

City of Barrie

**Corporate Asset Management Strategy
Asset Management Plan
Appendix D: Facilities**

**Note that this appendix is part of the
Whole of Government Asset Management Plan for the City of Barrie**

November 2011

Final

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1. Introduction

1.1 Content of this Asset Management Plan

This document forms Appendix D of the City of Barrie's Asset Management Plan (AM Plan) and addresses the City's Facilities assets only. Assets included in this AM Plan are:

- General facilities (e.g., corporate)
- Protection facilities (i.e., fire, police, POA)
- Transportation facilities
- Environmental Services facilities
- Recreation and Culture facilities.

The body of the AM Plan details the approach and methodology taken in determining the framework for the AM Plan and discusses results at the corporate level. Each Appendix to the main report describes specific results from a study of each asset service area including Environmental (Appendix A), Transportation (Appendix B), Recreation and Culture (Appendix C), Facilities (Appendix D), and Fleet (Appendix E).

1.2 Purpose of this Asset Management Plan

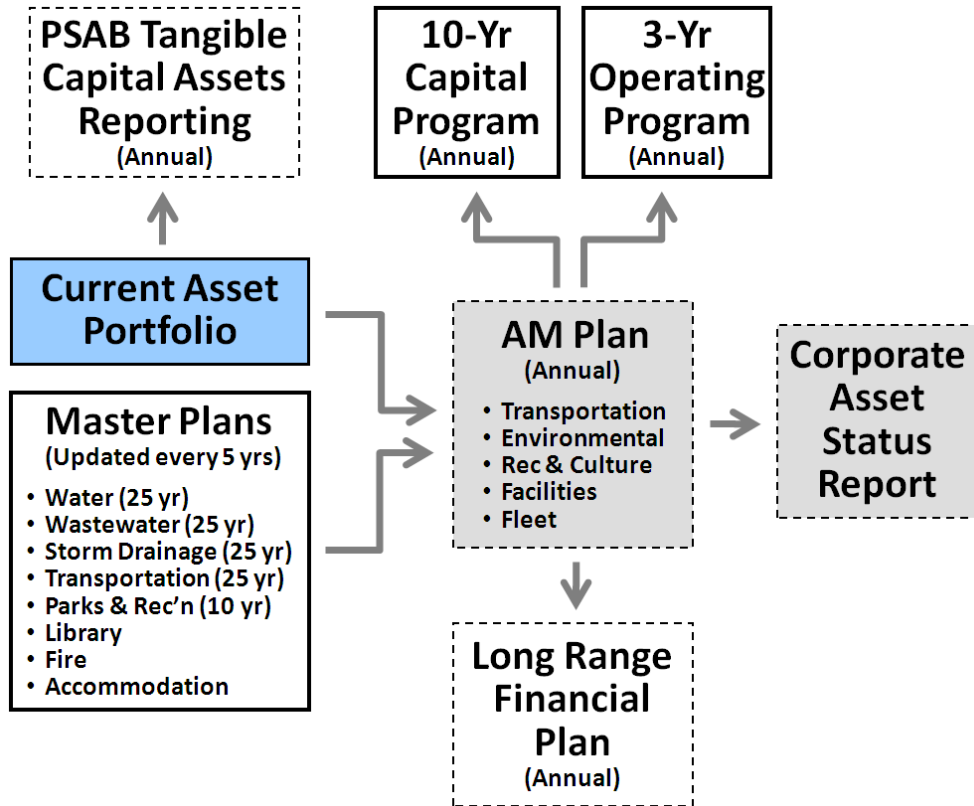
This AM Plan is intended to improve the City of Barrie's ability to achieve its corporate goals and objectives in a way that best services its customers. It provides a rational framework that enables systematic and repeatable processes to manage costs, risks and levels of service for the City's asset portfolio. The AM Plan identifies expected future costs and assists in predicting future barriers to efficient and effective service delivery. With this understanding, the City's asset managers and operators will be better equipped to remove physical, financial and political barriers before they negatively impact customer levels of service.

This is the second set of AM Plans for the City of Barrie. Additional data has been amended to the original set of plans which improves the confidence in the results. It is intended that the continual improvement of asset management practices within the City of Barrie will result in further updates to this document. As such, this AM Plan is a living document that will require ongoing refinement to reflect the evolution of asset management maturity within the City of Barrie over time.

1.3 Relationship to Other City Documents/Outputs

The relationship of this AM Plan to other City Documents and planning outputs is illustrated in the figure below. The AM Plan is the base framework (tool) to assist the City in developing appropriate direction and inputs to budget forecasts, master plans, and associated studies/outputs.

Figure 1-1 AM Plan Relationship to other City Documents



2. Asset Portfolio

2.1 Overview of Facilities Service Delivery

The Community Operations Division delivers physical operations and services including Operations, Leisure, Transit and Facilities, Emergency Planning and Fire and Emergency Services. The Leisure, Transit and Facilities Department, within the Community Operations Division, is responsible for:

- Corporate facilities maintenance and operations
- Community facility management (bookings, programming, staffing)
- Development, administration and marketing of community recreation programs
- Special events programming and delivery of community events
- Cultural studies, initiatives, programming and delivery
- Transit operations (route planning, bus stops, shelters, fee structure, service delivery)
- Accessible Community Transportation Services (BACTS) operations
- Transit Terminal operations.

2.2 Hierarchy of Assets

Asset information is needed to support decision-making. The asset hierarchy provides the framework for segmenting the City asset portfolio into appropriate classifications and describing the linkages. Due to the complexity of facility assets, the asset hierarchy for facilities has been categorized in two ways. These are:

- A **Facility Level Hierarchy** that organizes the City's facility by service area and service function
- A **Program Area Hierarchy** that organizes the assets within a facility by building element function.

Separating the hierarchy into these two categories enables planning, reporting and forecasting of facilities at a detailed component level. The level to which any one facility is disaggregated into program area elements varies depending on the complexity of the facility. The program area and facility level asset hierarchies shown below.

Table 2-1 Program Area Asset Hierarchy – Facility Services

Level 0 Simple Facilities	Level 1 Minor Facilities	Level 2 Major Facilities
Whole Facility	1 Site	1.1 Decommissioning
		1.2 Hardscape
		1.3 Landscape
		1.4 Site Furnishings
		1.5 Site Electrical
		1.6 Site Services
	2 Structure	2.1 Footings & Foundations
		2.2 Structural Steel
	3 Building Envelope	3.1 Air Vapour Barrier & Waterproofing
		3.2 Exterior Cladding
		3.3 Windows & Doors
		3.4 Roofing
	4 Occupied Space	4.1 Pools
		4.2 Arenas
		4.3 Interior Doors, Glass & Glazing
		4.4 Partitions
		4.5 Millwork
		4.6 Painting & Finishes
		4.7 Flooring
		4.8 Furnishings
	5 Building Services	5.1 Electrical
5.2 Mechanical		
5.3 HVAC		
5.4 Building Automation & Controls		
5.5 Security		
5.6 Voice & Data Comms & Audio Visual		
5.7 Refrigeration & Specialized Equipment		

Table 2-2 Facility Level Asset Hierarchy – Facility Services

Level 1 Service Area	Level 2 Service	Level 3 Facility ID	Facility Description	Level
Environmental	Waste Management	ENVC	Environmental Centre	L2
Environmental	Wastewater	SWTP	Surface Water Treatment Plant	L2
Environmental	Wastewater	WPCC	Water Pollution Control Centre	L2
General	Corporate	CH	City Hall	L2
General	Corporate	MUL56	56 Mulcaster (Purchasing Dept.)	L1
General	Other	ATS	Allendale Train Station	L2
General	Other	MAB	Foodland Market Bldg	L1
General	Other	ORORES	Oro Residential Properties	L1
General	Other	PAR	Parkade	L2
General	Other	PUG1	1 Puget St	L1
General	Other	VIC72	72 Victoria	L1
General	Other	WIL	Wilcox House	L1
Protection	Fire	BFES1	Fire Station #1	L2
Protection	Fire	BFES2	Fire Station #2	L2
Protection	Fire	BFES3	Fire Station #3	L2
Protection	Fire	BFES4	Fire Station #4	L2
Protection	Fire	BFHQ	Fire Headquarters	L2
Protection	POA	POAB	POA Barrie (45 Cedar Pte) LH Impr'ts	L1
Protection	POA	POAO	POA Orillia (575 West St.S) LH Impr'ts	L1
Protection	Police	BPSBELL60	Police – 60 Bell Farm Rd (LH Impr'ts)	L1
Protection	Police	BPSBELL79	Police - 79 Bell Farm Rd	L1
Protection	Police	BPSSPERL	Police – Sperling	L2
Recreation & Culture	Culture & Other	DTT	Downtown Theatre	L2
Recreation & Culture	Culture & Other	LIB	Library	L2
Recreation & Culture	Culture & Other	LIBP	Painswick Library	L2
Recreation & Culture	Culture & Other	MAC	MacLaren Art Centre	L2
Recreation & Culture	Culture & Other	MUL	Armoury Building	L1
Recreation & Culture	Parks	CONCEN	Centennial Beach Concession	L1
Recreation & Culture	Parks	CONQUE	Queens Park Concession	L1
Recreation & Culture	Parks	DKBAY	Bayfield Dock	L0
Recreation & Culture	Parks	DKHER	Heritage Park Docking	L0
Recreation & Culture	Parks	DKTIF	Tiffin Boat Launch	L0
Recreation & Culture	Parks	DKTOL	Tollendale Dock	L0
Recreation & Culture	Parks	PPALL	Allendale Sta. Park Pavilion	L0
Recreation & Culture	Parks	PPARB	Aboretum Pavilion	L0
Recreation & Culture	Parks	PPBAY	Bayview Pavilion	L0
Recreation & Culture	Parks	PPBSP	Barrie Sports Park Park Pavilion	L0
Recreation & Culture	Parks	PPCEN	Centennial Beach Pavilion	L0
Recreation & Culture	Parks	PPGAB	Gables Park Pavilion	L0
Recreation & Culture	Parks	PPHER	Heritage Park Pavilion	L0
Recreation & Culture	Parks	PPSTV	St. Vincent Park Pavilion	L0
Recreation & Culture	Parks	PPTCT	Trans Canadian Trail Board	L0
Recreation & Culture	Parks	PPTYN	Tyndale Park Pavilion	L0
Recreation & Culture	Parks	PWCEN	Centennial Beach Washrooms	L2

Level 1 Service Area	Level 2 Service	Level 3 Facility ID	Facility Description	Level
Recreation & Culture	Parks	PWHER	Heritage Park Washroom	L1
Recreation & Culture	Parks	PWJOHN	Johnson Beach Washroom	L1
Recreation & Culture	Parks	PWMIN	Minet's Point Washroom	L1
Recreation & Culture	Parks	PWQUE	Queens Park Washroom	L1
Recreation & Culture	Parks	PWSTV	St. Vincent Park Washroom	L0
Recreation & Culture	Parks	PWTYN	Tyndale Park Washroom	L0
Recreation & Culture	Parks	SPHER	Heritage Park Splash Pad	L0
Recreation & Culture	Parks	TENQUE	Queens Park Tennis Building	L1
Recreation & Culture	Recreation	ARC	Allendale Recreation Centre	L2
Recreation & Culture	Recreation	BCSC	Barrie Sports Complex	L2
Recreation & Culture	Recreation	BMC	Barrie Molson Centre	L2
Recreation & Culture	Recreation	BSD	Barrie Sports Dome	L1
Recreation & Culture	Recreation	CC	Circle at the Centre	L1
Recreation & Culture	Recreation	DPC	Dorian Parker Centre	L2
Recreation & Culture	Recreation	EA	Eastview Arena	L2
Recreation & Culture	Recreation	EBCC	East Bayfield Centre	L2
Recreation & Culture	Recreation	HCC	Holly Community Centre	L2
Recreation & Culture	Recreation	LLCC	Lampman Community Centre	L2
Recreation & Culture	Recreation	MAR	Marina	L2
Recreation & Culture	Recreation	MYPC	Maple Young Peoples Centre	L1
Recreation & Culture	Recreation	PCC	Parkview Centre	L2
Recreation & Culture	Recreation	SSCC	Southshore Centre	L2
Recreation & Culture	Recreation	VV	Victoria Village (LH Impr'ts)	L1
Transportation	Roads	OPS	Operations Centre	L2
Transportation	Transit	TOPS	Transit Operations & Mtce Facility	L2
Transportation	Transit	TT	Transit Terminal	L2

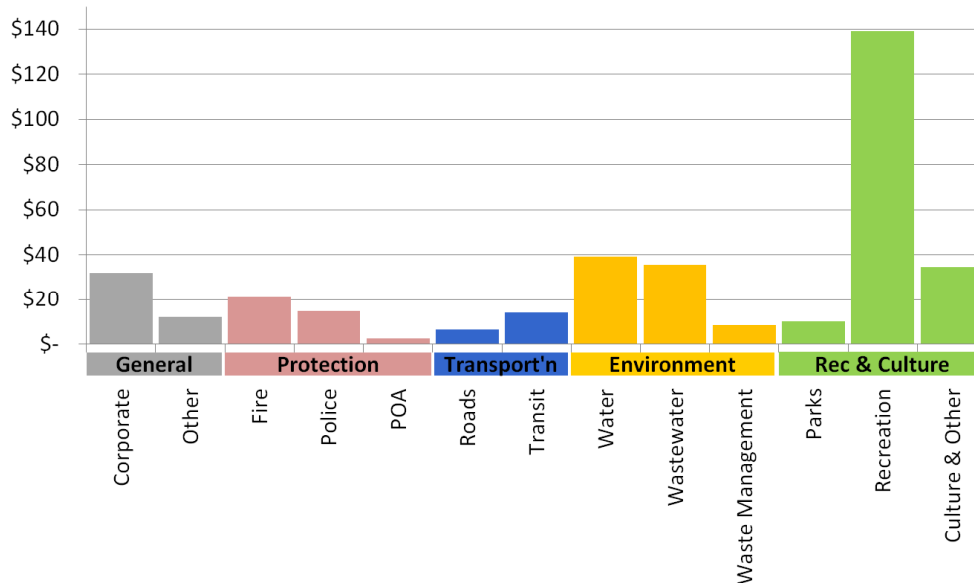
Notes:

- The environmental service area facilities consist of only the site works, structure, building envelope, occupied space, and building services associated with the building. The process piping, structural, mechanical, electrical, instrumentation, etc. are included in the environmental services asset register.
- The following facilities are leased, maintained and renewed by the City (as indicated by LH Impr'ts – Leasehold Improvements):
 - POA Barrie – 45 Cedar Pointe Road
 - POA Orillia – 575 West Street South
 - Police – 60 Bell Farm Road
 - Victoria Village

2.3 Replacement Cost of Asset Inventory

To focus needs for investments, it is helpful to understand the number of assets and replacement value of assets against the hierarchy. The following figure outlines the replacement value of the City's transportation asset portfolio, in 2011\$.

Figure 2-1 Recreation & Culture (Parks) Assets Costs, 2011\$



2.4 Installation Profile of Assets

To assist the City with future funding needs analysis, it is helpful to understand the installation profile of the asset profile portfolio. The following graphs show the replacement value of the assets by year of installation, in 2011\$.

The story these graphs tell is that the majority of City assets were installed between 1980 and 2005. Within this timeframe, the graphs show two main periods of growth, at which a significant number and value of assets were installed. The first being in the mid to late 1980's, and the second being from 1995 to 2005.

Figure 2-2 Asset Installation Profile – Facilities (Total)

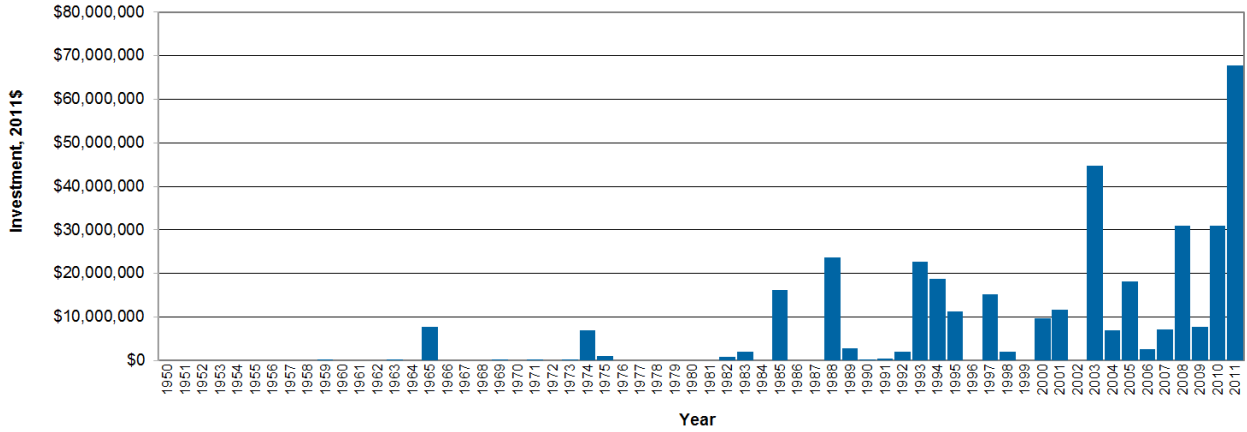


Figure 2-3 Asset Installation Profile – General – Corporate

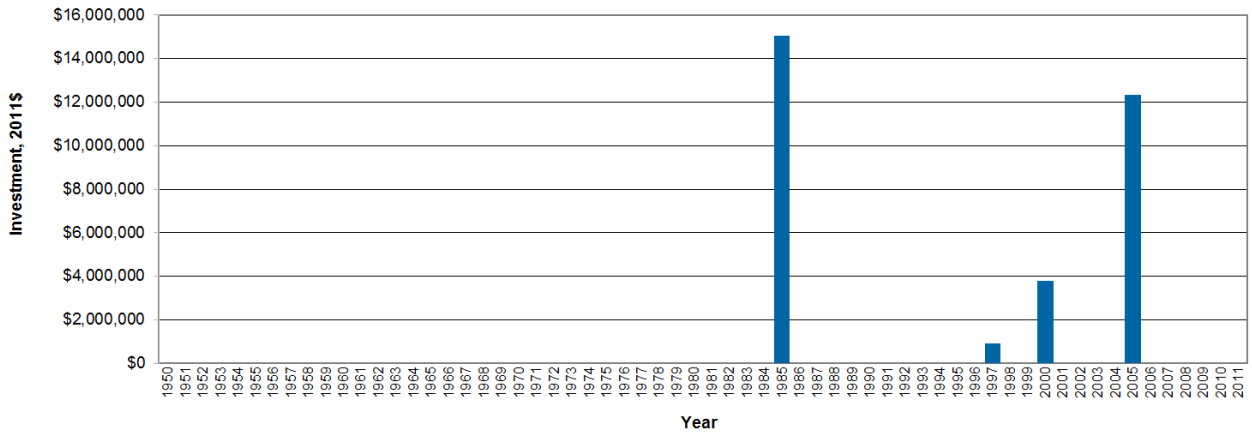


Figure 2-4 Asset Installation Profile – General – Other

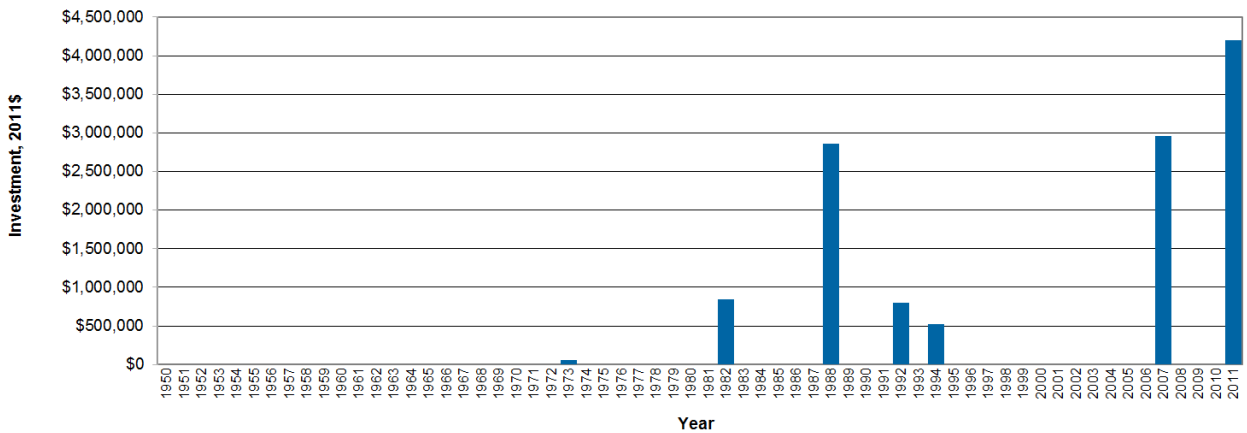


Figure 2-5 Asset Installation Profile – Protection – Fire

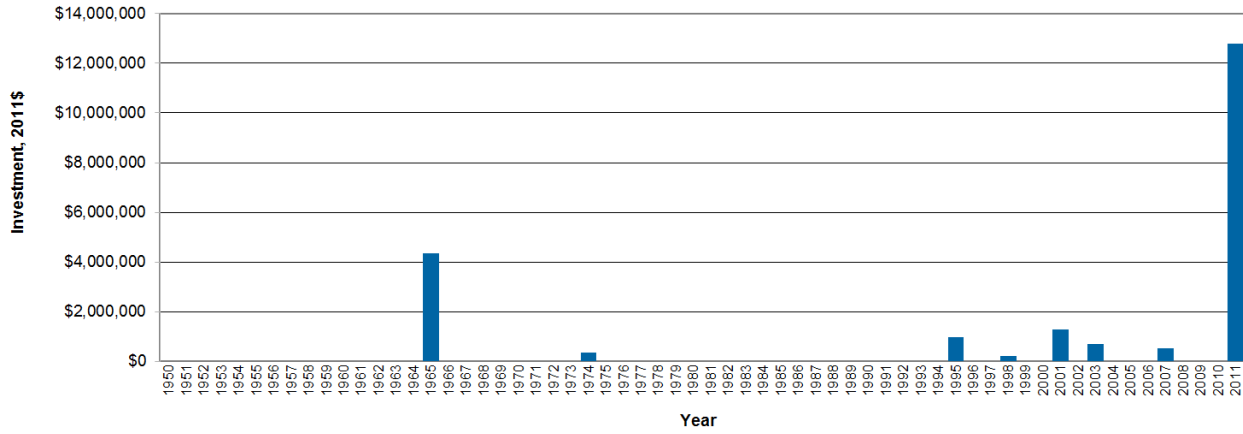


Figure 2-6 Asset Installation Profile – Protection – Police

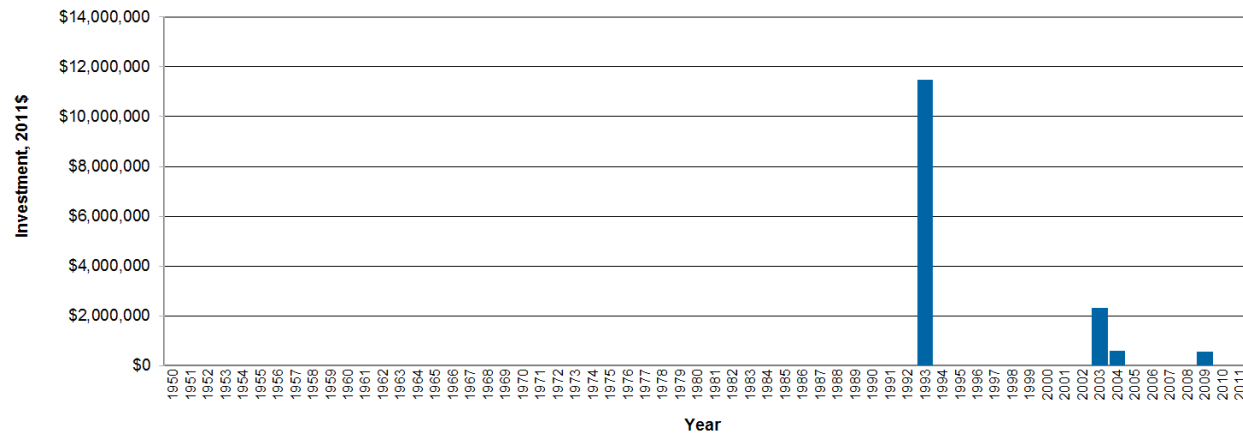


Figure 2-7 Asset Installation Profile – Protection – POA

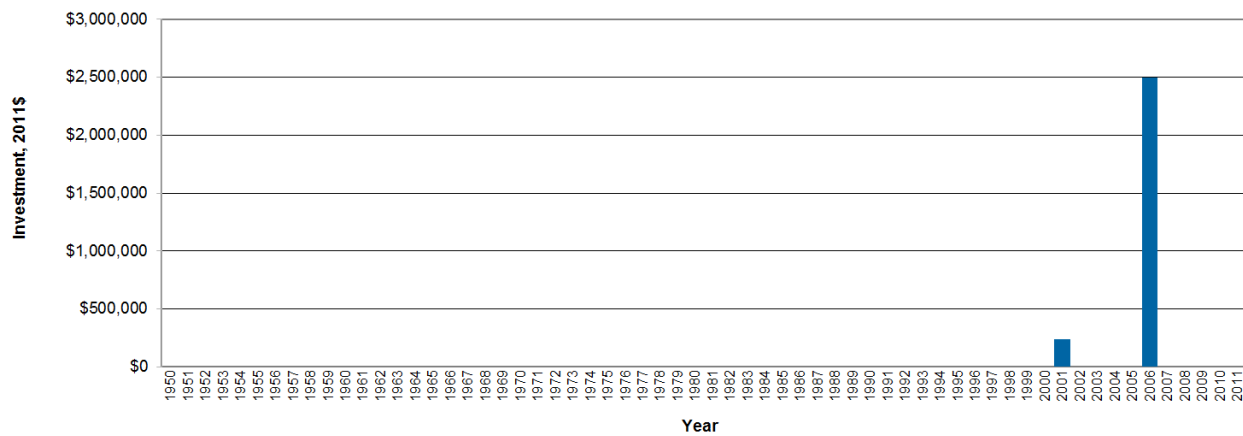


Figure 2-8 Asset Installation Profile – Transportation – Roads

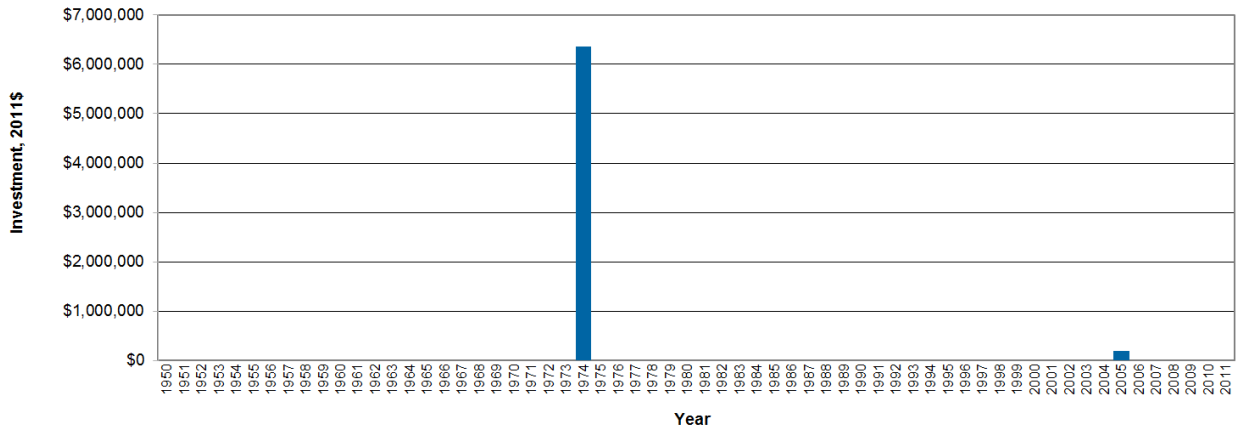


Figure 2-9 Asset Installation Profile – Transportation – Transit

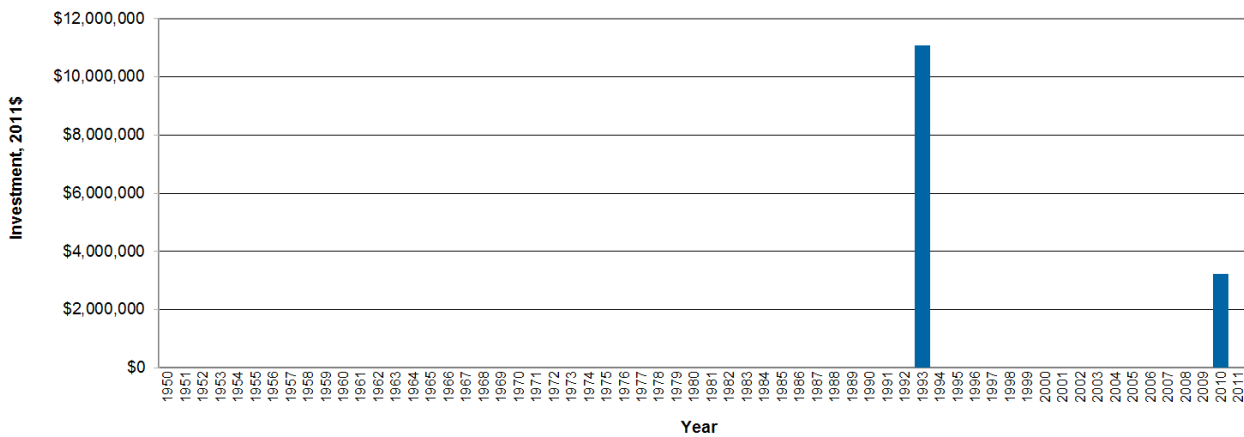


Figure 2-10 Asset Installation Profile – Environmental – Wastewater

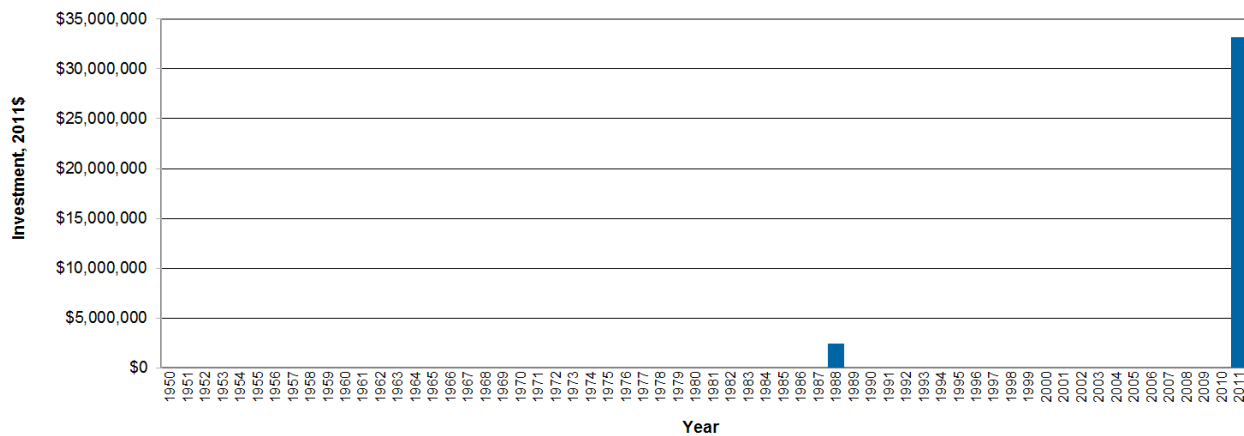


Figure 2-11 Asset Installation Profile – Environmental – Water

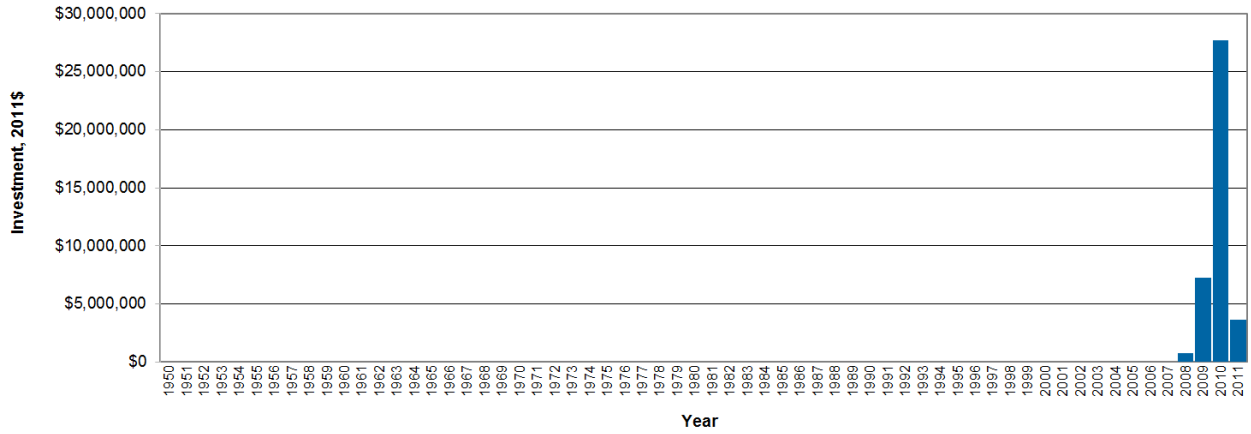


Figure 2-12 Asset Installation Profile – Environmental – Waste Management

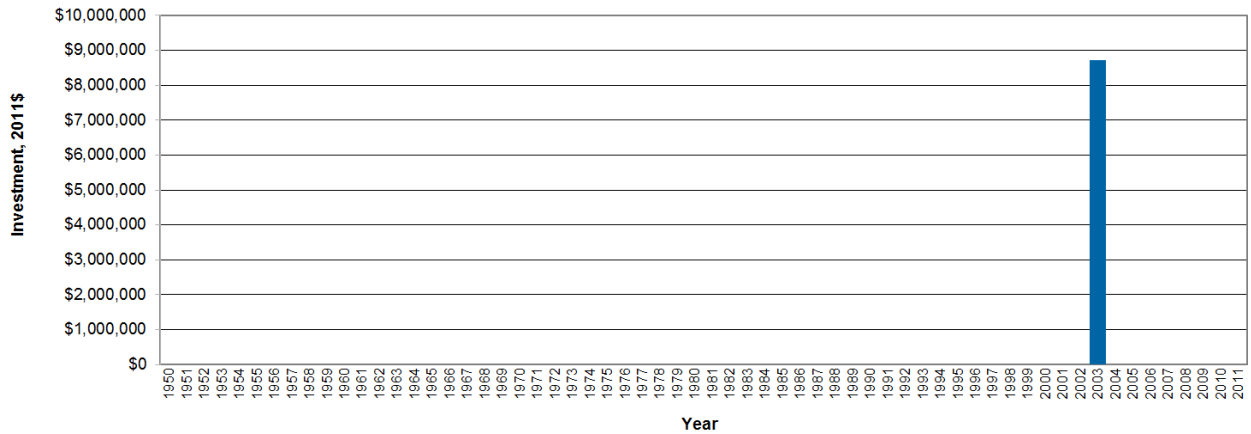


Figure 2-13 Asset Installation Profile – Recreation & Culture – Parks

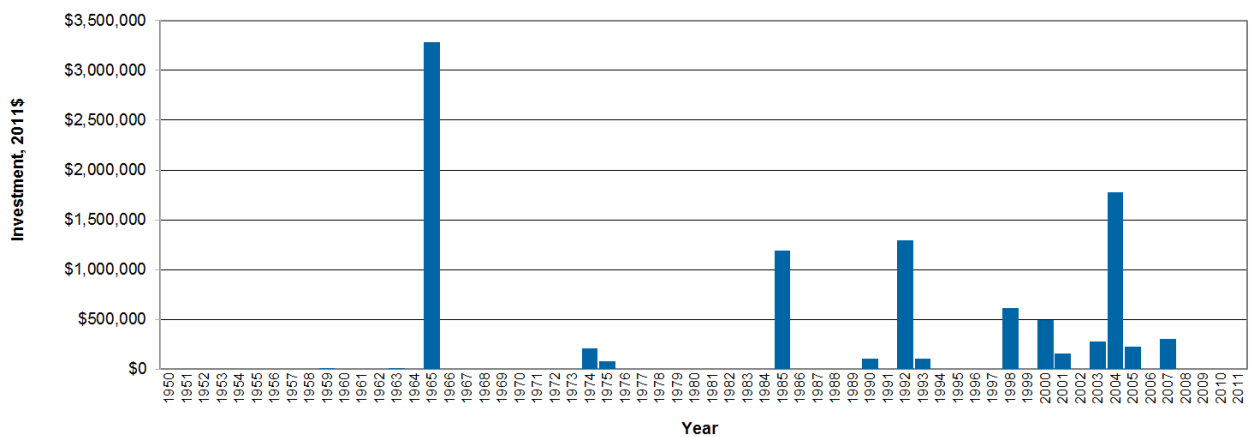


Figure 2-14 Asset Installation Profile – Recreation & Culture – Recreation

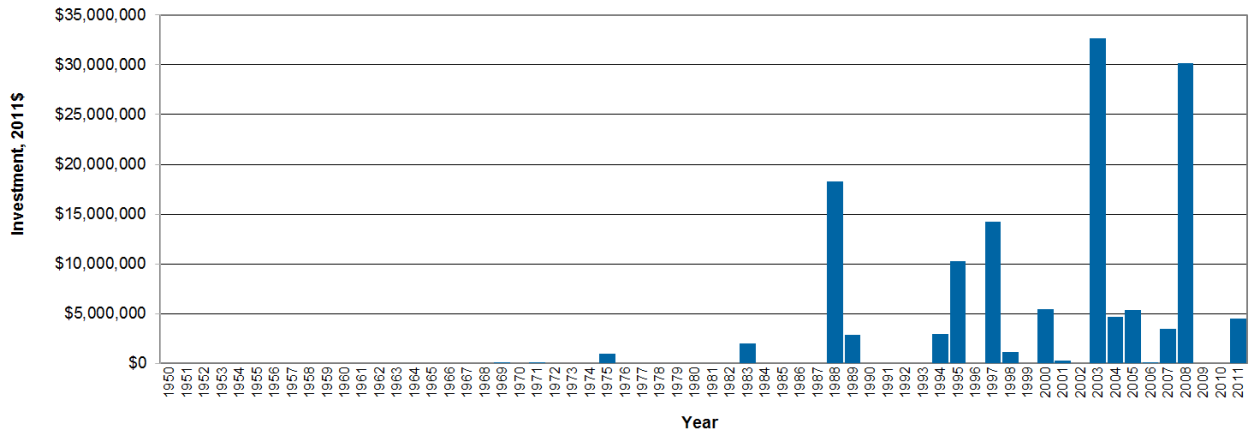
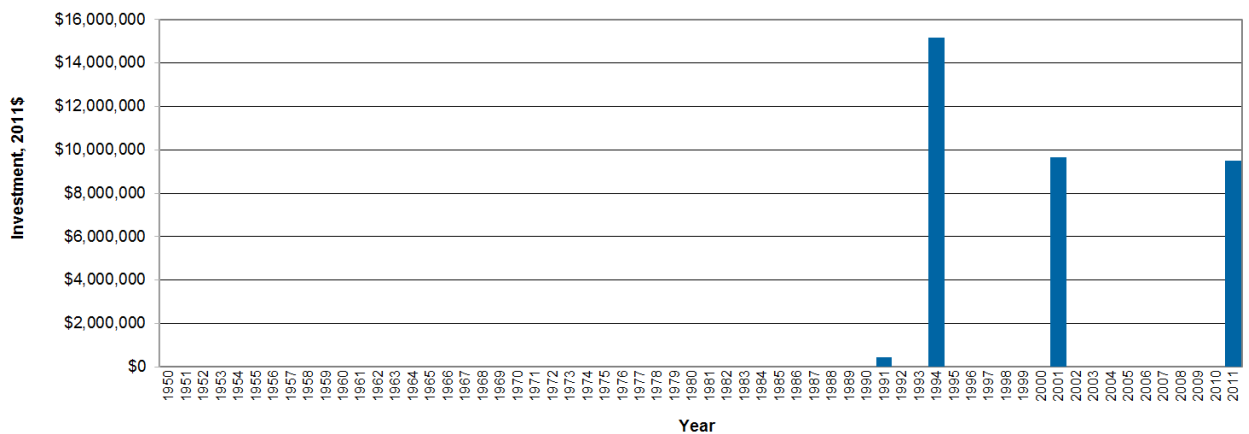


Figure 2-15 Asset Installation Profile – Recreation & Culture – Culture & Other



2.5 Facility Utilization – Recreation Facilities

The Facility Usage Report (Utilization of Assets, January 1 - December 31, 2008) indicates that most recreation facilities assessed are well utilized. However, several facilities have significant underutilization. Examples of are listed in Table 4-1. This underutilization indicates that the future growth and demand of the City (relating to recreation) could be catered for at these underutilized facilities with minimal expansion requirements.

Table 2-3 Utilization of Assets (Jan 1 - Dec 31, 2008)

ID	Facility	Specific Facility Function	Hours Available	Hours Utilized
1	Barrie Molson Centre	Media Room	5856	179
		Suite 27	5856	293
2	Allendale Recreation Centre	Lower Meeting Room	6222	797
		Ralph Snelgrove Room	5856	314
3	East Bayview Community Centre	Babysitting Room	6222	263
		Pre-School Room	6222	755
		Skate Change Room	6222	623
		Pool Classroom	6222	630
4	Holly Community Centre	Pre-School Room	6222	667
		Skate Change Room	6222	287
5	Victoria Village (Leased)	Meeting Room 2	5490	515
		Activity Room B	5490	556
6	Lampman Lane Community Centre	Activity Room	6222	952

2.6 Other Facilities

The City has not identified any future levels of service information for other facilities such as general (corporate and other), protection (police and POA), transportation (roads and transit), environmental (water, wastewater, solid waste and waste diversion facilities) at this point in time.

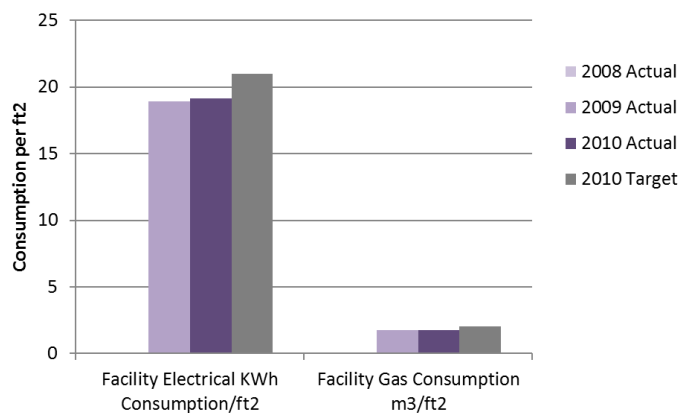
3. Levels of Service

3.1 Current Performance Measures

3.1.1 Corporate Balanced Scorecard

The City of Barrie Balanced Scorecard includes four quadrants: Community Services, Finance, Process, and People. The scorecard reports Target, Previous Year, and Current Year for a number of indicators, including the following indicators related to facilities services.

Figure 3-1 Corporate Balanced Scorecard – Facilities Services



3.1.2 Provincial Municipal Performance Measures

Effective for the 2000 fiscal year, the Provincial Ministry of Municipal Affairs and Housing implemented a mandatory Municipal Performance Measurement Program (MPMP) for all Ontario municipalities. This program requires municipalities to provide information on how the municipality conducted business and provided services in the previous year by September 30, based on key factors and indicators. Some of these measures can be compared between municipalities and serve as benchmarks for local governments to strive to deliver more efficient and effective services to their property owners and residents.

Both effectiveness and efficiency measures are needed to properly assess service delivery. Without effectiveness measures, the least cost form of service delivery would be perceived as optimal because it would yield the lowest cost per unit. With effectiveness measures, other factors are evaluated, such as how well services meet municipal service goals and the expectations of the public.

The MPMP measures, objectives and indicators related to facilities are provided in Table D2-2 below.

Table 3-1 MPMP Measures – Facility Services

Measure	Objective	Type	Indicator
Fire			
Operating Costs for Fire Services	Efficient management of fire services operating costs	Efficiency	Operating costs for fire services divided by Total property assessment / 1,000.

3.1.3 OMBI Benchmarking

The Ontario Municipal Benchmarking initiative (OMBI) is a collaboration of 15 Ontario municipalities that represent 9.3 million citizens or 73% of the population of Ontario. This initiative is led by the Chief Administrative Officers (CAOs) and City Managers in each participating municipality. OMBI is intended to foster a culture of service excellence in municipal government by creating new ways to measure, share and compare performance statistics and allow experts in participating municipalities to share ideas on operational practices.

The City of Barrie recently joined the OMBI initiative. The following performance measures are relevant to facilities services (MPMP measures are not repeated). As more data is generated, the OMBI Performance Measures should be graphed to show progress over time.

Table 3-2 OMBI Performance Measures – Facility Services

No.	Type	Measure	Reporting
FCLT203	Service Level	Gross Square Footage – All Buildings Owned and Leased by Municipality	
FCLT203A	Service Level	Gross Meters Squared – All Buildings Owned and Leased by Municipality	
FCLT206	Service Level	Rentable Square Footage of Office Buildings Owned and Leased by Municipality	Publicly Reportable
FCLT206A	Service Level	Rentable Square Meters of Office Buildings Owned and Leased by Municipality	Publicly Reportable
FCLT208	Service Level	Rentable Square Footage of Office Buildings Managed by Municipality	Publicly Reportable CAO Measure
FCLT208A	Service Level	Rentable Square Meters of Office Buildings Managed by Municipality	Publicly Reportable CAO Measure
FCLT210	Service Level	Rentable Square Feet of HQ Building Managed by Municipality	Publicly Reportable
FCLT210A	Service Level	Rentable Square Meters of HQ Building Managed by Municipality	Publicly Reportable
FCLT212	Service Level	Rentable Square Footage of Office Buildings (less HQ) Managed by F&RE	Publicly Reportable
FCLT212A	Service Level	Rentable Square Meters of Office Buildings (less HQ) Managed by F&RE	Publicly Reportable
FCLT225	Service Level	Percentage of Office Buildings Managed by F&RE	
FCLT307	Efficiency	Facility Cost per Rentable Square Foot of Office Buildings Managed by F&RE	Publicly Reportable CAO Measure
FCLT307A	Efficiency	Facility Cost per Rentable Square Meters of Office Buildings Managed by F&RE	Publicly Reportable CAO Measure
FCLT310	Efficiency	Facility Cost per Rentable Square Ft of HQ Buildings Managed by F&RE	
FCLT310A	Efficiency	Facility Cost per Rentable Square Meter of HQ Buildings Managed by	

No.	Type	Measure	Reporting
		F&RE	
FCLT315	Efficiency	Facility Cost per Rentable Square Ft of Office Buildings (Excluding HQ) Managed by F&RE	
FCLT315A	Efficiency	Facility Cost per Rentable Square Meters of Office Buildings (Excluding HQ) Managed by F&RE	
FCLT405	Customer Service	Percentage of Facilities meeting Barrier Free Guidelines (seat of Government Buildings only)	

Table 3-3 OMBI Performance Measures – Parks

No.	Type	Measure	Reporting
PRKS265	Service Level	Number of washroom structures per 100,000 population	

3.2 Current Levels of Service – Recreation Facilities

The City’s Leisure and Recreation Master Plan (1991) recommends standards as follows:

- Arenas: 1:600 residents or 1 per 1500 to 1900 population
- Community Centers: 1:18,000 residents
- Pools: 1:40,000 residents

In addition, the City of Barrie has the following documents in place for the recreation facilities:

- Barrie Rental contract/permit
- Procedures for use of ball diamond/ soccer fields/ courts – wet field/ rainout policy
- Sports field and park regulations and policies

3.3 Future Levels of Service

3.3.1 General

The City has not identified any future levels of service information for corporate or other facilities at this point in time.

3.3.2 Protection

According to the Fire Master Plan (June 8, 2009), the future levels of service for protection facilities include:

Reduction of the intervention time:

Fire department intervention time is crucial in determining the consequences of a fire in terms of deaths, injuries and loss of property and damage to the environment. Effective fire prevention and public education programs can reduce intervention time. In turn, reducing intervention time can significantly increase fire department effectiveness. Increased intervention time can have three significant impacts to

an owner; higher insurance premiums, increased loss in the event of an emergency and increased rate of injury or death.

Enhancing External Resources and Partnerships:

Barrie Fire and Emergency Service is the largest fire service in the county and have expanded levels of service that cannot be expected in the smaller communities. Because of this, there is an expectation on Barrie to provide some of these services to other municipalities. The department should continue to explore partnerships with other municipalities to provide these lifesaving disciplines on a total cost recovery basis and possible source of revenue through response or training initiatives.

Goals

The Fire Master Plan also lists the following short term, intermediate term and long term goals for future levels of service. These are as follows:

Short Term Goals (1 – 3 Years)

- A recommendation should be forwarded for consideration on expansion of the Fire Prevention Branch based on a generalized population ratio.
- Review the service levels provided to maintain and repair the fire fleet.
- Fleet Services should review current staffing levels, service levels and training to make recommendations to ensure fire apparatus is maintained and repaired.
- A number of aging apparatus needs to be replaced over the next few years. The Command Centre is 25 years old and is in need of replacement; the replacement of this apparatus has been deferred from previous years. The Hazardous Materials Apparatus is 18 years old and Ladder 3 is 13 years old and will both require replacing.
- Implement marine response service levels and capabilities.
- BFES staff is trained in both ice and water rescue including water entry which is not mandated by the police services. The department has limited resources to exercise this service level of rescue in open water due to the absence of a water craft that would multi-task as a rescue and firefighting vessel.
- Review and have Council approve a Service Delivery Standard (Establishing By-law)

Intermediate Term Goals (3 – 5 Years)

- Implement a communications service delivery standard to accommodate increases in level of service.
- A service level standard developed between BFES and its current clients should be developed to ensure that both parties are well aware of the expectations and delivery levels.

Long Term (5 – 10 Years)

- Develop a deployment strategy based on Service Delivery Standard. A review of the delivery of services is planned in 2013 to ensure the delivery of service is current, meets the expectations of Council, the public and the department. Transportation

3.3.3 Transportation

The City has not identified any future levels of service information for roads or transit facilities at this point in time.

3.3.4 Environmental

The City has not identified any future levels of service information for water, wastewater, solid waste or waste diversion facilities at this point in time.

3.3.5 Recreation and Culture

The City has not identified any future levels of service information for recreation, parks or cultural facilities at this point in time.

- The City is in the process of preparing a new Leisure and Recreation Master Plan. This should include future levels of services for recreation and cultural facilities.

4. Growth & Demand

4.1 Future Demand for Facilities Assets

The future demand for facilities assets have been defined in only two studies commissioned by the City of Barrie. These are:

- The City of Barrie - Fire Master Plan – Review and Recommendation (Draft Report), June, 2009.
- Leisure and Recreation Master Plan, completed by Monteith Zelinka Limited, October 1991

4.2 Future Demand for Fire Services

The Fire Master Plan discusses a variety of requirements to cater for future demand of the City's fire services. This includes decommissioning and relocating Station 1 to the southwest of the city and construction of new fire station facilities. The requirements of this master plan indicate that heavy growth of fire facilities is required over the next 3 years, reducing to moderate growth over the next 3 to 5 years, then minimal growth beyond a 5 year horizon. These requirements, as with the future levels of service requirements, are reflected in the Fire Master Plan's future goals. These requirements are also included in the current 10 year capital plan

Short Term Goals (1 – 3 Years)

- Construct new Station 1, Communications Centre and Emergency Operations Centre. Target dates are:
 - Construction in 2010
 - Commissioning in 2011
 - Estimated BFES staff time is in excess of 1,000 hrs, however can be included in future work plans without the need for additional staff resources.
- Implement a sustainable back-up communications location consistent with best practices and standards. This should be in concert with other City of Barrie critical communications back-up requirements.

Intermediate Term Goals (3 – 5 Years)

- Initiate Training Centre construction (Phased): Construction of the training centre should continue with a phased approach to achieve a viable sustainable training centre that should include the use by other City of Barrie Departments and revenue production from other fire services and partnerships. Costs would be determined through the consultant process in the Short Term Goals. This is a continuing progression throughout the 3 to 5 year span.
- Construct Station 5 to open in 2011: There has been an established need for Station 5 in the southwest quadrant of the City of Barrie. This will also require the purchase of an additional fire apparatus.

Long Term (5 – 10 Years)

- Construct Station 6: With the completion of the Station location and feasibility study, recommendation for the location of Station 6 and any relocation of existing stations can be addressed.

4.3 Future Demand for Leisure and Recreation Facilities

The future demand for facilities has been defined in the Leisure and Recreation Master Plan (1991). This master plan defines the following over a 20 year period (1991 to 2011).

- New recreation facilities (Arenas, community centers etc) requirements and recommendations
- Outdoor Recreational Facilities requirements and recommendations
- Indoor Recreational Facilities requirements and recommendations (general)
- Specific Municipal Recreation Facility requirements and recommendations

As the forecast period (1991 – 2011) is coming to a close, the City is currently updating this master plan. Due to the age of the master plan and the lack of definition surrounding what requirements and recommendations of this master plan have been implemented, we have therefore assumed for the purpose of this AM Plan, the growth of the facilities asset portfolio is commensurate with the City's population growth. Specific future demands for the Facilities asset portfolio should be addressed in the updated Leisure and Recreation Master Plan.

4.4 Facility Utilization – Recreation Facilities

The Facility Usage Report (Utilization of Assets, January 1 - December 31, 2008) indicates that most recreation facilities assessed are well utilized. However, several facilities have significant under utilization. Examples of such under utilization are listed in Table 4-1. This under utilization indicates that the future growth and demand of the City (relating to recreation) could be catered for at these under utilized facilities with minimal expansion requirements.

Table 4-1 Utilization of Assets (Jan 1 - Dec 31, 2008)

ID	Facility	Specific Facility Function	Hours Available	Hours Utilized
1	Barrie Molson Centre	Media Room	5856	179
		Suite 27	5856	293
2	Allendale Recreation Centre	Lower Meeting Room	6222	797
		Ralph Snelgrove Room	5856	314
3	East Bayview Community Centre	Babysitting Room	6222	263
		Pre-School Room	6222	755
		Skate Change Room	6222	623
		Pool Classroom	6222	630
4	Holly Community Centre	Pre-School Room	6222	667
		Skate Change Room	6222	287
5	Victoria Village (Leased)	Meeting Room 2	5490	515
		Activity Room B	5490	556
6	Lampman Lane Community Centre	Activity Room	6222	952

4.5 Other Facilities

The City has not identified any future levels of service information for other facilities such as general (corporate and other), protection (police and POA), transportation (roads and transit), environmental (water, wastewater, solid waste and waste diversion facilities) at this point in time.

5. Lifecycle Analysis

5.1 Estimated Remaining Life

The imminent failure mode for an asset is defined as the failure mode with the lowest estimated remaining life. Best practice asset management considers all failure modes (i.e. physical mortality, capacity, level of service and financial efficiency). However, for this AM Plan, the remaining life of Facility assets was determined considering the physical mortality failure mode only, based on year of acquisition and estimated maximum potential life.

5.2 Maximum Potential Life (MPL)

The MPL for facilities assets has been calculated at three levels based on the Unifomat asset hierarchy:

- **Level 0** - These facilities were analyzed as a whole facility.
- **Level 1** - The MPL values for facilities at this level were calculated taking the average of the MPL's of Level 1 facilities.
- **Level 2** - The MPL values for facilities at this level were defined by City staff.

These MPLs are detailed in Table 5-1 below.

Table 5-1 Facility Asset Maximum Potential Life

Level 0	MPL (years)	Level 1	MPL (years)	Level 2	MPL (years)
Pavilions	35	Site	25	Decommissioning	50
Docks	50			Hardscape	25
Washrooms	35			Landscape	25
Boat Launch	50			Site Furnishings	15
Splash Pad	20			Site Electrical	25
				Site Services	25
		Structure	50	Footings & Foundations	50
		Building Envelope	25	Structural Steel	50
				Air Vapour Barrier & Waterproofing	25
				Exterior Cladding	25
				Windows & Doors	25
				Roofing	15
		Occupied Space	15	Pools	15
				Arenas	15
				Interior Doors, Glass & Glazing	15
				Partitions	15
				Millwork	15
		Building Services	20	Painting & Finishes	10
				Flooring	15
				Furnishings	15
				Electrical	25
				Mechanical	25
				HVAC	25
				Building Automation & Controls	10
				Security	10
		Voice & Data Comms & Audio Visual	10		
		Refrigeration & Specialized Equipment	10		

5.3 Asset Consumption by Asset Type

Based on the failure modes and remaining life predictions described above, the consumption of each asset in the hierarchy has been calculated. Figures 5-1 to 5-18 illustrate where Facility assets are within their lifecycle and how much they have been consumed based on the percentage of maximum potential life consumed and condition of the asset (asset consumption graphs).

The asset consumption graphs illustrate the value of assets that are new (0% consumed) through to assets that have reached their maximum potential life (100% consumed). These graphs provide a good indication of which assets are at the end or nearing the end of their life and which assets will require replacement in the near future.

As the failure modes for assets are predominately based on install dates and maximum potential life, the consumption of the assets generally reflect the age of the assets only. As additional data becomes available (such as condition data), consumption will directly reflect the maximum potential life based on factors such as condition, capacity and service levels, as opposed to just age.

Figure 5-1 Asset Consumption Distribution – Facilities – Total

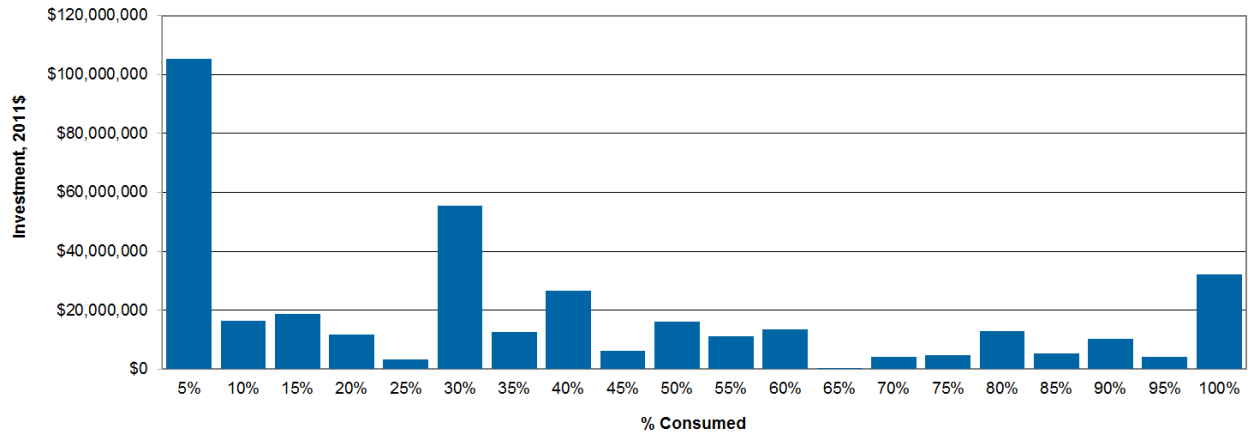


Figure 5-2 Asset Consumption Distribution – General – Corporate

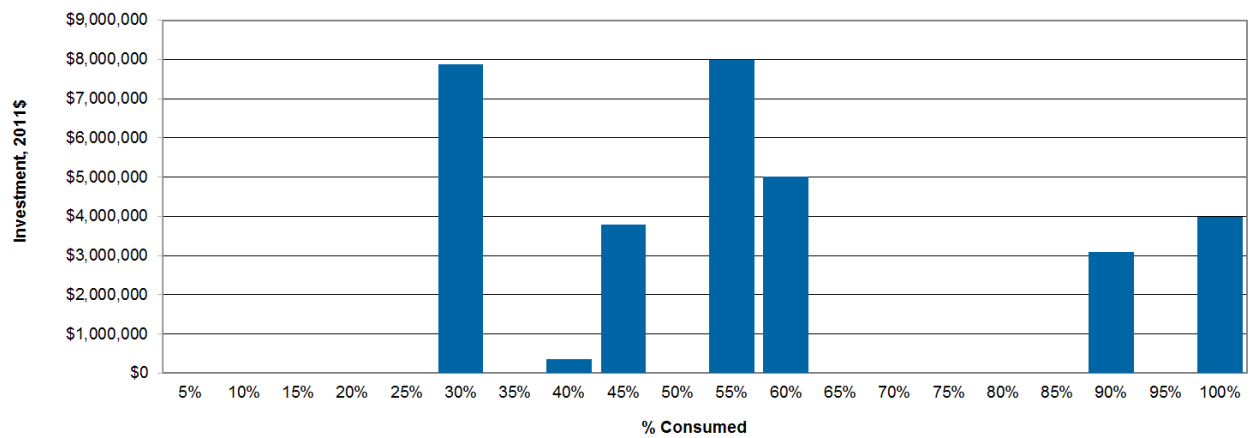


Figure 5-3 Asset Consumption Distribution – General – Other

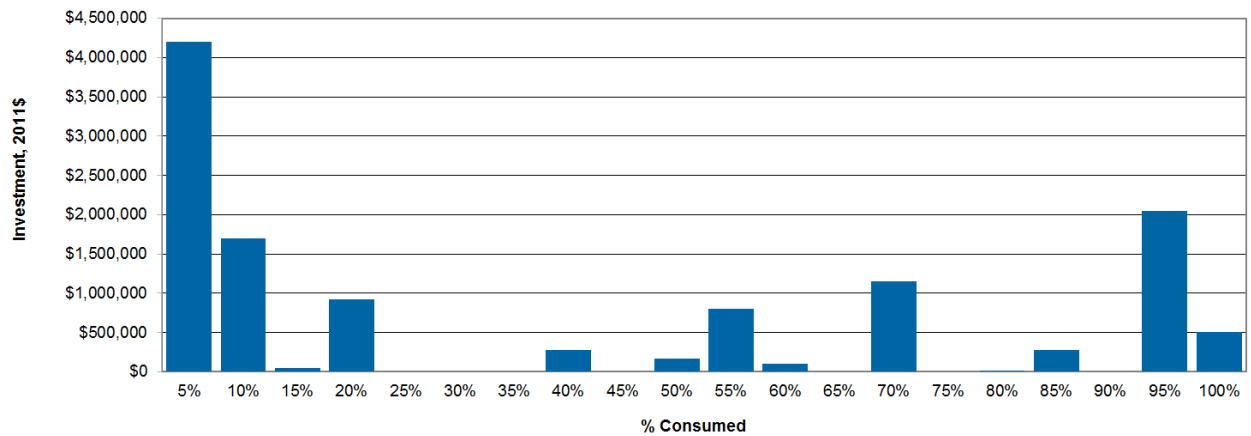


Figure 5-4 Asset Consumption Distribution – Protection – Fire

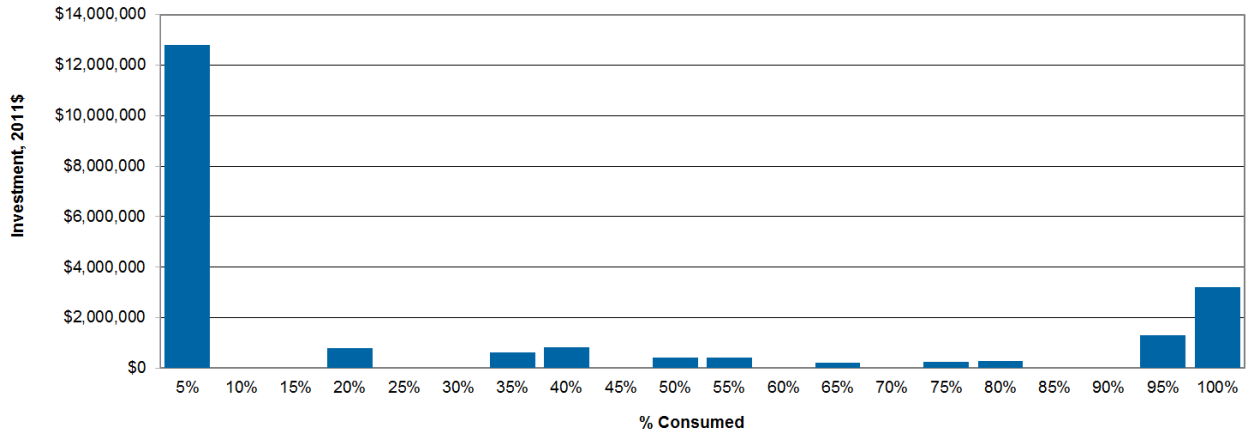


Figure 5-5 Asset Consumption Distribution – Protection – Police

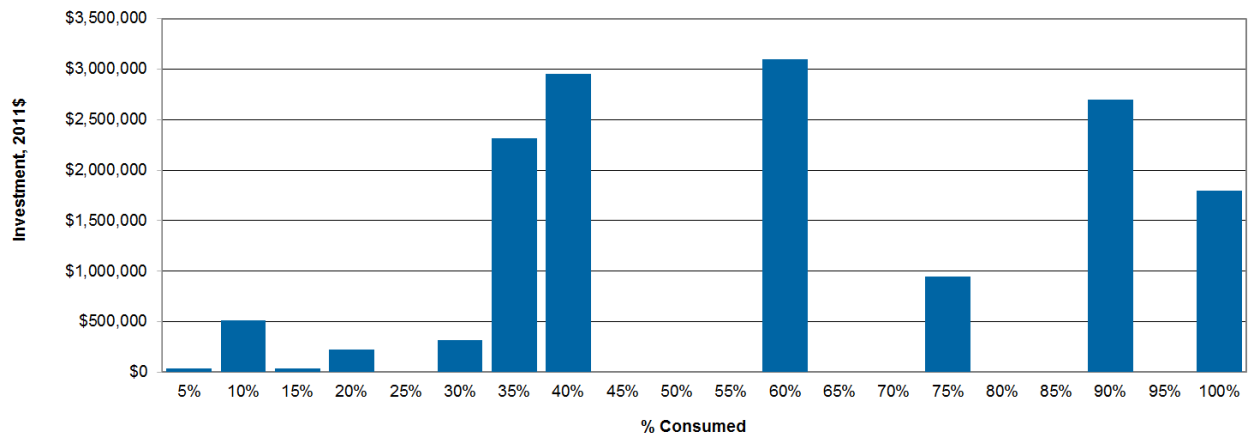


Figure 5-6 Asset Consumption Distribution – Protection – POA

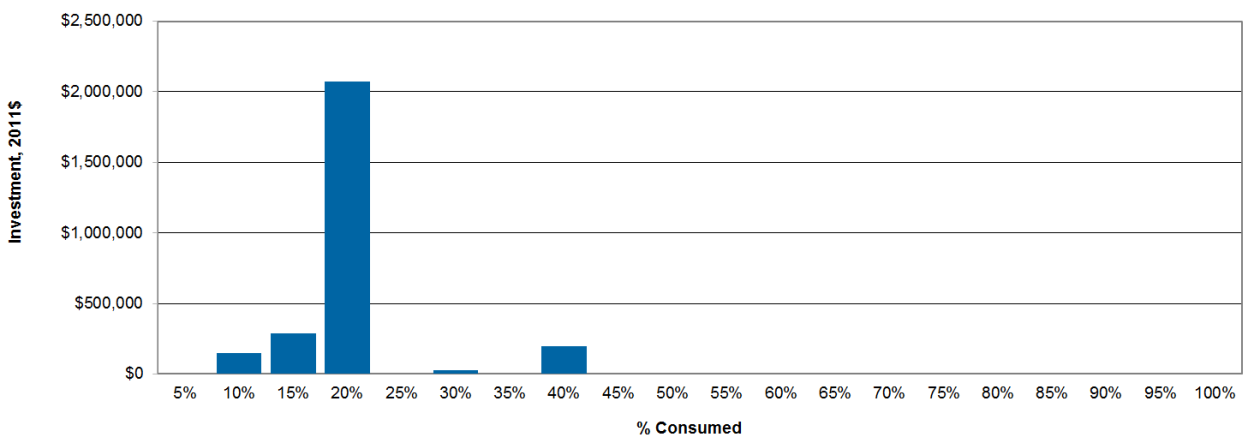


Figure 5-7 Asset Consumption Distribution – Transportation – Roads

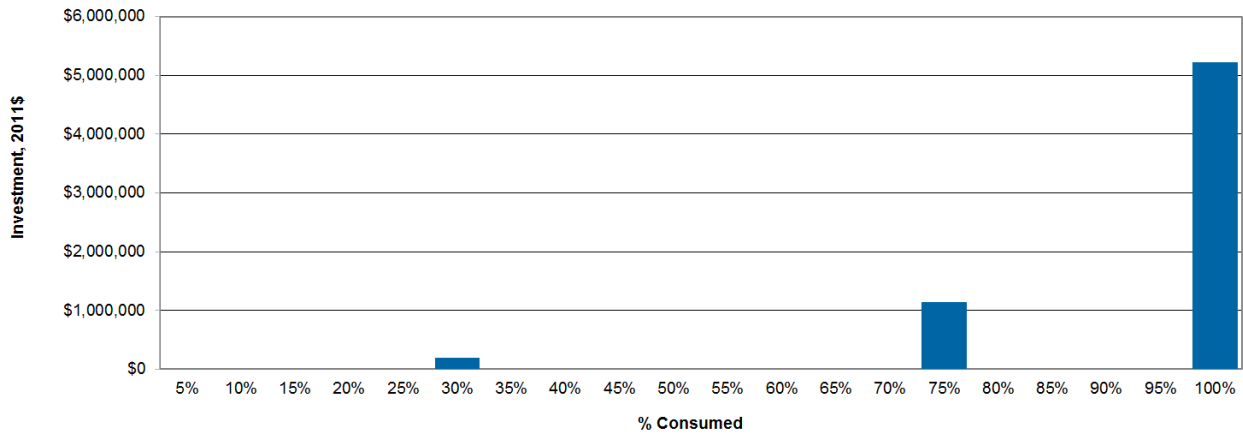


Figure 5-8 Asset Consumption Distribution – Transportation – Transit

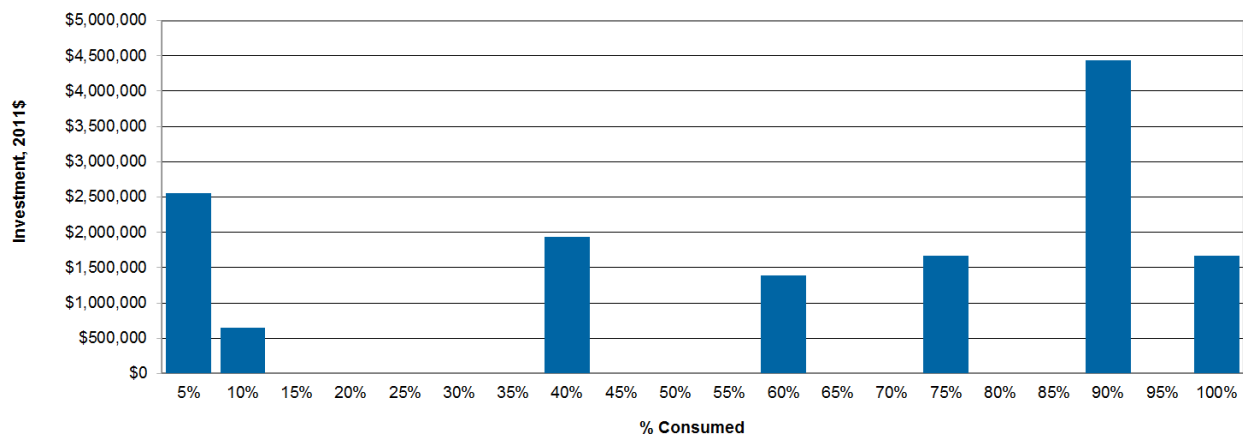


Figure 5-9 Asset Consumption Distribution – Environmental – Wastewater

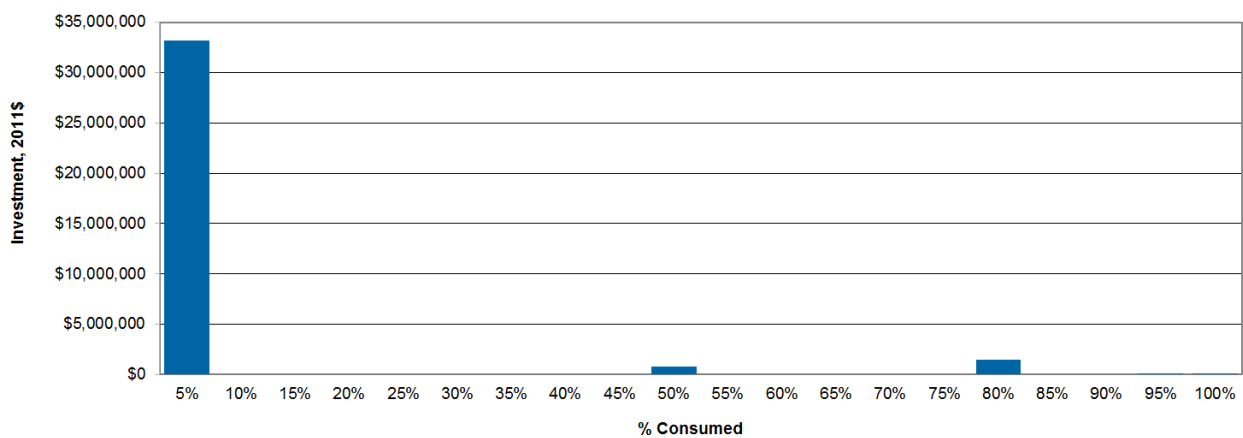


Figure 5-10 Asset Consumption Distribution – Environmental – Water

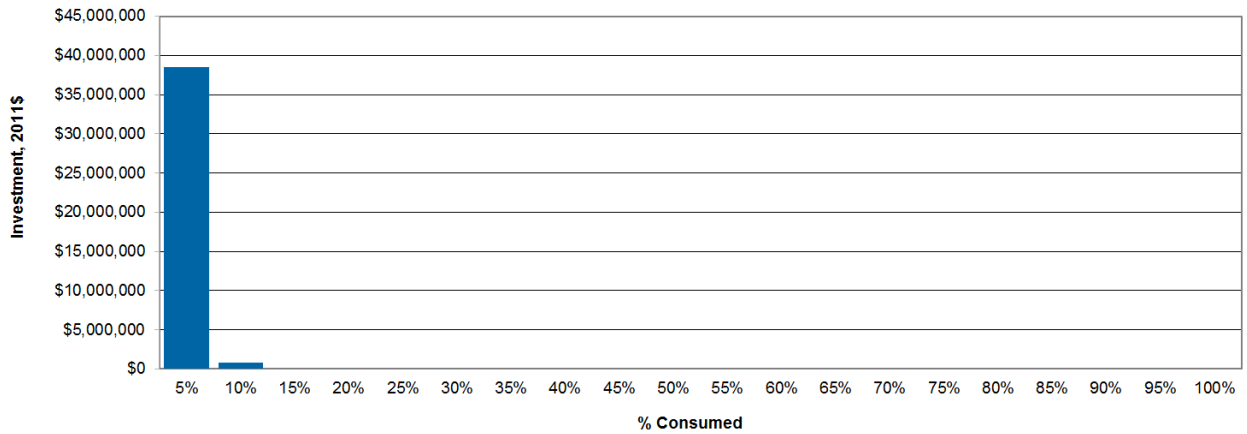


Figure 5-11 Asset Consumption Distribution – Environmental – Waste Management

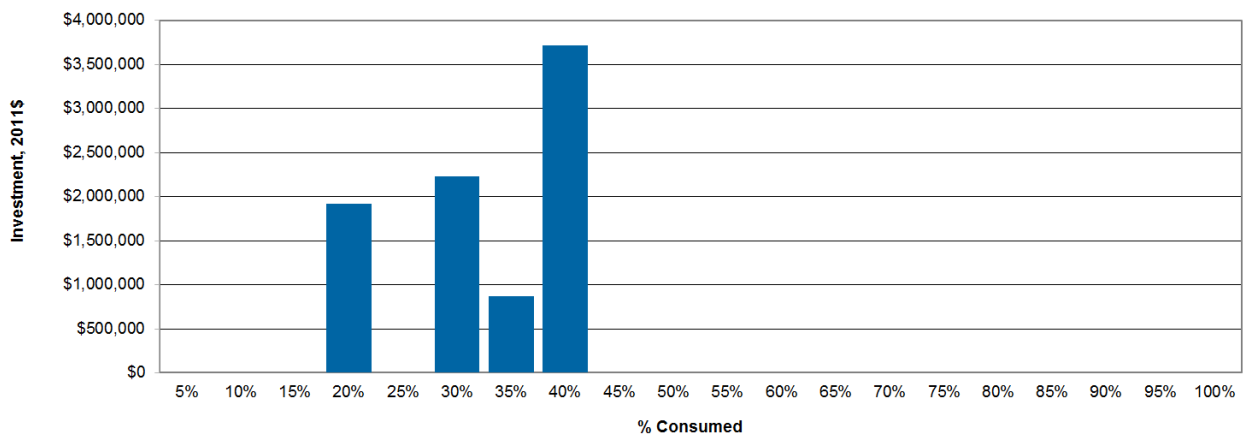


Figure 5-12 Asset Consumption Distribution – Recreation & Culture – Parks

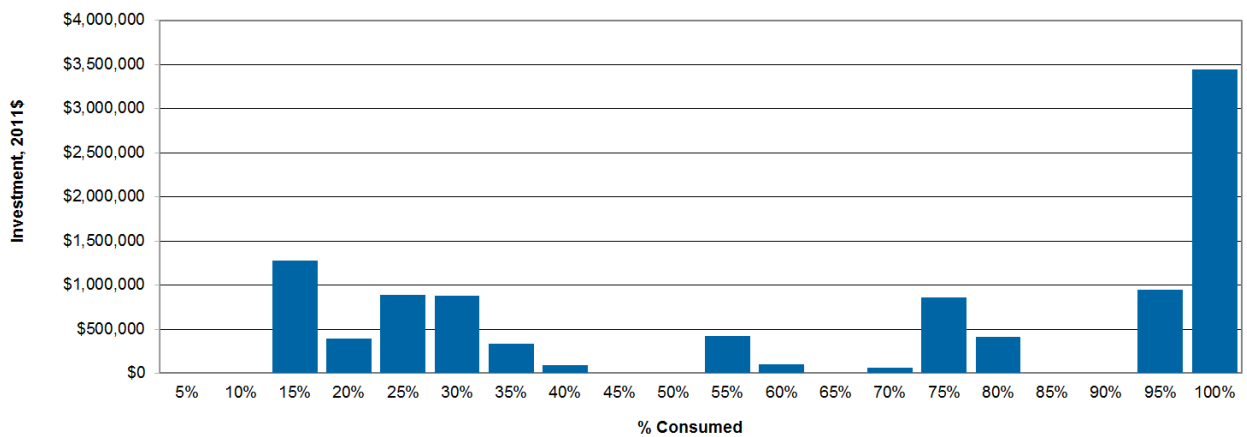


Figure 5-13 Asset Consumption Distribution – Recreation & Culture – Recreation

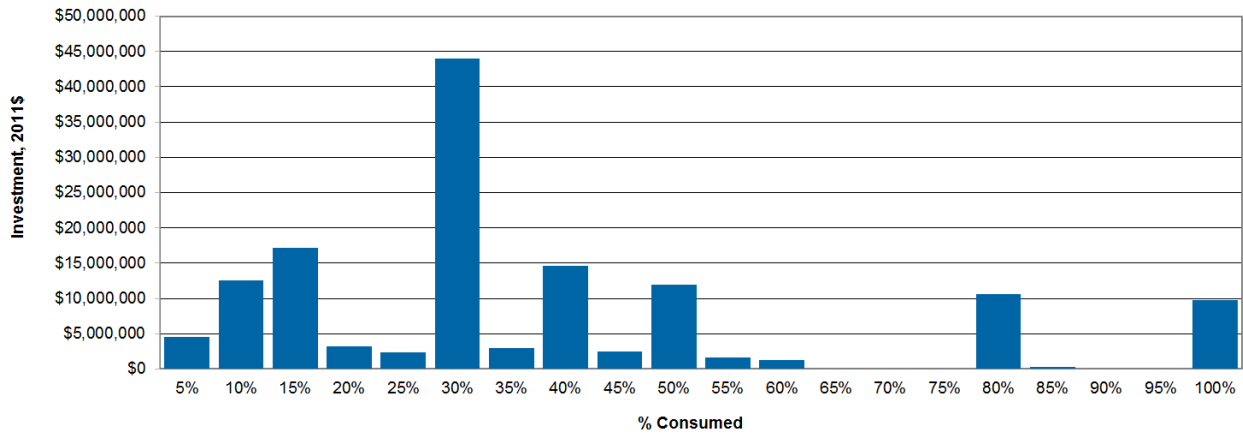
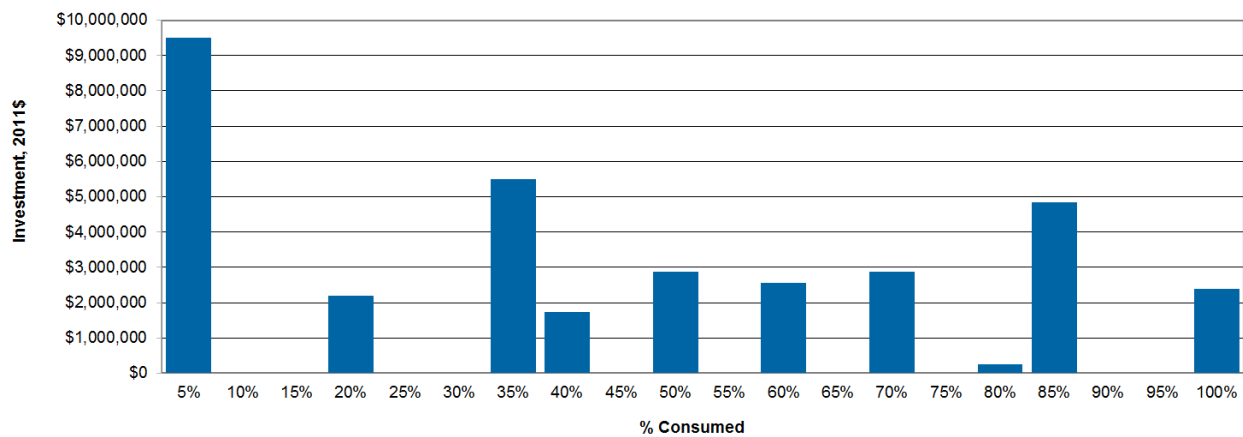


Figure 5-14 Asset Consumption Distribution – Recreation & Culture – Culture & Other



5.4 Consequence of Failure (CoF)

The consequence of failure was recorded at two levels, the Facility Level and the Program Area Level. The CoF methodology and its application are described in Section 5 of the main body of the report.

The consequence of failure ratings were recorded for the following three parameters at both, the facility and the program area levels:

- **Function:** What is the consequence of failure if the facility / program area does not function as intended?
- **Safety:** What is the consequence of failure if the facility / program area does not meet safety requirements?
- **Quality:** What is the consequence of failure if the facility / program area does not meet quality requirements such as aesthetics?

The consequence of failure ratings were captured through during the AM Plan workshops and through an iterative process between the City of Barrie's Facilities group and GHD. These ratings are detailed for both the facility level and program area level in Tables xxx and xxx respectively.

5.5 Probability of Failure (PoF)

The probability of failure is based on percent life consumed for all program areas, for all facilities. The PoF methodology and its application are described in Section 5 of the main body of this report.

5.6 Redundancy

Redundancy at the facility level was defined during the AM Plan workshops. Redundancy factors applied are detailed in Tables 5-2 and 5-3.

To apply redundancy to facilities at a detailed level, an assessment of the geographical location of the facilities, relating to redundancy, must be completed. For example, if a facility is not useable it is possible an alternate facility with the same or similar facilities may be. The type of alternate facility available and the condition of the facility coupled with the distance from the unusable facility all need to be considered in determining redundancy. This AM Plan is not presented at this detailed level. It is recommended that this type of redundancy be considered for future AM Plans.

The methodology for applying redundancy in business risk exposure is described in Section 5 of the main body of the report.

Table 5-2 Facility Level CoF, PoF and Redundancy

ID	Facility	Facility PoF Rating (Capacity)	Facility CoF Rating (Function)	Facility CoF Rating (Safety)	Facility CoF Rating (Quality)	Redundancy or Risk Mitigation Factor
ARC	Allandale Recreation Centre	P1	3	4	4	1
ATS	Allandale Train Station		1	4	2	0.5
BCSC	Barrie Community Sports Complex	P1	2	4	4	1
BFES1	Fire Station #1	P4	4	4	4	1
BFES2	Fire Station #2	P4	4	4	4	1
BFES3	Fire Station #3	P4	4	4	4	1
BFES4	Fire Station #4	P4	4	4	4	1
BFHQ	Fire Headquarters	P1	3	4	3	1
BMC	Barrie Molson Centre	P1	3	4	4	1
BPSBELL60	Police – 60 Bell Farm Rd (LH Impr'ts)	P3	3	4	4	1
BPSBELL79	Police – 79 Bell Farm Rd	P1	3	4	4	1
BPSSPERL	Police – Sperling	P4	4	4	4	1
BSD	Barrie Sports Dome	P1	2	4	4	1
CC	Circle at the Centre	P1	2	4	4	1
CH	City Hall	P4	4	4	4	1
CONCEN	Centennial Beach Concession	P1	2	4	2	1
CONQUE	Queens Park Concession	P1	1	4	2	1
DKBAY	Bayfield Dock	P2	2	4	3	1
DKHER	Heritage Park Docking	P1	1	4	2	0.5

ID	Facility	Facility PoF Rating (Capacity)	Facility CoF Rating (Function)	Facility CoF Rating (Safety)	Facility CoF Rating (Quality)	Redundancy or Risk Mitigation Factor
DKTIF	Tiffin Boat Launch	P1	1	4	3	0.5
DKTOL	Tollendale Dock	P1	1	4	2	0.5
DPC	Dorian Parker Centre	P1	2	4	3	0.1
DTT	Downtown Theatre	P2	2	4	4	1
EA	Eastview Arena	P3	2	4	4	1
EBCC	East Bayfield Centre	P1	3	4	4	1
ENVC	Environmental Centre		3	4	3	1
HCC	Holly Community Centre	P1	3	4	4	1
LIB	Library	P3	3	4	4	1
LIBP	Painswick Library	P1	3	4	4	1
LLCC	Lampman Community Centre	P1	2	4	4	1
MAB	Foodland Market Building		2	4	3	1
MAC	MacLaren Art Centre	P1	4	4	4	1
MAR	Marina	P4	2	4	3	1
MUL	Armoury Building	P1	2	4	3	1
MUL56	56 Mulcaster (Purchasing Dept.)	P4	3	4	4	1
MYPC	Maple Young Peoples Centre	P1	2	4	3	1
OPS	Operations Centre	P3	4	4	4	1
ORORES	Oro Residential Properties	P1	2	4	2	1
PAR	Parkade	P1	2	4	3	1
PCC	Parkview Centre	P1	2	4	4	1
POAB	POA Barrie (45 Cedar Pte) LH Impr'ts	P2	3	4	4	1
POAO	POA Orillia (575 West St.S) LH Impr'ts	P1	3	4	4	1
PPALL	Allandale Station Park Pavilion	P1	1	4	2	1
PPARB	Arboretum Pavilion	P1	2	4	2	1
PPBAY	Bayshore Pavilion	P1	1	4	2	1
PPBSP	Barrie Sports Park Pavilion	P1	1	4	2	0.5
PPCEN	Centennial Beach Pavilion	P1	1	4	2	0.5
PPGAB	Gables Park Pavilion	P1	1	4	2	0.2
PPHER	Heritage Park Pavilion	P1	1	4	2	1
PPSTV	St. Vincent Park Pavilion	P1	1	4	2	0.5
PPTCT	Trans Canadian Trail Board	P1	1	4	2	1
PPTYN	Tyndale Park Pavilion	P1	2	4	2	1
PUG1	1 Puget St	P1	1	4	2	1
PWCEN	Centennial Beach Washrooms	P1	2	4	3	1
PWHER	Heritage Park Washroom	P1	2	4	3	1
PWJOHN	Johnson Beach Washroom	P1	2	4	3	1
PWMIN	Minet's Point Washroom	P1	2	4	3	1
PWQUE	Queens Park Washroom	P1	2	4	3	1
PWSTV	St. Vincent Park Washroom	P1	2	4	3	1
PWTYN	Tyndale Park Washroom	P1	2	4	3	1
SPHER	Heritage Park Splash Pad	P1	2	4	4	1
SSCC	Southshore Centre	P2	3	4	4	1

ID	Facility	Facility PoF Rating (Capacity)	Facility CoF Rating (Function)	Facility CoF Rating (Safety)	Facility CoF Rating (Quality)	Redundancy or Risk Mitigation Factor
SWTP	Surface Water Treatment Plant	P1	3	4	3	1
TENQUE	Queens Park Tennis Building	P1	1	4	3	1
TOPS	Transit Operations & Maintenance Facility	P1	2	4	4	1
TT	Transit Terminal	P1	2	4	4	1
VIC72	72 Victoria St	P1	1	4	1	1
VV	Victoria Village (LH Impr'ts)	P1	2	4	4	1
WIL	Wilcox House	P1	2	4	4	1
WPCC	Water Pollution Control Centre	P1	3	4	3	1

Table 5-3 Program Area CoF and Redundancy

Program Area	Program Area CoF Rating (Function)	Program Area CoF Rating (Safety)	Program Area CoF Rating (Quality)	Redundancy or Risk Mitigation Factor
LEVEL 1				
Level2				
SITE	C3	C2	C1	0.8
Decommissioning	C4	C1	C1	1
Hardscape	C3	C2	C1	0.8
Landscape	C1	C1	C1	0.8
Site Furnishings	C1	C1	C1	0.8
Site Electrical	C4	C2	C1	0.8
Site Services	C4	C3	C1	0.8
STRUCTURE	C4	C4	C1	1
Footings & Foundations	C4	C4	C1	1
Structural Steel	C4	C4	C1	1
BUILDING ENVELOPE	C4	C3	C1	1
Air Vapour Barrier & Waterproofing	C4	C2	C1	1
Exterior Cladding	C4	C3	C1	1
Windows & Doors	C4	C1	C1	1
Roofing	C4	C4	C1	1
OCCUPIED SPACE	C2	C2	C1	1
Pools	C4	C2	C1	1
Arenas	C4	C2	C1	1
Interior Doors, Glass & Glazing	C1	C2	C1	1
Partitions	C1	C2	C1	1
Millwork	C1	C2	C1	1
Painting & Finishes	C1	C1	C1	1
Flooring	C1	C2	C1	1
Furnishings	C2	C1	C1	0.5
BUILDING SERVICES	C4	C3	C1	0.5
Electrical	C4	C2	C1	1
Mechanical	C4	C3	C1	0.5
HVAC	C4	C1	C1	0.5
Building Automation & Controls	C4	C3	C1	0.5

Program Area	Program Area CoF Rating (Function)	Program Area CoF Rating (Safety)	Program Area CoF Rating (Quality)	Redundancy or Risk Mitigation Factor
Security	C4	C3	C1	0.5
Voice & Data Comms & Audio Visual	C4	C1	C1	0.5
Refrigeration & Specialized Equipment	C4	C1	C1	0.5

5.7 Business Risk Exposure

The following section includes risk maps showing the total replacement value of assets for Business Risk Exposure by asset type, based on the risk methodology and criteria described in the body of this AM Plan and outlined below.

The combined Facility and Program Area CoF and Redundancy Factor (RF) was calculated as follows for facilities:

$$\text{CoF (combined)} = \text{Square Root of } [\text{Maximum of Facility CoF (Function, Safety or Quality)} \times \text{RF (Facility)} \times \text{Maximum of Program Area CoF (Function, Safety or Quality)} \times \text{RF (Program Area)}]$$

The risk maps show the value of assets by asset type (in 2011\$) at extreme, high, moderate, or low risks of failure. The assets falling in the extreme and high categories will generally be those assets that are most consumed, as illustrated in the consumption graphs and therefore have a high probability of failure, and those that have a high consequence.

The risk maps have enabled the identification and prioritization of high risk assets that need to become candidates for closer inspection (to verify if they truly are high risk), renewal or replacement.

The risk maps for facilities assets are shown in the following series of graphics. Approximately 22% of facility assets are an extreme business risk (shown in red), with a further 35% of assets being a high business risk (shown in yellow).

Table 5-4 Asset Business Risk Exposure – Facilities – Total

PoF	P4	\$52,076	\$5,314,680	\$44,793,652	\$14,990,624
	P3	\$0	\$2,686,760	\$9,357,703	\$21,975,189
	P2	\$0	\$2,811,593	\$33,235,427	\$81,277,642
	P1	\$100,000	\$6,437,268	\$51,545,398	\$97,306,379
		C1	C2	C3	C4

CoF

The assets that comprise the high BRE for facilities assets are:

- Components of City Hall and other smaller, older facilities
- Components of Fire Station #1, #2 and #3, and Police (Sperling)

- The building envelope of the Operations Centre and Transit Terminal
- Components of Parks facilities

Table 5-5 Asset Business Risk Exposure – General – Corporate

PoF	P4	\$0	\$0	\$2,570,705	\$4,498,734
	P3	\$0	\$2,251,595	\$2,772,714	\$7,978,250
	P2	\$0	\$0	\$7,885,673	\$4,127,517
	P1	\$0	\$0	\$0	\$0
	C1	C2	C3	C4	

CoF

The Corporate facilities (or components of these facilities) that are an extreme business risk are:

- City Hall
 - Building Envelope, including roofing
 - Building Services

Table 5-6 Asset Business Risk Exposure – General – Other

PoF	P4	\$0	\$0	\$2,544,145	\$297,123
	P3	\$0	\$0	\$1,321,217	\$738,595
	P2	\$0	\$283,181	\$0	\$172,456
	P1	\$100,000	\$1,566,363	\$3,375,656	\$1,829,778
	C1	C2	C3	C4	

CoF

Other facilities (or components of these facilities) that are an extreme business risk are:

- 1 Puget Street
- Foodland
- Oro Residence

Table 5-7 Asset Business Risk Exposure – Protection – Fire

PoF	P4	\$0	\$221,675	\$1,809,979	\$2,789,825
	P3	\$0	\$0	\$158,088	\$724,089
	P2	\$0	\$64,028	\$991,425	\$851,617
	P1	\$0	\$385,660	\$3,258,436	\$9,952,912
	C1	C2	C3	C4	
	CoF				

Fire facilities (or components of these facilities) that are an extreme business risk are:

- Fire Station #1
- Fire Station #2
- Fire Station #3

Table 5-8 Asset Business Risk Exposure – Protection – Police

PoF	P4	\$0	\$491,713	\$3,518,108	\$487,338
	P3	\$0	\$0	\$945,368	\$3,093,522
	P2	\$0	\$0	\$320,300	\$5,269,810
	P1	\$0	\$0	\$344,174	\$479,795
	C1	C2	C3	C4	
	CoF				

Police facilities (or components of these facilities) that are an extreme business risk are:

- Sperling Police Station

Table 5-9 Asset Business Risk Exposure – Protection – POA

PoF	P4	\$0	\$0	\$0	\$0
	P3	\$0	\$0	\$0	\$0
	P2	\$0	\$0	\$197,168	\$25,594
	P1	\$0	\$0	\$2,080,000	\$434,184
	C1	C2	C3	C4	
	CoF				

No POA facilities are an extreme business risk.

Table 5-10 Asset Business Risk Exposure – Transportation – Roads

PoF	P4	\$0	\$489,089	\$3,128,227	\$1,597,692
	P3	\$0	\$0	\$0	\$1,141,209
	P2	\$0	\$0	\$0	\$195,636
	P1	\$0	\$0	\$0	\$0
	C1	C2	C3	C4	
	CoF				

Roads facilities (or components of these facilities) that are an extreme business risk are:

- Operations Centre, particularly the Building Envelope

Table 5-11 Asset Business Risk Exposure – Transportation – Transit

PoF	P4	\$0	\$1,386,554	\$4,381,511	\$332,773
	P3	\$0	\$0	\$2,329,411	\$721,008
	P2	\$0	\$0	\$0	\$1,941,176
	P1	\$0	\$883,025	\$1,059,975	\$1,267,219
	C1	C2	C3	C4	
	CoF				

Transit facilities (or components of these facilities) that are an extreme business risk are:

- Transit Facility, particularly the building envelope

Table 5-12 Asset Business Risk Exposure – Environmental – Waste Management

PoF	P4	\$0	\$0	\$0	\$0
	P3	\$0	\$0	\$0	\$0
	P2	\$0	\$436,434	\$3,535,119	\$2,836,824
	P1	\$0	\$0	\$0	\$1,920,311
	C1	C2	C3	C4	

CoF

No waste management facilities are an extreme business risk.

Table 5-13 Asset Business Risk Exposure – Environmental – Wastewater

PoF	P4	\$0	\$10,999	\$97,828	\$1,528,024
	P3	\$0	\$0	\$0	\$0
	P2	\$0	\$0	\$0	\$785,250
	P1	\$0	\$2,689,286	\$12,792,587	\$17,718,127
	C1	C2	C3	C4	

CoF

Wastewater facilities (or components of these facilities) that are an extreme business risk are:

- WPC (original facility)
 - Structure
 - Building Envelope
 - Occupied Space
 - Building Services

Table 5-14 Asset Business Risk Exposure – Environmental – Water

PoF	P4	\$0	\$0	\$0	\$0
	P3	\$0	\$0	\$0	\$0
	P2	\$0	\$0	\$0	\$0
	P1	\$0	\$0	\$11,296,000	\$27,997,377
	C1	C2	C3	C4	
	CoF				

Water facilities (or components of these facilities) that are an extreme business risk are:

- None

Table 5-15 Asset Business Risk Exposure – Recreation & Culture – Parks

PoF	P4	\$0	\$0	\$2,620,390	\$2,175,158
	P3	\$0	\$163,198	\$1,963	\$1,279,072
	P2	\$0	\$0	\$1,140,824	\$165,325
	P1	\$0	\$0	\$734,040	\$1,825,665
	C1	C2	C3	C4	
	CoF				

Parks facilities (or components of these facilities) that are an extreme business risk are:

- Bayshore Pavilion
- Centennial Beach Concession
- Centennial Beach Pavilion
- Heritage Park Splash Pad
- Heritage Park Washroom
- Johnson Beach Washroom
- Minet's Point Washroom
- Queens Park Concession
- Queens Park Washroom
- St. Vincent Park Pavilion
- St. Vincent Park Washroom

Table 5-16 Asset Business Risk Exposure – Recreation & Culture – Recreation

PoF	P4	\$52,076	\$1,686,911	\$18,102,691	\$828,880
	P3	\$0	\$271,967	\$1,199,702	\$1,482,990
	P2	\$0	\$2,027,949	\$15,878,399	\$58,080,110
	P1	\$0	\$406,590	\$13,427,951	\$25,856,666
	C1	C2	C3	C4	
	CoF				

Recreation facilities (or components of these facilities) that are an extreme business risk are:

- Allandale Recreation Centre
- Barrie Community Sports Complex
- Barrie Molson Centre
- Lampman Community Centre
- Marina
- Parkview Centre
- Southshore Centre

Table 5-17 Asset Business Risk Exposure – Recreation & Culture – Culture & Other

PoF	P4	\$0	\$1,027,738	\$6,020,068	\$455,077
	P3	\$0	\$0	\$629,240	\$4,816,454
	P2	\$0	\$0	\$3,286,519	\$6,826,329
	P1	\$0	\$506,343	\$3,176,579	\$8,024,343
	C1	C2	C3	C4	
	CoF				

Culture and other facilities (or components of these facilities) that are an extreme business risk are:

- Library
- MacLaren Art Centre
- Armory Building (Museum).

6. Lifecycle Activities

6.1 Lifecycle Activities by Asset Type

During the AM Plan workshops, City staff discussed preferred lifecycle activities for each asset type. Lifecycle activities are strategies implemented by the City to enable assets to achieve the required levels of service and to prolong the economic effective life and maximum potential life of the assets beyond the initial physical failure. Lifecycle activities may include maintenance strategies, renewal works and capital improvements or other similar interventions/treatments that are required over the life of an asset.

For facility assets, the only lifecycle activity included in this AM Plan is to replace the asset at the end of the MPL. No other lifecycle activities have been formalised by the City to date and therefore have not been applied to this AM Plan. It is recommended that lifecycle activities be defined, documented and applied for future revisions of this AM Plan at the levels defined in the asset hierarchies.

7. Long-Term Funding Analysis

7.1 Sustaining the Existing Asset Portfolio

Figures 7-1 to 7-18 illustrate the estimated long term investment needs to sustain the City’s existing facilities asset portfolio. That is, the estimated amount of money the City needs to reinvest in its existing asset portfolio on an annual basis to sustain the current level of service to the City’s citizens. The dollar amounts in these figures are in 2011 dollars.

These figures only represent investment needed to replace these assets – they do not include the cost to maintain or rehabilitate them throughout their lives (these costs are addressed in Section 7.2). All costs are order of magnitude estimates only and are based on cost data provided by the City of Barrie. The figures illustrate the long term funding needs at the levels detailed in the asset hierarchy.

The figures indicate that the City needs to be reinvesting approximately \$14.5 million in its facilities assets on an annual basis to sustain its existing asset portfolio.

Figure 7-1 Forecast Asset Renewal Investment – Facilities (Total)

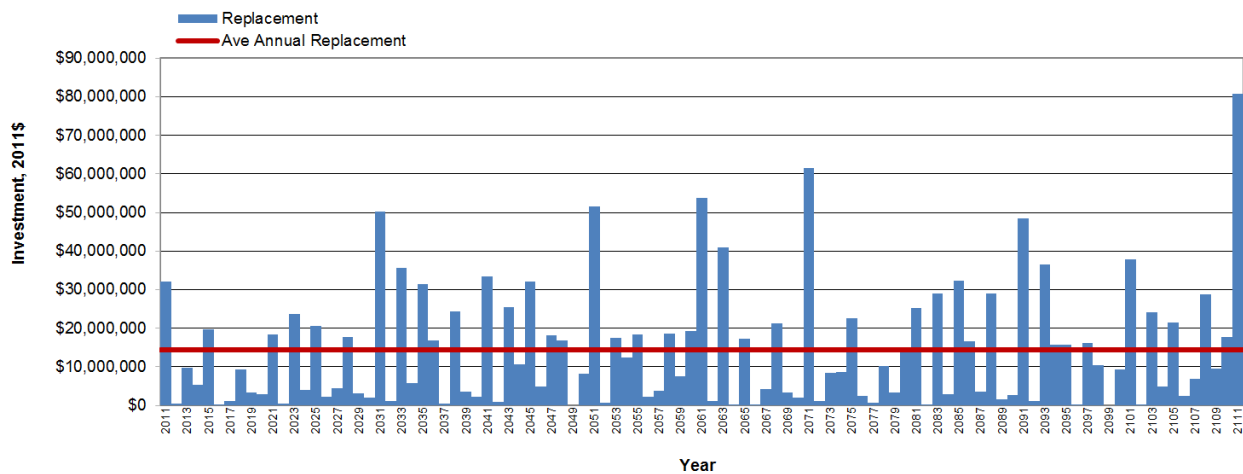


Figure 7-2 Forecast Asset Renewal Investment – General – Corporate

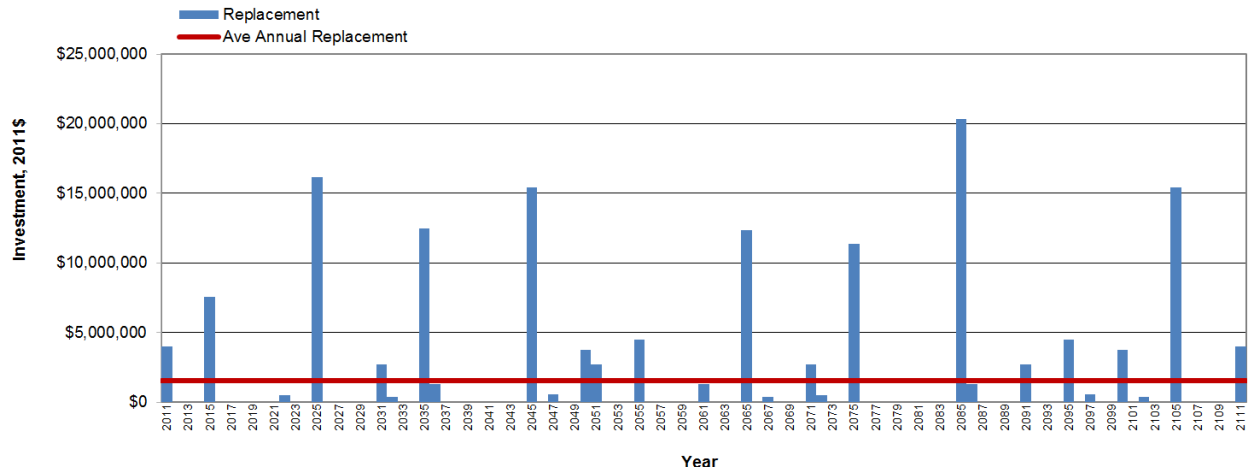


Figure 7-3 Forecast Asset Renewal Investment – General – Other

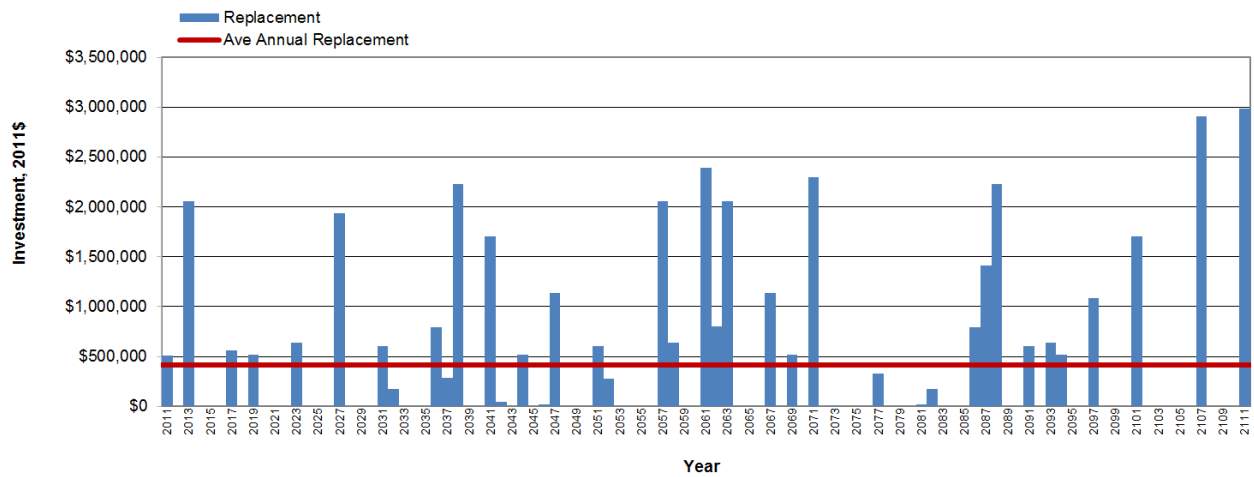


Figure 7-4 Forecast Asset Renewal Investment – Protection – Fire

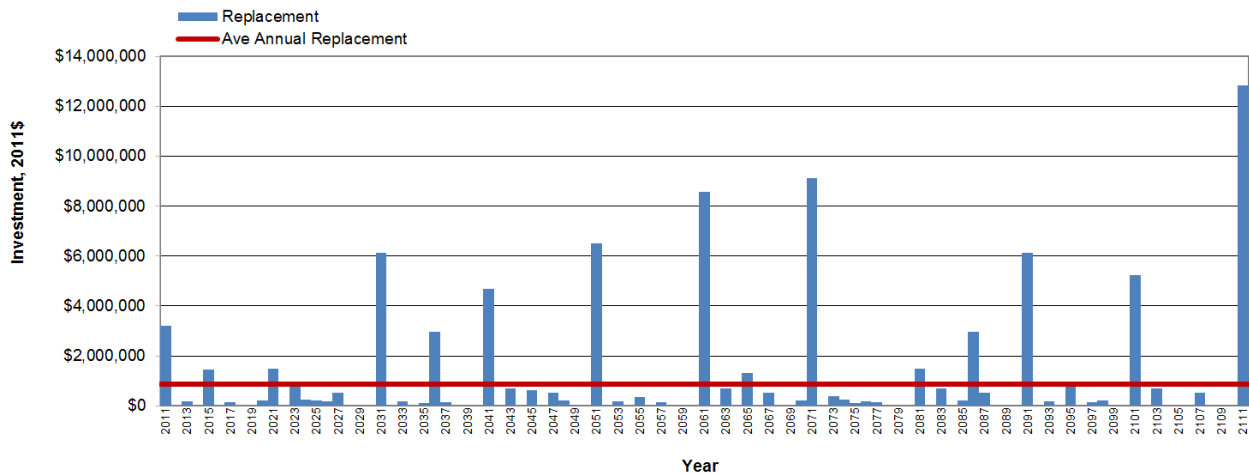


Figure 7-5 Forecast Asset Renewal Investment – Protection – Police

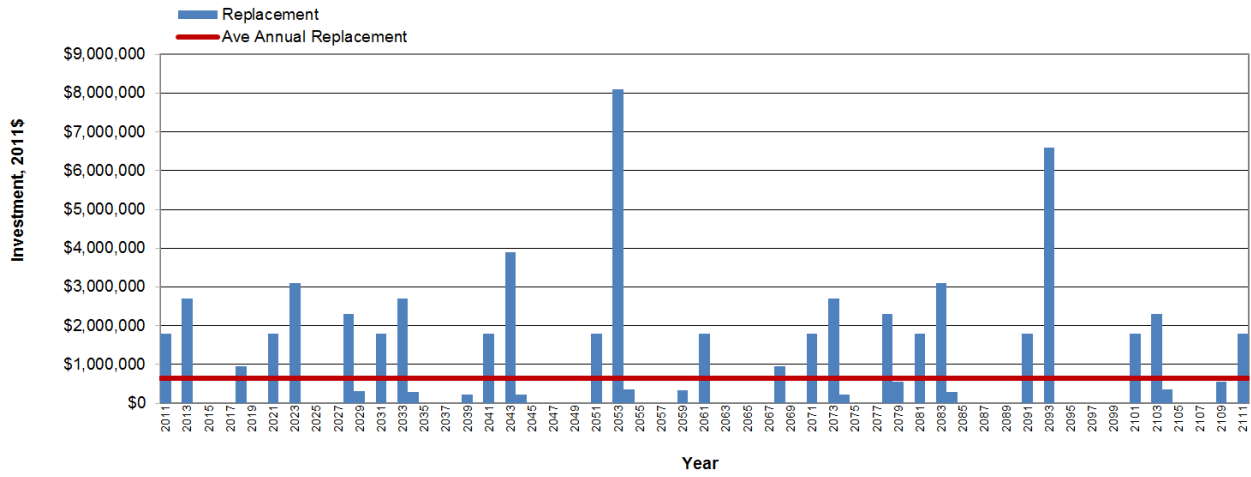


Figure 7-6 Forecast Asset Renewal Investment – Protection – POA

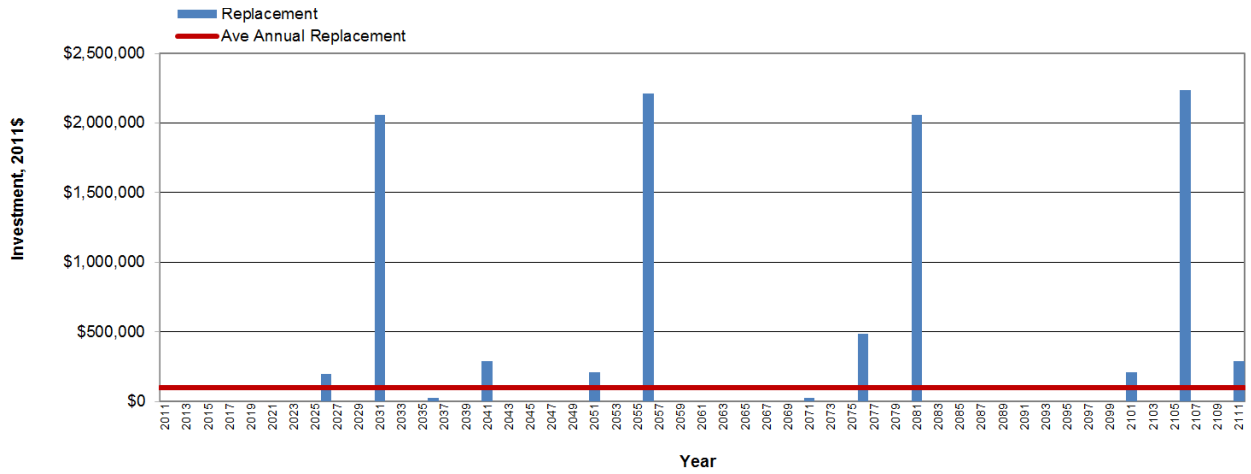


Figure 7-7 Forecast Asset Renewal Investment – Transportation – Roads

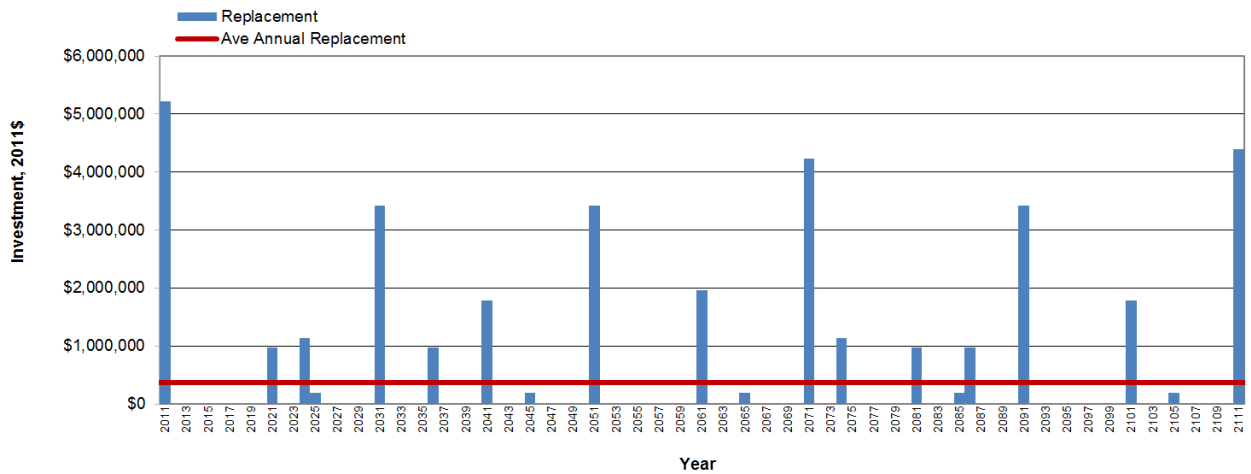


Figure 7-8 Forecast Asset Renewal Investment – Transportation – Transit

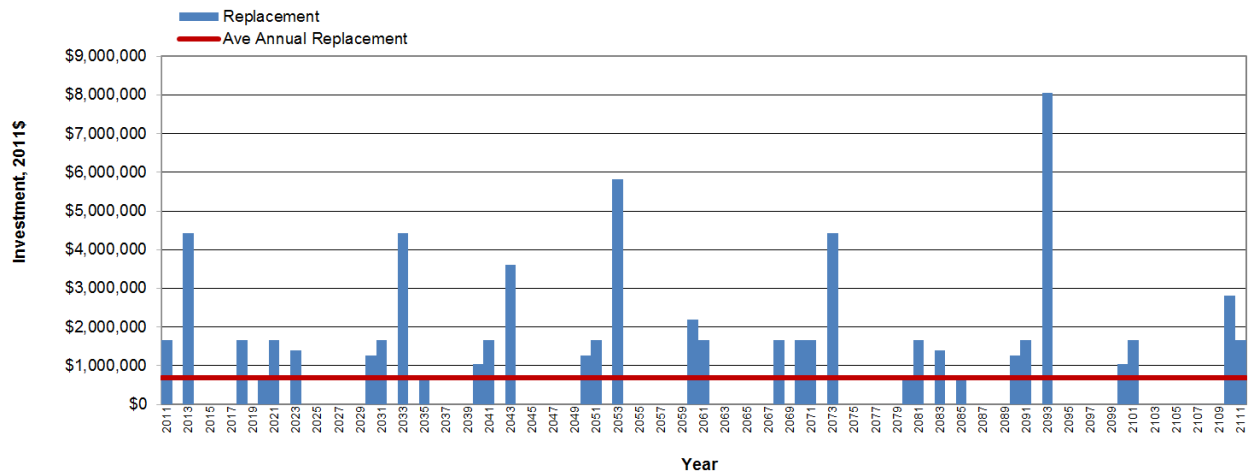


Figure 7-9 Forecast Asset Renewal Investment – Environmental – Wastewater

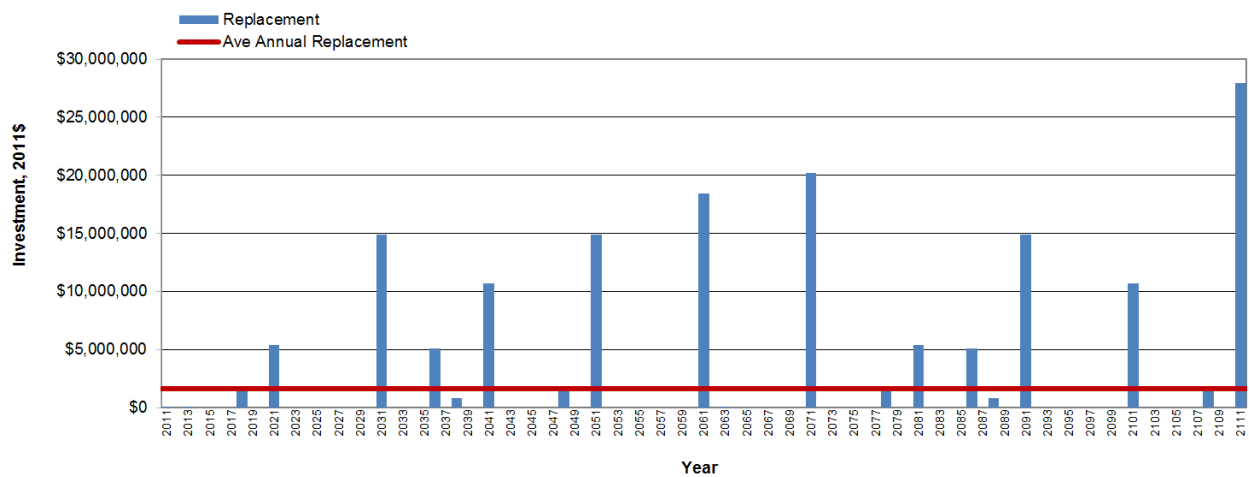


Figure 7-10 Forecast Asset Renewal Investment – Environmental – Water

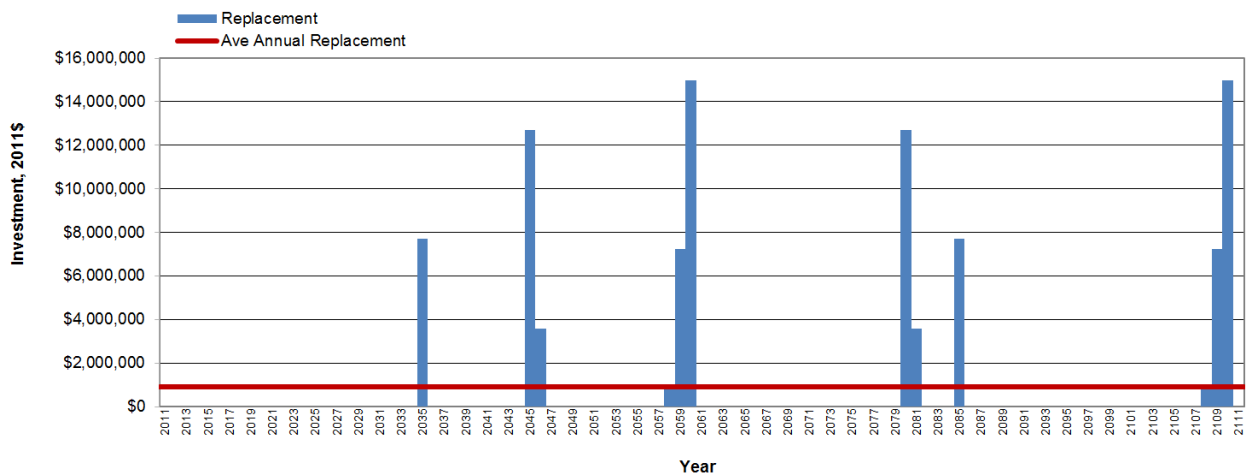


Figure 7-11 Forecast Asset Renewal Investment – Environmental – Waste Management

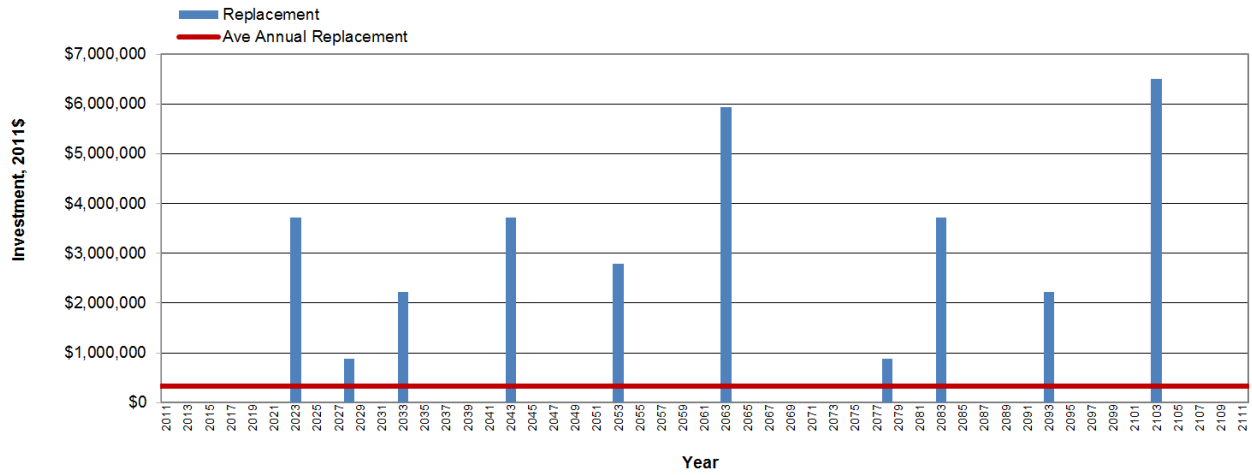


Figure 7-12 Forecast Asset Renewal Investment – Recreation & Culture – Parks

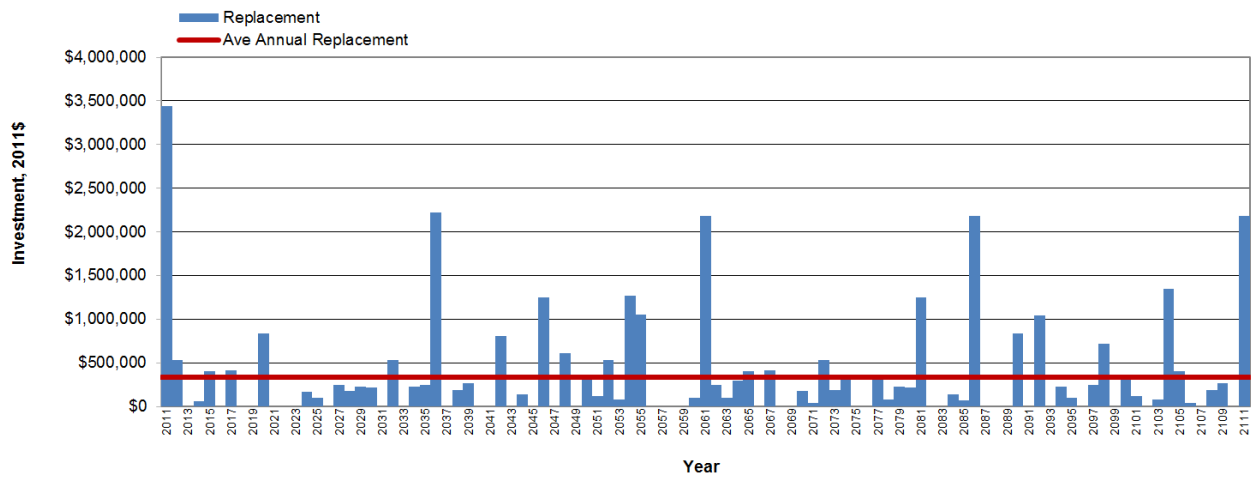


Figure 7-13 Forecast Asset Renewal Investment – Recreation & Culture – Recreation

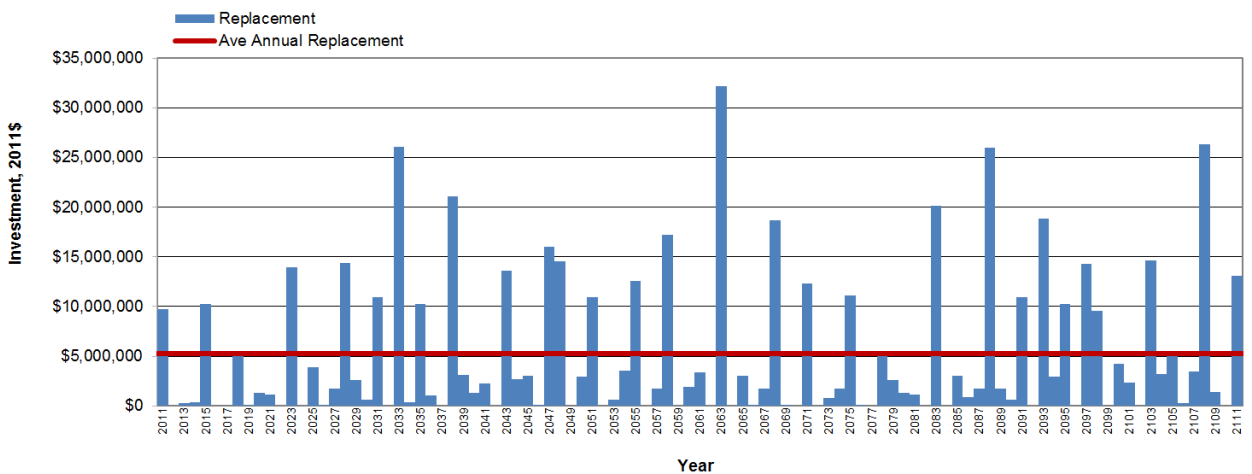
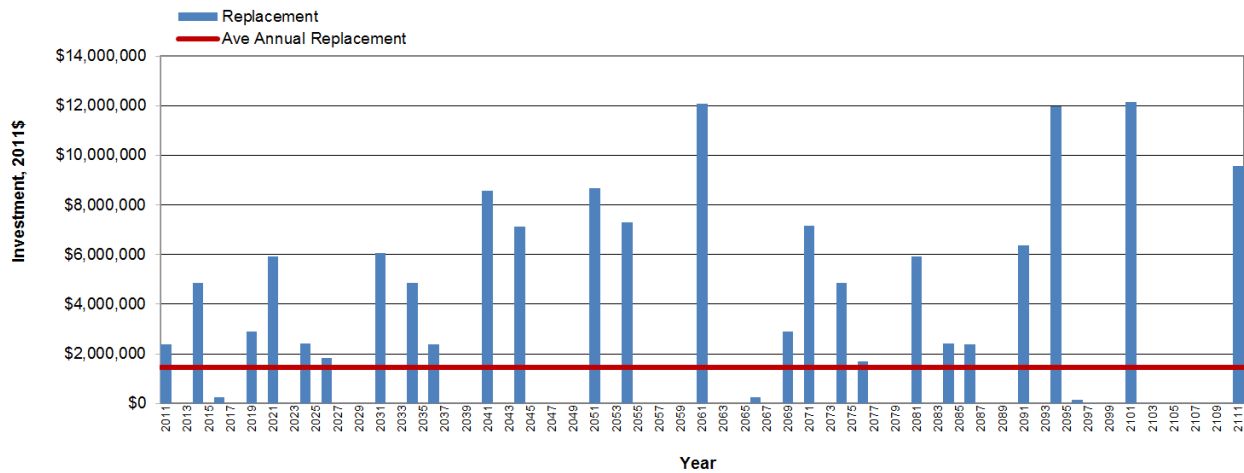


Figure 7-14 Forecast Asset Renewal Investment – Recreation & Culture – Culture & Other



The City reinvested approximately \$1.4 million to replace fleet assets within the portfolio in 2008, \$2.2 million in 2009, \$9.1 million in 2010, and approximately \$8.9 million in 2011 (all in 2011\$). The average reinvestment over the past four years is \$5.4 million, which is only 37% of the forecast average annual sustainable renewal amount of \$14.5 million. **Thus the historic rate of replacement is not sustainable.** For future asset management plans, the expenditures should be clearly defined as Additional Capacity / Capability or Renewal.

Table 7-1 below shows the level of expenditures over the past three years and the estimated budget for 2011 compared to the forecast average annual sustainable renewal amount (all in millions of 2011\$).

Table 7-1 Comparison of Past Expenditures / Budget to Sustainable Renewal Amounts

	Expenditures (in 2011\$)			Estimate	Forecast Sustainable
	2008	2009	2010	2011	Renewal Amount
Facilities (Total)	\$1.38	\$2.17	\$9.09	\$8.87	\$14.52
Waste Management					\$0.32
Wastewater					\$1.60
Water					\$0.93
Corporate	\$0.03	\$0.12	\$0.15	\$0.25	\$1.52
Other			\$1.21	\$3.38	\$0.41
Fire	\$0.55	\$0.67	\$0.10	\$4.42	\$0.85
Culture & Other	\$0.02		\$0.03	\$0.04	\$1.44
Parks					\$0.34
Recreation	\$0.41	\$0.54	\$2.48	\$0.47	\$5.29
Roads	\$0.21	\$0.48	\$2.32	\$0.26	\$0.36
Transit	\$0.07		\$0.08		\$0.70

8. Short-Term Investments

8.1 Corporate 10-Year Capital Program Needs

An important part of the City asset management decision-making is developing specific work or projects in the short term. Much of the City's investment in assets should be to reduce risk. The City's highest risk (BRE) assets are shown in Table 8-1 below with replacement cost in 2011 dollars (replacement cost for the high risk assets within each of the facilities). The City should confirm if these assets do indeed represent an extreme business risk to the City and, if they do, develop business cases to include them in the 10-year capital program.

Table 8-1 Extreme BRE Assets – Risk Reduction Program

Level 1	Level 2	Level 3		Replacement Cost (2011\$)
Environmental	Wastewater	WPCC	WPCC - Original	\$1,635,851
General	Corporate	CH	City Hall	\$14,405,013
General	Other	MAB	Foodland Market Building	\$838,752
General	Other	ORORES	Oro Residential Properties	\$2,686,351
General	Other	PUG1	1 Puget St	\$ 54,760
Protection	Fire	BFES1	Fire Station #1	\$4,339,765
Protection	Fire	BFES2	Fire Station #2	\$577,089
Protection	Fire	BFES3	Fire Station #3	\$476,703
Protection	Fire	BFES4	Fire Station #4	\$101,912
Protection	Police	BPSSPERL	Police – Sperling	\$8,536,050
Rec & Culture	Culture & Other	LIB	Library	\$7,888,006
Rec & Culture	Culture & Other	MAC	MacLaren art Centre	\$2,156,426
Rec & Culture	Culture & Other	MUL	Armoury Building (Museum)	\$239,125
Rec & Culture	Parks	CONCEN	Centennial Beach Concession	\$655,894
Rec & Culture	Parks	CONQUE	Queens Park Concession	\$536,122
Rec & Culture	Parks	PWHER	Heritage Park Washroom	\$510,659
Rec & Culture	Parks	PWJOHN	Johnson Beach washroom	\$206,294
Rec & Culture	Parks	PWMIN	Minet's Point Washroom	\$192,348
Rec & Culture	Parks	PWQUE	Queens Park Washroom	\$3,078,817
Rec & Culture	Parks	SPHER	Heritage Park Splash Pad	\$541,031
Rec & Culture	Recreation	ARC	Allandale Recreation Centre	\$6,379,900
Rec & Culture	Recreation	BCSC	Barrie Community Sports Complex	\$707,114
Rec & Culture	Recreation	BMC	Barrie Molson Centre	\$3,707,078
Rec & Culture	Recreation	LLCC	Lampman Community Centre	\$1,934,721
Rec & Culture	Recreation	MAR	Marina	\$967,936
Rec & Culture	Recreation	PCC	Parkview Centre	\$1,132,726
Rec & Culture	Recreation	SSCC	Southshore Centre	\$ 45,829
Transportation	Roads	OPS	Operations Centre	\$6,356,217
Transportation	Transit	TT	Transit Terminal	\$7,376,468





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