INFRASTRUCTURE PRIVATIZATION:

STAKEHOLDER PERCEPTIONS IN TWO ONTARIO INITIATIVES

by

Steven Michael Derek Brooks

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Infrastructure Privatization:
Stakeholder Perceptions in Two Ontario Initiatives

Abstract

Privatization of government services and infrastructure has been touted as a solution to the problems of big government, fiscal deficits and the need to rebuild infrastructure and expand service delivery throughout the world. Possible benefits include lower operating costs, more appropriate allocation and direction of resources, increased choice, increased quantity, better feedback mechanisms for the service (money rather than votes), decentralized decision making, increased speed of decision making and service delivery, and accessing creativity and expertise within the private sector, to name a few. Yet many of the market failure lessons of the past are not discussed in any depth in recent privatization literature, and few case studies are comprehensive. The market, cultural, legal, and institutional conditions necessary for these successes to occur is a critical issue. This thesis critically reviews existing world literature, theory, and evaluative frameworks in the context of two Ontario, Canada water privatizations. Twenty seven structured interviews were conducted with key stakeholders over 1996 and 1997 which identify a range of factors relevant in considering a municipal infrastructure privatization initiative. Many of the perspectives revealed are not discussed in the literature surveyed. The result has been the identification of a wide range of relevant privatization evaluative criteria that is Canadian-source and Canadian cultural and institutional-specific data, the discovery of similarities and differences of perception in stakeholder groups that should enable the process of privatization to be improved, a validation of the applicability of some of the theories reviewed, and the disclosure of the potentially unique elements of each privatization. Lastly, a process by which the infrastructure privatization decision-making process can be customized to a particular government and set of suppliers for a particular time is discussed.

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S. Michael Brooks
August, 1998

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1. Introduction

> "The wave of privatization over the last decade has been a fascinating phenomenon of deep significance in transforming mainstream political economy. The boundaries between the public and private sector have become blurred, probably forever. However, in the future, it is unlikely that privatization will be adopted quite as unquestioningly as an easy route to economic efficiency as it has been in the recent past " (Clarke, 1993)

Privatization of government services and infrastructure has been touted as a solution to the problems of big government, fiscal deficits and the need to rebuild infrastructure and expand service delivery throughout the world. Possible benefits include lower operating costs, more appropriate allocation and direction of resources, increased choice, increased quantity, better feedback mechanisms for the service (money rather than votes), decentralized decision making, increased speed of decision making and service delivery, and accessing creativity and expertise within the private sector, to name a few. Yet many of the market failure lessons of the past are not discussed in any depth in recent privatization literature, and few case studies are comprehensive. There is considerable economic evidence that privatization of government services and state-owned enterprises into competitive markets can, inter alia, improve efficiency, increase the availability of capital, and reduce costs. The market, cultural, legal, and institutional conditions necessary for these successes to occur is a critical issue. While the evidence for cost savings by contracting out local garbage collection and urban busing seems strong, the recent economic evidence in support of privatization of infrastructure and public services that exhibit monopoly characteristics, such as electrical distribution and sewer and water projects, is less convincing. Other privatization candidates, such as toll roads and airports, have different economic characteristics and roles. Privatization can occur in many ways[1], and have many goals, and efficiency may be only one.

I have used the term "privatization" interchangeably in this thesis with the term "Public Private Partnership" or "PPP" for short although the terms have wide and varying interpretations. A review of various interpretations of those terms, and the definitions used for the purposes of this research, is contained in Appendix "A".

All levels of government in Canada were considering privatization of government services and infrastructure during the 1980's and 1990's.

There are two primary motivations for this research which comprise its overall goals. Firstly, there is very little Canadian based literature that discusses, in detail, case studies of privatization initiatives in Canada. While there are a few that deal with federal level government services (for

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[1] see Appendix "A" for various definitions of privatization, commercialization, de-regulation , and public-private partnerships.

example Canadian National Railway, Air Canada and NAVCAN) there is very little that discusses privatization initiatives at the provincial and municipal levels. Given that most infrastructure that involves planning in Canada is at the provincial and municipal levels, it is perceived that there is a need for a better understanding of privatization initiatives at this level. Secondly, much of the literature currently existing on infrastructure privatization appears to be narrowly focused. Particularly, much of the literature reviewed described privatization from either a political or economic point of view and often did not deal with other types of issues that the privatization may raise, such as the environmental, social or cultural impacts of the privatization. Some of the literature appears biased. Most of the literature, I believe, fails to equip government policy makers or analysts with any frameworks or a balanced perspective that would enable them to determine for themselves if, when and how to consider privatization. This research contributes in all those respects.

Several water and wastewater privatization initiatives were underway in Ontario in 1996 and 1997. The initiatives of the Regional Municipality of Halton just west of Metropolitan Toronto to seek a private sector partner to assist it with providing water and wastewater infrastructure as part of its Halton Urban Structure Plan, and the initiative of the Regional Municipality of York just north of Metropolitan Toronto to seek a solution, with a private sector partner, for its long term water needs (the "Case Studies") were selected for detailed review in this research. These are two of the largest and richest municipalities in Canada.

Accordingly, this thesis does five things;

(i) summarizes experience in infrastructure and public service privatization reviewed in the literature surveyed from 1750 onward in Europe, North America and selected other countries;

(ii) explores applicable theory from the fields of political science and economics;

(iii) describes and analyzes two water privatization initiatives proceeding at the time of the study in the Province of Ontario in the context of the experience in infrastructure and public service privatization, and the existing theoretical frameworks; those of Halton Region and York Region;

(iv) compares the perceptions of key stakeholders in the Halton and York Region case studies against both the existing theoretical frameworks and the recent history of infrastructure and public service privatization; and

(v) suggests outcomes relevant to emerging privatization theory regarding public infrastructure in Canada and areas for further research.

This thesis is organized consistent with these five elements.

Chapter 2 describes the history of and recent experience in infrastructure and public service privatization, from 1750 onward. This chapter gathers together experience in infrastructure and public services privatization from Europe, the United States, and Canada. It summarizes experiences involving privatization of water service, urban lighting, electrical and natural gas distribution, bridges, roads, urban transit, canals and dams. In the context of Ontario, particular experiences in privatized gas and electrical service, street railways, water works and sewage systems and toll roads are discussed. In addition, Chapter 2 reviews experiences with the privatization of state owned enterprises ("SOE") and the empirical evidence of savings appearing in published reports involving government services such as garbage collection, urban busing and other similar local government services. Chapter 2 attempts to make some conclusions as to the outcomes of the empirical evidence surrounding local service privatization and describe the various points of view with respect to this research. Chapter 2 provides an analysis of the evaluative frameworks used by several key authors to analyze the perceived success or failure of privatization initiatives, including many of the Thatcher privatizations. Chapter 2 concludes by suggesting that privatization initiatives need to be evaluated using a much broader framework than simply a framework involving issues of economic efficiency.

Chapter 3 explores the existing theoretical frameworks underpinning infrastructure and public service privatization initiatives. These include placing privatization initiatives on the political spectrum, a discussion of the literature on motivations for nationalization and a description of the degree to which nationalization is discussed in recent privatization literature. Chapter 3 reviews the political perspectives of those in support of privatization and of those against it. In addition, chapter 3 discusses economic theories applicable to privatization, including property rights, the principal agent literature, theory of the firm literature and the effect of competitive markets on pricing and efficiency. In addition, theories from political science are discussed including public choice theory and the government reform literature. Lastly, this chapter attempts to describe existing frameworks of analysis based on this ideological and theoretical background. Several authors' approaches are reviewed. Chapter 3 ends with a summary of what could be regarded as the state of the art in privatization theory in 1997.

Chapter 4 describes in detail the methodological approach to this research. This research is qualitative research. Fundamentally, it seeks insights into the question of if, when and how should Canadian governments consider privatization as a policy initiative. Twenty seven key stakeholders involved in the Case Studies have been interviewed in depth, including senior elected officials, senior bureaucrats and heads of departments, senior representatives of private sector bidders, management consultants, financial consultants, representatives of labour and ratepayer groups. The purpose of these interviews was to determine their individual fundamental perceptions of the strengths and weaknesses of government, the strengths and weaknesses of the private sector, the reasons for, costs and benefits of, and risks involved in infrastructure privatization. It was intended that by polling such a diverse group in two case studies involving the same infrastructure; water and wastewater, that a wider range of potential issues and perspectives could be generated that could lead to the development of Canadian-context insights, experiences and potential analytical and evaluative frameworks and, as a result, better policy making. Given the decision making or critical influence roles played by most of the interviewees, it was expected that their perceptions would, and are,

reflected in the actual decisions made by the public and private partners in the Case Studies.

Chapter 5 describes in detail the Halton Region and the York Region Case Studies. A summary of the Halton Region Case appears in section 5.1. This section describes the historical background to Halton Region's official plan making process and the creation of the Official Plan ("HUSP") that resulted in the need to provide new water and waste water services for the northern parts of Halton Region. It describes the prohibitive cost structure of HUSP and the decision by the municipality to seek private sector partners. It describes the progress of that process from May of 1996 to May 1997. It shows the issues involved, on a detailed local level, in a privatization initiative involving an upper tier municipal level of government.

Section 5.2 describes the similar process, during the same period of time, in York Region. In York Region, the issue was not so much the need for an expansion to the water and waste water system to service outlying areas, but rather the need for an increase in capacity for water delivery, and the decision to choose an independent solution over that offered by the Municipality of Metropolitan Toronto, its current primary fresh water supplier.

Finally, chapter 5 describes in detail the interview process that was developed, and the results of those interviews. It offers detailed insights into the thinking of the key stakeholders and provides a mechanism to evaluate both the historical experience described in chapter 2, the empirical evidence also described in chapter 2, and the underlying theories described in chapter 3. The Case Studies provide an important Canadian based counterpoint to the literature and will assist Canadians in understanding Canadian experience in this world context. From this review, the existing "privatization theory" can be tested in a truly Canadian context.

It was also important for the purpose of the study to select infrastructure that exhibited monopoly characteristics, since the empirical evidence as to the benefits of privatization of monopolies was very equivocal; no clear economic benefit from privatization had been consistently shown. Accordingly, a study of water privatization enabled the author to focus on additional aspects of privatization that might not otherwise be apparent where efficiency gains were the primary goal of privatization. Conversely, the choice of a monopoly such as water for study also had the possibility (although it subsequently turned out to be premature) to provide further empirical evidence as to whether there are any efficiency gains to be made in privatizing a monopoly such as water, and the externalities of doing same.

Chapter 6 provides for analysis and synthesis of the Halton Region and York Region case studies, including a comparison of the outcomes of those Case Studies to the historical experience described in Chapter 2 and the theoretical background described in chapter 3. In this section, new issues are identified and new perspectives discussed arising out of the Case Studies and questionnaires. Included in this section are subsections on variances between stakeholder perceptions, similarities between stakeholder perceptions, unexpected stakeholder perceptions, and stakeholder perceptions vis-a-vis theories in political science and economics.

Lastly, chapter 7 provides for some research conclusions in light of the goals and objectives of the research, and suggests areas for further study.

This introduction has explained the overall context and subject matter of the research, and the methodology used in this research. The goals for the research are met by:

1. Identifying the reasons and political objectives (both explicit and implicit) for privatization both historically (described in chapter 2), recently (described in chapter 2) and in the context of the Case Studies (described in chapters 5 and 6);

2. Surveying the perceptions of key stakeholders in the Case Studies, and identifying the indicia of failure and success from the perspective of all stakeholders in the process, and identifying the parties strengths and weaknesses from the Case Studies. This is described in chapters 4, 5 and 6;

3. Explaining the process and the perceptions, in Case Studies and comparing them to the literature surveyed and theory reviewed. This is explained in chapters 6 and 7; and

4. Developing and refining issues, frameworks and processes to assist future researchers in understanding #3 above, and in reconsidering traditional theoretical approaches to privatization in light of the evidence presented. This is described in chapter 7.

2. History of and Recent Experience in Infrastructure and Public Service Privatization

The purpose of this chapter is to provide the reader with an understanding of the experiences, throughout the world, in infrastructure and public service privatization from 1750 onward. This will enable the reader to place any current case studies in a historical context and will enable the reader to see both similarities and potentially dissimilarities with prior experience. In addition, history may provide some level of predictive utility, to the extent that one is able to either see privatization in the context of a nationalization-privatization "cycle", and to the extent that one is able to see, from history, the tendency for basic infrastructure to ultimately revert back to public hands.

This chapter also reviews in considerable detail the empirical evidence of efficiency gains in privatizing infrastructure and government services, including urban bussing, garbage collection, piped water, electrical utilities, toll roads and airports, amongst others. This chapter also provides the reader with a broad overview of the major research works in the area to date, their approach to their research and their findings. Lastly, this chapter attempts to show how the approach to the analysis of infrastructure or public services privatization has changed from the 1980's to the 1990's, and the broadening of the line of enquiry and analysis taken, for example, on the Thatcher privatizations by authors more recently.

There has been very little research undertaken in the context of Canadian privatization initiatives on the history of infrastructure privatization. This chapter summarizes some of that Canadian and Ontario infrastructure privatization history for the purposes of providing both a foundation for theory building, and a context to consider recent privatization initiatives in.

2.1 From 1750 onward: General History

Public works history and municipal government history provide a history of privatization not indexed as such. The empirical facts of these examples colours considerably the recent debate, since many of the market failure lessons of the past are not discussed in any depth in recent privatization literature, nor recollected by interviewers (except one).

While public bodies often identified the desired ends, it was mostly private sector entities that initially supplied the means of providing infrastructure in Europe and North America during the period 1750 to approximately 1900. Water service, coal gas for urban lighting, the provision of electricity and natural gas, bridges, roads, urban transit, canals and dams are examples of infrastructure that the private sector has for almost two hundred years provided either for its own account with no regulation, or under a franchise with a particular level of government. Indeed, some infrastructure was initially provided in the private sector for private motives, without any government directive. Early private irrigation projects in the U.S. west had both religious (e.g Brigham Young and the settlement of Salt Lake City in the state of Utah, United States) and profit motives. Early omnibuses (horse-drawn buses) were organized privately, like today's taxis, in many urban areas and were unregulated. Sewers were privately built and operated in Boston in the early

1800's.

2.1.1 General History: Canada and Ontario

Montreal is reported to have had a private water supply system in place as far back as 1801, although the service was short lived. The Welland Canal in Ontario was privately built. The Windsor tunnel was privately built and privately operated for 60 years. Many dams in the United States were privately built. There has been no particular categorical limitations on what types of infrastructure the private sector could have built, owned and operated in the past.

Variances in public and private ownership existed in Ontario during the late 1800's and early 1900's with respect to the provision of gas and electrical service, street railways, waterworks and sewage systems. Toronto adopted a gas lighting system in 1841 through a franchise to a private company, and that form of gas service spread throughout Ontario during the mid to late 1800's. In the late 1880's, when electricity facilitated street lighting much easier than gas did, many gas companies took up electricity franchises and operated both systems. Municipalities were empowered to acquire and service themselves with gas pursuant to the Municipal Light and Heat Act of 1883, but it was not until 1900 that the first municipality exercised this right. Only thirteen Ontario municipalities acquired gas companies, the last occurring in 1949. It appears that the technological change emergent upon the introduction of electricity made gas company acquisition unattractive to many municipalities. However, the gas industry rebounded in the 1950's as many small gas suppliers consolidated either into Consumers Gas or Union Gas, both continuing private utilities in Ontario.

During the 1880's, seventy-two municipalities awarded franchises to private companies for municipal electrical systems. By 1895, there were 145 electric systems in operation in Ontario but only twelve of them were organized and operated by the municipalities themselves. It appears that some private companies delayed the introduction of electricity where they had an unamortized investment in gas systems in place, such as the Galt Gas Company in 1896.

> "The potential of long distance electricity transmission, municipal ownership of local utilities and the strong interest in new industrial growth were among the elements which gave rise to the "People's Power Movement" ....." (Bloomfield, at pg. 78).

When Niagara Falls power generation came on stream in 1896, many municipalities bought out their local electricity supplier and connected to the Ontario Hydro grid. Despite this general trend, there are still many municipalities in Ontario who are not connected to the Ontario Hydro grid and in fact have electricity supplied by private companies. Many municipal takeovers of private electricity suppliers, which occurred in the early 1900's, occurred because of the reluctance of existing electrical suppliers to undertake the expansion necessary to meet perceived demands in each municipality.

Similarly, street railways were typically owned and constructed by private companies, starting in Toronto in 1861. By 1890, horse drawn tram cars were replaced with electric cars. However, privately-operated municipal street car systems were rarely financially viable. When failure occurred, the municipality often had to acquire the operator to maintain service.

2.1.2 General History: Ontario Waterworks

As in Europe, early waterworks systems in Ontario were aimed towards the elimination of fire and not the provision of safe water for domestic use. Unlike Europe, municipalities in Ontario became directly involved in operating waterworks services because they were not financially attractive to private enterprise, compared to gas, electricity or street railway systems. Having said this, the first waterworks systems were provided by the private sector in Toronto from 1840 to 1871. The private system was then acquired by the City due to complaints of inadequate service in connecting houses to the system. Similarly, Kingston's waterworks system, developed by a private company in 1849, was acquired by the City in 1886. In 1882, Ontario enacted legislation permitting the granting of franchises to private companies and many municipal systems were constructed in the 1880's after the enactment of this Act. Kitchener, for example, contracted with an American company who operated forty waterworks plants in the U.S. and Canada to supply a waterworks system in return for a ten year franchise with an exemption from local taxation on its property. It was felt at the time, however, that private companies could not profitably operate waterworks systems to provide both drinking water and water with enough pressure to fight fires. During the 1890's, many companies resisted the takeover of municipal waterworks upon the expiry of any particular franchise period. Some considerable lobbying of the provincial government occurred as did resort to the courts to establish a selling price for the franchisees' systems. The comparables at that time were not to France but to Britain, as it was widely felt that "municipal socialism" would be cheaper and more efficient than private enterprise. By 1950, almost all of the waterworks companies in Ontario were operated by Boards of Waterworks Commissioners reporting to a local municipality. While sewer and water projects by municipalities stagnated between 1931 to 1945, an amendment to the Municipal Act in 1943 allowed municipalities to finance new projects by user rate rather than from general taxes and after that time, works in restoring and replacing old and outdated systems occurred.

2.1.3 General History: Some Observations

In situations where previously publicly-provided infrastructure is once again provided privately, lack of public financing ability is often a key factor. Private sector involvement in the provision of infrastructure increased markedly during times of public funds shortages, such as between 1875 and 1890 in the U.S., with respect to private waterworks.

During the late 1830's, privately operated toll roads were prevalent around Canadian cities. Public Works Canada had responsibility for most other public roads in Canada during the period 1841 to 1846, but ran up too much debt because of a lack of central budgetary control. Canal spending particularly got out of hand, representing 75% of all federal public works expenditures in

1847. Accordingly, starting in about 1850, Public Works Canada started selling roads to private companies or local governments to raise funds. Many operators of toll roads bought Public Works roads. By 1853, most of the roads had been sold. However, many of the new (private) owners failed to maintain the roads, and so Public Works repossessed them, repaired them and then resold them. During the mid 1800's, roads were under increasing competition from railways, which captured the public's imagination at the time, as well as capturing an increasing volume of freight, mail and people transportation. While toll roads generally situated around Ontario cities were purchased by municipalities during the late 1800's, the route between Ottawa and Bell's Corners (a 12.9 km stretch) remained private, and profitable, until 1920, when it was bought by the Township of Nepean. Reasons for the sale included escalating maintenance costs due to the increasing use of the automobile (invented in 1893), and public demand for free access. It is interesting to note that in 1993, the Province of Ontario enacted the Capital Investment Plan Act, authorizing, inter alia, private toll roads. The motivation for the highway privatization legislation was reported to be speed - the private sector can complete and bring the highway on-line much faster than the Province could. However, speed used in the context of high Ontario provincial deficits existing in 1993 may also suggest an inability to pay - the Province was having financial difficulties and could not afford to support financially a fast-paced construction program, or perhaps even finance a slow paced construction program. The first of such roads, the Highway 407 bypass around Toronto, was originally to form the subject of a sale-leaseback transaction with a private consortium of road builders, engineers and financial institutions. However, when the Province of Ontario realized it could finance the project more cheaply than the private sector, the arrangement changed to a form of long term management contract.

Another example of cyclicality has occurred in the United States with municipal electrical supply. In many municipalities, conversion from coal gas street lighting to electric street lighting occurred by enfranchising a contractor to install the necessary capital works in return for an exclusive franchise to supply electric power for a period of years. Most of these local utilities were acquired or taken over by municipalities in the late 1800's and early 1900's. However, since 1924, private sector ownership of municipal electrical supply infrastructure in the United States has increased, primarily because of the availability of private capital to finance high initial infrastructure and system costs and lower costs of operation, and therefore rates, charged by the private operators.

For situations where governments sought to enlist the aid of the private sector in achieving public ends in public services provision, motivating factors (the "Historical Privatization Factors") included the following;

Table 1
Historical Privatization Factors

(i)	speed (such as the electrification of Paris streets in 1890),
(ii)	the availability of private sector experience and skills (such as for Paris roadways 1882-1894, and for Paris public transit 1850-),

(iii)	the lack of public sector capital (U.S. 1785-1850, 1875-1890), or, conversely, the availability of private sector capital (U.S. bridges 1874-1956),
(iv)	unique opportunities (carts bringing in produce could take garbage out to farms - Paris in the early 1800's), and
(v)	low costs (Milan gas supply 1890 to 1925, Paris late 1800's, Budapest's railroads).

The histories of private sector involvement in infrastructure is generally consistent throughout the western world. In some European cities, infrastructure development was taken over by, and in a some cases started by, the public sector as a matter of cultural ideology. The Germans and the English believed in efficient municipal governments very early. France may have been slower to appreciate the benefits of public control and ownership of infrastructure, enabling the private companies to develop, own and operate private franchises in gas and electrical service, municipal transit, garbage collection, roadway construction and sewer and water facilities for many decades before selectively taking over many of these responsibilities in the 1800's. Ontario seems to have rested somewhere in between these two approaches, permitting the private sector in many cases to initially build and operate infrastructure but eventually taking over control and ownership. While England tended to take over private infrastructure systems earlier than in France, the U.S. or Canada, the experiences are comparable.

In some cases, governments might have considered involving the private sector but expressly chose to initiate the infrastructure work or service themselves. Reasons included the following;

Table 2 **Initial Public Provision Reasons**	
(i)	the lack of availability of private capital (Germany, Stuttgart late 1800's, U.S, 1815 to 1860);
(ii)	the likelihood of technological change affecting the infrastructure (Stuttgart with electricity vs. gas late 1800's);
(iii)	concern about corruption in the granting of franchises (U.S. street railways 1830-1860);
(iv)	desire to control service conduits and rights of way (Manchester 1875-, Paris 1880-),
(v)	a desire to achieve social objectives (Glasgow electricity 1890-, Manchester gaslight 1807-, Manchester electricity 1893-); and
(vi)	a desire to control the quality of the facilities (Glasgow tram lines 1894-, Manchester tram lines 1875-),

(the "Initial Public Provision Reasons")

Eventually, most of the basic private infrastructure facilities were transferred into public (mostly municipal) control. In this category are roads, sewers, water service and gas or electrical

service for street lighting. Exceptions are rare, and seem to have been based on a record of excellent private sector service to the public. For example, water is still privately supplied to Paris, France, and approximately 55% of French water supplies are privately sourced[2]. Relevant factors apparently included low cost, a willingness to supply all households, ability to assure future supply, and a willingness to permit municipal water usage for street cleaning, parks and fire control. On the other hand, in most large U.S. cities, water is a municipal responsibility, often through a separate quasi-governmental board. In Canada, water is generally supplied publicly. Natural gas is supplied municipally in large British cities such as Manchester and Birmingham, but by private regulated companies (Consumers Gas and Union Gas) in the Greater Toronto Area. Consumers Gas has a long (and eventful) history of staving off competition, nationalization and loss of franchise in the Toronto area.

The tendency of municipal governments in all of these jurisdictions to want to control the delivery of municipal services so as to achieve perceived public ends is pervasive. In these cases, often the means by which the public ends are achieved have social relevance and, for various reasons, mandate public control and ownership. Reasons for the public takeover varied, but included the following;

Table 3
Public Infrastructure Takeover Reasons

(i)	a belief in greater municipal cost efficiency (Paris roads 1905-, almost all German cities except Frankfurt on Main late 1800's, Ontario electrical costs 1906-);
(ii)	more public flexibility (Paris water 1860-, Glasgow gas supply 1869, Ontario water supply, Montreal water 1845, U.S. municipal waterworks 1890);
(iii)	concern of maintenance of streets, rights of ways and common conduits (Paris water 1860 -, German cities, Canadian transit);
(iv)	belief in conflict between private profit motives and public motives (Germany, 1890's, Philadelphia water 1790-);
(v)	reluctance to commit to expansion or lack of private expansion capital (Cdn municipal takeover of small\ local electrical utilities in the early 1900's, Glasgow water supply 1860-, Manchester's water supply 1847-, Birmingham's water supply 1875-, US water companies 1880-);
(vi)	new technology (Ontario Hydro grid 1896, railways over roads, U.S. 1850's, automobile U.S. 1893- demand for asphalt, autos over streetcars 1912-1969, electricity over coal gas in street lighting 1881, UK turnpike system until the 1830's when the steam engine came into use);
(vii)	corruption (such as occurred with the UK toll road trusts from 1790 to 1830);

[2]Gayle and Goodrich, 1990 at p. 75

(viii)	financial failure (Ontario municipal streetcar systems, 1890 -, Ontario municipal waterworks systems 1886-, U.S. toll road companies from 1850 -, western US irrigation projects from 1865-, the Welland Canal in 1830-);
(ix)	a demand for better service (Toronto transit 1897-1921);
(x)	a concern over abuse of a defacto monopoly (Vancouver transit, Toronto transit);
(xi)	securing future supplies;
(xii)	ensuring service to all (regardless of ability to pay);
(xiii)	ability to use the resource for the public good (such as fare discounts for workers going to and from work using transit, and ability to use water to keep streets clean);
(xiv)	assuring supply uninterrupted by financial failure; and
(xv)	avoiding discrimination,

(collectively the "Public Infrastructure Takeover Reasons").

What is clear about the analysis is that government has generally been the default provider of public infrastructure. The Historical Privatization Factors led, in almost all cases described, to only temporary provision of municipal infrastructure and public services by the private sector; sooner or later the Public Infrastructure Takeover Reasons would apply and the activity revert to public control and provision[3].

2.2 Recent Literature and Empirical Evidence: Infrastructure and Public Services Privatization From the 1980's to the 1990's

Many studies have been undertaken in the last 15 years comparing public and private provision of public services, likely as a result of the Thatcher privatization in the United Kingdom, the Reagan initiatives at decentralization and privatization in the United States, and the adoption of privatization as a policy alternative by the World Bank, and the fall of the Berlin and communism in the eastern bloc countries. In most cases, evaluations have been undertaken of the relative profitability of the enterprises before privatization and after. These quantitative evaluations form an important benchmark followed in much of the world literature.

2.2.1 Recent History: SOE Privatization

At the world level, many international examples of public services' privatization are reviewed by the World Bank in its 1992 study (Kikeri, 1992). In that study, the privatization of twelve State-Owned Enterprises (" SOE's") from Chile, Malaysia, Mexico and the United Kingdom are analyzed in detail. The SOE's include three telecommunications companies, two electricity

[3] for a comprehensive analysis of the history of British public infrastructure ownership, see Foreman-Peck (1994)

utilities, and a port authority. Anecdotal evidence of success included a dramatic increase in investment which, in the case of Chile's telecommunications company, enabled it to double its capacity in the 5 years following privatization. 9 of 12 had improved productivity due to improved incentives, reduced work force, internal reorganizations, and better labor management relations. While output prices did not change in 5 cases, increased prices in the other cases were felt to better reflect the scarcity of the output. Privatization enabled diversity, offering economies of scope to the newly privatized entities. Chile's privatized electric utility reduced illegal connections, thereby improving conditions for paying customers. Newly privatized telephone companies in Argentina increased prices, but were able to increase the percentage of completed calls from 70% to almost 100%, expand service and keep existing lines under repair. Kikeri et al suggest that privatization fosters efficiency, encourages investment, and frees public resources for other social welfare investments. Kikeri lists as the main reason for the benefits of privatization that private ownership leads to a higher probability of efficient performance over the long term. Kikeri is clear that privatizing into competitive environments produces the most benefit.

> "SOE's can be placed on an economic-financial performance spectrum that ranges from very good to very bad. Although the same is true for private firms, there is considerable evidence indicating that the median point on the private enterprise spectrum lies higher than the median on the public enterprise spectrum. This is true under all market and country conditions. The decision concerning what to privatize and what to reform should thus tend toward privatization as the outcome most likely to produce positive gains. ...The evidence .. repeatedly points to the conclusion that ownership itself matters" (Kikeri at p 3).

On the other hand, it is acknowledged that SOE's exist in the first place in many countries to balance or replace weak private sectors, to extract a capital surplus for investment in the economy, to transfer technology to strategic sectors, to generate employment, and to make goods available at lower cost. It is not clear that all of these factors were no longer relevant in those countries.

2.2.2 Recent Literature and Empirical Evidence: U.S. Public Service Privatization Generally

Similar favorable results are reported by Roth (1987), who focuses more particularly on public services such as electrical supply, water supply and sewerage, urban transport, education, health and telecommunications in developing countries, again using only anecdotal examples. Roth set out to refute the notion that only the public service could supply public services in developing countries. Roth's examples focus on a broad interpretation of benefit, not simply efficiency. In many cases in the developing country context, the extension of basic services to rural areas at reasonable cost by a private provider is a critical indicia of success. However, few examples deal with a natural monopoly situation, such as piped water.

Municipalities in the United States have been involved in significant levels of service privatization for at least 15 years. Poole (1988) reports that a 1983 International City Managers Survey of 2000 larger U.S. municipalities shows privatization of a variety of local services as extensive, including a majority of those responding for 13 of 59 "core" services. Most frequently privatized were day care, towing, community arts programmes, mental health programmes, para-transit and residential garbage collection. A comparison done against a 1973 survey shows that the use of contracting out to the private sector by municipalities doubled during the period 1973-1983 (Poole, 1988).

> "State and local governments can't print money ...We've had a growing tax revolt at the state and local level in the last decade ...Fiscal pressure on local government has been an important factor in promoting privatization" (Poole at p 81)

The 1985 EcoData survey reported by Poole compares costs among comparably sized California municipalities based on an analysis that apparently equalizes service levels. The survey demonstrated that private services replacing public services were 37% cheaper for street tree maintenance, 43% cheaper for street sweeping, 43% cheaper for grass maintenance in parks and on medians, 56% cheaper for traffic signal maintenance, and 73% cheaper for public building janitorial work. For asphalt paving and repair work, it was 96% cheaper to contract for it than to equip and do it in house. Contracting out city hall janitorial work saved Little Rock, Arkansas 50% and Phoenix 57% of its previous in house costs (Linowes, at p. 2). Reported reasons for the differences included leaner management, much more generous fringe benefits and tolerated absenteeism in the public sector, and economies of scale for larger service companies who may have many municipalities for clients.

2.2.3 Recent Literature and Empirical Evidence: Canadian Public Service Privatization Generally

McDavid (1988) has done considerable research on contracting out as practiced by 136 managers of municipalities with populations greater than 10,000 people in Canada. 26.4 % of that group contracted out waste management services, the same percentage contracted out road construction and maintenance, and 22.5% contracted out policing, animal control and pest control. Much lower percentages were recorded for social and cultural services (6.8%), transportation (6.5%) and administration (7.3%) (McDavid 1988 at p. 103).

2.2.4 Literature Review: Urban Busing

In the case of urban busing, Roth (1987) cites several cases which followed a process of competitive private market, followed by a government backed monopoly, followed again by limited competition. In Buenos Aires, a money-losing public monopoly was replaced by the private sector operating microbuses pursuant to a route franchise, self organized into a route association. As a result, public subsidy losses were eliminated and service levels improved. Labour productivity was

high, as families took pride in owning and operating their microbus. In Calcutta, unsubsidized private buses account for 2/3rds of all trips. These buses were given franchises by the local governments in 1966, and made a profit even though they charged the same fares as money losing public buses. The private operators kept their vehicles on the road. If a bus broke down, it was immediately repaired, even if the parts had to be bought on the "black" market. Public buses have to secure parts through official (slow) channels, and only one-half of its buses are on the road at a time. Also, private bus crews do a better job of fare collection: evasion is at 25% on public routes. Lastly, the private bus system uses much fewer staff. The public system in 1980 was using 50 employees per bus (Roth at 205). Roth suggests the availability of the public purse in the case of the public systems make efficiency unnecessary and makes them subject to uneconomic political route demands (Roth at p 220: see also Pashigian 1976).

Teal (1989) describes privatization developments in the United States as having been motivated by fiscal as well as ideological grounds. Prior to 1981, urban mass transit had required an ever increasing subsidy. Since 1981, U.S. President Ronald Reagan had cut federal assistance for transit by 47%, and after 1985, adopted policies within its Urban Mass Transportation Administration ("UMTA") designed to encourage "competitive procurement of transit services" throughout metropolitan areas in the U.S. The fiscal reasons were alarming - and telling. Since public subsidies of U.S. transit systems were started in the 1960's, the unit costs of the transit industry rose 140 % above the rate of inflation. It was estimated that one third of the increased funds made available to the industry was paid to existing labor for existing service, with in fact a 7% decline in labor productivity. UMTA's aim was not to fully privatize urban mass transit, since they believed that even private providers would require subsidy given the service levels expected. Rather, they intended to contract out transit delivery based on expected cost savings. Contracting out of fixed-route bus service in the U.S. is significant, with 22% of all U.S. systems doing so in 1987. Estimates of the savings ranged from 10% to 50% (Teal, 1989 at pg 68), with the larger systems exhibiting larger percentage cost savings. Poole (1988) reports that the savings are in the range of 25 to 40%, but only when all aspects of transit are competitively tendered. On the other hand, the public transit unions disputed the savings data to 1988, since there were few long term comparisons of private takeover of public routes for which identical public and private cost data was available. One case satisfied that criteria in 1988; Yolo County, California. The cost savings were 38%. Other cases are close. While San Diego city has unionized in house public transit, the surrounding cities and San Diego County contract out for equivalent bus service. Their costs are 33% lower (Poole, 1988).

A variety of methodologies had apparently been employed to estimate the cost differences between public agencies and private contractors, ranging from simple comparison of unit costs to the use of relatively sophisticated cost models in Teal's surveys. The empirical evidence from Roth, Poole, Teal and others suggests urban busing is a public service where significant cost reductions are possible from contracting out.

> "Evidence from Australia, the United Kingdom, and the United States confirms that publicly owned transport operators have higher

> costs than privately owned ones, even when they provide similar services, because they have less flexibility in making the best use of their resources and they pay their employees more. In transport, as in other fields, the discipline of having to live within one's budget applies a constant downward pressure on costs, a pressure that is all too easily relieved by the availability of subsidies from public funds" (Roth at 220)

Gomez-Ibanez (1993) offers the most extensive review of urban busing case studies from developing and developed countries, including the US and the UK, using a more complete methodology, including broad definitions of success and failure, and more detailed analysis of pre- and post privatization environments. The conclusions are similar: privatization of certain bus services into a competitive environment produce efficiency gains of at least 20%, mostly based on improved labour productivity (at p. 91).

2.2.5 Literature Review: Garbage Collection

Garbage collection is another area where municipalities have been experimenting with contracting out for many years. A 1975 study comparing costs of garbage collection in San Francisco, which has had private collection since 1932, and New York, showed San Franciscans paying an average of $40 a year, while New Yorkers paid $297 (Linowes, 1988 at p. 2). McDavid's 1981-82 study comparing costs of public and private residential garbage collection is one of the few rigorous studies done in Canada. 42.1% of municipalities surveyed had privatized municipal residential solid waste collection. McDavid identifies a key problem with this type of analysis; cost data is only broken out, in most municipalities, by service, with no consideration of adding space costs, administrative overhead or fringe benefit costs so as to afford an "apples to apples" comparison with private sector costs. McDavid prompted for this breakdown in his questionnaire. In cases where no response was given, a number was deduced and imputed into the cost numbers. McDavid also made an effort to compare once-a-week collection systems and twice-a-week collection systems to the counterpart, rather than cross comparing on the basis of different service standards. McDavid also attempted to equalize for geography, climate, location of collection, population density and total tonnage.

> "Once costs are adjusted, the big difference between public and private remains. Public costs per household are now $42.14 compared to $29.88 for private contracting. This is still a 41% difference" (McDavid, 1988 at p. 107)

McDavid's discussion of two particular cases, Richmond B.C., and Halifax, Nova Scotia, are illustrative. He suggests that crew productivities were the primary difference in Richmond, where costs once privatized dropped 66%. In Halifax, an arrogant public service union caused the City Council to seek competitive bids from the private sector. The union had insisted that 9 public crews of three people were necessary to collect garbage. In addition, employees often filed for overtime

to complete their work. The union was invited to bid for the work along with the private sector, but the union bid was almost twice as high as the private sector bid. The winning bidder operated 7 private crews of two people, who were able to complete all garbage collection routes with no overtime. The savings were 46% in 1983.

> "American studies, and studies done in Europe and elsewhere overseas consistently point to the fact that privatizing solid waste collection services saves money without sacrificing quality" (McDavid, 1988 at p. 114)

2.2.6 Literature Review: Electrical Utilities

Likewise, surveys reviewed by Wolf from the 1970's showed the private sector as slightly more efficient in one case, even in two in the provision of electrical utilities. Conversely, Wolf's student, Ross, confirms that the public sector is generally more efficient in providing electric utility service (at p. 35). Vickers and Yarrow would agree: results from more recent studies (including one study cited by Wolf) were that public sector electrical utilities had lower unit costs than private ones, but the quality of the evidence adduced has been challenged. However, Vickers and Yarrow do not believe private sector electrical supply operators are any more efficient (at p. 40).

> "..Taken in conjunction with the research on US electric utilities, we are therefore led to the conclusion that, where firms face little product market competition and are extensively regulated, there is generally no decisive evidence in favor of one or other type of ownership" (Vickers and Yarrow at p. 41)

2.2.7 Literature Review: Toll Roads

Recent fiscal pressures have caused many U.S. states to re-examine toll roads, on the basis that either new construction is tolled, or it is not built at all. Governments are seen to be re-experimenting with toll roads in the U.S., and it is not yet clear whether the gasoline tax is their preferred financing source (Teal, 1989 at p. 64). Roads are treated differently from contracting out cases in the literature, given the long term nature of the agreements and high capital costs. It is rarely possible to anticipate all contingencies that may arise in the future in the long term lease or supply agreement (Hirschorn, 1992). A toll road lease may be 50 years; a bus contract may be for 3 years. There is a resale market for buses if a tender is lost: one cannot sell asphalt. The evidence of success in private toll roads is scant, and the risks of opportunism, inflated costs and financial failure still constitute primary risks (Gomez-Ibanez and Mayer, 1993: Hirschorn 1992). On the other hand, Gomez-Ibanez (1993) points to experience and success with private toll roads in France and Spain. Tolls can be collected by governments or the private sector. Often, it is noted, the need satisfied by the privatization of a toll road is not lower operating costs, but the initial financing. In these cases, the income stream out into the future from the tolls are sold (discounted cash flows) to a developer-financier consortium who pay for the construction cost in return for the income stream for a defined

period, like an annuity. A similar approach has been taken to private bridges and tunnels.

Toll roads are not natural monopolies since there are usually untolled (slower) alternatives. In addition, toll roads that are privatized may have political advantage since no public funds (i.e. current cash) is used. On the other hand, the scope for service innovations and creativity appears limited. In capital-intensive undertakings, there is likely to be less difference between the public sector provider and the private sector provider. Gomez-Ibanez supports highway privatization but also suggests, given the paucity of North American cases, that other factors are relevant, and the political risks particularly high. Canadian examples include the recent (1996) Highway 104 privatization in Nova Scotia, and the 223 Kilometre Coquihalla Highway in British Columbia. The 69 Kilometre Highway 407 project in Metropolitan Toronto, in which an initial privatization was scaled back to merely be a private operating contract is a similar example. A relevant question is: why can't government keep the tolls and raise the financing itself.

> "A number of studies have indicated that there are important gains to be realized through more efficient road pricing and investment. But these are not organizational problems. The solution lies in an appropriate shift in government objectives and priorities, not in privatization" (Hirschorn, 1992 at p. 19)

2.2.8 Literature Review: Airport Privatization

Airport privatization studies are more current, but there are few long term reviews of the effects of airport privatization available. Terminal privatization have occurred, such as in Terminal 3 in Toronto's Pearson International Airport, as have commercializations, such as the share issuance for the British Airports Authority, operator of Heathrow and other airports in the U.K. Results reviewed by Hirschorn (1992) are mixed, and overriding public policy concerns suggest that ownership transfers to the private sector of entire airports may not result in any significantly greater allocative efficiency than if steps were taken to improve public management of airports. Vickers and Yarrow do not see any advantages in privatizing airports that already contract out for services (at p. 429). This is particularly relevant given the Canadian government's reported agreement to re-purchase Terminal 3 and convey it to the Greater Toronto Airport Authority, a non-profit local public authority which was given Terminals 1 and 2 at Pearson to operate. A selective approach to re-pricing, contracting out and changing management practices may offer efficiency gains without loss of public policy flexibility for nationally critical assets like airports, according to Hirschorn.

2.2.9 Literature Review: Water and Wastewater

Piped water exhibits the characteristics of a natural monopoly. Yet private piped water has been successful in France for centuries, and the private sector has facilitated the provision of water, particularly to the poor, in developing countries (Barghouti, 1990). Wolf (1993) reviews three water utility surveys from the 1970's, all of which show lower private sector costs and greater efficiency. Vickers and Yarrow review several US cases of private water supply and their conceptual

counterpart, electrical power supply and distribution. Early studies in private water supply reviewed by Vickers and Yarrow also suggested lower private sector costs, but a more recent study not reviewed by Wolf found lower public sector costs: on balance, little efficiency gains are seen by Vickers and Yarrow in privatization of water utilities (see also Kinnersley (1988)). Moreover, Vickers and Yarrow are concerned about the potential negative externalities of water privatization, including concerns about the environment, natural monopoly abuse, and infrastructure investment. Concern, particularly, over pricing of water and the ability of the water price to be low enough to subsidize certain groups (e.g. farmers) highlights social opportunity costs of privatization of these monopolies in other countries. In the UK, fear of rising water disconnections causing outbreaks of disease was discussed shortly after the RWA privatization (Clarke, 1993, at p. 221).

Of the privatization carried out in the UK, the privatization of ten regional water and sewerage companies were one of the most difficult, called by the British government's management consultants "the most complex privatization there ever will be"[4], and by Saunders (1994) an extreme case of privatization, since all the issues, problems and concerns which arose in other sales occurred in the RWA privatization. Saunders (1994) identified at least six barriers to the privatization of water in the UK;

1. Public distrust. Almost three quarters of the British public apparently opposed it[5]. The public felt that water is such a basic resource that only government should be trusted to provide it. The industry employed almost 50,000 people, and controlled assets valued at 28 Billion pounds, making it the second biggest industry in the UK, after electricity.

2. Natural Monopoly. The distribution of water is a natural monopoly; it is almost always inefficient to have more than one water authority distributing piped water and sewerage services in one area. Where pipes are in place, supply can be increased without a proportional increase in cost. Unlike telecommunications, there are few substitutes. On the other hand, the supply of water generally may not exhibit natural monopoly characteristics.

3. Environmental Regulation. The British regional water authorities ("RWA's"), themselves an amalgamation over decades of hundreds of local companies, had a mandate both for supply and regulation, the latter involving discharge permits and private well supervision. It was of some concern that outright privatization without separation of these two functions would permit, in essence, a private company to regulate other private companies. This could lead to market failure results to the extent that the private regulator would sacrifice prudent guardianship for profits.

4. Under investment and existing debt. Most of the RWA's had large debts, which the government could write off, but also had neglected needed capital investments in their basic

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[4]Saunders (1994) at p. 33

[5]Saunders (1994) at p. 33

infrastructure. This meant that new private owners would face an initial capital call to bring the RWA facilities up to current standards. Several of these are familiar to residents of southern Ontario. For example, in two RWA's, there was excessive nitrate levels in drinking water caused from fertilizer use by local farmers. Northumbrian Water had ten of nineteen beaches below official standards for bathing. Many other RWA's had heavily polluted rivers, successive accidental chemical spills, and water discoloration. North West Water had drinking water contaminated with high levels of lead and twenty out of thirty beaches were in breach of EC regulations.

5. Differences between RWA's. Given that there were ten RWA's to be privatized, how could they be sold off at once? Wouldn't investors flock to the best and shun the rest? If the sales were staggered, what if interest waned for the latecomers, or, worse still, the conservatives lost an election and the sales were stopped?

6. Charging for water. Water was separately metered only to commercial and industrial users; residences paid only a flat rate, like taxes, based on the notional rental value of the property. It was clear in England that this approach had to change, with or without privatization.

As RWA privatizations were being proposed in a 1986 UK government White Paper, ten reasons were offered in support of privatization, described below;

Table 4
British Water Privatization Objectives

1.	Elimination of Political pressures on RWA Chiefs.
2.	Release RWA's from financial constraints.
3.	Give RWA's access to capital markets.
4.	As private companies, better managers could be hired since compensation could be freely set.
5.	Employee Motivation would be improved.
6.	comparative competition between the ten RWA's would result in improved customer service.
7.	the improved efficiency would lead to lower prices.
8.	stronger incentives to find out what customers really want.
9.	broadening of share ownership.
10.	clearer framework for protecting the water environment.

The White paper proposed a new governmental regulatory agency ("Ofwat") responsible to regulate service standards and price. The White paper also proposed to leave integrated water

management as a concept intact, meaning that the privatized RWA's would retain regulatory functions as in the past, although a later paper proposed a right of appeal to a governmental authority. In the end, it cost the government more to privatize the RWA's in loan write offs and new capitalization for previous under investment than it received in net proceeds from the sales[6]. On the other hand, after initial price shocks, government control of the RWA's through the National Rivers Authority and others has been effective, much to the delight of the environmental lobby. On the other hand, the biggest losers through the process have apparently been the trade unions within the industry.

2.2.10 Literature Review: Broad Empirical Review of Benefits of Privatization and Methods of Analysis

Broad surveys of empirical surveys of the effects of privatization of public services have recently been undertaken by Vickers and Yarrow (1988), Boardman and Vining (1989), Marsh (1991), Gomez-Ibanez (1993) and Wolf (1993).

Wolf reviews cost and productivity findings of 58 published privatization service delivery case studies done by U.S. academics over 23 industry sectors in the U.S. from 1971 to 1992. The results listed are pervasive on the basis of efficiency. The public sector was less costly or more efficient in 2 of the studies; one dealing with municipal suppliers in Montana in the early 1970's, the other dealing with per patient costs in a Veteran's Administration hospital in the U.S. vs a proprietary hospital. In seven cases there were no significant differences in costs or efficiencies. These included two evaluating electrical utilities, one comparing CN and CP railroads' operating costs in the 1970's, and three comparing refuse collection costs. In the other 49 studies, the private sector was less costly or more efficient. These included bus services, cleaning, fire departments, health care, housing, garbage collection, and water utilities. Savings ranged from 5% to over 60% of the pre-privatization cost. Wolf does not classify the studies by degree of relative or natural monopoly and does not deal with the specific indicia of success in those cases.

The approach taken by each author to the analysis surveyed by Wolf is not discussed. However, Wolf finds the methodology of many of the surveys undertaken insufficient, to the extent they only consider the most measurable of indicia, efficiency based on "allocative efficiency" as described in economics literature (Wolf, 1993 at p. 137). More Qualitative subjective criteria are not used.

Marsh (1991) compares the early results of the Thatcher privatizations on the government's stated goals: reducing government involvement in industry, increasing efficiency, reducing the public sector borrowing requirement, curbing public sector union power, assuring wider share ownership, and gaining political advantage. Marsh suggests that failed efforts at deregulation accompanying asset sales in infrastructure and public services may have hindered efficiency gains.

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[6]Saunders (1994) at p. 53

On the other hand, contracting out and competitive tendering had successfully reduced costs. Savings disclosed by case review includes savings of 20% or greater for refuse collection, hospital domestic services, and other local services. Marsh notes that these reports, however, are not without their own methodological problems:

> "...different methods are used to calculate savings; often the studies assess expected savings rather than measuring actual ones; and sometimes the data are collected from interested parties, councils with an ideological commitment to privatize or even contractors who have won contracts...There is little doubt that initial bids by private contractors were loss leaders while there is considerable debate as to whether or not the standard of services has declined as contractors cut costs" (Marsh, 1991 at p. 466)

The survey by Marsh of British academic articles and books surveying the outcomes of privatization also show differences in perspective. Early (mid-80's) reviews were altogether too favorable. The gains in efficiency have not been clear cut (Hutchinson, 1991). In all one is left wondering whether the mixed political and economic objectives of the British program, the mixed quality of subsequent analysis, and the differences of opinion even amongst British academics leaves one able to make any conclusive assessments at this stage about the success of the Thatcher privatizations generally.

> ".. there is considerable doubt as to whether privatization has increased efficiency. Contracting out has reduced costs but perhaps at the expense of the quality of services. The failure to improve efficiency in many privatized companies is even more noticeable. Perhaps the jury is still out, but the interim verdict must be skeptical" (Marsh, 1991 at p. 477).

The results of case studies surveyed by Boardman and Vining (1989) shows that the efficiency differences between public and private enterprises are much less favorable to the private sector than Wolf would suggest. The public sector may be more efficient in providing electricity and water services and other natural monopoly, high capital cost infrastructure services, according to three studies cited. Where the private sector is more efficient, such as in garbage collection, fire protection and bus transit, monitoring costs are low. Prager (1994) suggests that monitoring costs are consistently either uncounted or undercounted in privatization decisions, and that monitoring costs might eliminate in many cases the operating cost savings that may be available from privatization. Boardman and Vining are skeptical about cost savings in health-related services, given the importance of service quality and the possibility that the surveys have not controlled for service quality differences. Survey results cannot be generalized across the economic contextual boundaries of the infrastructure or service. Claims about efficiency of activities in a competitive environment may not apply to a regulated duopoly environment (e.g. railroads), or a monopoly environment (e.g.

electrical utilities). In each case, the effect of discriminating subsidies and regulations is another issue affecting the competitive environment (Boardman and Vining, 1989 at p. 7).

Vickers and Yarrow (1988) provide perhaps the most economically thorough review of the evidence of efficiency gains, or lack thereof, of the Thatcher privatizations. Unlike Wolf, they take the time to analyze particular privatizations in natural monopoly situations, and particularly analyse the effect of the existing competitive and regulatory scheme in any claimed success. Included in the natural monopoly categorizations are the supply of water and sewerage services, parts of the telecommunications system, natural gas supply, and electricity supply. In each case, the natural monopoly arises from the distribution system in place: pipes and lines. The interrelatedness of supply and distribution may make the two collectively the natural monopoly. In these cases, the scope for increasing competition is extremely limited (Vickers and Yarrow, 1988 at p. 402). In these cases, Vickers and Yarrow see privatization, particularly of the water industry, as decreasing efficiency, not increasing it, based on loss of economies of scope, the substitution of private for social decision criteria, the loss of direct control of service standards, and the likelihood of suboptimal private sector capital expenditure.

> "Where monopoly exists, ... the case for preferring private ownership to public ownership weakens considerably: private efficient profit seeking can no longer be expected to lead to socially efficient results." (Vickers and Yarrow, 1988 at p. 426)

Vickers and Yarrow's analysis does not proceed on the basis of private ownership, theory of the firm, or principal -agent economic literatures, but primarily on the ability of the divesting entity, in this case the British government, to create a competitive environment for the privatized entity and, in turn, whether it makes sense to try to do so. Efficiency gains, Vickers and Yarrow hold, arise when competitive markets exist. Regulatory control is a poor substitute, and has its own externalities. On the basis of Vickers and Yarrow's analysis, privatization of public services comprising natural monopolies may not yield any efficiency gains: indeed it may lose efficiency and create additional negative externalities.

Prager (1994) is suspicious of claims about the inherent superior efficiency of the private sector in providing public goods, and claims any differences in efficiency are for political, not economic reasons. It is unfair, Prager claims, to judge the efficiency of public sector activities when that may not have been their primary goal.

> "It is no surprise that government-operated activities are inefficient when public policy makers de-emphasize efficiency as a goal of the public sector, when management is not provided with sufficient flexibility to pursue efficiency goals ...Low cost provision by a government agency may be possible on a conceptual plane but be impossible politically" (Prager, 1994 at p. 180)

Wolf, Marsh, Ramanadham, Vickers and Yarrow, and Prager all criticize the analytic rigor applied to many of the empirical studies. Most agree the reviews focus too much on efficiency and not enough on qualitative factors. Vickers and Yarrow particularly are critical of the methodology used in many of the surveys, that they focus too much on allocative efficiency and not enough on the subjective elements of the privatization: the competitive and regulatory environment preceding and following the privatization. In most cases, the evidence is too narrow, and the weight to be given to other potentially relevant factors undisclosed. In addition, the Initial Public Provision Reasons and the Public Infrastructure Takeover Reasons have not been used to qualitatively evaluate the empirical evidence or the propriety of the privatization experience.

> "... the relative performance of publicly and privately owned firms ... will depend on a range of factors that includes the effectiveness of the respective monitoring systems, the degree of competition in the market, regulatory policy, and the technological progressiveness of the industry, ... evaluation of the welfare implications of privatization necessarily depends on empirical assessment of the role and significance of each of these various factors." (Vickers and Yarrow at p. 39)

Gomez-Ibanez' work is much less quantitative and much more qualitative than the others, dealing with transport privatization examples from developed and developing countries. His methodology considers five factors necessary to successful privatizations: effective competition, large efficiency gains, ensuring the redistribution or income transfers created by the privatization are not excessively large and complex, limited externalities, and reasonable but not excessive profitability (or minimum subsidies, as the case may be) (at p. 276 and 290). Gomez-Ibanez is also not afraid to label winners and losers, and identify organized labour as a typical loser in privatization.

2.2.11 Literature Review: Summary

In none of the cases of large scale monopoly divestitures have major cost saving productivity improvements been convincingly demonstrated (Galil et al 1994).

Of the analytical material reviewed above, Gomez-Ibanez and Vickers and Yarrow's work is the most comprehensive. Few of the other studies adopt a comprehensive evaluation framework. Increased efficiency is not necessarily determinative. While the evidence for cost savings by contracting out garbage collection and urban busing based on the work of Poole, Teal, Roth, Gomez-Ibanez and Kikeri seems strong, these examples may be characterized by the ability to place the service pricing into a competitive market by contracting out on short terms or by franchising. Particular analysis is necessary for natural monopolies, toll roads and airports. There seems to be little evidence from the literature reviewed by the author supporting privatization for efficiency purposes of electrical distribution or piped water distribution utilities. Privatization for the purpose of obtaining financing is merely the sale of future cash flows, whether user-pay or from government

guarantees or subsidies. In most cases, the public policy objectives are relevant, as is the qualitative indicia of success. These have not typically been extensively reviewed in the literature.

2.3 Post 1990 Evaluative Literature: Critique of Past Methodology

2.3.1 The Thatcher (UK) Privatizations

There has been a marked change in the tone and attitude of many British academic writers in published books since 1990 compared to those with publication dates in the 1980's. Economists and academics have criticized the outcomes of infrastructure privatizations, particularly the Thatcher privatizations. Recent criticism of the performance of the privatized British entities by Marsh (1991), Clarke and Pitelos (1993), Hutchinson (1993) and Ramanadham (1993) suggest that the politically-motivated architecture of the SOE sales, termed "political short-termism" by Marsh, ultimately crippled many of the privatized entities. Private monopolies were created in place of public ones. No efficiency gains occurred, but monopoly profits increased through price increases or service reductions. Ownership had been replaced by complex regulations and monitoring costs in the form of administrative agencies. This was, according to Marsh, no freeing of captive entities to the laissez-faire wilds of the competitive market.

Clarke (1993) summarizes the Thatcher mid-term results:

> ... some significant gains in efficiency have been attained. The extent to which such improvements in efficiency were based on restructuring carried out prior to privatization, or were due to reductions in service or quality of products, or asset sales, is not entirely clear.....The frequent interventions of the regulators has clearly been a crucial factor in maintaining the responsiveness of the privatized monopolies to customer concerns ... [7]

The impact of the Thatcher privatizations on British industrial relations was significant. First, the political link between unions and the government of the day was broken, replaced by shareholders and regulators. The regulators of the various utilities (acronyms Oftel, Ofwat, Ofgas, and Offer), are responsible for regulating price increases, monitoring service quality and overseeing the development of competition. In order to increase profits under a fixed price regime, the newly regulated utilities have had to cut costs. Labour costs are about 50% of overhead in electricity distribution, 60% in gas, 40% in water and just under 50% in telecommunications in the UK[8]. Water price levels are tied to capital expenditure levels, to the extent that permitted price increases in several of the utilities were to be suspended if capital expenditure programmes were not maintained.

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[7] Clarke, 1993 at p. 25

[8] Ferner (1993) at p. 128

Cost information is now required of the privatized utilities, which are intended to make it more difficult for the utilities to pass costs between regulated and unregulated activities. In the case of water companies, benchmarking of costs between regions is now occurring.

The British regulators are also quite focused, for political reasons, on the quality of service provided by the regulated utilities. When water had been privately provided in the mid 1800's, British regulators had required private water companies to supply water to anyone who wanted it. Recent intervention in all privatized utilities in the UK has included forcing companies to offer compensation to customers receiving poor service, ensuring the utilities publish more informative quality of service statistics, and linking quality of performance with the pricing formula[9]. This is not particularly laudatory of the benefits of private sector provision of utilities over the public sector. For example, after the privatization of the regional water companies, in 1991-92, water disconnections increased 177%. The result was evidence of the outbreak of dysentery.

The success of privatized British utilities may have occurred because of increased monopoly prices, selling off assets and cutting unprofitable services, and reducing labour headcount. If so, these tools are equally available to a public sector monopoly as a private one. A factor made clear in recent Ontario Hydro labour (anti-privatization) advertisements is supported in the UK case: a common consequence of privatization of a natural monopoly is increased prices to consumers (see Marsh 1991: 469). In fairness, however, this has often been a result of the conversion from public price-subsidies to full cost recovery pricing, and the addressing of significant public deferred maintenance by resumed current life cycle maintenance programs by the British privatized utilities.

Economists understand the incentive of regulated companies to "capture the regulators". It was, accordingly, not surprising to them (but it was to the British public) that the newly privatized water utilities proposed regulating themselves. The European Community has a policy, however, requiring that the regulator stay completely independent of the regulated.

Another interesting side effect of the British utility privatizations has been the increased scope for unregulated activity by those companies, including offering their expertise around the world, and branching out into related businesses including upstream and downstream integration. For organized labour, this means that new work standards can be created internally that may find use within the regulated utility itself. Northumbria Water, for example, has sidestepped their union in setting up a joint management-labour compensation committee.

Upon privatization, the shares of the newly privatized utilities traded on the British stock exchange. This meant that they were susceptible, like any other publicly-traded company, to takeover risk. In water, for example, the French private water companies took over several of the British privatized water companies, seeking a toehold in the British market. This has political implications.

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[9] Ferner (1993) at p. 129

Foreman-Peck and Millward also argue that the cost of and effect of regulation has not been adequately accounted for in the privatization process in the UK:

> "to allay fears of price exploitation and withdrawal of services, yet another institutional innovation was born: the industry specific regulatory office staffed by civil servants and headed by a non-civil servant government employee.... What remains unclear is whether the regulations ... necessary to ensure competition are so pervasive and detailed that effective freedom of action will eventually be removed from the regulated industries ... eventually there will be little difference between the internalized regulation of the state owned industry and the regulated private firm...there is little evidence as yet that these institutional innovations have promoted any fundamental change ... " (at p. 339)

2.3.2 The World Bank and International Literature

The World Bank, which has supported privatization throughout the world in many prior studies throughout the 1980's and early 1990's, has also seen the need to address privatization in a more balanced way. In Welfare Consequences of Selling Public Enterprises (1994), a publication supported by the World Bank, the preface contained the following admission by a World Bank official;

> [speaking about privatization] "...although the literature on the subject is extensive, it is by and large theoretical and descriptive. Until now, there has been little empirical work across countries addressing some of the major policy questions that have made privatization controversial in the past - who gains and who loses from divestiture, does it benefit owners and management at the expense of workers and consumers, are privatized firms more efficient? "(at (viii))

The study uses a methodology that is "resolutely and comprehensively quantitative, derived by comparing the performance of individual enterprises before and after divestiture" (at p. 3). Given the subjective element underlying the "objective data", and the philosophy of the sponsor, one is left questioning how the goals for the preface of the book were met. A more qualitative analysis remains to be done by the World Bank.

The conclusions from Welfare Consequences were:

> "The goal is enhanced economic welfare... How dramatic [sic] are the gains that might reasonably be expected? This depends to a large part on how much room there is for improvement. If the country's public enterprises are run as well as Singapore's airlines ..., then the potential

> gains are small... (at p. 576). Additional economic benefits might follow from unleashed private entrepreneurial activity .... but to our knowledge they are no where substantiated by empirical work... There is no simple internationally applicable recipe for divestiture." (at p. 577)

2.3.3 Revisiting Qualitative Impacts of Privatization

In Privatization and Equity, Ramanadham has collected articles from 12 international academics and experts on privatization on the distributional effects of select privatizations in 11 developing and formerly communist bloc countries. These articles focus on how privatizations impact on social redistribution generally; i.e. helping relatively poor sections of the community, the unemployed and other disenfranchised groups, raising the share of national income of the lowest-income brackets; raising the share of wealth owned by the poorest groups, and controlling excessive flows of income and capital outside the country[10]. Distributional impacts, however, may arise both directly and indirectly, and affected groups usually include consumers, labour, taxpayers, as well as investors.

> "The disparate distributional effects in a given case - e.g. when a privatized enterprise attains internal efficiency through measures that cost jobs and raise prices - can only be adjudged properly if the desideratum in the case of each effect is known through some public policy statements ..." [11]

Privatization and Equity, suggested privatizing governments and others have paid little attention to distributional equity issues. This is particularly so with respect to infrastructure where in many countries pre-privatization prices represented a subsidy to certain low income groups[12]. Privatization, followed by or preceded by marginal cost or full cost recovery type pricing, may then require another, more explicit subsidy or modification to a progressive tax system aimed at such groups to rebalance those distributional issues: a failure to do so may invite political instability in some jurisdictions. Indeed, if, for example, cheap clean drinking water was a policy objective in a given country, the subsidy may have to be given to the privatized infrastructure operator to maintain the policy without creating additional work. Almost all the authors pointed out the initial layoffs incident to privatization. Accordingly, the short run unemployment side effect of privatization needs consideration by the privatizing government, but should not necessarily be thought of as a reason not to privatize. For example, current employment levels may be excessive in some governmental departments as a result of featherbedding and union work rules. In the long run, society may be

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[10] from Ramanadham (1995) "Impacts..." at p. 2

[11] from Ramanadham (1995) "Impacts ... " at p. 3

[12] From Ramanadham, (1995) "Concluding Review" at p. 273

better off freeing up those employees to be more productive elsewhere.

Particularly, the impact of privatization on employment levels was positive in the case of the newly privatized British Regional Water Authorities, according to Harris (1995). The total number of jobs in the water industry has risen since privatization, due to diversification by the water industries. Pay rates have also risen faster in the privatized RWA's than in the public British National Rivers Authority[13]. However, it has been a source of some concern that the reported pay for some RWA chief executives has risen five-fold since privatization, to the extent that their pay is now in the million pounds range.

Many of the authors in Privatization and Equity foresee tax and fiscal problems incidental to the privatization, as gross receipts from privatization have been used by governments, including the Thatcher government, against operating deficits, not against debt. These tax consequences, suggests Ramanadham, have not yet materialized in many countries[14]. It has been interesting to read of the British labour party's windfall tax on the profits of privatized British utilities which, amongst British Telecom, the electricity generators, the RWA's, the electricity distributors and British Gas, totalled 10 Billion pounds in 1995. The RWA's alone earned profits of almost 2 Billion pounds during that year[15].

2.3.4 Recent Evaluative Literature: Summary

There is an unmistakable moral that comes out of the more recent academic literature: privatization options and techniques of divestiture ought to be more meticulously determined than has been the case so far, with adequate consideration being given to the qualitative impacts[16]. In addition, a clear effort must be undertaken to differentiate privatization experience arising from the divestiture of SOE's from the literature dealing with privatized natural monopolies that are public services. As Clarke concludes,

> "it is difficult to imagine any advantages of a private monopoly compared with a public monopoly ... The private sector is as prone to the erection of large-scale, complex and remote bureaucracies as the public sector" (1993; at p. 213).

Ramanadham makes several conclusions in Privatization and Equity relevant to the privatization of natural monopolies that are infrastructure:

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[13]Harris (1995) at p. 237

[14]at p. 276

[15]The Economist, June 1, 1996 at p. 55

[16]see, for example, Ramanadham, 1995 at p. 277 for further thought

(i) there are serious problems of identification and measurement. The problem lies in the difficulty in isolating causality, dependant and independent variables;
(ii) "the immediate impacts associated with a given measure or series of measures of privatization may not persist in the long run. Examples can be found in the context of employment and the public exchequer";
(iii) the redistributions that occur with privatization are not all in one "direction";
(iv) analysis of equity impacts would improve and gain in relevance if governments were more explicit as to their objectives in these areas;
(v) some inequities (i.e. loss of jobs and reductions in non-commercial outputs) may have to be accepted as the price for efficiency aimed at by privatization;
(vi) if distributional impacts were properly weighed by governments, other alternatives may gain more strength; and
(vii) the weight of public concern with the issue of distributional equity depends on how important the privatized entity is in the economy.

(at pp. 277-278)

2.4 Overall Summary: Literature Review; Historical Evaluative Methodologies

It seems evident from this chapter that efficiency gains may be a necessary, but not a sufficient, expectation of infrastructure and public service privatization. Public and political intolerance for some of the side effects of privatization, called distributional equity by Ramanadham, but really dealing with social costs, lost opportunities, and social externalitites more broadly defined, is now seen as directly relevant. It is important to understand that a priori understanding of the potential social impacts of privatization by policy makers may fundamentally alter the selection from initial policy alternatives. In other words, if policy makers and politicians had a better understanding of the developing world experience in privatization, not from the point of view of efficiency gains but from the point of view of social and other externalities, perhaps fewer privatizations may be initiated or, alternatively, privatizations that do proceed are structured differently and accompanied by specific measures aimed at addressing these potential social externalities in advance.

There are a wide variety of potential evaluative approaches possible when looking at privatization. Most are much too narrowly focused. The well established approaches are based on economics and efficiencies; static, allocative and dynamic. The work of Vickers and Yarrow falls into this category. Vickers and Yarrow do not see efficiency gains from (monopoly) infrastructure privatization. Still other authors have used a slightly more subjective and broader approach to valuation. The work of Gomez-Ibanez and Myers is more qualitative than many of the other works. However, in order to make evaluative frameworks workable, unfortunately, they are often comprised of only a few subjective categories and often develop into a "matrix" form, such as was done by Ross. While these several criteria, or matrix frameworks are of considerable assistance in abstracting subjective information and permitting comparisons between case studies, they are of much less utility in suggesting risks, suggesting alternatives, or in suggesting likely outcomes.

For the purposes of this study, I have often focused on a simple tool; the Table-based list. Several lists have been contained in this chapter including the Historical Privatization Factors, the Initial Public Provision Reasons, and the Public Infrastructure Takeover Reasons. In the following chapters, privatization is placed in a current political context and in the context of prevailing theories, including those from politics and economics.

3. Existing Theoretical Frameworks

The purpose of this chapter is threefold;

(a) to acquaint the reader with the political issues associated with privatization and the proposition that privatization has political as well as economic motivations and outcomes;

(b) to familiarize the reader with the economic, political science and other theories used either in support of or against privatization; and

(c) to familiarize the reader with the types of evaluative frameworks used by most authors reviewed and referenced in chapter 2 of this research.

An understanding of the political motivations behind privatization support the proposition that privatization can rarely be evaluated on economic grounds alone; there appear to be political dimensions to a privatization decision either causing it, preventing it, or making it more complicated. This section makes a useful backdrop for the case studies to follow.

An understanding of the theories underlying privatization and particularly their strengths and weaknesses, is intended to equip the reader with the ability to critically evaluate pro or anti-privatization literature that relies solely on theory for its justification. In addition, a familiarity with theory is useful to the extent that subsequent case studies can be seen to validate one or more of these theories or be partially supported by one or more of these theories. This will enable this research to suggest which theories appear to be of greater applicability given the case studies and worthy of further research and consideration.

Lastly, the explicit and implicit frameworks of analysis used by these authors, demonstrates both the necessary subjectivity of the analysis of privatization initiatives and also the difficulty one has in structuring a framework broad enough to permit consideration of all relevant factors in any given privatization. The sources for the following chapter were obtained during the literature phase of this research from publications generally having publication dates after 1980 (except generally in the case of nationalization literature). They were reviewed during the thesis research phase, from the period 1994 to 1997.

While many theoretical perspectives are possible when approaching a broadly defined and wide implication topic such as privatization, I have focused on prevailing political science and

economic theories, since these theories are most often discussed in the privatization literature and provide relevant insights.

3.1 Political Science - Privatization as Ideology

3.1.1 Privatization as a Policy Tool: Relationship to Ideology

The dismantling of "big" government by Thatcher and Reagan reflected, in the early to mid 1980's, a worldwide concern with big government and perhaps a failure of Keynesianism generally. Recent authors suggest that deficit ridden governments were a natural end point of liberal social welfare programs in western economies, and that Thatcher was merely the first and best known western leader to confront it. The tools used by Thatcher; privatization, delegation, competition, deregulation and the fostering of enterprise, as well as union ("big" labour) busting and focus on service quality, have been emulated throughout the west and indeed were used as policy tools by newly democratizing countries of Eastern Europe.

Privatization begs two additional questions: what sector, public or private (or indeed not-for-profit) should provide a given infrastructure/service in the first place (i.e. why should it be a public sector infrastructure/service?); and what are the reasons for a reversal of the process, i.e. nationalization? A finding that privatization is, say, unwarranted may not necessarily imply that an activity or service ought to be in the public sector in the first place if, say, the costs of privatization or a structural, regulatory or historical impediment to its privatization applies, such as labour unrest, constraints imposed by collective bargaining agreements, or severance pay and retraining obligations. Indeed, a government ideologically disposed to private markets may be unable to privatize a particular activity if there is little private capital or expertise available in its domestic market or if it is constrained for other policy reasons such as the unwillingness to exacerbate high unemployment. The paramountcy of particular policies, such as limiting foreign ownership of economic sectors deemed important, may also limit the ability of a country to privatize public services, again when it may be ideologically disposed to do so.

Conversely, the existence of privatization as government policy in any jurisdiction may not mean that the government is particularly neo-conservative or liberal. Left of centre governments, such as in Spain, have been involved in the privatization of SOE's, many to avoid subsidizing continual losses by the SOE in sectors not deemed to be necessary to the national interest, others because they believe it is simply good government, still others because they need to raise capital. Even Japan, considered by many to have had the world's strongest economy in the 1980's, has undertaken privatizations, notably its railways. Ontario's previous left-of-centre NDP government conceived of and has partially implemented the privatization of Highway 407 north of Toronto, and was a strong proponent of a form of water and sewage privatization through its Ontario Clean Water Agency. Other governments, such as Sweden and New Zealand, may have had no ideological choice:

sell off SOE's and undertake privatization generally or default on world government bond markets. Still others may see private sector involvement in public services delivery as effective use of private sector strengths.

Accordingly, issues of ideology are relevant to any debate on the merits of privatization. Those who favor markets over governments and a passive state system, the ideology of the right, may support it. Those who favor an active interventionist state with broad social welfare goals in mind and a desire to manipulate the economy to achieve those goals from time to time, the ideology of the left, may resist it. Systematic privatization and a diminution of the power of governments to undertake the latter, absent regulation is generally seen as a tool of the former group.

The potential conflict between political objectives (ideology) and economic objectives of privatization is evident in some recent evaluations of the Thatcher privatizations. General objectives of privatization in England from 1979 to 1987 included "rolling back the frontiers of government", reducing the burden on the state of SOE's, and in creating what Mrs. Thatcher termed an "enterprise" culture (Kikeri, 1992, Savoie, 1994). It is clear that Mrs. Thatcher brought an ideological perspective to the task; a belief that government was bloated and inefficient, and a goal to reduce its size.

The UK experience shows that privatization as practiced by politicians is not privatization as designed by economists. The Thatcher government went to considerable lengths to ensure that the privatization process met little political opposition from major stakeholder groups by "never cancelling a benefit, making friends with their enemies and disarming the opposition" (Pirie, 1987). For example, support was obtained from labour, by ensuring labour perks were carried over, or that they were offered the right to buy the entity (e.g. National Freight Corporation) or that index linked-pensions available in the government were bought out to compensate for the unindexed pensions prevalent in the private sector (e.g. British Airways). Support was obtained from customers, by limiting price increases to 3% below inflation, and from existing management, by maintaining their employment and the company's monopoly position for a number of years and ensuring that a regulatory framework was in place to stabilize the market. Often, government debts were cancelled. Lastly, support was obtained from the public, by ensuring a "golden share" was retained by the government so that, in the event of a foreign takeover or threat to dispersed share ownership, the government could regain voting control, acting like a "poison pill" in the lexicon of current management practice.

> "Whatever it takes, no matter how ad hoc it seems, these are worth doing because privatization has a political as well as an economic dimension. It is very important to secure the support of groups who might otherwise have fought it" (Pirie, 1987 at pg 10).

What is the nature of the right wing agenda? With the reality of GATT, regional free trading blocs, multinational corporations, global finance and globalism generally, many governments and politicians feel the need to ensure that their nations can compete globally in order to maintain and enhance the standard of living of their residents. Indicia include per capita income in U.S. dollars

adjusted for purchasing power parity, per capita GDP, productivity growth, net inbound investment, balance of payments and government debt/surplus. The pro-market ideology is that of F.A. Hayek, Milton Friedman and Michael Porter. Capitalism is connected to liberalism and the freedom of the individual: individual rights, personal property rights and liberty are paramount in that society. Some have seen Canadian efforts at privatization in this ideological light:

> "... when the government unloaded DeHavilland and Canadair it was doing much more than examining its portfolio of Crown Corporations for redundancies. It was much more explicitly renouncing the previous government's industrial interventionist policy stance to ensure a Canadian presence in either the so-called commanding heights or the so-called infant industry groupings. That was a major "let's make the market work" policy initiative itself" (Kierans, 1988)

Other authors see privatization in more revolutionary terms. Linowes, writing in the [US] Report of the President's Commission on Privatization in 1988, sees privatization as a political movement against the influences of Marxism and socialism around the world in the late 20th century. He also sees privatization as a direction against scientific management, against modernism, against command and control economies and, accordingly, against what planners might call rational comprehensive planning. This is done by decentralizing, as much as possible, factors of production, limiting the power of bureaucrats and facilitating the invisible hand of the markets. Enlightened self-interest is a dominating motive in society. While interest group liberalism is still a force in Linowes' Reagan-era society, the rise in privatization reflects cynicism about the public bureaucracy, and a belief in the truth of public choice theory and theories of non-market externalities, discussed below. Poole (1988) reminds us that governments are very poor at commercial type activities; decisions are made for political, not economic, reasons, civil service bureaucracies tend to want more money to inflate departmental budgets, perks and their own pay, and money is forced from the public to do so by way of taxes rather than obtained consensually, one customer at a time.

The eastern Europe experience has given neo-liberals new experience in societal transformation to a pro-market system. Privatization is a key element among monetary reform, fiscal controls, price and wage deregulation, legal protection of property rights, and the breakup of state monopolies to provide for the conversion of these economies to market-based economies.

> "..The government's role is both crucial and paradoxical: crucial in initiating all the elements, yet paradoxical because the process that the government initiates is intended to diminish its ensuing role, displace its overextended functions, and reduce its size in favor of market mechanisms." (Wolf, 1991 at pp 170-171)

Laux regards the ideological shift to neo-liberalism as a world wide trend, suggesting that neo-liberal discourse requires international competitiveness to be a primary policy objective of

governments, and accordingly market-driven approaches to production must be adopted (Laux, 1991, at 288). Howlett and Ramesh use slightly different terminology to describe the same ideological phenomena: liberal political economy. Theories of liberal political economy seek to extend the market system, while socialist political economy seeks to advance the interests of labour and loosely defined anticapitalist forces (Howlett and Ramesh, 1992 at 254).

> "The contemporary discourse in political economy is perhaps more narrowly confined than ever before. Virtually all alternatives at the centre of the public agenda are grounded in liberal political economy. At the theoretical level, the most lively debate is between the neoconservatives, who unabashedly admire the market and abhor state intervention, and the post-Keynesians, who call for an expanded role for the state in guiding the economy" (Howlett and Ramesh, 1992 at p. 256).

Privatization as political ideology is criticized by those on the left of the political spectrum[17]. Socialists may fear the whipsaw of global markets and recessions, the transience of (and deep mistrust of) multinational corporations, the siphoning of national economic surplus by foreign owners who have no stake in national social welfare, the sacrifice of the unemployed in the name of marginally lower unit cost, and the trivializing of social justice issues in the name of efficiency. Post-Keynesians believe in markets but also believe in the paramouncy of the state, and the duty of the state to control markets and intervene as necessary to achieve state objectives.

Many authors have articulated reasons for consideration of privatization as a political economic solution in the 80's and 90's throughout the world. For example, Clarke (1994) referencing the Russian Privatization Programmes[18], suggests several political and economic reasons that might support SOE privatizations, including:

Table 5
SOE Privatization Reasons

1.	Reduce Public Sector Borrowing Requirement
2.	Raise Cash From SOE sales
3.	Generate new sources of Cash Revenue
4.	Reduce External Debt through Debt/Equity Swaps
5.	Deepen Domestic capital Markets

[17] see e.g. Schumacher, (1973), Galbraith (1992), Laux (1991)

[18] Clarke, 1994 "Introduction: Privatising the World?" at p. 3; A State-Owned Enterprises is referred to as an "SOE".

6.	Democratization of Capital
7.	Encourage the Return of Flight Capital
8.	Promote Domestic Investment
9.	Attract direct foreign investment
10.	Attract new technology
11.	Increase domestic and international business confidence
12.	Increase competition
13.	create employment opportunities through real growth
14.	increase productive and operating efficiency
15.	turn around or restructure ailing SOE's
16.	increase exports
17.	improve quality of services
18.	Reduce the Role of the State in the Economy

(the "SOE Privatization Reasons").

3.1.2 Privatization in the Canadian Political Context

J.C. Weldon articulates a Canadian social democratic view of privatization, characterizing it as a "dismantling of the instruments of public choice", as being anti-union, anti-Keynes, indeed, as being a denial of the political process itself (Weldon, 1991, pp 70-73). Laux believes privatization may hamstring subsequent government efforts at Keynesianism. In the process, Canada, she says, had turned its back on the long history of nation building, at the expense of free enterprise. Laux argues that multiple forms of ownership in the mixed economy is good to the extent it helps enable a state to achieve its own social goals.

When the Mulroney conservatives were in power from 1984, state interventionism and explicit industrial policy was replaced by pro-market decisions and ad hoc interventionism in Canada. The privatization of many Canadian SOE's, and the privatization of Terminal 3 in Toronto are two examples. Federal policy in 1985, as reflected in the MacDonald Commission report supported a reduced role for the state in industrial policy ("picking winners"), and an enhanced role for the market to achieve broad goals of productivity and competitiveness. This Report was clearly consistent with Mulroney's pro-market inclinations, and support for the US-Canada Free Trade Agreement.

Canadian authors Savioe (1990) and Weldon, however, contend that state interventionism under Mulroney had continued unabated despite the rhetoric. Laux points out that regulations after

some Canadian privatizations stipulated headquarters location (DeHavilland), employment levels (Fisheries Products International) or non-resident share ownership (Air Canada). Investment was still a policy instrument that was used by the federal government during the Mulroney years.

> "The fact that states continue to shape markets using both investment and conditional divestment should now be self-evident... the (new) invisible hand. Media hype tends to camouflage state capitalism..." (Laux, 1991, at p. 303)

The choice between government and private production of public services has subjective and ideological dimensions. Analysts must understand political decision making in their constituency and the underlying motivations to understand why privatization is a considered alternative. This requires piercing the veil of rhetoric, press releases, and the superficial to understand the true agenda and the real process. The guardian role articulated by Jacobs and Mintzberg for government is important, and the political process seems largely paramount over the economic system in privatization decisions.

3.1.3 Privatization v. Nationalization

At the same time, spot nationalizations do not necessarily mean that a government is ideologically socialist. Trudeau's National Energy Program sought Canadian petroleum self-sufficiency as its objective, at a time when the Arab oil embargo was perceived as a threat to the national interest as Trudeau understood it, rather than signifying any ideological shift of the Liberal party at the time. There have been many historical reasons for nationalization in Canada and around the world , including;

	Table 6 **Historical Nationalization Factors**
(i)	concerns about industry structure,
(ii)	the desire for low-visibility taxation (and redistribution),
(iii)	the need for national symbolism, national security and international relations,
(iv)	the ability to undertake "nation-building", regional economic development and community development,
(v)	the ability to moderate business cycles in the economy,
(vi)	ensuring security of supply in critical industries (i.e. PetroCan),
(vii)	controlling externalities (such as nuclear accidents by owning Atomic Energy of Canada and Eldorado Nuclear [and Ontario Hydro?]),
(viii)	regulation and control of distribution of products with potentially serious social costs (i.e Liquor Control Boards, Lotteries),

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(viii)	regulation and control of distribution of products with potentially serious social costs (i.e Liquor Control Boards, Lotteries),
(ix)	creating a "yardstick" competitor,
(x)	sheltering an "infant" industry,
(xi)	secrecy,
(xii)	attempting to realize cultural and political cohesion (ie CBC),
(xiii)	protecting jobs,
(xiv)	developing key underdeveloped sectors (i.e. Syncrude),
(xv)	the realization of scale economies (i.e. Ontario Hydro),
(xvi)	taking risks unacceptable to the private sector,
(xvii)	to promote efficiency in a critical manufacturing operation,
(xviii)	to eliminate "holdout" and "free rider" problems,
(xix)	to maintain service (and/or jobs) after private sector failure; and
(xx)	to protect valuable ecologies or technologies.

There are many traditional approaches to the privatization issue in economics literature that might help explain why infrastructure and public services are provided by the public sector or why governments intervene in markets;

(i) the services are classic "public goods";
(ii) the services are classic "merit goods";
(iii) the services tend to comprise natural monopolies;
(iv) public ownership or control is necessary to minimize potential negative externalities;
(v) transaction costs associated with privatization or private ownership are too high; or
(vi) government is better off to produce/provide the service in house rather than subcontract it to the private sector.

3.2.1 .1 Public Goods

In classic economic literature, the market cannot be relied upon to produce public goods. Therefore, public goods must be supplied by government. Public goods are defined as a good that is not reduced through consumption (Glahe, 1981 at p. 475, Cowan, 1993 at p. 74). Conversely, a good that is exhausted through consumption is a private good. Other additional indicia are often offered to define public goods; non-excludability, inability to charge, and non-rivalrous consumption. Non-excludability means that it is difficult to exclude those who do not pay from benefitting from the service. Free riders might otherwise benefit from the efforts or payments of others. National defense is a classic example. Others might include services for the collective benefit of a country such as immigration and naturalization, monetary and fiscal policy institutions, regulation of telecommunications and consumer protection. Inability to charge refers to the difficulty with which a provider might have charging all benefitters separately. In order to prevent "free-riders", all citizens are charged perhaps through general taxation, so as to ensure no citizen receives a benefit someone else has paid for. Non-rivalrous consumption similarly refers to the user whose use doesn't increase costs or reduce the benefit others receive. An example would be the fireworks display, where a non-paying observer wouldn't increase the cost of the show nor reduce the enjoyment of those within an area who have paid to watch the show.

Unfortunately, many public services are a poor fit to this definition. Many services could exclude certain users or selectively charge on a user pay or decentralized basis, such as postal services, canals and harbours, airports, roads, libraries, recreation facilities, fire protection, and sewer and water facilities. The availability of these services may be reduced through consumption. Police and fire services could be reduced through high usage and low manpower. Libraries could be small and demand for recent literature high. Well located roads become congested during rush hour. In several of these cases, consumption is rivalrous. Often, regulations which make levels of government make a service available for all constituents make it a public good (and, possibly, a monopoly) rather than the good being fundamentally a public good by definition in the first place. Human Rights Codes, Charter of Rights, specific paramount legislation and common law all elevate potentially excludable services to non-excludable ones. The variable nature of these laws suggests shifting

economic characterizations of traditional government services are possible, despite the classic definition of public goods.

In addition, the inability to charge may have two elements; the technological inability and the physical inability. Thus, while a provider cannot charge for a fireworks display, a road provider can, perhaps without cash-based toll booths. In addition, if general taxation provides funding support for many non-excludable services such as national defense, then the service could be privatized, but the collection of funds to support it could remain public. In a sense, everyone can be charged for every service the government chooses to provide through general taxation; in that sense an inability to charge seems an anachronistic indicator of when a service is a public one. Variable taxation based on benefit received is consistent with taxing principles based on voluntariness; the property tax system is roughly consumption based. Everyone can be charged for anything in a society with general taxation schemes. Accordingly, classic public goods definitions may not apply to many public services, or the service side (and not the revenue collection side) could still be theoretically privatized by contracting out.

3.2.1.2 Merit Goods

Merit goods are goods that have special importance to society that may be underproduced if left to the private sector. Examples include health, education, water fluoridation programs and housing. Typically, merit goods have positive externalities important to society but to which a private provider may be indifferent.

3.2.1.3 Monopolies

Governments often own and operate natural monopolies[20] or monopolies[21] by regulation that are in the public interest, and regulate other natural monopolies. As a result of increasing returns to scale, costs are cheaper with few or only one supplier for a service. Hydroelectric power, water utilities and urban mass (at least fixed rail) transit are possible examples. Governments are loathe to permit private monopolies to exist unregulated, since monopolists are inefficient, usually choosing to provide lower quantity at a higher price[22]. Monopolists may also discriminate, requiring the enforcement of anti-combines and competition laws. Governments often grant property rights resulting in monopolies, such as in telecommunications, electrical distribution, cellular licensing, railways or gas distribution. Where the service is perceived to be an essential public service,

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[20] In natural monopolies, long run average costs and marginal costs continuously decline at all levels of output (Glahe, 1981 at p. 322).

[21] Monopolies are the only seller of a good or service. Without government regulation, a monopoly is free to set any price it chooses, limited only by demand.

[22] the price and quantity at the intersection of the long run average cost curve with the demand curve, rather than the price and quantity at the intersection of the long run marginal cost curve with the demand curve

ownership, control and operation by the public sector or a quasi-governmental agency has been perceived as preferable to private operation. The distribution activities of Ontario Hydro, and the track of the TTC are examples. Contrary examples include Consumers Gas and the taxi industry (where licensing provides the monopoly, subject to regulation and managed supply).

Today's natural monopoly is occasionally tomorrow's dinosaur as cheaper technologies and distribution systems become available; big iron ore-fed steel mills to minimills, large hydroelectric projects to co-generation, wind, and local power sources; cable TV to satellite distribution; in-ground telephone wiring to cellular; single purpose cabling (i.e. Coaxial cable for cable TV) to multiband fibre optics (enabling the merger of distribution for several types of systems). Centralized services can become decentralized or distributed. Alternately, the service is supplanted by a cheaper, better substitute. The re-evaluation necessary from time to time suggests economic characterization of an activity is not permanent. The advance of technology and globalization has only eroded the ambit of the classic public good, and often limited the power of monopoly, not enhanced it.

3.2.1.4 Negative Externalities

Governments may rationalize policy intervention on the basis of preventing or correcting negative externalities[23]. Externalities can be positive or negative. A positive externality can occur when one receives a benefit he did not pay for. A negative externality occurs if one is made, or society is collectively made, worse off because of transactions between others. Pollution, overfishing, abuse of public services are examples. In many cases, simply the risk of negative externality is sufficient to draw government control of production or distribution, if the risks of failure might be serious or catastrophic. Supply of fresh water, pollution control, storage of toxic waste, generation of nuclear fuel, operation of prisons might fall into this category.

3.2.1.5 Property Rights

Three schools of economic thought justify privatization as more efficient[24] than public service provision under suitable factor conditions: property rights, the theory of the firm (transaction costs), and principal-agent literature. The property rights and principal-agent literatures are behavioural. All focus on efficiency gains under otherwise perfect market conditions.

Property rights are often used or recommended by economists as possible solutions to the free rider and negative externality problem. Providing property rights in elephants in Africa are

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[23] An externality is a cost or benefit in an exchange not completely borne by or received by the two or more parties to the exchange.

[24] Three types of efficiency measurements are used by economists. Efficiency of private sector activity can be measured by its static allocative efficiency (level and quality of output: price equal marginal cost), dynamic allocative efficiency (little or no leftover capacity) and productive efficiency (output at least cost). Competition forces competitors to achieve static and dynamic efficiency (Wolf, 1993 at p. 157).

causing an increase in elephant populations. Property rights cannot be provided in some cases, such as for air, but property rights in, say, the right to emissions from factory smokestacks has been used in the U.S. Regulation and contractual arrangements may also control free riders and negative externalities, but may be of little use if transaction costs to establish, distribute and monitor them are high. It is perhaps through the economic literature on property rights that some economists can envisage a positive theory of public enterprise and, through it, a normative concept of good government (although that is not yet clearly articulated - Vickers and Yarrow, 1988 p.1). The key is in the residual rights. Individuals who have property rights try to perpetuate and enhance the value of the property for themselves, their heirs or those they may sell the property rights to. This ensures careful management of the asset. Given the non-transferability of ownership claims in the public sector, bureaucrats have no particular, personal stake in the longevity of the asset (Hardin, 1993: De Alessi, 1980). According to DeAlessi, public firms tend to fail to price properly, favor voters, have higher operating costs and use more capital intensive production techniques. Indeed, on the issue of pricing, Hayek (1985) and others suggest that market pricing is necessary to counter dispersed knowledge: efficient acquisition of knowledge comes through price 'signals' provided by markets. On the other hand, Boardman and Vining (1989), and Borcherding (1983) have shown that public firms do not necessarily have higher operating costs in certain circumstances.

The property rights literature would suggest that private sector owners/operators maximize the value of an asset. In the context of the then-privatized Terminal 3 at Pearson International Airport, Toronto, this may have been manifested by better retail sales to airport users, better pricing of parking lots, concessions and licensees, and the development of surplus density for hotel and office purposes. On the other hand, underpricing may be perceived as an express or implied subsidy, offered for political or other reasons.

3.2.1.6 Theory of the Firm-Transaction Costs

The theory of the firm literature, also known as transaction costs literature, focuses on decisions by economic units to either make a product itself or buy it from outside sources. There are situations in which it is better to source products from outside rather than tool up to make it internally, since unless the good or service is critical or strategic, co-ordination costs would be too high, or outside supply is limited and exposes the firm to shortages of supply. In government, contracting out and the recent public-private partnership literature reflects the decision that outside suppliers are plentiful and more efficient that government could be in undertaking certain activities. Using a Terminal 3 example, the private sector, it would be argued, could construct the Terminal, finance it and operate it for a much lower cost than the Department of Transport could. Transaction costs, however, are rarely disclosed in the empirical literature.

3.2.1.7 Principal-Agent

Principal-agent literature analyzes incentives and information in organizations (notionally, "agents" of shareholders), and suggests that the profit motive of private sector firms translates within the firm to efficiency-seeking and profit-seeking incentives. These in turn ensure that the internal

structure of the firm maximizes efficiency and profit. There is no concern about the relative importance of other objectives. On the other hand, government agencies have many purposes, including social welfare, maximizing votes, minimizing the potential for political embarrassment, and the incentives to the agent are mixed. Often, labour and capital redundancy are a design standard. Performance bonuses are rare in the public sector: public bureaucrats have little incentive to minimize costs or increase the value of the "service", since the asset is not transferable. In the context of the Terminal 3 example, private sector operators will have a stronger incentive to control costs since more profit falls to the bottom line. Vickers and Yarrow see regulation as a principal-agent manifestation, since it substitutes written command for ownership command, but nevertheless is aimed at control and incentive.

3.2.1.8 Economic Theories: Observations

The literature on these theories and their applicability in the context of privatization and the role of government is quite large. Clarke (1993) points out that communal ownership and co-operatives have historically enhanced efficiency, and that market conditions are often far from perfect[25]. Much of the case literature accordingly tends to focus on managerial incentives, objectives and competitive (or the lack of) forces. The assumptions about alternative market dynamics that would support efficiency gains through privatization are often challengeable. Also, a "western" culture, where money is valued above, say, religion or culture as motivators is presupposed.

Rowthorn and Chang (1993), after evaluating the property rights, residual claimant theory and dispersed knowledge (based on the writings of Hayek) support for privatization, conclude that private ownership per se will not guarantee better enterprise performance, nor do they feel that private ownership is intrinsically more efficient than public ownership. In reality, existing ownership rights are the product of previous social bargainings, and are constantly being altered because people are constantly attempting to create new property rights, expand the boundaries of existing property rights, and defend their existing property rights against such encroachments. As a result, most, if not all, property rights are 'truncated' in a most complex manner[26].

3.2.2 The Re-invention of Government Literature

The re-invention of government, under various names including "new public management"[27], constitutes a set of competing theoretical approaches to privatization, to the extent it suggests that it is not public vs. private, or even competitive vs. noncompetitive that matters so much as good public sector management. This set of theories tries to minimize the "pay, power, and prestige" bias

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[25]Clarke (1993) at p. 3

[26]at p. 64

[27]Walsh (1995)

of bureaucrats discussed by Niskanen (1971)[28]. Clarke (1994) suggests that a sea change in focus is at the core of the movement;

(i) from a focus on internal process to a focus on outcomes;
(ii) delegation and personal responsibility replace hierarchical decision making;
(iii) quality joins quantity as a government focus; and
(iv) innovation and diversity are valued and rewarded over stability and uniformity[29].

In Hood's (1991) model, privatization is but one of several tools to achieve good government from time to time, as well as benchmarking, results-based incentives, private sector management practices, desegregating units, and competitive tendering for services. Osborne and Gaebler (1992) offer a menu of prescriptions for more efficient and representative government including community involvement, competitive tendering, results-oriented programming, service standards and decentralization. What is not known is whether the need for honesty in government may be sacrificed in the process to entrepreneurial government (see Jacobs, 1992), whether the re-examination of a bureaucratic model almost 200 years old ignores the reasons for its design in the first place (see Moe, 1994), whether the public really sees government services as qualitatively inferior to private ones (see Poister, 1994), or, in the privatization context, whether the public really wants the government to sell SOE's and enter public-private partnerships for its roads, airports, waterworks and mass transit (see Savioe, 1994).

Gaebler and Osborne's landmark book (1992) represents another ideological alternative to privatization: reforming government to make it more efficient. The basis of this movement is a shift in organizational culture from a inward-looking, supplier focused structure to a customer-focused, results-oriented structure and culture. A key element of this change, also termed "New Public Management" (Hood, 1991) is the increasing marketization of public services by establishing pricing and market based mechanisms for public services and public services organization and increasing user pay approaches. Within this philosophy, privatization is regarded as a tool, with ownership being replaced by regulation as the form of control. Yet even with this approach, success is not guaranteed. Canada's experiences at the federal level with the Lambert Commission from the Trudeau era, the Neilson Task Force on program reductions (1984), the Forget Report on UIC (1986) and others all show that the attempted application of private sector management and efficiency techniques to the public sector is difficult and has had limited success in Canada (Savoie, 1990 at p. 146). Some authors contend the two are fundamentally different entities, and that efficiency criteria cannot be grafted onto a governmental bureaucracy (Moe 1994: see also Jacobs, 1992)

> "The gross inefficiency of Pentagon contracting - probably the most 'privatized' portion of government - is hardly an advertisement for the

[28] see also Cullis and Jones (1993)

[29] Clarke (1994) "Reconstructing the Public Sector" at p. 401

> superiority of privatization. In local government, there is evidence that when too many public services are contracted out, there are just not enough public officials and too little public sector esprit de corps to keep the process honest" (Kutner, 1991 at p. 313)

Donohue suggests that policy makers consider what else is relevant in making a privatization decision, such as flexibility (i.e. desired results change), loyalty/sensitivity, the limits of specification writing, control over methods, and situations where results can't be specified in advance, just attitudes and values (Donohue 1989 at p. 82). Civil service regulations, designed to prevent favoratism and corruption, make efficiency difficult, but facilitate values (Jacobs, 1991). Efficiency isn't the only criteria in the privatization debate. While municipal services can be measured, others can't. Contracting out can be extremely complicated, as the U.S. Pentagon experience has shown. Transaction costs may be high. A competitive environment must be present for efficiency gains to be realized.

> "Getting government to do the right things may ultimately be more important than getting government to do things right" (Donohue, 1989, at p. 222)

3.2.3 Public Choice Theory and other Political Science Theories

Can government do things right? Two theories bear on this issue, although both can be seen as neo-liberal approaches. Buchanan's Nobel Prize-winning[30] work in public choice theory offers one theoretical, and doubtful, insight. Public choice theory applies assumptions about self-interested behaviour in the marketplace to governments; to bureaucrats, to special interest groups and to politicians. Interest group-government interaction is likely to produce, according to public choice theory, economically irrational decisions (Linowes at 234). These start from stated government policy and compare skewed results or implementations. Examples include the use of environmental legislation to curb competition (Shaw, 1993 at p. 152). Public choice has libertarian roots, but is broad in its applicability and explanatory, although not particularly predictive. It shows the loose control provided to governments through the ballot box, and the dynamic of decision making within it (Shaw, 1993: see also Sproule-Jones, 1983: Hartley and Parker, 1991).

The emergence of the non-market failure literature suggests government ought to have efficiency dimensions to its actions that apply regardless of the policy course sought. Wolf argues that aspects of non-market failure includes the dispersed majority-interested minority problem, the high time-discount of political actors (similar to Marsh's "political short-termism"), the political find-a-problem, legislate-a-solution ethic, group enfranchisement, reduced tolerance of market shortcomings, the decoupling of benefits and burdens, and internalities of government. These are thought to provide a way for policy analysts to see how government efforts to compensate for market

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[30]awarded in 1986

failures may themselves fail in predictable ways.

> "a common element in the property rights and public choice literature is that, in the absence of the profit motive, ...government departments will tend to pursue goals such as budget maximization, risk aversion, over-manning and non-optimal pricing, employment and investment" (Hartley and Parker, at p. 15)

Gillette also reviews the classical externalities of government intervention in markets, particularly their inability to understand the price system so prized by Hayek and others. Prices are signals; they signal scarcity and value. Scarce resources end up in the hands of those who can use them most productively (Gillette, 1994 at p. 97).

3.2.4 Theories Relevant to Privatization: Summary

Privatization generally is not a science explained by any single reductionist theory. Economic theory, particularly the property rights literature, principal-agent literature, theories of the firm and competitive markets, support some empirical evidence of private sector efficiency otherwise discussed in chapter 2 of this research. Successful privatization may free up capital for more deserving public activities, absent overriding political considerations. The issue is; when are overriding political considerations absent, and for how long will they be absent? Political science literature exposes one to the diversity of expressions of the public interest, and politics defies predictability over the long term. There is much in public policy not linked to efficiency gains that is relevant to the issue, and to this extent the non-market failure and public choice literature is also informative.

Privatization challenges traditional roles of the public sector bureaucrats as guardians of the public interest. Re-inventing government is a concept that will be seen as an alternative to privatization in many jurisdictions.

3.3 Some Frameworks of Analysis

Given this ideological and theoretical background, it is useful to revisit the empirical literature to compare the evaluative approaches and frameworks used against the theoretical background. This time, the approach used, not the outcome of the research, is discussed.

Many economists analysed privatizations from the point of view of classic economic efficiency; static, dynamic and allocative. These approaches focus on the efficiency of the organization (typically, an SOE) before and after privatization, using a number of indicia, including profit, annual revenue, costs and other objective input and output indicators.

Few books on privatization analyze opportunities on the basis of any rigorous economic theoretical analysis at the level suggested by Vickers and Yarrow or Wolf, although most are able

to at least deal with the evils of monopolies or refer to negative externalities. Roth (1987), writing on behalf of the World Bank, applies a framework including natural monopolies, decreasing marginal cost, negative externalities, public goods problems (non excludability or difficulty in collecting), and merit goods to a discussion of the potential privatization of education, electricity, health care, telecommunications, urban transport, and water and sewerage services in developing countries. Donohue's approach is that a review of economic theories and, indeed, philosophical theories of government, offers no clear guidance on the privatization issue, and the likelihood of success. He suggests that reviewing the evidence on the basis of competitive vs noncompetitive markets is more important, an approach that Vickers and Yarrow also take. Vickers and Yarrow, and Gomez-Ibanez take a particularistic approach to privatization success, and the availability of competitive markets is the primary success factor. Where competitive markets cannot be structured, privatization gains may be minimal or non-existent.

Social researchers look at privatizations from the case study point of view and look at qualitative outcomes such as societal benefits, access to services, social externalities and distributional equity, to name a few. This approach offers few necessarily transportable generalizations given that the research is not positivist, but provides experience that may be useful to others. Several authors have attempted a more inclusive political framework. Ramanadham (1994, Privatization and After) provides a subjective factor list for privatization, labelled as impacts of privatization. It offers insights into "impacts", all of which are relevant in assessing the desirability of privatization at the margin:

(a) public exchequer;
(b) employment;
(c) development [i.e. industrial] strategy: largely aimed at developing countries;
(d) distributional structure;
    (i) tax effects;
    (ii) employment effects;
    (iii) social benefits;
    (iv) divestiture techniques and processes;
    (v) basic implications;

Unfortunately, Ramanadham suggests many governments are not interested in monitoring privatizations, perhaps from fear of self-incrimination. One senses that Ramanadham's comments are specifically aimed at the developing country and eastern bloc states. If so, the impact assessment list he employs may be context specific to those set of examples unique to developing countries.

Ross asked a very general question: what would be the appropriate way to redivide responsibilities among government and the private sector (termed by him, the "assignment" problem)? Ross divined a simple matrix for analysis:

	funding	production	utilization	control
efficiency				
equity				
participation				
accountability				

The resulting matrix, Ross surmised, could then be used to guide thinking in undertaking the analysis of the question posed, in the context of any activity, including the provision of services and infrastructure. These programs, Ross believed, could be broken down into four core functions, described above as column titles. These functions were, in turn, borrowed from earlier work applicable to industry alone. The criteria listed in the row of titles evolved from a sense that mere economic efficiency analysis was insufficient to evoke the breadth of issues potentially relevant in posing the condition. Equity refers to distributional fairness. "Participation" is an odd one: defined by Ross to include the degree to which the public participates in the planning, implementation and evaluation of the program. "Accountability" refers to the degree to which the service providers are subject to a post audit of their functions, with operational consequences attached to the post audit process.

Ross tested the framework on three areas of activity capable of being provided by both the public and private sectors; electric power, school bus transportation, and mental health services. Having said that, Ross' analysis of electric power is largely efficiency focused, drawing on existing literature to a large extent. His conclusion was that public providers were more efficient than private ones. The school bus analysis seemed to pay lip service to the framework, but the analysis was mostly focused on price and efficiency. The analysis of mental health facilities used the matrix only to the extent that published studies provided economic evidence. Ross' work provided no support for the matrix suggested, and demonstrated only a fear of subjectivity in analyzing and weighing factors present in each square of the matrix.

Many private sector materials offer interesting insights into privatization, often from unique perspective. For example, recent seminar materials on the financeability of privatization projects in Canada raises another set of relevant criteria that could be used for evaluation purposes. However, most readily financeable projects are those which provide an essential service (lenders love monopolies), have a defined revenue stream, (such as user fees from toll roads (Hwy 407) or toll bridges (PEI fixed link)), provide additional commercialization opportunities, (e.g. airport retail), and allow the private sector to bring the benefits of their expertise and experience. For example, those financeability factors include;

(i) Risk (identify it, evaluate it, mitigate it or assign it)
- design risk
- structural risk
- interest rate risk
- currency risk
- tax risk

- political risk
- rate setting risk
- regulatory risk
- environmental risk
- demand risk (achieving tolls or user fees)
- operational risk
- construction risk (e.g. on time and on budget; at forecasted performance)

(ii) Sources of Capital
(iii) Capital Structure
(iv) Investor Returns
(v) Cost Comparison
(vi) User Fees[31]

Given that lenders love monopolies, it is probably not useful to regard financeability criteria as broad enough to be used by government policy makers, nor necessarily aligned with the public interest. On the other hand, the finance criterion may provide an interesting list for private sector consortia to use when considering investing in public infrastructure.

Ross' work suggests another well known evaluative tool, but even more general, that of the healthy cities movement, which uses efficiency, equity and the environment as three evaluative criteria in overlapping circles. Unlike Ross' approach of trying to find and weigh published studies as support, the healthy cities movement tries to deal with subjectivity and tradeoff in rankings, but prefers the opinion of "citizens groups" as the ultimate judge, over Ross' preference for published studies. The issue, to me, is quite clearly brought into focus by Ross' matrix: having raised the issue of subjectivity, how is it resolved, weighed and decided, and who decides?

The issue is the effective management of a public good, but from a variety of perspectives. Privatization is merely a tool. Policy makers need a more comprehensive framework for analysis and a better ability to articulate and characterize risks. The gains evaluation methodology should not be merely economic, should not be merely positivist, and should not necessarily attempt reductionist, simple conclusions. The theoretical tools currently available are incomplete, and, given some outcomes in the Thatcher privatizations, may be poor predictors of success as subsequently defined by a public. The issues in each privatization are often different, and the literature reviewed shows that success and failure occurs in different situations for different reasons. The attribution of success or failure to any particular fact may be impossible, given the difficulty of isolating dependant and independent variables in each real life example. See Spicer (1991), Bishop (1994) and others for context specific analysis of various privatizations.

With so many culture and context-dependant issues involved, the multiplicity of dependant and independent variables involved (often with little feel for which is which), and the choice of

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[31]Leith

several competing models, the likelihood of ever developing cross-contextual predictive theories regarding infrastructure and public service privatizations seems remote. Alternative approaches that seek to minimize risk or maintain adaptability and flexibility may have more promise than those that seek to maximize efficiency in return for a long term or permanent commitment, particularly when the asset or service involved is public infrastructure or an essential public service.

There are a range of factors and alternative policies relevant to the privatization debate. Decentralization is decision making power may be another tool to increase efficiency and achieve "success". Centralization may be shown to be a problem, not government ownership per se, regarding public infrastructure. Increasing accountability of local public autonomous authority managers to users of toll-based public infrastructure may improve service, pricing and efficiency without loss of public control. Giving locals who have a stake in the infrastructure the control over it may counteract the property rights arguments of economists who argue that it is the interest in the residual, or the "downward pressure on costs" exerted by competitive markets that causes private sector operators to manage firms better.

In the result, the current empirical and theoretical evidence in favor of infrastructure privatization is suspect. Decision makers need new understandings of the capabilities and attributes of different methods of achieving public policy objectives regarding public infrastructure and services, and new definitions of and evidences of success. Once a clearer understanding of experience, and the linkages between public policy objectives, methods and outcomes exist, better policy making should result.

In this respect, we have (at least) 6 systems for resolving subjectivity on this planet: economic, political, ecological, judicial, reconciliation through communication, and the use of force. In privatization decisions, we are assuming that it is the political system that generally will determine this subjectivity, and local "truth" (absent financial compulsion). Accordingly, if the local existing political system will weigh and decide amongst potentially subjective expected outcomes involving, as an alternative, privatization, the perceptions of those decision makers, and the perceptions of those who may influence them, are of critical importance. That is not to say that those perceptions cannot and will not change over time. Rather, it is to say that the current perceptions will likely drive the current decision making.

In conclusion, this section 3.3 has shown a wide variety of frameworks of analysis used by authors in the literature surveyed. They are representative. What they show is that the more general the framework is, the more subjective it is (e.g. Ross). The more specific the framework is (i.e. Vickers and Yarrow or Roth) the less it is able to deal with more subjective factors such as distributional equity. One might also conclude that the more specific evaluative frameworks (i.e. Vickers & Yarrow) offer more predictive utility (i.e. knowledge that might be used to predict the future economic success of a given privatization) than a more subjective, and broader approach, but only as to those same factors.

3.4 Privatization Theory: A summary

In this chapter 3 we have;

(a) described the relationship between privatization and politics;

(b) reviewed the economic, political science and other theoretical perspectives affecting privatization and understood their relevance and limitations; and

(c) reviewed frameworks of analysis used by many authors in assessing privatization initiatives and come to understand their limitations.

What then could be summarized as the attributes of a privatization "theory" in 1997? The following are some suggestions;

(i) privatization has both politics and economics as its motivational sources: there does not appear to be any strong social or ecological theories yet driving (or resisting) privatization, although that is not to say there couldn't be;
(ii) economic theory is helpful and possibly explanatory of efficiency gains in privatization of enterprises into competitive markets, but not of conflicts with the public interest[32],
(iii) there is little consistent empirical evidence supporting expected efficiency gains in natural monopolies, and there is a need to segregate the SOE privatization literature from the infrastructure (monopoly) privatization literature, since the empirical efficiency conclusions appear to be quite different;
(iv) there is no established privatization analytical or evaluative framework, key factor lists or even success measurement tools; each case seems to have its own unique characteristics, preconditions, and cultural and institutional context. Success depends in part on the initial objectives of the privatizing government and many times these objectives are political not economic. Success depends on the implementation strategy, as well as many other related and often unrelated and unforseen factors. Success is often in the eye of the beholder;
(v) the body of privatization literature surveyed does not discuss the Historical Privatization Factors, the Initial Public Provision Reasons, the Public Infrastructure takeover Reasons, nor the Nationalization Reasons, which one would have thought should have been considered in deciding on privatization as a preferred policy alternative. Policy makers may be informed by a recollection of past experience and familiarity with current experiences;
(vi) the recent western governmental context for privatization (1980-1995) appears to be fiscal pressure either on the national profit and loss statement (provincial and federal

[32]Relevant here is the question of who defines the public interest; politicians of the day or citizens by referenda and what is the tool by which that public interest is measured. However, private interests do not define the public interest.

deficits) or the balance sheet (lack of ability to fund high capital cost infrastructure due to impacts on credit ratings, continued losses in SOE's). The local Ontario municipal pressure comes from the increasing need to maintain/expand infrastructure with fewer financial resources and options to do it with;

(vii) a more thorough analysis of privatization outcomes is likely hampered by the difficulty in obtaining a precise political and economic definition of the objectives of certain privatization initiatives; in many cases, authors seem to be analyzing privatization outcomes according to their own standards of what is right and what is wrong, and not necessarily against the (possibly unstated) objectives of the politicians of the day.

Within the context of the elements of a privatization theory identified above, the case studies following in this research can have a political context and a theoretical context, so that observations can be made to the prior literature on both basis. Furthermore, with an understanding of the breadth of the frameworks used, and their particular inadequacies, the research can proceed on the basis of identifying other approaches.

4. Choice of Methodological Approach and Case Studies

This research is comprised of three components;

(a) a detailed discussions of case literature, both as to privatization generally and as to public infrastructure privatization specifically (chapter 2);

(b) a discussion of the applicable theories relevant to privatization and the development of some elements of a privatization theory in chapter 3; and

(c) a detailed review of two Canadian case studies with structured interviews with 27 key stakeholders.

The key conclusions from the case literature review were that outright privatization of public infrastructure has often failed, resulting in a reversion back to the public sector, and much of the recent literature does not take into account the factors listed in Tables 1, 2, 3 and 6.

The main conclusions from the theory review were that there are many theories relevant to a discussion of privatization, although many either do not apply or do not appear to be strongly correlated with a decision to privatize a natural monopoly. In addition, chapter 3 reviewed existing evaluative frameworks and determined that specific, more objective frameworks of analysis (such as the economic analysis of privatized entities) were lacking in their consideration of more subjective factors such as distributional equity. More general frameworks of analysis, on the other hand, were quite subjective, and as a result, were open to differing interpretations and may have had little predictive utility, compared to more objective approaches.

The implications of the foregoing components of this research are that;

(a) a purely objective (i.e. quantitative) approach to the analysis will not advance the desire to develop a more comprehensive and more inclusive framework of analysis, given the observations in chapter 3;

(b) given the potential dimensions of privatization decisions, a case study approach needs to be undertaken that is sensitive to institutional context and political issues;

(c) given the conclusions of chapter 2 and the breadth of relevant issues to a privatization decision, a case study approach is merited.

Furthermore, given the observations and conclusions from chapters 2 and 3 of this research, the case study needs to have regard to factors driving the political and economic reasons for a privatization initiative so as to permit comparison with chapter 2 results.

4.1 Selection of and Outline of Case Studies

In evaluating the merits of infrastructure and service privatizations, many theoretical perspectives exist, and from many fields, including economics, social planning, labour relations, management science, political science, law and economics, and comparative public policy. No single comprehensive methodological framework exists to analyze the success of infrastructure and public service privatizations.

Given the lack of Canadian literature on the topic, a Canadian case (or cases) is to be targeted. In order to expose as much of the range of issues identified in chapter 2 and 3 as possible relative to infrastructure privatization, the case should have the following attributes;

(a) deal with infrastructure or public service privatization in Canada;

(b) have an element of subjectivity in service delivery (i.e. quality of service needs to be an important consideration for the using public and stakeholders);

(c) the case needs to expose the public to some risk (requiring, for example, monitoring costs or government regulation of some sort); and

(d) the infrastructure of public service needs to be in a traditional public service environment (i.e. perhaps comprising a monopoly).

Case disqualifying attributes might include;

(i) unique dominant characteristics likely to limit the comparability of the case;

(ii) infrastructure or public service privatizations that are still in the conceptualization stage;

(iii) infrastructure or public service privatizations that are intended at the outset to be merely management agreements, or franchise arrangements, (i.e. that involve no transfer of ownership rights, profits or risk) or that are short term only, since many examples of this type of outsourcing currently exist, such as with construction contracts or with short term facility or operations management agreements.

I have been initially interested in privatization examples of toll roads (Highway 407 in Ontario and Highway 104 in Nova Scotia), sewage treatment plants (e.g. Rockland), water (Halton Region and York Region), bridges (PEI fixed link) and airports (Pearson Terminal 3). Some of these examples are quite new.

The Highway 407 example may be merely a privatized management transaction now. The PEI fixed link bridge may have constitutional motivations, not efficiency or management ones. Also, the PEI fixed link may be mature in the sense that the agreements are in place, but there seems to be very little of a "service" component to it that can fluctuate to any great degree or that is management intensive. Terminal 3 at Pearson Airport has now reverted to quasi-public hands.

Management of sewage treatment plants has been privatized, and Build-Own-Operate-Transfer ("BOOT") models are being contemplated for these types of projects, but few are, to my knowledge, complete and running, at least in Ontario.

At the federal level, the only recent case studies of particular interest have been the privatization of NAVCAN, the federal air traffic control system, and the previous privatization of Terminal 3 at Pearson International Airport. Given that the NAVCAN privatization was well underway (and is arguably an "SOE"), and the Terminal 3 privatization have been completed several years earlier, they were not felt to be "rich enough" case studies. Furthermore, they were felt to be of more remote relevance to planning literature in Canada, given most planning in the geographical context is undertaken at the provincial and municipal levels.

At the provincial levels, the province would have jurisdiction for major highways and, in this context, the Highway 407 initiative was a possible candidate. However, given the fact that the decision making involved in the project had largely been completed prior to the commencement of the study, and given that the program had been scaled back from an outright privatization to a long term maintenance and management contract, it was not felt to be suitable.

Bridges and tunnels could be considered as case examples, since there are a variety of privatization models existing that have been operating for many years, including public, private (BOOT models - Windsor Ambassador Bridge, Vancouver Lions Gate Bridge), formerly private (Windsor tunnel), and public authority (Peace Bridge at Fort Erie, Bluewater Bridge at Sarnia and others). Since this research has focused on infrastructure and public services such as bussing and

garbage collection, over privatization of state owned enterprises, candidate cases that were considered largely centre on those under municipal jurisdiction.

Water privatization satisfies several critical criteria within the overall methodology;

1. Water infrastructure is a classic natural monopoly.
2. There is a body of explicit literature on the British water privatizations useful as historical context (see chapter 2.2.9);
3. Water has an importance in Canada, given our large supply of fresh water, and the political concern over its usage (and rights to U.S. usage) evident in the Canada-US Free Trade (now NAFTA) debate and agreement;
4. Water is provided locally, regulated provincially and nationally. All three levels of government are involved.
5. At least two Ontario regional municipalities, York and Halton regions, were considering, during the time that suitable case studies were being sought, proceeding with huge ($400 million to almost $1 billion dollars) "private" water infrastructure provision contracts with consortia that included British suppliers during the study period.

The York and Halton Region water privatization initiatives satisfied the criteria set out for the case studies in the following ways;

1. The two cases are in similar types of infrastructure; in York Region's case, the provision of water and in Halton Region's case, the provision of both water and wastewater infrastructure.

2. Both case studies were at roughly the same stage of consideration in the Spring of 1996, i.e. consultants had recommended consideration be given to a public/private partnership to assist in financing the required water and wastewater infrastructure;

3. The timing in both cases was ideal, affording an opportunity to an observer to view, first hand through attendance at committee meetings and council sessions, the quality of debate and the rationale involved in the debate as to whether a privatization solution was possible, and worthwhile, and advisable.

4. The proximity of the cases to one another, under the same provincial jurisdiction, mean that direct comparisons could be made given similar cultural, institutional and legal contexts.

5. While dealing with the same type of infrastructure, the cases approached the solution in completely different ways; Halton went through the equivalent of a tender process, by stipulating the specifications for the proposed water and wastewater system in advance and inviting bids, initially through the Request for Expressions of Interest ("REI"), subsequently through the Request for Qualifications ("RFQ") and, ultimately, through the Request for Proposals ("RFP") (when and if it is released). York Region chose the approach of picking

the private sector "partner" up-front, again through an RFQ and RFP process, and then using the services of that partner to help York Region determine the optimum solution for its long term water needs.

6. Each of these cases satisfy the required attributes discussed earlier, to the extent that they deal with infrastructure privatization, have an element of subjectivity in service delivery (i.e. water quality, water pressure and timeliness), expose the public to some risk (in this case manifested in the potential for increased development charges or water rates) and is in a traditional public goods environment, water, which is almost a perfect example of a natural monopoly.

Furthermore, the cases do not exhibit any particular unique characteristics likely to limit their comparability. While it may be argued that the initiatives are still in the "conceptualization stage", the benefit of that stage to that research is that the very origination of the privatization initiative can be directly observed, compared to more "mature" cases, where the focus may shift more to the valuation of pricing and service delivery levels, than in the initial reasons and perceptions of a stakeholder in embarking on the privatization initiatives. Lastly, and while it may be argued the York Region case ultimately resulted in a mere "management" agreement, this was only a possible outcome when the case study commenced. In both cases, the scope of the public/private partnership was unclear at the outset but was intended to include significant elements of risk transfer to the public sector, including, possibly, privatization through a BOOT approach to the construction of the new facilities. These cases were, accordingly, felt to be a good match. As a result of the foregoing, the Halton and York Region water privatization initiatives were selected as the case studies..

4.2 Case Study Methodology

There were many methodologies that could have been used in the furtherance of this research. However, given the goals of the research described above, it was felt that exploratory research using the case study method provided the best methodology.

The research that is proposed in this paper is fundamentally qualitative research, since it seeks meanings, explanations, reason and, possibly, the development of criteria, lists, reasons, experiences and framework(s) to guide others' questioning of and analysis of the infrastructure and public service privatization phenomena.

4.2.1 Exploratory Research

Babbie (1991) suggests exploratory research is valid to explore a topic and to provide a beginning familiarity with a topic. They are typically done to satisfy a curiosity and a desire for a better understanding, to test the feasibility of undertaking a more careful study, and to suggest methods that may be employed in a more detailed study (at p. 90). Babbie points out that exploratory research may include aspects of descriptive research and explanation and, indeed, this research may contain elements of each. The research might also be considered as social policy research (Nas), to

the extent research is being gathered that can assist the policy maker in effecting needed change.

The approach can be seen as positivist (to discover natural laws so people can predict and control events), interpretive social science (to understand and describe meaningful social action) (Neuman, 1991, at p. 63) or constructivist. A positivist outcome may arise if there appears to be a strong relationship between structure and outcome in effecting infrastructure and service delivery privatization. An interpretive social science result may arise if social, organizational and cultural issues are seen as critical and fragile elements in achieving organizational success. A constructivist outcome may arise to the extent that findings are not generalizeable, and no positivist result is either possible or desirable. These are both questions of outcome and philosophy.

4.2.2 As Evaluative Research

Still other authors term the research that I am proposing "evaluation research", which is, broadly, the study of change (Nas). The change in this context is the change in organizational structure and outcomes brought about by a policy decision to privatize infrastructure or a public service under one of the many possible approaches.

4.2.3 As Qualitative Research

Denzin and Lincoln (1994) have mapped more broadly the qualitative research field. According to Denzin and Lincoln, qualitative research involves the study of things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research may involve the studied use and collection of a variety of empirical methods - case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts - that describe routine and problematic moments and meanings in individual lives. Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter at hand. Its essence is twofold: a commitment to some version of the naturalistic, interpretive approach to its subject matter, and an ongoing critique of the politics and methods of positivism. (Denzin and Lincoln, at p. 2 and 4).

While Denzin and Lincoln's approach is primarily from the field of sociology and psychology, they highlight the philosophical differences between positivism (which they eschew), and qualitative research. Qualitative research may be theoretically constructivist[33], but is not positivist[34], according to Denzin and Lincoln. On the other hand, positivist findings are possible

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[33] Constructivism assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings) and naturalistic (in the natural world) set of methodological procedures (Denzon and Lincoln, 1994)

[34] Positivism and post-positivism is more logical-deductive, scientific, has as its main criteria internal and external validity, and the result is scientific report.

outcomes of qualitative research, and indeed enhancement of positivist theory is contemplated in grounded theory methodology. Constructivism stresses credibility, transferability, dependability and confirmability over positivist criteria such as internal and external validity, reliability and objectivity (Denzon and Lincoln, p. 14). It recognizes subjectivity for what it is; a blurring of the lines between science and the art of interpretation, the social scientific and the literary account (Geertz, 1980).

4.2.4 Constructivism

Schwandt details constructivism in a manner that seems to directly link to the outcomes of my comprehensive examination:

> "One's constructions are challenged when one becomes aware that new information conflicts with the held construction or when one senses a lack of intellectual sophistication needed to make sense of new information." (Schwandt, at p. 129)

There are many strategies of inquiry that might lend themselves to the goals and objectives of the research: case study, grounded theory and historical method among others are relevant. Indeed, this research might benefit from methodology in all three approaches.

4.2.5 Grounded Theory Methodology

Grounded theory is a useful methodology under a constructivist paradigm. Grounded theory involves generating theory and doing social research as part of the same process (Strauss and Corbin). However, much of the theory development in grounded theory is data oriented: the actual is compared to the previous data anecdotally and continually. Since there is little quantitative data collection proposed for this research, the case study merely provides a point of comparison against prior research on privatizations, much of which, however, involved economic comparison and data gathering. Grounded theorists regard the definition of the theory quite loosely, and at least one has tried recently to refocus grounded theory on qualitative case study; "theory elaboration" (Vaughan, 1992). Grounded theory tries to bridge quantitative and qualitative methods. It is a general methodology only. Accordingly, grounded theory explains one approach to this research to the extent recent theory is uncovered through secondary research (or recent lessons), and that theory is tested in one or two detailed Canadian case studies.

4.2.6 Historiography

Historiography involves the research of methods of finding history. This body of literature can be helpful in placing and validating recent literature review. How does one find information and how does one assess it? Fortunately, there is much written about the Thatcher and US infrastructure privatizations and from a variety of sources (and ideological perspectives). Risks of meaning and bias may remain: judging reliability is always an issue. Secondary sources would be the primary source of recent literature. Reference to Tuchman and others have been made for assessment of

methods in this respect.

4.2.7 Preferred Method: The Case Study

The case study, particularly the instrumental case study (Stake, 1994), is a valid approach when one seeks to "provide insight into an issue or refinement of theory" (Stake, at p. 237). The case, in this context, facilitates an understanding of something else; in this case, the recent experiences shown by literature research into infrastructure privatization. The case may or may not be seen as typical. That isn't necessarily important. The case is selected because it may advance our understanding of the theory. If the pre-existing literature does not support elements of shared understandings capable of being called theory, the single case study becomes, in Stake's lexicon, an intrinsic case study, used to develop a better understanding of the case, and possibly assist in theory building (Stake, at p. 237). The lines are not sharp between the intrinsic case study and the instrumental case study, but exist on a continuum. Both remind me of exploratory research methodology generally. Indeed, many authors support single and multiple case studies as an effective research tool for exploratory research, including those involving questions of "how" and "why" (Yin 1981, p. 98). Yin suggests case studies are appropriate when an empirical enquiry must examine contemporary phenomena in its real life context, particularly when the boundaries between the phenomena and the context are not clearly evident. Babbie (1991) confirms that case study research is especially effective for studying the subtle nuances of attitudes and behaviours and examining social processes over time. This is suitable for the research goal and objectives since it is attitudes and behaviours that underly most economic theories, and effect or potentially effect both quantitative and qualitative indicia of success in considering infrastructure and public service privatizations.

As a result of the foregoing, the case study method has seemed most appropriate given the outcomes of the research in chapters 2 and 3, since it will enable the determination of both subjective and objective criteria, enable the political institutional context and motivating factors to be explored in more detail than in any other approach.

4.2.8 Credibility and Transferability

Given the choice of the case study method, as the preferred method to achieve the goals and objectives of this research, the next issue for consideration is the structure of the case study research so as to ensure both its relevance to the goals and objectives of the research and its veracity from a technical point of view.

This case research has accordingly been structured to ensure reliability and transferability (or in constructivist terminology, credibility, transferability, dependability and confirmability) of findings by approaching the case study through a variety of methods;

1. Direct personal attendance at and recording of discussion at relevant York and Halton public council and committee meetings for both Halton Region and York Region from May of 1996 to January of 1997; A schedule of all committee meetings personally attended, for both

Halton and York Regions, is attached hereto as Appendix "B".

2. Review of all published minutes of Council and Committees in both Halton and York Region to verify directly observed discussion and decisions;

3. Review of all published Halton and York Region literature on each privatization initiative, which includes engineering background reports, financial reports, consultants reports, consortia submissions and similar published materials;

4. Review of newspaper articles for the York Region initiative: progress in Halton was considered too slow to merit detailed newspaper analysis;

5. Interview of key stakeholders in the process. The interview results are in Schedule "C". An interview questionnaire has been designed which attempts to identify the fundamental perceptions of key participants in the case studies, including local elected officials, senior public bureaucrats, senior executives with each of the consortia, financial and management consultants retained by the municipal governments, representatives of labour and citizens group. The form of the questionnaire is attached hereto as Schedule "D".

By approaching the case studies through the several approaches described above, the accuracy of observations described herein can be maximized and referenced points established for future researchers interested in the same or similar case studies.

The outcomes of the observations resulting from numbers 1 to 4 above are described in chapters 5.1 and 5.2 herein and the outcomes of the interview process described in number 5 above are described in chapter 5.3 herein.

4.3 Participants Involved in the Study

The decision to interview key stakeholders in each of the two privatization case studies was based on a perceived need to;

(a) understand the reasons for the process and outcomes observed in chapters 5.1 and 5.2;

(b) focus on perception as a critical link between knowledge of the key actors in the process (relevant to chapters 2 and 3) and the outcome of the process; the inference being that perceptions of the key stakeholders would inform possible privatization decision making and evaluative frameworks later;

(c) the interview process might unearth new facts, issues, and considerations not otherwise identified in the historical review from chapter 2, and might link to certain of the theories identified in chapter 3.

The case study involved 27 structured interviews (14 for Halton Region, 13 for York Region). Final selection of individuals interviewed was determined for each Regional Municipality based on the type of stakeholder groups involved. They were intended to represent a cross-section of key decision making or key influencing stakeholders, including regional commissioner or department-head level staff, elected representatives, representatives of the private consortia involved in the privatization initiative, financial and management consultants, representatives of labour and citizens.

Initial interviewees were determined for each Regional Municipality based on the type of stakeholder groups involved. Gender balance and other equity considerations did not factor in final selection; the individuals holding particular offices, whether male or female, were sought. A letter of introduction was sent to all interviewees beforehand providing an overview of the project. Follow-up telephone calls were made to confirm participation and schedule meeting times. There is no attribution of interview results by name in this report, so as to protect the anonymity of research respondents. This was a requirement of the Office of Human Research at the University of Waterloo. Respondents were not compensated. Those interviewed in the initial stage of research and any others who were contacted in the course of the research will be entitled to receive, if interested, a summary of study findings and a complete copy of the research upon request.

The selection of the appropriate individuals was based on the following:

1. All Regional Commissioners relevant to the study were sought and interviewed, including the Commissioners of Planning, Finance, Administration and Engineering[35] in each Region (they have slightly different titles between the two Regions)

2. Key Financial and management consultants retained by the regions, if any. None were yet retained in the Halton initiative, two had been retained and were very important in the York initiative, and their answers are comprised in the "private" column in the interview summaries.

3. Elected officials were sought. Given at least 4 months of direct observation of council meetings prior to the selection of which elected officials to interview, it was decided to seek, from Halton Region, two politicians who seemed to be "for" proceeding with the RFP and two who seemed to be "against" proceeding with the RFP. In Halton Region, this resulted in 4 interviews including the Regional Chair, the mayors of Oakville and Burlington, and one councillor from north Halton. In York, there was no "polarization" of views detected by 4 months of direct observation, but at least two asked very pointed and astute questions (the

[35]In the case of York Region, a previous commissioner who was the head of the long term water strategy task force was selected. In the case Halton Region, the Commissioner of Engineering and Public Works resigned after receipt of the interview letter to take up a job with NWW Water Canada, a member of the Consumers Utilities consortium and winning bidder in the York Region RFP. His interview results are nevertheless counted as a public response in the Halton Region, given his original involvement in that initiative and involvement during the critical Council debate meetings.

Mayors of Markham and Newmarket). They were selected for interview along with the Regional Chair. A fourth elected official would not make herself available for interview, and was not pressed.

4. Representatives of affected labour were sought. In York Region, the existing water service is unionized with the Canadian Union of Public Employees ("CUPE"). The appropriate representative of CUPE was interviewed for the York study. In Halton Region, waterworks are manned by union members of the International Brotherhood of Electrical Workers ("IBEW"). The appropriate representative of IBEW was interviewed for the Halton study.

5. Finding a representative voice for Citizens became a difficult undertaking, since no citizens showed up for the months of Council sessions over the spring and summer of 1996 in York Region, and only one showed up for the Halton Regional meetings. Given concern over representativeness, it was decided to seek a citizen voice through interviewing the local heads of the associations of ratepayer groups for each Region. These entities were identified, the appropriate chair contacted and agreed to be interviewed, and both interviewees were well informed as to the initiatives and added value to the study.

   "The public" voice is not necessarily representative of the public opinion at all, but was the best that could be done given the methodology and scope of interviewing.

6. Consortia representatives were selected from the RFQ respondents for both York Region and Halton Region. There was, of course, some overlap between these groups, since most proponents bid on both initiatives. Accordingly, the York Region study focused on senior members of the winning consortia, including the presidents of Consumers Utilities and the senior officer of NWW Canada, while the Halton consortia list focused on the presidents of other bidders, including the presidents of Phillips Utilities, Ogden Yorkshire Water Canada, the head of Union Gas' utility division, and a senior officer of a major engineering and construction consortium who was part of a Halton finalist consortia, with direct personal experience in the Highway 407 and Pearson privatization initiatives.

It is felt that the interviewees are indeed a "rich" sampling. The 6 mayors interviewed have an average experience of almost 20 years in politics. The private sector and public commissioner interviewees are highly educated professionals; degrees include three engineers, an M.Sc., 2 CA's, a CGA, an MBA, a CMA, a Master of Electrical Engineering, a Doctor of Philosophy and a Doctor of Medicine. The citizen and labour representatives had extensive experience as representatives.

4.4 Questionnaire Design

The questionnaire that was to form the basis of the interviews was prepared based on the initial goals and objectives of the study and the target information generally described in 4.3 above. It was felt that the interview should not last more than 30 to 45 minutes, given interviewees busy schedules and concerns over intrusion by the Office of Human Research at the University of

Waterloo. Accordingly, a much longer original list of questions were scaled back into a "core" set that could be completed in 30 minutes or so, and a set of "supplemental" questions that could be asked, given participants' time schedules. A copy of the Questionnaire is appended hereto as Schedule "D".

The focus of these interviews was to gather more details as to interviewees perceptions, by determining, in a "core" set of questions;

(A) participant's existing understanding of the context of privatization given current issues within that Region and in government generally, and opinion as to whether the private sector could play any role in assisting with these problems. This issue was reflected in Core question 2 (referred to as "C2"). The purpose of this question was to place the answers in a cultural and institutional context, given the qualitative nature of the research;

(B) participants perceptions as to what a successful privatization would be, what a failed privatization would be, and what the key indicators of each are (i.e. quantitative and/or qualitative). This is reflected in Core questions 3, 4 and 5 (C3, C4, C5). The purpose of this question is to generate a wide list of relevant, subjective and objective, indicators of both success and failure;

(C) participants beliefs as to the ways in which risks identified in C3, C4 and C5 can be managed. The purpose of this question is to enable insights into structuring alternatives and methods that may be useful. This is reflected in C6;

(D) participants beliefs as to the relative strengths and weaknesses of each of government and the private sector. The purpose of this question is to determine the respondents pre-existing perceptions as to who is good at what; the implication is that who should do what as between government and the private sector can be inferred from who is good at what. This is reflected in question C7 and C8;

(E) participants perceptions as to the risks of the public involving the private sector in basic infrastructure, and the private sector being involved in basic infrastructure, and the steps that each can take to minimize the potential impact of those risks. This is reflected in questions C9, C10 and C11. The purpose of this question is both to consider questions of process and structure, and to enable mutual understanding;

(F) participant's perception of the impact of previous answers on the particular regional initiative under discussion. This was intended to ground, or link, participants answers to what was really happening in the case study. This is reflected in question C12;

(G) participant's perceptions of the importance of qualitative outcomes, their

measurability, and the manageability of public perception. This question was intended to validate the qualitative approach taken to the research, and determine issues in managing public relations with the electorate. It is question C13.

(H) the supplemental questions were generally more specific than the core questions, but given time constraints for the first several interviews, only questions Supplementary 2 ("S2") and 5 ("S5") were consistently asked of interviewees. Question S2 seeks to place privatization in a context of fiscal necessity: is it only used by or useful to governments in times of fiscal necessity. Question S5 seeks to validate motivation 1 of this research stated in the introduction: the assumption is that if Canada is culturally different than the UK and the US and others, we need to carefully filter research from those countries. We must also develop Canadian research.

Each interview began with a review of the study process as outlined in the information consent letter. A series of questions about the interviewees experience with privatization generally or public private partnerships generally began the interview. An effort was made to obtain information on the individuals professional background, experience, responsibilities, and current interest. While directing the interviewees attention to the question, no ideas were planted, and if the answer seemed to miss the point of the question, after asking it a second time, I proceeded to the next question.

Each interview has been tape recorded in full. That original tape recording, and notes taken at the meeting, were used by the author to prepare a summary of relevant points which are contained in Schedule "C" attached hereto. In preparing this summary, thought was given to both the context of the answer and the actual language used so that the summary accurately reflects the participants response.

4.5 Summary - Linkage of Methodology to Purpose of Thesis

The purpose of this research is to contribute to the Canadian source privatization literature base by identifying stakeholder perceptions to privatization and suggesting, from those perceptions, a wider range of relevant issues and criteria, the weight to be afforded relevant theory, and lastly to suggest new frameworks of analysis and evaluation that might be used by policy makers and researchers in the future. By selecting a case study methodology, and supplementing the questionnaire with a thorough review of the conduct of the cases themselves, a richly contextual analysis is possible that can inform all of the above-mentioned purposes. The case study approach supports the objectives of exploratory research described in Section 4.2.1 above. It also can be thought of as evaluative research, described in Section 4.2.2. above, to the extent that governments are slowly changing in their relationships with the private sector and their ability to structure those relationships to achieve optimal service delivery solutions is important.

While the statement of a prior hypothesis was considered as a "set up" to the interviews, one's hypothesis might have been different depending on whether they were based on the economic

theories, political choice theories for example or the ideology of a governing party in power. As such, the author preferred, consistent with the exploratory research model, to proceed with the case studies without any particular hypothesis, but to regard the collected body of "privatization theory" described in Chapter 3.4 as the point of comparison comprising the grounded theory described in Section 4.2.2 above.

5. Description of Halton Region and York Region Case Studies

This chapter explains the cases themselves, and the results of attendance at council and committee sessions, a review of the case literature and official minutes, of council and committee meetings. A discussion of the York case follows the Halton case.

5.1 Halton Region Case Summary

5.1.1 Historical Context

The Regional Municipality of Halton ("Halton" or "Halton Region") was formed in January of 1974 and was given responsibility for water and wastewater services within its area. At that time, water was supplied through wells in the northern part of Halton Region, and by fragmented Lake Ontario-based pipewater systems within the Town of Oakville and the City of Burlington.

The first regional plan for Halton Region, approved in August 1980, needed to deal with only limited growth, both from the point of view of expected population spillover from Metro, and from the point of view of the capacity of existing systems. While growth in Halton Region had averaged generally 5%, growth in the Town of Milton had been averaging approximately 15% in the late '70's to 1983. While Milton was aggressive creating a 1200 acre industrial park at that period of time, limited servicing capacity would only permit the development of half of it, and the remaining lands were committed to develop on private (i.e. wells and septic services). By 1986, Milton council was requesting Halton Region to find ways for it to expand its existing stream and well based systems. In 1987 Halton Region Council decided to go through a planning review process to deal with the issue of the overall growth for Halton Region and the need for and the ability to accommodate growth in the Milton Urban area, amongst others.

5.1.2 Long Term Water Needs

Halton's long-term water needs arise out of its need to deal with current population growth pressure, including an expected population increase from 310,000 in 1991 to 530,000, for the planning period to 2011. Prior to 1994, Halton Regional Council had established the Halton Urban Structure Review ("HUSR") process to define the location and character of new urban areas to accommodate growth. This is an official plan making process, with the critical part of it being the decision to allocate growth to the Town of Milton and most of the settled areas in Oakville. The process resulted in four documents;

1. The Halton Urban Structure Plan, endorsed by Halton Regional Council in July, 1994 ("HUSP") which designated the land use plans of the HUSR;
2. A Water and Wastewater Servicing Master Plan, which detailed the required infrastructure to support the urban structure otherwise described in HUSP;
3. A watershed plan for Sixteen Mile Creek; and

4. A financial strategy.

The decision to undertake the HUSR was initially made by Halton Region in 1986, and Phase I, completed in 1989, considered a number of possible sites to accommodate expected growth. By 1994, Halton Regional Council was considering amendments to its new regional official plan to implement and adopt HUSP.

The critical decision in HUSP in selecting the Milton - centred area and north of Oakville as alternative locations for new growth carries a significant cost, since Milton, at the time, obtained its fresh water from wells whereas Oakville and Burlington had direct pipe water supply from Lake Ontario.

An urban separator system in HUSP established distinct edges separating Milton from north Oakville and Burlington. The implications of HUSP to water supply became a recurring theme in discussions with stakeholders in the process. Was it good planning to allow Milton to grow, supplied by a new pipe brought up from Lake Ontario, or was it expensive folly, with the long reach of the pipe made particularly uneconomical given that it had no users after it passed Burlington/Oakville until it reached Milton.

Unlike York, alternative water supplies were examined early in the HUSR process and it was determined that a Lake Ontario-based fresh water source was most feasible to supply Milton. A Lake Ontario option had the least impact on the environment while maintaining the required engineering design requirements and cost-effectiveness. Other water supply alternatives that had been considered included expanded ground water supply and a pipeline from Lake Huron. The total water needs of Halton are such that an additional 138 MIGD of capacity would be required if existing ground water supplies are maintained. The early cost estimates suggested that servicing north Oakville and Milton and the Halton Peel - Highway 401 area would costs close to $500 million over the period to 2011. Specifically, the estimated total infrastructure costs for developing new lands outside existing urban areas was expected to be $432 million. Approximately $231 million would be required over the first 5 years of the project when the revenue generating potential for the new infrastructure was felt to be minimal. In addition, there would be an additional requirement for new infrastructure within existing urban areas totalling $256 million, of which $143 million was projected to be needed within the first 5 years. Furthermore, capital expenditure requirements to maintain existing water and wastewater facilities was expected to cost $207 million until the year 2016, giving a total water and wastewater infrastructure requirement cost over the forecast period of approximately $900 million. Of this total, the cost to pay for infrastructure within existing urban designations ($256 million) and to maintain existing systems ($207 million) was contained within Halton Region's existing capital budget. The balance was not.

5.1.3 Identification of Private Sector Role

Halton Region intended that growth-related infrastructure should be self-supporting in terms of capital costs, meaning that the collection of development charges under the provisions of the

Development Charges Act should cover the capital costs of water expansion. However, as was the case with York Region, regional water, wastewater and road infrastructure cost requirements occur prior to the time when development charges can be levied and collected from developers, presenting a timing problem. The Halton Urban Structure and Overview Report dated April, 1994 ("Overview Report"), suggested that the per residential unit cost of supplying Milton and the northern part of Halton Region would be substantially greater than the current region wide average per unit costs (approximately $2,900 per residential unit). Halton admitted in its Overview Report that the cost to provide infrastructure for HUSP would be much higher than current costs, but not, according to the Overview Report, inconsistent with the costs of other "greenfield" developments elsewhere in Ontario.

The financial strategy accompanying the Overview Report was aimed at considering alternatives to provide for the financing of the necessary water and wastewater infrastructure including, possibly, the provision for sharing of costs and risks by benefitting developers through prepayment of development charges (i.e. "front-ending"), a public-private partnership which may include financing and operating the facilities; provincial financial participation perhaps through the Ontario Clean Water Agency, or perhaps from the Province directly as a landowner benefitter.

Halton Region's Water and Wastewater Servicing Master Plan dated February, 1995 (the "WW Master Plan") provided and evaluated alternative solutions to provide water. The WW Master Plan suggested that additional capacity of approximately 138 million MIGD would be required if all existing ground water supplies were maintained, and 151 MIGD of additional capacity would be required if ground water supplies were to be replaced, to 2011. While there were some savings possible through water conservation and supply management measures, they would only be a partial solution to the problem.

Four criterion were identified by Halton Region as critical in the determination of the appropriate water supply methodology;

(a) technical viability;
(b) security of supply;
(c) water quality; and
(d) cost.

The Lake Ontario-based water supply through Halton was considered the best alternative source of supply.

Elements of the WW Master Plan included the requirement for a new water purification plant prior to the year 2000, the need for reservoirs pumping stations and watermains.

In addition to fresh water requirements, and unlike York, Halton Region also needs wastewater servicing from the newly serviced areas back to Lake Ontario, including effluent disposal and treatment in either existing or new wastewater treatment plants. It was determined, after

considering several alternatives, that the recommended wastewater service strategy was to expand the mid-Halton Wastewater Treatment Plant. It had a lower potential impact on the natural and social environments than other alternatives.

While phasing was considered as a possible way to mitigate upfront costs of water and wastewater infrastructure, the real potential to do so, given the length that the water and wastewater pipes need to travel from Lake Ontario to Milton, seemed minimal. Accordingly, the WW Master Plan recommended a combination of water conservation strategies and expansion of water and wastewater servicing systems as described above. Construction of the new water and wastewater servicing infrastructure was scheduled, at that time, to begin as early as 1997, constructed in phases and to meet potential needs beyond 2011, where necessary. As in York, Halton's water and wastewater systems would be subject to a class environmental assessment process pursuant to provisions of the *Environmental Assessment Act*[36].

The May 1995 HUSP financial analysis and implementation strategy report concluded that the expected additional cost of supplying water and wastewater facilities pursuant to the HUSP plan could not be funded solely by Halton Region using conventional municipal debt financing.

In April 16, 1995, Halton Region released its Halton Urban Structure Plan Financial Analysis and implementation strategy. This report expanded on the WW Master Plan significantly with respect to the issue of dealing with the cost of HUSP water and wastewater infrastructure and means to address that cost. The financial conclusions from that report was that the HUSP plan presents a financing challenge that could not be managed through conventional debt financing by Halton. It was expected that the market would see the risk associated with a debt issue to fund the long pipe to Milton and that this would result in an additional risk premium being attached to Halton's debenture rates, translating into higher carrying costs. Furthermore, if development was delayed, resulting in development charge revenue not materializing, tax payers of Halton Region would have to pay the additional costs.

The absolute per residential unit cost for HUSP was significantly higher than current per unit costs, given the significant "premium for the urban separation needed to support the nodal growth concept within the HUSP planning vision"[37].

The combination of the cash flow circularity risk and high absolute cost risk was expected to be an issue even with the private sector partner. At this stage, Halton was fearful that the higher per unit cost would translate directly into higher development charge rates. As a result, it was recommended that, of the $432 million, an upfront contribution of $131 million will be required from sources other than Halton Region, and that Halton and/or a private sector investor would fund

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[36]Class and Environmental Assessment for Municipal Water and Waste Water Project (June, 1993) approved under the *Environment Assessment Act*.

[37]at p. 30

the $301 million balance.

Accordingly, that report suggested that a public/private partnership arrangement might be considered as a way to both share the cost and to lower the absolute cost of the infrastructure required. At the same time, the HUSP financial analysis and implementation strategy report also suggested that Halton Region discuss cost sharing with the Province, since it owned 1200 acres of land within Halton Region that might otherwise benefit from the new infrastructure, discuss with the Region of Peel the ability for Halton to buy water through the South Peel Water and Wastewater System for the short to medium term, review the availability of new membrane technologies which would increase capacity at the Milton Wastewater Treatment Plant (technology developed by Zenon Environmental Inc. of Burlington, Ontario) and, lastly, secure all necessary class environmental assessment and planning approvals.

5.1.4 Halton "Privatization" Process

In May, 1995, Halton released its HUSP water and wastewater plan request for expressions of interest ("REI") to private supplies. In this document, Halton suggested that it "now wishes to explore how the private sector can bring innovation to the design, construction, operation and financing of Halton water and wastewater infrastructure". Particularly, the REI requested responses from the private sector as to how it could deliver the required infrastructure in an efficient, timely and effective way, how technology could be used, and how overall economic benefits to Halton and its taxpayers could be generated. The REI, however, was not only issued to the private sector but also to other public bodies, since the REI suggested that opportunities may exist for parties not only in the private sector but also the other parties in the public sector.

While a process was articulated in the REI by way of a project schedule, no dates were put on these events. Stage 1 was the REI. Stage 2 was to be a request for qualifications ("RFQ") leading to a short list of eligible candidates, and Stage 3 was to be a request for proposals ("RFP") from the short listed parties. The deadline date for submission of expressions of interest was June 29, 1995. As in York, several consortia responded to the request.

In the Spring of 1996, Halton Region prepared its RFQ, with its objectives to;

1. identify policy implications of a partnership;
2. identify new technology/financing and staging approaches to HUSP;
3. to obtain private sector input on the viability of the full and staged HUSP scenarios;
4. identify and asses potential partnership structures;
5. identify the economic benefits of the partnership;
6. identify areas of interest through a private sector partner;
7. receive the private sector's response to Halton's risk management strategy;
8. implement the development of the HUSP financial plan;
9. identify a short list of capable partners.

Six private sector consortia and one public sector consortium (Inter Regional Water Partners) responded to the RFQ on or prior to the deadline of March 14, 1996. The core criteria articulated in the RFQ were as follows;

Table 7 Halton Privatization Evaluative Criteria	
1.	the provision of water and wastewater services should not force undue financial burden on ratepayers or compromise planning objectives of Halton Region;
2.	risk sharing of financial and development risk should place no undue financial burden on existing ratepayers;
3.	protection of the environment and health and safety of the Region's residents must be assured;
4.	the strategy should result in water rates and development charges competitive with water rates and development charges in surrounding communities and the Greater Toronto Area; and
5.	the infrastructure development project should create additional economic benefits to Halton Region.

The evaluative matrix used by Halton to select the preferred bidders was similar to that used by York Region, including a review of the track record of the applicant, financial capability, technical capabilities, other competing commitments, potential or existing conflicts of interest, and an understanding of the project and the commitment to local economic development.

On May 29, 1996[38], it was recommended that three private sector consortia be "short-listed" as participants eligible for the request for proposal stage (RFP) of Halton's partnership opportunity. These consortia included;

1. Canadian Clean Water Systems Inc. comprised of Ogden Yorkshire Water of Canada Ltd. and Union Gas Limited;
2. Consumers Utilities comprised of Northwest Water Canada Ltd. and Consumers Gas Company Ltd;
3. Halton Water Partnership comprised of United Water Resources - Lyonnaise Des Eaux Partnership, Philips Utilities Management Corporation, Monenco Agra Inc., and Banister Foundation Inc.

It was also determined, given Halton Region's interest in pursuing a public partnership with Peel Region, that further investigations be made between Halton and Peel Region to see whether a

[38]In a report from the Commissioner of Corporate Services and Planning and Public Works addressed to the Chairman of the Administrative and Finance, and Planning and Public Works Committees.

public sector consortium, Inter-Regional Water Partners, could offer a solution to Halton Region, although their submission to the REI did not comply with the technical requirements of the REI. These meetings were to have been completed by August 23, 1996.

There were many benefits to Halton Region in going through the RFQ process. The following is a summary of the ideas generated by the private sector consortia or observations made of benefit to Halton Region, according to public reports to Halton Regional Council;

1. It was seen as financially appropriate to phase development in north Halton in furtherance of the HUSP plan rather than build all of the required infrastructure at once.
2. The private sector consortia all suggested that the cost of providing infrastructure for HUSP should and could be financed through revenues generated by development charges and user fees.
3. All private sector consortia were comfortable adhering to performance specifications with respect to the construction.
4. It was expected that significant design and construction savings could be achieved using a private sector partnership arrangement through the ability to select preferred contractors and subcontractors, leeway in negotiating with bidders, timing and phasing of construction, narrowing the time lag between cost of construction and revenue collection.
5. It was not expected that there would be significant cost savings in transferring existing water and wastewater operation to the private sector, since any cost savings may be off-set by management fees and potential GST costs. On the other hand, it was felt that transfer of operations may make sense bundled with the obligation to operate the new facilities, since combining construction and operations together may ensure construction quality since the group that builds it would then have to maintain it and operate it.
6. It was felt that the private sector could bring advantages in customer service and billing, both an improvement in process and in cost savings.
7. None of the RFQ proposals seem to offer significant local economic development spin-off benefits with the exception of construction job creating impact.

5.1.5 Outcome of RFQ Process

As a result of the response to RFQ, it was felt that a public/private partnership could provide benefits to Halton Region, particularly in design and construction, customer service and billing and possibly operations. It was seen as less likely that the private sector would be able to finance the infrastructure on terms satisfactory to Halton Region and it was not clear whether the private sector could reduce the overall cost of HUSP to the Region at that stage.

On the other hand, Inter-Regional Partners presented a proposal and response to the REI and RFQ that had the possibility for lowering total HUSP infrastructure servicing costs through an

arrangement limit in scope (i.e. access to the South Peel system) but which would benefit both partners and thereby lower cost and financial risk. As a result of this, it was decided by Halton Regional council that it should try to see whether it could find a satisfactory engineering and financial arrangement with Peel Region prior to embarking on a solution with a private consortia.

Intra-Regional Partners is a public sector consortium comprised of the Ontario Clean Water Agency ("OCWA") and the Region of Peel. It submitted a proposal in response to the REI to provide immediate services to Halton to mitigate the upfront costs of HUSP. Intra Regional Partners were able to service Milton's water and wastewater systems through enhancements to the plant capacity within the South Peel Water and Wastewater System. They proposed to build trunk water and wastewater sewers over to Milton from that system.

Given some uncertainty regarding the Inter-Regional Water Partners submission, Halton seemed reluctant to continue discussions with Peel Region prior to getting back to continuing the more formal process with its potential private sector partners through releasing an RFP. While discussion with Peel Region had been originally expected to be completed by August 23, 1996, concern expressed, in camera, at Peel's Council meeting of August 8th, 1996, suggested that Peel itself may not have thought through all of the issues and concerns relevant in providing water from Peel's system to a neighbouring region.

5.1.6 Political Debate on the Merits of HUSP

On June 19, 1996, Halton council considered how to deal with the response to the RFQ. There were many deputations at the meeting including a representative of a group called the Halton Planning Oversight Committee, who objected to urban sprawl, and a consultant on behalf of landowners holding 800 acres in Milton, obviously in support of HUSP and in getting on with providing water to it. Hugh Heron, representing Shipp Homes, Mattamy Homes, Fieldgate Homes, and the Milton West Development Area, was also in attendance in support of HUSP.

It was the submission of the Commissioner of Finance and Administration at that meeting that the project financing for the water and wastewater aspects of HUSP may require area specific water rates, increased development charges, as well as conservation and peak demand charges. He stated that there was an ability to obtain capital cost savings contingent on controlling construction schedules through just-in-time construction. On the other hand, there would be some situations where services would be required in advance of need at a premium cost, such as preservicing industrial land. Debate within the council brought out the various sub-issues involved in funding the water and wastewater infrastructure;

1. Growth must pay for growth related cost but on the other hand there was a need for the region's development charges to be competitive with other region's development charges so as not to lose development altogether.
2. Industrial commercial lands to date have been subsidized since they only pay 75% of the comparable development charge rate levied against residential lands.

3. Burlington has cheaply serviced lands to accommodate 30 or 40 years of growth and Oakville has cheaply serviced the lands to accommodate 10 or 15 years growth; does HUSP really make sense when there is this huge price tag and the risk involved?
4. Halton already had one of the highest development charge rates within the Greater Toronto Area and there is very little room to increase them.
5. Many regional council members were concerned about the costs incurred by Halton Region in working on the REI, the RFQ and at the next stage, the RFP and want a detailed internal and external cost ceilings placed on those efforts. It was also suggested that the private sector consortia had spent, on their own account, at least $250,000 already just responding to the RFQ.

Throughout the HUSR and HUSP process, Halton Region's documents have stated that existing ratepayers should not have to pay for new development. Indeed, there were only two ways for Halton Region (and York Region for that matter) to obtain revenue from the provision of water and wastewater services; development charges and water user rates. There was the possibility, in some cases, to surcharge water rates so they are higher than a general rate prevailing within Halton Region. In other words, a two tier or multi-tier water rate structure is possible. It is important to note that Halton currently prices its water on the basis of full cost recovery. Water rates are currently not subsidized by general property tax revenues.

On the other hand, several councillors did not believe the staff suggestions of expected growth and believed that the region had 50 or 60 years current inventory of industrial and commercial land that would otherwise be available. They made it clear that developing lands in the south of Halton was much more efficient than picking isolated communities to expand in the north. Other councillors suggested that it was unfair to keep the private sector "hanging" much longer by delaying further development of the RFP until discussions with Peel could be completed, since there was no time line for that, that seemed to be binding, and Peel did not seem to be interested in cooperating.

The private sector consortia were becoming, commencing with this June 19th, 1996 meeting, increasingly concerned that there was not the political will in Halton Region to continue with the initiative, and that the fear of rising rates and costs, coupled with some suspicion that the HUSP plan makes no economic sense, where undermining the initiative altogether. The meeting that decided to proceed with to the RFQ phase of the project had been deadlocked at 10:10 and the regional chairman had to decide that casting vote in favour of proceeding to the RFQ process. Many of the private sector consortia regarded the fall council meetings to be difficult. During the early fall of 1996, it became clear that OCWA's political future was in doubt. Certain press releases and statements by the Minister of Municipal Affairs had suggested that OCWA may be privatized. As such, OCWA's mandate and legislative authority to partner became quite unclear. This uncertainty remained throughout the early fall of 1996, resulting in a lengthy debate at Halton Regional Council as to the merits of proceeding with the RFP on October 22, 1996. At the meeting of the Joint Planning and Public Works, and Administration and Finance Committees on that day, a decision was made to both continue discussions with Peel Regional Council for the purpose of securing water and

wastewater supply for HUSP, and in addition, to proceed to prepare the formal RFP ultimately to be released to the three finalists consortia.

On October 3, 1996, at a joint meeting of the Planning and Public Works Committee and the Administration of Finance Committee, it was recommended that council authorize the preparation of a Request for Proposal ("RFP") for release in January 1997. On October 9th, 1996, a report with this recommendation from the joint committee was presented to Halton Regional Council. In attendance again was Tom Muir of the Halton Planning Oversight Committee, again complaining that Halton council was spending too much money investigating and facilitating water and wastewater servicing under HUSP and that it represented sprawl. The debate within council itself demonstrated the range of uncertainty about proceeding with the HUSP water and wastewater initiative, and in particular, the uncertainty about the desirability of involving the private sector at all. The arguments made, pro and con, included the following;

1. That given the political uncertainty within the Greater Toronto Area, that Halton should wait until they know the political structure of their neighbours.
2. That Halton needs time to deal with Peel Region.
3. There is no mad rush to proceed with this, so defer it for 6 months.
4. The Ontario government needs to be made a partner to this initiative, since it is beyond the financial capabilities of Halton Region.
5. There is no time to wait; Halton must proceed now so it has the new system functioning by the time the demand is there.

After the ensuing debate, the Halton Regional Council called for a recorded vote whereby the decision to proceed with drafting the RFP was passed by a narrow 11 to 9 margin.

Subsequent to this meeting, discussions with Peel Region have been continuing, up until and including the date of submission of this report, May 14, 1997. The RFP had not as of August 5, 1997 been released to the RFQ finalists. Many RFQ finalists had apparently lost interest, given the ambivalent Council, and were focusing their energies pursuing initiatives with a higher probability of success elsewhere.

5.2 York Region Case Summary

5.2.1 Historical Context

The Regional Municipality of York, formed in 1971, ("York" or "York Region") is located immediately north of the Municipality of Metropolitan Toronto, Province of Ontario, ("Metro"), stretching from Steeles Avenue on the northern border of Metro, to Lake Simcoe, and between Peel Region to the west and Durham Region to the east.

The population of York has been rapidly increasing as development spilled over outside of Metro's boundaries. From 1971 to 1993, York Region's population increased from 166,000 to

538,000. The population forecast prepared by York in 1993 foresaw a population of 1.1 million people in York Region by the year 2021.

As an upper tier municipality, York Region has the responsibility for the provision of water and sewage treatment[39]. The lower tier municipalities within the Region are responsible for local water distribution and service connections, fire protection and billing. Those lower tier municipalities include the City of Vaughan, the Town of Markham, the Town of Richmond Hill, the Town of Aurora, and the Town of Newmarket.

5.2.2 Long Term Water Needs

In 1996, about three-quarter of the Region's potable water was supplied through Metro pursuant to two long-term water supply agreement signed in the mid-1970's. The balance was sourced through ground water wells. In 1995, York Region was providing approximately 51 million imperial gallons ("MIG") per day ("MIGD") to its residents. Projections of the water requirements for the year 2031 suggested that amount would increase to 148 MIGD per day.

York Region had been concerned about securing long-term water supply for its growth at least as far back as 1991, when Metro had not only suggested that there would be limits to the amount of water it would sell to York Region, but had also suggested that capital contributions of up to $160 million would be required from York to maintain supply through Metro. Furthermore, York Region was concerned that existing ground water supplies for several rural municipalities would not be sufficient to meet long-term needs. Accordingly, York Region retained engineering consultants to analyze sources of long term water supply and make recommendations to it. The resulting report, prepared by the consulting team of Gore and Storrie Limited and MacViro Consultants Inc. (the "Gore Report, 1994") was completed in December 1993 and presented to York Regional Council in early 1994. Through subsequent discussions with Metro, it was determined that the capital improvements necessary to the Metro system to facilitate increased supply to York was to cost York Region $190 million[40]. York Region was able to reach a satisfactory agreement with Metro at that time with respect to supplying its short-term growth needs, but the alternatives for long-term water supply remained unclear.

The Gore Report, 1994, in addition (or as a result) had recommended that a public or private partner be found to assist York Region to develop a long-term water supply strategy that could be in place by the year 2000. Accordingly, on February 24, 1994, York Regional Council established a water strategy committee to deal with this issue going forward and such committee had the authority to hire a management consultant firm to assist it. The management consulting firm of

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39 specifically, pursuant to The Regional Municipality of York Act

40 Although Metro had previously estimated the cost of meeting the increased York Region demand at more than $400 million.

Ernst & Young were selected, after a competitive bid process, on April 28, 1994.

By July of 1995, staff and the members of York's Regional Water - Long-Term Supply Committee were negotiating with Metro to secure a total water supply from Metro of about 57 MIGD to meet York's then short-term needs (defined as a six to eight-year period), but York had also determined the need to select "partners" to develop long-term solutions.

5.2.3 Identification of Private Sector Role

The genesis of the "partner" approach in York Region is unclear. Some suggest an unsolicited lobbying effort by Trans Canada Pipelines Inc. in 1993, to provide long term water, got York Region thinking about it. Others suggest it may have been a consultant's recommendation.

5.2.4 York "Privatization" Process

York Region and its consultants prepared a Request for Qualifications ("RFQ") and released it to specified potential bidders in the summer of 1995. York Regional Council, on July 6, 1995, adopted a recommendation to proceed with a formal process to identify a partner who could assist in developing and/or implementing a long-term water supply strategy. Over 75 firms requested the RFQ package from York Region. By August 11, 1995, the deadline date, nine firms or groups of firms had made submissions. The three finalists were selected based on pre-determined evaluation criteria including water system expertise, understanding of the issues, financial capability, openness to various forms of partnership, commitment, public credibility and regulatory expertise. Independent credit investigations were made of the applicants and each group was asked to identify potential conflicts of interest with York Region and other officials holding public office. Of the consortia responding, three were short-listed after the date of closing of the RFQ, August 11, 1995.

On September 14, 1995, the three short-listed consortia were all invited to respond to a Request for Proposal (RFP) to form a public/private partnership to find a solution to the Region's long-term water supply needs. These three consortia were:

1. Canadian Clean Water Systems Inc. , which is a consortium comprised of Ogden Yorkshire Water of Canada (an affiliate of a British regional water company), Union Gas Limited (an Ontario natural gas supplier) as well as several smaller construction companies and consulting engineering companies;
2. Consumers' Utilities, a joint venture between the Consumers' Gas Company Ltd. (an Ontario natural gas supplier) and NWW Canada Limited, a subsidiary of Northwest Water (U.K.), another British regional water company; and
3. York Consortium, a joint venture between Trans Canada Pipelines Ltd., the Ontario Clean Water Agency (then a semi-autonomous arm of the Provincial Government involved in managing water and sewage treatment plans around the Province of Ontario), as well as another group of consulting engineers and contractors.

All respondents were provided with copies of the Gore Report, 1994. York Region was looking for creativity and innovative approaches from the finalist consortia. In order to more fully understand each respondent's water system expertise, members of the Regional Water Long Term Supply Committee ("LTWSC") and York Region staff conducted site visits to inspect the water systems of Durham and Peel Regions, and of Yorkshire water and North West Water in the United Kingdom ("UK"). The trips to the UK occurred on February 19 and February 20, 1996. Furthermore, a visit to the Office of Water Services ("OFWAT"), the British water regulatory authority occurred on February 21, 1996 in order to understand the British system of water regulation.

Responses to the RFP were received on or about December 20, 1995 and by report to the York Regional Council dated March 14, 1996, the York Region - Long-Term Water Supply Task Force and the consultants recommended the selection of Consumers Utilities as the private sector partner based on each firm or group of firms' ability to develop, design, finance, construct, operate and administer a long-term water supply with York Region.

5.2.5 Outcome of RFP Process

The winning bidder, Consumers' Utilities, is comprised of two very large entities, Consumers Gas and North West Water ("NWW"). Consumers' Gas is a subsidiary of IPL Energy Inc. of Alberta and has been providing piped natural gas to Metro residents since 1848, initially from coal gas, and then through a pipeline from western Canada, starting in 1955. Consumers Gas is the largest natural gas distributor in Canada and has approximately 1.3 million customers. North West Water ("NWW") was for 17 years a public water authority in the United Kingdom and since 1989 has been a private sector company. It has the responsibility to deliver about 550 MIGD to a population of 7 million people in the north west of England. While it delivers this water through 40,000 kilometres of mains, much of that network is made up of old cast iron mains installed in Victorian times. These mains, given underinvestment for decades by the UK government, were prone to corrosion and bursting. Accordingly, NWW has developed considerable experience in maintenance, replacement and new construction of water systems.

NWW has taken its expertise internationally and was, in 1996, involved in major water projects in Australia, Mexico, Malaysia and the United States. According to NWW, worldwide, NWW was serving a population of approximately 20 million people in 1996.

The arrangements with Consumers' Utilities were structured into two phases:

1. Phase I, which would be the phase where various alternative solutions to long term water supply were developed in consultation with the LTWSC and a preferred alternative is selected by York Region; and

2. Phase II, where a structure is put in place for the alternative selected, including, possibly, though not necessarily, a public/private partnership.

The arrangements were such that Consumers' Utilities would fund all Phase 1 costs, excluding those costs internal to York Region, and these costs would be either borne entirely by Consumers' Utilities if the Region decided not to proceed to Phase II or, if it did, the cost would be capitalized and recovered from future financing or repaid operationally over the life of the project through water rates or development charges.

York Region made its goals for its long-term water supply clear in the RFP.

Table 8
York Privatization Evaluative Criteria

1.	Secure water above a short-term ceiling of 57 MIGD to enable York Region's future growth well into the 21st century;
2.	Ensure water rate stability and cost minimization in providing for long-term water supply;
3.	Ensure that York Region has a substantial role in the decision-making of any proposed public/private partnership and ensure York Region's ability to protect the public interest;
4.	Ensure that the financing of the infrastructure required for the long-term water supply would not unduly impact the existing credit rating of York Region or the ability of York Region to undertake other capital expenditures; and
5.	Protect the environment in meeting the long-term supply, including the requirement that the project meet or exceed all relevant guidelines, policies and standards.

The process adopted to arrive at the preferred alternative included obtaining detailed population forecasts and long-term water supply demand forecasts, and evaluating several alternative sources of supply, including Lake Ontario, Georgian Bay, Lake Simcoe and ground water sources. Other management alternatives impacting the alternatives were also reviewed, including the potential for water use reduction through demand management techniques, possibly as well as the potential for system optimization and water storage optimization.

The various alternative sources of supply and water use reduction techniques described above were analysed through a computerized optimization model known as a genetic algorithm, in this case, resident on a computer located at the University of Exeter in UK. The genetic algorithm sorts through various combinations of alternatives in an iterative process, where the combinations often number in the thousands, to determine the best alternatives.

In addition, York Region's financial consultants, CIBC Wood Gundy, analysed possible alternatives for financial stability and for risk, including risk in the context of operations and maintenance, design and construction, environmental, financial, tax, political, market (demand), legal and physical. Most important to the financial modelling was the limited capital sources of the funding for the infrastructure within York Region, limited basically to either water rates or development charges.

The financial criteria included the requirement that interest coverage ratios, that is the ratio of cash available to pay interest divided by the amount of the interest due, was to be at reasonable levels where external financing was to be used. The water system had to be in a strong financial position at the end of the review period (i.e. year 2031) in terms of the outstanding debt and profitability. The timing differences between the receipt of development charges and the payment of capital expenditures had to be financeable. With respect to the latter point, development charge revenues are based solely on the rate of development at a given time, and also assume the continuation of the current legislative framework[41] ensuring 100% recoverability of hard costs for the growth related costs of development. There is a circularity problem: the water must be there to provide for development before development will occur and development charges will be paid. Yet development needs to occur to generate development charge revenue right away to pay for the water infrastructure.

5.2.6 Political Issues Relevant To Alternative Supply Sources

York Region was quite concerned that water rates not rise in real terms over the life of the study period. All but the independent solutions allowed water rates to decrease from the region's uniform 1996 wholesale rate of 43.34 cents per cubic metre. It was estimated that by 2031 the water rate in 1996 dollars could be reduced to a range of between 26¢ - 37¢ per cubic metre depending on the technical solution chosen.

Accordingly, each of the alternatives were analysed for financial effects including total capital costs, the water rate in 2031 in 1996 dollars, and the immediate effect on development charges (water portion only) in terms of the increase that will be necessary in development charges in order to pay the related capital costs. A summary of those impacts are attached hereto;

Table 9
York Water Infrastructure Alternatives

Alternative	Capital Costs	Water Rate Effect in 2031, in 1996 cents per cubic metre	Immediate Effect on Development Charges: water portion only
Georgian Bay independent	$900 million to $1.3 billion	.53 to .67	plus 12% to plus 18%
Peel Independent	$900 million to $1.3 billion	.53 to .67	12% to 18%
Durham Independent	$900 million to $1.3 billion	.53 to .67	12% to 18%

[41] The *Development Charges Act*, RSO 1990

Georgian Bay/Metro York Water Systems	$700 to $900 million	.30 to .37	20% to 52%
Peel Metro York Water System	$700 to $900 million	.30 to .37	20% to 52%
Durham East Metro - York Water	$550 to $700 million	.29 to .35	minus 6% to plus 19%
Metro Direct	$500 to $700 million	.29 to .35	minus 6% to plus 19%
Durham West Metro	$400 to $550 million	.26 to .32	0% to plus 5%
Peel Cooperatives/Lake Simcoe/Metro	$400 to $500 million	.26 to .32	0% to plus 5%
Lake Simcoe Supply	$50 to $200 million	neutral	neutral* *this will only supply 5 to 20 MIGD

It also became evident early in the process that it was important both to York Region and to Consumers Utilities to undertake a communications program with the public and with the media. By the end of August, 1996, 24 articles had appeared in local newspapers and 12 more in industry association newsletters. The class environmental assessment process necessary as a result of the initiative required a certain level of consultation in any event. However, the communications that was undertaken in connection with this initiative exceeded that required. A series of public open houses were arranged at various locations across York Region in the summer of 1996 to provide information on the intentions and goals of the York Region Long Term Water Project in arriving at a preferred solution and to seek public input. Public polling was commissioned to support early findings from the open houses. In addition, mailers were sent to residents of York Region, an Internet site was established and the public polling initiative was followed up with multi-criteria ranking[42].

As a result of the communications with the public, many observations were noted. The public acknowledged the seriousness of the water supply problem in York Region. Concern was greatest for those receiving ground water. The public was concerned with the source of the water and Georgian Bay was perceived to be good source, particularly amongst those currently receiving their water from wells. The next most important factor, after source, was cost. An increase of $40 per year in the water rate was regarded as significant and undesirably higher than current costing.

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[42]multi criteria ranking, also called "Compromise Programming", permits ranking preferences amongst conflicting objectives.

It was important to the public that there be a secondary source of supply as opposed to only having a single source. A shared supply system was marginally preferred over an independent system. As to population growth requiring long-term water supply initiatives, the public were generally neutral to positive.

In addition to this public outreach program, extensive consultation was undertaken by representatives of Consumers Utilities and York Region (the "Consortia") with the Region of Durham, the Region of Peel, Metro Toronto, Simcoe County, the Collingwood Public Utilities Commission, amongst others. In addition, discussions were held with other levels of government including the Ontario Ministry of Natural Resources, the Ministry of the Environment and Energy, the Ministry of Municipal Affairs, Offices of the Greater Toronto Area, Ontario Hydro, the Trent Severn Waterway, and a division of Environment Canada. In addition, in respect of generating capacity losses, a meeting with Orillia Water and Light and Power Commission was also undertaken.

The Great Lakes Charter (the "GL Charter") is an agreement signed by the Province of Ontario, Quebec and the eight U.S. States bordering in the Great Lakes. It requires each jurisdiction to inform and consult with the others over water quantity and quality issues. No jurisdiction is allowed to divert more than 4.2 MIGD out of the system. For example, a long-term water alternative comprising fresh water sourced from Georgian Bay would in effect divert such water to Lake Ontario by way of the York Durham Sewage system. Accordingly, there is an "intra-basin" transfer of water which would invoke the prior notice and consultation requirements of the GL Charter. The Ministry of the Natural Resources in Ontario has primary responsibility for the GL Charter. Considerable concern over the availability of approvals to source water from Georgian Bay and have it treated and discharged at Lake Ontario was expressed by the Ministry of the Environment and Energy. One issue in this respect was the potential loss of hydro generating capacity at Niagara Falls caused by a Georgian Bay solution. It had been suggested that the Georgian Bay alternative would be opposed by the provincial and federal government. Ontario Hydro suggested that an agreement for compensation of loss of power generating capacity could be negotiated.

The Trent Severn Waterway was concerned about a potential solution involving sourcing Lake Simcoe water and discharging into Lake Ontario, given their mandate to maintain navigability in the Trent Severn Waterway. However, the Trent Severn Waterway was of the opinion that the amount of supply being sought (up to 1 cubic metre per second) would have minimal impact on navigation.

Lastly, the Consortia reviewed the enabling legislation and were concerned that there was an insufficient legal framework in order to permit many structuring alternatives to proceed. The current powers of York Region with respect to water supply were described as a "patchwork" of specific powers found in many acts, such as the Public Utilities Act, the Municipal Act, and the Regional Municipalities Act. It is not surprising that none of these acts contemplated public-private partnerships or any other similar commercial structure. Accordingly, it was determined that specific statutory amendments would be necessary to enable a public-private partnership to proceed with respect to long-term water supply, if that was the form of the association between York and

Consumers Utilities. The following is a summary of some of the legal impediments to a public-private partnership as the supplier of York Region's long-term water needs;

Table 10 Water Privatization Regulatory Impediments	
1.	Only York Region was enabled to levy development charges; no "hybrid" body has such authority.
2.	There are statutory restrictions on how development charges received by a municipality can to be applied.
3.	There is no regulatory body specifically empowered to review water rates, although the Ontario Municipal Board does have broad jurisdiction to do so. Accordingly, if a partnership required a body other than York Region to be the arbiter of water rates, new legislation will be required.
4.	There is no current authority for York Region to fix water rates so as to make a profit; water rates were to be set based on cost recovery only.
5.	York Region has some powers of expropriation but insufficient powers of expropriation to acquire an easement or right-of-way for a water pipeline outside its jurisdiction.
6.	The grant of franchise to operate a regional waterworks system or any part has to be done by by-law and requires either electoral assent or another by-law eliminating the requirement of electoral assent.
7.	The taking of water in excess of 2,000 litres per day requires a permit issued by the Director appointed under the Water Resources Act (Ontario). Consumers Utilities may require such a permit, yet it is not clear the extent to which it is eligible to issue a permit (i.e. sub-license).
8.	If a separate entity is required to operate the waterworks, this entity must be at least 90% owned by York Region to enjoy the same tax status as York Region.
9.	There is no express legislative authority for York Region to enter into a joint venture.

As a result to the foregoing, significant constraints existed on York Region in determining an appropriate commercial structure to involve the private sector in the long-term water supply strategy finally decided upon.

5.2.7 Recommended Supply Alternative

The recommended preferred solution and the detailed methodology used to evaluate the options was presented to council of the Regional Municipality of York on December 19th, 1996. The preferred solution, as recommended by the consortium, was based on a "phased" strategy comprising four steps. First, it was suggested that York Region should pursue a new water supply agreement with Metro so as to provide for its water supply needs over the next 6 to 8 years. This would require capital contributions by York to Metro. The second phase was for York Region to initiate a water use efficiency program including engineering work to reduce leakage, and to provide

for a better water detection and control through the installation of meters. Thirdly, a new Lake Simcoe based water treatment plant was recommended so as to provide sufficient capacity to service planned expansion of communities at the north end of York Region, including the Towns of Sutton and Willow Beach. Lastly, it was recommended that York Region should pursue the Durham (West) alternative for an independent water supply. That option, according to the Consortia, best satisfied the selection criteria.

The Durham West option requires a new Lake Ontario based water input pipe, located in Pickering, a new shore pumping station and a transmission pipeline to a treatment facility in York Region. It is possible to modify the engineering so as to facilitate use of the Durham West alternative by Durham Region itself. Accordingly, the long term solution for York Region's needs was to access Lake Ontario source water, co-operatively through Metro and independently through Durham, in addition to maintaining its existing ground water supplies and expanding Lake Simcoe sources.

The recommended solution (the "Durham/Expanded Metro Solution") would result in an expected Year 2031 water rate of 26¢ to 32¢, expressed in 1996 dollars. The impact of this alternative on water development charges was expected to be from 10% to 22% and the impact on total regional development charges from 3% to 7%. However, the actual level of water rates and development charges depend on several factors including demand for water, interest rates, inflation levels, growth rates, capital and operating costs, purchased water cost, commercial structure and the allocation of capital costs between development charges and water rates. The Durham/Expanded Metro Solution, however, satisfied the York Regional needs in terms of total demand, based on its projections to 2031.

5.2.8 Recommended "Privatization" Structure

By February 13th, 1997, a structure, recommended by both Consumers Utilities and the Long Term Water Strategy Task Force was presented to York Regional Council. It had always been understood by both parties that the appropriate structure would follow the recommended alternative, and not vice versa. Accordingly, both parties had looked at the four specific components of the Durham/Expanded Metro Solution to determine an appropriate role for each party within each phase.

Several alternatives had been considered, including outsourcing, the creation of a public authority, the development of a joint venture, and the creation of a concession or a build-own-operate-and-transfer structure ("BOOT") and a privatization option. Privatization was not considered viable since York Region had wanted to retain ownership of the water system, and, given the regulatory/legislative constraints existing, the adverse tax and financing costs being created ultimately would have to be borne by ratepayers. Finally, privatization would create a private monopoly, which was of concern.

The concession, or BOOT arrangement was of concern, to the extent that it would require Consumers Utilities to finance the infrastructure, resulting in higher debt costs and requirement for

equity, together with adverse tax implications. Again, it was expected that this would result in significantly higher costs for rate payers in York Region. These expected higher costs were not perceived to be able to be mitigated by any increased efficiencies in design, construction or operating the facilities. These arrangements would also require some type of a fixed price contract which would, in essence, mean there would be no "demand" risk transfer to the private sector. Again, the concession or BOOT structure would be subject to significant legislative constraints, possibly requiring statutory amendments, particularly in the areas of the right to collect water rates and the ability to use development charge revenues.

The joint venture arrangement was felt to be inappropriate conceptually, since it was felt that a joint venture between a profit motived entity and one mandated with maintaining the public interest would have coordination problems ("non-aligned interests"). In addition, it was felt that the parties had specific abilities to manage specific risks and different decision making speeds and governance structures, that there would be considerable difficulties managing the joint venture. Again, there was a risk of higher financing costs, and adverse tax treatment.

The public authority option was perceived as desirable to the extent that York Region needed to arrange independent financing, independent governance or accounting arrangements, and felt that the authority might acquire other work from other surrounding regions. However, there was no legislative base to create such a public authority and there would be some start up costs involved in creating one. Finally, it was felt that a public authority structure could be imposed on the preferred, outstanding, solution at some point in time in the future if it was felt appropriate. Accordingly, this option continues to be possible concurrent with the outsourcing option. As a result of the foregoing, the "outsourcing" approach was preferred as the structural alternative most suited to the Durham/Expanded Metro Solution.

The key factors supporting the outsourcing approach selected by York Region included the following;

Table 11
York Outsourcing Structure Factors

1.	The outsourcing approach was felt to be flexible to the extent that if legislative authority changed in the future; it didn't foreclose more complex options.
2.	The outsourcing arrangements were not constrained by significant legislative barriers.
3.	Outsourcing enabled York Region to limit the cost to the ratepayer of water quantity demand risk because water could be provided at wholesale rates, through a natural monopoly structure.
4.	York Region is exempt from capital and income taxes; accordingly, water rates would not be burdened with this obligation (and this put York Region in a position equal to or better than the private corporation, who had the off-setting ability to claim capital cost allowance).

5.	Only York Region was able to collect development charges.
6.	York Region could finance up to 100% of the debt at lower rates than the private sector could.
7.	Each of the public and private sector "partners" had widely differing abilities and skills in certain areas; outsourcing best allowed each to "match" its skills to its responsibilities.
8.	York Region preferred to retain ownership and control and maintenance responsibilities for the water system.

The outsourcing solution meant that the arrangements between Consumers Utilities and York Region could be undertaken by contract. Consumers Utilities was to have a role in the design, construction and operation of the water system. The intent was to combine the strengths of the private sector, perceived as being in design, construction and operation with the strengths of the public sector, perceived as being its tax exempt status and ability to manage demand risk. Outsourcing would be easy to implement, require no statutory amendments, and provide significant flexibility. The following table summarizes perceived relative strengths.

Table 12
Perceived Comparative Strengths: York Region and Consumers Utilities

York Region Strengths:	Consumers' Utilities Strengths:
Ability to manage (i.e. take risk) of fluctuations in demand for water	Design
Tax Exempt Status	Construction
	Operations

The outsourcing alternative manifested itself in a number of distinct ways within each phase of the Durham/Expanded Metro Solution. For example, in the first phase, obtaining an extension and an expansion of the water supply for Metro Toronto, it was determined that Consumers Utilities could assist in re-examining Metro's existing hydraulic model so as to allow York Region to specifically negotiate with Metro for the specific location, timing and quantities of water required, and that Consumers Utilities could produce a computer program again using the "genetic algorithm" to arrive at the best solution with the lowest capital cost. With respect to the water use efficiency phase, it was felt that Consumers Utilities could devise a leakage control program in cooperation with area municipalities, liaise with existing area municipalities and coordinate with Metro Toronto water conservation initiatives, manage the on-going maintenance of the water use efficiency programs during implementation, and implement demand management programs, including residential retrofit, public education, non-residential water audits, training and cost benefit analysis with respect to each area municipality.

The remuneration proposed for Consumer Utilities could be based on a per diem fee and an

incentive fee based on exceeding, in the case of obtaining expanded water supplies from Metro, specified and negotiated savings targets. The remuneration for the water use efficiency program could be based on either a fixed fee or a per diem fee together with an incentive fee (or negative bonus) with an agreed limit for either reaching or failing to reach agreed benchmarks as to savings, standards and timing.

With respect to the third phase of the initiative, the implementation of Lake Simcoe water treatment facilities, Consumers Utilities could complete the Phase 3 and 4 of the Class Environmental Assessment, being involved extensively in the design, construction and operation on a build-transfer-operate ("BTO") basis with respect to these activities. Consumers Utilities would be paid on the basis of a fixed fee for completion of the Class Environmental Assessment and would be based on negotiating a fixed price or cost plus contract for the design, construction and operation of the proposed Lake Simcoe Water Treatment Facilities.

The last phase of the project, the new water supply from Lake Ontario by way of the Durham West solution, would involved Consumers Utilities in proceeding with the phase 3 and 4 of the Class Environmental Assessment and would involved Consumers Utilities in the design, construction and operation, again on a BTO model, of the required facilities. York Region would finance the acquisition of the facilities and service those finance charges through collection of water rates and development charges. The remuneration to Consumers Utilities for the Class Environmental Assessment again would be based on a fixed fee, adjusted only if the scope significantly exceeded agreed benchmarks. The remuneration for design, construction and operation again would be based on contracts based on a fixed fee or cost plus arrangements, still to be determined.

Finally, it was felt that York Region's existing water facilities were being operated and managed well and that therefore it was not desirable to enter into any management or operating contracts with Consumers Utilities for those. However, York Region was interest in entering into an arrangement with Consumers Utilities where they would be retained from time to time as consultants, but that arrangement would not be an exclusive arrangement and the remuneration for each project would be determined on a case by case basis.

Unlike Halton Region, York Region had no pre-existing corporate policy on partnering. Perhaps as a result, it felt the need to retain management and financial consultants throughout to assist it in analyzing risks, financial impacts, and structures on an on-going basis. It is not clear whether council explicitly addressed potential social impacts in its discussions and negotiations, since many of these were in camera and behind closed doors.

5.3 Similarities and Differences Between the Case Studies

There are several elements of the Halton and York Region Case Studies that are different and relevant including the following;

(a) Halton Region proceeded with its privatization initiatives with weak political support

in its council. Relevant to this weak political support, however, was the fact that three regional councillors were disqualified from voting given the existence of a law suit relevant to the HUSP plan. All three councillors were from the northern part of the region who otherwise would have supported the plan. The pace of HUSP's progress may have increased if they could vote.

(b) York Region had strong political support from the long term water supply initiative.

(c) Halton Region had developed the specifications for the required water and wastewater system in advance and was engaged in a process of requiring a bidder to bid on that specified water and wastewater system. York Region however focused on choosing the right "partner" in advance to help it to develop and choose an alternative long term water supply system, without any preconceived commitments as to the nature of or extent of the "privatization" of such ultimate system.

(d) Halton Region had a pre-existing policy on privatization and outsourcing; York Region did not.

(e) A comparison of Table 7, the Halton Privatization Evaluative Criteria and Table 8, the York Privatization Evaluative Criteria show that Halton seemed more focused on the potential negative impacts of a privatization initiative than York. Halton's Criteria #3 is the same as York's Criteria #5. York did not appear to be looking for "competitive" development charges and water rates as Halton sets out in Criteria #4; York was looking for stable water rates and cost minimization in providing for long term water supply. Halton seems focused on the impact on ratepayers (Criteria #2) whereas York was more focused on its credit rating and its ability to undertake other capital works (Criteria #4). York's key criteria was the desire to secure water supply to enable its future growth. This is not mentioned in the Halton Criteria. Halton was concerned about risk sharing that might result in placing undue financial burden on ratepayers (Halton Criteria #2) whereas York was concerned that it maintain its ability to protect the public interest (#3). Halton was looking for additional economic benefits to Halton Region (Criteria #5) whereas York was apparently not.

On the other hand, both processes started at approximately the same time. Both regions had an ample number of qualified bidders interested in the project, with both local representation and large multinational water companies as members.

In York Region, the water needs were region wide, including both large urban areas and rural towns. In Halton Region, the long term water needs only apply to part of the region.

In York Region, a complete bidder and project selection process was completed. In Halton Region, the process was only completed so far as the request for qualifications stage. A more detailed analysis of the cases appears in chapter 6.

6. Analysis and Synthesis of Halton Region and York Region Case Studies

This chapter contains three elements;

(a) an analysis of the Halton Region and York Region Case Studies, both generally and by reference to Historical Privatization Factors and the Public Infrastructure Takeover Reasons;

(b) the summarized results of the questionnaires, on a question by question basis; and

(c) an analysis of the questionnaire results.

The purpose of this chapter is to place the case studies in the context of the historical research contained in chapter 2 and to identify the unique institutional context, processes, and issues relevant in each Case Study so as to be able to consider the Case Studies in the context of the theories, political ideologies, and frameworks discussed in chapter 3.

6.1 Observations and Analysis of the Halton Case Study

In reviewing the Halton case study without consideration of the interview results, it is useful to summarize Halton's objectives in seeking the private sector partner and in the approach taken to the process. To understand this process, one has to consider the policy structure adopted by Halton as its "corporate policy" on partnering and reflected in a report by KPMG, management consultants, adopted by Halton Council April 18, 1995. In that report, partnering is defined as the involving of another entity outside of the Corporation of the Regional Municipality of Halton in some element of the provision of public infrastructure and services.[43] The following potential benefits and risks of privatization were identified.

Table 13
Halton Policy on Privatization: Benefits and Risks

Benefits		Risks	
(i)	maintain or improve service levels by bringing expertise, facilities, economies of scale or new technologies;	(i)	that Halton may lose control over certain services to the extent of the types of services offered, the service levels and the pricing of those services;
(ii)	Reduce costs by bringing a new approach to service delivery;	(ii)	that the partner is not fully accountable for service quality to the extent the partner is not as motivated as Halton's internal staff would be;

[43]Region of Halton; Formulating a Corporate Policy on Partnering, April 18, 1995, at p. 1.

(iii)	Accessing new sources of capital that is not otherwise available directly to the public sector;	(iii)	that the benefit may not outweigh the costs, specially if non-financial costs are property incorporated into the analysis;
(iv)	realizing the value of underutilized assets by utilizing creative development projects, creative financing techniques or intensified marketing efforts;	(iv)	if the proposal call process is seen as biased particularly to the extent that the partnering arrangements are entered into through a sole/single source negotiation, where it is more difficult to demonstrate fairness and objectivity;
(v)	sharing risks including operating and financial risk;	(v)	where service may be interrupted, for example, by a labour strike;
(vi)	measuring program performance, to the extent a detailed evaluation of costs associated with alternative service delivery options provide additional opportunities to test current program performance;	(vi)	where Halton's internal staff would face uncertainty in job security and job roles, to the extent that some employees may lose employment or have their job descriptions change;
(vii)	Realizing economic development opportunities by providing an opportunity to market Halton expertise to others;	(vii)	to the extent the transfer of assets may be difficult, to the extent that it is not endorsed by the public or may be prohibited under the legislation; and
(viii)	enhancing customer service focus of service delivery by providing new products and services to meet customer needs; and	(viii)	to the extent that privatization increases the risk of abuse of privileges [fundamentally, a "non-aligned" interest argument].
(ix)	providing career development opportunities for Halton staff, to the extent that employment opportunities are available with the partner that are not otherwise available within the regional offices themselves.		

In reviewing the policy background to the Halton Region HUSP initiative reflected in the corporate policy and partnering, it is clear that Halton Region, unlike York Region, has set out a policy framework for itself that it intends to apply to all possible partnering opportunities on a going forward basis, including the partnership opportunity presented by the HUSP water and wastewater infrastructure requirement. Particularly relevant in this respect, with the participant's views reflected on page 8 of the report, is that Halton needed to retain the authority and flexibility to establish, maintain and change services, that essential services, specifically water, must be controlled by Halton and that Halton should maintain control of pricing. What is clear from a review of the policy is that there were relatively severe pre-existing policy constraints that, if they were applied by the region would make any public private partnership difficult to structure and, indeed, may put a private

sector operator at some risk. There appeared to be almost no private sector input into the development of the policy. On the other hand, the policy seeks to consider, in detail, the distributional impacts of partnering.

The first point of comparison for the Halton Region case study is the Historical Privatization Factors. The following table compares the initial reasons for considering Privatization in Halton Region with the Historical Privatization Factors:

Table 14
Halton Case *vs* Historical Privatization Factors

Historical Privatization Factors:	**Halton Water and Wastewater Privatization factors from observation at Council meetings and review of official Regional Reports; new factors:**
1. Speed	No
2. Availability of Private Sector experience and skills	Yes
3. Lack of Public Sector capital	Yes
4. Unique opportunities	No
5. Low costs	No
6.	creativity and innovation

This chart may show that all Historical Privatization Factors are not present in all cases. It shows creativity and innovation as new factors.

Also relevant to the debate in Halton, given its lack of clear support at Halton Regional Council, are the Initial Public Provision Reasons and the Public Infrastructure Takeover Reasons. The following chart compares those historical reasons with the reasons identified by observation and through review of Halton official Reports and council and committee minutes;

Table 15
Halton Case *vs* Public Infrastructure Takeover Reasons

Initial Public Provision Reasons, and Public Infrastructure Takeover Reasons (combined list):	**Halton Water and Wastewater Privatization factors from observation at Council meetings and review of official Regional Reports:**
1. Lack of Availability of Private Capital	No
2. The likelihood of technological change affecting the infrastructure; the existence of new technology	No

3. Concern over potential corruption	No
4. Desire to control service conduits and rights of way: concern over maintenance of same	Yes
5. Desire to achieve social objectives	Yes
6. Desire to control the quality of the facilities: demand for better service	Yes
7. Belief in greater municipal cost efficiency	No
8. More public flexibility	Yes - but may be premature to say
9. Belief in conflict between private profit motives and public motives (protection of the public interest)	Yes through policy statements
10. Reluctance of Private supplier to commit to expansion or lack of expansion capital	No
11. Fear of financial failure	Not explicitly stated
12. Concern over abuse of defacto monopoly	Yes in policy papers

This chart shows that some public takeover reasons were present at project inception.

In reflecting on progress in the Halton Region case study to August 15, 1997 the following observations are noted;

1. Given that grant monies from senior levels of government were unavailable in Ontario in 1995-1997, the sources of revenue to fund water and wastewater infrastructure were generally regarded as water user rates (including, possibly, different rates for different areas) and development charges. Local politicians do not appear to want to increase water rates generally, since this would be perceived as charging existing residents for new growth.

2. The reason that a public/private partnership is being considered in Halton Region is primarily as a result of the huge cost involved in providing for the water and wastewater requirements of HUSP.

3. The water and wastewater requirements of HUSP present both a high absolute cost risk and a cashflow circularity risk, to whichever party undertakes to provide the service.

4. The REI document was looking to the private sector to provide innovation and design, construction and operation as well as the financing of the necessary HUSP infrastructure.

5. The RFQ document specifically sought creative advice from the private sector on how to tackle the problem.

6. Halton Region believed that a public/private partnership could provide benefits not only in design and construction, but also in customer service and billing and possibly operations.

Evidence from the Halton case so far does not contradict the findings of empirical research discussed in chapter 2.2. That evidence suggested that there is little or no evidence of efficiency gains in turning over a public monopoly to a private one. Indeed, Halton Region was not particularly seeking efficiency gains from operations.

Much of the economic theory previously discussed does not seem explicitly relevant to the Halton Region case yet;

1. At this stage there was no expectation that private property rights would be conferred, and accordingly the property rights literature would not seem to be of assistance.

2. The theory of the firm literature may be relevant to the Region although not particularly predictive (the "make or buy" issue).

3. The principal agent literature appears quite relevant, but again, not particularly predictive without knowing the ultimate terms of the contractual arrangements made; and

4. The economic evidence based on the benefits of competitive environment would not appear to apply again, given the stage reached in Halton Region and the fact that a natural monopoly, water and wastewater infrastructure, is the subject matter.

Indeed, the primary benefits sought by Halton Region through the REI and RFQ process, being creativity and innovation in design, construction, operations and finance, is not directly the subject of any specific economic theory. It is not entirely clear what the theoretical underpinnings might be for the assertion of the private sector is necessarily more creative than the public sector. From a practical point of view, it makes sense that those in the business of providing solutions to a specific problem day in and day out would have more ideas than those who only confront the problem occasionally through their careers. This is a benefit of specialization.

The public choice literature, evaluating the actions of self interested groups in the process, provides an interesting counterpoint to the economic literature. Arguably, existing bureacrats and staff have only cautiously allowed privatization in the past, and the exercise of drafting a policy statement without private sector input may well have constituted a veiled attempt at self protection, manifested by overstating risks of privatization and understating benefits. Of course, it may be impossible to prove this assertion. In addition, politicians from the north of Halton Region would have acted in a self interested way e.g. voting, where they were allowed, to facilitate improved water

services to their constituents, who re-elect them. Politicians from the south of Halton Region would also have acted in a self interested way; resisting any cost or risk which might have resulted in increased costs, water rates to their own constituents, or loss of development in their own municipalities to the northern neighbours.

6.2 Observations and Analysis of the York Region Case Study

The starting point for the analysis of the York Region initiative is to compare the decision factors evident from the case study against the Historical Privatization Factors discussed above.

Table 16
York Case *vs* Historical Infrastructure Privatization Factors

Historical Privatization Factors:	York Water and Wastewater Privatization factors from observation at Council meetings and review of official Regional Reports; new factors:
1. Speed	No
2. Availability of Private Sector experience and skills	Yes
3. Lack of Public Sector capital	Yes
4. Unique opportunities	No
5. Low costs	No
	6. Creativity and innovation

As in the Halton case, this shows that not all of the Historical Privatization Factors are present in the York context. It also shows creativity and innovation as potential new factors.

Also relevant to the debate in York, are the Initial Public Provision Reasons and the Public Infrastructure Takeover Reasons. The following chart compares those historical reasons with the reasons identified by observation, through review of York official reports and council minutes:

Table 17
York Case vs Public Infrastructure Takeover Reasons

Initial Public Provision Reasons and Public Infrastructure Takeover Reasons (combined list):	York Water Privatization factors from observation at Council meetings and review of official Regional Reports;
1. Lack of Availability of Private Capital	No
2. The likelihood of technological change affecting the infrastructure; the existence of new technology	No

3. Concern over potential corruption	No
4. Desire to control service conduits and rights of way: concern over maintenance of same	Yes
5. Desire to achieve social objectives	Yes (to the extent that water would then be made available to accommodate growth).
6. Desire to control the quality of the facilities: demand for better service	Yes
7. Belief in greater municipal cost efficiency	No
8. More public flexibility	Yes
9. Belief in conflict between private profit motives and public motives (protection of the public interest)	Yes, in part
10. Reluctance of Private supplier to commit to expansion or lack of expansion capital	No
11. Fear of financial failure	Not explicitly stated
12. Concern over abuse of defacto monopoly	Yes

This table again shows that some public takeover reasons were present at project inception.

The York Region case study enables somewhat more depth of analysis than the Halton Region case study, given that it has advanced from project conceptualization to the structuring of the legal arrangements amongst the public and private partners. Interesting elements of the case include the following;

1. The original role contemplated for the private sector, from the Gore Report, 1994, was for the private sector to help York Region develop the long term water supply plan. Clearly, the private sector's expertise has been sought. It wasn't until the RFQ stage, that there was a suggestion that the private partner might also assist the region in "implementing" the long term water supply strategy.

2. The RFP document from York Region made it clear that York Region, too, was looking for creativity and innovation from the private sector.

3. York Region has the same institutional and legal constraints as Halton Region has, in terms of funding for the infrastructure being limited to development charges and water rates. Again, York Region was politically unwilling to increase water rates for existing residents.

4. It is important to note the process that York Region followed in first working on an

appropriate solution with a private sector partner, and then determining the role of the private sector partner could play. The private sector facilitated this process by agreeing to work on a solution without having a firm commitment as to its ultimate role.

5. It is important to note that York Regional council was unwilling to consider any alternative where a private monopoly was created, or ownership of public assets, particularly the water system, would pass to private hands.

6. It seemed clear that York Region preferred an alternative solution that could be implemented immediately without any legislative changes; a more severe form of privatization would have required enabling legislation and regulatory changes which would have delayed implementation.

7. It is not clear if in any of the arrangements ultimately agreed to with Consumers Utilities there has been in fact a "demand risk" transfer to the private sector. Legal documents were not completed at the date of completion of the research phase.

8. York Region has clearly preferred to maintain complete control of public services, given its concern about co-ordination between the profit motivation and the public interest.

9. Outsourcing was easy to implement, required no statutory amendment, utilized the best of the private sector, its creativity and expertise and provided significant flexibility, while avoiding private monopoly risks and maintaining control the public sector.

In conclusion, the York Region initiatives seems to have resulted in a structure where there was no privatization or public/private partnership ultimately agreed upon and there does not appear to have been any risk transferred to the private sector. The public sector remains committed to financing the project.

Evidence from the York case again does not contradict the findings of empirical research discussed in chapter 2.2, although, similar to Halton Region, there was the general statement in some of the reports that the private sector may be better at "operations". It is not clear whether the definition of "operations" refers to the billing function, the management function, or the actual valves and pipes operating function or a combination thereof. York Region was not particularly seeking efficiency gains from operations in having proceeded with this privatization initiative.

Again, the economic theories are not particularly explanatory of the outcome. Given that no property rights were ultimately conferred, the property rights literature would not seem to be of assistance again. The theory of the firm literature may again be relevant although it is of no assistance with respective to predictive utility and it is not clear whether the literature is of assistance when there are indirect social and public interest costs involved in the "make or buy issues". The principal agent literature is again relevant although again not predictive. Clearly, the desire of York Region to retain control in many stages could be seen to be a manifestation of the principal agent

literature. Again, there was not a "competitive environment" into which the water services could be privatized, and accordingly, much of that literature would remain irrelevant to this case.

The public choice literature seemed to be less evident as applicable to the York Region case study. Perhaps this was due to the different circumstances in York Region, although arguably public bureaucrats could have had a role in ensuring that their jobs and their bureaucracies were not threatened by any large scale privatization of the water works system. This is impossible to detect or verify in the York context. The politicians, given that there was no divisiveness within the long term water issue, seemed uniformly and genuinely interested in getting the best "deal" for the region while ensuring long term water needs could be met for their constituents at the least possible cost. There did not appear to be other conflicting motivations evident from the case. Again, creativity and expertise was a primary motivator in York Region selecting as its initial "partner", Consumers Utilities.

6.3 Questionnaire Summary: Perceptions of Key Stakeholders

In the following section, the interview results from the questionnaire for both Halton Region participants and York Region participants are summarized. The actual individual responses are set out in Appendix "C" attached hereto. The purpose of the following summary links back to the methodology and the original intent of the questionnaire design. After reviewing the perceptions of the participants from the questionnaire, this chapter then seeks to suggest some insights, criteria and frameworks for analysis that might be used in the future. Please note that the "conclusions" from each question are of perception only.

The following contains more detailed analysis on a question by question and respondent by respondent basis. An overall summary of the questions is provided in Table 35 in Section 7.2.3.

For Question S2, 11 of 14 respondents in Halton Region did not see interest in privatization if there is no fiscal crisis. The three who did, interestingly enough, are from the public sector; two are elected officials and one is a departmental Commissioner. The private sector seems uniformly more cynical than the public sector officials as to the reasons driving privatizations and public-private partnerships. This suggests the private sector may be able to make inroads educating the public and moderating its marketing to align with public officials' perceived needs. Possible uses of privatization in times where there is no fiscal crisis that were suggested include realigning government cost structures, exposing government operations to the private sector, and to be innovative.

In the York Region responses to Question S2, 8 of 13 respondents do not see the same level of interest in privatization without a fiscal need reason. Unlike Halton, there is more optimism with the private sector group in York than the public officials that there would be a role for the private sector without the fiscal crisis. Of the 5 who see continued interest in privatization, reasons include access to private expertise and doing more with less, leading to the need for efficiency. Of those 5, only one of them was from the public sector who said, unequivocably, yes to privatization without

fiscal need.

The purpose of question S5 was to consider the extent to which those interviewed felt that Canada was the same as other countries that have experienced significant privatization initiatives. Implicit in the question is the degree to which experiences in those other countries were directly transportable to the Canadian context.

For supplementary question S5, more than 50% of the Halton respondents say Canada is different from all the listed countries. Many respondents are not aware of experience in other jurisdictions. Three say Canada is similar to the UK, but all are in the private sector, and two of them are connected to a British water supplier member of a consortium. Several respondents suggest Canadians are more comfortable with government than the US is. With respect to responses to question S5, York interviewees seem generally more knowledgeable than Halton interviewees. Canada is perceived as culturally different than the US, the UK and other jurisdictions by 11 of the 13 respondents. It is believed that the expertise level in Canada is quite high, we are more oriented towards big government than in the US, and we didn't have the huge infrastructure deficit that they had in the UK.

A possible conclusion is that Canada needs to develop its own experiences and approaches based on its current fiscal and infrastructure situation, needs, institutional setting, citizen preferences and private sector capabilities.

The purpose of Question C2 was to elucidate the "context" of the privatization answers given, relative to the current "environment". Interestingly, the Halton Region answers to this question somewhat contradicted Halton answers to question S2. It appears that with the elimination of many grant programs, (as opposed to the existence of "deficits"), the need to require full cost recovery in water rates, and the ability to consider separately financing major works, privatization is perceived by many interviewees to be a real alternative. Many interviewees spoke of the "infrastructure deficit" and the need to increase the pace at which infrastructure is repaired, renewed and expanded. It appears that there is a role for the private sector in assisting with respect to the provision of at least municipal level infrastructure in the future, given the lack of existing funding alternatives. Absent a renewal of infrastructure funding by more senior levels of government, the answer to this question suggests continuing interest in some types of privatization by municipal governments, notwithstanding recent strengthening government balance sheets.

York's interviewees seem more focused on both the need to provide for York's long term water supply and the need to deal with fiscal constraints in their responses to Question 2. York apparently has a very good credit rating and can borrow money cheaply, even though grants from senior levels of government may have disappeared. Again, there is some contradiction between the public sector York answers to C2 and the York Region public sector answers to S2. Generally, the public sector response to C2 seems much more open minded to a role for the private sector particularly where the private sector offers a different viewpoint, financial abilities, leading technology and internal efficiencies to add value.

The following is a summary by respondent type of the answers given in Halton Region and York Region respondents to Question C2. Responses 1 to 11 are from Halton interviewees; responses 12 to 24 are from York Region interviewees (duplicated answers are commingled).

Table 18
Question C2 Summary: Issues Facing the Public Sector

Issues facing Public Sector	Source: Respondent Type	Role for Private Sector?
1. Maintaining spheres of power, perks and influence	Labour and Citizens	yes
2. Lack of Funding from Senior levels of government; called defacto privatization by one private participant	Public, Private	yes
3. Providing more value in Operations, controlling costs	Public	yes
4. Managing or offloading Risk	Public	yes
5. Need to tap alternative financing sources	Public, Private	yes
6. Need to protect jobs	Labour and Citizens	no, except temporary labour
7. Contending with Rapid Growth	Public	yes - put in money
8. Short term financial constraints (2-3 years)	Public	yes
9. Infrastructure Deficit	Public, Private	yes
10. Sheer number of municipalities (est. 800); small size of most	Private	yes, plus need to amalgamate
11. Provide services in anti growth, anti tax environment	public	yes
12. Jurisdictional changes; onerous approvals processes, and the need for off balance sheet financing	public	yes
13. Ensure core services are provided at reasonable cost, at a price within everyone's range, and maintain standards	public	yes
14. Get things done cost efficiently	private	yes
15. Efficiency; cost control while maintaining quality	private	yes
16. Obtaining a long term water supply	public	yes
17. Tax fatigue, mistrust of government usage of tax dollars, the infrastructure deficit	private	yes
18. Ability to fund capital infrastructure	public	yes

19. Trying to keep everyone happy; politicians, the public, labour, staff	public	yes
20. The need to run a safe and reliable infrastructure service	labour and citizens	no
21. Finding the resources to do something right	public	yes
22. Lack of regulation and monitoring	labour and citizens	no
23. Making sure services are delivered in uniform fashion.	Public	yes

What is interesting about these responses is not only the variety of "contexts" suggested, but the little overlap amongst those contexts, and the almost unanimous reply that there was a role for the private sector to play in almost all those contexts. This suggests that the respondents feel that the private sector can play a role in a variety of contexts, and can help with a variety of problems facing the public sector.

The 2 negative responses from York Region participants, suggesting no role for the private sector in providing public infrastructure, could mean that the private sector needs to take steps to convince both labour and local citizens that they are not prejudiced by private sector involvement in infrastructure privatization.

The purpose of Questions 3 and 4 is to determine the interviewees biases about government and the private sector, on the basis that those preconceived notions about who is good at what, will in turn drive decision making about who should do what. For example, one would not expect the private sector to have much chance of being asked to participate in a municipal infrastructure project if public officials were uniformly cynical about the integrity and ability of the private sector compared to the public sector, absent overriding pressure from other levels of government or fiscal compulsion ("hitting the wall"). Conversely, one would expect an active and vigorous market for the private sector in assisting with respect to public infrastructure if the public sector respondents were uniformly cynical about public capabilities and confident of private integrity and abilities. Both extremes are likely mitigated in the question responses by each groups tendency not to criticize their own sectors of the economy.

Question C3 and C4 assumed that there could be a successful public private partnership; an assumption one respondent from York challenged. However, all other 26 respondents were able to visualize and articulate a definition of success and related indicia. The responses to question C3 and C4 can be summarized for Halton Region as follows (many participants gave several indicia: accordingly the number of factors exceeds the number of participants);

Table 19
Halton Question C3/C4 Summary: Range of Privatization Success Factors

Success Factors	Respondent Type

1. Financial Risk Sharing	Public
2. Cost-effective service to the public	Public
3. No financial burden on the public; e.g. no increases in water rates or taxes	Public
4. Control retained by public sector over rates	Public
5. Creativity of private sector used, e.g. in matching supply and demand	Private
6. Use of Expertise in commodity pricing and wheeling	Private
7. Fair process and commitment from public sector	Private
8. High hurdles for private partner re financial strength, safety standards, labour relations	Private
9. Efficiency, quality, profitable for private sector, public gets infrastructure	public, private
10. No ambiguities in contract; long term motivation, trust between parties, mechanisms to maintain it	public, private
11. Each party does what its best at: public does planning, policy, standards, regulation, pricing; private does delivering, operations, maintenance, management, being efficient and effective	public, private
12. Benchmark standards	private
13. Ensure infrastructure maintained and renewed	private
14. Costs and benefits shared equally	private
15. Quality meets all normal and accepted standards	private
16. Private sector operating beyond scope of public procurement constraints	private
17. Faster decision making	private
18. Can't be a successful public private partnership: different motives that don't mix	labour and citizens
19. Fallout and public cynicism manageable	public
20. Managing unions and environmental issues	public
21. High quality service and product; low operating and construction costs: value for money	private
22. No surprises	Public
23. Safety, monitoring and inspections	Labour and Citizens
24. No surprises	Public

The variety of Halton Region responses was again an interesting product of the question. Most respondents were able to vision a public-private partnership based on a "win-win" scenario, or bringing the best of each of the private and public sectors together. This suggested that respondents from Halton Region do not regard privatization as a zero-sum game, with one parties' gain necessarily coming at the expense of the other. Indicators of success enumerated include achieving the public sector's objectives (in providing the infrastructure), controlling costs, ensuring a profit for the private partner, bringing ingenuity to the relationship, having good "chemistry", achieving safe working conditions (as possibly reflected in WCB ratings parity) and ensuring a contract that has processes in place to deal with disputes and unforeseen changes in the working environment.

In the York responses, a successful public private partnership is generally defined as, again, achieving each parties' objectives and ensuring a "win-win" situation. Government must feel better off, and the service or the facilities need to be brought to the people, with high quality standards, no increases in price, and with a positive public perception. The following is a summary of responses:

Table 20
York Question C3/C4 Summary: Range of Privatization Success Factors

Success Factors	Respondent Type
1. Operating at reasonable cost; quality production of potable water	public
2. Raised quality standards, no increase in price, happy customer base	public
3. Good contract with private partner, with flexible processes to deal with unforseen events; public support, quantified outputs, qualitative standards, distributional equity (no group is severely disadvantaged by the arrangement)	public
4. Quality infrastructure at efficient and effective price	private
5. Shared risks and benefits, not necessarily cost reduction	private
6. Achieving both parties' goals; no relative price increases, assistance in lobbying	public

7. Win win position; one step up the ladder in quality and efficiency; need for quick political "win" for the public; need for transparency; satisfactory returns; no damage to private company's reputation, no extraneous risk exposure for the private company, good relationship and good chemistry	public
8. Win-win position: government better off, lower taxes, fast, high service levels, life cycle costing	private
9. Strong regulatory regime, control, high ethical standards	labour and citizens
10. Good working relationship: efficiency, quality	public
11. Low costs, financial benefits to public sector, value for dollar, extraordinary technical capability from private sector partner, good chemistry	public
12. If the partnership is better than a totally public or totally private solution; factoring in social and other costs	public

The purpose of question C5 was to attempt to expand the list of relevant factors determining success or failure by asking respondents to focus on failure alone. Many respondents stated that evidence of failure was the inability to achieve the success factors mentioned above, bu then went on to add additional factors that had not been identified in the answer to C3 and C4. While failure may comprise the inverse of those factors listed in C3:C4 above, the Halton Region list includes a misalignment of objectives, poor communications, poor safety for workers, the private sector either losing money or not making a profit, the public sector not achieving its objectives, service or quality level expectations not being met, poor investment in training, bad press or bad public relations, or a lack of support from the public at large, amongst others.

Evidence of failure from the York Region respondents would include constant confrontation, corruption, financial failure, increases in rates or costs, environmental problems, failure to meet objectives, achieving cost savings through cut backs in labour benefits, negative public perception, or loss of reputation to the private sector partner. Failure may also occur if there is no improvement over the public sector model. Minimizing the failure risk and maximazing the success likelihood can

occur if there are appropriate provisions in the agreement to deal with risk allocation, the right partner is chosen, and the parties ensure clear and concise standards are set and monitor them. Both parties need to ensure a political and public "buy in".

What is interesting from these lists is the degree to which the private sector recognizes the need for the politicians to show a "win", the need to ensure that the public accepts the privatization initiative and the project, and the need to "perform". It is interesting to note that the public sector recognizes the importance of the private sector making a profit; further support for the perception that privatization can be a "win-win" scenario, and not a zero sum game.

Question C6 attempted to enable the respondents to show how they could or would mitigate risks of failure, and how they would ensure success. The question was aimed at both process and structure in privatization initiatives.

The list of responses to C5 and C6 from Halton Region is summarized as follows:

Table 21
Halton: Privatization Failure Factors

Failure Factors from question C5	Respondent Type
1. One way Agreement; either the private sector losing money or the public making too much money	public
2. Misaligned objectives or failure by either party to meet objectives	private
3. No capital investment, failure to complete or provide necessary infrastructure; poor maintenance; failure to meet quality or cost objectives; poor remedies in the contract	public
4. Bad press, negative public perception	public
5. Rate increases	public
6. Political failure; project does not have a reasonable cost, poor labour relations environment created, no local industrial benefits created by the project	private
7. Creation of private monopoly in place of public one	private
8. Lack of delegation of authority	labour and citizens
9. Unanticipated surprises	public

10. Bankruptcy of private partner; inability to source local expertise; a "sole source" deal (failure to get competitive bids); moving too quickly	public
11. Failure of government to exercise policy control; loss of control by municipality	public, labour and citizens
12. Workplace accidents	labour and citizens

Table 22
Halton Failure Mitigating Factors

Failure Mitigating Factors; Success Maximizing Factors from Question C6	Respondent Type
1. Dispute Resolution mechanisms, clear performance measurements, clear service level expectations, clear points of accountability	public
2. Guarantees on core competencies, management of capital and operating risk	private
3. Explicit contract, with performance tests and penalties for non-performance, limit profit	public
4. Defining the public interest, picking the right partner	public
5. Good contract, work at "team building" (break down each culture), develop attitude as a strategic alliance, day to day recognition of risks and rewards	private
6. Ensure no ulterior motives by parties, a long term orientation, trustworthy partners, good communications	private
7. Anticipate change in future regulatory environment and allocate the risk	public
8. Good chemistry between the parties; mutual respect, responsiveness, high expectations	public
9.Mitigate by partnering with a financially stable business, setting standards and holding the person to them, ensuring accountability, monitoring, keeping all complaint letters, open books, allow inspections, keep formal and informal communication channels open, provide insurance policies, bonds.	
10. Training and safety rules	labour and citizens

The respondents from York Region have similar failure factors and answers to C6:

Table 23 York Failure Factors	
Failure Factors from Question C5	**Respondent Type**
1. Constant confrontation over interpretation, financial failure, event of default leading to termination	public
2. No service or product, price too high, development charges too high, therefore no development	public
3. Environmental problems, increased development charges, not satisfying RFP, mismatch timing	private
4. Adverse impact on reputation of bidder, low quality	private
5. Failure to meet expectations or improve on public sector model	public
6. Failure to do project at all; increased costs, inappropriate risk transfer, poor selection process	private
7. Not letting private partner work on solution: just tendering public sector solution	public
8. Corruption, profits made at the expense of labour, failure to achieve local benefits	labour and citizens
9. Creation of bureaucracy, no public consultation, not looking at historical precedent (doing homework)	labour and citizens
10. Lack of public support, lack of public confidence, or if only factor is profit	private
11. Befriending the partner, failure to insist on continued high quality and delivery; political donations received from Private partner	public
12. No viable, timely solutions; not meeting objectives, no return (profit) for partner, no chemistry	public
13. Public opposition to the project; no management by public sector of private partner	public

Table 24
York Failure Mitigating Factors

Failure mitigating factors, and Success Maximizing factors from C6	Respondent Type
1. Recognize causes of confrontation and deal with them up front, provide formula for adjustment and risk sharing, be prepared to share risk	public
2. Minimize by financial sensitivity analysis, monitoring public perception, assess impact of high development charges, be equal partners in educating public	public
3. Get second and third opinions of critical estimates and update them, use worldwide experience, ensure can finance temporary problems, transparency	private
4. Be conservative on projections, just in time investment, accurate forecasts of demand	private
5. Anticipate risks, get financial security from private partner, pick large company partner, monitor	public
6. Get political champion in government, fair framework for RFQ and RFP, ensure realistic expectations by public sector	private
7. Let private partner help with solution, good chemistry, creative thinking	public
8. There are none. Privatization should not be considered.	labour and citizens
9. Give consumers control since they are the end users	labour and citizens
10. Good faith, good working relationship	private
11. Continued requalification of the relationship, monitoring	public
12. Get a political buy in; be cautious as to the scale of the privatization, no sale of assets, no BOOT concept	public
13. Audit performance, remedies in contract, ensure public is satisfied	public

The interesting outcome of the answers to questions C3 to C6 is that they comprise, in their totality, a case-driven (inductive) list of constraints and policy criteria that could be used as a checklist for governments contemplating infrastructure privatization; a checklist that is at least Ontario-context specific.

The purpose of question C7 was to identify respondents preconceptions as to what government was and was not good at, assuming privatization in those areas that government is not good at would accordingly be a policy alternative. Many respondents did not choose to answer by reference to the functional areas listed in the question. While there were some disagreements in the Halton responses about who was better at what, the majority of both the public and private view was that the public is better at, and should be involved in, policy making, protecting the public interest, carrying out legislative obligations, financing (through lower rates) and in the general stewardship role, which includes ownership of the asset itself. The private sector was generally perceived to be better at design, construction, and in most cases, operations. The government was felt to be weak in management, given regular changes in the politicians in power, and weak in operations. It was suggested that the government tends to over design and over staff facilities.

The following is a summary of the Halton responses to Question C7: the strengths and weaknesses of government.

Table 25
Halton: Strengths of Government

Strengths of Government	Respondent
1. Protect the public interest, the ability to tax, the legislated authority and responsibility. Could operate at same efficiency as private sector if faster decision making, no tender requirement. Government better at ownership, stewardship, finance. Its a fallacy that the public sector is inefficient.	public
2. Reflecting the social conscience	public
3. Government good at basic services, monopolies	private
4. Government strong in operations, given high quality people deep in talent and experience, and can finance cheaper	private
5. Government can be innovative and deliver high quality product	public
6. Public and private sectors equal in design, construction and operation. Government better at deciding where and when	public

7. Public can raise money more cheaply, but that doesn't mean it should.	private
8. Setting broadly defined policy, providing service	labour and citizen
9. Ensuring conformity to standards, ensuring public satisfaction by providing these services	public
10. Managing public infrastructure, protecting health and the environment	private
11. Providing an opportunity for dialogue (municipal level)	labour and citizens
12. High degree of accountability; staff are local, have a high service ethic	public

Table 26
Halton: Weaknesses of Government

Weaknesses of Government	Respondent
1. Operate under different ground rules in decision making (slow); contracting procedures (public tender).	Public
2. Operations, finance, design, construction	private
3. Government picks the wrong projects (e.g Mirabel), priorities change with each election	private
4. Slow in process, tend to overregulate, and may not be innovative	public
5. Private sector may be more creative in seeking efficiency.	public
6. Tend to overspecify, overdesign, in order to ensure safety and reliability. Poor decision making: consent of those below you to the decision required. Political system is 100% risk averse. Do not reward ingenuity and novelty. Fear of blame primary motivator	private
7. Mistaken belief that they represent the public's interest. Governments poor in maintenance of roads, bridges and water pipes (no depreciation reserves, no replacement policy)	labour and citizens
8. Governments inflexible, bureaucrats have the innovation trained out of them.	Public

9. At municipal level, governments often fickle, dogmatic; politicians have no vision.	Private
10. Hire too many accountants, not enough experienced people	labour and citizens
11. Influence of other levels of government on municipalities, complacency (complaint focused)	public

The following table shows the York Region responses to Question 7:

Table 27 **York Region: Strengths of Government**	
Strengths of Government	**Respondent**
1. Outsourcing if it doesn't have the expertise or ability in-house; borrowing at low rates; experience, neither strong nor weak in operations	public
2. Protecting the public interest, regulating quality, price, communicating with public, fair process, financing	private
3. Ability to borrow cheaply, efficient operations (no income taxes, recapture, GST)	public
4. Ability to balance a broad set of interests; cost, quality, equity, environment, as well as the bottom line; strong in finance.	public
5. Finance at lower costs; maintain ownership and control quality standards	private
6. Finance at lower cost; local knowledge, understand their political needs, neighbour regions,	private
7. Finance at lower cost, experience in design, tendering, stable workforce, reasonable management practices	public
8. Accountability to public; taxing abilities, financial rating, ability to absorb day to day fluctuations in revenue.	public

9. Providing services that private sector cannot; e.g. subsidized transit, recreational services (also subsidized); good at bringing together groups, co-ordination; good at owning public services	public
10. Future planning, financing	public
11. Accountability	labour and citizens
12. Planning, environmental, transportation services.	labour and citizens
13. Uniform service at same cost without discrimination	public

Table 28
York: Weaknesses of Government

Weaknesses of Government	Respondent
1. Getting major projects done, making fast decisions, factoring in inflation	private
2. Not on leading edge of R&D; stick with old technology (tried and true), play political games with approvals, influence of special interest groups	public
3. Slow to take up technology, no strong customer service ethic; not nimble	public
4. Design, construction, operations	private
5. They use their high credit rating to borrow cheaply regardless of the project risk; no incentives to keep costs down, no freedom to expand revenue opportunities; no environmental assessment flexibility	private
6. Staff not highly motivated; budgeting, staffing not cost effective	public
7. Bound by rules and can't take risks; government will not spend $1 million to save $10 million	public
8. Often incompetent, too many low performing people, tends to overdesign and overprotect.	Public
9. Occasionally defers maintenance	labour and citizens

10. Parochial, too management heavy, cannot see big picture	labour and citizens
11. Labour costs too high, stagnant staff because no job circulation, turnover.	Public

In summary, based on the York Region responses to Question 7, government is good at protecting the public interest, borrowing at lower rates, managing infrastructure with high local knowledge content, ensuring fairness in process, communicating with the public and in regulation. The weaknesses are that government takes a long time to make decisions, are bound by certain protocols (such as public tendering), may defer maintenance, they are not on the leading edge of technology and tend to be risk averse, are susceptible to political manipulation and the manipulation at the hand of special interest groups. Government does not have a strong customer service ethic and may not use their low rate financing ability appropriately.

The purpose of question 8 was to identify participants preconceptions as to the strengths and weaknesses of the private sector. Implicit in the question was the assumption that public sector cynicism of the abilities or integrity of the private sector might curtail potential privatization opportunities. The responses to Question C8 for Halton Region, being the relative strengths and the weaknesses of the private sector are listed below.

Table 29
Halton: Strengths of the Private Sector

Strengths of the Private Sector	Respondent type
1. Private sector better at design, construction, operations	public
2. More flexible, can change quickly, bring international experience to bear	public
3. Private sector better at operations, design, construction, finance and risk management	private
4. 10% better at design and building, better at choosing the right projects, better at thinking "outside the box", more creative, better at optimizing facilities and resources.	Private
5. More labour flexibility, such as with compensation, bonuses, quick automation, better decision making since uninfluenced by politics; highly motivated to be efficient	private
6. Look at projects more realistically, do have a heart, aware of risk and evaluate very effectively.	Labour and citizens

7. Engineering and planning	Labour and citizens
8. Profit seeking motivation, creative ideas, motivation to go beyond the average, willingness to take risks (e.g. adopting new technology)	public
9. Take big risks and assemble big groups, take over municipal debt loads	public
10. Technology, flexibility	public
11. Innovative, co-operative, efficient, risk takers, better at adding value	private
12. Bring money to the table, dedicated and skilled employees	public

Table 30
Halton: Weaknesses of the Private Sector

Weaknesses of the Private Sector	Respondent type
1. Weak in monopoly situations: need for government to set customer service standards	public
2. Private sector has no empathy	public
3. Weak in monopoly situations	private
4. Perhaps can't borrow as cheaply	private
5. Don't do projects based on need since bottom line oriented	labour and citizens
6. Wrong people doing the wrong job	labour and citizens
7. Profit seeking motivation	public
8. Same professional associations as in the public sector (e.g. engineers), so no engineer-threatening solutions supported.	Public
9. Cut too many corners	public
12. Responsiveness to and accountability to the public	public

The responses to question C8 from Halton Region show the private sector was generally perceived to be better at design, construction and operations by both the public and private sector respondents, and are very good at bringing innovation and ingenuity to a project and managing operations effectively and efficiently. There are tax and accounting differences which affect the degree to which the private sector could operate facilities more profitably than the public sector;

generally, the private sector do not appear to want "ownership" of the water and wastewater assets that they are operating. In addition, it was generally believed that the private sector can move faster, has more effective decision making, and is more flexible in its internal arrangements to ensure the motivation of its staff, resulting in greater efficiency. As its weaknesses, the private sector was felt by most to have no empathy, were only short term thinkers and were not appropriate owners in monopoly situations. As a result, it was necessary to set performance and qualitative standards and to monitor and provide penalties for failure to reach those standards.

The following table summarizes the York Region responses:

Table 31
York: Strengths of the Private Sector

Strengths of the Private Sector	Respondent type
1. Less regulation, less accountability, lack of bureaucracy.	public
2. Speed, cost control, creativity re revenues (pricing), economic analysis (inflation and present value)	private
3. Availability of tax writeoffs (capital cost allowance) to counteract public interest rate advantage, acquire investors, more flexible	public
4. Operations	private
5. Design, construction, operations (if no union); faster	public
6. Construction (not bound to tender), operations	public
7. Speed, solution oriented, experienced	private
8. Design, construction, operations	public
10. Sense of mission and urgency, expertise, financial sense and quality	public
11. Speed at decision making, ability to take risks, solve problems creatively	labour and citizens
12. Professionalism	public
13. Efficiency	labour and citizens

Table 32
York: Weaknesses of the Private Sector

Weaknesses of the Private Sector	Respondent type
1. Costlier to raise money, liability for tax	public
2. Understanding public sector accounting; understanding an environment with no profit motive	private
3. Not socially accountable	public
4. Doesn't have public experience and knowledge	public
5. Can't own infrastructure assets due to Development Charges Act (Ontario)	public
6. Short term oriented, limited understanding of public sector, often miss what's important; liability for taxes	private
7. Accountable to shareholders, and to produce dividends	public
8. Weak at ownership, financing	public
9. Tend to want you to buy what they are selling vs what you need	public
10. Profit motive which often contradicts the public interest, tendency to seek a monopoly	labour and citizens
11. Take advantage of the local economy; financial failure risk; potential to discriminate through profit seeking approach to operations	public
12. Owning essential services, or controlling the environment, planning, including water	labour and citizens

In summary, the York Region answers to question 8, listing the private sector strengths include ability to make decisions fast, to manage, to control costs, to be creative in strategy, design and in the use of technologies, to bring broad international experience to bear, and to be flexible in their structuring arrangements. The weaknesses are that they may have a short term orientation, may be weak in management, do not quite understand the public sector view point and role, may sacrifice the public interest for profits, tendency to seek monopolies, and are liable for taxes.

The outcome to question C8 tends to validate the position reflected in C3; that there is a role for the private sector in providing infrastructure even when the public sector is not financially compelled to do so. This is so given the near uniform responses to C8 and C7 that the public sector can borrow more cheaply, but the wide range of alternative, and valuable, attributes of the private sector, such as ingenuity, make them valuable "partners".

In contrast, the weaknesses of the private sector, as perceived by the public sector, all centre around the potential for abuse of control and failure to attain performance standards, and overall perceived lack of accountability to the public. This suggests that full privatization, including ownership of assets and ability to control price, would not be considered in Halton Region. That position is consistent with Halton's Corporate Policy on Partnering and the other responses.

The purpose of question C9 was to identify the impediments to privatization from a risk point of view. Respondents disclose what can go wrong when a public entity seeks a private sector partner.

These risks inform both process and outcomes. Private bidders may use the questionnaire results to better understand the public mindset in bidding. C9 may also suggest regulatory change, to the extent either party needs statutory protection from the perceived risks in order to enable a privatization process even to proceed. The answers may also suggest changes in process and structure involving privatizations. The response of the citizen and labour groups that Halton Regional policy on privatization was a thinly veiled attempt to eliminate privatization raises an issue relevant to more senior level of government disposed to facilitating privatization at the municipal level: how to facilitate the consideration of privatization as a policy alternative by eliminating the risk of local public officials protecting "turf". Few respondents chose to answer the question on the basis of the referenced factors, and measurement was dealt with on the basis of outcome by most respondents.

In Halton Region, the public sector has many concerns in involving the private sector in infrastructure projects, including the concerns of loss of control, misalignment of objectives, potential loss of jobs, risk of being out negotiated, risk of compromising in designs, construction and operation, failure to maintain assets constructed, the risk that the private sector can't wait for profits to materialize, loss of control over water rates or development charge rates, which may have a ripple effect in impeding growth, the risk that the private sector won't want to assume its fair share of risk, the risk of financial failure and public relations risk (that the private sector will not satisfy the public in operating standards), and the risk that the partner will be too secretive (lack of transparency on all matters). Many of these factors are not mentioned in Halton's Corporate Policy on Partnering. It would be argued, conversely, by one respondent from the labour and citizens group, that these risks are overstated by bureaucrats so that they can keep their jobs.

The York Region answers to question C9 are again similar to the Halton responses.

Table 33 **Halton and York Combined Risk Factors**
The public sector risks of involving the private sector include;
(i) risk of private sector financial failure,
(ii) fear of being out negotiated or otherwise taken advantage of;

(iii) risk of irreversibility or uneconomic compensation required;
(iv) fear that the private sector partner may not assume the risk that the public sector wants them to;
(v) fear that the public will regard the deal or the arrangements as inappropriate;
(vi) fear of corruption;
(vii) the use of faulty or poor materials; and
(viii) environmental concerns.

The purpose of question C10 was to determine the degree to which respondents could facilitate the consideration of privatization by controlling public sector risks in proceeding with a privatization initiative. Again, it informs both process and structure. The types of solutions to the risks elucidated in C9 above from Halton Region primarily include the need for a good written agreement between the parties, with explicit standards and penalties, the right to audit and complete accounting and managerial transparency, picking the right partner with significant financial strength, and ensuring all risks are dealt with generally in the agreement. In addition, public communication, public questionnaires and outreach programs were seen as beneficial, perhaps leading to government having more courage to seek innovative solutions with the private sector. At least one respondent, however, identified one externality of risk minimization: financial standards were set so high for Halton Region infrastructure RFQ respondents that no existing Canadian firm could qualify. Interested Canadian-based consortia were forced to partner up with either large British or French water companies just to bid.

The concerns in C9, according to York Region respondents in their answers to C10, may be mitigated by having a good agreement, by retaining external consultants, by choosing a partner with integrity and of large financial size, including one with international experience, making sure of inspections and supervision and making sure the agreement is fair. In addition, risks may be lessened by getting a "buy in" by both the politicians and the public at large by setting clear standards and ensuring proper governance within the agreements, by ensuring transparency and by ensuring that the public retains control.

The purpose of question C11 was to identify private sector risks in bidding, for the same purposes as in C9 and C10. The public entity can use the results to better understand the private mindset in bidding. The private sector has seemed willing to spend enormous amounts of monies to bid on public private partnership opportunities involving infrastructure. The risks to those bidders reflected in the Halton responses to C11 include;

Table 34 **Halton and York Combined Risk to the Private Sector Factors**	
(i)	political risks;

(ii)	the risk of not understanding public decision making processes or the local environment, the risk of the politicians changing their mind or changing the ground rules or the decision making process;
(iii)	the risk of cancellation (Pearson) or early termination (Ottawa-Carlton) which concerns the private bidders to the extent that most of the profit are in the "back end" of the agreement.
(iv)	risks that the private sector involvement is not perceived by the public at large to be appropriate;
(v)	the costs of an error in revenue or cost calculations, competition, consumer alienation, poor co-operation with the public sector partner;
(vi)	changing regulations;
(vii)	changing politicians (and political sentiment);
(viii)	labour disputes and assumption of poor labour management practices upon a "privatization" of a union;
(ix)	poor labour quality; and
(x)	the risk that the public sector will seek to "steal" good private sector ideas through the RFQ or RFP process;
(xi)	On the revenue side, risk may arise in the water context from over estimating demand forecasts, and failure to negotiate inflation into contract prices;
(xii)	On the costs side, this could mean failing to take into account existing defects in infrastructure they are expected to repair, maintain or tolerate leakage from,
(xiii)	the risk of legal penalties from spills, and the risk of cost and time overruns;
(xiv)	planning risk such as variations in the direction of growth.

The primary risk foreseen by the York Region respondents to C11, for the private sector appears to be political risk; that is, the risk of changing political view and philosophies and not getting the approval for the arrangements after money has been spent bidding and negotiating. There is financial risk to the private sector if the deal changes from what was originally contemplated, and there are financial risks from overestimating revenue or under-estimating costs, or in underbidding. There is a risk of damage to the private sector company's reputation and a risk that they negotiate a poor deal that they are stuck with for a long time. There is the risk that unions won't agree to wage rollbacks or other concessions. There is also risk that their role will be diminished by bureaucrats seeking to protect their "turf".

Of the few Halton and York respondents that had an answer on risk mitigation, risks could be mitigated by researching the project well, making sure the deal is binding on future governments, ensuring consultation with all stakeholders up front, good demand forecast, and an integrated resource planning approach (meeting all stakeholders beforehand).

With respect to question C12, many Halton respondents felt that it was too early to see how their individual concerns as to privatization risks would play out in Halton Region. At the stage of questionnaire design, Halton Region was at a more advanced stage than York Region. It had been felt that respondents may have been able to see outcomes from the Halton process based on their perceptions. However, as at August 12th, 1997, Halton Region still had not released its RFP to the three selected RFQ finalists. The reluctance of Halton Region to proceed to the RFP stage however, may be related to extraneous factors, such as doubts about the HUSP plan's financeability itself, and the fear that every alternative plan except a Peel co-operative solution will result in higher water and development charge rates to the existing Halton Region residents than can be politically tolerated. Accordingly, every plan in which the private sector could assist is already outside of the constraint box: it will result in politically unacceptable rate increases to residents.

York's approach of picking a partner early in the process to help it design the project, without any commitments going forward, was perceived as advantageous since the public sector can get to know its potential partner without having committed in advance to the potential partner, or the structure, or the solution. Particularly, it was able to develop "chemistry" without having to assure Consumers Utilities that it will necessarily have a role in the ultimate infrastructure solution.

The purpose of question C13 was to place the importance of qualitative outcomes against the quantitative (i.e. efficiency, price, costs) outcomes. The general consensus in Halton Region is that quality of service delivery is very important, but its not often considered until there is a complaint. In the context of water supply, quality is easy to measure. The public sector believes it is critical to document performance standards for the private sector operator although the private sector operators state that the public sector often don't benchmark their own performance to date, and the RFP documents often understate the importance of qualitative outcomes and rely basically on price alone. The private sector operators also point out that in many cases the standards are inappropriate and, indeed, the private sector has been asked to revise standards or write new standards in several cases. The public sector seems concerned about the quality both from a stewardship point of view, but also from the point of view of ensuring a positive public perception of any potential public-private arrangements and avoiding any political backlash to the politicians of the day. It is generally regarded as difficult to manage public perception of water quality. Bottled water, stated several public respondents, is perceived to be better than tap water. In at least one case in Halton Region, it was tap water. Several respondents from the public sector believed that the public would regard tap water from a private operator more suspiciously than tapwater from a publicly managed utility. To manage this risk, government and the private sector need to get the public to "buy-in" up front, and then continue with an ongoing public relations and communications effort and ability to demonstrate high quality and improved service. Particularly, private firms need to sell the perception that they can provide clean water, perhaps better than the public sector can.

Qualitative outcomes are very important also to York Region respondents, so as to maintain public confidence in elected officials, and public confidence in the water supply and to ensure that the long term water supply needs are met without quality being sacrificed for cost savings. There is a suggestion that large international companies may be better at assessing quality than the public

sector. There is a concern that strict monitoring be maintained.

6.4 Comparison of Responses

6.4.1 Variances Between Stakeholder Perception

When the question summaries reflected in Tables 18 to 34 are reviewed, there are many variances that appear between stakeholder groups as to the responses given to the questions asked.

The largest consistent variations were between representatives of the labour and citizens group on the one hand, and the public and private groups collectively.

A respondent from the labour and citizen's group suggested that the only issue facing the public sector was the need to maintain spheres of power, perks and influence. In addition, a representative of labour and citizens was the only one to suggest that there is no role for the private sector in providing reliable infrastructure. Another replied that there cannot be a successful public-private partnership since the two groups have different motives that do not mix. Other labour and citizen interviewees raise issues not otherwise raised by the other groups, such as the importance of safety monitoring and inspections in ensuring the success of infrastructure privatization. Representatives of the labour and citizens group suggested failure factors (corruption, profits made at the expense of labour, creation of bureaucracy, not doing homework) not raised by the other groups. On the other hand, one representative from the labour and citizens group did believe that there was too much government and that the scope of government authority and power should be significantly reduced. Representatives of labour and citizens were also critical of decision making in the private sector, suggesting that they do not do projects based on public need since they are bottom line oriented.

Perhaps these variances described above are to be expected from the labour and citizens group since the sample size was very small (only two in each region) and the individuals interviewed were either a spokesperson for a major labour union operating in the region and potentially threatened by the privatization initiative, or ratepayer group leaders whose mandate was to reduce property taxes.

6.4.2 Similarities Between Stakeholder Perception

There was remarkable similarity between the public and private respondents in both York and Halton Region as to the issues facing the public sector and what constitutes success and failure. The public sector largely understand the private sector's need to show a profit and the representative of the private sector largely understand the public sector's need to show a "win" for its constituents. In addition, there is remarkable similarity between public and private respondents as to strengths and weaknesses of government and the private sector, even though there was some disagreements in the Halton responses about who was better at what (regarding operations). The majority of both the

public and private view was that the public is better at, and should be involved in, policy making, protecting the public interest, carrying out legislative obligations, financing, (through lower rates), and in the general stewardship role, which includes ownership of the asset itself. The private sector was generally perceived to be better at design, construction and in most cases, operations (except, as stated in some of the Halton responses). Government was felt to be weak in management, given regular changes in the politicians in power, and weak in operations (again except for some Halton respondents). However, the private sector respondents did not agree with the weaknesses suggested by a few of the public sector respondents, including that it had no empathy, are only short term thinkers and were not appropriate owners in monopoly situations.

It is particularly important to note the degree of agreement with respect to the private sector strengths including their ability to make decisions fast, to manage, to control costs, to be creative in strategy, design and the use of technologies, to bring broad international experience to bear and to be flexible in their structuring arrangements. There is some disagreement between the public and private stakeholders with respect to a few issues such as benchmarking; the public sector wants the private sector to document and meet certain performance standards, but the private sector says that the public sector do not benchmark their own performance. In addition, there is some suggestion that the benchmarking standards may be out of date in some situations.

6.4.3 Unexpected Stakeholder Perception

There were perceptions from the questionnaire that were unexpected. First and foremost, was the richness of the replies and the depth and range of issues raised by the various interviewees. The depth and range of those responses in many cases raised new issues that perhaps are the subject of further research. One example was the wide discrepancy in worker's compensation rates (reflecting, in turn, injury rates) between public sector employers and private sector employers. However, these rates may vary across sectors and even among sectors. Also unexpected were the degree to which each of the public and private sectors were able to identify their own weaknesses including, in the case of public sector, slow decision making and bureaucratic processes and in the case of the private sector, weakness in monopoly situations and in understanding an environment with no profit motive.

Different readers, having different backgrounds, will also have their own view as to which stakeholder perceptions were expected and which were unexpected. The fact that the perceptions of the perceptions can vary further the supports of the richness of the interview results.

6.4.4 Stakeholder Perception *vis a vis* Economic Theories

Many of the responses to the questionnaires are illustrative of the economic theories described in section 3.2 of this research. For example, many respondents fear negative externalities as described in section 3.2.1.4, as illustrated in the Halton Privatization Failure Factors (Table 21), York Privatization Failure Factors (Table 23) and Weaknesses of the Private Sector (Tables 30 and 32).

The questionnaire responses seemed less illustrative of the property rights theories, to the extent that the public sector seemed unwilling to consider devolving ownership of the water distribution system assets to the private sector and, indeed, the private sector did not seem to be interested in acquiring permanent ownership of the assets. However, this may only reflect the unique and single purpose use of the assets themselves or the a priori understanding that seeking ownership by the private sector would be a "deal breaker". On the other hand, long term contracts may create elements of interest in the residual, and property rights, to the extent the private sector wants to avoid default under the contract.

The theory of the firm-transaction cost materials is central to the Case Studies; should the municipalities design, build and operate the water systems themselves or should they outsource it to a third party. One could argue that the municipalities have made the decision to maintain ownership of the assets given that the service is critical and strategic to their municipality over the long term. On the other hand, a decision to contract out design and construction and operations could reflect the reality that outside suppliers are plentiful and more efficient than government could be in undertaking certain activities. It is difficult to judge, given the early stage of the cases, the extent to which co-ordination costs in outsourcing outweigh the benefits. In the case of York Region, they do not believe that co-ordination costs would be too high, given their decision to proceed with their long term arrangements with Consumers Utilities.

The principal agent literature is also central to the Case Studies. This is because the commonly perceived strengths of the private sector, including improved creativity, faster decision making, bottom line orientation, better management, are all potentially the result of efficiency seeking and profit seeking incentives built into the organizational structure of private sector firms. The reduced capabilities of the public sector in these areas is illustrative of their mixed objectives, including social welfare, maximizing votes, minimizing the potential for political embarrassment and ensuring preservation of the public interest as well as operating efficiently. This would suggest that in situations where profit and efficiency can be isolated as paramount or primary motives, and the government can satisfy its objectives in other ways, such as by regulation (itself an instrument of principal agent theory), privatization is a valid alternative.

Lastly, however, except for the RFQ and RFP processes, there appears to be little scope to inject competition into the process described in the two Case Studies. In addition, given the long term nature of the contracts, it would appear that much of the "franchising" literature, would be of reduced relevance. Franchising appears to apply to shorter term contracts (e.g. 3 years).

In conclusion, the stakeholder perceptions strongly support, and indeed the cases demonstrate, the transaction cost-theory of the firm literature and principal agent theory. Competitive markets and the property rights theories would appear to have less relevance to these Case Studies.

6.4.5 Stakeholder Perception vis-a-vis Political Science Theories and Ideology

It is difficult to see in the responses to the questionnaires, any identifiable and consistent ideology of respondents that would suggest a particular political orientation. On the other hand, public sector respondents, and many of the labour and citizens group respondents, to the extent that they supported the government role in defending the public interest and owning infrastructure assets, may reflect a liberal ideology. Members of the private sector, those suggesting a reduced role for government (including one of the labour and citizens group respondents), may be representing a more conservative view point. However, none of the respondents to the questionnaire showed a predisposition towards, or a philosophy of, government consistent with, for example, the Thatcher revolution in the U.K., or used rhetoric consistent with either the Thatcher revolution or the Reagan years in the United States. Having said that, the Case Studies and the responses to the questionnaires do raise many of the issues discussed in sections 3.1, 3.2.2 and 3.2.3 of this research.

Firstly, it is to be noted that municipal elections with few exceptions, are generally not fought on the basis of party affiliation, unlike Canadian provincial or federal elections. Arguably, the private sector would favour markets over government and a passive state system, the ideology of the right. Those in the public sector may favour an active interventionist state with broad social welfare goals in mind and the desire to manipulate the economy and pull whatever levers are necessary from time to time, including privatization, to achieve those broad social welfare goals. That is the ideology of the left. The scent of the former is evident in the private sector respondents and the scent of the latter is evident in the public sector respondents. On the other hand, the privatization contemplated in both York and Halton Regions did not in any way resemble the architecture of the Thatcher privatizations, such as by ensuring that there was no opposition to the privatization. In addition, given existing outsourcing of the management of waterworks facilities throughout Ontario, there is nothing particularly revolutionary in the Case Studies, suggesting a sea change from York and Halton's consideration of these particular privatization initiatives. There are however, some common political objectives such as, for example (with reference to Table 5 - SOE Privatization Reasons), reducing the public sector borrowing requirement, attracting new technology, increasing productivity and improving operating efficiency.

The responses to the questionnaires do illustrate both the reinvention of government literature and the public choice theory in political science. York's approach, particularly, focusing on good public sector management can be seen as an effort to ensure efficiency going forward, although it is not clear from this one project that any internal organizational change is necessary or contemplated. In addition, given that the York and Halton exercises were based on potentially outsourcing, it is hard to see any reinvention of government initiative from the response to the questionnaires or the Case Studies themselves with respect to these particular projects.

The public choice theory literature seems quite relevant to Halton's deliberations. Both from the questionnaire summaries, and from the Case Studies themselves, there is evidence of self-interested behaviour by the various politicians and by the existing bureaucrats. The self-interested behaviour (i.e. re-election) is manifested by the debate played out between the mayors of Oakville and Burlington on the one hand, and the Milton-Halton Hills politicians on the other hand with respect to HUSP. Bureaucratic self-perpetuation, one respondent from the labour and citizens groups

said, is clearly reflected in Halton's pre-existing policy on privatization, shown in Table 13. That policy seemed, according to that respondent, to be structured deliberately to make any public-private partnership very difficult to structure and accordingly, may be seen as a thinly veiled attempt to enshrine existing bureaucrats. There is no clear evidence from the respondents to the questionnaire of any interest group skewing of original public policy objectives. However, the cases may be too young to know for sure.

6.4.6 Stakeholder Perception vis-a-vis Research Agenda and Methodology

The stakeholder perceptions confirm that the analysis used by many writers surveyed in the literature reviewed is too narrow. There are a much broader range of potentially relevant issues discussed by respondents to the questionnaire than were discussed by most of the authors. Support can be seen from the questionnaire respondents to the comments of Vickers and Yarrow, who suggest that many surveys focus too much on allocative efficiency and not enough on the subjective elements of the privatization. Similarly, the breadth of responses support Gomez-Ibenez' work, which is less quantitative and more qualitative, although even Gomez-Ibenez' five factor-based methodology (discussed in section 2.2.10) seems narrow when viewed in the context of the responses to the questionnaire.

The questionnaire results validate the Case Study approach to this research, to the extent that both the Case Study and the questionnaire results have shown that most of the evaluative approaches to date looking at privatizations have been too narrowly focused. The Case Studies and indeed the questionnaire results have disclosed factors driving the public and private sector perspectives. The questionnaire results have provided many new frameworks of analysis, both from the basis of providing more exhaustive lists of relevant factors, and from the point of view of showing an approach to the determination of frameworks that is in itself important. The subframeworks and the overall process framework enables a balance between objective and subjective indicators, and the general frameworks are useful as a tool in future evaluation.

In addition, the Case Studies and the responses to the questionnaire may suggest positivist outcomes to the extent that one can see relationships between structure and outcome in effecting infrastructure and service delivery privatization. In addition, the disclosure of the importance of "chemistry" between the parties may be seen as an interpretive social science result, to the extent that interpersonal relationships are seen as critical and fragile elements in achieving success. On the other hand, we may also see the results of the questionnaire as a Constructivist outcome, to the extent that the findings are not particularly generalizable. The breadth of the questionnaire results shows that the research can also be seen as Exploratory Research, to the extent that it includes aspect of description and explanation. The questionnaire results also show the research as social policy research to the extent the outcome of the questionnaires can affect policy makers in effecting needed change in the future.

7. Research Conclusions

The purpose of this chapter is to effect some closure on the research; to summarize its findings, its successes, failures and relevance and to discuss further work required.

7.1 Revisiting Goals

The goal of this research was to develop experience in actual privatization initiatives relevant to Canada, and to determine whether broader criteria, a more balance perspective, better factor lists, better frameworks or several sub-frameworks exist or was suggested by recent Canadian experience to assist public decision makers and analysts.

7.2 Summary of Conclusions

7.2.1 Summary of Conclusions of Literature Review

Tables 1, 2 and 3, constituting the Historical Privatization Factors, the Initial Public Provision Reasons, and the Public Infrastructure Takeover Reasons, respectively, adequately summarize western experience in infrastructure and public services privatization from 1750 until the 1970's. An interesting conclusion from that segment of the research was the tendency of either initially privately provided public infrastructure, or a privatized public infrastructure, to in most cases, ultimately revert back to ownership and control by the state. The more recent experience with infrastructure privatization, starting in the 1980's, seemed to ignore past cycles and seem to have had both political (for example the Thatcher privatizations) and fiscal (privatizations in the United Kingdom and New Zealand being examples) motivations.

Empirical studies undertaken throughout the '70s and '80s and early 1990s suggest that there can be significant efficiency gains where state owned enterprises are privatized into a competitive environment. However, these gains have not yet been consistently proven in cases of privatized monopolies.

There is a wide variety of frameworks used to analyze the success or failure of privatization initiatives throughout the world. During the 1980s, much of the academic analysis was merely economic, with little regard being had to the other impacts of privatization on various stakeholders. By the early 1990s, criticism of the architecture of many Thatcher privatizations began to emerge, as the broader impacts of privatization began to be appreciated and understood. As a result, analysis of privatizations more recently have been much more qualitative than in the 1980s. Still, consideration of the historical factors described in Tables 1, 2 and 3 does not appear in any of the literature. It is also worth noting that factors supporting nationalization, which one would have thought were relevant in opposition to a decision to privatize, also do not appear to have been discussed in any of the literature. These omissions suggests that the analysis of privatization continues to be too narrowly focused.

Lastly, it appears clear from this literature review that there is a need for more broadly based frameworks for analysis of infrastructure privatization and that efficiency gains are not necessarily

an expectation of infrastructure and public service privatization.

7.2.2 Summary of Conclusions of Theory Review

Chapter 3 explored the political and theoretical frameworks applicable to the privatization issue and concluded that privatization has an ideological as well as an economic element to it. Privatization, being associated with smaller governments and devolution to markets, can be seen as a policy of the right. Indeed, privatization was one of several tools used by Thatcher to dismantle "big government" in the U.K., which included delegation, increasing competition, deregulation, the fostering of enterprise as well as union busting. While privatization begs the question of who should do what service in the first place, that in turn assumes that economic systems are necessarily *pari passu* with political ones; in this study I have assumed that political systems will always seek to control economic ones and that social issues and the public interest will cause governments to intercede in economic affairs where appropriate, as determined by the political party of the day. Table 5, describing SOE Privatization Reasons, is particularly illustrative. Table 6, which describes Historic Nationalization Factors, is also illustrative as a counterpoint.

Many economic principles form important cornerstones for the analysis of privatization, including the concepts of public goods, and merit goods, the concept of a natural monopoly, and the concepts of negative externalities and market failure. The theories of property rights tend to support privatization generally. The theory of the firm and transaction cost literature is also of assistance, although its predictive utility is limited, given that political parties of the day would always determine whether a good or service is critical or strategic or if coordination costs would be perceived to be too high. The principal agent literature appears to be of primary relevance, given the ability of the private sector to create incentive mechanisms which, in turn, could lead to increased creativity, faster decision making, and increased efficiency. Political bodies have choices in effecting control, to the extent that "control" of the infrastructure or public service is always a key concern of politicians, through employment of bureaucrats, contracts with outside suppliers, promulgation of laws and regulations, or a combination of the foregoing.

Similarly, public choice theory and other theories in political science, including those of Niskanen, are helpful in understanding the range of possible outcomes in political decision making. In addition to the foregoing, the re-invention of government literature also provides another counterpoint to the privatization alternative.

Finally, chapter 3 reviewed the breadth of the frameworks of analysis used by authors in the literature surveyed. The conclusions were that the more general the framework was, the more subjective that it was (e.g. Ross). The more specific the evaluative framework was (e.g. Roth), the less it was able to deal with highly subjective factors such as distributional equity. Chapter 3 finished by suggesting what could be thought of as privatization theory emergent from the review of chapters 2 and 3. The conclusions from the literature were that privatization research has a history, a political context and a theoretical context, and an understanding of the prior literature in all cases is essential.

7.2.3 Summary of Conclusions of Case Studies and Questionnaires

In order to test the conclusions from chapters 2 and 3, and to consider possible alternative frameworks of analysis that could be used in assessing infrastructure and public services privatization, water infrastructure privatization initiatives in two large Ontario municipalities were studied, and key stakeholders interviewed. The purpose of the case studies was to determine the goals and objectives of the municipality involved in seeking a private sector partner to assist it with a given municipal initiative. This in turn would enable reflection on the Historical Privatization Factors and other indicators relevant in Tables 1, 2, 3 and 6 of this research. The key stakeholders involved in the privatization process, including politicians, senior bureaucrats, private sector consortia, consultants, representatives of labour and ratepayer groups, were sought to ascertain their collective perceptions on many issues surrounding privatizations. The purpose of the interview process was to determine the reasons for the process structure and outcome, the issues involved, and the perceptions of each group in respect thereto.

This approach has several benefits. Firstly, it enables a fuller understanding of institutional and political context surrounding the cases. It contributes to the possible validation (or refutation) of the historical reasons supporting privatization. It assists the researcher to understand the "mind set" of the various parties involved in the process. This, in turn, would enable some conclusions to be drawn if any particular party, or set of parties, were misinformed or ignorant of either past or current experience. Also, it enables the generation of a much broader list of relevant factors than might otherwise have been ascertained from a literature review, or quantitative analysis of prior privatization initiatives. This latter element is seen as critically important to the development of better evaluative frameworks that are broad enough to reflect all constituent's concerns.

The following summary table was prepared by reviewing the interview results from each respondent and coding each response by frequency of usage. The most common reason(s) or concern(s) are shown in response to each question together with the number of times that concern or issue was raised. Where a respondent gave a reason or concern that was different than the ones listed, these have been gathered under the category called "Other" . The Other category represent a disparate collection of responses, were generally much fewer in number, and were different than the more common responses for which specific numbers are given.

It is important to note that Table 35 lists responses not respondents. While there are 27 respondents in the survey, the totals below only add up to 27 where there is a clear choice to be made i.e. between yes and no. Otherwise the totals may not add up to 27 since respondents may have given no answer or may have given multiple answers. In tabulating the responses for Table 35, the most frequent responses have been separately identified in descending order of frequency.

A breakdown has been provided for all responses amongst those coming from the labour and citizens group (titled "L&C"), public sector officials and elected officials (titled as "Public Sector") and private sector consultants and consortia officials (titled as "Private Sector"). The percentages shown in brackets are of the total number of responses. Percentages shown may not exactly total

100% due to rounding errors.

Table 35
Interview Results: Summary of Primary Responses to Key Questions

Paraphrased Question Title	Primary Response(s) (# of responses and % of total responses)	L&C	Public Sector	Private Sector
1. S2: If there is not so much of a fiscal crisis caused by high deficits at provincial and federal levels, do you believe there would still be the same of interest in public with respect to privatization as there is today?	No (20) (74%) Yes (7) (26%)	3 1	11 4	6 2
2. S5: Do you believe that Australia, New Zealand, Southeast Asia, New United Kingdom and the United States are culturally different than Canada in respect of infrastructure privatization?	Yes (22) (81%) No (5) (19%)	2 2	14 1	6 2
3. C2: What are the issues facing the public sector today in providing infrastructure and public services?	Financial constraints (14) (33%) Rising costs (12) (29%) Need for expertise (9) (21%) Other (7) (17%)	0 0 0 4	6 7 6 1	8 5 3 2
4. C2: Is there a role for the private sector in assisting in respect of that problem?	Yes (23) (85%) No (4) (15%)	0 4	15 0	8 0

Table 35
Interview Results: Summary of Primary Responses to Key Questions

Paraphrased Question Title	Primary Response(s) (# of responses and % of total responses)	L&C	Public Sector	Private Sector
5. C3/C4: *Indicia* of success of public private partnership	Competitive pricing and cost effective services (17) (27%)	1	10	6
	Each party benefits (16) (25%)	1	8	7
	Static or reduced public burden (10) (16%)	1	7	2
	Government retains control (6) (10%)	2	3	1
	Risk sharing (6) (10%)	0	4	2
	Other (8) (12%)	2	4	2
6. C5: *Indicia* of failure	No benefits accruing: no price cuts or service Improvements (17) (37%)	2	10	5
	Inordinate risks or costs to one party (12) (26%)	1	6	5
	Bad public perception (6) (13%)	2	4	0
	Other (11) (24%)	7	3	1
7. C5/C6 Ways to minimize failure risks	Having explicit expectations and measurements (12) (23%)	0	9	3
	Having good chemistry and a good relationship (10) (19%)	1	5	4
	Having detailed structure and detailed written agreements (8) (15%)	0	5	3
	Having effective process for dispute resolution (8) (15%)	0	6	2
	Other (15) (28%)	3	6	6

Table 35
Interview Results: Summary of Primary Responses to Key Questions

Paraphrased Question Title	Primary Response(s) (# of responses and % of total responses)	L&C	Public Sector	Private Sector
8. C7: Strengths of government	Ownership of basic services (17) (31%)	3	9	5
	Protecting the public interest (15) (27%)	3	6	6
	Ability to finance (13) (24%)	0	8	5
	Other (10) (18%)	3	4	3
9. C7: Weakness of government	Inefficiency (9) (22%)	0	5	4
	Lack of innovation (8) (20%)	1	5	2
	Slow decision making (4) (10%)	0	3	1
	Other (20) (49%)	5	10	5
10. C8: Strengths of private sector	Efficiency (14) (29%)	0	6	8
	Innovation and design (12) (24%)	3	4	5
	Speed and flexibility (11) (22%)	1	4	6
	Other (12) (24%)	2	5	5
11. C8: Weakness of the private sector	Weak at ownership of public services and monopolies (8) (29%)	2	4	2
	Weak at empathy and sensitivity to constituents (6) (21%)	0	6	0
	Other (14) (50%)	3	8	3
12. C9: Risks of involving the private sector from the public sector point of view	Negative public perception (7) (21%)	2	3	2
	Poor service, high price (7) (21%)	3	2	2
	Loss of control (4) (12%)	2	1	1
	Risk of financial failure of private partner (3) (9%)	0	3	0
	Being out negotiated (4) (12%)	0	3	1
	Other (8) (24%)	3	4	1

Table 35
Interview Results: Summary of Primary Responses to Key Questions

Paraphrased Question Title	Primary Response(s) (# of responses and % of total responses)	L&C	Public Sector	Private Sector
13. C10: Mitigating the Risks in C9	Ensure contract is good (12) (46%)	0	7	5
	Communicate with the public (8) (31%)	2	4	2
	Other (6) (23%)	1	3	2
14. C11: Risks to the private sector in being involved in public infrastructure projects	Political risk: government changing its mind or changing politicians (14) (33%)	0	9	5
	Unexpected costs: private sector stuck in a bad agreement (13) (30%)	2	6	5
	Negative public opinion (6) (14%)	2	3	1
	An unclear and unfair process (6) (14%)	1	1	4
	Other (4) (9%)	2	2	0

Because of the small sample size, it is impossible to generalize from the responses given above. However the responses do reflect on the case studies and the comparisons discussed in the individual question responses and provide useful insights

Table 35 shows that respondents generally see privatization being considered where there is a fiscal crisis, although the same respondents, the answers to question C2, could see a role for the private sector, generally, in assisting with respect to municipal issues. The respondents also indicate that financial constraints and rising costs are the top two issues facing the public sector in their responses to question C2. The same theme, that privatization is seen as a set of financial benefits addressing a financial problem, is carried through in the answers to questions C3, C4 and C5. One way to reconcile these answers is to suggest that municipalities are interested in involving the private sector, but certainly in an environment where they maintain control, maintain ownership of assets, and use the unique and particular special abilities of private sector entities (and only those abilities). Particularly, it seems that privatization will only be considered if there is a financial need: that financial need being defined as either the lack of funding or the need to control costs. From the Case Studies, one may surmise that the Ontario municipal sector seems reluctant to commit to outright

privatization of municipal infrastructure. Infrastructure, it appears, is considered on a different level than, say, urban busing and garbage collection, which is routinely outsourced. This particular conclusion would be consistent with the results to date in both Halton Region and York Region case studies referred to above.

Most respondents believe that Canada is culturally different than the other listed countries in the world who have had recent and direct experiences with privatization. The suggestion that Canadians are more comfortable with government is perhaps consistent with the approach taken in the Halton and York Region case studies. However, in both of those situations, there is no apparent political ideological drivers behind the initiatives; the drivers were financial need and a creative problem solving requirement.

Ontario does not currently have a legislative and institutional environment conducive to privatization. While the infrastructure deficit was mentioned by several respondents, as well as the elimination of grants from senior levels of government, it does not appear that any established way of dealing with capital funding shortfalls has emerged except "business as usual".

The responses to question C2 about the issues facing the public sector show considerable differences of opinion between labour and citizen representatives and the public and private sectors who would be serving them. The actual responses by the labour and citizens group may reflect a degree of cynicism about the public sector, their operational attributes and their motivations as well as the motivations of the private sector. This is also reflected in the second part of question C2, where there is a complete split amongst labour and citizens on the one hand, and the public and private sectors on the other hand, as to whether there is a role for the private sector. This further supports the conclusion that more dialogue needs to occur by public officials and the private sector with the public and labour.

While questions C3 and C4 focused on the key success and failure factors for public/private partnerships, the open-mindedness expressed by public sector respondents have not translated into any significant role for the private sector in Halton Region yet. This, however, may be due to the nature of the project, and the belief that the private sector can, and has, added value to the process without being given long term operational control, price control, or ownership of assets. It is particularly interesting to note the references to "good working relationship" and "good chemistry" in the York Region responses, where the parties have had the opportunity to work together prior to a decision on a structure, compared to the Halton Region responses. Getting to know one another could be an effective strategy for the private sector in developing more business for itself in this respect. Indeed, that is a marketing strategy in most businesses.

The responses to questions C3, C4 and C5 show a very wide range of success and failure indicators, suggesting that while financial benefits are important, there are other factors at play in developing a successful public private partnership or privatization initiative.

The responses to question C5 with respect to ways to minimize failure risks may provide a

partial checklist for governments considering privatizations in the future.

The responses to question C7 as to the strengths of government show considerable support, both in the public and private sector, for government continuing to own basic services and continuing to protect the public interest. It is interesting to note, in the answers to question C7 as to the weakness of government, that the public sector officials are keenly aware of their own shortcomings and, given the high number of reasons listed under "other" disclosed by the public sector respondents, there is likely much to be done to improve the operations of government.

The response to question C8 as to the weaknesses of the private sector disclose differences of opinion: the public sector respondents see weakness in the private sector that the private sector do not see in themselves, particularly with respect to the issue of empathy and sensitivity to constituents. This could be reflective of the potential conflict between the public interest and the profit motive.

There are risks to the public sector in involving the private sector, and risks to the private sector in bidding in the first place. The responses to question C9 have both a financial and a public perception element, again suggesting the importance of not only getting the deal right, but also making sure that the public supports the initiative. Ways of mitigating those risks, described in the answer to question C10, are predictable, given the content of the answers to C9. The responses to C11 show how important trust is between the parties, given both parties sensitivities to political risk. Participation in a privatization tender call can result in significant transaction costs to a private sector bidder that may provide an on-going disincentive to all but the richest private sector consortia to continue bidding on these types of projects. The high up front costs of responding to REI, RFQ and RFP materials, the long decision time involved, and the risk that the municipality may take the best ideas from the private sector through the RFP or RFQ process (in essence, without paying for them: did this happen in Halton?) and not proceed with a public/private partnership at all, supports this proposition. Critical for both the private sector and the public sector, seems to be public support for the privatization initiative. This would suggest that the private sector will need to do more, on its own account, to sway public opinion. This will lower the political risk to governments who are considering a privatization decision.

The result of the Case Studies may be evidence of the predisposition of current institutional frameworks, entrenched management and, public and political perception against privatization in its more significant forms in Canada. The importance of their being a financial need, and the importance of showing financial benefits of privatization and public private partnerships, while at the same time having a public "buy-in" means that the factor conditions for privatizations in Canada will generally not be that common. This is based on the assumption that financial crises of Canadian municipal governments are not that regular, and that the public has not bought into privatization initiatives. The result appears to be a predisposition towards out sourced management by contract in a variety of contexts, but not more significant forms of privatization.

This research informs both the process by which a private sector entity may seek to increase

the amount of public infrastructure and service delivery work it obtains (see Section 7.4.3) and the way in which the public sector goes about increasing the involvement of the private sector with lower risks than might have occurred with similar privatizations in the past (see for example Section 7.4.1). To this extent, this thesis provides some interesting ground work informing, from both the public and private sector's point of view, how to, and how not to, proceed with a privatization initiative.

The questionnaire process has contributed to the privatization theory summary described in Section 3.4. There is validation from the questionnaire results of greater perceived private sector efficiency linked to certain economic theories, such as principal-agent theory. It is believed that the private sector can make decisions quicker, can be more creative, and is better at pooling technologies and expertise. In turn, this supports principal agent theory to the extent that the profit seeking motive incents companies to make decisions relatively quickly, earn profits by being more focused on adding value (i.e. creativity, hiring the best talent and using the best technologies), than in minimizing risk.

The conclusion that there is little empirical evidence supporting efficiency gains in natural monopolies is perhaps too simplistic; one needs to break down critical elements in the functioning and success of such monopolies to determine in which particular areas the private sector may be able to add value without undue risk to the public interest and then try to find ways that the private sector can be involved in those areas. On the other hand, perceptions of areas of successful co-operation, from both the public and private sector respondents, may not necessarily translate into success; this would need to be evaluated after the fact against both parties' original objectives. On the other hand, one would know, after the fact, which particular aspects of the private sector to look at for improved results and this should assist in the evaluation process (by making evaluation targeted to areas where the private sector is expected to show improvements).

The results of the case studies and the questionnaires would suggest that it is not so important to segregate SOE privatization literature from infrastructure (monopoly) privatization literature as it is to break down the undertaking in terms of public sector strengths and private sector strengths, and then proceed to evaluate on that basis. Again, in cases where there is mutual agreement among public and private sector respondents as to what areas the public is better in and what areas of private sector is better in, one would presume that any privatization initiative can be broken down into those functional areas consistent with each side's strengths and a division of responsibilities made based on that architecture.

Researchers might have an easier time analyzing privatization initiatives by reference to a framework built on the basis of common perceptions of public and private sector strengths, but particularized to that particular level of government at that particular time. For example, an evaluative matrix that might be used for the purposes of evaluating a water infrastructure privatization initiative in southern Ontario in 1997 might not only focus on the traditional economic indicia, such as cost and efficiency, or whether the public sector objectives could generally be met, but would look at the contribution of factor conditions allocated to each of the public and private

sectors by strength. The following Table 36 is an example;

Table 36
Hypothetical Analytical Framework
Water Infrastructure Privatization

Element	Public Sector Benchmark	Savings through use of Private Sector
1. Design		•initial design costs •long term maintenance savings through design costs •higher reliability through design •greater flexibility through design, etc.
2. Decision making speed	Public hierarchy; •public tendering required •financial analysis and political analysis required •mandatory and informal stakeholder consultation	•financial analysis only •possibly less formal bureaucracy •incentive mechanisms to analyze and choose quickly
3. Construction	•unionization •separate tendering •political incentive to spread the work around, and choose local contractors •no ability to further negotiate price with winning bidder •potential positive point; workers' compensation and injury rates	•ability to use non-union workers •ability to negotiate further price reductions with winning bidders •ability to incent a faster construction pace •economies of scale •potential negative point - injury rates

4.	Finance and Risk Management	Traditional sources of public borrowing; •slow •risk spread •lower overall rate •recourse risk •on-balance sheet financing •positive: tax free status	•ability to match rate with risk •ability to enable non-recourse financing (off-balance sheet of public sector) •timing and delivery of funds •potential for expedited pay back of funds •potential for reduced impact on further ability to borrow •financing creativity •negative: taxable status
5.	Other	Other factors from Tables 25 and 27	Other factors from Tables 29 and 31

The foregoing framework might enable policy makers to focus, in any particular privatization, on the strengths and weakness of the private sector in order to anticipate gains and make sure that those gains can be obtained while at the same time preserving the public bodies' ability to protect the public interest. Then, new projects could be evaluated on the basis of which commonly perceived strengths of the private sector could be utilized in places where the public sector was otherwise perceived to be weak. In turn, this may enable an evaluation of privatization initiatives not simply on the basis of net cost savings without regard to social costs and other costs, but might enable evaluation on the basis of the way in which the privatization took the best of what the private sector has to offer and otherwise the government retained direct jurisdiction and control over public services and infrastructure within their legislative jurisdiction.

Alternatively, the approach by which this research was undertaken can be seen itself as a framework. In other words, municipalities or other levels of government, interested in a privatization initiative, might go through an evaluative process similar to that undertaken by the questionnaire;

Table 37
General Privatization Analytical Process

Step	Element
1.	Determine that particular government's strengths and weaknesses, and institutional constraints.
2.	Determine the strengths and weaknesses of the private sector available to that particular level of government in that location at that time.
3.	Determine the risks to both parties of being involved in a process and take steps to minimize those risks.

4.	Determine the public attitude to, and level of understanding of, privatization.
5.	Identify potentially fatal circumstances to the initiative.
6.	Particularly, structure to take into account historically validated risks (Tables 1, 2, 3 and 6).

7.2.4 Overall Conclusions

1. In these Case Studies, policy makers are not starting with a clean sheet of paper as to who should do what. The status quo, more particularly represented by the current regulatory and institutional environment, is a starting point and there does not appear to be any motivation to devolve assets, responsibility or ownership interest by the public sector through the private sector without some overriding and compelling reasons to do so. Given that the ability to finance does not, at least in these cases, provide such compelling reasons, one is left to wonder what possible compelling reasons may be left in the case of infrastructure that is a natural monopoly and an essential service, absent ideology. In this case, the Ontario public interest seems to be for the public sector to maintain strict ownership and control of those assets.

2. It can also be concluded that privatization is a useful tool for planners to consider in implementing plans where creativity, expertise in design, construction and operations is seen as important, and potential risks are controllable. The need for financing appears to be a less significant reason to initiate the consideration of privatization as a policy alternative, at least in a situation where the particular government has a good credit rating. Ensuring success in privatization remains a craft and a complex art, since success is based on a complex mix of original objectives, defining the public interest, ascertaining the strengths and weaknesses of that government, and the available private sector suppliers; dealing with process risk and structure appropriately and the institutional and cultural context as well as "chemistry" of the key public and private leaders.

3. The economic and political science theories, particularly principal agent theory, provides useful background for thinking about privatization policy, although it seems to have little predictive utility. For example, the fact that ingenuity is a critical factor possibly supports the development of a newer privatization theory where knowledge and expertise is the new currency and critical factor, not price. In other words, the best candidates for public service and infrastructure privatization may be services requiring fast or creative decisions. This is certainly a subject for future research.

4. Many of the tables provided in this report will prove useful to others engaged in privatization research or in considering policy on privatization in a variety of contexts. On the other hand, given the potential different context in which privatization decisions can arise, it seems difficult to suggest that these lists are necessarily exhaustive of potential factors or universally relevant in all cases. Tables 7, 8, 14 and 15 comparing historical factors to the

Halton and York Region initiatives demonstrate that not all factors may be present in all privatization initiatives.

5. Policy makers and analysts may find that the process adopted within this research, described in Table 37, is of use in determining the context for decision making within any particular government, in any particular geographical location, and within any particular cultural or institutional context. In other words, governments may go through a process of determining their needs and the "supply" through an interview process with affected stakeholders, including the private sector. They may then consider how those needs may be addressed by assessing the relative strengths and weaknesses of their own particular government, and private suppliers who may be available and willing to offer services in that location to that government at that time. In those situations where there is a "match" (i.e. private sector strength and government sector weakness) then there may be the ability to pursue a public private partnership by referencing clearly stated objectives of the public sector, the public interest represented by the real "public" (and not necessarily by the perceptions held by politicians), looking at impacts on various stakeholders (for example, labour), and looking at the risks to both the public sector and the private sector in being involved in both the process and a partnership structure. From this groundwork, a match may be found with respect to services that the public at large would support being provided by the private sector, selecting that private sector partner through a process which does not expose either party to unreasonable risks, and in reaching a structuring alternative that satisfies the objective, utilizing the success maximizing and failure minimizing factors articulated in the questionnaire. This is a significant participatory agenda. It may create objectors when none might otherwise exist. It may also delay decision making where time is of the essence. On the other hand, it may avoid expensive mistakes and it may ensure that the guardian role of the public sector and the profit seeking role of the private sector are "aligned". That "alignment" process cannot be dictated by universal formula or reference to theory, although both theory and history will be informative. The proper structuring of privatization remains a craft. Who is best at what may vary over time, region, culture and institutional setting. Protecting the public interest remains a critical factor.

7.3 Thesis Outcome

This thesis has added to the body of Canadian-based literature on the topic of infrastructure privatization. It has been determined, through the interview results, the Case Studies and the literature review, that a wide variety of factors are relevant to the determination of whether a public infrastructure or service ought to be privatized and, if so, to what degree and with what structure. The process followed by York Region is illustrative of the basic approach to privatization; ascertain needs and then fit the skills of the private sector partner, where superior to the public sector, to those needs.

This thesis has generated many new lists of relevant factors applicable both to infrastructure privatizations generally, and to the privatizations contemplated in York and Halton Regions

specifically. These lists, reflected in the many tables in this research, can constitute a set of evaluative matrices that other municipalities could use as a "checklist" against which to compare their own perceptions of strengths, weaknesses and opportunities and risks. The analysis is of those lists suggests frameworks of analysis of use in the future.

Accordingly, the Case Studies, the questionnaires, and this research has satisfied the goals of the thesis as follows;

(a) broader frameworks for success, failure and risk factors have been determined;

(b) links between certain kinds of risks, outcomes and impacts have been suggested, together with linkages to certain kinds of structures;

(c) the Case Studies have provided insight into Canadian privatization experience that expands international experience;

(d) the Case Studies have identified reasons and political objectives of privatization;

(e) perceptions of initial and continuing success from the perspective of stakeholders has been obtained;

(f) links have been explained between objectives and structures although it is premature to suggest a link between structures and outcomes yet in both cases;

(g) frameworks, links, criteria, factor lists and instances have been developed through this research which reflect on existing theoretical approaches to privatization.

7.4 Recommendations

7.4.1 For Politicians and Public Servants

Politicians and public servants need to educate themselves to ensure that their perceptions of the relative strengths and weaknesses of their own bureaucracies as well as the local private sector suppliers are accurate and current. In addition, politicians and public servants need to understand the tools and techniques available to them to enable them to access the best of the private sector without necessarily involving the private sector in aspects of public service and infrastructure that they are no better at than the public sector. Fundamentally, the public sector and particularly public servants need to maintain a sophisticated understanding of financing techniques so as to enable themselves to minimize risk in situations where it may not be prudent to involve the private sector in doing so. Lastly, politicians and public servants need to be able to ensure that their "guardian" role as protector of the public interest is maintained throughout all varieties of privatization initiatives, and that the proper structuring of a privatization initiative is not sacrificed for the purposes of political short termism and other such similar political "negative externalities".

If I was a politician with finite resources but needed to accomplish significant enhancements in infrastructure or public service delivery otherwise beyond the resources of my government, I would;

1. Clearly and explicitly identify both my objectives in seeking privatization of an infrastructure or a public service together with any unacceptable political costs of doing so.
2. Contemplate, prior to involving the private sector, ways in which the private sector could assist for this purpose, and a thorough review of the weaknesses and strengths of the private sector suppliers available.
3. Tables 29, 30, 31, 32, 35 and 36 would assist me in finding realistic, expectable "matches" of private sector strengths to desired objectives. This would inform, for example, the request for qualifications stage to make sure that the private sector was better at design, construction or operations, as described in item #1 of Table 29. In addition, I would need my staff to have regard to the potential weaknesses of the private sector, some of which are articulated in Tables 30 and 32 and to take those into account when considering whether to proceed with the initiative at all and, if so, how to design the arrangements. For example, item #4 of Table 30, suggesting that the private sector cannot borrow money as cheaply as the public sector, was a critical factor in the Ontario Provincial NDP Government's decision to change its initial arrangements with the 407 Consortium and borrow the money itself. If it had considered this factor at the outset, it may have saved itself time and money.
4. Make sure that I understood both the potential failure factors of privatization and the weaknesses of the private sector to understand the risk and take steps, in advance, if I was proceeding with the project, to assure the public that all of these potential matters had been taken into account.
5. Understand and ensure my staff understands both the range of privatization success factors described, for example, in Tables 19 and 20 and the Privatization Failure Factors, described in Tables 21 and 23, so that any public tender process, or negotiations with a pre-selected partner, are conducted with knowledge of the main historical and perceived risks and what to consider in structuring either the RFQ and RFP documents, or the initial contractual arrangements.
6. Be sure that I had a clear understanding of the strengths of my own particular government and the weaknesses of my own particular government. Strengths and weaknesses of Halton and York Region governments might help me in focusing on particular areas; those strengths and weaknesses are articulated in Tables 25 to 28. I would also ensure that my staff were aware of failure mitigating factors described, for example, in Tables 22 and 24 so they could take those into account in designing both process and contractual arrangements.
7. Make sure, both in my proposal call documents and in negotiations, that my staff was aware of the risk factors involved in the private sector initiative, some of which are enumerated in Table 33 and make sure that steps have been taken, where possible to deal with each of those potential risks. Where a public education program is

necessary in advance of commencement of negotiations, I would arrange to have this done either to gauge existing public opinion towards such an undertaking or, alternatively, to educate the public so as to modify expected public responses to the project once the same becomes public. This may be an exercise in managing public opinion from the basis of effective public communications and overcoming what might be negative perception from past failures.

8. Make sure that my staff were aware of private sector fears and make sure that where possible each of those potential fears has been addressed or will be addressed so the private sector partner feels comfortable in dealing with the public sector body and to make sure that any of the private sector risk factors are not resulting in any increased pricing unless necessary.

7.4.2 For Researchers

Researchers need to assemble and carry forward the lists of factors contained in this study to other case studies to determine what other factors exist in other institutional contexts involving infrastructure and public services privatization. In addition, a long term study should be undertaken of other Canadian-based monopoly infrastructure privatizations to determine if the "negative externalities" observed in some of the Thatcher privatizations and elsewhere seem to be emerging in a Canadian context. Particularly, further empirical work on the issue of whether there are any consistent efficiency gains in privatizing public monopolies should continue.

There are certain elements of this research that could be continued but that, given the scope of the existing research, needs a separate study. This could include research as to the ways in which Ontario provincial regulatory impediments prohibit municipal flexibility in considering a greater degree of privatization in providing for municipal infrastructure. Research could also be continued by interviewing private sector officials as to their happiness with the "outcome" of the York Region process. Is it what they wanted or did they lose their shirt? How optimistic are they about future opportunities given that experience? Are they expanding their operations in this area or are they winding them down so as to keep costs to a minimum? It is not beyond the realm of possibility that the private sector may find that returns in undertaking these types of services are minimal, causing some suppliers to exit the market.

It would also be interesting to monitor the Halton Region initiative on a long term basis to see if, when and/or how the provision of infrastructure for the HUSP plan is accomplished and with whom.

7.4.3 For the Private Sector

For the private sector, this study demonstrates the importance of public relations and public support for an infrastructure or public service privatization initiative. In some cases, where perceptions of politicians and public servants are not consistent with experience, the private sector needs to be sure that they are re-educated. On the other hand, the private sector needs to ensure that

its efforts at public relations and education are undertaken with integrity, and without concealment of the potential social costs of privatization. A small, economically successful privatization of a public service or infrastructure, followed by strong public backlash based on the social cost of same, may limit the ability of a private sector supplier to grow that business in this country. An acknowledgment of the limitations of privatization, the comfort of Canadians with government, and reduced expectations, may be the key ingredients to the emergence of strong Canadian suppliers available to assist levels of government in outsourcing aspects of basic infrastructure provision.

If I was a private sector consortium interested in growing a business designing, constructing and operating municipal infrastructure in Canada, I would do the following;

1. Make sure that all of my senior and sales staff understood in detail the mind set of the public official, particularly those issues facing the public sector described in Table 18;
2. Make sure that my sales staff understood what, in the mind of the public sector, were the privatization success factors described, for example, in Table 19.
3. Make sure that our company was able to deliver on the promises made.
4. Make sure that our company avoids, in developing and structuring relationships, those privatization failure factors enumerated in Tables 21 and 23 and make sure that mechanisms were in place in any agreement so as to comfort the public sector that any perceived problems or failures can be appropriately dealt with (see Tables 22 and 24).
4. Make sure, in my sales presentations to council, to carefully allude to the potential weaknesses of government enumerated in Tables 26 and 28 (without embarrassing or insulting Council) while the same time stressing the strengths of the private sector enumerated in Tables 29 and 31.
5. Be aware of the perceived weaknesses of the private sector enumerated in Tables 30 and 32 and make sure that I had a response to each in the proposal call, RFQ, RFP and initial discussion phases. Particularly, I would make sure that our internal corporate governance and the structure of each arrangement anticipated the problems identified in Tables 30 and 32 that otherwise are not a characteristic of the private sector (such as the profit seeking motivation) and deal with them.
6. Make sure particularly that I understood the risks facing the public sector in dealing with the private sector described for example in Table 33 and make sure that, in our company's sales materials, sales approach and presentation, and ultimate arrangements, that we are aware of and take into account the risk to the public sector and take steps before, during and after the contract to mitigate the potential impact of those risk factors on the public sector partners where appropriate.
7. Make sure that the public sector understood the risks that the private sector was up against in bidding in these types of projects so as to solicit from the public sector at least an understanding that both parties have risk in the process and both parties have a stake in ensuring that the process is indeed successful resulting in a win-win solution.

7.4.4 Implications for Planners and Planning Theory

The focus of the research on local infrastructure, (water services) a key element of land use planning itself, and municipal (regional) governments, a jurisdiction with regional planning and plan approval authority (as an upper tier municipality) in Ontario, ensures a factual relevance for the research to planners. Planners are increasingly called on to ensure effective implementation of planning decisions - yet often the public authority is constrained in that implementation. In many cases, privatization will be a useful tool for planners to use to secure implementation of desired public schemes, whether by obtaining private financing for roads, water and wastewater services, or by public private partnerships for design, construction and operation. Indeed, the need for alternative approaches to the facilitation of urban growth for the Town of Milton, in Halton Region, and the ability to secure long term supply for York Region, in a time of fiscal restraint, were reasons for York and Halton Region's water privatization initiatives.

Privatization is relevant to the further development of planning theory. In its mildest form, privatization, such as outsourcing, build-transfer-operate ("BTO") contracts and management contracts, offer little to the development of theories in planning. They are techniques to achieve planner's goals. However, at the other extreme, where the privatization of a sector of the economy occurs (such as the privatization of the Canadian air traffic navigation system ("NAVCAN") in 1996), and accompanying de-regulation the impact can be seen as more fundamental. Privatization can become an act of delegation of planning and of control to a self organizing system; the private sector in a capitalist, democratic, mixed economy. Privatization and indeed, a market approach generally, can be a theory of planning. However, even at this level, the private sector activities are not necessarily free of government control and, indeed, controls through regulatory body, regulatory agency, through laws and regulations themselves, or through direct contractual relations in a contract or ground lease (the "instrument of control") may take the place of more direct day to day "planning". The plan making exercise may be undertaken prior to the completion or enactment of the instrument of control rather than at the operational level (e.g. whether NAVCAN is placing its air traffic control installations in appropriate locations or not).

In situations where the privatized infrastructure provider has the choice of location of capital works, then there is a risk of inappropriate growth being incented. This was the lesson from early omnibus providers, who changed bus routes to increase the value of lands owned by them.

As is apparent in from the Halton Region Case Study, the other issue involved in infrastructure privatization, is whether it fundamentally alters the planning that would otherwise have occurred. For example, if economic efficiency was the primary factor in determining growth areas in a regional municipality, a private sector solution may plan for growth in the least cost urban expansion area (i.e. the urban fringe). However, planners, arguing against urban sprawl, may propose nodal-type development in existing separate communities (i.e. Milton and Halton Hills as well as Burlington and Oakville) that is more expensive to service with piped water and sewerage, but that builds more separate identifiable communities. This tension between planning ideals and the cost of required infrastructure to facilitate it, is played out in the Halton Region Case Study.

Appendix "A"
Privatization and Related Definitions and Explanation

Pirie (1993) defines privatization as a process by which the production of goods or services is removed from the government sector of the economy (at p. 285). Veljanovski (1987) suggests that privatization involves the transfer and redefinition of a complex bundle of property rights which creates a whole new penalty-reward system which will alter the incentives of the firm and ultimately its performance. (at p. 77). Many other authors have articulated broad sweeping definitions of the term privatization and indeed, public-private partnerships ("PPP") for the purposes of their particular works. McFetridge also makes the point that in the public's mind, the word privatization has become associated with any situation in which a function formerly carried out by a government body is transferred to a non-government body, including some forms of deregulation wherein command and control regulations are replaced by market style incentives, such as tradeable permits or property rights[44].

I prefer a wide definition so as to avoid excluding potential examples at this stage. I will use the following definition:

Privatization is any process by which the responsibility, ownership, control, risk or cost of a government asset, right or service is devolved, either in whole or in part, to a non-governmental entity.

A non-governmental entity is one that the government does not directly or indirectly own or control more than 10% of any voting securities and does not fund it with any discretionary funds or other funds that are revocable at will. This definition gets difficult at this level: surely a government can revoke payments at any time. The experience of the Pearson Terminal 1 consortium with the 1995 Bill C-41 (the federal bill to limit damages for having expropriated the Pearson Terminal 1 lease) shows that a government, even Canadian, bent on expropriation without compensation can do it.

Privatization can occur in a variety of ways, from simple contracting out of municipal services on a short term basis to outright sale of government assets comprising a monopoly with extensive regulation to supplant the control lost by the sale of the ownership interest. The following table shows some of the variety that can occur in an event that might otherwise be considered a "privatization".

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[44]McFetridge, D.G., "The Economics of Privatization", C.D. Howe Institute Benefactors Lecture, 1997, at p. 3.

Figure A-1: Some Methods of Privatization:

Existing Corporate Shell (e.g. State Owned Enterprises, or "SOE's"; e.g. Air Canada before share sale)	**Public Authority Shell** (e.g. Ontario Hydro)	**Directly Owned Assets** (e.g. municipal waterworks)
1. private placement of shares	corporatization followed by a private placement of shares	transfer to corporate shell followed by private placement of shares
2. public offering of shares	corporatization followed by public offering of shares	transfer to corporate shell followed by public offering of shares
3. Outright sale of assets	Outright sale of assets	Outright sale of assets
4. New Private Investment: assignment of income stream by contract	New Private Investment: assignment of income stream by contract	New Private Investment: assignment of income stream by contract
5. Management or Employee buyouts	corporatization followed by Management or Employee buyouts	transfer to corporate shell followed by Management or Employee buyouts
6. Sale-Leaseback of assets; leasing out assets	Sale Leaseback of assets; leasing out assets	Sale-Leaseback of assets; Leasing out assets
7. Management Contracts	Management Contracts Vouchers/Deregulation	Management Contracts

A "public/private partnership" is probably a poor term to define a privatization within the ambit of the definition that I have created and defined above. A "partnership" at common law and by statute is an undertaking carried by two or more persons for the purpose of earning a profit. Partnership in the privatization context is more loosely defined, I believe, to merely refer to a "relationship" that involves an element of privatization. **Accordingly, I have used the term "public/private partnership" or "PPP" interchangeably with my definition of privatization in this study.**

However, public/private partnership more often represents privatization alternatives where both the public and the private sectors are still directly involved, often through contractual relations or through a sale leaseback arrangement. This may take the form of a build-own-operate-transfer contract ("BOOT"), build-operate-transfer contract ("BOT") or other similar variance. PPP is a poor descriptor when there is an outright sale of assets whether or not followed by regulatory control after

such sale. PPP is also a poor descriptor where there is a mere management contract or outsourcing arrangement, since without risk sharing there really is no partnership.

Choice of structure not only involves traditional issues of allocation of risk and responsibility but may also involve tax issues (e.g. provincial capital tax may apply to private sector owners), common law and statutory liabilities of an owner, and cost of and availability of insurance.

Canada has seen many examples and types of privatization in the last 15 years, including the sale of shares of Air Canada (1988), Petro Canada (1991 - 1997), Atomic Energy of Canada Ltd. (1991), CN Route (1986), CNCP Telecommunications (1988), Canadian National Railways (1996) and NAVCAN (1997). In addition, many provincial governments have been involved in asset sales, including Cameco Corporation by Saskatchewan (1991 - 1996), Alberta Government Telephones (1991), and Nova Scotia Power (1992).

Privatization in the broad context used above, has in fact occurred for decades in Canada and indeed most western governments. For example, governments routinely contract out construction work through a bidding process. Governments buy supplies and services from the private sector such as janitorial services, legal and accounting services and food services. Many governments are involved in "franchising" certain services for certain periods of time. Indeed, there are a variety of contexts for privatization, many of which are not new to governments and most of which governments have been using in the past. The forms of these arrangements have evolved through trial and error over many years. The privatization contemplated in this study involves newer forms of privatization than have been used in the recent past for a particular function of government.

Schedule "B"

Chronology: Meetings Observed
Halton Region

1. **June 19th, 1996, Halton Standing Committee of Council (at Regional Council Offices, Burlington, Ontario)**

   - met to consider whether to proceed to RFP stage of project
   - deputation by Tom Muir of Halton Planning Oversight Committee against Halton Urban Structure Plan ("HUSP")
   - deputation by Glenn Schnarr on behalf of Milton landowners holding 800 acres in support of HUSP
   - deputation by Hugh Heron of Heron Homes in support of HUSP
   - presentation by staff (Art Leach, Commissioner of Works, and Joe Rinaldo, Commissioner of Finance) in support
   - decision to seek partnership with Peel Region prior to proceeding with RFP preparation
   - questions and comments by councillors Sparling, Brechin, Day, Best, Carter, Scholtens, Krantz, Denison, Mulkowicz, Flynn, Behrens and Chilton.
   - decision to proceed with Peel negotiations

2. **August 8, 1996: Peel Regional Council Meeting (Bramalea City Centre)**

   - met with Mitch Zamoij, Acting Commissioner of Public Works and Engineering; Council meeting is in camera, public not allowed in. Wait for conclusion of meeting, advised by Mitch that Council had decided that it was not proceeding with Halton partnership at this time.

3. **September 4th, 1996 Halton Region Council Meeting**

   - deferred

4. **October 5th, 1997; Joint Meeting of Planning and Public Works Committee, Administration and Finance Committee**

   - met to consider Peel's decision not to proceed, and the Peel-OCWA proposal in light of the fact that Peel may end its relationship with OCWA
   - issue of the impact of the Golden Report
   - recommendation to council to proceed with RFP

5. October 9th, 1996: Halton Regional Council Meeting

- met to hear reports from the Planning and Public Works Committee, and the Administration and Finance Committee
- further deputation from Tom Muir
- Council devolves into Committee of the Whole
- 6 point motion put forward from Committees recommendations
- lengthy debate and speeches by Sparling (for), Mulvale (against), Mulkewicz (against), Krantz (for), McIsaac (against), Scholtens (against), Dennison (against), Best (for), Behrens (for), Brechin (against), Day (for), Flynn (against), Graham (against), Carter (for).
- after hours of debate, vote is 11 to 9 against deferral of the recommendation to proceed with the RFP

6. February 17th 1997, Meeting of Halton Regional Council

- could not attend
- Council met to consider status of discussions with Peel Region
- no progress made

Chronology: Meetings Observed

York Region

1. May 23, 1996: York Regional Council Meeting

- decision to proceed with the work plan for the Long Term Water Strategy Task Force, comprised of representatives from Consumers Utilities and York Region
- December 1996 deadline for arriving at a preferred solution to be presented to Council

2. July 4, 1996: Meeting of Water Strategy Task Force

- joint presentation by staff and representatives of Consumers Utilities (Jim Southworth): report adopted for presentation to Council

3. July 11, 1996: Meeting of York Regional Council

- same presentation made by staff and Consumers Utilities to Council
- Council devolves into Committee of Council to review Report 4 of the Water Strategy Task Force, reviewing possible alternative solutions to Region's need to

secure long term water supply
- acceptance of all three recommendations
- questions by Bell, Taylor

4. Public Open Houses Conducted by York Region and Consumers Utilities, July 1996

- attended the public open house in Richmond Hill to observe number of interested parties, maps, questionnaire form

5. September 19th, 1996: Meeting of Water Strategy Task Force

- presentation by Neil Embree to discuss open houses and discussions with other municipal and regional governments and the Province of Ontario about York's plans, including Peel and Durham Regions, Collingwood, New Tecumseh, Ministry of Natural Resources
- discussed issues concerning the International Joint Commission, the Great Lakes Charter and the problems with drawing water from either Lake Simcoe or Georgian Bay; need to compensate for loss of power generating capacity.
- Mayor Bell suggests Metropolitan Toronto over billing York Region for water
- desire to increase presentations to the public, run an ad on cable tv, reach out to the public with information
- further presentation by Jim Southworth of Consumers Utilities regarding the process to be followed by Consumers Utilities to arrive at a recommended, cost-effective solution, using a genetic algorithm

6. September 26th, 1996: York Regional Council Meeting

- presentation of report #5 of the Long Term Water Strategy Task Force to Council
- Jeff Trudeau and Jim Southworth of Consumers Utilities report on random sample polling done of citizens concerns and results
- Mayor Cole described presentation made to Simcoe County Council meeting September 24th

7. October 16th, 1996: Meeting of Long Term Water Strategy Task Force

- presentation of interim report of progress and alternatives to Task Force Members by Jim Southworth of Consumers Utilities
- Mayor Cole not pleased with report; finds it confusing
- full discussion of all alternatives
- detailed questions and comments from Mayor Lorna Jackson, Cole.
- decision to present to council

8. October 24th, 1996: Meeting of York Regional Council

- Council received presentation of revised interim report of progress from Jim Southworth of Consumers Utilities, along with Cliff Inskip on financial impacts and variables
- council authorizes task Force to proceed to recommended solution for Dec 19th Council meeting

9. December 19th , 1996: Meeting of York Regional Council

- adoption by Council of Report #6 of the Long Term Water Strategy Task Force
- could not attend

10. January 31, 1997: Meeting of York Regional Council

- adoption of recommendations on structure of arrangements with private consortia

Schedule "C"

Interview Summary

Halton Region Case Study

Q. #: Paraphrased Question: (with "H" prefix) responses of Labour and the Public	**Public Sector Officials and Elected Officials,**	**Consortia and Consultants**
S2 - privatization if no deficits and cost cutting?	H1: yes if cost structure is "out of whack"	H3: no; fiscal need is the catalyst. Most politicians regard public services as their little kingdoms, and they need a burning platform beneath them before they'll change the status quo.
H11: no; there is a perception that the recession will be over soon. Staff in Halton are still within their budget.	H2: no, because there would be little public interest in outsourcing.	
	H4: yes, because competition is good; every so often governments need to expose their operations to the private sector - note that water is a rate supported activity, not a tax supported activity.	H6: no, because the political downside is too big
		H7: no
		H8: no
		H9: no, politicians "need a kick" to consider it.
	H5: no.	
	H10: no; deficit and cost cutting is a catalyst but it may lead to a shift in thinking such that public/private partnerships become standard even in stable times.	
	H12: Likely not, although municipalities must do something about the cost of services.	
	H13: In Halton, yes, but not everywhere else. Halton is into innovation.	
H14: No.		

S5: Is Canada culturally different than UK, US and others with privatization experiences?

H11: Yes, Canada is different in different ways from each of the countries mentioned.

H14: We are similar to the United States but they embrace more privatization in the United States and the private sector there is prepared to take more risks than in Canada.

H1: yes, the nature of the public interest is different. Canadian have high standards, and would not follow the UK "abdication of responsibility". US is pro business.

H2: yes. We have more of a collective aspiration in Canada (e.g. the "Last Spike"); UK had its own unique problems, US standards are lower

H4: yes; Canadians like a sense of collective ownership, want "control" of public services.

H5: yes; UK experience can't be transplanted; they privatized, we would keep control and ownership in the public sector: US is pro business; Canadian like a blend of public and private.

H10: Many of these countries have had the same cycles that Canada has had. Standards in S.E. Asia (open sewers, pollution masks) and the US (Great Lakes) are lower. The UK has had a different starting point.

H12: Each is different than Canada. The UK's changes have been ideologically driven. In the US they have had no belief in governments since Thomas Jefferson.

H13: Don't know about any countries other than the U.S. They are different than us; we are more cautious and careful.

H3: diff than US, closest to UK culturally.

H6: NZ and Australia are similar to Canada; they were in a fiscal mess. NZ had to undertake asset sales perhaps required by the IMF; UK hit "the wall" in the 70's; US is a mix of political philosophy: now governments privatize to accelerate development (i.e not in their current capital budget, or its on the "B" list of projects).

H7: believes UK is the same as Canada - but we need to purge the term "privatization" in Canada. Canadians are very comfortable with their public sector.

H8: Canada not different than Australia, NZ, UK and US but different than Southeast Asia.

H9: generally, yes

C2: Issues facing Public Sector - Role for Private Sector?

H11: There are a myriad of issues facing the public sector today. Status quo has been totally disrupted. They have been running around like scalded cats trying to figure out how to maintain their power, perks and spheres of influence. Municipalities are paying lip service only to the potential roles for the private sector. Their outsourcing policies are often a thinly veiled attempt to maintain the status quo. Bureaucrats want to keep their jobs and politicians want to keep power. There is zero interest in going forward in Halton with any kind of privatization or public private partnership. The outsourcing policy paper prepared by staff is a total waste of time - it's a deliberate non-starter.

H1: elimination of funding from senior levels of government: therefore municipalities are forced to look at creative financing techniques to get capital works and infrastructure works, including involving the private sector; the private sector can provide more value in operations, not in financing (municipalities can borrow cheaper). The public, however may want to pay a higher interest rate premium to reduce risk. A combination of the best abilities of each of private sector and public sector- private sector's technical abilities combined with public lower cost of borrowing equals opportunity for savings.

H2: Where to get financing to fund the plan? Municipalities have "maxed out their credit cards"; they can borrow to repay from taxes, but may not want to. Private sector can have a role, but it must be carefully structured, and the nature of the public interest clearly defined. Public must always keep statutory control; cannot assign statutory obligations, and the regulatory environment does not yet exist in Ontario to fully permit this.

H3: scarce government funding: the 85% capital grants from governments do not exist anymore. In water particularly, there is an upward pressure on rates, due to environmental standards, increasing maintenance obligations, and the need to meet growth. The other reason is disentanglement; the move to full cost accounting and full cost recovery in municipal systems.

H6: Financial constraints preventing governments from keeping up with need to refurbish and provide new facilities. Operating costs keep rising if you don't keep up with replacements and refurbishment. Requirements for infrastructure have increased. There is a conscious decision to out source now, to manage growth, to obtain expertise from the commercial sector. Who prevents change?: 70% media coverage with a negative slant, 30% labor trying to hang onto inefficient job structures, keep things the way they use to be. You can work with labor and be successful. Media can't be satisfied.

H14: The main issue is jobs. Jobs have been lost to technology changes, yet computers don't pay taxes and people are being put out of work for the benefit of someone else. The private sector is less responsive than the public sector and the only role for the private sector is in overload and peak labour management situations. (i.e. supplying help when the in-house department is overloaded with work).

H4: drastic reductions in provincial grants; regions have to contend with rapid growth (20% in last 10 years in Halton). The role for the private sector is to put in the money that the public sector doesn't have.

H5: Financial constraints in the short term (2 to 3 years); the infrastructure deficit (age of infrastructure) - for example Halton has 50 to 60 year old cast iron watermains. Governments are moving towards user pay if service levels differ. Public sector needs to think long term (20 to 50 years). The public want stability and predictability in water rates.

H10: The issue faced in the public sector is controlling cost in a situation where government resources are being stretched. There is a role for the private sector but only as one possible solution in a range of possible solution.

H8: money deficits; not enough capital has been invested in infrastructure for 10 to 20 years; there is an infrastructure deficit in capital terms and a maintenance deficit in Canada. The move to user pay enables money to be raised, whether through tolls or water rates.

H7: no more grants from the Province, which were up to 75% for small municipalities. CMHC used to grant 15% in the late 70's and early 80's. The role for the private sector is to assist in financing without grants. Another issue is the number of municipalities (800). They need to amalgamate to have the ability to manage finance, design, build, operate and maintain infrastructure.

H9: No grants, no money from other governments. Withdrawal of funding is a defacto privatization.

H12: The issues facing the public sector is having enough dollars to provide new services and maintain the old services in anti-tax and anti-growth environment. There have been cuts in transfers from the federal and provincial governments and in the end, users (people) have to pay. The issue is how do you pay it most fairly; through property tax, through income tax or through new taxes and what is the mix. There is a role for the private sector although it is no cheaper in the private sector. Outsourcing, design and construction has been happening for years so is nothing is new there. But the private sector can bring better technology and some cost savings through economies of scale (for example Hwy 407).

H13: The issues are the cost of both funding the maintenance repair of existing infrastructure and funding growth costs. There is considerable pressure from development industry to continue to allow growth. There is a role for the private sector through partnering in public infrastructure if its done properly.

C3: C4 Defining Successful Public private Partnership: Indicia of success	H1: with a win-win situation, such as Halton's sludge management initiative with Terratak; indicia are financial risk sharing, providing service in a cost effective manner, providing infrastructure at competitive prices (without the municipality having to raise development charges); no financial burden on the public.	H3: Many arrangements are possible: the agreements need to define the arrangements; define the requirements for service. The public sector may need to raise capital, and the private sector will be expected to provide innovative capital options, while maintaining control in the public sector for political reasons. Private supplier may find new ways to match demand and supply. Experience in Kingston where 2 private operators merged with 1 public operator. Merger will also apply in KW. Private supplier can provide expertise in portfolio management if the commodity is transportable and deregulated, such as in gas or possibly electricity .
	H2: the municipality must retain control, particularly where the public interest is high; e.g. water quality, flow pressure, fixing leaks. The municipality must control rates; no exorbitant rates set but must consider health, safety, welfare, convenience. Role for private sector in customer service, skills and expertise, and if real cost savings can emerge. Halton believes it can operate just as well as the private sector.	

H4: Public sector has a handle on pricing and the long term capital needs; the private sector needs to find innovative ways to provide the service at a less costly price. Indicia would be efficiency, quality, and profit for the private sector, and the public sector gets the enhanced infrastructure.

H6: Success is in the process: a commitment by the public sector at all levels to the project, the private sector partner is chosen in a fair and open process, setting high hurdles with respect to financial history and strength, safety standards, and labor relations. Secondly, allocate risks in the contract; no extra costs should be allocated. Then a cost effective partnership should result. Indicia relate back to the parties' objectives, but should ensure that cost to users is reasonable, and must fit political philosophy typically including local industrial benefits, and a flow through of money: locally.

H5: No ambiguities in the contract; a long term motivation, trust between the parties and mechanisms to maintain it; each group is assigned what they do best, so for public sector its planning, for private its delivering the infrastructure, making decisions based on the business case, being efficient and effective, maintaining the asset (avoiding the Windsor Tunnel scenario). Indicia include predictability of behaviour, costs and quality, and no surprises.

H8: It must be effective; benchmark the standards to public service standard now, ensure infrastructure is maintained and renewed, ensure gradual elimination of infrastructure deficit. Equitable; costs and benefits shared equitably, shared profits. Quality meets all normal and accepted standards. Water is safe, and meets taste and quality standards. Indicia include long term relationship, profit sharing, fair process both at front end and during contract.

H7: The best of each coming together. Figure out what each do best. In water and wastewater, the public best at policy, standards, regulation (both operations and maintenance), and pricing. The private sector is best at delivery operations, maintenance, and administration (management). Indicia would be lower costs, faster delivery. Expertise in the public sector can't be commercialized, but expertise in the private sector can. The private sector can operate beyond the scope of public procurement constraints, are faster at decision making.

H11: Not convinced there can be a successful public private partnership (like being half pregnant). Believes it's best to be either one or the other. Users fees are only appropriate is there is commensurate reduction in the tax base. Water particularly has emotional elements to it. Indicia of success would be lower cost, lower taxes and less government. Water is not a suitable candidate unless the entire system were privatized. There is a role for the private sector if the politicians and bureaucrats get out of the way but they will not willingly relinquish their authority and roles. The public sector has no perception of how the private sector works and no perception of risks.

H10: A successful ppp means that public project is doable and fallout of public cynicism can be managed in France, public cynicism is not an issue. Here, we are resistant to change. We are also faced with the advocations made on behalf of the unions and environmental issues such as the potential change in benchmarks and economic impact.

H12: The government preserves its control, there are financial benefits to the government, and risks are shared. Governments need to protect the public interest by setting policy and financially coming out ahead.

H9: High quality service and high quality products. Need to get good referrals early in this industry in Canada: private sector will be very diligent in making sure all OK. Performance is essential. Indicia on the cost side include both low operating and construction costs, a good budgeting process, and the availability of capital. Value for money is critical.

H14: If the public is completely in control and oversee the project, inspect it, and ensure it is done safely the following certain rules and procedures. One indicator of success is the Workmen's Compensation Board assessment rating. For example, a public electric utility pays $1.05 per $100 of payroll. A private sector electrical contractor, pays $5.01 per $100 of payroll. Accordingly, the safety record and safety rating is key and the private sector tends to rush to get the job done so they can get on with the next job since time is money. However, this often means lower safety standards and more injuries, as is reflected in the WCB rating.

H13: If successful PPP would be where the public accepts and agrees with a PPP structure, where the roles are clearly defined, where the private sector makes a profit, and where there is accountability by the public sector. Indicia would be the public controlling standards and prices, there are no confrontations, the private sector is happy with its returns, and people are receiving a good level of service and at a reasonable price.

C5: C6 Evidence of Failure of Public Private Partnership: minimizing failure risk, maximizing success likelihood	H1: failure constituted by one way agreement; either the private sector is losing money or there is too much money accruing to the public partner; minimize risk by dispute resolution mechanisms, clear performance measurements, clear service level expectations, and clear points of accountability - was problem in UK.	H3: Failure arises upon misalignment of the two parties' objectives. Vancouver Island Natural Gas example. Private sector may be leery of long term arrangements that require funding or capital expenditures. Important to get guarantees on core competencies, and manage risk in respect of both capital and operations. The private sector knows how to manage risk.
	H2: No capital investment, bad press, poor remedies in contracts for service failures (e.g. flooding basements) are evidence of failure. Mitigate or minimize by defining the public interest, explicit contracts with performance tests, dispute resolution processes and interim agreements as to how to deal with issues while being resolved; Private sector plans for 5 years, the public sector plans for 20. In a planning context, planners and public works is planned to work backwards (where do we want to be in 30 years, and how do we get there), vs the private sector planning for next 5 years.	H6: The contract usually deals with economic failure. Political failure arises if service not at reasonable cost to users, unsettled labor relations, and no industrial benefits. Risk of failure minimized by contract, team building (breaking down of cultures), attitude as a strategic alliance, day to day recognition of the risks and rewards, and a desire to share the risks and rewards. If one party fails, both do. Public sector poor at team building: you're only their partner when they need something.

H5: Failure occurs if public perception is overwhelmingly negative, if there are surprises such as in rate increases or equipment breakdowns, or if the facilities are not left or maintained in turnover condition. To mitigate, pick the right partner, structure the deal to deal with conflicts; ensure monitoring, ensure financial motivations within the contract so that what the public sector wants is done, provide penalties for non-performance. The RFP is 80% of the contract.

H7: If the worst features of both are brought together. A complete privatization (to a regulated monopoly) would be a failure, since the private sector people would degenerate into civil servants. Minimize this risk by being careful in designing the public private partnership, know objectives, no ulterior motives (e.g. bust union), long term orientation, engage trustworthy partners (not necessarily low bidder).

H9: Communications between the partners is critical. A good structure is needed. Minimize risk of failure by being organized properly, ensure the parties are educated as to the issues; have good communications.

H11: Lack of delegation of authority and no opportunity for the private sector to do the work at all. Picking the right candidate for the service to be provided would be important to minimize risk of failure. For example, the fire department will spend less than 10% of their time fighting fires and are continually justifying their existence. A fire is an unusual occurrence; there were only eight fires in Oakville in 1996 yet it consumes 18% of the budget. The unions have too much power. The likelihood of success can be maximized by looking at who is benefitting. Governments have no concept of zero base budgeting or value for money. Therefore, there is no satisfactory conclusion when the public sector provides a service. Governments don't like benchmarking since it is like teachers being tested. Governments pay accountability lip service only. There will be no success in these partnerships until the government changes their attitudes and their environment.

H10: Failure would comprise unanticipated surprises, or failure to meet quality or cost objectives from the public sector's point of view. From the private sector's point of view, failure would constitute bankruptcy or "misjudging the call" with respect to the viability of the project. There are massive amounts of investment required. To minimize the risk, anticipate qualitative changes required pursuant to new government regulations and allocate the risk of those changes. One approach is to have the private sector guaranty compliance for the first 5 years and then provide a process thereafter. A comparison needs to be done between the costs and requirements of the status quo and the cost and requirements of the new project. Government should limit the private sector's profit margin based on a certain debt service amount and interest being pegged to a certain benchmark every 5 years or so. We can learn from other people's mistakes in this process.

H8: Failure if public left holding the bag, or if the private company collapses. Mitigate by partnering with a financially stable business, setting standards and holding the person to them, ensuring accountability, monitoring, keeping all complaint letters, open books, allow inspections, keep formal and informal communication channels open, provide insurance policies, bonds.

H14: Accidents and loss of control by a municipality. Be sure that the safety rules are implemented and all workers have the same training. Operators of sewage treatment plants need to be certified by the government. Training is the key.

H12: Failure would be a financial failure or failure of effectiveness of the infrastructure. The deal needs to be a good one from a cost point of view although failure could occur by the public failing to exercise its policy control.

H13: Failure would be the opposite of the success factors; a sole source deal may limit the likelihood of success. In addition, if you don't use "home grown" companies, you may shut out local talent. Failure also occurs when you move too quickly without exploring and analyzing the alternatives and the implications. Failure would be if you hear from the people that the service is not working well. Minimize this risk by ensuring good chemistry between the partners, ensuring that each party has leverage over the other and is flexible, ensure each party respects the other and deals with it honestly and ensure that there is responsiveness and the maintenance of high expectations between the party. Finally, never forget the importance of the people.

H4: Failure is in less service, price increases, or no profits to the private partner. Mitigate by setting up the arrangement properly, and bring in the risk analysis experts.

C7: Strengths of Government; Weaknesses	H1: Government's job is to protect the public interest; has the ability to tax; has the legislated authority and responsibility. Governments operate under different ground rules such as in decision making (slow), procedure for contracting (tender). If it was the same as the private sector, costs would be the same. Public better at ownership, stewardship, and finance. Private better at design, construction, operations. It's a fallacy that public sector is inefficient. H2: Private sector good at efficiencies, reducing costs, but don't reflect the social conscience. Privatization, ppp is a tool to bring together the two roles; guardian vs profit seeking.	H3: Government good at basic services. They approach management in a different fashion than the private sector. They are good at monopolies. They are not good at operations, finance, design, construction. H6: government can finance cheaper. Governments are strong in operations, they have high quality people deep in talent and experience (e.g. Terminal 1 and 2, Hamilton waterworks). On the other hand, governments tend to choose the wrong projects (e.g. Mirabel), their priorities change every 3, 4 or 5 years depending on the election cycle.

H4: Government can be innovative (citing the 10% payback of long term savings identified by staff at its plants to those staff), can have intrapreneurs, can deliver a high quality product (Halton only has a 13% water loss, which is apparently very good). On the other hand, government can be slow in processes, overregulate, and not innovative.

H5: The public can finance cheaper, and can levy fees and charges. The public and private sectors are equal in design, construction and operation. The public is better deciding where and when infrastructure should be provided, the policy framework for it. The public interest is represented. The private sector may be more creative when it comes to efficiency.

H8: Governments must set policy - private sector has no moral authority to do so (private sector doesn't want that job). Public can raise money more cheaply than private sector, but it doesn't mean they should. Problems of overspecifications, overdesign in the public sector, in order for bureaucrats to assure their political masters of the safety of the public. Getting politicians to bully its staff rarely works: underlings can scare the political masters: "nothing gets done without the permission of the person below you" applies in these situations. Public system is 100% risk averse, as opposed to rewarding ingenuity and novelty. Fear of blame primary motivator - bureaucrats learn to survive in 100% risk averse environment.

H7: Government strong in ownership (except tendency to overdesign), policy making, regulation, standard setting. Poor in design (overdesign, conservative design), risk averse in operations (overstaff, backups to backups), and weak in construction given the low bid approach to tendering.

H11: The government is good at setting broadly defined policies and providing service to their clients by their staff who often have good intentions. The weakness is their mistaken belief that they know better than the public in providing services. Governments do a lousy job in roads, bridges and water pipes. There is almost no maintenance of water pipes in Southeast Oakville, and in Southeast Burlington there is almost no water pressure. They are completely incompetent. They did not set up any depreciation reserves and they have no replacement policy in place.

H10: Government strong in ensuring conformity of standards. They can enact legislation fast and they can exempt themselves from certain processes. There is greater satisfaction to the public by a public provider of infrastructure (remember the 3 mile island incident). On the other hand, we put our children in privatize day care. As a weakness, government is inflexible. Often, this is tied to the professions such as the engineers who blocked Zenon Environmental Technology in Ontario because it might reduce the need for new capital spending. Bureaucrats have the innovation trained out of them and innovation is not tolerated (Thomas Edison had 1200 failures in perfecting the light bulb).

H12: Government is strong in making public policy but it is weak in the way it organizes the public sector and the way it lets contracts (tender). If public had the ability to be more enterprising things would be different.

H9: Government is good at managing public infrastructure, protecting health and the environment, controlling taxes and rates for the province, we need a government with a plan. At the municipal level, they are fickle, and often dogmatic - ideologic - since many are associated with a political party. There is also concern for riding electorate over regional interests in Halton. There is no code of conduct nor politicians with vision.

H14: Government at the municipal level is good at setting policies and providing an opportunity for dialogue whereas the provincial levels don't listen as well. The municipalities tend to hire more accountants vs. experienced people and this leads to problems. Politicians are not educating themselves to the work being done by their employees; they don't get out to the field often enough.

H13: Strengths of government is that their responsive to people and there is a high degree of accountability. In addition, they have a strong asset in their loyal and dedicated employee group. Those employee groups live in the municipality. Accordingly, they have the "buy-in" to ensure their plants reach the optimum level of service. The weaknesses are the influence of other levels of government, complacency to the extent that if there are no complaints, there is no changes made. On the other hand, Halton atypical because they will change and innovate even though there is no pressure from the public.

C8: Strengths of the Private Sector: Weaknesses	H1: competition creates efficiency; private sector better at design, construction, operations; profit motive requires sensitivity to public relations; that is how public accountability arises. Private sector is weak in monopoly situations - must set customer service as a standard, although difficult to write specs; must monitor and provide penalties. Need benchmarking and establish loyalty to the community: Public need early termination rights on a formula basis if not performing - only way politicians might go for outsourcing and ppp: Need to benchmark public services. Private Sector depreciates over 30-40 years, public 5 to 20. H2: public sector are long term thinkers, reflect the public interest, plan. Public should never sell assets given long term planning horizon. H4: Private sector more flexible, can change quickly, may have international experience, but private sector may have no empathy.	H3: Private sector better at operations, finance, design, construction, and risk management. Private sector not as effective in monopoly situations. H6: Private sector at least 10% better at designing and building, any activity that is process-intensive. Private cos shareholders usually don't change every 3, 4 or 5 years. Market makes choice of the right project more critical (e.g. no Mirabels). Private sector better at thinking "outside the box", more creative, better able to optimize facilities and resources. That is the value added. Design efficiencies (example of 120 bridges - 78 the same; all 78 the same equals cost savings vs separate tendering of 78 bridge projects) and process efficiencies. Public can borrow cheaper, but private sector can optimize financial requirements, perhaps borrowing less. H8: Private sector efficiencies; more flexible re employee bonuses, labour bargaining, quick automation, decision criteria unaffected by politics, have latest technologies, and are highly motivated to be efficient.

H11: Strengths of the private sector far outnumber any government body; they look at projects more realistically, they usually do have a heart, they are bottom line oriented, they are aware of risk and evaluate very effectively and deal in an unregulated, unprotected environment (i.e. they don't have a statutory monopoly). The weaknesses of the private sector are that because they have a bottom line, there aren't any projects that are based on need, only those based on rate of return. Oakville has one supervisor for every six employees - it is completely top heavy.

H14: The private sector is good at engineering and planning they are becoming more aware of safety. Often, they have the wrong people doing the wrong job.

H5: Strength is profit seeking motivation (that can also be a weakness), ability to generate creative new ideas, bring a motivation to go beyond the average (no motivation to go beyond average in the public sector except for personal pride), willingness to take risks, such as by adopting new technology.

H10: The opposite of C7. They have the same problem in the private sector, that professional associations don't encourage "breaking the box" as strengths, the private sector takes risks and can assemble big groups. They can also take over debt loads from municipal governments who are trying to avoid the scenario like in the 1930's when many municipalities went bankrupt.

H12: Strengths of the private sector are in technology and its flexibility to act. The weaknesses are they cut too many corners to protect their bottom line over the public interest.

H13: The strengths are that they bring money to the table. They often will have dedicated and skilled employees and will have the same professionals as public sector do. The weaknesses might be in their responsiveness to the public and their accountability to the public, particularly if there is a monopoly.

H7: Private sector innovative, co-operative, risk takers, efficient.

H9: Private sector better at adding value.

C9: Risks of Involving the Private Sector from Public Sector point of view	H1: In financing, private sector usually doesn't want to assume risk; must match risk vs reward. Need transparency (open books). Need to share information on costs. Need to be true partners.	H3: Loss of control, and the potential misalignment of objectives.
	H2: Timing: the planning horizon. Often the phasing policy doesn't match the rapid rate of return the private sector expects. Concern about having to raise development charge rates.	
	H4: loss of control leading to compromises in design, construction, and operations. It is important to ensure that capital facilities built for long life (beyond the term of the contract)	H6: Public is scared by potential loss of jobs, risk of change. Some governments don't like to expose their slow decision making (but it took only 29 days to negotiate the Highway 407 toll road deal, 6 weeks to negotiate toll road deal for Highway 104 in Nova Scotia). Yet may take financing risk away from public sector. Public wants private sector parent on hook forever - unrealistic.
	H5: Risk of financial failure, including third party claims against the facilities, getting bogged down in legal claims, operational risk, and public relations risk (that the private sector can't be trusted).	
	H10: The risk to the public sector is understanding how the private sector plays the game and how they are able to "squeeze money" out of a project in ways a public sector wouldn't initially understand. The public sector are children in an adult game. Occasionally, the public sector can be jelly in the sandwich to the extent that they are caught between a private sector provider and the public at large don't believe what the elected officials are doing. Many citizens are capitalists by day and socialists by night.	H8: Risks are bad service and high price (like in UK but price of water was going up anyway), labour unrest, lack of job security, a mismatch of objectives. Halton may have unrealistic expectations. These contracts are easier in small towns where they don't have a bureaucracy trying to prove they are just as good as the private sector (protecting "turf"). Labour unrest can be overcome with raises, profit sharing, attrition vs layoffs. Councils generally don't like outsiders.

H12: The risk is that standards would be compromised or that the private sector partner will require too much supervision.

H7: Risk of being unable to get financing, or of unsuitable design.

H9: Risk of choosing the wrong partner, not having a process to set rates, not having joint decision making.

H11: The biggest risk involving a private sector is the fear of setting a successful precedent; the fear that government will show itself as being completely obsolete and redundant. Governments are currently harbouring sheltered employees who are buffered, in-bred, and brainwashed. The only risks is will the private sector provide the right level of service based on the set standard, with continuity, and avoid bankruptcy. Again, Halton's policy is completely fallacious, and goes to great lengths to list the negatives of outsourcing. Fear of job loss and loss of control is the real motivator.

H13: The risks are that the public sector may not be honest about the proposal to involve the private sector in the first place. It's unfair to "fish". It's important to have a buy in at the councillor level. It's also important to be sure that you're going to make some savings in involving the private sector; the ultimate arrangements must be for the better or else there is no point.

H14: The risks are in the public reaction through privatization, environmental aspects, and the risk of bills.

C10: Mitigating or minimizing C9	H1: Risk sharing must be fair, provide for audits and transparency: need to isolate the planning systems from the delivery systems: i.e. a decision to expand in Milton (HUSP) should not be resisted by private sector operator just because less economical than sprawl (building at the end of the pipe). Otherwise, private sector more concerned about risk than public sector (e.g. growth projections). Need to find balance.	H3: To manage the former, need a good contract, with clear service levels and penalties. For the latter, need clear articulation of objectives, risk sharing, incentive programs. H6: Contract must be good. Public sector needs to understand what drives the private sector. Selecting public sector officials with private sector experience to lead the negotiations.
	H2: keep control. H4: Mitigate by picking the right team, have a policy going into the project (as Halton does), and decide how the partnership is going to work. H5: Through picking the right partner, ensuring the contract deals with enforceability issues, ways of dealing with changes, and exit strategies if there are changes. Communicate how the arrangement works with the public and councillors.	H8: Get public information sessions to inform re amount of savings, other experiences. Make a good case and assume the public will understand - openness and sharing information. Explain monitoring, reporting, financial instruments. H7: determine who takes the risks, how risks apportioned up front, penalty clauses, insurance. H9: mitigate or minimize by having a good contract, bonding, ensure no change of core business.

H11: The public sector need to try something; to be daring. They need to get an honest appraisal of their own abilities and environment by giving questionnaires to the public and getting feed back. There are no checks and balances at the present time. Perhaps these questionnaires to the public will give municipalities courage to do more with the private sector.

H14: To mitigate, the municipality needs to take control and make sure that the private sector partner adheres to certain rules and policies strictly.

H10: It is important for the public to get cross-trained people who understand the private sector. It is also important to manage the public and identify with them even though the public is often not rational, won't listen, or base their conclusions on historic or anecdotal information (i.e. 3 Mile Island). Often, they will benchmark elected officials in reference to historic or anecdotal information. Elected officials need to be able to explain how they manage the process well. We also need to deal with environmental and union issues at the same time.

H12: Get a good agreement, stick to your guns and make sure you have a clear ideology about the project.

H13: It's difficult since it is a only a 3 year council term and council is unpredictable.

C11: Risks to the Private Sector in being involved in Public Infrastructure Projects	H1: Political risk (municipalities changing their minds); Understanding public sector decision making processes; understanding ground rules set by council; (private sector can't apply normal business decision making model to public decisions); private sector must be prepared to deal with a completely above board process - no lobbying behind closed doors; need to understand local environment. H2: private sector exposed to legal penalties (e.g. kill fish from a spill), lack of experience, foreseeability. They may not be responsive to the public. H4: risk of changing governments; the deal has to be binding on future governments H5: Unexpected costs, such as existing defects in infrastructure they are expected to repair, maintain, or tolerate leakage from. Oakville mains are a problem. Who takes risk of legislative changes (such as preventing the use of chlorine to disinfect). Political risks such as termination on a whim. Planning Risk such as the determination of future growth directions or a development freeze, or an acceleration of development beyond the operator's capacity to deliver.	H3: Political risk; risk of change of heart, public opinion. Costs can be high to bid (up to $1 million in Halton). To mitigate, need consultation with all stakeholders up front, a good demand forecast so as to enable the base case to be determined, and an "integrated resource planning" approach (meeting all stakeholders beforehand). H6: Lack of political will, backing away from a project, failure to clearly define the project or the objectives costs the private sector money (3 losers on the PEI fixed link bridge spent approx $55 million in bidding; one party alone spent approx $20 million). The winner spent $25 million. Total money spent getting the job by all bidders doesn't equal profit on the job. Can move several kilometres sideways in a process and an inch forward in 6 mos. Also concerned about cancellation risk and evaporation of back end profit (T1, T2 project at Pearson). H8: Public thinks its getting capital from private sector, but what they are really bringing is ingenuity. The old days of build a pipe and development will follow is over; makes more sense to phase the pipe extension: risk is bureaucrats steal the ingenious ideas and don't use the private sector. H7: Political risks; the government changing the rules ½ way through. Ottawa Carleton terminated their private operator ½ way through the contract, brought it back in house. In water and wastewater, issue is control of rates within the public sector, and the risks that poses to the private operator.

H11: The risk to the private sector are competition, consumer alienation, and failure to properly identify the political process they will be involved in. They also need to recognize that government will still be involved and that will be a problem.

H14: There is a risk the true figures haven't been disclosed, or that maintenance of equipment has been deferred, and that cost will be higher than they expected. To mitigate it, you need to research the project well.

H10: List of the private sector is changing regulations and political change and labour disputes. In labour, the private sector is often forced to take people they otherwise wouldn't take. For example, Laidlaw in Ottawa, where they found out some of the employees had criminal records. For the private sector, they can mitigate their risk by getting hold of cross-trained people as well (for example Art Leitch).

H12: The risk of the private sector is that they need a profit and they will write the terms of reference accordingly; they will also lobby politicians so the public needs rules to govern the private sector.

H13: The risk that they will not make any money in bidding.

H9: Security of revenue flow, cost and time overruns, financing risk, no regulation of the infrastructure, no inflator in the contract prices.

C12: Impacts on Halton Process	H1: reflected in 11:9 vote; indecision at the political level; costly for RFQ proponents; changing circumstances make decision making difficult: Its difficult to make policy if you are not in the business day to day - otherwise how do you know the issues? (Counterpoint to Steering:Rowing analogy- how can you set policy if you have no experience in implementation) In Peel, OCWA runs the system, and Halton knows more about Peel's system than Peel does. Peel has probably been overcharged by another government agency (OCWA) simply because no benchmarks. Need to establish benchmarks for service levels. H2: reflected in the 11:9 vote in October 1996.	H3: issue of whether contiguous growth should occur or growth beyond urban separators. Uncertainty for bidders - bidders now passive in Halton, won't spend any more money given 11:9 vote - chances of proceeding too low. H6: Too early to tell in Halton, although they have already picked the brains of the consortia for ideas that are valuable: they could proceed with ideas and without private partner. HUSP an internal plan - were true costs considered? 401 has 380,000 cars a day on it (clearly we needed to provide a new highway): but it took the Star 3 years to find a negative on 407 (design deviated from previous standards - unsafe?). But standards were 50 years old (i.e. to 50 year old technology). The Province asked the consortia to update the standards. Ramp geometries, lighting, designs - master design standards in the 90's all were done by the 407 consortium.

H4: Halton process moving at snails pace given split council.

H5: The risks were not fully explained to Council. Who finances what is not known. There is a need to define "affordable" re rates.

H10: In Halton it has manifested itself in serious concerns about whether it should proceed at all.

H11: [no answer]

H12: In Halton, it became clear that the private sector would not take the risk. In addition, it is clear that the local business community has been locked out of the process in the bidding so there are no local benefits and indeed local businesses who have long standing service records for the municipality may no longer have work to do.

H8: York did it backwards - contest of wills with Metro (Serbia and Croatia?); needed independent supply? Its ludicrous. Province didn't do anything about it. York shouldn't have its own solution. York not interested in a "Metro Toronto based" solution. Halton: getting ingenuity from proponents, thought they needed capital. Council not forthcoming with proponents. Council continually focused on the ability to discontinue at any time. Waterloo doing it realistically - everyone else looking for dreams. Peel re-tendered OCWA; came in 20% cheaper than OCWA's last price that OCWA represented was rock bottom. The private sector is still cheaper than OCWA after re-tendering.

H14: N/A

H13: Peel is still being considered and staff are optimistic that an arrangement can be reached even though in the political level, there is a lower likelihood of a deal being reached.

H7: Support is soft in Halton for the project. The 11:9 vote is representative; councillors are against this because of fear of failure.

H9: 4 alder people conflicted out; otherwise October vote would have been 15:9. There is a fear that costs will go up, concern as to predicting the revenue, concern that big costs will be incurred before the population is there. Not fair to commingle public sector bidder (Peel/OCWA) with 3 private bidders with different ground rules and behind closed doors.

C12: [too early to conclude]

C13: Importance, measurability and managing public perception of qualitative outcomes	H1: is important to benchmark quality and service levels and costs. Public believes water out of Lake Ontario bad, yet bottled water same or worse than Halton's water. Public needs to be educated that Halton's water quality is good (private sector may do better job at public education). Public tends to trust public more than private re water.	H3: Critical to set qualitative criteria. OFGAS in UK sets 50 performance tests suppliers must meet. On the other hand, that which you measure will be performed.
	H2: not easy to assess; quality is critical. Often ends in finger pointing.	
	H4: Public only wants the top quality. It is important to pick the right team. Managing public perception of outcomes is much more difficult; it's a communications issue. The UK experience was unique.	H6: Public sector talks about quality, but in the RFP's, price is what counts; the public sector seems only dollar driven in the RFP; the private sector wants quality standards, but the public sector doesn't (e.g. hwy 407, 104 standards). Often the public sector expects much more from the private sector than they would expect from themselves; there are no standards now in the public sector. Often, the private sector is asked to propose the standard. Sometimes standard is religion (30 minute response time to fix elevator vs no public standard); but issue is compared to what?
	H5: Its really important to have performance standards dealing with water quality, and the operator must communicate with the public through an ongoing public relations exercise. The private sector should be good at managing public perception. Public must get best value for money.	
	H10: With water service, it is only obvious when it is not there and there are rarely any accolades when it is there in the normal course. It is difficult to manage public perception of the qualitative outcomes and you need more consultation with the public as one of your measurables.	H8: seems to get back to dollars although politically it may seem otherwise. Politicians want to be able to call technicians if a constituent calls with a water problem, but result in water service often overstaffed. There is better customer service in the private sector.

H11: The public has been led to believe in government standards but some people are cynical of government. Private firms need to sell the perception that they can provide clean water perhaps better.

H12: The qualitative outcomes are very important and the public-private partnership must meet the highest standards. Standards will be going up. For example, the standards for Hamilton harbour are higher than the provincial Ministry of Environment standards. One sewage treatment plant in Halton is meeting those standards now. The public expects the public sector to be there to protect its interest.

H7: easy to set standards for water and easy to monitor. Its getting easier to manage public perceptions of qualitative outcomes, given the global market for water management and development.

H9: Very important.

H14: N/A

H13: Qualitative outcomes are very important; standards and rules don't change. The people must the final arbiters of success allow them the opportunity for input. Public perception should be managed by going to them first and explaining it so that there is "buy-in" at the public level.

York Region Interviews Summary

Question #: Paraphrased Question and (with "Y" preface) responses of Labor and the Public	**Public Sector Officials and Elected Officials;**	**Consortia and Consultants**
S2-privatization if no deficits and cost cutting?	Y1: No. The public sector is not driven by the profit motive but to do a job. They are less inclined to sacrifice water quality.	Y3: Yes but not this fast. There is no fiscal crisis at the Regional and Municipal level. The fiscal situation is a catalyst only. It reflects trends in the US.
Y12: The need to provide good roads, clean water, sewage services in a highly taxed environment is the issue. Municipalities need to find the money to do it, perhaps through a more progressive tax system. Privatization is not the answer. People have forgotten the historic reasons why the private sector should not be in public infrastructure. Yes, it would still be considered if no deficit, but for other reasons. The fiscal crisis has been used by government for ideological reasons to encourage privatization.	Y2: Yes possibly in some areas where there are high levels of Research and Development done in the private sector, or where there is technical expertise. Y5: No. Y7: No. Its just a fashionable thing now, the philosophy of the day. Y8: No in the short term but yes in the long term because a required investment in infrastructure is so large, that, with continued public borrowing to fund, the municipal level will soon impair their own credit ratings if they choose to borrow in the normal fashion to make the investments.	Y4: Yes; the drivers are the need for operational efficiency, doing more with less. There is no debt at the Regional Level. They are looking at outsourcing and collapsing levels of government. Y6: No; there were different reasons operating in the UK.
Y13: No, but then again there is not much interest in it right now anyway. If governments lived within their means there would be no interest in privatization at all. Privatization is not a panacea for governments who are unable to live within their means.	Y9: Perhaps not, although there is probably no government that hasn't been involved with the private sector in respect of municipal services, such as dog catching, plowing, garbage collection and transit. It often lessens risk to involve the private sector. Y10: No, although there has been a big shift in thinking regarding the role of the private sector (for example arenas).	

Y11: No.

S5: Is Canada culturally different than UK, US and others with privatization experiences?

Y1: yes Canada is different; the level of expertise here is much better than in Southeast Asia where they are looking for someone to help. In the UK, they had a huge infrastructure deficit. We don't have the same pre-conditions and old systems. We already have, generally, full cost recovery pricing, and meters. The US is more oriented to the private sector.

Y3: Yes: the US hit the wall financially at the municipal level (e.g. Orange County, New York City) much earlier. The UK hit the wall physically, with its infrastructure deficit and bad environmental infrastructure.

Y4: Yes. Canada needs to focus on leadership rather than consensus building.

Y12: These countries are not entirely different from Canada: it's just the privatization approach is hitting us later.

Y2: Yes; they need technical expertise in the third world. The US is ahead of us.

Y5: Yes, the US for sure is different. It's the collective in Canada versus the individual in the US.

Y6: Yes, the population trusts government more in Canada. The public expects the government to have a bigger role in their lives (e.g. health care). The private sector here is slower to adopt the US.

Y13: No, there are no cultural differences with respect to a governments' ability to employ privatization. There are similar values amongst all these countries in that respect.

Y7: Yes. In the US, the private sector is more of a given than in Canada. In the UK, they are polarized.

Y8: Some are and some aren't. Australia and New Zealand and South East Asia hit the "fiscal wall" more quickly; in Canada, we still have a bit of a "cushion". In the United Kingdom, the issue was a fiscal one; the government did not have the $60 billion (Cdn) necessary to invest in infrastructure to bring it up to the required levels and so, accordingly, we are happy to dump that capital spending obligation on the private sector and let the private sector suffer the public backlash when the necessary price increases came. Now in the U.K., the efficiency gains made by the private sector in operating costs have gone into its capital program to fund the improvements and repairs.

Y9: Yes, they are culturally different. In the U.K. the water delivery structures were made of stone and were built by the Romans; some of them have 60% leakage. Canadians take things for granted. For example, we don't pay for water, just the transmission of it. We have a huge natural resource base and low population. On the other hand, we don't have the expertise in Canada.

Y10: Yes, they are different; we are so far behind the UK. I'm very impressed with what they have done in the UK.

Y11: Yes, Canada is culturally different. It is a young nation in the eyes of the world. Our residents expect government services and in many cases believe that government can do it the best.

C2: Issues facing Public Sector - Role for Private Sector?	Y1: The public sector is faced with jurisdictional changes, more onerous approvals processes. The old financing process (Debentures approved by the Ontario Municipal Board) is available, but its "on-balance sheet" financing. The private sector brings a different viewpoint, financial abilities and the ability to move financing "off-balance sheet".	Y3: These types of projects can be financed in the public sector. Its cheaper for the public to do it. However, the need is to get things done cost efficiently. The private sector has knowledge and experience. They can bring speed to the market. They have better R&D. They have the ability to manage major programs. The public sector is rule bound. The private sector is going to be involved anyway, why not bring them in early.
	Y2: Ensuring core services at reasonable cost. Ensuring cost isn't priced out of anyone's range. The other issue is maintaining standards. The private sector is on the leading edge in technology vs use of tried, tested and true technologies favored by governments. Private sector have R&D, profit seeking motive, and efficiencies.	Y4: Fiscal constraints, keeping quality stable, ensuring no cost increase, being efficient going forward. The private sector can help through a partnership (owning assets not the way to go); keep control and ownership in the public sector. Use the private sector expertise, technology, management skills, financial expertise, and ability to understand a bottom line. The value added is not necessarily lowest cost. There is faster decision making in the private sector.

Y5: There are lots of roles for the public sector to play; the steering vs rowing metaphor is apt. There is an inherent conflict between the roles of public guardian and commercial provider.

Y7: York Region is landlocked and needs to find technical and political solutions to secure long term water supply. Generally, the public sector needs expertise, private sector financing, and help given the large scale of operations. The Region has 3 water engineers on staff; North West Water has 300.

Y8: The issue facing the public sector is their ability to fund capital infrastructure requirements. There is a cushion now but ultimately limitations on borrowing won't allow them to complete 30 year improvement programs. The private sector can help in providing alternative sources of financing, helping them to maintain their credit rating by letting the municipality finance other services at a lower rate. In addition, the private sector can sell quality to the public sector through better level of service, and ideas re: providing new types of service, new technologies, eliminating fixed overhead from the municipal sector and their breadth and depth of thinking and knowledge in the area. For example, in the U.K., the largest membrane facility in the world (20 million gallons per day) has recently been installed and lessons learned.

Y6: Tax fatigue, and the mistrust of government's usage of tax dollars. The public's willingness to pay user fees. The recognition that we're not paying our own way at present; there is an infrastructure deficit. Yes there is a role for the private sector; incentives to minimize cost and be efficient. They can do things quicker, cheaper, and using alternative revenue sources, and can employ incentive systems.

Y9: The challenge of trying to appease the elected officials, civil servants and other levels of government and the public where the bottom line is not the final measuring tool is the issue facing the public sector. Service is a key factor. Private services can be provided more efficiently than the public sector since their bottom line is different. For example, the private sector can deliver just in time services whereas the public sector can't do that; we build once for 25 years (given the change in politics every few years) rather than tendering just what is needed according to one plan. Generally, the public sector can finance more cheaply than the private sector.

Y12: No definition; do not believe in public private partnerships. There is a fundamental inconsistency between the profit motive and the need to run a safe and reliable infrastructure service. Outsourcing is creeping privatization. The private sector is less accountable and more concerned about cost cutting.

Y10: The major issue is the mistake that governments have made building large organizations in the public sector (hydro). The Region of York is a large organization and they are still trying to grow it to fill out an overbuilt regional City Hall in Newmarket. The key is finding the resources to do something right. If you can find outside skill sets - use them. This municipality outsources garbage (in-house one employee - in the contractor 1200, bussing and others). We structure ourselves like the Japanese Keiretsu by developing relationships with long term business partners. Is there rules for the private sector; yes, absolutely and unequivocally.

Y13: The issues facing the public sector today are primarily a lack of regulation and monitoring. There is a very limited role for the private sector since it is difficult to control them, there are abuses by the private sector and they have limited ethics when confronted with their need to show a bottom line.

Y11: Public sector make sure that services are delivered in a uniformed fashion. There is a roll for the private sector to the extent that they can provide services for less money but one must always compare. Labour in the public sector is a problem and in addition governments have "bred out" responsibility of its employees.

C3:C4 Defining Successful Public Private Partnerships: Indicia of Success

Y1: Operating at a reasonable cost; quality production of potable water.

Y2: Getting the service to people, bringing to bear international experience, R&D, and the financial support. Indicia would be raised quality standards, no increase in price, happy client base.

Y5: A sophisticated contract that articulates the public interest and the commercial aspects of the arrangement. There are winners and losers if there is a change; need mechanisms to deal with unforeseen. Set out both process and principles. Indicia include public support, quantified outputs, vs what was expected, qualitative standards, and equity in the sense of a distribution of costs and benefits with public support. One needs to ask if there is one group that is severely disadvantaged by the arrangement.

Y3: York Region's to date is successful. It is a partnership and they are working together. They are tolerant of each others' rules and environment and pace. They got it to work. The private sector has the ability to talk to people; the ability to open doors politically. Indicia is quality infrastructure at an efficient and effective price. In the technology area, the genetic algorithm works down through parent alternatives to sub-alternatives. This ability to apply technology adds to the value equation for bringing in the private sector.

Y4: Depends on particular objectives of each party. Its not necessarily cost reduction. Shared risks and benefits.

Y7: achieving the goals of both parties. Indicia would be no relative price increase, assistance in lobbying, and a fair price/water rate for residents.

Y8: A win-win position. The public has to believe it has the right to the project, that it is cost effective and that they have taken one step up the ladder in terms of quality or efficiency. The public needs to show a "political win" and furthermore, those wins need to be quick and immediate because of the nature of politics. Politicians getting re-elected, the media presenting the arrangement favorably, and complete public transparency (York only had 2 in camera sessions). For the private sector, it means return satisfactory for that country, that their reputation has not been put at risk and that there is no exposure to extraneous risks except operating risks. It also means that the private sector can take the risk that it can best handle and the public sector takes the other risks. It also means good relationships and good chemistry.

Y6: a win-win situation. Government must feel better off. Losing bidders must be treated fairly. There must be service standards maintained. There must be risk transfer, and it must meet objectives. Indicia include lower cost (relief of taxes), speed at which project comes on stream, high service levels, and life cycle costing (cap cost/op cost tradeoff recognized).

Y12: N/A

Y13: Control, high ethical standards and a strong regulatory regime.

Y9: A good working relationship is the key. Indicators are ability to provide the service, efficiency, quality, the ability for the public to understand why the private sector is involved and the way in which the partnership addresses issues. The bottom line is important. Public perception is a factor.

Y10: Low costs, financial benefit, value for dollar, and extraordinary technical capability not otherwise available in-house. In addition, the chemistry must be good and the partner must have a proven track record.

Y11: Success would be if the partnership is better than a totally private or totally public solution. Indicators, however need to fully cost the transition costs as well as the cost of running the new partnership. For example, if the public sector has to pay off debts or lay off employees first, these should be factored in.

C5:C6 Evidence of Failure of Public Private Partnership: minimizing failure risk, maximizing success likelihood

Y1: Constant confrontation over interpretation, inability to carry on; a financial failure, the need to terminate the arrangement. Minimize by recognizing what can cause it, address it in advance together (e.g. population projections, demand risk), provide a formula for adjustments or risk sharing, and be prepared to share the risk.

Y2: No product or service to the people, price too high, driven away client base, development charges too high = no growth. Minimize through financial sensitivity analysis, monitoring public perception, assessing impact of high development charges: be equal partners in the education of the public. Manage public expectations.

Y3: Environmental problems, increases in development charges, losing control of the development charge rate. Not realizing the criteria from the RFQ and RFP (finding a supply of water that is secure and cheap). Failure if development is restricted by lack of water, or a mismatch in timing. Demand forecasting is a big risk. Management of risk a skill of the private sector. Minimize risk by getting second and third opinions on critical estimates and updating them (e.g. demand forecasts), use experience from around the world, ensure ability to finance temporary problems, ensure transparency of activities. Challenge assumptions; ask intelligent questions.

Y4: Failure would be adverse impact on reputation of the private co., and low quality. Mitigate by being conservative on projections, stage capital investments to just meet demand, accurately forecast demand, and ensure risk mitigation mechanisms in place.

Y5: Expectations may not be met. Failure may also occur if there is no measureable improvement over the public sector model. Contracting out, on the other hand, is a more realistic way of doing operational review, since it guards against atrophy. To minimize the risk, give forethought to these issues, ensure bonds and adequate security, ensure the partner is a large, well heeled company with a long term view, ensure monitoring.

Y8: Reciprocal to C4. Bring in the private partner early in the process; occasionally its more efficient to enable a private sector partner to work on creating the solution, rather than writing the solution internally and tendering the specifications. The other ways in minimizing risk of failure including having good chemistry, and make sure both parties go in believing it is a win-win situation vs. a win-don't care situation. Sometimes politicians don't like to concede any points at all for fear of criticism in the public sector. Politicians need to understand that the private sector needs to "win" a little bit too. In York, creative thinking trimmed exposures dramatically.

Y6: The project is not done; costs increase in the partnership format; inappropriate risk transfer in the agreement (the private sector is better at negotiating), the process is not handled well. Minimize by having a political champion in government, provide a framework for the RFQ and RFP and evaluative mechanisms. The public sector needs to be aware of the risk of regulatory change, and needs to have realistic expectations.

Y12: Evidence of failure would include corruption, which is more common in the private sector than the public sector, and the fact that private sector will be looking to recover profits by cutting back on benefits, wages and pensions of the workers. These are the same workers who are local people, who pay taxes, and spend that money on the community. Privatization hurts the community as a whole. The American companies would love to acquire monopolies in water service in Ontario; the are not here to provide the public service. Don't believe in public/private partnerships at all.

Y13: Evidence of failure would be bureaucracy, no public consultation or appeasement; or showing the public alternatives that are a fait accompli. Also, not looking at historical precedent is evidence of failure. Risk of failure could be minimized by giving consumers control since they are the end user. Governments need to be sure there are no private sector "hands in the till".

Y9: Lack of public support, lack of public confidence or if the only factor is the bottom line. Having a good working relationship, knowing your partner, avoiding in a case like this simply tendering to get the lowest price; the key is the "partnership" itself. The partners must trust each other. In York's case, there is only a letter of intent for all the work done up to the decision to proceed with the selected route. If a traditional route had been followed involving lawyers, we would be no further ahead.

Y10: You must keep requalifying the relationship by insisting on continued high quality and delivery. The public sector needs to be a policeman for the protection of the public interest throughout the contract. Your partner cannot be a friend; they are working for you. Politicians need to avoid taking political donations from potential suppliers or existing suppliers to a given municipality. This is a major problem to the political system.

Y11: Failure is obvious if there is public opposition to the project and if the public sector is not there to manage the private sector partner. You can minimize risk by auditing performance and making sure the agreement is written so that either party has remedies in the case of the other's default. You must make sure that your clients (the public) are satisfied.

	Y7: Failure would be constituted by no viable, timely solutions to the infrastructure problem, in a context where the municipality needs to provide for a growing population; not meeting objectives, no viable return to private partner, no chemistry: mitigate by getting a political buy in, be cautious on the scale of the privatization, no sale of assets, no BOOT approach	
C7: Strengths of Government: Weaknesses	Y1: Government has experience in hiring and managing consultants when it doesn't have the in-house expertise. If government is in good financial shape, it can borrow at a lower rate. Government is experienced. They already regularly outsource design and construction. They are neither strong nor weak in operations.	Y3: Government is good at protecting the public interest, regulating quality, price, communicating with the public, ensuring fairness in process, and in financing, given good credit ratings. They are not good at getting major projects done, planned and completed in a short time span. In the public sector, there are no decision shortcuts available, they have to tender. They don't factor in inflation.

Y2: Strengths are that York's credit rating is very good, there have been good response to debenture issues, public can borrow cheaper, and interest rate spreads are very small. In operations, the public has an advantage since there is no tax on revenues. Owners are paying income tax, GST, recapture. The weaknesses are that governments are not on the leading edge of R&D, tend to stick with tried, tested and true technologies. Often political games are played to make accommodations and get approvals. Another weakness is the existence of and influence of special interest groups.

Y5: Government is strong in finance; York's ratings are excellent. Government balances a broad set of interests; cost, quality, equity, environmental, as well as the bottom line. On the other hand, government is slow to take up technology and has no strong customer service ethic. Government is not nimble enough.

Y7: Strengths are stable financeability (Region is risk averse, can raise funds cheaply), experience in design, ability to oversee public tendering, ability to operate with stable workforce, and reasonable management practices. Taxpayers should own the assets.

Y4: Government can finance at lower cost (Hwy 407). For design, construction and operations third parties are already doing it for governments. The private sector is more efficient. The public wants government to maintain ownership and control quality standards.

Y6: The strengths of government include lower coupon debt, they understand their systems better (local knowledge), they understand their political needs, they understand their neighboring regions better than the private sector. The weaknesses are that they use their low cost rating regardless of the risk of the project, there are no incentive systems to keep costs to a minimum, no employee incentives, no freedom to expand revenue opportunities, no environmental assessment flexibility.

Y8: Government in strong in accountability, their financial backing and tax raising abilities. The existence of staff demonstrates accountability to the populist and that staff takes a high degree of responsibility for service provision. In addition, given their broad budgets and tax base, government has the ability to absorb day to day fluctuation in business activities since they can self-ensure and "write a cheque". This provides a cushion to the public. On the other hand, their staff typically aren't highly motivated and their budgeting processes and staff arrangements are not cost effective.

Y9: Governments are good at providing services that private sectors can't provide. For example, transit is paid for and subsidized through taxes. Recreational services are subsidized through taxes. The public has the opportunity for input and share the costs. Governments are also good at bringing together groups and individuals and coordinating between them. Governments are good at owing public services and financing. The weaknesses of government are that they are bound by rules and don't need to take risk. Government cannot spend $1 million to save $10 million where the private sector would this in a minute. The public won't gamble at all. In addition, looking at the bottom line efficiency is not the public's mandate.

Y12: Government is accountable because of the elective officials. Ontario has very good public services, including roads, parks, libraries, and public pools. The weakness of governments is that occasionally it defers maintenance when its funds are scarce. But this weakness is not necessarily solved by a private sector intervention since the private sector is just as prone to defer maintenance.

Y10: Failing to meet benchmarks or certain reference points. Requalifying the relationship all the time is important and making sure you put the risks on the table up-front and don't deal with half truths only. Governments only have a certain level of confidence and often they're incompetent. There is too many low performing people. Government is strong in future planning in terms of the sense of knowing where to go and how to get there. Governments are also good at financing (for example, Hwy 407 where the government decided to finance it). As a weakness, the government tends to overprotect and overdesign (for example, the York Regional municipal building).

Y13: They are good in controlling services, planning, environmental, transportation matters and indeed, anything that is cross-jurisdictional. On the other hand, governments are often parochial and they don't talk to one another. The weaknesses of government are they are not equipped to look at the big picture and they are too management heavy.

Y11: The strengths of government is providing a service to all at the same cost without discrimination. The weaknesses are that labour costs are high and that staff in government tends to become stagnant because they are not moved around often enough. It is important to get a fresh view.

C8: Strengths of the Private Sector: Weaknesses

Y1: Strengths are less regulation, less accountability (can negotiate with suppliers and squeeze pricing), they have an edge in operations since lack of bureaucracy, protocols. Decision making is slow in the public sector, but there are large bureaucracies in the private sector too. Its costlier to raise money in the private sector. The private sector has to pay tax, GST, PST, property tax.

Y3: Private sector good at speed, cost control, creativity re revenues (pricing), economic analysis (inflation and present value analysis taken into account). The private sector is bad at understanding accounting differences in the public sector, understanding an environment with no profit motive. They are accused of increasing prices, profit taking, but those can be managed by tying profit to cost savings, for example.

Y2: Strengths are that they can take tax writeoffs (capital cost allowance) to counteract the public interest rate advantage. They can acquire investors and generally have more flexibility. The weaknesses are that they are not socially accountable.

Y4: The antithesis of C7. The private sector is better at operations.

Y5: Private sector strong in design, construction, operation (if no union). Sometimes someone else is what's wanted. Private sector is faster, but public sector has experience and local knowledge. The TTC gets competitive benchmarks, but competition would reduce rates.

Y6: The strengths are that the private sector companies are "in the business"; they can find solutions to problems, they have broad experience, can act with speed. The weaknesses are that they are short term oriented, have a limited understanding of the public sector, and often miss what's important. Another weakness is liability for taxes.

Y7: The private sector is good at construction (they can "beat up" the low tender to get a lower price). They are experienced in operations. Because of development charges, the private sector can't own the assets.

Y8: The weaknesses are that they must satisfy shareholders and provide reasonable dividends and that they are highly focused. Their strengths in design, construction and operation are clear. Ownership is not necessary for the private sector.

Y9: Opposite of C7. The private sector is weak at ownership of public services: they are oriented toward different purposes and they are not as good at getting financing as the public sector.

Y12: Strength of the private sector are speed at which they can make decisions and act, their ability to take risks and their ability to solve problems creatively. Their weakness is the profit motive, which often contradicts the public interest, and their tendency to try to end up with the monopoly. They are not necessarily good at managing for efficiency; some are and some aren't.

Y10: The private sector has as a strength a sense of mission and urgency and they the momentum going. They have expertise and the ability to apply it. They bring financial benefits and quality to a project. I have tremendous respect for them. As weaknesses, they tend to want you to buy what they are selling as opposed to what you need.

Y13: The private sector is good at being efficient. They are not good at controlling or owning essential services and anything involving the environment, planning, and water.

Y11: The strengths of the private sector is their professionalism. The weaknesses of the private sector are that they may take advantage of the economy and the real costs of outsourcing may not be fully added in. In addition, they can go broke. Furthermore, the private sector may discriminate against the public by, for example, dropping service for unprofitable routes or areas.

C9: Risks of Involving the Private Sector from Public Sector Point of View

Y1: Companies and partnerships change and evolve; the partner may get weaker. They may go out of business.

Y3: Fear of being out-negotiated by the private sector. Need to protect the public. Fear that they will be taken advantage of.

Y2: Risks are the track record, the willingness of the private sector to assume risk, longevity, guarantee of performance, and finding the balance between control and risk, control and reward.

Y4: Risk of overdesign by the private sector if compensated by a % of capital expenditures. Union reaction to labour changes in operations. Tax issue if ownership involved.

Y5: The public sector needs a good contract. The risk is that they'll do a bad job of protecting the public interest.

Y6: Political risk to elected officials that ratepayers will regard it as a poor deal.

Y7: Low risk if structured properly. Municipalities don't want to take the risk on, e.g. population growth. Also finance risk and external risks.

Y8: Risk of delivery of the project within budgets, political risk, the feeling that the private sector is a shark and will feed off whatever it can in the public sector, or that the private sector partner will squeeze whatever dollar savings there are out of the project and it will ultimately become more expansive.

Y12: The risks are the NAFTA risks, because once you let an American company in, you can't take away their business without giving them compensation under NAFTA. Accordingly, the "reversibility" of the commitments is at issue. The other risks are corruption, the use of faulty or poor materials in construction, and poor design, and environmental concerns.

Y9: The risks are the public perception and the lack of knowledge that it might be a "sell out". The public just doesn't read the detailed materials. Often the media put a negative spin on events to create interest and/or controversy. There are risks in many partnership and you must share the risks and benefits and go back to the beginning relationship.

Y13: The risks and uncertainties are loss of control. However, politics is merely the manipulation of apathy anyway and so politicians do not represent the public anyway.

Y11: The risk to the public are that the contractor goes under and that the public is left fighting with insurers to get the job completed. There could also be embarrassment and public outcry.
Y10: fear and mistrust; picking the wrong partner; mitigate by doing due diligence, and hiring an independent consultant

C10: Mitigating or Minimizing C9

Y1: Define change in the agreements, and when its cause to terminate the agreement. Governments can't overload risk onto the private sector. The public sector needs to be fair with them, as to rates and development charges. Both sides must be willing to bear risk to keep it viable.

Y3: Be careful about choosing a partner; ensure integrity. Structure day to day workings with equal representation. 3 c's: Comfort, Competence, Capability.

Y4: Have the public retain control, ensuring transparency, reward the private sector on a cost savings basis, set clear standards, ensure proper governance within the partnership.

Y2: Minimize by a good agreement, getting a "buy in" by the public at large, get everything on the table up front with the public.

Y6: Ensure good communications with ratepayers; by open houses, polling, newspaper articles and advertisements, and ensuring an open process.

Y12: With respect to design and construction, public inspection would be one way to mitigate. However, the current government is cutting back on public inspectors and inspections and weakening the regulatory environment, such are through environmental regulation. We are losing our ability to regulate as we are losing inspectors. Standards, and the ability to set standards are being turned over to the private sector. This is a highly risky approach.

Y5: need a good contract that protects the public sector from, for example, not delivering the project on time.

Y7: Ensure you have internal expertise. York hired a management consultant to oversee the process, and an independent financial advisor.

Y8: Choose the right partner with a track record, getting financial information and talk to their other clients. Match the partner to the deal (i.e. big partner for big project, little partner for little project). In addition, the partner skill sets must match what you need.

Y9: Ensuring the public perception is positive.

Y10: The fear and mistrust between the parties or by the public sector towards the private sector, and the risk of picking the wrong partner.

Y11: Proper supervision and a good contract can mitigate these risks.

Y13: They could talk to the public and be honest with the public as to the choice of possible plans.

C11: Risks to the Private Sector in being involved in Public Infrastructure projects

Y1: Political risk; the collective will of 19 councillors - change in makeup of the political body. The Private sector need to tie the Region up with a good contract that the next council can't tear up.

Y2: Political risk: changing views and philosophies. Getting a good agreement. Changing makeup of the community and the private sector partner ends up losing money.

Y3: The risk of being caught in power seeking mechanisms. Senior staff have power and want to keep it and their jobs. They have pride in their work; they can skew the result since they are extremely risk averse; negotiations become lawyer intensive. Private sector may not understand how municipalities work. Political risk - elected officials need to show wins.

Y5: The big risk is getting all the approvals. The private sector risks not being a full partner; i.e. the deal has dictated the structure and that is not what the private sector wanted as a model. Another risk is the need to better the Metro deal (e.g. get a 10 to 20% reduction in cost), lower capital costs.

Y4: Damage to the private sector company's reputation. Political risk; people can change their minds. The financial sector likes a regulated environment, but with risk (i.e. rates of return are allowed). Demand risk is another big risk area.

Y12: The private sector will initially underbid a public project and carry it on for a few years before they try to make it back. There is a risk to the private sector in taking on unionized employees; the private sector would try to avoid the unions. They will try to claw back from workers any loss profits through a rollback of wages, benefits and pensions.

Y13: Taking flack from the public and regulatory control. They can mitigate those risks by being up-front with the consumer.

Y8: Political risk, the risk of changing governments, whim, or politicians falling to the wishes of a noisy minority. Politicians are usually difficult to educate and there is typically high political turnover every election. Other risks include regulatory risk (shifting goal post) which the private sector would typically insist that the public sector take. Standards are basically the same in France, the U.K. and in North America. In Ontario, with smaller governments, the level of power is quite high; there is no overall regulator. Consequently, the framework is much more unstable. Long term projects are often controlled by politicians with short term orientations.

Y6: The risk of a high profile failure. The risk of tainting the market for this sort of thing. The risk of negotiating a poor deal that they are stuck with for 25 to 35 years.

	Y10: The bid risk is a big risk for the private sector; doing a lot of work and not getting paid. Y9: Political risk: governments change, and you are dealing with 2, potentially 3 levels of government. The other risk is risk to shareholders; they may not be happy to cross subsidize a regulated industry; risk of corporate takeover Y11: Loss of reputation. Y7: Social and Public policy changes, political risk. You need to go slow and build momentum	
C12: Impacts on York Process	Y1: To minimize political risk, a tight time frame has been put on the process. Financial credibility was a high ranking factor in the RFQ. The decision to set the partnership structure after the selection of the preferred alternative leaves the Region's options open.	Y3: The Region has handled it well to date.
	Y2: The RFQ has been non-committal in terms of the terms or existence of a final agreement. Y5: There is a conflict between water rates and the development charges as funding sources; between short term benefit and long term benefit. In York the consortia and the Region are deep into organizational models. There is new technology risk. Y7: Both parties have been cautious.	Y4: Manifests itself in cautious approach by Region. A comfort level with each other is being developed. They are not rushing to create the deal. It's a 35 year requirement, but they can "buy" 7 more years breathing space by using water demand management techniques. Y6: Its too early to say. Interests are aligned to date.
Y12: Outsourcing is a cloaked privatization and we may not fully understand the risks involved for ten years.	Y8: Cautious approach taken by York and the consortia.	

Y13: There is nothing wrong with a public monopoly; if it is a good monopoly providing an essential service at a good price, why create a role for the private sector in it?

Y9: The understanding of the risk for both parties has acted as a positive lever since both parties recognize the risk and dealt with it. Each party must be prepared to look out for the party's risk and must understand them.

Y10: We pick what we believe to be the strongest contender to be our partner and work hard at developing the relationship.

Y11: The parties have worked hard to develop a good relationship and at the present time they are complimenting each other. The personal relationship is key to the success in York Region.

C13: Importance, measurability and managing public perception of qualitative outcomes.

Y1: The public may believe that there is a difference if a private operator delivers water, that quality was sacrificed to get a lower cost. Performance guarantees need to be put into words. The public would be more demanding of a private operator.

Y3: Public perception started to improve once the private sector got on board. Perception is reality.

Y2: Its at the top of the list. Quality of water was a primary motivator. Ground water is finite source. Need to give the private sector good data and standards to measure up to. Qualitative standards are easy to measure. There is a price/quality tradeoff.

Y4: Its crucial, since an environmental assessment process is required. This put more weight on secondary water sources in York.

Y5: Qualitative outcomes are very important for councillors. The intangibles, such as reliability of supply, quality of water, taste and odor are critical. Perceptions differ. The private sector will have more to live up to. It's a catch -22.

Y6: Its critical. York needs a good project at a fair price. The level of service delivery has to be better than government. Quality is judged at the tap, by the consumer.

Y7: Qualitative issues are very important. In testing, North West Water are much more stringent than we are; they have labs and are miles ahead of Canada. With OCWA, you never know what you're getting.

Y12: The qualitative outcomes are very important but we need to know who is monitoring it, given fewer inspectors and loss of regulatory control. We have forgotten history in dealing with these issues.

Y8: It is easy to asses the qualitative outcomes of water privatization and easy to monitor pressure, quantity and water quality. It is easier to manage public perception of the qualitative outcomes if costs have come down.

Y13: The qualitative outcomes are extremely important but unless the private sector can improve them, why bother with privatization. It is easy to assess qualitative outcomes through testing by independent labs. To manage public perception of them, must keep in contact with the public and be honest with them.

Y9: The importance of qualitative outcomes is huge. Water is easy to measure in terms of quality and volume. Managing public perception of the qualitative outcomes is always a problem and there is no easy answer. If there is a problem, governments look to blame someone else.

Y10: Qualitative outcomes are very important. I am concerned that the private sector has co-opted some or our staff.

Y11: Qualitative outcomes are critical since the users are the first to complain.

Schedule "D"
Interview Questions

Core

1. Please tell me about yourself and your background including professional background, education and particular interests relevant to this study.

2. What are the issues facing the public sector today in providing infrastructure and public services and is there a role for the private sector in assisting with respect to those problems? If so, how?

3. How would you define a successful public -private partnership with respect to public infrastructure?

4. What would the various indicia of success be? Is this achievable?

5. What would evidence of failure in the public-private partnership with respect to public infrastructure comprise?

6. How can the risk of this failure or uncertainty surrounding the project be minimized? How can the likelihood of success be maximized?

7. What do you believe to be the strengths of government with respect to the provision of public infrastructure? The weaknesses? By function (finance, design, construction, operation, ownership)?

8. What do you believe to be the strengths of the private sector in assisting with the provision of public infrastructure? The weaknesses? By function (finance, design, construction, operation, ownership)?

9. What are the risks and uncertainties to the public sector associated with involving the private sector somehow in a public infrastructure project? By function (finance, design, construction, operation, ownership? How do you measure those risks and uncertainties?

10. What steps could the public sector take to mitigate or minimize the potential impact of those risks and uncertainties?

11. What are the risks to the private sector in being involved in public infrastructure projects? What steps could the private sector take to mitigate or minimize the potential, impact of those risks?

12. How has that impacted this privatization initiative, if at all?

13. How important are the qualitative outcomes of infrastructure privatization? How easy is it to assess those qualitative outcomes? How easy is it to manage public perception of the qualitative outcomes?

Supplementary

1. If there was not so much of a fiscal crisis caused by high deficits at the provincial and federal levels, do you believe there would still be the same level of interest in public infrastructure privatization as there is today?

2. There has been a considerable experience with privatization both in Australia, New Zealand, South East Asia, the United Kingdom, and the United States. Do you believe these countries to be culturally different than Canada in respect of infrastructure privatization? If so, how?

Schedule "E"
Press Coverage: York Region September 1996 to April 1997

December 14, 1996, "Secret vote on water Thursday", The Newmarket Era-Banner.

December 14, 1996, "Region to decide where to get its water supply", The Newmarket Era-Banner.

December 22, 1996, "Residents will get water from Lake Ontario", The Newmarket Era-Banner.

December 26, 1996, "Lake Ontario chosen as Regions's water source", The Weekly.

December 27, 1996, "York urged to push giant water pipeline", The Toronto Star.

"Cost shouldn't control quality of water supply", The Newmarket Era-Banner.

January 9, 1997, "Water Supply deal for York pleases mayor", The Toronto Star.

January 9, 1997, "Region reform on York agenda", The Toronto Star.

January 12, 1997, "Mayor on right track re: Simcoe water", Advocate.

January 12, 1997, "New Water Supply Plan for York Region - Treatment Facility Targeted for Willow Beach in 2015", Advocate.

"Region copes with change", The Toronto Star.

January 16, 1997, "Farrow looks forward to planning GTA board", The Toronto Star.

March 15, 1997, "Region on trail of solution to long-term water supply problem", The Newmarket Era-Banner.

"Region drops water partner", The Newmarket Era-Banner.

March 20, 1997, "Money tap on for water consortium", The Toronto Star.

March 23, 1997, "Where did region find $1 million?", The Newmarket Era-Banner.

March 26, 1997, "Tapping into our future water supply", Economist & Sun.

April 5, 1997, "Privatization of water leads to complaints", The Newmarket Era-Banner.

April 8, 1997, "Region got solid value for $1-million investment", The Newmarket Era-Banner.

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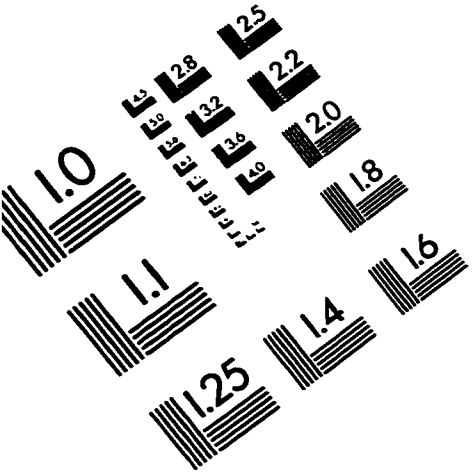
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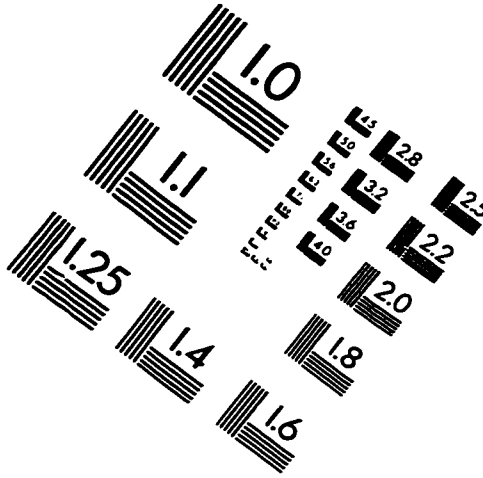
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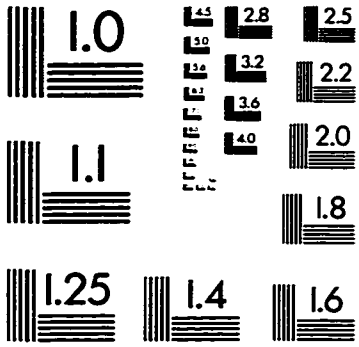
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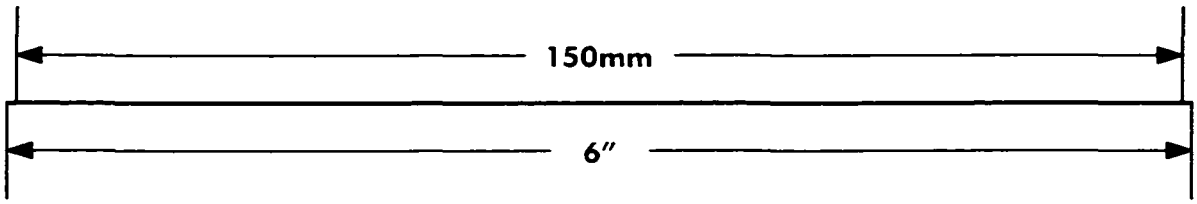
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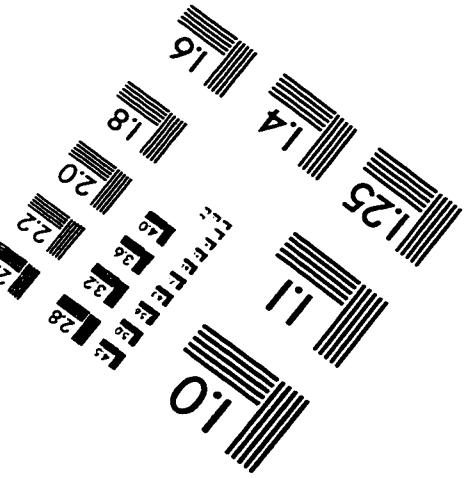
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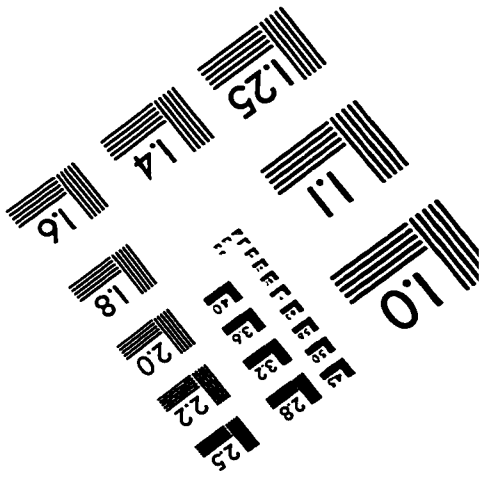












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