomes with respect to final cost and scheduled completion.
- Cost effective accommodation of an evolving scope of work.
- Access to additional qualified and experienced technical and project management resources to augment existing technical staff for the duration of the upgrade and expansion projects.
- Maintenance of operational control and retention of existing operations staff.

A partnership between the Utility and a Strategic Partner is considered to be the most appropriate delivery model to achieve these objectives. This model will have to be collaborative and integrated so that the designers, constructors and operators are part of the project delivery structure to maintain quality and operability of the upgraded and expanded treatment plants.

In addition to achieving the objectives outlined above, other benefits of the Strategic Partnership ("SP") model, are that the right partner:

- Could assist the Utility with improving future plant operations through technology transfer.
- Could help the Utility with the geographic expansion of services by providing the technical expertise to augment existing operations experience.

7.4.2 Strategic Partnership Application

Water treatment and distribution will always remain wholly owned by the City as set out in the City Charter and will be fully controlled by the City of Winnipeg through its 100% owned Utility.

The SP model will initially be used to deliver the SEWPCC and NEWPCC upgrades and expansions and the operations of all three sewage treatment facilities including the WEWPCC.

When other utility like business is identified by the Utility, the SP model may be used if appropriate. This model would bring together the technical expertise, construction capability and client base in a risk sharing partnership. The partnership would then have the capacity and resources to create the necessary infrastructure or modify existing infrastructure to deliver new utility services.

7.4.3 Procurement Process

The procurement process is currently underway. A three stage process is being used to attract and select the best qualified and cost-effective partner. The first part of the process, the issue of a Request for Expressions of Interest ("REOI") is completed. This was followed by the issue of a Request for Pre-Qualification ("RFPQ") in June 2009. Submissions from respondents are currently awaited.

The final part of the procurement process will be the issue of a Request for Proposals ("RFP"). It is expected that the RFP will be made available to four short listed proponents in August 2009.

7.4.4 Results from the Request for Expressions of Interest ("REOI")

The REOI was issued in March 2009. The objective of the REOI was to test market interest and to obtain feedback on the various partnering type project delivery models being used in other parts of the world.

In April 2009, fifteen individual submissions were received from a wide range of international and national organizations interested in partnering. The respondents were:

- American Water Canada Corp.
- Black & Veatch Corporation
- CH2M Hill Canada Ltd.
- Corix Utilities Inc.
- EPCOR – SENA (Suez Environment North America Inc.)
- m2t Technologies / Lotepro Environmental Systems & Services
- PCL Constructors Canada Ltd.
- Peter Kiewit Sons' Co.
- Plenary Group (Canada) Ltd.
- SNC-Lavalin Inc.
- UGL Canada Inc. / Jacobs Canada Inc. / UGL – Unicco Inc.
- Vatten Infrastructure Inc.
- Veolia Water Canada, Inc./ Veolia Water North America – Central, LLC
- Wardrop – a Tetra Tech Company
- Winnipeg Wastewater Solutions (Parsons + United Utilities Plc.)

The majority of these respondents confirmed, through their submissions and subsequent discussions, that they would be interested in participating in a partnership where:

- They bring resources and global experience to the capital program and assist in improving operations.
- The Utility retains the operations staff and overall control of plant operations.
- They share cost and schedule risk based on pain/gain type compensation mechanism.
- They actively participate in geographically expanding services.
- They work collaboratively to cost effectively accommodate an evolving scope of work.

The REOI also generated information relating to the structure of partnering models and compensation mechanisms used in other parts of the world. This information will assist in defining the specific requirements in the RFP document.

In addition, respondents indicated their receptiveness to the arm's length Municipal Utility model.

7.4.5 Potential Strategic Partner Business Model

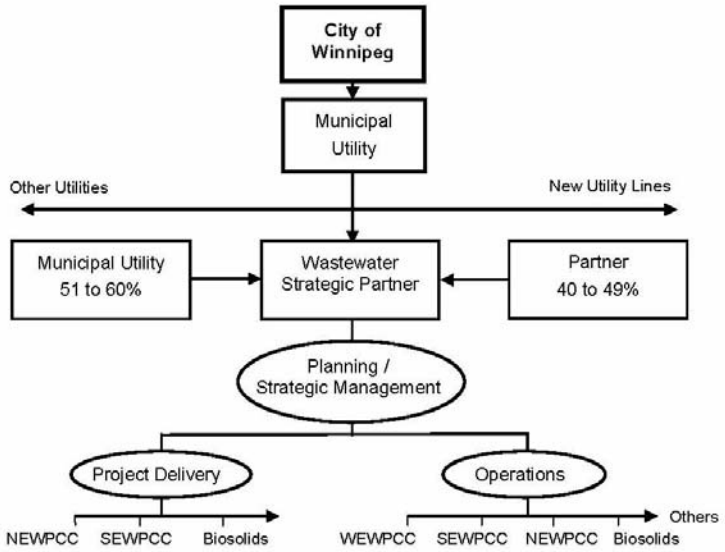
There are numerous partnering type capital project or program delivery models used globally. None of these existing models provide a complete solution to all the City's specific challenges. However, a combination of some of these models, such as the Australian Alliance Model, Scottish Water Solutions Model and the Design Build Finance Operate Model would provide all the desired attributes of a "Strategic Partnership".

The intricate functional details of the Strategic Partnership have yet to be completely defined and will evolve through the RFP Process. However, the model will have, as a minimum, the following characteristics:

- All physical assets will always remain fully owned by the City.
- The model will be based on a contractual partnership, a joint venture agreement or a corporate shareholding agreement with either the City or the Utility as the public partner.
- The Utility will have a minimum 51% controlling interest in the strategic partnership. The partnership will not own the sewage treatment plants but will be effectively a service provider to oversee design and construction and ensure the performance of the plants.
- Operations and engineering staff will remain employed by the Utility and be seconded to the strategic partnership as required.
- The private sector partner will likewise second qualified and experienced personnel to the strategic partnership to augment Utility staff for the planning, design, procurement and delivery of capital projects and operations during the term of the strategic partnership.
- Risks will be equitably shared between the Utility and the private sector partner.

- Both parties shall be required to agree to alternate dispute resolution methods to encourage the partners to resolve their disputes or other difficulties in a collaborative, cooperative way, without seeking to assign blame or resorting to traditional legal remedies.
- The private sector partner will be required to invest equity and/or substantial performance commitments in the strategic partnership to provide a base for a proportionate compensation arrangement.
- The Utility may provide some capital project financing in accordance with its own assessment and financing considerations with the strategic partnership from time to time.
- The private sector partner shall be required to access and provide debt financing in support of specific projects in the capital program which will contribute to the base for proportionate compensation arrangements.
- Performance criteria related to lifecycle costs and the pain/gain principle will be factored into the strategic partnership compensation model for the operations and capital projects.
- Delivery of the programme and delivery of specific capital upgrade and expansion projects will require integration of the public and private sector resources to effectively plan, finance, design, construct and operate the City's facilities throughout the term of the strategic partnership.

The organization structure incorporating the Wastewater Strategic Partner is illustrated below, and could also be replicated for the delivery of other utility type services.



- Rectangles are legal entities
- Ovals are functions

7.4.6 Key Assumptions

The proposed Strategic Partnership Model is unique. However, it is primarily a fusion of several successful capital project delivery models. Investigation into the success of each these models shows that a wide range of cost savings were achieved.

The Scottish Water Solutions Model is primarily a capital program delivery model. The original program of works was budgeted at 2.3 billion pounds. The completed program of works, used to deliver multiple projects, was completed for 1.8 billion pounds, representing a savings of 500 million pounds or 21.7%[12].

A survey of Alliance project performance on 30 public sector infrastructure projects across Australia found that 80% of the projects achieved an actual cost less than originally targeted. The savings ranged from 1% to 29%, with an average savings of 8.3%[13].

Based on this research, it is reasonable to estimate that savings of between 8% and 10% of the City's current estimated capital construction cost could be realized as a result of using the Strategic Partnership model.

The savings generated by both of the models described in the previous paragraphs are based on the capital cost and do not consider lifecycle costs. Lifecycle cost is the capital cost plus operation and maintenance costs for an asset over its anticipated life. The following table shows lifecycle cost savings achieved on a number of water and wastewater facilities.

Project	Owner	P3 Type	Capital Cost	Capital Cost Savings	Lifecycle Cost	Lifecycle Cost Savings
New Wastewater Treatment Plant	Town of Jasper, AB	DBO	$14 M	25%	n/a	n/a
Wastewater Treatment Plant Upgrade	Town of Okotoks, AB	DBO	$11 M	50%	n/a	n/a
New Water Treatment Plant	Town of Port Hardy, BC	DBO	$4 M	38%	n/a	n/a
New Wastewater System	Town of Sooke, BC	DBO	$23 M	16%	n/a	n/a
New Water Treatment Plant[14]	City of Moncton, NB	DBFO	$23 M	28%	$85 M	20% (est.)

[12] http://www.scottishwatersolutions.co.uk/portal/page/portal/SWS_DELIVERING_MORE_FOR_LESS/SWSE_PG_DELIVERING_MORE_FOR_LESS

[13] RMIT University – Alliances Performance in Public Sector Infrastructure, Dr. Nick Blismas, James Harley, 2008

[14] Source - Canadian PPP Project Directory, Canadian Council for Public-Private Partnerships, November 2006

Project	Owner	P3 Type	Capital Cost	Capital Cost Savings	Lifecycle Cost	Lifecycle Cost Savings
New Wastewater Treatment Plant[15]	Province of BC (Britannia)	DBFO	$16 M	16%	$27 M	31%
New Water Treatment Plant[16]	City of Seattle (Cedar)	DBO	$81 M	30%	n/a	30%
New Water Treatment Plant[17]	City of Seattle (Tolt)	DBO	$65 M	43%	n/a	40%
New Water Treatment Plant[18]	Tampa Bay Water	DBO	$79 M	n/a	n/a	21%

n/a = not available

Water and wastewater treatment plants delivered using P3 models show significant lifecycle cost savings can be realized. In addition, the preliminary value for money assessment developed by Deloitte and Touche Inc. in 2008 for the upgrade and expansion of the SEWPCC identified that a saving of 17%[19] on the lifecycle costs could be achieved using a DBFO model. Based on the foregoing, it is reasonable to conservatively expect a 10% to 15% saving on lifecycle costs using a combination partnership model.

For the purpose of the projections presented in this business plan the following assumptions have been made relative to the use of a Strategic Partnership model:

- Capital asset construction cost will be 8% less than current estimated costs when delivered by the Strategic Partnership.
- Lifecycle costs will be 12% lower as a result of using the Strategic Partnership model.

7.4.7 Expected Timing

The procurement process is scheduled to be complete by December 2009 so that work can commence on the SEWPCC project. This timing is essential to the ability to achieve the December 2012 licence date. While it is targeted the Utility will be created by December 2009 to enable the use of a jointly owned corporation for the Strategic Partnership, if this is delayed, a contractual partnership will be established with the City.

---

[15] Source -Partnerships BC Case Study http://partnershipsbc.ca/pdf/Britannia%20case%20study.pdf, and Value for Money Report http://partnershipsbc.ca/pdf/Britannia_Value_for_Money_Report_March_05_FINAL.pdf

[16] Source - SPU DBO Treatment Facility Projects, http://nwccc.info/upload/kelly1.pdf

[17] ibid

[18] Source - National Council for Public-Private Partnerships Case Study: http://www.ncppp.org/cases/tampabay.html

[19] Deloitte & Touche Inc. – Analysis of delivery models for the SEWPCC – February 2008

The RFP process will include initial terms for the partnership agreement. These terms will be refined through feedback and confidential meetings with the individual proponents to generate the final agreement by the end of the RFP process.

When the partner is selected, depending upon the form of partnership, an interim agreement will enable work to commence immediately on the review of the existing design work for the SEWPCC while the final form of partnership is established.

7.4.8 Impact or Procurement Risk

The indication from the procurement process thus far, is that there is sufficient interest from key organizations within the market regarding the Strategic Partner model. The risk of being unable to procure a partner is low. However, if interest declines and/or there is a failure to reach a workable agreement with a prospective partner, issues would be created for the City including:

- The December 2012 licence date for the SEWPCC would likely not be met.
- Anticipated savings would not be achieved. Costs would likely increase as a result of accelerating construction due to delay in starting.
- Project management resources will have to be hired by the City/Utility to manage the upgrades and expansion projects.

If the Utility and the Utility's Board are in place by December 2009, then the recommendation for engaging the selected strategic partner will be presented to the Utility's Board for a decision. If, however, the Utility has not been established by December 2009, then City Council will be presented with a recommendation for a decision. An interim contract may be used so that work on the SEWPCC can proceed to meet the licence date while the Utility is created. In either case, the budgets for the capital projects will be ratified by City Council prior to commencement of the works.

7.5 Requirements for Services from the City

To deliver core water and waste services, the Utility requires information technology, human resources, finance and customer contact support services. A number of support services are provided to the Department by corporate centralized support services while others are provided by the Department itself with its own internal resources.

Existing services were reviewed to determine how the support services should be delivered under the Municipal Utility model – either continue to be provided by the City's centralized support services under a service level agreement ("SLA") or be provided by internal resources within the Utility. To determine how support services should be delivered, an assessment was conducted with City staff that considered: the strategic importance of the service; the costs and benefits of having the service provided by one means versus the other; the impact on the City and Utility if the service delivery was changed; and the ease or difficulty of implementing the proposed means to deliver the service.

The results of the assessment generally indicated that the current means of providing support services could continue, resulting in the City continuing to provide some services to the Utility and the Utility providing some services with its own internal resources. A high level summary of these services follows.

Information Systems

The Department relies on certain applications that are used City-wide and the Utility will seek to leverage existing licensing agreements with software vendors, obtain ongoing access to the City's networks and hardware, and obtain application support services from the City for these corporate applications (including PeopleSoft Human Resource Management System, PeopleSoft Financial Management System, Outlook/Exchange email, I-View streets and property map system, GIS SDS, CITYNET intranet, e-directory, Land Information Management System, etc.). The Utility will also rely on the City to provide file storage, file access, and desk top support services.

The Utility plans to control access rights to its intranet services and maintain and design its own web page and internet content. The Department currently provides its own application support and development services for applications unique to the Department (including the computerized work management, computerized information and billing, aqueduct monitoring, landfill monitoring, and SCADA systems). The Utility will continue to do so in the future. The Utility will be responsible for its own information technology planning to ensure its information systems and technology needs continue to be met.

Human Resources

The Department currently delivers many human resources support services with its own resources. The City sets overall compensation, classification, recruitment, and personnel policies and provides certain collective bargaining, collective agreement, training, and benefit support services to all City departments.

As noted earlier, the Utility will continue to access the PeopleSoft Human Resource Management System through a service level agreement with the City. The Utility will however require flexibility, while considering external market conditions and public sector precedents, to set its own human resource policies and conduct its own job classification, staffing, compensation, labour relations, and human resources administrative functions. As such, it is envisioned that these services will be provided by the Utility in the future which may require additional resources. The Utility will work with providers and seek to leverage the City's existing benefits programs and Workers Compensation Board coverage under the existing City plans. The Utility would retain risk services from the City (insurance, claims).

The Utility will obtain certain services from external providers which are currently either provided by the City or by external providers.

Finance and Administration

The Utility will rely on the City's PeopleSoft Financial Management System which would continue to be provided and supported by the City. The Utility will also continue to rely on the City to provide certain treasury services such as debt issue, investment and banking services. The Utility will make arrangements with the City for office space and will rely on the City for property management services.

A key financial benefit of the Utility model is the Utility's ability to seek purchasing partners (for volume) and as such purchasing services will be controlled by the Utility directly rather than the City's centralized purchasing group. Financial management services including budgeting, financial reporting, accounts payable, taxation, rate setting, rate forecasting, and accounts receivable will be provided by the Utility similar to what is currently done today. When rates become subject to PUB regulatory oversight and reporting requirements, rate setting and forecasting will be impacted and will likely require additional resources.

The Utility will obtain certain services from external providers which are currently either provided by the City or by external providers. This includes selected legal services, and internal and external audit services.

Customer Services

The Department currently operates its own customer contact center for billing inquiries and operates separately from the City's 311 service. The Utility will continue to provide existing customer contact services, but will also respond to general customer inquiries that are currently routed through the City's 311 service. The Utility may need to invest in new telephony technology such as VOIP to facilitate this change. The Utility will be responsible for developing its own corporate identity and communicating this through appropriate communications, marketing and advertising strategies externally and internally. There will be little reliance made on the City for the provision of customer contact and communications related services similar to today.

While there will be some changes to the current means of providing support services, it is anticipated the impact overall will be cost neutral as gains in some areas will be offset with the need for a few additional resources or minor investment in others.

Miscellaneous Services

There are a few other miscellaneous services currently provided by other City departments to the Water and Waste Department. This includes: tree removal, cut restoration, naturalist services provided by Public Works; air tank refills and fit testing provided by Fire and Ambulance Services; etc. The Utility will continue to obtain these services and will prepare service level agreements or contractual arrangements as required.

Services Provided to Other City Departments

The Department provides a few services to other City departments. This includes:

- Inspection and after hours emergency services to set up and remove barricades for Public Works and Fire and Paramedic Departments;
- Fire hydrant maintenance and testing for Fire and Paramedic Department;
- Catch basin thawing, underpass station maintenance, and resource centre and library services for Public Works Department.

The Utility will have the resources and infrastructure to continue to provide these services to other City departments in the future. Appropriate service level agreements and contractual arrangements will be put in place as required.

Service Level Agreements ("SLA's")

Service Level Agreements ("SLA's") will be negotiated during the transition stage. The purpose of the SLA's will be to acknowledge and document specific service responsibilities, agreed expectations for service delivery, outputs, and commitments from both sides.

The objectives of an SLA are to:

- provide clear reference to service ownership, accountability, governance, roles and responsibilities;
- present a clear, concise, and measurable description and standards of service provision;
- define the formula or methodology for service pricing;
- anticipate and prevent risks; and
- match perceptions of expected service provision with actual service support and delivery.

The Utility will enter into SLA's for services provided by the City for an initial period of 1 to 3 years in order to facilitate a smooth transition and start up of the Utility. The Utility will be seeking growth and new business opportunities and therefore it will need to re-evaluate the provision of support services to determine whether the SLA's continue to meet the Utility's ongoing needs. The City currently charges a fee for certain services and elements of existing shared service arrangements can be incorporated into the SLA's that will be prepared by the Utility. SLA's will be critical to ensuring the services are competitive and formal agreements with the City would be required when rates/operating requirements are subject to PUB approval.

7.6 Marketing and Business Development

7.6.1 Corporate Identity

The Utility will develop its own corporate identity, separate from that of the City. The identity will be consistent with the goals and objectives of the Utility and once developed, will need to be communicated to stakeholders through a variety of vehicles.

7.6.2 Existing Contracts

The management of existing contracts between the Department and customers will be transferred to the Utility, as will some of the existing supplier contracts.

7.6.3 Geographical Expansion

The Utility will pursue opportunities to provide service to communities outside of Winnipeg to generate new revenue streams. The Utility will start by identifying municipalities and other entities that would benefit from such an arrangement based on criteria such as:

- Interest in purchasing services expressed previously to the Department by the municipality or entity.
- Inability to recruit and retain specialized skill sets required for water and waste operations.
- Needs relative to the Utility's capacity.
- Level of incremental investment required by the Utility to provide the service.
- Other criteria established by the Utility's management.

Once an opportunity for geographical expansion of service provision has been qualified, the Utility will undertake a cost-benefit analysis and present a business case to the Utility's Board. Where Board approval is provided, the Utility will pursue negotiations with municipalities and other entities within the parameters established by the Board. It is common practice in the utility industry to have a rate of return for provision of such services outside of its municipal boundaries. During the transition, the Utility will conduct further research into what options it has for obtaining a reasonable rate of return for providing services to other communities.

7.6.4 New Services/Lines of Business

The Utility will also pursue growth by exploring innovative new lines of utility related business that fill market demand, considering areas such as municipal green energy. New lines of business may evolve in the future.

A website search of selected water and waste structures summarizes the services/lines of business of each.

City	Business Name/Model	Service Lines/Lines of Business
Peterborough	Peterborough Utilities Commission	○ Water supply and distribution ○ Operation of Parks and Zoo ○ Supply and metering of electricity
Kingston	Utilities Kingston – Municipal Corporation	○ Supply, distribution, and metering of water ○ Collection, pumping, treating sewage ○ Distribution and metering of natural gas ○ Distribution and metering of electricity ○ Distribution of broadband high-speed wireless connectivity
Waterloo	Regional Government – Waterloo Region Public Works	○ Water supply and maintenance ○ Wastewater treatment ○ Solid waste management ○ Transit and specialized transit services ○ International airport services
Peel	Peel Public Works - Public Operator	○ Water treatment and distribution ○ Wastewater treatment and collection ○ Water and wastewater environmental assessments ○ Construction and maintenance of regional roads
Edmonton	EPCOR – Private Enterprise Model	○ Water and wastewater services ○ Power related services (builds, owns and operates power plants, electrical transmission and distribution networks)

The Utility will start by identifying services where:

- An unfilled market demand exists.
- The Utility has or can obtain the required skills and infrastructure to provide the service.
- The provision of the service is consistent with the Utility's vision and goals.
- Potential for synergies exist.
- A strong business case for provision of the service can be developed.
- A defensible competitive position is possible.
- No legal/regulatory barriers exist.

Once an opportunity for service provision has been qualified, the Utility will develop a business case, including a cost-benefit analysis, and present the business case to the Utility's Board. Where Board approval is provided, the Utility will pursue the opportunity. New services may be built organically by the Utility or acquired.

8. Governance

Corporate governance is the means by which companies are directed and controlled. This section describes the governance structure the Utility will adopt.

8.1 Ownership and Form

The Utility will be created by use of existing authority of the City contained in s. 212 of The City of Winnipeg Charter Act, as expressed in a regulation that will be required to be passed pursuant to that section (the "Regulation"). The resulting Corporation will be created and exist in law solely though the authority granted to the City by the Legislature of Manitoba in the Charter. The Corporation will be a defined municipal corporation and accordingly will exist solely for the benefit and use of the City of Winnipeg as will its assets. In other words, the City will not be able to sell the Utility in whole or in part. The Utility is anticipated to be a non-share capital corporation, with the City being the sole member.

As noted, for this wholly owned City controlled Utility to come into existence, the Charter requires the Province of Manitoba to pass the Regulation by Order in Council rather than by filing articles of incorporation. The City will offer input into the Provincial process that will consider the form and content of the Regulation. The purpose of the corporation and matters such as corporate governance will be set out in the Regulation.

In order for the Utility to be able to enter into the preferred strategic partnership model as described in section 7.4 of this business plan, the Regulation needs to provide the Utility with the ability to establish subsidiary corporations. This ability would apply to the proposed strategic partnership business model described in this document for the delivery of sewage treatment upgrades and expansions as well as to the establishment of other corporations for future strategic partnerships where appropriate.

In addition, to facilitate operations and mitigate risks to the Utility, additional complementary statutory amendments should provide the Utility's employees with the ability to discharge the duties currently imposed on the City and its employees. In addition, statutory amendments should provide the Utility and Utility employees with the same protections the City and City employees currently enjoy.

Discussions with the Province regarding the desired statutory amendments are ongoing.

8.2 Governance

As is acceptable and standard practice for control of similar public or crown corporations in Manitoba and elsewhere, it is proposed that the Utility have strict controls set out in law by the authority of the City in s. 212 of the Charter and as expressed in the Regulation. Objects and purpose of the Utility will be established and will state that one of the purposes of the Utility is to provide high quality utility service to both citizens of Winnipeg and elsewhere. The services shall meet or exceed environmental standards and shall always ensure protection of human health and safety. The services performed

by the Utility shall be provided on a basis that there will be a net-positive financial benefit for the citizens of Winnipeg.

Subject to the approval process set out below, a board of directors for the Utility will be established to appoint a CEO, oversee and direct the achievement of Utility goals and set prudent direction for the accomplishment of the purposes set out in the Regulation.

The Chairperson of the Board will deliver the Utility audited annual report and the proposed annual business plan, including the capital plan, to the City CAO.

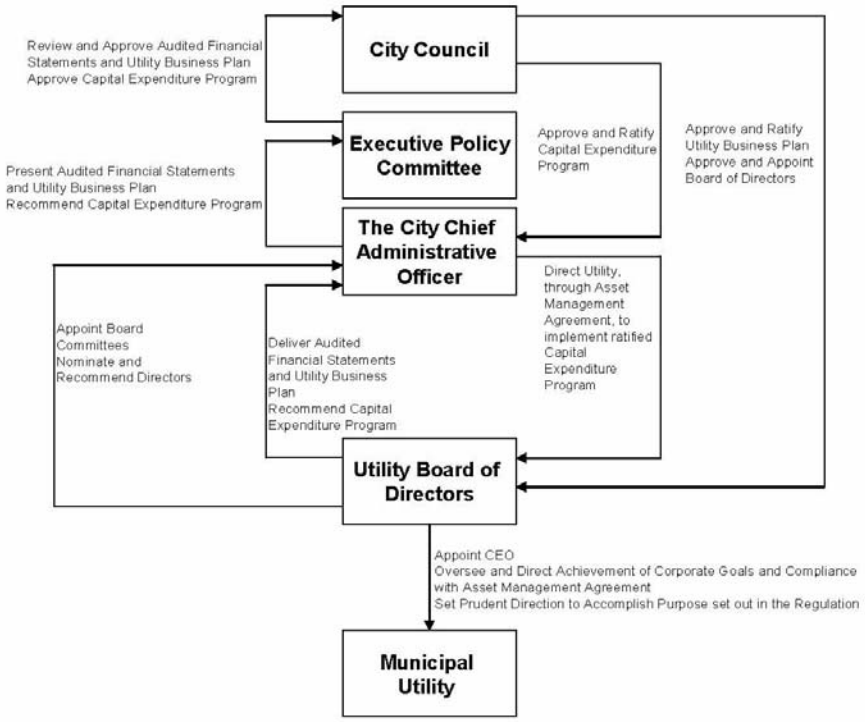
An Annual Members Meeting, consisting of City Council, will then be convened to receive the audited financial statements and to ratify the business plan thereby ensuring utility accountability and control to citizens through their elected City Council.

To facilitate these steps, the Utility will, through the Regulation or corporate by-laws, select a fiscal year end and will prepare and file with the CAO, audited annual financial statements within 90 days of its fiscal year end, unaudited quarterly financial statements within 60 days of the end of each quarter, and any additional information as the Board or CAO shall consider necessary, all of which will be made available to the public upon request. These reports will also be presented to Executive Policy Committee ("EPC"), which will in turn refer the reports to City Council.

The City CAO will present annual Utility business plans with a recommended capital expenditure program to EPC for their review and approval. Once a business plan has been approved by EPC, it will be presented to City Council for ratification. Once ratified, the CAO will direct the Utility, through the Asset Management Agreement, to implement the capital expenditure program. Performance measurements and quality of service standards will be established between the City and the Utility.

It is proposed that the Utility be required by the Regulation to convene a public meeting at least once per year to present and seek comment upon its annual plan and previous year's audited annual report.

The diagram that follows sets out the relationships between the Utility's Board, the City's CAO, EPC and City Council.



Governance Structure

8.3 Board of Directors

City Council will appoint a board of directors as set out in the Regulation.

Board Composition and Appointment

- Seven to eleven directors will be appointed to permit continuous operation even during periods where there may be a vacancy, with the number of directors from time to time to be an odd number to avoid deadlock votes. Staggered terms will be permitted.
- Directors will be recruited by an independent management recruitment firm, retained by the CAO to identify a slate of nominees.

- The CAO will review and recommend Board candidates based on desired skill sets, background knowledge and experience (such as engineering, environmental compliance, accounting and law) and present such recommendations to EPC. City Council will approve or reject the entire slate of candidates. For future vacancies, the Board will nominate a short-list of recommended candidates to the CAO for presentation to EPC and their presentation to City Council.
- City Council members will not be eligible to serve as board members.

Conflict of Interest Guidelines

- Prescribed conflict of interest guidelines or standards will be set out in the Regulation, or as currently set out in the Crown Corporations Public Review and Accountability Act (Manitoba) (the "Crown Accountability Act') and will not be less than those imposed by the Corporations Act.

Fiduciary Obligations and Responsibilities

- The Board of Directors has a fiduciary obligation, imposed by the Corporations Act, to act in the best interests of the Utility and to exercise care and diligence of a reasonable person, consistent with the Crown Accountability Act and in compliance with the Regulation. When acting in accordance with appropriate standards, directors are entitled to indemnification by the City.
- The Board of Directors will have the following key responsibilities:
  - Ensure compliance/performance under the Asset Management Agreement.
  - Monitor and evaluate Utility performance.
  - Maintain legal and ethical practices.
  - Select and appoint the CEO.
  - Evaluate senior management performance.
  - Determine executive compensation.
  - Hold a public meeting, in the City of Winnipeg, at least once annually, at which management of the Utility will explain the objectives of the Utility, describe prior year results, and summarize the contents of its business plan.
  - Establish required by-laws which will be ratified by City Council following approval by the Board.
  - Delegate responsibilities to Committees of the Board or individual directors or officers. Establish a number of key Committees which will include: Audit; Human Resources; and Environment and Health and Safety. Terms of reference for each Committee will be documented.
  - Evaluate board performance in accordance with accepted outside measures.
  - Hold regularly scheduled meetings, not less than 6 times per year, as well as ad hoc meetings from time to time.
  - Obtain advice from an independent consultant on director compensation. Director compensation will be approved by City Council.

- Establish policies and procedures for orientation of new directors and for continuing education.

Application of The Corporations Act (Manitoba)

Notwithstanding that the Utility would be created by Regulation, certain parts of The Corporations Act (Manitoba) would continue to apply to the Utility including the obligation of Directors to recognize fiduciary obligations and to act in the best interests of the Utility.

9. Legal and Regulatory Environment

The water and wastewater market is essentially a regulated monopoly. Water and wastewater utilities are subject to intense environmental and economic regulation. The Utility will need to comply with municipal, provincial and federal regulation.

With the above noted statutory amendment to mitigate the risk related to discharge of duties currently imposed on the City and its employees and protection from liability, the by-laws may not require changes but rather could be adopted by virtue of the statutory amendment. Otherwise, the relevant by-laws will need to be reviewed to determine their application to the Utility and may require amendment in order to proceed with the Utility.

Key legal and regulatory considerations are described in the paragraphs that follow.

9.1 Municipal Oversight

The City of Winnipeg Charter provides that the City has the exclusive possession and control over the waterworks facilities. This provides assurance that City water operations and facilities cannot ever be sold to a private non-city entity. The Charter also contains a number of significant powers and protections to the City, its assets and employees, in connection with the supply by the City of commodities and services, including waterworks. Matters such as the right of staff to enter privately owned land without being liable for trespass and City protection from liability for being sued for interruptions in utility service are examples of such rights and protections in the Charter.

The City of Winnipeg's legal mandate to ensure a supply of water, along with sewage and wastewater services is derived from the City of Winnipeg Act. By-laws of the City apply to land, works and equipment that form part of or are used for the City's waterworks, whether within or outside of Winnipeg. Related city by-laws include:

- Water Works 504/73 (passed 7 November 1973)
- Solid Waste 1340/76 (passed 21 July 1976)
- Bio-Medical Waste Sharps 6001/92 (passed 8 July 1992)
- Sewer 7070/97 (passed 24 July 1997)
- Lot Grading 7294/98 (passed 29 September 1998)
- Secondary Dyke 7600/2000 (passed 26 April 2000)
- Frontage Levy 7958/2002
- Local Improvement 98/72

Each by-law prescribes functions to be carried out by officials and designated employees of the City of Winnipeg and may require amendment to designate appropriate officials or employees of the Utility.

9.2 Provincial Oversight

Manitoba ministries responsible for water and waste stewardship include the following:

- **Manitoba Conservation.** Manitoba Conservation delivers programs and services to protect the environment and manage natural resource sustainability. Primary functions include:
  - Assisting local municipalities in wastewater and solid waste management issues.
  - Supporting water stewardship activities.
  - Regulating waste and water management systems and wastewater facilities.
  - Participating as Manitoba's representative on the Water Agenda development committee of the Canadian Council of Ministers of the Environment.
  - Administering the certification process for plants and plant operators under the Waste and Wastewater Facility Operators Regulation.
- **Manitoba Water Stewardship.** Manitoba Water Stewardship provides leadership in environmental stewardship, including the protection of Manitoba's water and water quality.
- **Manitoba Water Services Board.** Manitoba Water Services Board assists rural residents outside the City of Winnipeg in developing safe, sustainable water and sewerage facilities.

Relevant Manitoba legislation includes the following:

- The Environment Act (1987)
- Operators, Water and Wastewater Facility Regulation (2003)
- Onsite Wastewater Management Systems Regulation (2003)
- The Water Protection Act (2005)
- The Phosphorus Reduction Act (Water Protection Act amended) (2008)
- Nutrient Management Regulation (2008)
- The Water Rights Act – prevents the diversion, damming or alteration of water course or water levels without a license.
- Dangerous Goods Handling and Transportation Act (1992) – the City presently files reports on leachate.

The Drinking Water Safety Act provides regulatory oversight of drinking water suppliers in Manitoba and oversees water quality standards. The Act imposes liability on Directors of Corporations that commit an offence under the Act. In addition, two Manitoba regulations made pursuant to the Drinking Water Safety Act that apply to the City are the Drinking Water Safety Regulation (MB Reg. No. 20/2007) and Drinking Water Quality Standards Regulation (MB Reg. No. 41/2007).

The Environment Act (Manitoba) promulgates the Waste Disposal Grounds regulation which requires licensing of sewage waste disposal grounds. In addition, it addresses the

issuance of operating permits or certificates and licensing of water/sewer treatment facilities. The operating certificates are issued to a facility, so existing certificates would bind the Utility. If any facilities are transferred to the Utility, it will be required to provide details of the organization, operational hierarchy and designate a person in charge of operations for approval of the Director under the Environmental Act.

9.3 Federal Oversight

Federal legislation includes the Canadian Environmental Protection Act (1999), Navigable Waters Protection Act (1985), and the Fisheries Act.

The City presently submits annual reports with respect to its waste and solid waste utilities as required by the Canadian Environmental Protection Act.

9.4 Rate Regulation

Under the City of Winnipeg Charter, the City is entitled to set its own rates for water and waste services that the City supplies. Under the asset management model, the City will retain rate setting authority at least for the transition and start-up period. When suitable statutory amendments are achieved, the option of having the independent and provincially appointed PUB provide review and approval of utility rates will be implemented.

The PUB Act applies to every company, corporation or local authority owning, operating or controlling any public utility. A public utility is defined to include a system for delivery of water carried on, by or for a municipality. The PUB Act allows the PUB to declare any system of sewage collection or disposal to be a public utility.

It is intended that PUB jurisdiction would apply to rate setting only. Ratification of the capital program would remain the responsibility of City Council. Approval of the capital program would not be subject to PUB control as is the case with the Province and Manitoba Hydro. To ensure this, a statutory change has been proposed.

A movement to PUB regulation has implications for how the Utility allocates and manages the costs of providing service, and for how it plans the required investment in infrastructure and a transition period would be required to ensure the Utility has established the appropriate processes and cost allocation methodologies. The jurisdiction of PUB under its legislation is one of general supervisory powers over public utilities and the owners thereof and includes more than the power to set rates.

9.5 Mandatory Sewage Treatment Upgrades

The Utility must advance and provide for the timely completion of the capital projects necessary to bring its sewage treatment plants in line with new environmental licence requirements. Recent provincial regulatory licences issued in 2005 and 2006 under the authority of the Manitoba Environment Act require completion of sewage treatment plant Biological Nutrient Removal upgrades for the City's sewage treatment plants:

- WEWPCC by the end of 2008
- SEWPCC by the end of 2012
- NEWPCC by the end of 2014

9.5.1 WEWPCC

The upgrades required for this plant to achieve the BNR standard were recently completed. As part of the BNR upgrade, the work included a number of installations and renovations. Total cost expended to date on BNR upgrades and expansion to this plant is approximately $37 million.

To achieve year round disinfection, a new UV disinfection facility has been designed for the WEWPCC. However, given the good performance at the WEWPCC during most months because of the practice of routing final effluent through the existing lagoon cells or polishing boards, the City has requested that the Province of Manitoba amend the environmental licence issued and delete the requirement for disinfection during the winter months. The cost to build the UV disinfection facility is estimated at $10 million.

9.5.2 SEWPCC

The preliminary engineering and conceptual design for the BNR upgrades and expansion at SEWPCC have been completed and some minor site servicing requirements have been constructed.

Upgrades at the SEWPCC include the reduction of nitrogen, phosphorous, biochemical oxygen demand, and total suspended solids from the SEWPCC effluent as well as the inclusion of year round effluent disinfection. The environmental license specifies a completion date of December 31, 2012 for these upgrades.

In addition, expansion of the SEWPCC treatment capacity will be required to accommodate population growth in the service area of the SEWPCC. The current plant is almost operating at its average dry weather flow capacity of 60 million litre per day ("ML/d") and needs to be expanded to 70 ML/d based on the 25 year population projection. The license specifies flow and loading limits to the SEWPCC that will eventually be exceeded as increased development occurs and population increases within the plant's contributing service area. The SEWPCC upgrade is estimated to cost $205 million.

9.5.3 NEWPCC

Upgrades for the NEWPCC include the reduction of nitrogen, phosphorous, biochemical oxygen demand, and total suspended solids from the NEWPCC effluent as well as the inclusion of year round effluent disinfection. The environmental license specifies a completion date of December 31, 2014 for these upgrades. To date, both the disinfection and the centrate (phosphorous and nitrogen removal from centrate supernatant) treatment facilities have been constructed and are operating. The centrate facility was built at the NEWPCC ahead of the BNR upgrades because it was a cost effective means of reducing the City-wide nitrogen and phosphorous loading to the receiving stream in a relatively short time period.

The scope of the NEWPCC BNR expansion is presently being defined to more clearly identify the system processes needed to meet the environmental licence guidelines. The current amount carried for the NEWPCC plant expansion in the Department's capital program is $400 million, with options considered ranging from $343 to $530 million.

The wastewater by-product, biosolids, processed at the NEWPCC will also need an additional investment to meet existing and future environmental regulations. The magnitude of the investment required is currently under study and is not known at this time.

9.5.4 Other Upgrades

In addition to the projects described in the preceding paragraphs, an additional $200 million of wastewater treatment plant infrastructure upgrades is anticipated in the next five years.

9.6 Compliance

Water and wastewater services are delivered in a highly regulated environment. The Utility will need to comply with all relevant regulatory requirements. The City will need to remain compliant with regulatory requirements for the provision of water and waste services, and the Utility will need to facilitate this and operate according to the terms of the Asset Management Agreement.

10. Financial Implications and Results

10.1 Historical Financial Information

The Water and Waste Department consists of three distinct utilities for financial reporting purposes – water, wastewater and solid waste disposal. Separate financial statements are prepared by the City for these utilities in accordance with the accounting policies used to prepare the City's consolidated financial statements. Land drainage and garbage collection operations are reported in the City's General Revenue Fund and are included in the Public Works and Water reporting segment. Consolidated financial statements for the Department are not prepared.

The expenses for the utility segments are supported primarily by rate revenue. Land drainage services are supported by wastewater rate revenue, solid waste collection services are primarily tax supported, and recycling and waste minimization services are supported by provincial grants, service revenues and proceeds from the sale of recyclables.

The following table summarizes historical revenue from the sales of goods and services ("Revenue") for the water and sewer utility segments for the last five years. This Revenue amount includes rate revenue as well as revenue from the sale of surplus materials and equipment and equipment rental and excludes grants, developer contributions, interest and other sources. Revenue derived from rates accounts for approximately 90% of the Department's total revenue.

City of Winnipeg – Historical Revenue for Water and Sewer Utilities ($000s)

	2004	2005	2006	2007	2008
Water	$ 71,345	$ 74,008	$ 74,964	$ 83,351	$ 89,625
Sewer	76,495	85,651	98,152	106,948	123,961
Total	**$ 147,840**	**$ 159,659**	**$ 173,116**	**$ 190,299**	**$ 213,586**

Additional Revenue is earned from the provision of solid waste services. Historical Revenue from solid waste is shown below.

City of Winnipeg – Historical Revenue from Solid Waste Services ($000s)

	2004	2005	2006	2007	2008
Solid Waste	$ 17,753	$ 18,042	$ 15,788	$ 17,375	$ 18,558

Historical total expenditures for water and sewer operations are summarized in the table that follows. Total expenditures include operating costs, debt service, transfer to reserves, and transfers to the general revenue fund. The total sewer expense includes transfers to support land drainage.

City of Winnipeg – Historical Total Expenditures for Water and Sewer ($000s)

	2004	2005	2006	2007	2008
Water	$ 70,093	$ 69,327	$ 65,918	$ 69,509	$ 68,861
Sewer	83,048	88,702	75,967	83,575	88,968
TOTAL	**$ 153,141**	**$ 158,029**	**$ 141,885**	**$ 153,084**	**$ 157,829**

The historical total expenditures for solid waste (including recycling), garbage and land drainage are shown below.

City of Winnipeg – Historical Total Expenditures ($000s)

	2004	2005	2006	2007	2008
Solid Waste	$ 18,349	$ 18,816	$ 15,752	$ 16,251	$ 18,680
Garbage	16,503	17,299	15,715	15,159	15,489
Land Drainage	16,966	17,152	15,958	14,592	13,634
TOTAL	**$ 51,818**	**$ 53,267**	**$ 47,425**	**$ 46,002**	**$ 47,803**

Water and sewer utilities have historically realized surpluses over revenue. These surpluses are used to maintain working capital to a targeted 11% or more, to fund capital expenditures, and to prevent significant rate fluctuations and provide mid-term stability to rates through the ability to absorb losses resulting from declines in consumption or other unforeseen expenditures in operating or capital costs.

The City of Winnipeg operates Capital Reserves to account for the use of designated revenue for specific purposes. The Reserves related to water and waste services include:

- **Water Main Renewal Reserve Fund** – On February 18, 1981, City Council authorized the establishment of this fund for the purpose of financing, from one source, the renewal of water mains. The Reserve was established by the transfer of $2.0 million of frontage levy from the Waterworks System Fund and was maintained by the transfer of frontage levy revenue and interest earned until 2009. As of 2009, the reserve is funded by rate revenue through a transfer from the Water Fund.
- **Sewer System Rehabilitation Reserve** – On May 27, 1992, City Council authorized this establishment of the Combined Sewer Renewal Reserve and the Wastewater Sewer Renewal Reserve Funds. These reserves were established for the renewal and rehabilitation of combined sewers and wastewater sewers, respectively, with funding to be provided from the frontage levy for this purpose. The purpose of the reserves is to provide a consistent approach to financing infrastructure renewal and rehabilitate combined sewers and to renew and rehabilitate wastewater sewers. As of 2009, the reserve is also funded by rate revenue through a transfer from the Sewer Fund.

- **Environmental Projects Reserve Fund** – On December 17, 1993, City Council authorized the establishment of a River Quality Environmental Studies Reserve Fund for the purpose of providing funding for environmental projects to improve river quality. The name of the fund was subsequently changed to the Environmental Projects Reserve Fund to more accurately reflect the nature of the projects this Reserve was set up to fund. The Reserve is financed through a monthly transfer from the Sewage Disposal System Fund based on the amount of water consumption billed. This Reserve will partially fund the capital projects required to meet the environmental license requirements for the City's water pollution control centres.
- **Brady Landfill Site Rehabilitation Reserve Fund** – On December 17, 1993, City Council authorized the establishment of this fund for the purpose of providing funding for the future development of the Brady Landfill site. The Reserve is financed through a monthly transfer from the Solid Waste Disposal Utility Fund based on tonnages processed at the landfill.

Currently, the Director of Water and Waste is the Fund Manger for each of the Reserve Funds described in the preceding paragraphs.

10.2 Transaction to Establish the Utility

The details of the transaction to create the Utility and required statutory amendments will be formulated and developed in the next 90 days as the City Department transitions to a 100% City-owned Municipal Utility to provide services to the City under an Asset Management Agreement.

The relationship between the City and Utility under an Asset Management Agreement is summarized in the table that follows.

	Responsibility
Assets and Capital Decisions:	
Asset Ownership	City
Financial Reporting of Assets	City
Capital Financing	City
Capital Program Authority	City
Operations:	
Delivery of Services to Customers	Utility, on behalf of the City
Financial Reporting of Expenses	Utility – reports all operating expenses related to services. As the assets are reported by the City, the Utility does not record amortization expenses. Debt is held by the City and therefore the Utility does not record financing charges or costs. City pays and records the Asset Management fee paid to the Utility for the services, records amortization expenses on tangible capital assets and records financial charges or costs on debt.

	Responsibility
Customer Billings	The Utility will collect revenue from customers and will receive a fee for service under the Asset Management Agreement.
Regulatory:	
Rate setting control	Rate setting authority retained by the City; PUB regulation when suitable statutory amendments made.
Other:	
Financial Return for the City	Any return to be achieved by the City will need to be built into and be implicit in the rates established by City Council.
City's Bond Rating Impact	No change from present.

10.3 Key Assumptions

This section highlights the key assumptions incorporated into the financial analysis. Additional detail on the financial analysis assumptions is contained in Appendix A.

10.3.1 Key Assumptions – Ongoing Operations

Financial analysis was completed for the period from 2009 to 2014. The analysis was prepared using the Department's existing rate model and forecast as a base.

Existing Operations

The following assumptions were included in the Department's rate model and forecast and are expected to remain the same as the Utility operates under an asset management agreement. (For example, while amortization and debt charges would be recorded by the City under an asset management model, these expenses would be the same as included in the Department's rate model and forecast, the difference would be that they are reported on the City's financial statements and not the Utility's. Similarly, the revenue base does not change under the asset management model.)

- Water and wastewater revenues are driven by consumption. Water consumption is based on a five-year rolling average of historical actual consumption, adjusted to reflect anticipated year over year improvements in water conservation and efficiency. The financial analysis is based on the most current actual consumption information available (March 2009), which is slightly less than tabled with City Council in the November 2008 rate application. Sewer consumption is forecast as 98.98% of total water consumption, which is consistent with actual 2007 results.
- Operating expenses consist primarily of salaries and benefits; the cost of services purchased; interest and debt issuance costs; amortization; and materials, parts and supplies. These expenses are derived from the department's three year operating budget plus increases for inflation and new facilities as they come on line.

Differences between historical operating expenses and the financial analysis result from changes in accounting policies related to capital assets, increased costs associated with the operations of the new water treatment plant beginning in 2009, and increases in other operating expenses such as higher chemical purchase prices.

- Access to existing government grants is maintained and access to new government grants is obtained in the future.
- Significant capital asset additions are made over the forecast period to meet regulatory requirements and reinvest in existing infrastructure. The financial analysis is based on most current estimates of capital expenditures and timing. The difference between this and the estimate contained in the rate application filed in November 2008 is primarily a slight change in timing of appropriations to capital.
- In order to accommodate the new Waste Reduction and Recycling Support ("WRARS") levy imposed by the Province of Manitoba, charges for solid waste disposal at the Brady Road Landfill will increase effective July 1, 2009. Charges will be increased by $5 per load for small loads up to one-half tonne and by $10 per tonne for all other loads.
- As in the past, large borrowings will occur in the future to finance capital projects.

Strategic Partner Impact

The following assumptions were included in the financial analysis to reflect the impact of a strategic partner.

- A Strategic Partner will be procured at the end of 2009 or in early 2010. Assumptions and savings estimated to result from the Strategic Partner were outlined in Section 7.4 of the business plan and are expected to begin to be realized in year two of the Utility's operations. These include:
  - 8% reduction in capital asset construction costs when delivered by the Strategic Partnership.
  - 12% lower lifecycle costs using the Strategic Partnership model.
- The Utility will incur costs related to procuring a strategic partner in 2009 and 2010.

Operations in the Utility Model

Key assumptions incorporated into the financial analysis that are a direct result of transitioning to the Utility model include:

- **Expansion of services in the Winnipeg Capital Region.** It is assumed the Utility will provide wholesale water and wastewater services to certain municipalities in the capital region beginning in 2010, gradually increasing its market share over the forecast period, estimated based upon work previously done by the City in conjunction with the Municipal Service Sharing initiative. Over time, the Utility could expand its services to include metering, billing, customer service and operation and maintenance of rural collection and distribution systems. The scope of service expansion has not been built into the financial analysis as this will take time for the Utility to reach its full potential, but it is expected to be much more significant than

the initial estimate of additional incremental revenue shown in the financial analysis over the next five years.

- **Procurement Savings**. As a result of purchasing processes more customized to the Utility's needs (e.g. higher tender thresholds, longer terms) and more ability to negotiate contracts and to work with others to obtain purchasing synergies or greater volumes, it is expected the Utility will achieve a 1.0% savings in the first year, and 1.5% savings in subsequent years on its operating costs, excluding labour, relative to the existing Department forecast. These savings have been estimated based on the assumption that the Agreement on Internal Trade, which establishes certain procurement process requirements for municipal organizations, will apply to the Utility as it currently applies to the City. These savings are expected to be realized beginning in year two of operations as a Utility.
- **PUB Related Costs**. When the Utility makes an application to PUB to set rates, it will incur additional costs related to PUB regulation including rate applications and hearings. These costs have been estimated at $1 million annually, and it is projected these costs may begin to be incurred in 2012. These costs consist of an annual contribution to the PUB for operating costs, funding for registered interveners at public hearings and any legal/financial expertise that the Utility may need to retain to assist in the rate application process.

10.3.2 Key Assumptions – Transitional Items

In addition, the Utility will face a number of transition related costs. These costs are estimated to be $3 million and include costs related to:

- Legal and other advisory services related to establishing the Utility and obtaining additional statutory amendments ($1 million).
- Legal and Advisory services related to strategic partnership ($2 million).

10.4 Impact of the New Structure

10.4.1 Impact on the Utility

Accounting Implications

The City currently prepares its financial statements in accordance with Canadian Generally Accepted Accounting Principles for governments established by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants ("CICA"). When the Utility is established and becomes a separate legal entity that is distinct from the City, it will be established as a Government Business Enterprise for accounting purposes. The City currently reports Winnipeg Housing Rehabilitation Corporation as a government business enterprise using the modified equity method of accounting. Under this method, the Utility's accounting principles would not be adjusted to conform to those of the City and inter-corporate transactions would not be eliminated.

Because a government enterprise carries on a business, its financial statements should be prepared on the same basis as a private sector business and should adopt Canadian Generally Accepted Accounting Principles as prescribed by the CICA. As well, it is likely that the Utility will be required to adopt International Financial Reporting Standards ("IFRS") principles. This is consistent with other utility entities, such as Manitoba Hydro and Manitoba Public Insurance.

Tax Implications

It is intended that the Utility would have the same tax status as the City.

PUB Regulation

The PUB approves and sets utility rates and oversees other such matters as prescribed by legislation. In its decisions, the PUB is expected to determine the public interest, which has been defined to include fairly treated customers and consumers and financially viable utilities.[20] The Utility will need to ensure any changes in rates are fully and publicly justifiable and will require rigorous cost allocation processes and tools to ensure costs are properly allocated to each service area. In addition, the Utility will need to look at a cost allocation model that aligns the actual cost of delivering the service by class of customer, with the objective of ensuring each customer group pays its proportionate share of the costs associated with delivering that service. The Utility will require time to develop and implement these processes and tools.

10.4.2 Impact on the City

Establishing the Utility as a provider of asset management services to the City, will not have a significant impact on the City's financial results.

10.5 Potential Impact on Rate Revenue Requirements

City Council has the authority to approve rates for water and waste services. Typically, the rate report is submitted to City Council in November – City Council approves a one year rate but is provided a ten year forecast to support the recommended change in rates. The Department's ten year forecast details the revenue that is required to support the operations and capital programs of the water and sewer utilities while maintaining or exceeding targeted working capital to provide rate stability and enable the absorption of financial impacts caused by decreases in consumption or other unforeseen events. On November 19, 2008, City Council approved the 2009 water and sewer rates.

Expected expenditures drive the requirements for rate revenue. Total expenditures for water and sewer as was tabled in the November rate application are illustrated in the table that follows.

[20] The Public Utilities Board Manitoba, "Annual Report; Fiscal Year 2007/08 ending March 31, 2008."

	2009	2010	2011	2012	2013	2014
Revenue Requirements Driven by the Total Expenditure - Existing Model (Nov 2008)						
Water – total expenditures	$ 88,672	$ 89,179	$ 90,683	$ 92,223	$ 93,166	$ 92,935
Sewer – total expenditures	109,222	109,920	122,775	133,477	138,474	146,588
Total	**$197,894**	**$199,099**	**$213,458**	**$225,700**	**$231,640**	**$239,523**

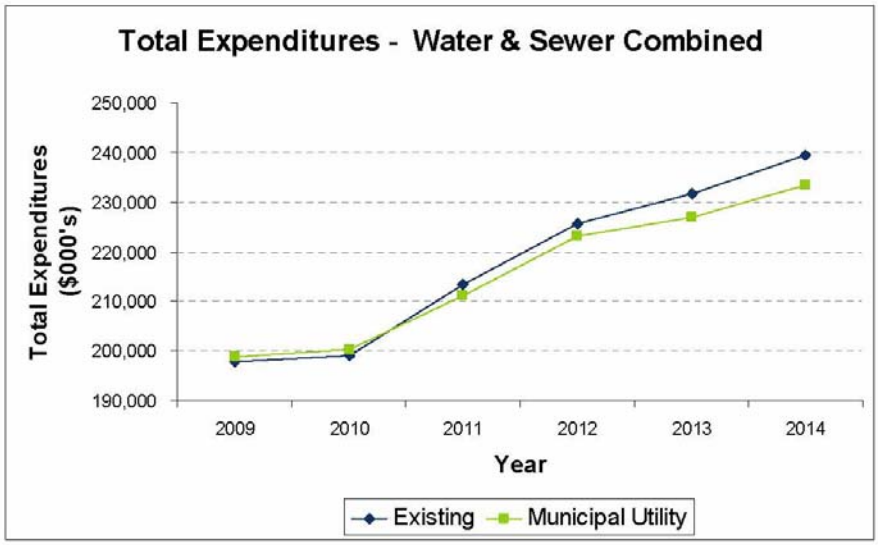
The Utility model provides an opportunity to realize financial benefits that will translate into expenditure reductions. These expenditure reductions are primarily due to operating cost savings and savings from strategic partner procurement which outweigh additional costs associated with the model. As well, the Utility model provides the benefit of net incremental revenue. The expenditure adjustments and incremental revenue expectations for the next five years are summarized in the table that follows.

	Notes	2009	2010	2011	2012	2013	2014
Expenditure adjustments resulting from new model							
One-time transition costs	**1**	$ 500	$ 2,500	$ -	$ -	$ -	$ -
Costs to have rates reviewed by PUB		-	-	-	1,000	1,000	1,000
Savings in operating costs / synergies associated with Utility model	**2**	-	(862)	(1,319)	(1,360)	(1,387)	(1,471)
Savings from strategic partnerships – **financing costs**	**3**	-	(253)	(623)	(1,336)	(2,325)	(3,317)
Savings from strategic partnerships - **operations**	**4**	-	-	-	-	(720)	(720)
Other	**5**	458	(90)	(213)	(352)	(513)	(557)
Expenditure adjustments - Subtotal		**958**	**1,295**	**(2,154)**	**(2,048)**	**(3,945)**	**(5,065)**
Incremental revenue resulting from new model							
Incremental revenue – wholesale services to capital region	**6**	-	(45)	(230)	(496)	(771)	(1,060)
Available improvements – new model: Dollar costs/(savings)		**$ 958**	**$ 1,250**	**$(2,384)**	**$(2,544)**	**$(4,716)**	**$(6,124)**

Notes:

1) One-time transition costs relate to utility formation and strategic partner procurement.
2) Operating cost savings of 1% in 2010 and 1.5% thereafter are achieved on identified service costs, materials, parts, and supplies; savings are not achieved on salaries and benefits.
3) Financing costs savings are a result of lower debt and interest requirements as a result of 8% savings on capital expenditures related to NEWPCC and SEWPCC.
4) Operational costs savings are a result of 12% lower costs anticipated at SEWPCC. Additional cost savings of $1.8 million per annum at NEWPCC expected to commence in 2015.
5) 'Other' relates to:
    a. Nominally revised operating cost estimates as a result of new information available
    b. Nominal reduction in estimate of transfers to Land Drainage
6) Incremental revenue from capital region wholesale services assumes that infrastructure would take one year to get in place. Estimate is also based upon interest rate that has been expressed by the capital region to date and incorporates variable costs of 10%.

The overall impact and comparison to total expenditures as per the rate model is shown in the graph that follows.



There is an opportunity that with the net impact of lower total expenditures and incremental additional revenue, rate revenue requirements can be similarly impacted. That is, whereby rates still face increases in the future under the Utility model, they are not anticipated to increase by as much as in the Department's current projection. How this opportunity for improvement ultimately translates into specific rates by rate category will also be impacted by the timing of capital appropriations, cost allocations by customer class and the objective of avoiding significant rate fluctuations from year to year.

While the new model provides the opportunity for rate revenue requirements to be slightly lower in the shorter term to 2014, this difference is expected to grow in the longer term beyond 2014 as benefits of the NEWPCC strategic partnership are realized and as the Utility expands its area of service and adds new services.

11. Accountability/Reporting Framework

11.1 Overview of Accountability/Reporting Framework

The Utility will be led by a CEO and governed by an independent, appointed board of directors comprised of members with relevant experience. The Utility's relationship to the City of Winnipeg will be defined by the Regulation and the Asset Management Agreement, with decision making falling to the Board and the CEO of the Utility. The City would monitor the performance of the Utility to the Asset Management Agreement through a formal governance framework, as described in section 8.0.

The Utility will develop an accountability/reporting framework that is based upon the following principles:

- An effective, independent board.
- A proactive audit committee.
- A compensation committee that aligns executive compensation to value to the City.
- Nominations recommended by an executive search firm and a nomination committee of the Utility's Board ensuring effective governance of the board.
- A sound internal control framework.
- A relevant code of ethical behaviour.
- Clear, enforced policies and procedures related to conflict of interest and other topics.
- Effective management of risk.
- An objective well resourced internal audit function.
- Independent, effective external audit.
- Transparent disclosure, effective communication, and systems that ensure effective measurement and accountability.

11.2 Key Performance Measures

Performance measurement is the process of identifying key value drivers and defining metrics to inform performance, support decision making, and foster positive behaviour and actions.

Close monitoring of key business and financial metrics will allow the Utility to determine whether it is achieving its goals and desired results. In the event that its goals and desired results are not being met, corrective action will be required. The Utility will develop a formal performance measurement system, building upon the performance measures currently used by the Department.

Key performance measures will be developed for each service area around the following themes:

- Satisfaction.
- Effectiveness.
- Efficiency.
- Financial.
- Compliance.

For each theme, specific measures will be established for each service area in alignment with the Utility's strategy. For example, satisfaction measures will be focused on end-user customer related measures relevant to the particular service area, such as satisfaction survey results and financial measures will be focused on measures such as net operating income. The following paragraphs summarize selected current key performance measures of the Department that the Utility will consider and build upon. Additional measures (such as those for the Financial theme), performance targets and consequences for not meeting targets will be developed by the Board.

11.2.1 Key Performance Measures - Water Supply, Treatment and Distribution

The table that follows summarizes some of the key performance measures that will be considered for water supply, treatment and distribution services.

Performance Measure	Theme
Citizen satisfaction with quality of drinking water	Satisfaction
Water main breaks per 100 km	Effectiveness
Component and coliform testing	Compliance/Effectiveness
Total cost for supply, treatment and distribution of water per megalitre pumped	Efficiency
Total cost for supply, treatment and distribution of water per km	Efficiency

11.2.2 Key Performance Measures - Wastewater Collection and Treatment

The table that follows summarizes some of the key performance measures that will be considered for wastewater collection and treatment services.

Performance Measure	Theme
Citizen satisfaction with protection from sewer back-up	Satisfaction
Number of wastewater main backups (sewer blockage or collapse) per 100 km of wastewater main	Effectiveness
Number of wastewater pumping station failures	Effectiveness

Performance Measure	Theme
Monthly averages for exceeding limits for TSS and CBOD5 tests	Compliance/Effectiveness
Total cost for collection, treatment and disposal of wastewater per megalitre	Efficiency
Total cost for collection, treatment and disposal of wastewater per km	Efficiency

11.2.3 Key Performance Measures – Land Drainage and Flood Control

The table that follows summarizes some of the key performance measures that will be considered for land drainage and flood control services.

Performance Measure	Theme
Citizen satisfaction with protection from river flooding	Satisfaction
Citizen satisfaction with protection from sewer back-up	Satisfaction
Total cost for land drainage and flood protection per kilometre of drainage system	Efficiency

11.2.4 Key Performance Measures – Solid Waste Collection

The table that follows summarizes some of the key performance measures that will be considered for solid waste collection services.

Performance Measure	Theme
Citizen satisfaction with garbage collection	Satisfaction
Service deficiencies per 10,000 collections	Effectiveness
Service requests for full AutoBins per day	Effectiveness
Garbage collection cost per household	Efficiency
Garbage collection cost per tonne	Efficiency

11.2.5 Key Performance Measures – Solid Waste Disposal

The table that follows summarizes some of the key performance measures that will be considered for solid waste disposal services.

Performance Measure	Theme
Solid waste disposal operating cost per tonne	Efficiency

11.2.6 Key Performance Measures – Recycling and Waste Minimization

The table that follows summarizes some of the key performance measures that will be considered for recycling and waste minimization services.

Performance Measure	Theme
Citizen satisfaction with recycling	Satisfaction
Recycling service deficiencies per 10,000 collections	Effectiveness
Recycling and waste minimization operating cost per Tonne	Efficiency
Recycling and waste minimization net operating cost per Tonne	Efficiency
Total recycling and waste minimization expenses and % of waste diverted	Efficiency

11.2.7 Ongoing Monitoring and Development of Additional Performance Measures

Performance measurement will be a formal and ongoing process at the Utility. Management will review key performance metrics on a monthly basis, and performance reports will be provided to the Board on a quarterly basis. To maximize transparency, key measures will also be summarized in the Utility's annual report which will be publicly available.

The Utility will revisit its performance measures annually as part of its planning process. As well, the Utility will participate in national benchmarking initiatives to identify additional relevant metrics and set appropriate targets.

12. Implementation Plan

The implementation plan has been broken into three time horizons:

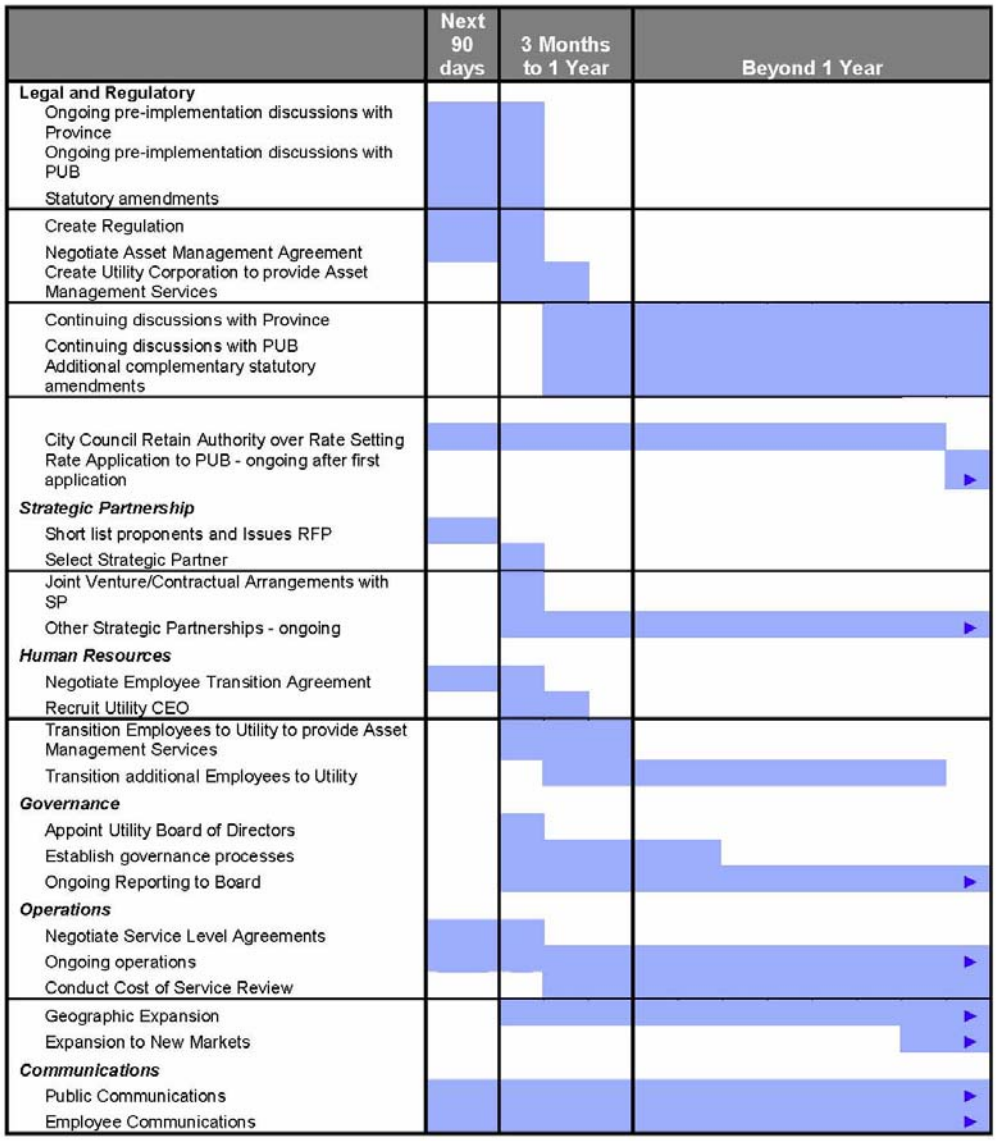
- The next 90 days – next steps to complete the development of the implementation plan and lay the foundation for the Utility to be created.
- Between three months and one year – pass Regulation and complementary statutory amendments, establish the Utility, its management and Board, and begin operations to provide asset management services to the City and explore growth strategies.
- Beyond one year – growth strategy implementation and lay the foundation to transition rate setting from City Council to PUB, when suitable additional statutory amendments are achieved.

It is important that the right cultural environment be created to facilitate the transformation and implementation of the growth strategy. This new business model requires change in order to be successful. A fundamental shift in corporate culture needs to take place, focusing on:

- Efficiency in processes and procedures to adapt to changing infrastructure requirements, technology requirements and partnership considerations.
- Flexible, adaptable workforce.
- Accountability by senior executives and project leaders for decisions and process changes.
- Adaptability of the business model to allow the addition of new customers and services.
- Transparency in requirements and results.
- Cost of service analysis methodology to align rates with the actual costs of delivering services.
- Full life cycle costing of assets.

The implementation plan has been created to facilitate an efficient, flexible, accountable, transparent corporate culture. An overview of the implementation plan and key activities and milestones is shown in the diagram that follows and is described in more detail in the sections that follow.

Implementation Plan - Key Activities and Milestones



12.1 The Next 90 Days

The next 90 days will be focused on offering feedback to the Province on their drafting the enabling Regulation and complementary statutory amendments to allow the City to create and incorporate the Utility. During this period the contents of the Asset Management Agreement for the Utility to provide asset management services to the City will begin to be developed and will be finalized upon the Utility being established.

As well, employee transition agreements with the applicable unions will begin to be developed, in consultation with employees and union representatives, to facilitate the movement of employees from the Water and Waste Department to the Utility once the Utility is established. While the employee transition agreements would address terms and conditions of employment, it is also essential that employees transferred to the Utility retain the current legal rights, privileges, and protection applicable to Department employees in the course of performing their responsibilities. Also, the above noted statutory amendments will be pursued to mitigate risks related to discharge of duties currently imposed on the City and its employees and providing the Utility and employees with the same protections from liability the City and City employees currently enjoy. Depending on when the proposed statutory amendments may be passed by the Legislature, employees may transition from the Department to the Utility at different times.

During the next 90 days, the City will short-list proponents for the Strategic Partner and a Request for Proposal will be issued to address the facility upgrades required at the south and north end water pollution control centers.

Other activities to establish the Utility will be undertaken during the next 90 days including:

- Development of service level agreements for the provision of support services from the City to the Utility and vice versa. This may include services provided by Water and Waste employees who remain with the City and are not initially transitioned upon creation of the Utility.
- Completion of the one year detailed operational implementation plan.
- Completion of the change management plan. Key factors include communications considerations and training needs.

The transformation will require strong executive management and a process to manage milestones to ensure resources are being used efficiently and effectively. The plan will include the development of appropriate operational processes to support the Utility that may differ from those currently used by all City departments.

While the organizational design, skill requirements, and plan to obtain have been outlined in this business plan, additional iterations will be required including:

- Development of a detailed organizational chart.
- Identification of key skill sets required for each of the leadership positions and the time period and process to fill these positions.

- More detailed analysis of specific new skill sets required and the process to obtain these skills.
- Strategies to retain key employees.

12.2 Three Months to One Year Implementation Plan

The one year plan includes establishing the Utility, appointing the Utility's Board of Directors, recruiting a CEO, hiring other key employees, transitioning employees and beginning operations to provide asset management services to the City.

During this period, the Utility will enter into joint venture or other contractual arrangements with a Strategic Partner and will begin work on the SEWPCC upgrades. The NEWPCC project will also be initiated within this period.

The plan will include continuing discussions with the Province and the PUB regarding suitable additional statutory amendments required to enable a transition of the rate setting process from City Council to the PUB. Additional statutory amendments will be required to exclude capital decisions from PUB approval and to transfer current rights, privileges, and protection granted to the Water and Waste Department and its employees to the Utility and Utility employees. It may take more than one year to achieve these additional statutory amendments. The Utility may also begin a cost of service review during this period to prepare itself for a transition to PUB oversight.

The one year plan will include the exploration and development of geographic expansion and other growth opportunities.

12.3 Beyond One Year

As noted, it will very likely take more than one year to achieve the additional statutory amendments required to enable transition of the rate setting process from City Council to the PUB. As such, the implementation plan beyond one year will include continuing discussions with the Province and PUB. If suitable amendments are achieved, then the plan will include preparing for the Utility's first application to the PUB. The Utility will continue to provide asset management services and will continue to complete the wastewater treatment upgrades required to meet the new environmental license requirements.

The implementation plan beyond one year manages for growth and continues to manage for change. The longer term plan will include the implementation of a growth strategy for the addition of new customers and new lines of business. The strategy will require established milestones to track progress and set a course of action.

13. Risk Assessment and Mitigation Strategies

The Utility will have a comprehensive, coordinated and sustainable risk management process that will enable it to proactively and efficiently manage business risks. As an asset management business, the Utility will in some cases manage risks on behalf of the City. For the purposes of this business plan, risks can be grouped into two categories: ongoing risks and transitional risks.

13.1 Ongoing Risks – Steady State

Like the existing Department, once established and operating on a steady state basis, the Utility, as a company, will face a number of risks. This section identifies key risks and the Utility's strategies to mitigate them. Ongoing risks have been grouped into the following categories:

- Strategic
- Operations
- Compliance
- Financial

13.1.1 Ongoing Risks - Strategic

Risk	Description	Strategies
Planning and resource allocation	Inability to discover, evaluate and select among alternatives to provide direction and allocate resources for effective execution to achieve the strategic objectives of the Utility.	○ Engage in regular, robust strategic planning process. ○ Conduct annual budgeting process to support achievement of strategic objectives. ○ Prioritize and resource initiatives, ensuring initiatives are linked to strategic objectives.
Planning and execution	Failure to plan and execute major initiatives in a coordinated manner.	○ Recruit and develop project management capabilities. ○ Ongoing monitoring of performance.
Regulatory uncertainty	May restrict market opportunity and negatively impact returns on existing assets.	○ Build strong relationships with regulators. ○ Monitor the regulatory environment in local and other jurisdictions and anticipate potential

Risk	Description	Strategies
		impacts. o Proactive management of rates and regulatory proceedings.
Crisis communications	Failure to communicate the right message in an effective manner to recover and maintain the operations in the event of crisis or disruption due to physical or natural circumstances.	o Develop a crisis/emergency communication response plan, allowing for rapid decision making and monitoring reaction. Employ as required.

13.1.2 Ongoing Risks - Operations

Risk	Description	Strategies
Project planning and work management / project life cycle risk	Inadequate construction and maintenance project management. Increases in an infrastructure project life cycle negatively impact costs due to regulatory, permitting, environmental, social or other unforeseen issues.	o Adhere to robust project management process. o Compare project performance to benchmarks. o Regular review of budgeted to actual performance. o Use of strategic partnerships to share risk and establishment of suitable terms with the strategic partner.
Property, plant and equipment	Failure to provide physical protection and stewardship over long-lived assets, designed to optimize longevity and utilization.	o Use of internal controls to ensure assets are efficiently and effectively utilized and managed on behalf of the City.
Recruiting and retention	Failure to recruit and retain qualified employees to ensure optimal staffing levels in a balanced workforce environment.	o Develop HR policies and procedures tailored to the Utility. o Ongoing succession planning.
IT Security/Access and Availability/Continuity	Failure to adequately protect the critical data and infrastructure from theft, corruption,	o Develop/adhere to IT security plan and policies. o Review and update

Risk	Description	Strategies
	unauthorized usage, viruses, or sabotage. The inability to recover from and continue uninterrupted operations in the event of extraordinary events, systems and implementation failures.	disaster and recovery programs as required. Appropriately test and communicate programs.
Hazards – natural events, disaster response, etc.	Threat of business or service disruption due to hazards.	○ Establish/adhere to disaster and recovery programs. Appropriately test and communicate programs.
Research and development	Failure to create new products and services to respond to opportunities in the marketplace.	○ Monitor the environment for opportunities. ○ Develop a process to identify and assess new product and service opportunities.

13.1.3 Ongoing Risks - Compliance

Risk	Description	Strategies
Contract	Entering into contracts that are unfavourable to the Utility; and the failure to comply with and monitor contract terms to protect the Utility from financial and other risks.	○ Hire in-house or external Legal Counsel to oversee contracts and develop related policies.
Regulatory mandates/ increased regulatory scrutiny and requirements	Failure to facilitate the City's compliance requirements, as well as comply with the Utility's regulatory requirements.	○ Build strong relationships with regulators. ○ Monitor the regulatory environment. ○ Report to City Council and the public frequently on performance in meeting and exceeding required standards. ○ Develop strong project management skills.

Risk	Description	Strategies
		○ Ongoing assessment of compliance to regulatory requirements. ○ Develop and document environmental and safety standards. ○ Regular environmental and safety audits are performed.
Rate case	Poorly managed rate case development causes unfavourable ruling by regulatory body.	○ Proactive management of rates and regulatory proceedings. ○ Develop rate setting process to ensure information and documentation support rate case.
Cost allocation	Failure to properly identify and allocate costs to various Utility business units and functions in compliance with governmental rules, regulations and expectations.	○ Develop appropriate cost allocation methodology.

13.1.4 Ongoing Risks - Financial

Risk	Description	Strategies
Accounting, reporting and disclosure	Inaccurate recording and reporting, for the City or the Utility, of all financial transactions in the proper accounting period in accordance with appropriate standards. Inaccurate financial reports can lead to bad business decisions by management and mislead members.	○ Review and approval of Utility's financial statements by the Audit Committee and Executive Management prior to being released. ○ Utility personnel preparing statements have appropriate experience and expertise.
Rate forecast	Inability to anticipate costs and forecast rates results in rate volatility.	○ Maintain and enhance robust rate setting processes.

Risk	Description	Strategies
Inflation	Failure to properly estimate and take into account inflation in rate projections and capital budgets.	○ Maintain budgeting and forecasting procedures that take expected inflation into consideration. Conduct sensitivity analysis as appropriate.

13.2 Transitional Risks

The Utility will be created as a 100% City-owned Municipal Utility to provide services to the City under an Asset Management Agreement. While PUB regulation of rates (but not capital decisions) are desired characteristics of the Utility in the long term, obtaining this is a complex undertaking.

The Utility will face certain risks as it makes the transition from a department of the City. Mitigating these risks will be an important component of the implementation plan. Key risks associated with the transition, and the strategies to mitigate those risks, are summarized in the table that follows.

Risk	Description	Strategies
Legal/regulatory	Inability to have recommended changes to statutes/acts/etc. made to allow the establishment and regulation of the Utility on suitable terms.	○ Legal review of existing governing statutes, etc.; identification of required changes and development of process to make required and desired changes happen. ○ Ongoing discussions with Province and PUB.
Employee buy-In	Lack of willingness of employees to move from the Department to the Utility.	○ Development and implementation of communication plans to ensure open and transparent communications with staff. ○ Negotiation with benefit and pension providers to maintain key benefits. ○ Collaboration with Unions to develop an appropriate transition agreement.

Risk	Description	Strategies
Public acceptance	Lack of support from the Public for the Utility model.	○ Development and implementation of communication plans, ensuring open and transparent communication with the public and stressing the benefits to the public of the new model.
Financial benefits	Financial benefits not identified or achieved.	○ Identification of non-financial value proposition. ○ Identification of new customers and services possible under the new model. ○ Project and performance management to implement and realize anticipated benefits.
Preparedness for the transition	Lack of appropriate planning and communication resulting in a disruption for employees and those who receive service.	○ Development of detailed implementation plans for the transition. ○ Enhance existing skill set of the Department to include change management and working with regulators. ○ Adding specific resources during the transition to address change management.
Set up costs	Set up costs to establish the Utility significantly exceed estimates.	○ Develop detailed implementation plans for the transition, including cost estimates.

Risks are inherent in any business and business plan. The successful implementation of the business plan is highly dependent on identifying and mitigating key risks, both ongoing and during the transition period. The Utility understands its strategic, operations, compliance, financial and transitional risks and intends to minimize these while establishing a sustainable business.

14. Advancing the Business Plan

The Public Service recommends the following:

- Establish an arm's length 100% City-owned Utility corporation that the City cannot sell, in whole or in part, and which ensures ongoing protection of public health and the environment.
- City Council request the Province to pass a regulation under section 212 of the City of Winnipeg Charter Act to establish the Municipal Utility.
- City Council continue to have control over the Utility capital program, similar to Manitoba Hydro's capital governance model.
- City Council authorize the Chief Administrative Officer to enter into an asset management agreement with the Utility.
- City Council, by resolution, direct the Utility to seek rate approval by the Public Utilities Board.
- City Council authorize Officers of the City to do all things necessary to implement the intent of the foregoing.

Water and waste operations are unique when compared to other City departments given the dedicated revenue stream and the long term nature of its significant capital projects. The arm's length Utility model will provide flexibility not possible in the current City department structure and allow the Utility to tailor its business processes and decision making to fit its needs. It is anticipated that the new Utility model will reduce overall operating and capital costs over time, and generate new revenue streams in the future that will offer more substantial financial benefits.

The Public Service recommends the establishment of a 100% City-owned arm's length Municipal Utility that the City cannot sell in whole or in part. This will benefit citizens, ratepayers, and employees by making service more accountable and transparent, and ensuring the long term sustainability of the Utility.

APPENDIX A - Summary of Key Assumptions

FUTURE ORIENTED FINANCIAL INFORMATION

This business plan includes certain financial estimates and projections with respect to future performance. Such estimates and projections reflect various assumptions concerning anticipated results and actions, which assumptions may or may not prove to be correct. The actual results achieved during the projection period will vary from the projected results and such variations may be material. There is no representation, warranty or other assurance that any of the estimates, forecasts or projections will be realized.

A.1 Overall Financial Analysis

- The financial analysis used the Department's November 2008 rate application as a base. This base was updated to reflect new and more current information and then adjusted to reflect differences between current departmental operations and anticipated Utility operations.
- The analysis period includes the Department's best estimates of future operations.
- The analysis period includes the six fiscals years of 2009 through 2014.
- If a capital asset is added, it is financed:
  - Firstly by developer contributions
  - Secondly by provincial or federal grants
  - Thirdly by transfers from reserves
  - Fourthly by new external debt or new external equity investments, and
  - Lastly the remainder by existing retained earnings (including current year income).
- Annual PUB costs of $1 million are expected to commence in 2012 and have been equally split between the two rate regulated business lines: Water and Sewer.

<u>Water Consumption:</u>

- The November 2008 rate application was based on the following water consumption assumptions:

	2009	2010	2011	2012	2013	2014
November 2008 Rate Application – Water Consumption (Mgals)	15,373	15,431	15,435	15,437	15,461	15,453

- The November 2008 rate application consumption assumptions were updated given more current information and the actual consumption (which was less than originally projected) as at March 2009 was incorporated resulting in an lower estimate. Annual water consumption in the financial analysis has been projected using the same approach as in the rate application which is based on a five-year rolling average of historical actual consumption adjusted to reflect anticipated year over year improvements in water conservation and efficiency (based on the Water Treatment Plant Capacity Assessment Report, February 2003). The consumption amounts estimated over the analysis period are as follows:

	2009	2010	2011	2012	2013	2014
Financial Analysis – Water Consumption (Mgals)	14,912	15,339	15,324	15,304	15,302	15,261

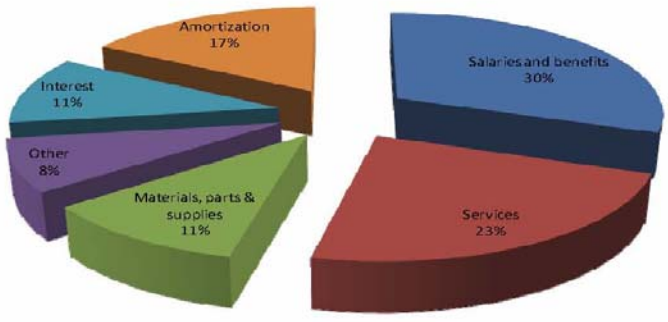
- Consistent with the November 2008 rate application, water consumption by block in the financial analysis is determined according to the average consumption distribution during the three-year period from 2005 to 2007, as follows:
  - Block 1 (<9,600 cu ft) – 60.3%;
  - Block 2 (9,600 – 96,000 cu ft) – 23.5%; and
  - Block 3 (>96,000 cu ft) – 16.2%.

Sewer Consumption:

- Consistent with the November 2008 rate application, annual sewer consumption in the financial analysis is projected as 98.98% of total water consumption. This is consistent with actual 2007 results.

The combined operating expenses of the Water and Sewer utilities as per the financial analysis is illustrated in the chart that follows:

Combined Water and Sewer Operating Expenses
Fiscal 2009



A.2 Water Utility: Key Assumptions

- Block rates per 100 cu ft. were estimated as follows in the November 2008 rate application:

Nov 2008 Rate Application	2009	2010	2011	2012	2013	2014
Block 1	$ 3.55	$ 3.66	$ 3.77	$ 3.82	$ 3.82	$ 3.82
Block 2	3.07	3.18	3.29	3.34	3.34	3.34
Block 3	2.59	2.70	2.81	2.86	2.86	2.86

- In the financial analysis, non-rate revenue is estimated at approximately $7.3 million to $8.2 million per year, and consists of provincial grants, permits & fees, developer contributions, interest, and other miscellaneous amounts. These estimates vary from the November 2008 rate application due to the addition of developer contributions and differences in financial reporting presentation.
- Operating expenses for 2009 through 2011 were derived from the Department's existing budgeting process for both the November 2008 rate application and the financial analysis. Expenses increase by 2% per annum thereafter.
  - The Department's three year budget was developed on a detailed basis by managers in the various department areas.
  - The 2009 budget is based on prior year's actual expenses plus adjustments for estimated changes in operations.
    - Includes cost of 462 FTE's, an increase of 12 from prior year with inflationary impacts.
    - Includes $4.3 million in additional costs related to operation of new water treatment plant.
  - The Department's three year budget incorporates incremental costs associated with the new water treatment plant based on current estimates of operations.
- In the financial analysis, cost savings of 1% in 2010 and 1.5% per annum thereafter are anticipated on non-salary operating expenses as a result of synergies.
- Interest expense is based on existing debenture debt at rates and repayment schedules in place as at December 31, 2008.
- In the financial analysis, estimated one-time transaction costs of $500,000 have been split 50/50 between Water and Sewer and are incurred during 2009. These costs relate to the formation of the Utility including legal assistance, Board recruitment, PUB readiness, etc.
- Capital assets as at December 31, 2008 were comprised of:

	Cost	Accumulated Depreciation	Net Book Value
Land	$ 1,823,986	$ -	$ 1,823,986
Building	5,398,662	1,560,595	3,838,067
Water & waste facilities	766,771,738	244,840,070	521,931,668
Machinery & equipment	9,558,787	8,387,094	1,171,693
Information technology	24,148,518	19,136,249	5,012,269
Construction in Progress[1]	254,098,809	-	254,098,809
Other	300,000	-	300,000
TOTAL	**$1,062,100,500**	**$ 273,924,008**	**$ 788,176,492**

1 – The majority of construction in progress relates to the new water treatment plant located at the Deacon Reservoir site. Amortization on CIP to commence in 2009 and 2010.

- Projected capital asset additions in the financial analysis are based on current information and are summarized in the table that follows. There is a slight difference in the timing of these capital expenditures compared to that which was assumed in the November 2008 rate application. Capital additions impact debt servicing costs.

Financial Analysis	2009	2010	2011	2012	2013	2014
Addition	$98,617,000	$23,650,000	$19,343,000	$19,190,000	$25,350,000	$18,300,000

- The majority of projected additions in 2009 relate to completion of the new water treatment plant. Approximately $6.5 million is related to a new customer billing system. Annual additions in 2010 and thereafter are primarily related to;
  - The Water Supply Valve Replacement Program
  - Watermain renewals, and
  - The Waverly West feedermain (Phase 1).

A.3 Sewer Utility: Key Assumptions

- Block rates were estimated as follows in the November 2008 rate application:

Nov 2008 Rate Application	2009	2010	2011	2012	2013	2014
Base rate	$ 4.81	$ 4.91	$ 4.91	$ 5.25	$ 5.36	$ 5.44
Environmental Projects Reserve	0.45	0.50	0.87	0.87	0.87	0.87
TOTAL rate	$ 5.26	$ 5.41	$ 5.78	$ 6.13	$ 6.23	$ 6.31

- Non-rate revenue, estimated at approximately $11.2 million to $12.2 million per year, consists of provincial grants, permits & fees, industrial waste surcharges, developer contributions, interest, and other miscellaneous amounts. These estimates vary from the November 2008 rate application due to the addition of developer contributions and differences in financial reporting presentation.
- Operating expenses for 2009 through 2011 were derived from the Department's existing budgeting process for both the November 2008 rate application and the financial analysis. All expenses increase by 2% per annum thereafter.
  - The Department's three year budget was developed on a detailed basis by managers in the various department areas.
  - The 2009 budget is based on prior year's actual expenses plus adjustments for anticipated changes in operations.
    - Includes cost of 389 FTE's, an increase of 16 from prior year, including inflationary impacts.
    - Includes $4.3 million in additional costs related to upgrades and plant expansions.
  - The Department's three year budget continues to incorporate incremental costs associated with the NEWPCC and the WEWPCC based on current estimates of operations.
    - Includes $1.0 million per annum for increased operating expenses.
    - Includes growth of $2.0 million per annum for increased property taxes (expected to grow to over $8.0 million per annum by the end of 2014).
- In the financial analysis, cost savings of 1% in 2010 and 1.5% per annum thereafter are anticipated on non-salary operating expenses as a result of synergies.
- In the financial analysis, 12% savings per annum of specifically identified operating costs of the SEWPCC and NEWPCC are estimated to commence in 2013. These savings are based on successful procurement of a strategic partner.

- Interest expense is based on existing debenture debt at rates and repayment schedules in place as at December 31, 2008 plus additions at 6% per annum.
- In the financial analysis, estimated one-time transaction costs of $500,000 have been split 50/50 between Water and Sewer and are incurred during 2009. These costs relate to the formation of the potential entity including legal, Board recruitment, PUB readiness, etc.
- In the financial analysis, additional one-time transaction costs of $2.5 million related to strategic partnership procurement have been included in the 2010 result of Sewer.
- Capital assets as at December 31, 2008 were comprised of:

	Cost	Accumulated Depreciation	Net Book Value
Land	$ 1,451,138	$ -	$ 1,451,138
Building	884,912	551,442	333,470
Water & waste facilities	1,134,969,066	414,845,961	720,123,105
Machinery & equipment	257,313	37,906	219,407
Information technology	199,867	9,993	189,874
Construction in Progress	29,287,236	-	29,287,236
Other	3,117,914	-	3,117,914
TOTAL	**$1,170,167,446**	**$ 415,445,302**	**$ 754,722,144**

- Projected capital asset additions in the financial analysis are based on current information and are summarized in the table that follows. There is a slight difference in the timing of these capital expenditures compared to that which was assumed in the November 2008 rate application. Capital additions impact debt servicing costs.

Financial Analysis	2009	2010	2011	2012	2013	2014
Addition	$68,675,000	$106,554,520	$150,772,600	$210,943,280	$191,149,840	$251,474,000

- Annual additions of $20 million represent estimated sustaining capital reinvestment. The majority of remaining additions relate to:
  - North End Water Pollution Control Centre for the purposes of nutrient removal;
  - Combined Sewer Overflow Mitigation activities; and
  - Sewer renewals.
- In the financial analysis, capital expenditure savings of 8% have been incorporated into NEWPCC and SEWPCC projects to recognize a potential strategic partnership. These 8% savings have been removed from Department's anticipated future debt issues. Prior to these savings, the two projects aggregate to an estimate of $601 million over the five year period.

A.4 Solid Waste: Key Assumptions

- The financial analysis is consistent with the Department's projections for Solid Waste, with the exception of the addition of incremental tipping fee revenue effective July 2009.
- Revenues are generated from two sources:
  - Tipping fees – including incremental revenue from anticipated tipping fee increase to occur by July 1, 2009 (majority of fees collected are remitted to the Province and a portion related to collections at Brady Road Landfill are returned); and
  - Other grants.
- Revenue growth remains consistent with growth in expenses (i.e. margins will remain consistent with Budget)
- Operating expenses for 2009 through 2011 were derived from the Department's existing budgeting process. All expenses increase by 1% per annum thereafter
  - Major increase from 2008 results from inflationary effects on contract costs and redeployment of staff.
- Interest expense is based on existing debenture debt at rates and repayment schedules in place as at December 31, 2008 plus additions at 6% per annum.
- Capital assets as at December 31, 2008 were comprised of:

	Cost	Accumulated Depreciation	Net Book Value
Land & depreciable improvements	$ 4,115,539	$ 3,070,841	$ 1,044,698
Building	273,438	273,438	-
Machinery & equipment	4,233,111	853,562	3,379,549
Information technology	92,286	4,616	87,670
Construction in Progress	4,106	-	4,106
TOTAL	**$ 8,718,480**	**$ 4,202,457**	**$ 4,516,023**

- Projected capital asset additions are as follows:

	2009	2010	2011	2012	2013	2014
Addition	$ 2,244,000	$ 12,825,000	$ 400,000	$ 488,000	$ 200,000	$ 200,000

- Annual additions of $200,000 represent estimated sustaining capital reinvestment. The majority of remaining additions relate to:
  - Landfill cell excavation,
  - Brady road landfill gas capture, and
  - Staff building

A.5 Garbage and Land Drainage: Key Assumptions

- The financial analysis is consistent with the Department's projections for Garbage and Land Drainage.
- Revenues are generated from several sources:
  - Transfers from Solid Waste (in Garbage)
  - Transfers from Sewer (in Land Drainage)
  - Small commercial contracts, bulky waste, and miscellaneous revenue
  - Permits and applications
  - Sale of recyclables, Manitoba Product Stewardship Corporation Grants, and Depot Recycling (altogether known as "recycling operations")
  - City of Winnipeg contract
- Revenue growth for all line items, except the City of Winnipeg contract, remains consistent with estimated growth in expenses. A new City of Winnipeg Contract and/or new user fees is estimated to cover remaining expenses of Garbage so that its operations are breakeven.
- Operating expenses for 2009 through 2011 were derived from the Department's existing budgeting process. All expenses increase by 1% per annum thereafter.
  - The major increase in the 2009 budget as compared to 2008 due to higher volumes of recycling collection.
- Interest expense is based on existing debenture debt at rates and repayment schedules in place as at December 31, 2008 plus additions at 6% per annum.
- Capital assets as at December 31, 2008 were comprised of:

	Cost	Accumulated Depreciation	Net Book Value
Land	$ 488,903	$ -	$ 488,903
Water & waste facilities	1,050,739,759	326,245,558	724,494,201
Information technology	1,864,909	769,522	1,095,387
Construction in Progress	1,632,159	-	1,632,159
Other	1,771,864	-	1,771,864
TOTAL	**$ 1,056,497,594**	**$ 327,015,080**	**$ 729,482,514**

- Projected capital asset additions follow:

	2009	2010	2011	2012	2013	2014
Addition	$ 25,057,000	$ 16,327,000	$ 14,246,000	$ 13,715,000	$ 13,750,000	$ 13,750,000

- Annual additions of $5,000,000 represent estimated sustaining capital reinvestment. The majority of remaining additions relate to:
  - Flood pump stations;
  - Storm retention basin; and
  - Combined Sewer relief.