

**Responses to Association of Major Power Consumers  
in Ontario Interrogatories**



**1-AMPCO-1**

**Ref: Exhibit 1, Tab 9, Schedule 1, Page 1**

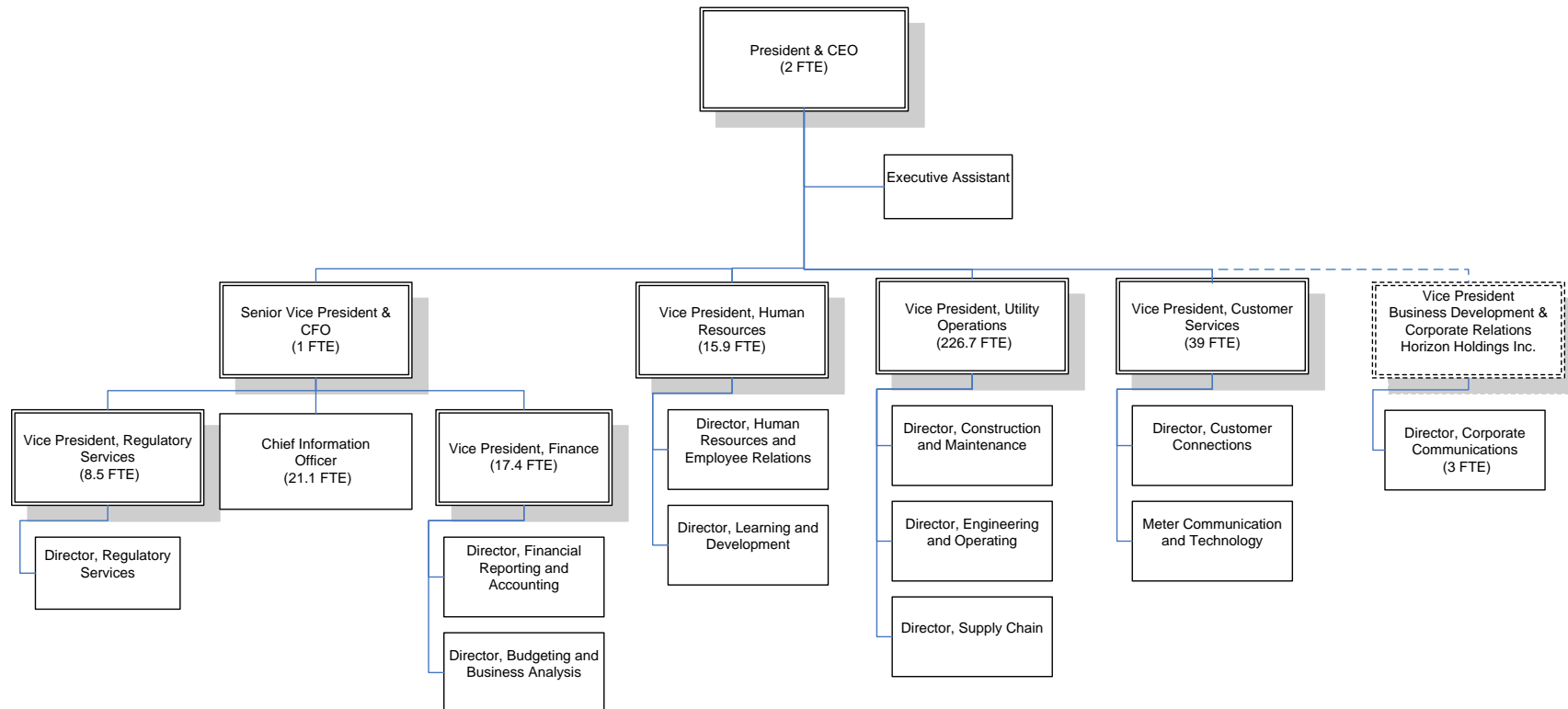
**Preamble:**

- a) Please provide the current organization structure below each of the executives provided in Figure 5-1 and include the total number of FTEs under each executive.**

**Response:**

- 1       a) The chart below outlines Horizon Utilities' current organization structure including the  
2       total number of FTE under each executive. The FTE for each executive is aligned to the  
3       2013 actuals as referenced in Exhibit 4, Tab 4, Schedule 2, Appendix 2-K, pg. 8.  
4       The Vice President, Business Development & Corporate Relations is responsible for  
5       Corporate Communications. This executive position, however, falls under Horizon  
6       Holdings Inc. It is included in the organization chart with the double hashed line as it is  
7       not a Horizon Utilities FTE. The Corporate Entities Relationship is illustrated in Exhibit 1,  
8       Tab 9, Schedule 2, p.1.

## Horizon Utilities Corporation



**1-AMPCO-2**

**Ref: Exhibit 1, Tab 10, Schedule 1, Page 3**

**a) Please provide the budget for the Board of Directors 2010 to 2013 actual and the forecast costs for 2014 to 2019.**

**Response:**

**1 Table 1: Board of Directors Costs**

	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	
2	Board of Directors	\$281,652	\$226,244	\$271,785	\$290,176	\$292,221	\$296,604	\$301,053	\$305,569	\$310,152	\$314,804



## 2-AMPCO-3

Ref: Exhibit 2, Tab 1, Schedule 1, Page 9

a) **Capital Additions – Please provide a summary of budget vs. actual capital additions for the years 2010-2013 (providing both CGAAP & MIFRS in 2011) and 2014 budget vs. 2014 year to date and forecast to year end.**

**Response:**

a) The table below provides a summary of budget versus actual capital additions for 2010 to 2013. In 2011, the budget was prepared only on a CGAAP reporting basis so a 2011 MIFRS budget has not been provided. For 2014, the budget is compared to the year to date May 2014 actuals and a forecast for the remainder of the year.

**Table 1: Capital Additions**

Year	Reporting Basis	Budget	Actual	Difference
2010	CGAAP	\$ 38,294,000	\$ 34,590,491	\$ (3,703,508)
2011	CGAAP	\$ 39,000,000	\$ 39,840,632	\$ 840,632
2011	MIFRS	N/A	\$ 30,500,974	N/A
2012	MIFRS	\$ 58,422,301	\$ 70,257,631	\$ 11,835,330
2013	MIFRS	\$ 37,783,219	\$ 37,908,037	\$ 124,818
2014	MIFRS	\$ 39,792,308	\$ 39,272,711	\$ (519,597)

Please refer to Horizon Utilities' response to Interrogatory 2-SEC-14(d) for an explanation of material variances between budget and actual capital expenditures.





## 2-AMPCO-4

Ref: Exhibit 2, Tab 1, Schedule 1, Page 10

**Preamble:** Horizon indicates 30% of the assets within 6 of the 22 asset groups have a health index of poor or very poor.

a) Please confirm the % of assets within 6 of the 22 asset groups that have a health index of poor.

b) Please confirm the % of assets within 6 of the 22 asset groups that have a health index of very poor.

**Response:**

- 1 a. Horizon Utilities identifies the percentage of assets within 6 of the 22 asset groups that have
- 2 a health index of poor or very poor in the table below.

3 **Table 1: Poor Health Index**

Asset Category	% poor	% very poor	Total
Underground Cables (secondary DB)	31%	11%	42%
Underground Cables (service DB)	54%	9%	63%
Vault Transformers	26%	23%	49%
Substation Switchgear	32%	0%	32%
Underground Cables (secondary ID)	27%	14%	41%
Submersible LBD Switches	26%	21%	47%

- 4
- 5 b. Please refer to the table provided in Horizon Utilities' response to part a) above.



**2-AMPCO-5**

**Ref: Exhibit 2, Tab 1, Schedule 1, Page 12**

**Preamble: Horizon indicates its buildings and infrastructure systems are at or nearing end of life.**

**a) Please provide end of life for each building and explain how this is arrived at.**

**1 Response:**

- 2 a) The expected life of a building is dependent on the components which make up the  
3 building. For example, brick structures have an expected life of 50 years, as identified  
4 by Evans Consulting Services in Appendix K - Building Condition Assessment 2013 in  
5 Exhibit 2, Tab 6, Appendix 2-4. Other components such as roofs and windows having a  
6 shorter expected life. Horizon Utilities provides the current age of its buildings and  
7 internal components in the table below.

Description	Expected Life	Current Age (Years)	End-of-Life	Reference
John Street Structure	50	62	Surpassed end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Hughson Street Building	50	100	Surpassed end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
John and Hughson Street Roof	15	15	At end-of-life	Appendix N - Roof Inspection Review in Exhibit 2, Tab 6, Appendix 2-4
John Street Windows	25	20	At end-of-life	Appendix M - Head Office Window Assessment in Exhibit 2, Tab 6, Appendix 2-4
John and Hughson Street HVAC Units	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
John and Hughson Street Electrical	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
John and Hughson Street Life Systems (Fire, etc.)	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Nebo Road HVAC Units	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Nebo Road Electrical	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Nebo Road Life Systems (Fire, etc.)	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Vansickle Road Windows	25	25	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Vansickle Road Electrical	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Vansickle Road Life Systems (Fire, etc.)	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Hwy # 8 Stoney Creek Windows	25	25	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Hwy # 8 Stoney Creek Electrical	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4
Hwy # 8 Stoney Creek Life Systems (Fire, etc.)	20	20	At end-of-life	Appendix K - Building Condition Assessment 2013 in Exhibit 2, Tab 6, Appendix 2-4

Horizon Utilities engaged third party consultants in 2013 to perform building condition assessments ("BCAs") of its buildings and infrastructure systems. BCAs were conducted to:

- determine which buildings components were at end-of-life and required replacement;
- understand building and operational requirements;
- determine the level of required investment; and
- prioritize the prospective building renewal projects as identified in Exhibit 2, Tab 6, Schedule 1.

1 BCAs determine the overall condition of a building and infrastructure systems based on life  
2 cycle analysis. Life cycle analysis ("LCA") is based on the premise that every building and  
3 component has a finite life. For example, a roof membrane may have a fifteen year life before  
4 replacement is required. One objective of a condition assessment is to plan for the replacement  
5 of the item before it becomes an emergency. In the case of a roof membrane, replacement is  
6 scheduled in the later stages of its fifteen year life to prevent damage to the building structure,  
7 interior contents and infrastructure systems as a result of deterioration and water leakage. To  
8 validate end of life information, regular inspections, and tests in the case of some assets, are  
9 completed to gauge the actual condition of the asset relative to its age.

10  
11 Further details on the results of Horizon Utilities' BCAs are provided on pages 39 to 43 in Exhibit  
12 2, Tab 6, Schedule 1.



**2-AMPCO-6**

**Ref: Exhibit 2, Tab 6, Schedule 1**

- a) Page 12 - Customer Impacts - Please discuss further how Horizon balanced distribution risks and customer bill impacts to arrive at the proposed increase for 2015 and the increases thereafter.**
- b) Page 16 -Table 2-26 – Please provide the historical failure rates for the Substations provided in the table for the years 2006 to 2013.**
- c) Page 17 - Please provide the net economic benefit calculation of \$22,500,000.**
- d) Page 22 – Table 2-47 - Please provide the proposed metres of underground XLPE renewal for each year by operating area shown.**
- e) Page 22 – Please provide historical failure rate data for underground XLPE in the operating areas shown.**
- f) Page 23 – XLPE - Please compare costs per metre for reactive replacement compared to proactive replacement.**
- g) Page 34 – How does Horizon define an overcrowded work environment?**
- h) Page 62-Table 2-58 – Please provide the number of light duty and heavy duty vehicle replacements for each location by year.**

**Response:**

- 1 a. Please see Horizon Utilities' response to Interrogatory 2-Staff-17.
- 2 b. Horizon Utilities provides the historical failure rates (number of failures/year) for the
- 3 substations identified in Table 2-46 for 2007 to 2013 in Table 1 below.

1 **Table 1: Historical Failure Rates**

Year	Number of Failures	Substation and Failed Component
2007	1	Spadina - Transformer
2008	3	Wentworth - Transformer Central - Bus Taylor - Reclosure
2009	3	Eastmount - Transformer Strouds - Transformer Bartonville - Transformer
2010	3	Webster - Transformer Hughson - Transformer Whitney - Battery
2011	1	Bartonville - Potential Transformer
2012	0	
2013	2	York - Reclosure John - Transformer
2014	1	Dewitt - Transformer

2

- 3 c. The net economic benefit of \$22,500,000 was derived by determining the avoided capital  
4 investment that would be required to renew the nine substations that will be  
5 decommissioned in the 2015 to 2019 rate plan period. A substation replacement cost of  
6 \$2,500,000 for each of the nine substations was used to determine this value.
- 7 d. Horizon Utilities provides the proposed metres of underground XLPE for each year by  
8 operating area in Table 2 below.



U/G (XLPE) Renewal in Metres		2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
	Ancaster/Flamborough/Dundas	10,280	6,694			4,899
	Hamilton Mountain		18,408	32,407	23,622	24,005
	St. Catharines	3,075	2,677	5,615	11,040	20,968
	Stoney Creek			4,882	11,961	
<b>U/G (XLPE) Renewal - Total metres</b>		<b>13,355</b>	<b>27,779</b>	<b>42,904</b>	<b>46,623</b>	<b>49,872</b>

**Table 2 – U/G XLPE Renewal in metres**

e. Horizon Utilities provides the historical failure rates (number of outages) due to failures of XLPE and related underground equipment, for the operating areas identified in Table 2-47 for 2010 to 2013 in Table 3 below.

**Table 3 – Historical Failure Rate (Number of Outages)**

Operating Area	Number of Outages				
	2010	2011	2012	2013	Total
Ancaster/Flamborough/Dundas	5	-	5	7	17
Hamilton Mountain	19	18	13	24	74
St. Catharines	23	14	16	22	75
Stoney Creek	24	26	11	12	73
<b>Grand Total</b>	<b>71</b>	<b>58</b>	<b>45</b>	<b>65</b>	<b>239</b>

f. Horizon Utilities estimates that the XLPE reactive replacement cost per metre is approximately three times more than the planned or proactive replacement cost. This estimate is based on a study performed by IBM Business Consulting Services pertaining to Supply Chain Management analysis which included analysis of planned vs. unplanned work. The study concludes that reactive work is three times more costly than planned work.

Horizon Utilities analyzed the 2013 proactive versus reactive costs for replacement of XLPE primary cable and found the reactive replacement costs to be 323% higher than the proactive replacement costs. The average cost for proactive replacements in 2013 was \$66/metre as compared to the average cost for reactive replacements in 2013 of \$213/metre. This analysis did not include indirect costs associated with reactive replacement such as the cost impact of diverting labour resources from planned work to respond to the unplanned reactive replacement work. If the indirect costs were included,

the cost of reactive replacement compared to proactive replacement would be higher than 323%.

g) Horizon Utilities defines an overcrowded work environment by the following conditions:

- Meeting rooms are being used for make-shift offices and contain multiple workstations and printing equipment in order to meet department space requirements. One example of an overcrowded work environment is the use of the John Street 4<sup>th</sup> floor meeting room as the temporary office space for the procurement group. The meeting room had a square footage of 500 sq. ft.; was the only meeting room for that floor; and was used to house five employees and a printing/copying and filing area for two years. The procurement workstations were allocated 49 sq. ft. in this temporary space as compared to Horizon Utilities' office space standard of 63 sq. ft. per workstation;
- Private offices are divided into make-shift workstations to house employees and printing equipment in order to meet department space requirements;
- Office employees sharing the same space as meter testing equipment. Private offices and workstations are located in warehouse space such as the Nebo Road South warehouse mezzanine and the John Street first floor occupied by Customer Connections and Metering Services employees;
- Employees from the same departments are located on different floors or in different buildings; and
- Lockers/washrooms/showers are installed in temporary locations to support current employee requirements.

h) Horizon Utilities provides the number of light duty and heavy duty vehicles replacements between 2009 and 2014 by location in Tables 4 and 5 below:

**Table 4 - Light Duty Vehicle Replacement**

Location	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year
Hamilton	3	4	4	1	0	1
St. Catharines	0	6	1	0	0	0
Total	3	10	5	1	0	1

1 **Table 5 - Heavy Duty Vehicle Replacement**

Location	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year
Hamilton	4	4	2	3	0	2
St. Catharines	2	1	1	0	0	1
Total	6	5	3	3	0	3



## 2-AMPCO-7

Ref: Exhibit 2, Tab 6, Schedule 3

a) Page 2-Table 2-63- Please provide 2014 year to date capital expenditures and forecast to year end.

**Response:**

a) The 2014 year to date capital expenditures and forecast to year end are provided in column "Q2F" in the table below. The Q2 2014 forecast includes five months of actuals (January-May) and seven months of forecast (June-December).

**Table 1: Capital Expenditures**

Category	2014 (MIFRS)		
	Plan	Q2F	Variance
	\$'000s		%
System Access	\$7,540	\$7,451	-1.2%
System Renewal	\$15,372	\$16,071	4.5%
System Service	\$4,101	\$3,401	-17.1%
General Plant	\$10,760	\$11,149	3.6%
<b>Total Expenditures</b>	<b>\$37,774</b>	<b>\$38,072</b>	0.8%
Change in WIP	\$2,019	\$1,201	-40.5%
<b>Total Additions</b>	<b>\$39,792</b>	<b>\$39,273</b>	-1.3%



**2-AMPCO-8**

**Ref: Exhibit 2, Tab 6, Appendix 2-4, Page 5**

**Preamble: The evidence indicates that it has determined a need to perform a condition assessment of its key distribution assets. Such an undertaking resulted in a quantifiable evaluation of asset condition, aiding in prioritizing and allocating sustainment resources, as well as further and facilitated development of the DSP. Horizon indicates this approach is aligned with the performance-based rate setting established in the Board's RRFE.**

**a) Please explain further how this approach is aligned with the performance-based rate setting of the RRFE.**

**Response:**

- 1       a. Under the RRFE, the preparation of a Distribution System Plan ("DSP") is a Board
- 2       requirement, regardless of the rate setting option chosen by the electricity distributor.
- 3       The DSP is the vehicle through which the distributor identifies investment requirements
- 4       to meet the Board's four performance outcomes in the RRFE, primarily but not
- 5       exclusively the Operational Effectiveness outcome. An Asset Condition Assessment is
- 6       one of the key elements informing the development of the DSP in prioritizing and pacing
- 7       investment needs for renewal capital that underpin the proposed rate under the Custom
- 8       IR rate setting mechanism chosen by Horizon Utilities.





**2-AMPCO- 9**

**Ref: Exhibit 2, Tab 6, Appendix 2-4**

- a) Page 7- Please confirm the savings in the test period related to the decommissioning of nine substations.**
- b) Page 20 – Please provide the comparator set of 20 urban utilities in Southern Ontario that Horizon uses to establish its annual SAIDI target.**
- c) Page 21 – Please discuss if Horizon plans to implement and report CEMI & CELDI in the test period and if any targets will be set and when.**
- d) Pages 21-22 – Please provide targets and results to date for the following metrics: Cost Performance Index, Schedule Performance Index and Request for Change.**
- e) Page 22 – Health Index – Please provide a list of the numerous condition based parameters that Horizon uses to quantify equipment condition.**
- f) Page 28 – Please provide the actual SAIDI, SAIFI and CAIDI results with loss of supply and excluding loss of supply for the years 2006 to 2008.**
- g) Page 28 – Please discuss SAIDI and SAIFI trends in 2014 based on year to date results and provide Horizon's 2014-2019 SAIDI targets.**
- h) Page 28 – Interruptions by Cause – Please provide a breakdown of the specific causes that contribute to equipment & material failures.**
- i) Page 29 – Figure 10 - Please provide the annual data that makes up the 30% of customer minutes (5 year average) related to equipment & material breakdown.**
- j) Page 29 - Please provide further outage data (% of customer minutes) for each cause of equipment & material failures for the past 5 years.**
- k) Page 37 – Horizon's evidence references investment decisions related to the long term stewardship of the assets to provide an acceptable level of customer service. Please define an acceptable level of customer service.**
- l) Page 42 – Kinetrics recommends a twenty year investment level of \$693,000,000. Please explain the basis for 20 years. Was a longer term timeframe considered such as 40 years? If not, why not?**
- m) Page 50 – Results Reporting – Horizon indicates that in 2014 it will develop and implement key indicators to gauge the effectiveness of the Facilities Asset Management Planning Process. Please provide an update on the status of this work, the key indicators under consideration and when these indicators will be implemented.**

- n) Page 66 – Horizon provides a map of seven operating areas in Hamilton. Please confirm the proposed investment amount (\$) by year for the years 2015 -2019 for each operating area under the categories System Access, System Renewal, System Service.
- o) Pages 70-98 – Please provide a breakdown of the specific causes that contribute to equipment & material breakdown for each operating area that contribute to the outages (% of customer minutes) provided in Figures 25, 27, 29, 31, 34, 36, 38.
- p) Page 100 – For St. Catharine's, please provide a breakdown of the specific causes that contribute to equipment & material breakdown percentage of customer minutes shown in Figure 40.
- q) Page 100 – For St. Catharines, please provide the proposed investment amount (\$) by year for the 2015-2019 timeframe for System Renewal and System Service work.
- r) Page 104 – Horizon indicates the Health Index distribution of substation transformers and circuit breakers has markedly improved and the Health Index distribution is now at an acceptable level. Please confirm what Horizon considers to be an acceptable level.
- s) Page 106 – Horizon indicates its capital investment programs were determined to consider the renewal investment requirements for all assets with a poor or very poor health index distribution. What would be the reduction in the proposed investment level over the 2015-2019 timeframe if only assets with a very poor health index distribution were included in the proposed capital investment program?
- t) Page 126 – Figure 64 - Horizon provides the Material /Equipment Configuration. Please provide the basis for this Figure, i.e. the timeframe used to develop the percentages shown.
- u) Page 127 – Horizon indicates reactive renewal is more costly than planned proactive renewal. Please provide a cost comparison.
- v) Page 129 – Horizon indicates that based on the Health Index Distribution and Reliability analysis proactive replacement of PILC cable is not needed at this point. Please explain how the reliability analysis was undertaken.
- w) Page 129 – Please discuss if Horizon has established a threshold level of forecast Health Index Distribution that triggers future investment.
- x) Page 136 – To address the availability of meeting room space, has Horizon opted to rent space in last five years? If so, please provide the annual cost.
- y) Page 138 – The evidence indicates Horizon has developed standards for office space. Please explain on what basis these standards were developed.

- z) Page 138 – Table 19 – Please provide the guidelines Horizon is relying on in its determination of average square foot per employee post renovation.
- aa) Page 139 – Please explain why shower and locker facilities are required at four of the buildings.
- bb) Please discuss if Horizon considered a later timeframe or staggered timeframe to renovate its five buildings given the significant increase in other capital investments in the 2015-2019 timeframe.
- cc) Page 150 - Please identify any changes in the frequency of Horizon's maintenance, testing and inspection programs since 2011.
- dd) Page 160 – Please provide the typical frequency of insulator washing.
- ee) Page 161 – Horizon indicates that assets that exceed Horizon's ability to address pose a high level of risk. Please confirm if ability to address refers to Horizon's maintenance activities.
- ff) Page 163 – The evidence indicates for the areas Hamilton Downtown and Hamilton Waterfront Industrial, investment may be required in the construction of additional feeders or modification of existing feeders to service redevelopment in the area. In what year is this work contemplated, and are any funds for this work included in the proposed 2015 to 2019 capital budget.
- gg) Page 171 – Figure 77 - Please provide Horizon's Renewal Investment Profile if only those assets with a health index of very poor were addressed.
- hh) Page 173 – Table 31 – For each of the asset groups listed, please provide the spending levels for each of the years 2010 to 2013 and the number of units addressed in each group by year.
- ii) Page 173 – Table 31 – For each of the asset groups listed, please provide the spending levels for each of the years 2015 to 2019 and the number of units addressed in each group by year.
- jj) Page 186 – Horizon indicates its forecast is based on \$18 per square foot which is consistent with industry comparators. Please provide the data for the industry comparators.
- kk) Page 186 – Please confirm the age and end of life of the head office windows.

**Response:**

a) Horizon Utilities confirms that the savings in the rate plan period related to the decommissioning of nine substations is \$335,000 as follows:

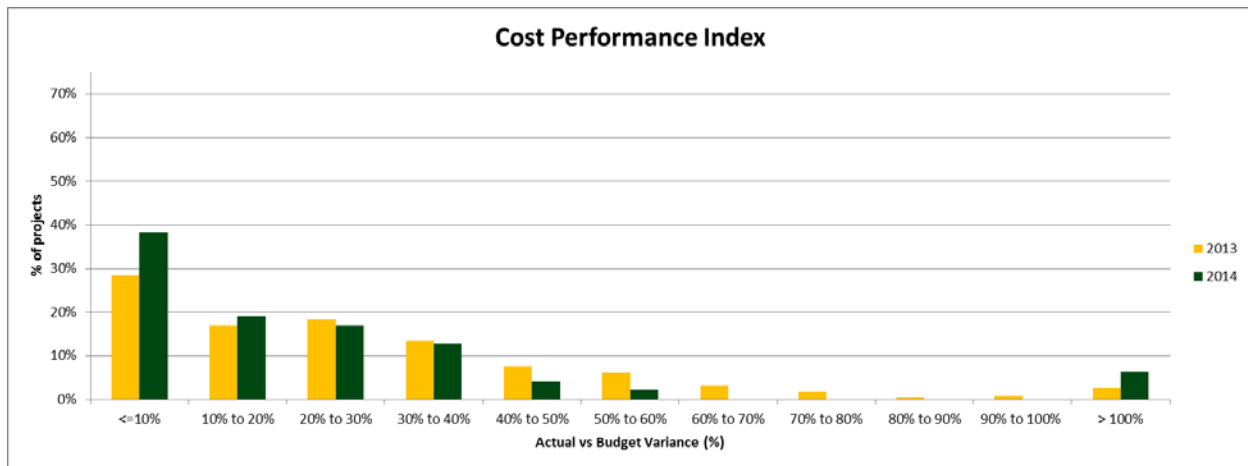
- \$23,000 realized in 2016
- \$82,000 realized in 2017
- \$52,000 realized in 2018
- \$178,000 realized in 2019.

b) The comparator set of 20 urban utilities in Southern Ontario used by Horizon Utilities to establish its annual SAIDI target is as follows:

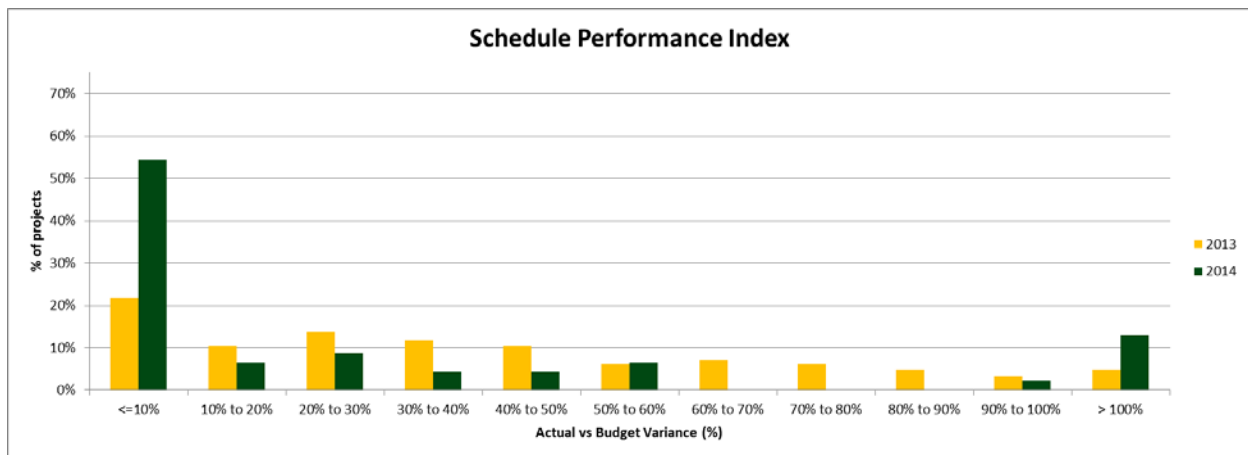
Brantford Power Inc.;  
Burlington Hydro Inc.;  
Cambridge and North Dumfries Hydro Inc.;  
Enersource Hydro Mississauga Inc.;  
EnWin Utilities Ltd.;  
Guelph Hydro Electric Systems Inc.;  
Horizon Utilities Corporation;  
Hydro One Brampton Networks Inc.;  
Hydro Ottawa Limited;  
Kitchener-Wilmot Hydro Inc.;  
London Hydro Inc.;  
Milton Hydro Distribution Inc.;  
Niagara Peninsula Energy Inc.;  
Oakville Hydro Electricity Distribution Inc.;  
Oshawa PUC Networks Inc.;  
Powerstream Inc.;  
Toronto Hydro-Electric System Limited;  
Veridian Connections Inc.;  
Waterloo North Hydro Inc.; and  
Whitby Hydro Electric Corporation.

- c) Please refer to Horizon Utilities' response to Interrogatories 1-Staff-10 parts a) and b).
- d) Horizon Utilities provides the results to date for the Cost Performance Index ("CPI"), Schedule Performance Index ("SPI"), and Request for Change ("RFC") in the Charts 1 and 2 below.

**Chart 1**



**Chart 2**



CPI measures the ability to complete projects within the budgeted costs. Horizon Utilities' target is for actual project costs to be within the greater of 10% or \$1,000 of the budgeted costs 70% of the time.

SPI measures the ability to complete projects within a specified amount of time. Horizon Utilities' target is for actual number of hours to be within the greater of 10% or 20 hours of the budgeted hours 60% of the time. Further details are provided in Section 1.3.1 of the DSP filed as Appendix 2-4 of Exhibit 2.

Horizon Utilities provides its results to date for the RFC metric in Table 1 below.

**Table 1**

	2013	2014 YTD
Total Number of Projects	422	40
Number of Projects with RFCs	37	6
% Projects with RFCs	9%	15%

Horizon Utilities does not have an internal target for this metric but plans to establish an internal target in 2015 based upon the benchmarks established in 2013 and 2014.

- e) The condition based parameters used by Horizon Utilities used to quantify equipment condition are provided for each asset group in Appendix A of Appendix B – Kinectrics' 2013 Asset Condition Assessment of Exhibit 2, Tab 6, Appendix 2-4. For example, Pole Top Transformer parameters are; service record, loading and age, and are identified on page 73. Horizon Utilities has provided Table 2 below summarizing the condition based parameters below for ease of reference.

1 **Table 2**

Asset Category	Condition Parameter	Reference
Substation Transformers	Insulation	Table 1-1 (Page 41 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Cooling	
	Sealing & Connection	
	Performance Record	
Substation Circuit Breakers	Age	Table 2-1 (Page 54 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Contact Performance	
	Arc Extinction	
	CB Operation	
Substation Switchgear	CB Performance Record	Table 3-1 (Page 64 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Age	
	Enclosure Condition	
	Bus & Cable Compartment	
Pole Top Transformers	Low Voltage Compartment	Table 4-1 (Page 73 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Switchgear Performance Record	
	Age	
	Loading	
Overhead Conductors	Age	Table 5-1 (Page 80 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Age	
Overhead Line Switches	Age	Table 6-1 (Page 93 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
Wood Poles	Pole Strength	Table 7-1 (Page 102 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Age	
	Overall	
Concrete Poles	Age	Table 8-1 (Page 110 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
Underground Cables	Age	Table 9-1 (Page 117 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
Pad Mounted Transformers	Service Record	Table 10-1 (Page 134 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Loading	
	Age	
Pad Mounted Switchgear	Physical Condition	Table 11-1 (Page 143 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Switch/Fuse Condition	
	Insulation	
	Other	
	Age	
Vault Transformers	Loading	Table 12-1 (Page 152 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Age	
Utility Chambers	Age	Table 13-1 (Page 162 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
	Overall	
Vaults	Age	Table 14-1 (Page 169 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)
Submersible Load Break Switches	Age	Table 15-1 (Page 175 of Appendix B - Kinetrics' 2013 Asset Condition Assessment)

- f) Horizon Utilities provides the actual SAIDI, SAIFI, and CAIDI numerical values, including loss of supply for 2006 to 2008 and excluding loss of supply for 2007 and 2008 in Table 3 below. Horizon Utilities did not record reliability metrics excluding loss of supply ("LOS") in 2006.

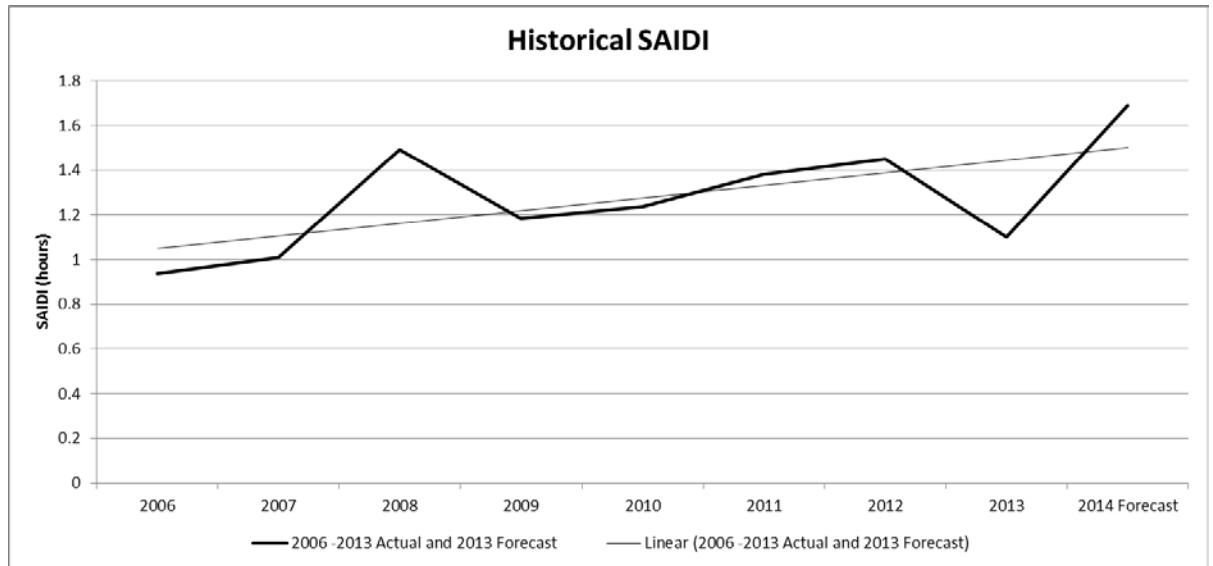
**Table 3**

		2006	2007	2008
SAIDI	including LOS	0.94	1.01	1.49
	excluding LOS		0.97	1.16
SAIFI	including LOS	1.44	1.59	1.80
	excluding LOS		1.47	1.47
CAIDI	including LOS	0.65	0.64	0.83
	excluding LOS		0.66	0.79

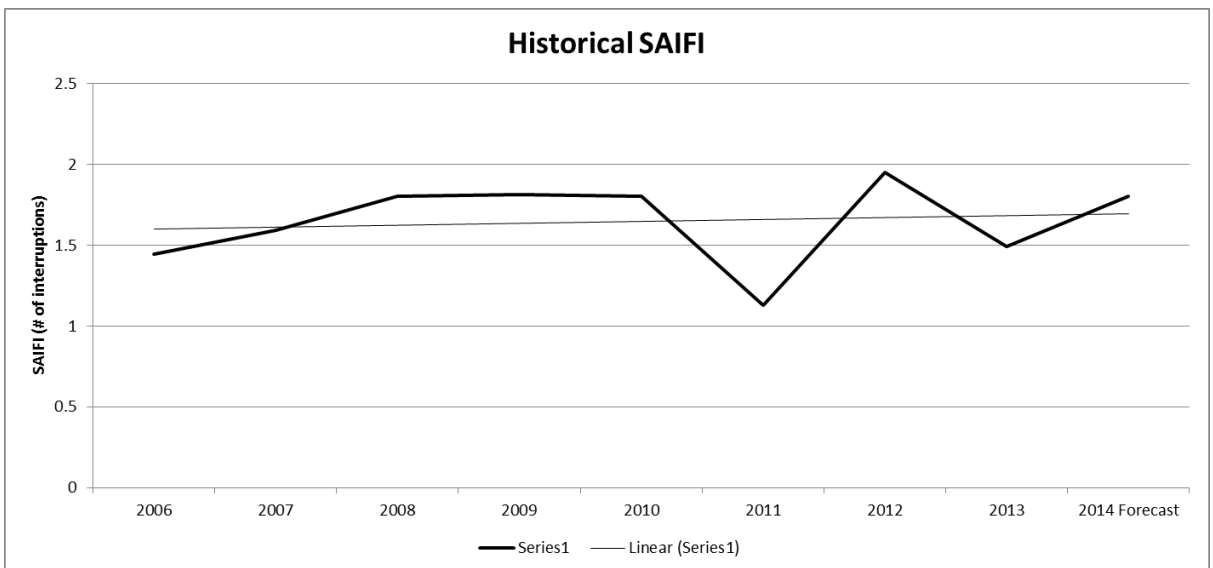


- g) Horizon Utilities' 2014 forecast for SAIDI and SAIFI indicates that both SAIDI and SAIFI are continuing to increase. SAIDI and SAIFI for 2006 to 2014 excluding major events are provided in Charts 3 and 4 below.

**Chart 3**

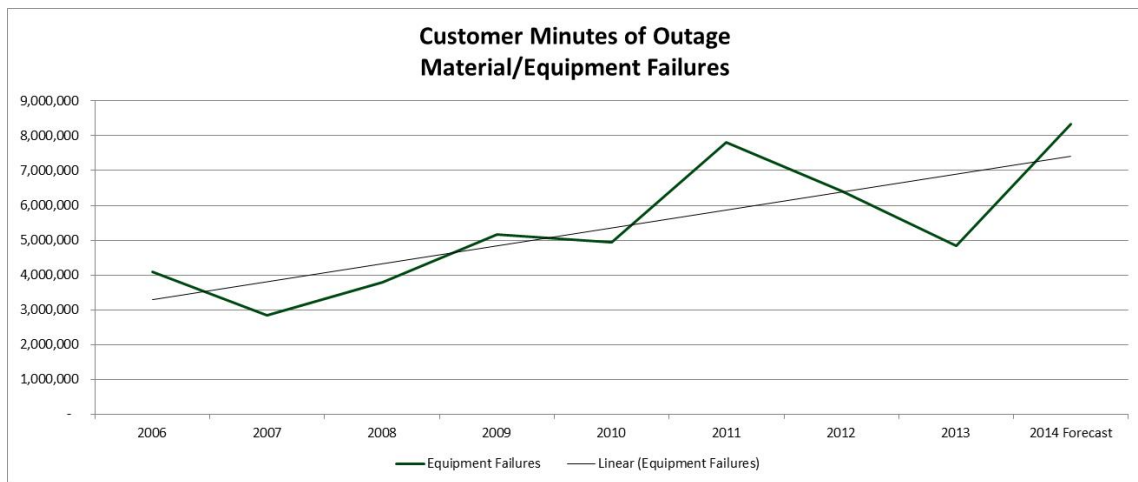


**Chart 4**



Material and equipment failures are trending significantly higher than 2013. 2014 is estimated to have the highest customer minutes of outage in the 2006 to 2014 time period. The compound annual growth rate for the customer minutes of outage due to material and equipment failures is 7.9% over the 2006 to 2014 time period. Horizon Utilities provides the customer minutes of outage for 2006 to 2014 in Chart 5 below.

**Chart 5**



Horizon Utilities develops an internal target for SAIDI through comparison of system performance relative to a comparator set of 20 urban utilities in Southern Ontario. Horizon Utilities' methodology for setting its internal SAIDI target is described on page 20 of Exhibit 2, Tab 6, Appendix 2-4. Horizon Utilities' 2014 target SAIDI based on this methodology is between 0.87 and 1.15.

Horizon Utilities has not calculated an absolute value for its SAIDI target for 2015 to 2019. The absolute value of the SAIDI target for each year will be set in Q4 of the prior year, based on the last available year of actual reliability data. This data is published annually in September in the Ontario Energy Board's Yearbook of Electricity Distributors.

- h) Horizon Utilities provides the breakdown of the specific causes that contribute to equipment and material failure in Table 4 below.

**Table 4**

Sub Cause
Transformer Failures
Overhead Primary Failures
Overhead Hardware
XLPE Underground Primary and Accessories
PILC Underground Primary and Accessories
Secondary Failures
Load Break Failure
Breaker/Reclosure Failure

- i) Horizon Utilities provides the annual outage data that makes up the % of customer minutes related to material and equipment failures in the attachment “2-AMPCO-9i\_Attch\_Equipment and Material Failures”.

This attachment identifies each unique outage due to material and equipment failures from Jan 1, 2010 to December 31, 2013. This information is not available for 2009 outages.

- j) Horizon Utilities provides further outage data (% of customer minutes) for each cause of equipment and material failures from 2010 to 2014 in Table 5 below.

**Table 5**

Sub Cause	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals	Average
Transformer Failures	10%	20%	12%	11%	13%
Overhead Primary Failures	14%	8%	18%	22%	15%
Overhead Hardware	25%	15%	10%	8%	14%
XLPE Underground Primary and Accessories	43%	46%	47%	43%	45%
PILC Underground Primary and Accessories	3%	8%	2%	11%	6%
Secondary Failures	1%	1%	1%	1%	1%
Load break failure	4%	0%	11%	4%	5%
Breaker / Reclosure failure	0%	1%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

- k) Horizon Utilities’ definition of acceptable level of customer service and reliability, in the context of page 37 of Exhibit 2, Tab 6, Appendix 2-4, refers to Horizon Utilities’ distribution system reliability targets. The methodology for determining Horizon

1 Utilities' reliability targets is described on page 20 in Exhibit 2, Tab 6, Appendix 2-4  
2 and in Horizon Utilities' response to part g) of this interrogatory.

3 l) Horizon Utilities utilizes a 20 year planning horizon for capital investments because it  
4 aligns with its corporate financial planning horizon of 20 years. Furthermore it  
5 facilitates balancing distribution system risks and customer bill impacts. The  
6 demographics of Horizon Utilities' distribution system and the declining level of system  
7 reliability experienced by Horizon Utilities' customers requires a level of capital  
8 investment that cannot be accomplished within a five year planning horizon.  
9 Extending the planning horizon to 20 years allows Horizon Utilities to invest along a  
10 carefully managed timeframe in a manner that balances distribution system risks and  
11 customer rate impacts.

12 A longer term timeframe was not considered due to the uncertainties and lack of  
13 precision associated with forecasting past 20 years.

14 m) Horizon Utilities is currently collecting historical data on the performance of its building  
15 and components; and analysing the results of its building condition assessments to  
16 determine appropriate key performance indicators. Key performance indicators will be  
17 developed based on the performance of HVAC units, equipment & structural  
18 maintenance programs, hazardous materials testing programs and buildings systems  
19 inspections. Horizon Utilities is planning to implement the selected key performance  
20 indicators in early 2015.

21 n) Horizon Utilities provides the proposed investment amount in each of the seven  
22 operating areas for System Access, System Renewal & System Service in Hamilton  
23 for 2015-2019 in Table 6 below. The corresponding regional legend is as follows:

24 1 – Flamborough/Ancaster/Dundas/Lynden

25 2 – Hamilton Mountain

26 3 – Hamilton West

27 4 – Hamilton Downtown

28 5 – Hamilton East

4

5           o) Horizon Utilities provides a breakdown of the specific causes that contribute to  
6           equipment and material breakdown for each operating area that contribute to the  
7           outages (% of customer minutes) provided in Figures 25, 27, 29, 31, 34, 36, 38 in  
8           Table 7 below.

10

11

- p) Horizon Utilities provides a breakdown of the specific causes that contribute to the equipment and material breakdown percentage of customer minutes for St. Catharines shown in Figure 40 in Table 8 below.

**Table 8**

<b>Sub Cause</b>	<b>St. Catharines</b>
Transformer Failures	14%
Overhead Primary Failures	26%
Overhead Hardware	25%
XLPE Underground Primary and Accessories	18%
PILC Underground Primary and Accessories	3%
Secondary Failures	2%
Load break Failure	13%
Breaker / Reclosure Failure	1%
<b>Total</b>	<b>100%</b>

- q) Horizon Utilities provides the proposed investment amount (\$) by year for St. Catharines for the 2015-2019 timeframe for System Renewal & System Service work in Table 9 below.

**Table 9**

<b>St. Catharines</b>	<b>\$</b>
<b>System Renewal</b>	<b>42,052,984</b>
2015	4,493,161
2016	10,784,987
2017	13,409,364
2018	5,728,851
2019	7,636,620
<b>System Service</b>	<b>1,999,907</b>
2015	-
2016	294,732
2017	-
2018	1,531,635
2019	173,540

1 r) Horizon Utilities considers an acceptable level of health for any given asset group to be  
2 one for which the health index distribution produces the same forecasted annual volume of  
3 assets flagged-for-action (i.e. assets having a high risk of failure) year-over-year. A constant  
4 volume of assets flagged-for-action contributes to achieving a stable, level investment  
5 requirement for a given asset group and as such does not require any significant increases or  
6 decreases in capital expenditures year-over-year, assuming the nature of the investment  
7 does not change. Please refer to Horizon Utilities' response to Interrogatory 2-SEC-12 for  
8 further details.

9 s) Horizon Utilities' capital investment programs were determined to consider the renewal  
10 investment requirements for all asset groups with either a poor Health Index distribution (at  
11 least 20% of assets in either 'poor' or 'very poor' health) or a significant five year investment  
12 requirement (greater than \$5,000,000). The level of investment represents the minimum  
13 renewal investment required to prevent the continued degradation of the Health Index  
14 distribution of Horizon Utilities' major asset categories through to 2019 and not the level of  
15 investment required to address only all the assets with a 'poor' and 'very poor' Health Index  
16 distribution.

17 Horizon Utilities cannot perform an assessment of the reduction in the proposed investment  
18 level over the 2015 to 2019 period if only assets with a 'very poor' Health Index were included  
19 in the proposed System Renewal investment. The investment level identified by the Kinectrics  
20 ACA is determined by the flagged-for-action volume for each asset category. The nature of  
21 the Health Index methodology is that based on asset demographics and the asset failure  
22 curves, a probability of failure exists for all assets regardless of their Health Index and  
23 therefore, assets in all of the five Health Index categories contribute to the flagged-for-action  
24 volume. As such, the investment level cannot be categorized into individual asset categories.  
25 The assets with a 'very poor' and 'poor' Health Index will have a larger contribution to the  
26 flagged-for-action volume than assets with a 'good' or 'very good' Health Index.

27 t) The timeframe used to develop the percentages presented in Figure 64 -  
28 Material/Equipment Failure Categorization was 2010 to 2013.

29 u) Horizon Utilities confirms that in general, reactive renewal is more costly than planned  
30 proactive renewal. Reactive work does not allow for planned efficiencies and productivity

efforts to be realized in comparison to planned work. Due to the need to quickly resolve reactive issues, such work is often performed outside of normal business hours and therefore, results in additional costs being incurred. Reactive work can result in absorbing Horizon Utilities' employees available work capacity. Employees are mandated to be placed on "sleep time" until available capacity returns which results in additional costs as employees are paid for unproductive time.

The reference to page 127 in this question relates to the replacement of primary XLPE cable. Please refer to the response to Interrogatory 2-AMPCO-6 f) for the cost comparison of reactive renewal to proactive renewal for these assets.

v) Horizon Utilities' reliability analysis indicating that proactive replacement of PILC primary cable is not required over the 2015-2019 period is based on an analysis of customer minutes of outage resulting from material and equipment failures. As identified in the table to part j) of this Interrogatory, which is provided below in Table 10 for ease of reference, only 6% of the customer minutes of outage from 2010 to 2014 are due to failures of PILC primary cable and accessories. This compares to 45% of customer minutes of outage due to failures of XLPE primary cable and accessories over the same time period.

**Table 10**

Sub Cause	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals	Average
Transformer Failures	10%	20%	12%	11%	13%
Overhead Primary Failures	14%	8%	18%	22%	15%
Overhead Hardware	25%	15%	10%	8%	14%
XLPE Underground Primary and Accessories	43%	46%	47%	43%	45%
PILC Underground Primary and Accessories	3%	8%	2%	11%	6%
Secondary Failures	1%	1%	1%	1%	1%
Load break failure	4%	0%	11%	4%	5%
Breaker / Reclosure failure	0%	1%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

The low impact to customers due to the failure of PILC cable , relative to XLPE primary cable and accessories, combined with the Health Index distribution of PILC cable, forms the basis of



Horizon Utilities' assessment that proactive replacement of PILC primary cable and accessories is not required in the 2015 to 2019 Test Years.

w) Horizon Utilities' threshold that triggers potential future capital investment is as follows:

- the asset category has either a poor Health Index distribution (at least 20% of assets in either 'poor' or 'very poor' health); or
- requires a significant five year investment requirement (greater than \$5,000,000).

When an asset category meets either of these criteria, Horizon Utilities assesses the need to create a Capital Investment Program for the proactive renewal of these assets

x) Horizon Utilities has not opted to rent space to address the availability of meeting room space in the last 5 years. Instead, Horizon Utilities has been utilizing lunchrooms, private offices, open office space, internal parking garages and warehouses to address the shortage of meeting room space. Horizon Utilities has taken a cost effective approach to refurbishment and renovations by adapting existing space to accommodate meetings during the renewal process.

y) Horizon Utilities' office space standards were developed in consultation with PRISM Partners, Evans Consulting, Office Source and Emberley & Associates Consulting. The standards were informed by a Space and Project Management Benchmarks Report ("Benchmarks Report"), conducted by the International Facility Management Association ("IFMA"). IFMA is a large and widely recognized international association for facility management professionals, supporting more than 24,000 members in 94 countries. Horizon Utilities office space standards are at the lower end of the range in the IFMA Benchmarks Report which is included as attachment 2-AMPCO-9y\_Attch\_IFMA Benchmarks Report. Horizon Utilities standards are as follows:

- Call Centre workstation: 49 square feet
- Standard workstation: 56 square feet
- Standard office: 120-160 square feet
- Common space (lunch rooms, meeting rooms, hallways, printer/copier rooms, filing and storage rooms: 50-70% total square footage)

1 z) The average square foot per employee post renovations was determined based on total  
2 square footage post renovation occupied by either a workstation or an office, divided by the  
3 number of employees who occupy a workstation or an office. Total square footage post  
4 renovation excludes common areas, service areas, warehouses, garages and tenant space.  
5 The total number of employees is based on the number of employees at the end of December  
6 2013 including contract staff and students; exclusive of field staff who do not require dedicated  
7 office space. Please refer to Horizon Utilities' response to part y) for further details on office  
8 space standards.

9 aa) Shower and locker facilities are required at the four Horizon Utilities buildings to support the  
10 outside workforce that reports to each of these facilities. The outside workforce is exposed to;  
11 the weather, and dirty jobsite conditions and hazardous materials. These staff require proper  
12 facilities for clean-up as well as for storage of personal protective equipment. Horizon Utilities  
13 has over 200 employees across all four of Horizon Utilities' buildings who need access to  
14 shower and locker facilities.

15 bb) Horizon Utilities has implemented a staggered timeframe from 2012 to 2019 to renovate its  
16 five buildings. Horizon Utilities has deferred investments in buildings and infrastructure systems  
17 for several years. In Horizon Utilities' last Cost of Service Application (EB-2010-0131), building  
18 renovations were deferred from 2008 to 2010 due to deferrals of key business requirements to  
19 address the revenue volatility and revenue risk experienced by the utility over this period.  
20 Capital expenditures for 2011 were deferred again to mitigate the non-discretionary increase in  
21 System Access obligations in 2011. Horizon Utilities developed a long term renovation plan in  
22 2012 to pace necessary building and infrastructure systems renewal projects, including those  
23 deferred from 2008-2011, over an eight year period. Investments in buildings and infrastructure  
24 systems could not be deferred past 2012 due to the critical need to replace assets which had  
25 reached end-of-life and to address: operational deficiencies; building accessibility; the removal  
26 of hazardous materials; security; and air quality. Building renovation projects were planned in  
27 phases over multiple years to mitigate the financial impact in any given year and reduce  
28 operational interruptions. Further details on these investments are provided in Exhibit 2, Tab 6,  
29 Appendix 2-4, pages 254 to 261.

1 cc) There have been no changes in the frequency of Horizon Utilities' maintenance, testing and  
2 inspection programs since 2011.

3 dd) Horizon Utilities performs insulator washing on an as needed basis. Horizon Utilities  
4 conducted insulator washing in two areas, on an annual basis, up until 2011:

5 1) Along the QEW in St. Catharines, and

6 2) Along Arvin Avenue and the QEW in Stoney Creek

7 In 2010, insulator washing was suspended and a close physical inspection (i.e. from a bucket  
8 truck versus ground inspection) of the insulators indicated that they were clean and without any  
9 signs of electrical tracking or damage. A second inspection in 2011 confirmed that insulator  
10 washing did not appear to be required on an annual basis.

11 ee) The 'ability to address' referenced on page 161 of Exhibit 2, Tab 6, Appendix 2-4 does not  
12 refer to Horizon Utilities' maintenance activities. The use of the term 'ability to address' in this  
13 context refers to Horizon Utilities experiencing a level of asset failure which exceeds its ability to  
14 reactively replace the failed assets within a reasonable timeframe or at a reasonable cost.

15 ff) Horizon Utilities has not included these particular investments in the proposed 2015 to 2019  
16 capital budget. Such investments are customer driven and outside of Horizon Utilities' control.  
17 To date, Horizon Utilities has not been approached by any customers to participate in projects in  
18 over the rate plan period related to the construction of additional feeders or modification of  
19 existing feeders in the Hamilton Downtown or Hamilton Waterfront Industrial areas. Horizon  
20 Utilities invested in the construction of additional feeder capacity in 2012 (Hamilton waterfront)  
21 and in 2013 (Hamilton downtown) based on customer driven projects. Both the downtown and  
22 waterfront are seeing renewed investment; depending on the demand requirements of future  
23 projects, Horizon Utilities may be required to provide additional capacity. Horizon Utilities has  
24 no knowledge of future projects related to these areas and as such capital expenditures for this  
25 work have not been included on the 2015 to 2019 capital budget.

26 gg) Horizon Utilities cannot provide a Renewal Investment Profile if only assets with a Health  
27 Index of 'very poor' were addressed for the same reasons it cannot perform an assessment of  
28 the reduction in the proposed investment level over the 2015 to 2019 Test Years if only assets

with a 'very poor' Health Index were included in the proposed System Renewal investment. Please refer to the response to part (s) above.

hh) Horizon Utilities provides the spending levels for each of the years 2010 to 2013 and the number of units addressed in each group by year for the asset groups used by Horizon Utilities in Table 11 below. The asset groups used by Horizon Utilities for financial reporting align with the Uniform System of Accounts ("USoA") as defined by the Ontario Energy Board ("OEB"), which does not necessarily align with the asset groups used for asset management planning. Horizon Utilities provides a mapping from the OEB account to the asset groups used for asset management planning where possible. Capital expenditures for 2011 to 2013 were reported at a higher level than in 2010.

**Table 11**

Asset Group (Financial Reporting)	Asset Groups identified in Table 31	2010 (CGAAP)		2011 (CGAAP)		2012 (MIFRS)		2013 (MIFRS)	
		Quantity	Capital Expenditure \$	Quantity	Capital Expenditure \$	Quantity	Capital Expenditure \$	Quantity	Capital Expenditure \$
Underground Conductors and Devices Primary PILC	Underground Cables (primary PILC)	207	66,376	3,026	971,840	48	11,910	2,690	664,465
Underground Conductors and Devices Primary XLPE	Underground Cables (primary XLPE)	4,167	636,429	3,948	555,532	1,922	208,038	9,129	988,232
Underground Conductors and Devices Secondary and Service In Duct	Underground Cables (secondary ID)	-	-	3,242	104,907	3,175	79,024	3,219	80,119
Underground Conductors and Devices Secondary and Service Direct Buried	Underground Cables (secondary DB)	-	-	1,292	209,839	836	104,387	732	91,389
Underground Conductors and Devices Switches and Switchgear	Underground Cables (service DB)	-	-	10	538,604	12	660,000	11	622,035
Poles, Towers and Fixtures - Concrete and Wood	n/a (Total Poles)	363	4,399,325	-	-	-	-	-	-
Poles, Towers and Fixtures - Concrete	n/a	-	-	185	2,193,668	132	1,130,681	193	1,655,673
Poles, Towers and Fixtures - Wood	Wood Poles	-	-	497	5,884,027	415	2,275,879	518	2,838,660
OH Conductors & Devices	n/a (Total OH)	30,934	1,941,274	-	-	-	-	-	-
Overhead Conductors and Devices Secondary and Service	Overhead Conductors (secondary)	-	-	33,575	1,811,130	23,204	962,271	33,541	1,390,953
Overhead Conductors and Devices Switches	Overhead Line Switches	-	-	59	1,047,103	37	499,898	58	446,700
Overhead Conductors and Devices Primary	Overhead Conductors (primary)	-	-	12,795	720,203	7,811	338,205	12,314	533,195
Line Transformers	n/a (Total Distribution Transformers)	235	2,774,327	-	-	-	-	-	-
Line Transformers Overhead	Pole Mounted Transformers	-	-	228	1,810,915	134	745,323	216	1,200,421
Line Transformers Underground	Vault Transformers	-	-	109	1,795,626	98	1,022,016	167	1,736,337
Substation Switchgear and Other Elements	Substation Switchgear	-	-	3	41,244	14	4,742,102	9	7,878
Substation Breakers and Reclosures	Substation Circuit Breakers	-	-	-	-	1	455,894	45	3,133,408

ii) Horizon Utilities provides the spending levels for each of the years 2015 to 2019 and the number of units addressed in each group by year, for each of the asset groups listed in Table 31 in Table 12 below.

**Table 12**

Asset Group	2015		2016		2017		2018		2019	
	Quantity	Total Spend	Quantity	Total Spend	Quantity	Total Spend	Quantity	Total Spend	Quantity	Total Spend
Underground Cables (primary XLPE)	13,355	1,445,633	27,779	3,112,301	42,904	4,975,182	46,623	5,595,574	49,872	6,195,026
Wood Poles	858	3,794,787	711	3,253,770	1,050	4,975,182	1,015	4,981,223	834	4,234,136
Underground Cables (secondary DB)	1,158	144,563	3,283	424,405	3,719	497,518	3,597	498,122	3,633	520,590
Underground Cables (primary PILC)	731	180,704	2,213	565,873	2,507	663,358	2,425	664,163	2,448	694,121
Overhead Conductors (service)	8,715	361,408	13,184	565,873	14,933	663,358	14,445	664,163	14,586	694,121
Underground Cables (service DB)	1,302	162,634	2,189	282,936	2,479	331,679	2,398	332,082	2,422	347,060
Pole Mounted Transformers	258	1,987,746	284	2,263,492	301	2,487,591	330	2,822,693	255	2,255,892
Overhead Conductors (secondary)	13,072	542,112	13,184	565,873	26,132	1,160,876	28,890	1,328,326	21,879	1,041,181
Vault Transformers	53	361,408	80	565,873	91	663,358	88	664,163	89	694,121
Overhead Conductors (primary)	16,693	722,817	9,470	424,405	14,301	663,358	17,293	830,204	24,447	1,214,711
Substation Switchgear	-	-	1	424,405	1	497,518	1	498,122	1	520,590
Underground Cables (secondary ID)	7,260	180,704	10,983	282,936	12,440	331,679	12,034	332,082	12,151	347,060
Substation Circuit Breakers	-	-	-	-	-	-	-	-	-	-
Overhead Line Switches	33	451,760	71	990,278	143	2,072,992	122	1,826,449	95	1,475,006
Submersible LBD Switches	1	9,035	2	14,147	2	16,584	2	16,604	2	17,353

1 jj) The data for the John Street forecasted roof replacement cost of \$18 per square foot was  
2 sourced by Garland Canada Inc. ("Garland"). Garland is an independent consultant who  
3 completed the Roof Inspection Review filed as Appendix N in the DSP. Garland provided  
4 Horizon Utilities with an average installation cost of two roofs similar in type to the John Street  
5 roof. The estimates for the roof were as follows:

- 6 • 3 Ply Modified System – Hot was estimated at \$15-18/square foot
- 7 • 2 Ply Modified System – Cold was estimated at \$20-25/square foot

8 The estimated unit cost excludes ancillary costs such as: permits; potential use of heavy  
9 equipment; and project management. Horizon Utilities will conduct a Request for Proposal  
10 ("RFP") to obtain competitive pricing in accordance with Horizon Utilities' procurement practices  
11 as defined within its Procurement Policy, prior to the replacement of the roof.

12 kk) The head office windows will be 21 years old in 2015. Windows typically have a useful life  
13 of 25 years. Age and condition parameters indicate that the windows are at end-of-life as  
14 determined by the window condition assessment performed in 2013 by MMM Group Limited and  
15 filed as Appendix M in Exhibit 2, Tab 6, Appendix 2-4.



EB-2014-0002  
Horizon Utilities Corporation  
Responses to Association  
Of Major Power Consumers  
In Ontario Interrogatories  
Delivered: August 1<sup>st</sup>, 2014  
2-AMPCO-9i\_Attch\_Equipment and Material Failures

## **2-AMPCO-9i\_Attch\_Equipment and Material Failures**

EB-2014-0002  
Horizon Utilities Corporation  
Responses to Association  
Of Major Power Consumers  
In Ontario Interrogatories  
Delivered: August 1<sup>st</sup>, 2014  
2-AMPCO-9i\_Attch\_Equipment and Material Failures



Date	Station Name	FeederAffectedID	Interrupt Time	Restore Time	Duration	Customer Min	CauseID	Couse
1/1/2010	Wentworth S/S	WT-3	9:56:00 PM	10:01:00 PM	5	3,400	7	Material/Equipment Breakdown
1/3/2010	Bunting T.S.	M75	8:16:00 AM	8:16:00 AM	-	-	7	Material/Equipment Breakdown
1/3/2010	Bunting T.S.	M75	8:16:00 AM	9:30:00 AM	74	740	7	Material/Equipment Breakdown
1/5/2010	Horning T.S.	481X	4:00:00 PM	5:15:00 PM	75	1,125	7	Material/Equipment Breakdown
1/5/2010	Nebo T.S.	331X	1:39:00 PM	2:15:00 PM	36	4,572	7	Material/Equipment Breakdown
1/10/2010	Eastmount S/S	EA-7	11:48:00 AM	12:35:00 PM	47	611	7	Material/Equipment Breakdown
1/11/2010	Lake T.S.	161X	2:10:00 PM	3:47:00 PM	97	1,843	7	Material/Equipment Breakdown
1/11/2010	Lake T.S.	161X	2:10:00 PM	8:10:00 PM	360	1,440	7	Material/Equipment Breakdown
1/12/2010	Elgin T.S.	5511X	12:30:00 PM	2:30:00 PM	120	120	7	Material/Equipment Breakdown
1/13/2010	Nebo T.S.	341X	8:58:00 PM	4:00:00 AM	422	844	7	Material/Equipment Breakdown
1/15/2010	Beach T.S.	7722X	2:44:00 PM	6:53:00 PM	249	1,744	7	Material/Equipment Breakdown
1/15/2010	Carlton T.S.	M10	4:28:00 PM	9:49:00 PM	321	1,605	7	Material/Equipment Breakdown
1/15/2010	Mohawk T.S.	0612X	9:52:00 PM	1:23:00 AM	211	633	7	Material/Equipment Breakdown
1/16/2010	Horning T.S.	471X	11:20:00 AM	2:10:00 PM	170	1,190	7	Material/Equipment Breakdown
1/17/2010	Wellington S/S	WL-6	7:50:00 PM	12:40:00 AM	290	3,190	7	Material/Equipment Breakdown
1/19/2010	Vansickle T.S.	M53	11:15:00 PM	11:59:00 PM	44	484	7	Material/Equipment Breakdown
1/20/2010	Lake T.S.	141X	7:07:00 PM	8:40:00 PM	93	930	7	Material/Equipment Breakdown
1/21/2010	Lake T.S.	141X	2:53:00 PM	9:15:00 PM	382	382	7	Material/Equipment Breakdown
1/22/2010	Newton T.S.	242X	8:25:00 AM	8:31:00 AM	6	7,885	7	Material/Equipment Breakdown
1/24/2010	Lake T.S.	141X	7:10:00 PM	7:20:00 PM	10	45,140	7	Material/Equipment Breakdown
1/24/2010	Nebo T.S.	341X	10:59:00 PM	11:07:00 PM	8	30,864	7	Material/Equipment Breakdown
1/28/2010	Bartonville S/S	BA-7	12:56:00 PM	2:04:00 PM	68	6,800	7	Material/Equipment Breakdown
1/28/2010	Bartonville S/S	BA-7	12:56:00 PM	2:04:00 PM	68	22,848	7	Material/Equipment Breakdown
1/28/2010	Bunting T.S.	M62	11:56:00 PM	10:10:00 AM	614	6,754	7	Material/Equipment Breakdown
1/31/2010	Beach T.S.	7821X	7:59:00 AM	10:25:00 AM	146	438	7	Material/Equipment Breakdown
1/31/2010	Spadina S/S	SP-1	8:25:00 PM	8:35:00 PM	10	170	7	Material/Equipment Breakdown
2/2/2010	Horning T.S.	4111X	6:00:00 PM	9:05:00 PM	185	185	7	Material/Equipment Breakdown
2/3/2010	Glendale T.S.	M8	5:38:00 PM	5:38:00 PM	-	-	7	Material/Equipment Breakdown
2/3/2010	Glendale T.S.	M8	5:45:00 PM	5:45:00 PM	-	-	7	Material/Equipment Breakdown
2/3/2010	Glendale T.S.	M8	5:50:00 PM	5:50:00 PM	-	-	7	Material/Equipment Breakdown
2/3/2010	Glendale T.S.	M8	6:07:00 PM	6:07:00 PM	-	-	7	Material/Equipment Breakdown
2/3/2010	Glendale T.S.	M8	6:11:00 PM	6:25:00 PM	14	37,002	7	Material/Equipment Breakdown
2/4/2010	Mohawk T.S.	0622X	7:42:00 PM	8:45:00 PM	63	756	7	Material/Equipment Breakdown
2/5/2010	Wellington S/S	WL-6	6:06:00 PM	10:03:00 PM	237	4,503	7	Material/Equipment Breakdown
2/6/2010	Dundas T.S.	2D7X	12:40:00 PM	2:00:00 PM	80	160	7	Material/Equipment Breakdown

2/9/2010	Elgin T.S.	5331X	5:40:00 PM	6:40:00 PM	60	1,620	7	Material/Equipment Breakdown
2/10/2010	Winona T.S.	W12X	10:23:00 AM	11:20:00 AM	57	513	7	Material/Equipment Breakdown
2/10/2010	Lake T.S.	161X	8:25:00 AM	12:11:00 PM	226	4,520	7	Material/Equipment Breakdown
2/11/2010	Horning T.S.	431X	9:25:00 AM	9:57:00 AM	32	320	7	Material/Equipment Breakdown
2/12/2010	Beach T.S.	7441X	11:07:00 PM	5:03:00 AM	356	4,272	7	Material/Equipment Breakdown
2/13/2010	Mountain S/S	MT-2	6:35:00 PM	7:15:00 PM	40	440	7	Material/Equipment Breakdown
2/16/2010	Carlton T.S.	M10	7:38:00 PM	8:57:00 PM	79	790	7	Material/Equipment Breakdown
2/21/2010	Dundas T.S.	2D12X	12:53:00 PM	4:18:00 PM	205	1,845	7	Material/Equipment Breakdown
2/22/2010	Nebo T.S.	3632X	6:38:00 AM	8:45:00 AM	127	1,524	7	Material/Equipment Breakdown
3/1/2010	Mohawk T.S.	0622X & 0621LM	12:31:00 PM	2:17:00 PM	106	103,745	7	Material/Equipment Breakdown
3/5/2010	Horning T.S.	481X	9:15:00 AM	9:21:00 AM	6	90	7	Material/Equipment Breakdown
3/13/2010	Parkdale S/S	PA-5	9:58:00 AM	12:50:00 PM	172	13,416	7	Material/Equipment Breakdown
3/13/2010	Parkdale S/S	PA-5	12:47:00 PM	12:50:00 PM	3	1,395	7	Material/Equipment Breakdown
3/14/2010	Strouds Lane S/S	ST-6	8:10:00 AM	9:20:00 AM	70	1,190	7	Material/Equipment Breakdown
3/14/2010	Eastmount S/S	EA-2	11:03:00 AM	11:35:00 AM	32	13,728	7	Material/Equipment Breakdown
3/14/2010	Eastmount S/S	EA-10	11:28:00 AM	11:35:00 AM	7	3,430	7	Material/Equipment Breakdown
3/14/2010	Nebo T.S.	3611X	8:55:00 AM	10:47:00 AM	112	9,080	7	Material/Equipment Breakdown
3/16/2010	Strouds Lane S/S	ST-6	7:20:00 PM	7:30:00 PM	10	5,450	7	Material/Equipment Breakdown
3/17/2010	Dundas T.S.	2D2X	12:45:00 PM	5:23:00 PM	278	1,112	7	Material/Equipment Breakdown
3/22/2010	Caroline S/S	CA-5	8:19:00 PM	11:47:00 PM	208	5,824	7	Material/Equipment Breakdown
3/25/2010	Dundas T.S.	2D13X	12:04:00 AM	12:15:00 AM	11	4,884	7	Material/Equipment Breakdown
3/28/2010	Mountain S/S	MT-10	7:20:00 PM	8:30:00 PM	70	1,120	7	Material/Equipment Breakdown
3/29/2010	Glendale T.S.	M16	7:55:00 AM	9:00:00 AM	65	65	7	Material/Equipment Breakdown
3/30/2010	Dundas T.S.	2D12X	8:33:00 PM	1:55:00 AM	322	966	7	Material/Equipment Breakdown
4/1/2010	Lake T.S.	1311X	9:45:00 PM	10:15:00 PM	30	60	7	Material/Equipment Breakdown
4/2/2010	Parkdale S/S	PA-7	3:00:00 AM	4:10:00 AM	70	1,260	7	Material/Equipment Breakdown
4/2/2010	Lake T.S.	141X	9:18:00 PM	9:18:00 PM	-	-	7	Material/Equipment Breakdown
4/2/2010	Lake T.S.	141X	9:43:00 PM	9:44:00 PM	1	3,840	7	Material/Equipment Breakdown
4/2/2010	Lake T.S.	141X	9:18:00 PM	11:09:00 PM	111	1,221	7	Material/Equipment Breakdown
4/3/2010	Welland S/S	F1	1:28:00 PM	1:29:00 PM	1	560	7	Material/Equipment Breakdown
4/5/2010	Horning T.S.	471X	2:30:00 PM	3:00:00 PM	30	360	7	Material/Equipment Breakdown
4/6/2010	Lake T.S.	141X	10:20:00 AM	10:45:00 AM	25	275	7	Material/Equipment Breakdown
4/11/2010	Horning T.S.	431X	9:49:00 PM	11:24:00 PM	95	129,675	7	Material/Equipment Breakdown
4/13/2010	John S/S	JN-1	6:20:00 PM	8:20:00 PM	120	2,160	7	Material/Equipment Breakdown
4/16/2010	Dundas T.S.	2D2X	1:56:00 PM	1:56:00 PM	-	-	7	Material/Equipment Breakdown
4/16/2010	Ottawa S/S	OT-5	7:33:00 PM	8:37:00 PM	64	2,624	7	Material/Equipment Breakdown

4/19/2010	Dundas T.S.	2D2X	1:31:00 PM	1:36:00 PM	5	20,365	7	Material/Equipment Breakdown
4/19/2010	Stirton T.S.	8511X	8:39:00 AM	9:02:00 AM	23	48,916	7	Material/Equipment Breakdown
4/20/2010	Horning T.S.	4481X	6:50:00 PM	8:20:00 PM	90	1,800	7	Material/Equipment Breakdown
4/23/2010	Bunting T.S.	M77	7:43:00 AM	7:47:00 AM	4	11,292	7	Material/Equipment Breakdown
4/24/2010	Parkdale S/S	PA-5	10:42:00 PM	2:25:00 AM	223	3,568	7	Material/Equipment Breakdown
4/25/2010	Caroline S/S	CA-4	9:25:00 AM	1:27:00 PM	242	6,292	7	Material/Equipment Breakdown
4/26/2010	Mountain S/S	MT-5	3:30:00 PM	5:20:00 PM	110	110	7	Material/Equipment Breakdown
4/28/2010	Wellington S/S	WL-6	6:14:00 PM	7:05:00 PM	51	612	7	Material/Equipment Breakdown
4/30/2010	Lake T.S.	151X	3:15:00 PM	5:36:00 PM	141	20,163	7	Material/Equipment Breakdown
5/2/2010	Mohawk S/S	MK-1	1:49:00 PM	2:30:00 PM	41	738	7	Material/Equipment Breakdown
5/2/2010	Carlton T.S.	M7	1:25:00 PM	4:06:00 PM	161	3,381	7	Material/Equipment Breakdown
5/4/2010	Ottawa S/S	OT-3	12:54:00 PM	2:55:00 PM	121	2,057	7	Material/Equipment Breakdown
5/4/2010	Mohawk T.S.	0731X	5:43:00 PM	10:40:00 PM	297	3,564	7	Material/Equipment Breakdown
5/5/2010	Bunting T.S.	M56	12:46:00 AM	4:40:00 AM	234	5,616	7	Material/Equipment Breakdown
5/8/2010	Birmingham T.S.	50H51	8:31:00 AM	9:30:00 AM	59	59	7	Material/Equipment Breakdown
5/8/2010	Birmingham T.S.	50X52	8:31:00 AM	9:15:00 AM	44	44	7	Material/Equipment Breakdown
5/12/2010	Wellington S/S	WL-8	3:00:00 PM	7:00:00 PM	240	57,840	7	Material/Equipment Breakdown
5/14/2010	Newton T.S.	282X	5:30:00 PM	6:30:00 PM	60	360	7	Material/Equipment Breakdown
5/17/2010	Nebo T.S.	331X	2:39:00 PM	2:39:00 PM	-	-	7	Material/Equipment Breakdown
5/17/2010	Nebo T.S.	331X	5:43:00 PM	5:43:00 PM	-	-	7	Material/Equipment Breakdown
5/17/2010	Nebo T.S.	331X	2:39:00 PM	3:25:00 PM	46	10,074	7	Material/Equipment Breakdown
5/17/2010	Nebo T.S.	331X	2:39:00 PM	3:34:00 AM	775	67,425	7	Material/Equipment Breakdown
5/18/2010	Wellington S/S	WL-8	4:55:00 PM	6:22:00 PM	87	1,827	7	Material/Equipment Breakdown
5/19/2010	Birmingham T.S.	50H51	2:03:00 AM	2:50:00 AM	1,487	4,461	7	Material/Equipment Breakdown
5/19/2010	Elmwood S/S	EL-9	1:25:00 PM	6:00:00 PM	275	3,300	7	Material/Equipment Breakdown
5/19/2010	Winona T.S.	W15X	5:46:00 PM	8:04:00 PM	138	8,418	7	Material/Equipment Breakdown
5/19/2010	Winona T.S.	W15X	10:06:00 PM	11:57:00 PM	111	5,439	7	Material/Equipment Breakdown
5/20/2010	Lake T.S.	141X	2:25:00 PM	7:50:00 PM	325	14,950	7	Material/Equipment Breakdown
5/21/2010	Nebo T.S.	331X	12:11:00 PM	5:35:00 PM	324	3,240	7	Material/Equipment Breakdown
5/21/2010	Nebo T.S.	331X	5:37:00 AM	6:09:00 AM	1,472	50,774	7	Material/Equipment Breakdown
5/23/2010	Glendale T.S.	M14	1:04:00 PM	1:04:00 PM	-	-	7	Material/Equipment Breakdown
5/23/2010	Vansickle T.S.	M41	1:04:00 PM	1:04:00 PM	-	-	7	Material/Equipment Breakdown
5/24/2010	Horning T.S.	462X	2:24:00 PM	2:58:00 PM	34	98,285	7	Material/Equipment Breakdown
5/25/2010	Taylor S/S	F3	7:30:00 PM	8:50:00 PM	80	1,520	7	Material/Equipment Breakdown
5/25/2010	Lake T.S.	1431X	3:05:00 PM	4:08:00 PM	63	630	7	Material/Equipment Breakdown
5/26/2010	Wellington S/S	WL-11	3:04:00 AM	5:53:00 AM	169	2,028	7	Material/Equipment Breakdown

5/26/2010	Winona T.S.	W13X	3:23:00 PM	8:00:00 PM	277	4,432	7	Material/Equipment Breakdown
5/26/2010	Winona T.S.	W13X	2:46:00 PM	2:46:00 PM	-	-	7	Material/Equipment Breakdown
5/26/2010	Carlton T.S.	M18	6:09:00 PM	8:03:00 PM	114	2,166	7	Material/Equipment Breakdown
5/27/2010	Beach T.S.	7411X	6:43:00 AM	9:00:00 AM	137	1,781	7	Material/Equipment Breakdown
5/28/2010	Parkdale S/S	PA-7	8:02:00 AM	10:00:00 AM	118	708	7	Material/Equipment Breakdown
5/28/2010	Glendale T.S.	M8	3:00:00 PM	3:33:00 PM	33	297	7	Material/Equipment Breakdown
5/30/2010	Dundas T.S.	2D13X	8:42:00 AM	8:42:00 AM	-	-	7	Material/Equipment Breakdown
5/30/2010	Highland S/S	HI-1	4:21:00 PM	5:55:00 PM	94	22,470	7	Material/Equipment Breakdown
5/30/2010	Mohawk T.S.	0611X	10:31:00 AM	11:20:00 AM	49	84,823	7	Material/Equipment Breakdown
6/2/2010	Bunting T.S.	M62	5:52:00 AM	7:30:00 AM	98	220,892	7	Material/Equipment Breakdown
6/2/2010	Bunting T.S.	M61	5:52:00 AM	7:21:00 AM	89	230,688	7	Material/Equipment Breakdown
6/2/2010	Mohawk T.S.	0642X	7:00:00 AM	9:50:00 AM	170	1,700	7	Material/Equipment Breakdown
6/3/2010	Elmwood S/S	EL-3	8:00:00 AM	9:47:00 AM	107	1,391	7	Material/Equipment Breakdown
6/6/2010	Carlton T.S.	M25	12:33:00 PM	3:50:00 PM	197	3,152	7	Material/Equipment Breakdown
6/6/2010	Nebo T.S.	3532X	6:44:00 AM	7:34:00 AM	50	49,850	7	Material/Equipment Breakdown
6/7/2010	Vine S/S	F5	1:05:00 AM	4:05:00 AM	180	1,980	7	Material/Equipment Breakdown
6/7/2010	Mohawk T.S.	0642X	4:19:00 PM	6:35:00 PM	136	1,360	7	Material/Equipment Breakdown
6/7/2010	Nebo T.S.	341X	12:52:00 AM	12:53:00 AM	1	3,872	7	Material/Equipment Breakdown
6/7/2010	Nebo T.S.	341X	12:53:00 AM	4:50:00 AM	237	19,434	7	Material/Equipment Breakdown
6/8/2010	Lake T.S.	121X	10:33:00 PM	4:00:00 AM	327	3,270	7	Material/Equipment Breakdown
6/9/2010	Aberdeen S/S	AB-4	9:40:00 PM	11:10:00 PM	90	2,070	7	Material/Equipment Breakdown
6/9/2010	Vansickle T.S.	M51	6:43:00 AM	8:45:00 AM	122	15,006	7	Material/Equipment Breakdown
6/12/2010	Nebo T.S.	341X	5:07:00 PM	7:15:00 PM	128	4,608	7	Material/Equipment Breakdown
6/12/2010	Nebo T.S.	341X	5:07:00 PM	6:32:00 PM	85	1,190	7	Material/Equipment Breakdown
6/12/2010	Nebo T.S.	341X	5:07:00 PM	9:00:00 PM	233	1,165	7	Material/Equipment Breakdown
6/12/2010	Nebo T.S.	341X	8:26:00 PM	9:00:00 PM	34	136	7	Material/Equipment Breakdown
6/13/2010	Horning T.S.	4481X	3:48:00 PM	5:00:00 PM	72	864	7	Material/Equipment Breakdown
6/14/2010	Nebo T.S.	341X	1:24:00 PM	7:10:00 PM	346	346	7	Material/Equipment Breakdown
6/16/2010	Wellington S/S	WL-8	12:30:00 AM	3:20:00 AM	170	23,800	7	Material/Equipment Breakdown
6/18/2010	Carlton T.S.	M17	8:23:00 AM	8:23:00 AM	-	-	7	Material/Equipment Breakdown
6/18/2010	Carlton T.S.	M17	8:24:00 AM	8:24:00 AM	-	-	7	Material/Equipment Breakdown
6/18/2010	Lake T.S.	1712X	6:22:00 PM	7:02:00 PM	40	68,800	7	Material/Equipment Breakdown
6/19/2010	Lake T.S.	1711X	6:22:00 PM	1:40:00 AM	438	50,808	7	Material/Equipment Breakdown
6/20/2010	Eastmount S/S	EA-8	9:46:00 PM	10:30:00 PM	44	880	7	Material/Equipment Breakdown
6/22/2010	Carlton T.S.	M11	1:41:00 PM	4:04:00 PM	143	382,954	7	Material/Equipment Breakdown
6/22/2010	Elgin T.S.	5452X	1:23:00 PM	1:25:00 PM	2	1,778	7	Material/Equipment Breakdown

6/22/2010	Glendale T.S.	M14	11:10:00 PM	1:40:00 AM	150	3,750	7	Material/Equipment Breakdown
6/23/2010	Carlton T.S.	M20	3:26:00 PM	4:14:00 PM	48	288	7	Material/Equipment Breakdown
6/24/2010	Bunting T.S.	M55	4:27:00 AM	6:20:00 AM	113	4,068	7	Material/Equipment Breakdown
6/25/2010	Dundas T.S.	2D2X	9:57:00 AM	10:04:00 AM	7	21	7	Material/Equipment Breakdown
6/25/2010	Mohawk T.S.	0821X	9:09:00 PM	9:38:00 PM	29	22,591	7	Material/Equipment Breakdown
6/25/2010	Mohawk T.S.	0642X	3:39:00 PM	8:36:00 PM	297	78,111	7	Material/Equipment Breakdown
6/26/2010	Carlton T.S.	M18	5:30:00 PM	9:58:00 PM	268	13,936	7	Material/Equipment Breakdown
6/26/2010	Mohawk T.S.	0821X	3:39:00 PM	4:52:00 PM	73	126,363	7	Material/Equipment Breakdown
6/26/2010	Mohawk T.S.	0821X	9:09:00 PM	10:40:00 PM	91	1,274	7	Material/Equipment Breakdown
6/27/2010	Horning T.S.	471X	4:44:00 PM	9:29:00 PM	285	3,990	7	Material/Equipment Breakdown
6/29/2010	Wellington S/S	WL-5	12:00:00 PM	2:30:00 PM	150	3,600	7	Material/Equipment Breakdown
6/29/2010	Lake T.S.	1311X	12:01:00 AM	3:12:00 AM	191	170,563	7	Material/Equipment Breakdown
6/29/2010	Stirton T.S.	8721X	3:51:00 PM	5:05:00 PM	74	1,332	7	Material/Equipment Breakdown
7/2/2010	Beach T.S.	7321X	1:26:00 PM	6:20:00 PM	294	882	7	Material/Equipment Breakdown
7/2/2010	Nebo T.S.	3541X	7:34:00 AM	7:37:00 AM	3	738	7	Material/Equipment Breakdown
7/2/2010	Nebo T.S.	3541X	10:12:00 AM	10:37:00 AM	25	6,150	7	Material/Equipment Breakdown
7/3/2010	Bunting T.S.	M55	12:09:00 PM	1:29:00 PM	80	2,400	7	Material/Equipment Breakdown
7/4/2010	Horning T.S.	471X	2:14:00 PM	3:35:00 PM	81	11,664	7	Material/Equipment Breakdown
7/5/2010	Beach T.S.	7731X	1:31:00 PM	9:27:00 PM	476	952	7	Material/Equipment Breakdown
7/5/2010	Carlton T.S.	M10	3:48:00 AM	3:51:00 AM	3	8,661	7	Material/Equipment Breakdown
7/5/2010	Carlton T.S.	M10	9:17:00 PM	6:51:00 AM	574	3,444	7	Material/Equipment Breakdown
7/5/2010	Horning T.S.	4481X	4:46:00 PM	4:49:00 PM	3	2,922	7	Material/Equipment Breakdown
7/5/2010	Nebo T.S.	3521X	1:17:00 PM	5:54:00 PM	277	2,770	7	Material/Equipment Breakdown
7/6/2010	Beach T.S.	7731X	1:31:00 PM	2:58:00 PM	87	59,334	7	Material/Equipment Breakdown
7/6/2010	Horning T.S.	4481X	4:25:00 PM	8:49:00 PM	264	19,008	7	Material/Equipment Breakdown
7/6/2010	Mohawk T.S.	0821X	12:31:00 AM	2:10:00 AM	99	11,781	7	Material/Equipment Breakdown
7/6/2010	Mohawk T.S.	0821X	6:18:00 PM	2:10:00 AM	472	6,608	7	Material/Equipment Breakdown
7/7/2010	Aberdeen S/S	AB-2	3:55:00 PM	5:30:00 PM	95	5,320	7	Material/Equipment Breakdown
7/8/2010	Bunting T.S.	M61	12:29:00 AM	2:16:00 AM	107	315,757	7	Material/Equipment Breakdown
7/8/2010	Kenilworth S/S	KE-T2 Bus	2:30:00 AM	7:05:00 AM	275	388,850	7	Material/Equipment Breakdown
7/8/2010	Carlton T.S.	M21	11:46:00 PM	2:30:00 PM	884	8,840	7	Material/Equipment Breakdown
7/8/2010	Nebo T.S.	331X	8:57:00 PM	4:27:00 AM	450	2,250	7	Material/Equipment Breakdown
7/8/2010	Vansickle T.S.	M53	4:44:00 PM	9:40:00 PM	296	1,184	7	Material/Equipment Breakdown
7/9/2010	Cope S/S	CP-3	10:55:00 PM	2:30:00 AM	215	4,300	7	Material/Equipment Breakdown
7/9/2010	Spadina S/S	SP-5	4:22:00 PM	5:20:00 PM	58	1,392	7	Material/Equipment Breakdown
7/10/2010	Lake T.S.	121X	7:06:00 AM	7:06:00 AM	-	-	7	Material/Equipment Breakdown

7/10/2010	Mohawk T.S.	0821X	6:10:00 PM	8:35:00 PM	145	250,995	7	Material/Equipment Breakdown
7/11/2010	Caroline S/S	CA-4	7:55:00 AM	9:00:00 AM	65	5,720	7	Material/Equipment Breakdown
7/12/2010	Mohawk T.S.	0711X	10:11:00 PM	12:23:00 AM	132	228,756	7	Material/Equipment Breakdown
7/12/2010	Mohawk T.S.	0711X	2:06:00 AM	4:25:00 AM	139	417	7	Material/Equipment Breakdown
7/18/2010	Nebo T.S.	3521X	5:12:00 PM	7:51:00 PM	159	179,829	7	Material/Equipment Breakdown
7/18/2010	Nebo T.S.	3521X	2:03:00 AM	2:05:00 AM	2	210	7	Material/Equipment Breakdown
7/19/2010	Eastmount S/S	EA-7	6:47:00 PM	8:05:00 PM	78	2,340	7	Material/Equipment Breakdown
7/19/2010	Lake T.S.	151X	12:55:00 PM	3:25:00 PM	150	22,050	7	Material/Equipment Breakdown
7/20/2010	Carlton T.S.	M10	5:30:00 PM	9:00:00 PM	210	210	7	Material/Equipment Breakdown
7/20/2010	Elgin T.S.	5522X	8:47:00 PM	11:23:00 PM	156	50,544	7	Material/Equipment Breakdown
7/20/2010	Lake T.S.	1412X	6:31:00 PM	7:07:00 PM	36	38,556	7	Material/Equipment Breakdown
7/21/2010	Bunting T.S.	M61	8:16:00 AM	8:18:00 AM	2	5,150	7	Material/Equipment Breakdown
7/21/2010	Glendale T.S.	M14	8:54:00 AM	8:54:00 AM	-	-	7	Material/Equipment Breakdown
7/21/2010	Glendale T.S.	M14	9:01:00 AM	9:01:00 AM	-	-	7	Material/Equipment Breakdown
7/21/2010	Bunting T.S.	M61	7:12:00 AM	7:12:00 AM	-	-	7	Material/Equipment Breakdown
7/21/2010	Bunting T.S.	M61	10:34:00 AM	10:36:00 AM	2	5,150	7	Material/Equipment Breakdown
7/21/2010	Bunting T.S.	M61	7:12:00 AM	11:45:00 AM	273	4,368	7	Material/Equipment Breakdown
7/22/2010	Bartonville S/S	BA-2	7:33:00 PM	8:35:00 PM	62	930	7	Material/Equipment Breakdown
7/22/2010	Carlton T.S.	M25	1:27:00 PM	2:05:00 PM	38	342	7	Material/Equipment Breakdown
7/22/2010	Carlton T.S.	M25	4:52:00 PM	8:07:00 PM	195	1,755	7	Material/Equipment Breakdown
7/24/2010	Troy D/S	2452X	9:00:00 PM	10:15:00 PM	75	75	7	Material/Equipment Breakdown
7/25/2010	Dewitt S/S	DW-3W	3:19:00 AM	5:06:00 AM	107	1,177	7	Material/Equipment Breakdown
7/25/2010	Dewitt S/S	DW-3B	5:06:00 AM	6:25:00 AM	79	2,133	7	Material/Equipment Breakdown
7/26/2010	Eastmount S/S	EA-T3 Bus	7:34:00 AM	7:35:00 AM	1	2,131	7	Material/Equipment Breakdown
7/26/2010	Nebo T.S.	3512X	7:34:00 AM	8:17:00 AM	43	76,454	7	Material/Equipment Breakdown
8/1/2010	Glendale T.S.	M14	7:12:00 AM	7:12:00 AM	-	-	7	Material/Equipment Breakdown
8/1/2010	Glendale T.S.	M14	7:41:00 AM	7:41:00 AM	-	-	7	Material/Equipment Breakdown
8/1/2010	Elgin T.S.	5261X	6:46:00 AM	8:12:00 AM	86	1,634	7	Material/Equipment Breakdown
8/1/2010	Glendale T.S.	M14	10:49:00 AM	11:50:00 AM	61	2,806	7	Material/Equipment Breakdown
8/3/2010	Winona T.S.	W14X	1:28:00 PM	1:28:00 PM	-	-	7	Material/Equipment Breakdown
8/4/2010	Elgin T.S.	5231X	6:49:00 PM	4:13:00 AM	564	10,716	7	Material/Equipment Breakdown
8/4/2010	Elgin T.S.	5231X	12:41:00 AM	4:13:00 AM	212	424	7	Material/Equipment Breakdown
8/5/2010	Vansickle T.S.	M42	4:14:00 AM	4:14:00 AM	-	-	7	Material/Equipment Breakdown
8/5/2010	Vansickle T.S.	M53	4:14:00 AM	4:14:00 AM	-	-	7	Material/Equipment Breakdown
8/5/2010	Vansickle T.S.	M53	4:14:00 AM	9:30:00 AM	316	4,424	7	Material/Equipment Breakdown
8/8/2010	Glendale T.S.	M24	11:18:00 AM	12:04:00 PM	46	1,288	7	Material/Equipment Breakdown



8/9/2010	Eastmount S/S	EA-6	9:48:00 PM	4:10:00 AM	382	4,966	7	Material/Equipment Breakdown
8/9/2010	Eastmount S/S	EA-6	3:15:00 AM	4:10:00 AM	55	1,100	7	Material/Equipment Breakdown
8/9/2010	Ottawa S/S	OT-4	2:30:00 PM	2:50:00 PM	20	260	7	Material/Equipment Breakdown
8/9/2010	Mohawk S/S	MK-10	9:00:00 PM	11:30:00 PM	150	2,700	7	Material/Equipment Breakdown
8/10/2010	Wentworth S/S	WT-12	12:40:00 PM	1:45:00 PM	65	2,470	7	Material/Equipment Breakdown
8/10/2010	Dundas T.S.	2D7X	2:18:00 PM	2:18:00 PM	-	-	7	Material/Equipment Breakdown
8/10/2010	Dundas T.S.	2D7X	4:55:00 PM	4:55:00 PM	-	-	7	Material/Equipment Breakdown
8/10/2010	Dundas T.S.	2D7X	2:18:00 PM	5:39:00 PM	201	49,647	7	Material/Equipment Breakdown
8/10/2010	Nebo T.S.	3611X	6:14:00 PM	8:25:00 PM	131	1,572	7	Material/Equipment Breakdown
8/10/2010	Nebo T.S.	3611X	10:00:00 PM	10:10:00 PM	10	170	7	Material/Equipment Breakdown
8/11/2010	Horning T.S.	471X	2:39:00 PM	5:59:00 PM	200	4,800	7	Material/Equipment Breakdown
8/11/2010	Lake T.S.	1421X	8:16:00 AM	9:37:00 AM	81	11,583	7	Material/Equipment Breakdown
8/11/2010	Vansickle T.S.	M51	8:25:00 PM	2:35:00 AM	370	5,180	7	Material/Equipment Breakdown
8/13/2010	Carlton T.S.	M10	11:07:00 PM	11:12:00 PM	5	14,435	7	Material/Equipment Breakdown
8/14/2010	Carlton T.S.	M10	8:28:00 PM	1:19:00 AM	291	1,455	7	Material/Equipment Breakdown
8/15/2010	Horning T.S.	471X	3:47:00 PM	4:40:00 PM	53	689	7	Material/Equipment Breakdown
8/20/2010	Carlton T.S.	M18	10:25:00 AM	10:27:00 AM	2	4,140	7	Material/Equipment Breakdown
8/20/2010	Carlton T.S.	M18	10:25:00 AM	2:25:00 PM	240	240	7	Material/Equipment Breakdown
8/21/2010	Central S/S	CE-4	9:24:00 AM	7:50:00 PM	626	44,446	7	Material/Equipment Breakdown
8/21/2010	Dundas T.S.	2D13X	7:43:00 PM	9:45:00 PM	122	122	7	Material/Equipment Breakdown
8/21/2010	Carlton T.S.	M18	11:18:00 PM	4:28:00 AM	310	20,770	7	Material/Equipment Breakdown
8/21/2010	Stirton T.S.	8631X	11:02:00 PM	11:57:00 PM	55	1,540	7	Material/Equipment Breakdown
8/23/2010	Nebo T.S.	331X	10:51:00 AM	12:31:00 PM	100	1,100	7	Material/Equipment Breakdown
8/23/2010	Nebo T.S.	331X	10:51:00 AM	5:57:00 PM	426	426	7	Material/Equipment Breakdown
8/30/2010	Central S/S	CE-8	12:07:00 PM	2:15:00 PM	128	2,304	7	Material/Equipment Breakdown
8/30/2010	Lake T.S.	1811X	12:08:00 PM	3:00:00 PM	172	688	7	Material/Equipment Breakdown
8/30/2010	Mohawk T.S.	0731X	4:48:00 PM	5:25:00 PM	37	518	7	Material/Equipment Breakdown
8/31/2010	Vansickle T.S.	M41	5:52:00 PM	11:35:00 PM	343	9,261	7	Material/Equipment Breakdown
9/1/2010	Bunting T.S.	M55	4:31:00 PM	9:35:00 PM	304	4,864	7	Material/Equipment Breakdown
9/2/2010	Deerhurst S/S	DH-1B	12:28:00 PM	2:15:00 PM	107	1,070	7	Material/Equipment Breakdown
9/2/2010	Glendale T.S.	M14	5:41:00 AM	9:30:00 AM	229	4,580	7	Material/Equipment Breakdown
9/3/2010	Dewitt S/S	DW-1 (3-ph)	11:25:00 AM	2:07:00 PM	162	56,700	7	Material/Equipment Breakdown
9/4/2010	Beach T.S.	7822X	9:51:00 PM	9:56:00 PM	5	6,181	7	Material/Equipment Breakdown
9/4/2010	Cope S/S	CP-5	1:05:00 PM	2:50:00 PM	105	1,890	7	Material/Equipment Breakdown
9/4/2010	Eastmount S/S	EA-7	2:26:00 PM	3:20:00 PM	54	972	7	Material/Equipment Breakdown
9/4/2010	Vansickle T.S.	M51	10:12:00 PM	10:17:00 PM	5	17,075	7	Material/Equipment Breakdown

9/5/2010	Bunting T.S.	M75	7:43:00 AM	12:01:00 PM	258	9,804	7	Material/Equipment Breakdown
9/5/2010	Bunting T.S.	M75	7:43:00 AM	7:43:00 AM	-	-	7	Material/Equipment Breakdown
9/5/2010	Spadina S/S	SP-5	9:55:00 AM	10:20:00 AM	25	475	7	Material/Equipment Breakdown
9/5/2010	Vansickle T.S.	M51	11:26:00 AM	11:06:00 PM	700	2,799	7	Material/Equipment Breakdown
9/5/2010	Vansickle T.S.	M51	11:26:00 AM	11:26:00 AM	-	-	7	Material/Equipment Breakdown
9/8/2010	Winona T.S.	W12X	12:25:00 AM	1:53:00 AM	88	704	7	Material/Equipment Breakdown
9/8/2010	Winona T.S.	W12X	1:50:00 AM	1:51:00 AM	1	8	7	Material/Equipment Breakdown
9/8/2010	Caroline S/S	CA-4	12:32:00 PM	1:10:00 PM	38	228	7	Material/Equipment Breakdown
9/8/2010	Elgin T.S.	5231X	9:11:00 AM	10:39:00 AM	88	352	7	Material/Equipment Breakdown
9/8/2010	Elgin T.S.	5231X	11:01:00 AM	11:46:00 AM	45	49,516	7	Material/Equipment Breakdown
9/13/2010	Horning T.S.	4491X	12:00:00 PM	12:40:00 PM	40	360	7	Material/Equipment Breakdown
9/17/2010	Carlton T.S.	M17	8:52:00 AM	10:57:00 AM	125	4,000	7	Material/Equipment Breakdown
9/17/2010	Glendale T.S.	M24	7:27:00 AM	9:57:00 AM	150	146,037	7	Material/Equipment Breakdown
9/17/2010	Carlton T.S.	M17	8:52:00 AM	8:52:00 AM	-	-	7	Material/Equipment Breakdown
9/17/2010	Glendale T.S.	M24	7:27:00 AM	11:40:00 AM	253	3,036	7	Material/Equipment Breakdown
9/17/2010	Glendale T.S.	M24	1:05:00 PM	11:35:00 PM	630	8,820	7	Material/Equipment Breakdown
9/22/2010	Mohawk T.S.	0642X	10:24:00 AM	11:49:00 AM	85	3,230	7	Material/Equipment Breakdown
9/24/2010	Wellington S/S	WL-5	4:45:00 PM	9:00:00 PM	255	6,885	7	Material/Equipment Breakdown
9/24/2010	Newton T.S.	291X	5:10:00 PM	7:20:00 PM	130	2,210	7	Material/Equipment Breakdown
9/24/2010	Vansickle T.S.	M41	12:35:00 PM	3:58:00 PM	203	5,278	7	Material/Equipment Breakdown
9/28/2010	Wellington S/S	WL-11	4:08:00 AM	6:20:00 AM	132	1,716	7	Material/Equipment Breakdown
9/29/2010	Mountain S/S	MT-6	12:31:00 AM	12:59:00 AM	28	14,220	7	Material/Equipment Breakdown
10/1/2010	Dundas T.S.	2D13X	10:44:00 AM	11:15:00 AM	31	248	7	Material/Equipment Breakdown
10/5/2010	Vansickle T.S.	M41	5:25:00 PM	5:25:00 PM	-	-	7	Material/Equipment Breakdown
10/6/2010	Mountain S/S	MT-4	1:08:00 AM	4:00:00 AM	172	2,752	7	Material/Equipment Breakdown
10/7/2010	Horning T.S.	4111X	9:45:00 PM	12:50:00 AM	185	3,145	7	Material/Equipment Breakdown
10/9/2010	Carlton T.S.	M21	9:55:00 AM	9:00:00 PM	665	7,980	7	Material/Equipment Breakdown
10/14/2010	Mohawk S/S	MK-2	6:50:00 PM	11:40:00 PM	290	4,930	7	Material/Equipment Breakdown
10/14/2010	Mountain S/S	MT-6	6:35:00 PM	9:57:00 PM	202	3,434	7	Material/Equipment Breakdown
10/14/2010	Nebo T.S.	3621X	7:05:00 PM	7:25:00 PM	20	180	7	Material/Equipment Breakdown
10/20/2010	Vine S/S	F3	2:47:00 PM	9:15:00 PM	388	7,372	7	Material/Equipment Breakdown
10/20/2010	Nebo T.S.	3611X	3:18:00 PM	6:15:00 PM	177	6,903	7	Material/Equipment Breakdown
10/20/2010	Nebo T.S.	3611X	3:18:00 PM	9:30:00 PM	372	4,464	7	Material/Equipment Breakdown
10/20/2010	Nebo T.S.	3611X	8:35:00 PM	9:30:00 PM	55	1,430	7	Material/Equipment Breakdown
10/21/2010	Wentworth S/S	WT-9	2:10:00 AM	1:13:00 PM	663	24,531	7	Material/Equipment Breakdown
10/21/2010	Wentworth S/S	WT-9	10:58:00 AM	1:13:00 PM	135	23,760	7	Material/Equipment Breakdown



10/22/2010	Carlton T.S.	M10	7:04:00 PM	9:28:00 PM	144	1,872	7	Material/Equipment Breakdown
10/26/2010	Horning T.S.	4451X	9:11:00 AM	10:20:00 AM	69	80,178	7	Material/Equipment Breakdown
10/26/2010	Horning T.S.	4111X	9:11:00 AM	10:22:00 AM	71	91,519	7	Material/Equipment Breakdown
10/27/2010	Dundas T.S.	2D2X	5:27:00 PM	9:38:00 PM	251	8,077	7	Material/Equipment Breakdown
10/28/2010	Nebo T.S.	341X	7:03:00 PM	12:29:00 AM	326	8,802	7	Material/Equipment Breakdown
10/30/2010	Carlton T.S.	M18	5:17:00 PM	6:50:00 PM	93	1,116	7	Material/Equipment Breakdown
11/1/2010	Baldwin S/S	BD-2	6:47:00 AM	10:25:00 AM	218	13,080	7	Material/Equipment Breakdown
11/1/2010	Lake T.S.	1421X	7:52:00 AM	10:41:00 AM	169	260,361	7	Material/Equipment Breakdown
11/3/2010	Aberdeen S/S	AB-2	12:43:00 PM	1:30:00 PM	47	611	7	Material/Equipment Breakdown
11/3/2010	Nebo T.S.	341X	7:00:00 PM	7:45:00 PM	45	90	7	Material/Equipment Breakdown
11/14/2010	Wellington S/S	WL-5	9:12:00 AM	11:00:00 AM	108	6,264	7	Material/Equipment Breakdown
11/17/2010	Horning T.S.	4461X	8:51:00 AM	11:20:00 AM	149	25,181	7	Material/Equipment Breakdown
11/20/2010	Carlton T.S.	M17	10:00:00 AM	11:20:00 AM	80	880	7	Material/Equipment Breakdown
11/22/2010	Mohawk S/S	MK-1	4:26:00 PM	4:59:00 PM	33	17,622	7	Material/Equipment Breakdown
11/23/2010	Nebo T.S.	3632X	9:56:00 AM	12:22:00 PM	146	1,606	7	Material/Equipment Breakdown
11/26/2010	Eastmount S/S	EA-9	9:23:00 PM	10:00:00 PM	37	629	7	Material/Equipment Breakdown
11/30/2010	Lake T.S.	1431X	4:36:00 AM	5:26:00 AM	50	44,650	7	Material/Equipment Breakdown
12/6/2010	Lake T.S.	141X	10:19:00 AM	4:15:00 PM	356	356	7	Material/Equipment Breakdown
12/7/2010	Glendale T.S.	M6	9:20:00 AM	10:40:00 AM	80	35,760	7	Material/Equipment Breakdown
12/9/2010	Lake T.S.	1731X	11:05:00 AM	2:40:00 PM	215	6,450	7	Material/Equipment Breakdown
12/10/2010	Carlton T.S.	M18	4:41:00 PM	2:25:00 AM	584	6,424	7	Material/Equipment Breakdown
12/10/2010	Mohawk T.S.	0622X	1:57:00 AM	3:04:00 AM	67	603	7	Material/Equipment Breakdown
12/12/2010	Carlton T.S.	M18	12:38:00 PM	12:38:00 PM	-	-	7	Material/Equipment Breakdown
12/12/2010	Carlton T.S.	M18	12:38:00 PM	4:28:00 PM	230	12,427	7	Material/Equipment Breakdown
12/13/2010	Lake T.S.	1731X	5:10:00 PM	6:20:00 PM	70	2,240	7	Material/Equipment Breakdown
12/13/2010	Lake T.S.	141X	11:56:00 PM	12:00:00 PM	724	724	7	Material/Equipment Breakdown
12/16/2010	Bartonville S/S	BA-1	2:52:00 PM	3:38:00 PM	46	21,712	7	Material/Equipment Breakdown
12/23/2010	Whitney S/S	WH-5	9:43:00 PM	10:00:00 PM	17	12,138	7	Material/Equipment Breakdown
12/25/2010	Hughson S/S	HU-11	4:25:00 PM	8:09:00 PM	224	2,464	7	Material/Equipment Breakdown
12/30/2010	Dundas T.S.	2D12X	11:14:00 AM	12:32:00 PM	78	3,657	7	Material/Equipment Breakdown
12/30/2010	Lake T.S.	161X	2:29:00 PM	2:29:00 PM	-	-	7	Material/Equipment Breakdown
12/30/2010	Lake T.S.	161X	2:27:00 PM	8:00:00 PM	333	333	7	Material/Equipment Breakdown
12/30/2010	Lake T.S.	161X	4:00:00 PM	8:00:00 PM	240	240	7	Material/Equipment Breakdown
12/31/2010	Kenilworth S/S	KE-3	8:20:00 PM	8:25:00 PM	5	100	7	Material/Equipment Breakdown
12/31/2010	Glendale T.S.	M14	11:04:00 AM	2:41:00 PM	217	3,255	7	Material/Equipment Breakdown
1/3/2011	Nebo T.S.	3521X	10:50:00 AM	12:20:00 PM	90	1,530	7	Material/Equipment Breakdown

1/9/2011	Nebo T.S.	3611X	12:02:00 AM	1:05:00 AM	63	123,763	7	Material/Equipment Breakdown
1/11/2011	Cope S/S	CP-7	6:28:00 PM	6:29:00 PM	1	607	7	Material/Equipment Breakdown
1/11/2011	Cope S/S	CP-7	5:50:00 PM	10:06:00 PM	256	256	7	Material/Equipment Breakdown
1/12/2011	Parkdale S/S	PA-5	10:06:00 AM	12:06:00 PM	120	45,479	7	Material/Equipment Breakdown
1/13/2011	Nebo T.S.	3521X	10:35:00 PM	11:23:00 PM	48	32,030	7	Material/Equipment Breakdown
1/13/2011	Nebo T.S.	3632X	6:10:00 PM	10:19:00 PM	249	363,056	7	Material/Equipment Breakdown
1/13/2011	Nebo T.S.	3521X	5:39:00 PM	5:44:00 PM	5	5,655	7	Material/Equipment Breakdown
1/15/2011	Lake T.S.	141X	9:40:00 AM	2:45:00 PM	305	5,490	7	Material/Equipment Breakdown
1/17/2011	Glendale T.S.	M24	3:17:00 PM	4:17:00 PM	60	4,920	7	Material/Equipment Breakdown
1/17/2011	Glendale T.S.	M14	1:26:00 PM	6:02:00 PM	276	1,380	7	Material/Equipment Breakdown
1/20/2011	Bunting T.S.	M61	9:10:00 AM	1:15:00 PM	245	2,695	7	Material/Equipment Breakdown
1/23/2011	Nebo T.S.	3612X	6:28:00 PM	11:25:00 PM	297	5,346	7	Material/Equipment Breakdown
1/25/2011	Wellington S/S	WL-8	6:54:00 AM	1:00:00 PM	366	5,490	7	Material/Equipment Breakdown
1/25/2011	Horning T.S.	462X	1:10:00 PM	1:50:00 PM	40	160	7	Material/Equipment Breakdown
1/25/2011	Nebo T.S.	3521X	6:31:00 AM	9:36:00 AM	185	8,695	7	Material/Equipment Breakdown
1/28/2011	Bunting T.S.	M55	12:21:00 PM	11:00:00 PM	639	639	7	Material/Equipment Breakdown
1/28/2011	Bunting T.S.	M75	1:05:00 PM	1:49:00 PM	44	352	7	Material/Equipment Breakdown
1/28/2011	Bunting T.S.	M75	5:10:00 PM	5:38:00 PM	28	2,912	7	Material/Equipment Breakdown
1/30/2011	Wellington S/S	WL-11	1:25:00 AM	3:25:00 AM	120	120	7	Material/Equipment Breakdown
1/31/2011	Lake T.S.	141X	8:39:00 AM	11:19:00 AM	160	1,920	7	Material/Equipment Breakdown
2/1/2011	Eastmount S/S	EA-4	3:57:00 PM	5:15:00 PM	78	1,560	7	Material/Equipment Breakdown
2/1/2011	Mohawk T.S.	0731X	1:51:00 PM	7:00:00 PM	309	927	7	Material/Equipment Breakdown
2/2/2011	Mohawk T.S.	0622X	3:46:00 AM	4:45:00 AM	59	1,003	7	Material/Equipment Breakdown
2/3/2011	Lake T.S.	1712X	7:02:00 PM	12:45:00 AM	343	6,174	7	Material/Equipment Breakdown
2/3/2011	Lake T.S.	1712X	10:45:00 PM	12:45:00 AM	120	2,040	7	Material/Equipment Breakdown
2/3/2011	Lake T.S.	1831X	3:52:00 PM	4:42:00 PM	50	200	7	Material/Equipment Breakdown
2/5/2011	Birmingham T.S.	50X71	10:44:00 AM	3:00:00 PM	256	7,680	7	Material/Equipment Breakdown
2/5/2011	Bunting T.S.	M77	8:50:00 PM	1:45:00 AM	295	2,655	7	Material/Equipment Breakdown
2/5/2011	Dundas T.S.	2D12X	3:29:00 PM	7:05:00 PM	216	522,288	7	Material/Equipment Breakdown
2/7/2011	Beach T.S.	7731X	1:15:00 AM	2:30:00 AM	75	2,100	7	Material/Equipment Breakdown
2/7/2011	Nebo T.S.	331X	10:30:00 AM	10:37:00 AM	7	26,558	7	Material/Equipment Breakdown
2/8/2011	Wentworth S/S	WT-5	7:31:00 PM	8:30:00 PM	59	1,534	7	Material/Equipment Breakdown
2/9/2011	Mountain S/S	MT-6	4:29:00 AM	5:29:00 AM	60	1,560	7	Material/Equipment Breakdown
2/9/2011	Mountain S/S	MT-6	5:24:00 AM	5:29:00 AM	5	2,445	7	Material/Equipment Breakdown
2/11/2011	Lake T.S.	1832X	11:49:00 AM	11:53:00 AM	4	9,620	7	Material/Equipment Breakdown
2/13/2011	Stirton T.S.	8631X	6:07:00 PM	11:18:00 PM	311	9,019	7	Material/Equipment Breakdown

2/14/2011	Beach T.S.	7411X	8:56:00 PM	9:50:00 PM	54	594	7	Material/Equipment Breakdown
2/14/2011	Vansickle T.S.	M53	3:06:00 PM	3:06:00 PM	-	-	7	Material/Equipment Breakdown
2/14/2011	Elgin T.S.	5231X	5:11:00 PM	12:25:00 AM	434	6,944	7	Material/Equipment Breakdown
2/15/2011	Beach T.S.	7441X	11:58:00 PM	12:49:00 AM	51	51	7	Material/Equipment Breakdown
2/16/2011	Horning T.S.	421X	7:55:00 PM	9:54:00 AM	2,279	26,478	7	Material/Equipment Breakdown
2/16/2011	Lake T.S.	1831X	10:41:00 AM	12:35:00 PM	114	1,710	7	Material/Equipment Breakdown
2/17/2011	Dundas T.S.	2D13X	8:44:00 AM	12:05:00 PM	201	201	7	Material/Equipment Breakdown
2/18/2011	Cope S/S	CP-6	11:50:00 PM	12:20:00 AM	30	600	7	Material/Equipment Breakdown
2/19/2011	Lake T.S.	1712X	3:27:00 AM	6:43:00 AM	196	168,490	7	Material/Equipment Breakdown
2/19/2011	Lake T.S.	141X	10:00:00 AM	2:00:00 PM	240	240	7	Material/Equipment Breakdown
2/22/2011	Ottawa S/S	OT-7	2:12:00 PM	2:43:00 PM	31	124	7	Material/Equipment Breakdown
2/22/2011	Dundas T.S.	2D1X	2:08:00 PM	2:08:00 PM	-	-	7	Material/Equipment Breakdown
2/24/2011	Spadina S/S	SP-1	4:59:00 PM	6:00:00 PM	61	793	7	Material/Equipment Breakdown
2/24/2011	Lake T.S.	1831X	7:37:00 AM	9:10:00 AM	93	837	7	Material/Equipment Breakdown
2/25/2011	Vansickle T.S.	M51	7:38:00 AM	7:38:00 AM	-	-	7	Material/Equipment Breakdown
2/25/2011	Vansickle T.S.	M51	7:38:00 AM	8:30:00 AM	52	2,704	7	Material/Equipment Breakdown
2/26/2011	Nebo T.S.	3621X	7:35:00 PM	8:29:00 PM	54	2,376	7	Material/Equipment Breakdown
2/28/2011	Beach T.S.	7821X	12:40:00 AM	12:41:00 AM	1	1,852	7	Material/Equipment Breakdown
2/28/2011	Kenilworth S/S	KE-6	3:25:00 AM	3:35:00 AM	10	240	7	Material/Equipment Breakdown
2/28/2011	Whitney S/S	WH-2	5:11:00 AM	11:20:00 AM	369	369	7	Material/Equipment Breakdown
2/28/2011	Whitney S/S	WH-2	7:53:00 PM	8:02:00 PM	9	153	7	Material/Equipment Breakdown
2/28/2011	Nebo T.S.	3611X	6:34:00 AM	9:00:00 AM	146	1,022	7	Material/Equipment Breakdown
3/1/2011	Eastmount S/S	EA-3	9:45:00 AM	11:00:00 AM	75	525	7	Material/Equipment Breakdown
3/3/2011	Ottawa S/S	OT-3	12:18:00 PM	12:44:00 PM	26	858	7	Material/Equipment Breakdown
3/3/2011	Mohawk T.S.	0622X	2:34:00 PM	3:05:00 PM	31	372	7	Material/Equipment Breakdown
3/6/2011	Beach T.S.	7411X	7:50:00 AM	10:30:00 AM	160	3,680	7	Material/Equipment Breakdown
3/6/2011	Nebo T.S.	331X	5:35:00 PM	5:35:00 PM	-	-	7	Material/Equipment Breakdown
3/6/2011	Nebo T.S.	331X	5:35:00 PM	10:08:00 PM	273	13,663	7	Material/Equipment Breakdown
4/6/2011	Bunting T.S.	M61	10:50:00 AM	9:30:00 PM	640	3,200	7	Material/Equipment Breakdown
4/6/2011	Ottawa S/S	OT-4	10:04:00 AM	11:25:00 AM	81	2,025	7	Material/Equipment Breakdown
4/6/2011	Elmwood S/S	EL-9	10:30:00 AM	11:10:00 AM	40	360	7	Material/Equipment Breakdown
4/6/2011	Deerhurst S/S	DH-3R	12:32:00 AM	1:36:00 AM	64	9,856	7	Material/Equipment Breakdown
4/6/2011	Kenilworth S/S	KE-3	7:02:00 PM	8:40:00 PM	98	1,568	7	Material/Equipment Breakdown
4/6/2011	Elmwood S/S	EL-9	11:40:00 PM	11:49:00 PM	9	8,325	7	Material/Equipment Breakdown
4/6/2011	Wellington S/S	WL-5	8:55:00 PM	9:36:00 PM	41	1,107	7	Material/Equipment Breakdown
4/6/2011	Deerhurst S/S	DH-2 (3-ph)	5:31:00 AM	5:47:00 AM	16	4,080	7	Material/Equipment Breakdown

4/6/2011	Galbraith S/S	GA-Total Station	1:52:00 AM	5:47:00 AM	235	156,275	7	Material/Equipment Breakdown
4/6/2011	Lake T.S.	121X	1:52:00 AM	1:52:00 AM	-	-	7	Material/Equipment Breakdown
4/6/2011	Newton T.S.	282X	12:45:00 AM	12:45:00 AM	-	-	7	Material/Equipment Breakdown
4/6/2011	Elgin T.S.	5341X	3:14:00 PM	10:00:00 AM	1,126	3,378	7	Material/Equipment Breakdown
4/6/2011	Hughson S/S	HU-7	10:10:00 AM	10:10:00 AM	-	-	7	Material/Equipment Breakdown
4/6/2011	Lake T.S.	1411X	11:31:00 PM	11:33:00 PM	2	2,140	7	Material/Equipment Breakdown
4/6/2011	Mohawk T.S.	0621LM	3:30:00 AM	5:24:00 AM	114	114	7	Material/Equipment Breakdown
4/6/2011	Mohawk T.S.	0621LM	11:41:00 PM	12:28:00 AM	47	141	7	Material/Equipment Breakdown
4/6/2011	Mohawk T.S.	0622X	11:41:00 PM	12:40:00 AM	59	77,703	7	Material/Equipment Breakdown
4/6/2011	Nebo T.S.	3531X	8:29:00 AM	11:24:00 AM	175	700	7	Material/Equipment Breakdown
4/6/2011	Newton T.S.	282X	4:07:00 AM	4:36:00 AM	29	50,286	7	Material/Equipment Breakdown
4/6/2011	Newton T.S.	252X	8:35:00 AM	8:57:00 AM	22	52,250	7	Material/Equipment Breakdown
4/8/2011	Cope S/S	CP-5	12:00:00 PM	1:40:00 PM	100	700	7	Material/Equipment Breakdown
4/9/2011	Glendale T.S.	M14	9:56:00 AM	11:00:00 AM	64	1,344	7	Material/Equipment Breakdown
4/9/2011	Vansickle T.S.	M52	8:37:00 AM	8:48:00 AM	11	6,688	7	Material/Equipment Breakdown
4/11/2011	Lake T.S.	1811X	4:09:00 AM	4:11:00 AM	2	4,898	7	Material/Equipment Breakdown
4/12/2011	Mohawk T.S.	0812X	6:21:00 PM	1:05:00 AM	404	404	7	Material/Equipment Breakdown
4/15/2011	Parkdale S/S	PA-6	9:12:00 AM	11:59:00 PM	887	887	7	Material/Equipment Breakdown
4/17/2011	Mohawk S/S	MK-9	3:08:00 PM	3:45:00 PM	37	703	7	Material/Equipment Breakdown
4/17/2011	Glendale T.S.	M14	12:50:00 PM	12:52:00 PM	2	5,954	7	Material/Equipment Breakdown
4/17/2011	Glendale T.S.	M14	1:25:00 PM	1:34:00 PM	9	25,685	7	Material/Equipment Breakdown
4/19/2011	Taylor S/S	F1	11:13:00 AM	11:18:00 AM	5	1,855	7	Material/Equipment Breakdown
4/19/2011	Aberdeen S/S	AB-3	10:45:00 PM	11:10:00 PM	25	625	7	Material/Equipment Breakdown
4/19/2011	Wentworth S/S	WT-5	8:00:00 PM	9:30:00 PM	90	2,340	7	Material/Equipment Breakdown
4/20/2011	Eastmount S/S	EA-3	8:56:00 AM	2:11:00 PM	315	2,205	7	Material/Equipment Breakdown
4/20/2011	Nebo T.S.	331X	1:55:00 AM	11:00:00 AM	545	6,540	7	Material/Equipment Breakdown
4/25/2011	Glendale T.S.	M14	12:43:00 PM	4:18:00 PM	215	4,300	7	Material/Equipment Breakdown
4/26/2011	Cope S/S	CP-6	4:00:00 PM	4:50:00 PM	50	22,391	7	Material/Equipment Breakdown
4/26/2011	Nebo T.S.	341X	9:55:00 AM	2:45:00 PM	290	1,740	7	Material/Equipment Breakdown
4/27/2011	Carlton T.S.	M20	5:10:00 PM	5:12:00 PM	2	3,966	7	Material/Equipment Breakdown
5/1/2011	Nebo T.S.	341X	12:05:00 PM	12:05:00 PM	-	-	7	Material/Equipment Breakdown
5/2/2011	Mohawk T.S.	0711X	1:30:00 AM	4:50:00 AM	200	12,400	7	Material/Equipment Breakdown
5/2/2011	Nebo T.S.	341X	6:33:00 PM	10:22:00 PM	229	85,188	7	Material/Equipment Breakdown
5/3/2011	Elgin T.S.	5231X	2:45:00 AM	11:17:00 AM	512	11,264	7	Material/Equipment Breakdown
5/3/2011	Elgin T.S.	5231X	1:49:00 AM	1:49:00 AM	-	697,764	7	Material/Equipment Breakdown
5/4/2011	Lake T.S.	161X	1:03:00 PM	1:13:00 PM	10	1,070	7	Material/Equipment Breakdown

5/4/2011	Winona T.S.	W12X	8:50:00 AM	8:50:00 AM	-	-	7	Material/Equipment Breakdown
5/6/2011	Winona T.S.	W15X	2:53:00 PM	12:22:00 AM	569	37,554	7	Material/Equipment Breakdown
5/6/2011	Winona T.S.	W15X	10:20:00 PM	12:22:00 AM	122	7,930	7	Material/Equipment Breakdown
5/7/2011	Elgin T.S.	5411X	5:34:00 AM	6:10:00 AM	36	9,000	7	Material/Equipment Breakdown
5/7/2011	Elgin T.S.	5231X	5:34:00 AM	7:21:00 AM	107	44,512	7	Material/Equipment Breakdown
5/7/2011	Elgin T.S.	5231X	5:34:00 AM	10:50:00 AM	316	7,584	7	Material/Equipment Breakdown
5/11/2011	Spadina S/S	SP-10	9:05:00 PM	9:08:00 PM	3	3,996	7	Material/Equipment Breakdown
5/13/2011	Nebo T.S.	341X	12:32:00 PM	2:46:00 PM	134	4,288	7	Material/Equipment Breakdown
5/15/2011	Carlton T.S.	M11	2:19:00 PM	2:30:00 AM	731	731	7	Material/Equipment Breakdown
5/15/2011	Glendale T.S.	M14	2:31:00 PM	4:30:00 PM	119	3,689	7	Material/Equipment Breakdown
5/15/2011	Vansickle T.S.	M53	7:57:00 PM	10:00:00 PM	123	2,337	7	Material/Equipment Breakdown
5/19/2011	Lake T.S.	1812X	5:17:00 PM	11:03:00 PM	346	70,930	7	Material/Equipment Breakdown
5/19/2011	Vansickle T.S.	M41	9:21:00 PM	11:55:00 PM	154	8,470	7	Material/Equipment Breakdown
5/21/2011	Bunting T.S.	M76	6:23:00 PM	12:40:00 AM	377	377	7	Material/Equipment Breakdown
5/21/2011	Nebo T.S.	3611X	8:44:00 PM	10:10:00 PM	86	1,118	7	Material/Equipment Breakdown
5/23/2011	Mohawk S/S	MK-2	8:02:00 PM	8:30:00 PM	28	28	7	Material/Equipment Breakdown
5/23/2011	Winona T.S.	W12X	9:50:00 PM	11:15:00 PM	85	935	7	Material/Equipment Breakdown
5/23/2011	Glendale T.S.	M14	12:46:00 PM	9:50:00 PM	544	2,720	7	Material/Equipment Breakdown
5/26/2011	Vansickle T.S.	M51	9:00:00 AM	1:45:00 PM	285	3,135	7	Material/Equipment Breakdown
5/26/2011	Vansickle T.S.	M41	5:16:00 PM	6:11:00 PM	55	7,370	7	Material/Equipment Breakdown
5/26/2011	Vansickle T.S.	M41	6:24:00 AM	7:30:00 PM	786	3,144	7	Material/Equipment Breakdown
5/27/2011	Wentworth S/S	WT-9	12:05:00 AM	4:20:00 AM	255	1,530	7	Material/Equipment Breakdown
5/28/2011	Parkdale S/S	PA-5	6:00:00 PM	6:55:00 PM	55	495	7	Material/Equipment Breakdown
5/29/2011	Dundas T.S.	2D13X	4:25:00 PM	6:05:00 PM	100	100	7	Material/Equipment Breakdown
5/30/2011	Vansickle T.S.	M42	8:21:00 AM	10:45:00 AM	144	1,152	7	Material/Equipment Breakdown
5/31/2011	Winona T.S.	W15X	2:18:00 PM	4:36:00 PM	138	13,110	7	Material/Equipment Breakdown
5/31/2011	Wentworth S/S	WT-9	8:24:00 AM	5:20:00 PM	536	269,608	7	Material/Equipment Breakdown
5/31/2011	Glendale T.S.	M6	8:03:00 PM	8:45:00 PM	42	2,142	7	Material/Equipment Breakdown
6/1/2011	Winona T.S.	W15X	12:50:00 PM	2:52:00 PM	122	7,198	7	Material/Equipment Breakdown
6/2/2011	Cope S/S	CP-3	7:18:00 AM	8:25:00 AM	67	1,005	7	Material/Equipment Breakdown
6/2/2011	Taylor S/S	F3	3:03:00 PM	4:25:00 PM	82	1,558	7	Material/Equipment Breakdown
6/2/2011	Nebo T.S.	3632X	5:28:00 PM	7:28:00 PM	120	480	7	Material/Equipment Breakdown
6/7/2011	Nebo T.S.	341X	7:17:00 AM	10:25:00 AM	188	2,449	7	Material/Equipment Breakdown
6/9/2011	Parkdale S/S	PA-5	1:31:00 AM	3:51:00 AM	140	54,040	7	Material/Equipment Breakdown
6/9/2011	Horning T.S.	4491X	4:54:00 PM	7:06:00 PM	132	149,160	7	Material/Equipment Breakdown
6/11/2011	Horning T.S.	421X	8:35:00 PM	6:24:00 AM	589	6,479	7	Material/Equipment Breakdown

6/11/2011	Horning T.S.	421X	12:53:00 AM	6:24:00 AM	331	11,916	7	Material/Equipment Breakdown
6/15/2011	Elgin T.S.	5271X	3:44:00 PM	10:41:00 PM	417	25,020	7	Material/Equipment Breakdown
6/16/2011	Wellington S/S	WL-8	12:10:00 PM	7:37:00 AM	1,167	59,517	7	Material/Equipment Breakdown
6/16/2011	Hughson S/S	HU-11	4:44:00 PM	7:40:00 PM	176	82,016	7	Material/Equipment Breakdown
6/16/2011	Lake T.S.	1811X	5:20:00 PM	6:30:00 PM	70	4,900	7	Material/Equipment Breakdown
6/16/2011	Nebo T.S.	331X	8:34:00 PM	8:35:00 PM	1	3,864	7	Material/Equipment Breakdown
6/17/2011	Nebo T.S.	331X	8:30:00 PM	2:00:00 AM	330	1,320	7	Material/Equipment Breakdown
6/20/2011	Elgin T.S.	5331X	7:33:00 PM	8:19:00 PM	46	644	7	Material/Equipment Breakdown
6/21/2011	Carlton T.S.	M25	8:37:00 AM	2:12:00 PM	335	13,065	7	Material/Equipment Breakdown
6/23/2011	Spadina S/S	SP-1	5:56:00 PM	8:10:00 PM	134	3,350	7	Material/Equipment Breakdown
6/23/2011	Elmwood S/S	EL-4	12:47:00 PM	2:01:00 PM	74	15,170	7	Material/Equipment Breakdown
6/23/2011	Elmwood S/S	EL-4	2:01:00 PM	2:07:00 PM	6	2,892	7	Material/Equipment Breakdown
6/23/2011	Stirton T.S.	8621X	9:16:00 PM	9:17:00 PM	1	493	7	Material/Equipment Breakdown
6/23/2011	Stirton T.S.	8621X	9:37:00 PM	9:39:00 PM	2	986	7	Material/Equipment Breakdown
6/25/2011	Lake T.S.	1431X	6:29:00 PM	5:36:00 AM	667	8,004	7	Material/Equipment Breakdown
6/25/2011	Lake T.S.	1431X	6:29:00 PM	7:09:00 AM	760	55,480	7	Material/Equipment Breakdown
6/25/2011	Lake T.S.	1431X	1:01:00 AM	2:50:00 AM	109	43,491	7	Material/Equipment Breakdown
6/25/2011	Lake T.S.	1431X	5:40:00 AM	7:09:00 AM	89	14,596	7	Material/Equipment Breakdown
6/27/2011	Carlton T.S.	M11	8:15:00 AM	10:30:00 AM	135	2,970	7	Material/Equipment Breakdown
6/28/2011	Bunting T.S.	M75	11:13:00 PM	11:13:00 PM	-	-	7	Material/Equipment Breakdown
6/28/2011	Bunting T.S.	M75	2:57:00 PM	2:26:00 AM	689	14,469	7	Material/Equipment Breakdown
6/29/2011	Eastmount S/S	EA-10	10:55:00 AM	1:40:00 PM	165	3,960	7	Material/Equipment Breakdown
6/30/2011	Mountain S/S	MT-3	3:24:00 PM	4:25:00 PM	61	1,281	7	Material/Equipment Breakdown
7/3/2011	Horning T.S.	4471X	7:50:00 PM	8:40:00 PM	50	1,750	7	Material/Equipment Breakdown
7/4/2011	Lake T.S.	1431X	12:38:00 PM	1:31:00 PM	53	47,329	7	Material/Equipment Breakdown
7/5/2011	Bunting T.S.	M77	12:00:00 PM	2:15:00 PM	135	2,160	7	Material/Equipment Breakdown
7/5/2011	Glendale T.S.	M14	12:24:00 PM	1:59:00 PM	95	74,100	7	Material/Equipment Breakdown
7/5/2011	Horning T.S.	441X	7:04:00 PM	12:43:00 AM	339	4,068	7	Material/Equipment Breakdown
7/5/2011	Horning T.S.	4111X	2:15:00 PM	2:30:00 PM	15	360	7	Material/Equipment Breakdown
7/5/2011	Mohawk T.S.	0832X	5:55:00 PM	10:45:00 PM	290	4,060	7	Material/Equipment Breakdown
7/5/2011	Nebo T.S.	3611X	8:58:00 AM	8:59:00 AM	1	1,978	7	Material/Equipment Breakdown
7/5/2011	Nebo T.S.	3611X	8:58:00 AM	9:49:00 AM	51	100,878	7	Material/Equipment Breakdown
7/6/2011	Ottawa S/S	OT-3	12:41:00 AM	1:51:00 AM	70	1,190	7	Material/Equipment Breakdown
7/7/2011	Carlton T.S.	A2	6:02:00 PM	10:10:00 PM	248	126,728	7	Material/Equipment Breakdown
7/7/2011	Bunting T.S.	M75	8:27:00 AM	8:27:00 AM	-	-	7	Material/Equipment Breakdown
7/8/2011	Dundas T.S.	2D12X	9:50:00 AM	10:50:00 AM	60	3,180	7	Material/Equipment Breakdown



7/8/2011	Newton T.S.	241X	8:10:00 AM	9:40:00 AM	90	1,710	7	Material/Equipment Breakdown
7/8/2011	Vansickle T.S.	M52	7:37:00 PM	11:10:00 PM	213	2,343	7	Material/Equipment Breakdown
7/9/2011	Glendale T.S.	M24	7:58:00 PM	7:58:00 PM	-	-	7	Material/Equipment Breakdown
7/9/2011	Hughson S/S	HU-6	5:15:00 PM	8:43:00 PM	208	2,912	7	Material/Equipment Breakdown
7/9/2011	Glendale T.S.	M5	7:02:00 PM	7:51:00 PM	49	69,090	7	Material/Equipment Breakdown
7/10/2011	Carlton T.S.	M7	6:01:00 AM	7:02:00 AM	61	39,345	7	Material/Equipment Breakdown
7/10/2011	Mohawk S/S	MK-2	10:10:00 PM	11:55:00 PM	105	2,730	7	Material/Equipment Breakdown
7/11/2011	Nebo T.S.	3611X	1:50:00 AM	2:30:00 AM	40	480	7	Material/Equipment Breakdown
7/11/2011	Nebo T.S.	3521X	2:34:00 PM	9:06:00 PM	392	5,488	7	Material/Equipment Breakdown
7/13/2011	Glendale T.S.	M14	3:00:00 PM	8:30:00 PM	330	3,630	7	Material/Equipment Breakdown
7/13/2011	Lake T.S.	151X	2:45:00 PM	3:55:00 PM	70	910	7	Material/Equipment Breakdown
7/13/2011	Vansickle T.S.	M51	12:53:00 PM	1:12:00 PM	19	14,915	7	Material/Equipment Breakdown
7/14/2011	Newton T.S.	252X	5:33:00 PM	7:05:00 PM	92	1,656	7	Material/Equipment Breakdown
7/14/2011	Newton T.S.	252X	5:32:00 PM	7:05:00 PM	93	1,674	7	Material/Equipment Breakdown
7/17/2011	Winona T.S.	W16X	3:00:00 PM	7:57:00 PM	297	4,455	7	Material/Equipment Breakdown
7/17/2011	Lake T.S.	1311X	8:29:00 PM	9:41:00 PM	72	2,160	7	Material/Equipment Breakdown
7/18/2011	Bunting T.S.	M75	7:40:00 PM	1:55:00 AM	375	5,250	7	Material/Equipment Breakdown
7/18/2011	Bunting T.S.	M61	5:52:00 PM	2:02:00 AM	490	4,410	7	Material/Equipment Breakdown
7/18/2011	Horning T.S.	4111X	10:32:00 PM	3:05:00 AM	273	3,003	7	Material/Equipment Breakdown
7/18/2011	Nebo T.S.	3611X	11:58:00 PM	12:41:00 AM	43	516	7	Material/Equipment Breakdown
7/19/2011	Horning T.S.	421X	2:10:00 AM	2:51:00 AM	41	59,491	7	Material/Equipment Breakdown
7/20/2011	Elmwood S/S	EL-7	12:20:00 PM	1:26:00 PM	66	1,914	7	Material/Equipment Breakdown
7/21/2011	Glendale T.S.	M8	4:59:00 PM	5:38:00 PM	39	18,213	7	Material/Equipment Breakdown
7/21/2011	Dundas T.S.	2D2X	10:07:00 PM	10:07:00 PM	-	-	7	Material/Equipment Breakdown
7/22/2011	Carlton T.S.	M10	11:06:00 PM	12:05:00 AM	59	826	7	Material/Equipment Breakdown
7/22/2011	Dundas T.S.	2D2X	10:06:00 PM	6:09:00 AM	483	31,395	7	Material/Equipment Breakdown
7/22/2011	Dundas T.S.	2D2X	2:21:00 AM	2:21:00 AM	-	-	7	Material/Equipment Breakdown
7/22/2011	Winona T.S.	W14X	10:58:00 PM	10:00:00 AM	662	662	7	Material/Equipment Breakdown
7/22/2011	Horning T.S.	4491X	3:33:00 AM	7:45:00 AM	252	101,556	7	Material/Equipment Breakdown
7/23/2011	Elgin T.S.	5261X	12:56:00 AM	10:30:00 AM	574	574	7	Material/Equipment Breakdown
7/23/2011	Nebo T.S.	3521X	3:43:00 PM	4:27:00 PM	44	15,004	7	Material/Equipment Breakdown
7/23/2011	Nebo T.S.	3532X	3:43:00 PM	7:44:00 PM	241	219,551	7	Material/Equipment Breakdown
7/24/2011	Carlton T.S.	M25	10:12:00 PM	10:12:00 PM	-	-	7	Material/Equipment Breakdown
7/24/2011	Horning T.S.	4481X	1:46:00 AM	7:27:00 AM	341	332,134	7	Material/Equipment Breakdown
7/26/2011	Parkdale S/S	PA-3	8:53:00 AM	10:05:00 AM	72	1,008	7	Material/Equipment Breakdown
7/26/2011	Nebo T.S.	341X	3:50:00 PM	5:20:00 PM	90	720	7	Material/Equipment Breakdown

7/26/2011	Stirton T.S.	8511X	4:42:00 PM	5:10:00 PM	28	60,620	7	Material/Equipment Breakdown
7/28/2011	Mohawk T.S.	0812X	9:50:00 AM	10:50:00 AM	60	60	7	Material/Equipment Breakdown
7/30/2011	Carlton T.S.	M11	12:00:00 PM	2:00:00 PM	120	10,080	7	Material/Equipment Breakdown
7/30/2011	Winona T.S.	W15X	4:55:00 AM	8:05:00 AM	190	6,080	7	Material/Equipment Breakdown
7/30/2011	Nebo T.S.	3621X	8:00:00 AM	12:15:00 PM	255	2,550	7	Material/Equipment Breakdown
7/30/2011	Nebo T.S.	3621X	12:15:00 PM	1:40:00 PM	85	5,185	7	Material/Equipment Breakdown
7/30/2011	Nebo T.S.	331X	3:45:00 PM	4:55:00 PM	70	20,300	7	Material/Equipment Breakdown
8/1/2011	Strouds Lane S/S	ST-7	7:47:00 PM	8:49:00 PM	62	682	7	Material/Equipment Breakdown
8/1/2011	Nebo T.S.	3611X	12:17:00 PM	4:04:00 PM	227	2,724	7	Material/Equipment Breakdown
8/3/2011	Winona T.S.	W14X	6:34:00 AM	6:34:00 AM	-	-	7	Material/Equipment Breakdown
8/3/2011	Mohawk T.S.	0711X	6:14:00 PM	11:20:00 PM	306	3,060	7	Material/Equipment Breakdown
8/4/2011	Galbraith S/S	GA-1	5:21:00 AM	9:39:00 AM	258	8,256	7	Material/Equipment Breakdown
8/6/2011	Winona T.S.	W15X	8:51:00 AM	2:53:00 PM	362	30,408	7	Material/Equipment Breakdown
8/7/2011	Bunting T.S.	M62	2:55:00 AM	5:10:00 AM	135	1,755	7	Material/Equipment Breakdown
8/10/2011	Lake T.S.	1411X	4:55:00 AM	5:20:00 AM	25	25	7	Material/Equipment Breakdown
8/13/2011	Nebo T.S.	331X	6:24:00 PM	6:27:00 PM	3	3	7	Material/Equipment Breakdown
8/14/2011	Nebo T.S.	331X	2:37:00 PM	7:10:00 PM	273	3,549	7	Material/Equipment Breakdown
8/14/2011	Vansickle T.S.	M41	12:47:00 AM	12:47:00 AM	-	-	7	Material/Equipment Breakdown
8/14/2011	Nebo T.S.	331X	5:17:00 PM	7:10:00 PM	113	2,938	7	Material/Equipment Breakdown
8/16/2011	Carlton T.S.	M10	9:28:00 PM	9:58:00 PM	30	30	7	Material/Equipment Breakdown
8/17/2011	Ottawa S/S	OT-4	6:02:00 AM	6:30:00 AM	28	868	7	Material/Equipment Breakdown
8/17/2011	Mohawk T.S.	0812X	3:21:00 PM	5:25:00 PM	124	6,200	7	Material/Equipment Breakdown
8/17/2011	Nebo T.S.	3632X	3:21:00 PM	5:25:00 PM	124	8,680	7	Material/Equipment Breakdown
8/21/2011	Glendale T.S.	M24	10:30:00 AM	5:34:00 PM	424	11,024	7	Material/Equipment Breakdown
8/22/2011	Beach T.S.	7441X	10:30:00 PM	10:40:00 PM	10	400	7	Material/Equipment Breakdown
8/22/2011	Whitney S/S	WH-T2 Bus	12:47:00 AM	1:15:00 AM	28	33,572	7	Material/Equipment Breakdown
8/22/2011	Strouds Lane S/S	ST-T1 Bus	12:47:00 AM	12:48:00 AM	1	2,623	7	Material/Equipment Breakdown
8/23/2011	Vansickle T.S.	M71	1:00:00 AM	1:00:00 AM	-	-	7	Material/Equipment Breakdown
8/23/2011	Cope S/S	CP-5	5:22:00 PM	6:17:00 PM	55	2,750	7	Material/Equipment Breakdown
8/27/2011	Beach T.S.	7821X	9:26:00 AM	9:29:00 AM	3	147	7	Material/Equipment Breakdown
8/27/2011	Beach T.S.	7822X	9:26:00 AM	9:29:00 AM	3	33	7	Material/Equipment Breakdown
8/27/2011	Beach T.S.	7821X	10:09:00 AM	7:22:00 PM	553	7,189	7	Material/Equipment Breakdown
8/27/2011	Cope S/S	CP-T1 Bus	9:26:00 AM	9:29:00 AM	3	4,812	7	Material/Equipment Breakdown
8/27/2011	Eastmount S/S	EA-7	6:00:00 PM	7:50:00 PM	110	1,540	7	Material/Equipment Breakdown
8/27/2011	Lake T.S.	1821X	9:26:00 AM	9:29:00 AM	3	3	7	Material/Equipment Breakdown
8/27/2011	Lake T.S.	1822X	9:26:00 AM	9:29:00 AM	3	195	7	Material/Equipment Breakdown



8/27/2011	Lake T.S.	1822X	2:38:00 PM	4:30:00 PM	112	7,280	7	Material/Equipment Breakdown
8/31/2011	Beach T.S.	7731X	1:16:00 PM	1:20:00 PM	4	60	7	Material/Equipment Breakdown
9/2/2011	Wellington S/S	WL-1	9:15:00 PM	10:45:00 PM	90	1,260	7	Material/Equipment Breakdown
9/3/2011	Bunting T.S.	M76	5:59:00 PM	7:35:00 PM	96	1,728	7	Material/Equipment Breakdown
9/3/2011	Winona T.S.	W14X	8:17:00 AM	8:18:00 AM	1	3,191	7	Material/Equipment Breakdown
9/3/2011	Winona T.S.	W14X	6:57:00 AM	8:25:00 AM	88	2,552	7	Material/Equipment Breakdown
9/4/2011	Carlton T.S.	M10	11:00:00 PM	12:45:00 PM	825	9,900	7	Material/Equipment Breakdown
9/4/2011	Wellington S/S	WL-6	2:45:00 AM	4:02:00 AM	77	37,653	7	Material/Equipment Breakdown
9/4/2011	Vansickle T.S.	M51	4:09:00 AM	3:35:00 PM	686	5,488	7	Material/Equipment Breakdown
9/5/2011	Elgin T.S.	5511X	8:43:00 AM	12:43:00 PM	240	28,080	7	Material/Equipment Breakdown
9/5/2011	Elgin T.S.	5511X	7:23:00 AM	7:23:00 AM	-	-	7	Material/Equipment Breakdown
9/7/2011	Bunting T.S.	M55	3:26:00 PM	3:26:00 PM	-	-	7	Material/Equipment Breakdown
9/10/2011	Vansickle T.S.	M72	8:42:00 AM	8:42:00 AM	-	-	7	Material/Equipment Breakdown
9/11/2011	Dundas T.S.	2D13X	9:51:00 AM	1:20:00 AM	929	929	7	Material/Equipment Breakdown
9/13/2011	Wentworth S/S	WT-9	11:49:00 AM	1:20:00 PM	91	6,370	7	Material/Equipment Breakdown
9/14/2011	Aberdeen S/S	AB-5	8:34:00 PM	8:47:00 PM	13	299	7	Material/Equipment Breakdown
9/14/2011	Nebo T.S.	3632X	9:57:00 PM	2:24:00 AM	267	3,738	7	Material/Equipment Breakdown
9/14/2011	Nebo T.S.	3632X	12:32:00 AM	2:24:00 AM	112	6,272	7	Material/Equipment Breakdown
9/15/2011	Whitney S/S	WH-1	10:26:00 PM	10:40:00 PM	14	364	7	Material/Equipment Breakdown
9/15/2011	Lake T.S.	1811X	12:13:00 AM	12:15:00 AM	2	4,896	7	Material/Equipment Breakdown
9/15/2011	Lake T.S.	1812X	12:17:00 AM	12:46:00 AM	29	70,992	7	Material/Equipment Breakdown
9/16/2011	Carlton T.S.	M11	2:01:00 PM	2:20:00 PM	19	665	7	Material/Equipment Breakdown
9/18/2011	Vansickle T.S.	M72	5:57:00 AM	5:57:00 AM	-	-	7	Material/Equipment Breakdown
9/18/2011	Vansickle T.S.	M72	5:57:00 AM	1:05:00 PM	428	428	7	Material/Equipment Breakdown
9/20/2011	Wellington S/S	WL-3	12:47:00 AM	2:41:00 AM	114	10,488	7	Material/Equipment Breakdown
9/21/2011	Carlton T.S.	M10	7:38:00 AM	10:19:00 AM	161	27,048	7	Material/Equipment Breakdown
9/21/2011	Carlton T.S.	M10	7:38:00 AM	7:38:00 AM	-	-	7	Material/Equipment Breakdown
9/22/2011	Carlton T.S.	A6	1:14:00 PM	1:16:00 PM	2	292	7	Material/Equipment Breakdown
9/22/2011	Eastmount S/S	EA-3	10:16:00 AM	4:09:00 AM	1,073	108,345	7	Material/Equipment Breakdown
9/22/2011	Eastmount S/S	EA-8	12:43:00 PM	2:37:00 PM	114	70,908	7	Material/Equipment Breakdown
9/23/2011	Wentworth S/S	WT-T4 Bus	11:43:00 AM	11:44:00 AM	1	926	7	Material/Equipment Breakdown
9/23/2011	Vansickle T.S.	M72	1:29:00 AM	1:29:00 AM	-	-	7	Material/Equipment Breakdown
9/23/2011	Stirton T.S.	8721X	11:43:00 AM	11:46:00 AM	3	5,118	7	Material/Equipment Breakdown
9/23/2011	Stirton T.S.	8721X	3:52:00 PM	4:03:00 PM	11	28,952	7	Material/Equipment Breakdown
9/25/2011	Elgin T.S.	5301X	8:58:00 AM	9:49:00 AM	51	67,422	7	Material/Equipment Breakdown
9/25/2011	Lake T.S.	1411X	8:59:00 AM	9:00:00 AM	1	68	7	Material/Equipment Breakdown

9/25/2011	Lake T.S.	1412X	8:59:00 AM	9:00:00 AM	1	998	7	Material/Equipment Breakdown
9/25/2011	Lake T.S.	1412X	12:31:00 PM	2:02:00 PM	91	5,460	7	Material/Equipment Breakdown
9/25/2011	Lake T.S.	1412X	12:31:00 PM	12:41:00 PM	10	130	7	Material/Equipment Breakdown
9/25/2011	Lake T.S.	1412X	1:47:00 PM	2:02:00 PM	15	195	7	Material/Equipment Breakdown
9/26/2011	Parkdale S/S	PA-3	4:55:00 PM	5:43:00 PM	48	2,448	7	Material/Equipment Breakdown
9/29/2011	Elgin T.S.	5521X	11:29:00 PM	12:12:00 PM	763	247,975	7	Material/Equipment Breakdown
9/29/2011	Elgin T.S.	5521X	11:29:00 PM	7:30:00 AM	481	156,325	7	Material/Equipment Breakdown
10/1/2011	Carlton T.S.	M11	6:49:00 PM	11:00:00 PM	251	2,259	7	Material/Equipment Breakdown
10/3/2011	Strouds Lane S/S	ST-7	3:36:00 PM	4:09:00 PM	33	759	7	Material/Equipment Breakdown
10/4/2011	Beach T.S.	7321X	6:51:00 PM	6:53:00 PM	2	310	7	Material/Equipment Breakdown
10/4/2011	Beach T.S.	7321X	6:51:00 PM	7:05:00 PM	14	84	7	Material/Equipment Breakdown
10/4/2011	Beach T.S.	7321X	6:51:00 PM	10:28:00 PM	217	3,472	7	Material/Equipment Breakdown
10/4/2011	Beach T.S.	7321X	10:22:00 PM	10:28:00 PM	6	36	7	Material/Equipment Breakdown
10/5/2011	Bunting T.S.	M77	8:28:00 AM	11:15:00 AM	167	3,674	7	Material/Equipment Breakdown
10/7/2011	Kenilworth S/S	KE-2	10:00:00 PM	10:10:00 PM	10	100	7	Material/Equipment Breakdown
10/10/2011	Baldwin S/S	BD-2	10:13:00 AM	10:47:00 AM	34	23,970	7	Material/Equipment Breakdown
10/10/2011	York S/S	YK-1	10:13:00 AM	11:17:00 AM	64	21,376	7	Material/Equipment Breakdown
10/10/2011	York S/S	YK-2	10:13:00 AM	11:17:00 AM	64	5,632	7	Material/Equipment Breakdown
10/12/2011	Lake T.S.	1812X	4:43:00 AM	5:04:00 AM	21	4,305	7	Material/Equipment Breakdown
10/12/2011	Lake T.S.	1812X	5:16:00 AM	7:08:00 AM	112	22,960	7	Material/Equipment Breakdown
10/13/2011	Lake T.S.	121X	5:35:00 PM	5:55:00 PM	20	1,140	7	Material/Equipment Breakdown
10/15/2011	Carlton T.S.	M20	9:25:00 PM	11:10:00 PM	105	315	7	Material/Equipment Breakdown
10/15/2011	Carlton T.S.	M17	7:48:00 AM	9:00:00 AM	72	864	7	Material/Equipment Breakdown
10/15/2011	Carlton T.S.	M18	7:00:00 PM	10:30:00 PM	210	6,090	7	Material/Equipment Breakdown
10/15/2011	Strouds Lane S/S	ST-7	4:23:00 PM	5:41:00 PM	78	36,582	7	Material/Equipment Breakdown
10/15/2011	Ottawa S/S	OT-5	4:49:00 PM	6:32:00 PM	103	1,545	7	Material/Equipment Breakdown
10/15/2011	Ottawa S/S	OT-4	6:33:00 PM	8:50:00 PM	137	2,329	7	Material/Equipment Breakdown
10/15/2011	Lake T.S.	1331X	1:55:00 PM	2:15:00 PM	20	220	7	Material/Equipment Breakdown
10/17/2011	Nebo T.S.	3642X	4:21:00 PM	4:40:00 PM	19	266	7	Material/Equipment Breakdown
10/19/2011	York S/S	YK-2	3:40:00 AM	4:03:00 AM	23	2,024	7	Material/Equipment Breakdown
10/19/2011	Baldwin S/S	BD-2	3:40:00 AM	4:03:00 AM	23	3,381	7	Material/Equipment Breakdown
10/23/2011	Eastmount S/S	EA-8	10:30:00 AM	12:00:00 PM	90	1,800	7	Material/Equipment Breakdown
10/24/2011	Carlton T.S.	A6	1:50:00 PM	1:58:00 PM	8	3,520	7	Material/Equipment Breakdown
10/24/2011	Vansickle T.S.	M51	9:10:00 PM	10:30:00 PM	80	880	7	Material/Equipment Breakdown
10/26/2011	Highland S/S	HI-3	8:52:00 PM	9:50:00 PM	58	58	7	Material/Equipment Breakdown
10/31/2011	Vansickle T.S.	M41	1:37:00 PM	1:37:00 PM	-	-	7	Material/Equipment Breakdown

11/4/2011	Wellington S/S	WL-10	11:25:00 PM	12:39:00 AM	74	888	7	Material/Equipment Breakdown
11/7/2011	Baldwin S/S	BD-1	4:55:00 PM	11:24:00 PM	389	778	7	Material/Equipment Breakdown
11/10/2011	Stirton T.S.	8862X	12:45:00 AM	2:00:00 AM	75	1,800	7	Material/Equipment Breakdown
11/11/2011	Horning T.S.	4451X	1:32:00 PM	3:07:00 PM	95	4,260	7	Material/Equipment Breakdown
11/13/2011	Vansickle T.S.	M41	5:19:00 PM	4:25:00 AM	2,106	12,636	7	Material/Equipment Breakdown
11/13/2011	Vansickle T.S.	M53	12:17:00 PM	1:30:00 PM	73	292	7	Material/Equipment Breakdown
11/14/2011	Spadina S/S	SP-6	6:16:00 AM	7:18:00 AM	62	496	7	Material/Equipment Breakdown
11/18/2011	Mountain S/S	MT-2	5:55:00 PM	6:20:00 PM	25	575	7	Material/Equipment Breakdown
11/21/2011	Bunting T.S.	M61	12:27:00 PM	2:41:00 PM	134	1,206	7	Material/Equipment Breakdown
11/21/2011	Carlton T.S.	M21	3:58:00 AM	4:58:00 AM	60	300	7	Material/Equipment Breakdown
11/23/2011	Lake T.S.	1311X	3:19:00 PM	4:35:00 PM	76	760	7	Material/Equipment Breakdown
11/24/2011	Horning T.S.	4491X	7:15:00 PM	7:30:00 PM	15	195	7	Material/Equipment Breakdown
11/24/2011	Lake T.S.	1311X	6:55:00 PM	11:25:00 PM	270	2,700	7	Material/Equipment Breakdown
11/27/2011	Ottawa S/S	OT-8	4:37:00 PM	5:21:00 PM	44	11,528	7	Material/Equipment Breakdown
11/27/2011	Ottawa S/S	OT-1	5:19:00 PM	5:21:00 PM	2	714	7	Material/Equipment Breakdown
11/28/2011	Nebo T.S.	331X	7:27:00 PM	8:02:00 PM	35	455	7	Material/Equipment Breakdown
11/30/2011	Spadina S/S	SP-2	2:54:00 PM	5:08:00 PM	134	1,742	7	Material/Equipment Breakdown
12/4/2011	Eastmount S/S	EA-10	7:04:00 PM	7:17:00 PM	13	234	7	Material/Equipment Breakdown
12/5/2011	Winona T.S.	W12X	8:24:00 PM	9:39:00 PM	75	5,625	7	Material/Equipment Breakdown
12/5/2011	Winona T.S.	W14X	2:40:00 PM	2:45:00 PM	5	16,155	7	Material/Equipment Breakdown
12/5/2011	Winona T.S.	W14X	2:40:00 PM	5:27:00 PM	167	70,903	7	Material/Equipment Breakdown
12/6/2011	Bunting T.S.	M62	3:59:00 PM	9:58:00 PM	359	3,949	7	Material/Equipment Breakdown
12/6/2011	Wentworth S/S	WT-12	2:20:00 PM	4:50:00 PM	150	300	7	Material/Equipment Breakdown
12/7/2011	Bunting T.S.	M62	10:18:00 PM	5:22:00 AM	424	1,696	7	Material/Equipment Breakdown
12/9/2011	Vansickle T.S.	M71	6:13:00 AM	6:13:00 AM	-	-	7	Material/Equipment Breakdown
12/9/2011	Carlton T.S.	M25	2:09:00 PM	4:13:00 PM	124	992	7	Material/Equipment Breakdown
12/9/2011	Vansickle T.S.	M42	6:12:00 AM	8:43:00 AM	151	14,949	7	Material/Equipment Breakdown
12/10/2011	Carlton T.S.	M10	12:15:00 PM	1:32:00 PM	77	1,617	7	Material/Equipment Breakdown
12/11/2011	Bunting T.S.	M56	4:14:00 AM	5:30:00 AM	76	1,900	7	Material/Equipment Breakdown
12/16/2011	Deerhurst S/S	DH-3W	11:49:00 PM	12:55:00 AM	66	3,696	7	Material/Equipment Breakdown
12/19/2011	Bunting T.S.	M62	9:06:00 PM	11:00:00 PM	114	3,762	7	Material/Equipment Breakdown
12/19/2011	Dundas T.S.	2D14X	10:49:00 PM	3:33:00 AM	284	1,024,501	7	Material/Equipment Breakdown
12/19/2011	Dundas T.S.	2D14X	9:31:00 PM	11:30:00 AM	839	1,678	7	Material/Equipment Breakdown
12/23/2011	Ottawa S/S	OT-2	2:33:00 PM	7:00:00 PM	267	3,204	7	Material/Equipment Breakdown
12/24/2011	Bunting T.S.	M55	12:25:00 PM	12:52:00 PM	27	54	7	Material/Equipment Breakdown
12/26/2011	Nebo T.S.	3521X	5:42:00 PM	11:15:00 PM	333	3,996	7	Material/Equipment Breakdown

12/26/2011	Nebo T.S.	3521X	8:56:00 PM	11:15:00 PM	139	2,641	7	Material/Equipment Breakdown
12/27/2011	Whitney S/S	WH-6	6:11:00 PM	6:13:00 PM	2	466	7	Material/Equipment Breakdown
12/27/2011	Whitney S/S	WH-6	8:15:00 PM	8:16:00 PM	1	233	7	Material/Equipment Breakdown
12/27/2011	Dundas T.S.	2D12X	7:03:00 PM	11:00:00 PM	237	237	7	Material/Equipment Breakdown
12/28/2011	Whitney S/S	WH-6	8:33:00 PM	12:57:00 AM	264	61,512	7	Material/Equipment Breakdown
12/31/2011	Mohawk T.S.	0622X	5:23:00 PM	6:34:00 PM	71	94,075	7	Material/Equipment Breakdown
1/2/2012	Horning T.S.	421X	10:10:00 AM	12:43:00 PM	153	135,441	7	Material/Equipment Breakdown
1/2/2012	Horning T.S.	421X	5:23:00 PM	5:29:00 PM	6	4,446	7	Material/Equipment Breakdown
1/2/2012	Horning T.S.	421X	6:49:00 PM	8:15:00 PM	86	76,592	7	Material/Equipment Breakdown
1/3/2012	Eastmount S/S	EA-3	1:51:00 PM	2:50:00 PM	59	3,068	7	Material/Equipment Breakdown
1/3/2012	Wentworth S/S	WT-2	4:21:00 PM	8:40:00 PM	259	6,734	7	Material/Equipment Breakdown
1/3/2012	Eastmount S/S	EA-3	5:37:00 PM	9:35:00 PM	238	12,376	7	Material/Equipment Breakdown
1/6/2012	Bartonville S/S	BA-1	10:30:00 AM	11:15:00 AM	45	630	7	Material/Equipment Breakdown
1/7/2012	Dundas T.S.	2D13X	1:00:00 AM	2:50:00 AM	110	550	7	Material/Equipment Breakdown
1/8/2012	Central S/S	CE-4	11:50:00 PM	12:45:00 AM	55	1,540	7	Material/Equipment Breakdown
1/9/2012	Carlton T.S.	M21	6:15:00 PM	10:45:00 PM	270	3,240	7	Material/Equipment Breakdown
1/12/2012	Winona T.S.	W13X	8:21:00 AM	11:16:00 AM	175	14,798	7	Material/Equipment Breakdown
1/13/2012	Parkdale S/S	PA-5	9:37:00 AM	9:55:00 AM	18	9,504	7	Material/Equipment Breakdown
1/14/2012	Wentworth S/S	WT-2	8:25:00 PM	8:29:00 PM	4	120	7	Material/Equipment Breakdown
1/17/2012	Horning T.S.	4111X	9:31:00 AM	9:35:00 AM	4	5,204	7	Material/Equipment Breakdown
1/17/2012	Horning T.S.	4451X	8:20:00 AM	10:55:00 AM	155	186,971	7	Material/Equipment Breakdown
1/20/2012	Nebo T.S.	331X	2:30:00 PM	4:00:00 PM	90	450	7	Material/Equipment Breakdown
1/22/2012	Horning T.S.	421X	5:20:00 PM	6:00:00 PM	40	240	7	Material/Equipment Breakdown
1/23/2012	Eastmount S/S	EA-1	7:56:00 PM	8:15:00 PM	19	209	7	Material/Equipment Breakdown
1/23/2012	Aberdeen S/S	AB-2	8:00:00 PM	9:12:00 PM	72	11,664	7	Material/Equipment Breakdown
1/23/2012	Aberdeen S/S	AB-2	8:51:00 PM	9:12:00 PM	21	10,269	7	Material/Equipment Breakdown
1/23/2012	Aberdeen S/S	AB-2	9:11:00 PM	9:12:00 PM	1	1,025	7	Material/Equipment Breakdown
1/24/2012	Mohawk S/S	MK-1	10:30:00 AM	10:40:00 AM	10	90	7	Material/Equipment Breakdown
1/24/2012	Vine S/S	F3	11:25:00 AM	11:30:00 AM	5	15	7	Material/Equipment Breakdown
1/25/2012	Lake T.S.	121X	9:17:00 AM	10:40:00 AM	83	3,569	7	Material/Equipment Breakdown
1/27/2012	Dundas T.S.	2D2X	5:45:00 AM	5:55:00 AM	10	80	7	Material/Equipment Breakdown
1/29/2012	Carlton T.S.	M18	1:03:00 AM	11:40:00 AM	637	7,007	7	Material/Equipment Breakdown
1/31/2012	Beach T.S.	7821X	8:30:00 PM	11:25:00 AM	895	895	7	Material/Equipment Breakdown
2/1/2012	Elgin T.S.	5431X	7:05:00 AM	9:02:00 AM	117	21,474	7	Material/Equipment Breakdown
2/1/2012	Highland S/S	HI-3	9:53:00 AM	1:30:00 PM	217	20,612	7	Material/Equipment Breakdown
2/1/2012	Central S/S	CE-4	7:50:00 PM	10:20:00 PM	150	3,150	7	Material/Equipment Breakdown

2/2/2012	Newton T.S.	282X	10:30:00 AM	10:40:00 AM	10	20	7	Material/Equipment Breakdown
2/11/2012	Beach T.S.	7321X	3:00:00 PM	3:53:00 PM	53	6,478	7	Material/Equipment Breakdown
2/11/2012	Carlton T.S.	M10	5:10:00 PM	10:35:00 PM	325	10,640	7	Material/Equipment Breakdown
2/12/2012	Mohawk T.S.	0721X	2:15:00 PM	4:15:00 PM	120	960	7	Material/Equipment Breakdown
2/15/2012	Aberdeen S/S	AB-2	4:15:00 PM	7:30:00 PM	195	195	7	Material/Equipment Breakdown
2/16/2012	Mohawk T.S.	0821X	5:16:00 AM	7:09:00 AM	113	91,666	7	Material/Equipment Breakdown
2/16/2012	Mohawk T.S.	0812X	10:36:00 AM	10:49:00 AM	13	11,366	7	Material/Equipment Breakdown
2/16/2012	Mohawk T.S.	0821X	5:16:00 AM	3:35:00 PM	619	619	7	Material/Equipment Breakdown
2/17/2012	Bunting T.S.	M82	11:18:00 AM	11:40:00 AM	22	22	7	Material/Equipment Breakdown
2/19/2012	Mohawk T.S.	0721X	2:32:00 PM	3:27:00 PM	55	1,925	7	Material/Equipment Breakdown
2/20/2012	Glendale T.S.	M14	1:50:00 PM	2:54:00 PM	64	512	7	Material/Equipment Breakdown
2/21/2012	Kenilworth S/S	KE-6	10:50:00 AM	11:40:00 AM	50	650	7	Material/Equipment Breakdown
2/22/2012	Mohawk S/S	MK-9	5:25:00 PM	5:48:00 PM	23	414	7	Material/Equipment Breakdown
2/22/2012	Galbraith S/S	GA-2	12:19:00 PM	3:22:00 PM	183	7,686	7	Material/Equipment Breakdown
2/22/2012	Galbraith S/S	GA-2	5:15:00 PM	8:50:00 PM	215	9,030	7	Material/Equipment Breakdown
2/24/2012	Bunting T.S.	M82	3:51:00 PM	3:51:00 PM	-	-	7	Material/Equipment Breakdown
2/24/2012	Bunting T.S.	M77	4:32:00 PM	4:32:00 PM	-	-	7	Material/Equipment Breakdown
2/25/2012	Bunting T.S.	M77	7:07:00 PM	9:35:00 PM	148	2,516	7	Material/Equipment Breakdown
2/26/2012	Carlton T.S.	M25	10:08:00 PM	10:23:00 PM	15	345	7	Material/Equipment Breakdown
2/28/2012	Dundas T.S.	2D14X	12:30:00 PM	2:00:00 PM	90	3,700	7	Material/Equipment Breakdown
2/29/2012	Elgin T.S.	5331X	7:28:00 AM	8:55:00 AM	87	1,479	7	Material/Equipment Breakdown
3/1/2012	Carlton T.S.	M21	10:43:00 AM	2:00:00 PM	197	12,076	7	Material/Equipment Breakdown
3/2/2012	Wentworth S/S	WT-3	3:04:00 PM	4:05:00 PM	61	488	7	Material/Equipment Breakdown
3/2/2012	Vansickle T.S.	M51	11:30:00 AM	12:09:00 PM	39	507	7	Material/Equipment Breakdown
3/4/2012	Ottawa S/S	OT-2	5:15:00 PM	5:16:00 PM	1	286	7	Material/Equipment Breakdown
3/4/2012	Ottawa S/S	OT-2	7:40:00 PM	9:00:00 PM	80	880	7	Material/Equipment Breakdown
3/5/2012	Glendale T.S.	M16	8:17:00 PM	10:30:00 PM	133	1,995	7	Material/Equipment Breakdown
3/5/2012	Ottawa S/S	OT-7	11:30:00 AM	11:35:00 AM	5	1,925	7	Material/Equipment Breakdown
3/5/2012	Winona T.S.	W14X	10:05:00 AM	11:30:00 AM	85	850	7	Material/Equipment Breakdown
3/8/2012	Bunting T.S.	M75	6:05:00 AM	8:15:00 AM	130	780	7	Material/Equipment Breakdown
3/8/2012	Carlton T.S.	M17	1:06:00 PM	1:35:00 PM	29	261	7	Material/Equipment Breakdown
3/9/2012	Carlton T.S.	M17	4:45:00 PM	5:00:00 PM	15	41,130	7	Material/Equipment Breakdown
3/9/2012	Wellington S/S	WL-11	11:15:00 AM	12:10:00 PM	55	935	7	Material/Equipment Breakdown
3/10/2012	Mountain S/S	MT-9	2:03:00 PM	3:10:00 PM	67	1,273	7	Material/Equipment Breakdown
3/11/2012	Lake T.S.	111X	1:50:00 PM	4:14:00 PM	144	14,976	7	Material/Equipment Breakdown
3/11/2012	Mohawk T.S.	0812X	4:14:00 PM	4:50:00 PM	36	29,556	7	Material/Equipment Breakdown

3/12/2012	Beach T.S.	7411X	3:46:00 AM	4:35:00 AM	49	117,387	7	Material/Equipment Breakdown
3/12/2012	Dundas T.S.	2D12X	10:30:00 PM	11:30:00 PM	60	180	7	Material/Equipment Breakdown
3/13/2012	Elgin T.S.	5521X	1:30:00 PM	2:45:00 PM	75	10,650	7	Material/Equipment Breakdown
3/13/2012	Elgin T.S.	5521X	10:32:00 AM	2:45:00 PM	253	21,330	7	Material/Equipment Breakdown
3/16/2012	Hughson S/S	HU-11	12:52:00 PM	6:41:00 PM	349	23,102	7	Material/Equipment Breakdown
3/21/2012	Lake T.S.	1812X	11:05:00 AM	12:15:00 PM	70	980	7	Material/Equipment Breakdown
3/21/2012	Nebo T.S.	331X	12:21:00 PM	9:41:00 PM	560	31,908	7	Material/Equipment Breakdown
3/22/2012	Elgin T.S.	5472X	12:45:00 AM	4:49:00 AM	244	40,692	7	Material/Equipment Breakdown
3/26/2012	Bunting T.S.	M62	3:20:00 AM	3:20:00 AM	-	-	7	Material/Equipment Breakdown
3/27/2012	Lake T.S.	1411X	8:49:00 PM	9:50:00 PM	61	1,250	7	Material/Equipment Breakdown
3/30/2012	Dundas T.S.	2D2X	11:20:00 AM	11:20:00 AM	-	-	7	Material/Equipment Breakdown
3/30/2012	Dundas T.S.	2D2X	12:54:00 PM	12:54:00 PM	-	-	7	Material/Equipment Breakdown
3/30/2012	Dundas T.S.	2D2X	11:20:00 AM	3:40:00 PM	260	15,620	7	Material/Equipment Breakdown
3/31/2012	Newton T.S.	252X	3:11:00 AM	5:03:00 AM	112	672	7	Material/Equipment Breakdown
4/2/2012	Bunting T.S.	M75	10:09:00 AM	10:09:00 AM	-	-	7	Material/Equipment Breakdown
4/2/2012	Bunting T.S.	M75	10:09:00 AM	2:12:00 PM	243	2,673	7	Material/Equipment Breakdown
4/3/2012	Glendale T.S.	M8	11:08:00 AM	11:32:00 AM	24	4,320	7	Material/Equipment Breakdown
4/5/2012	Wellington S/S	WL-6	6:42:00 AM	9:28:00 AM	166	97,963	7	Material/Equipment Breakdown
4/9/2012	Wentworth S/S	WT-3	12:55:00 PM	2:15:00 PM	80	1,600	7	Material/Equipment Breakdown
4/16/2012	Horning T.S.	431X	4:45:00 PM	5:20:00 PM	35	630	7	Material/Equipment Breakdown
4/16/2012	Eastmount S/S	EA-9	6:08:00 PM	6:11:00 PM	3	1,917	7	Material/Equipment Breakdown
4/17/2012	Bunting T.S.	M77	5:35:00 PM	12:32:00 AM	417	10,557	7	Material/Equipment Breakdown
4/17/2012	Winona T.S.	W16X	7:20:00 AM	10:52:00 AM	212	11,448	7	Material/Equipment Breakdown
4/17/2012	Wentworth S/S	WT-6	6:53:00 AM	11:10:00 AM	257	5,140	7	Material/Equipment Breakdown
4/20/2012	Dundas T.S.	2D13X	5:55:00 PM	7:15:00 PM	80	1,280	7	Material/Equipment Breakdown
4/20/2012	Mohawk T.S.	0642X	7:29:00 AM	7:34:00 AM	5	4,440	7	Material/Equipment Breakdown
4/21/2012	Lake T.S.	141X	6:18:00 AM	7:08:00 AM	50	1,900	7	Material/Equipment Breakdown
4/23/2012	Newton T.S.	282X	4:02:00 PM	7:10:00 PM	188	1,692	7	Material/Equipment Breakdown
4/24/2012	Kenilworth S/S	KE-3	2:35:00 PM	4:45:00 PM	130	1,690	7	Material/Equipment Breakdown
4/27/2012	Eastmount S/S	EA-4	5:29:00 PM	6:07:00 PM	38	418	7	Material/Equipment Breakdown
5/1/2012	Baldwin S/S	BD-1	8:52:00 PM	10:15:00 PM	83	332	7	Material/Equipment Breakdown
5/2/2012	Carlton T.S.	M17	10:29:00 AM	10:33:00 AM	4	10,872	7	Material/Equipment Breakdown
5/2/2012	Glendale T.S.	M14	2:03:00 PM	6:15:00 PM	252	4,284	7	Material/Equipment Breakdown
5/8/2012	Mohawk T.S.	0642X	11:52:00 AM	11:55:00 AM	3	2,664	7	Material/Equipment Breakdown
5/8/2012	Mohawk T.S.	0641X	12:34:00 PM	3:25:00 PM	171	88,288	7	Material/Equipment Breakdown
5/9/2012	Carlton T.S.	M21	4:45:00 AM	7:25:00 AM	160	5,814	7	Material/Equipment Breakdown



5/14/2012	Glendale T.S.	M16	8:12:00 PM	8:14:00 PM	2	1,418	7	Material/Equipment Breakdown
5/14/2012	Mountain S/S	MT-5	11:05:00 AM	1:54:00 PM	169	86,563	7	Material/Equipment Breakdown
5/15/2012	Elgin T.S.	5472X	10:14:00 AM	12:13:00 PM	119	86,020	7	Material/Equipment Breakdown
5/15/2012	Glendale T.S.	M16	8:14:00 PM	11:46:00 PM	212	6,144	7	Material/Equipment Breakdown
5/15/2012	Mohawk T.S.	0721X	6:04:00 PM	10:51:00 PM	287	3,444	7	Material/Equipment Breakdown
5/17/2012	Vansickle T.S.	M53	10:37:00 AM	2:40:00 PM	243	1,458	7	Material/Equipment Breakdown
5/18/2012	Lake T.S.	131X	9:52:00 AM	11:45:00 AM	113	18,532	7	Material/Equipment Breakdown
5/19/2012	Dundas T.S.	2D13X	7:52:00 AM	7:52:00 AM	-	-	7	Material/Equipment Breakdown
5/19/2012	Dundas T.S.	2D13X	11:55:00 PM	11:55:00 PM	-	-	7	Material/Equipment Breakdown
5/20/2012	Bunting T.S.	M56	9:30:00 PM	1:28:00 PM	958	958	7	Material/Equipment Breakdown
5/20/2012	Dundas T.S.	2D13X	11:55:00 PM	1:20:00 AM	85	5,015	7	Material/Equipment Breakdown
5/20/2012	Ottawa S/S	OT-2	4:56:00 AM	9:56:00 AM	300	7,500	7	Material/Equipment Breakdown
5/23/2012	Vine S/S	F3	5:30:00 PM	5:48:00 PM	18	216	7	Material/Equipment Breakdown
5/25/2012	Horning T.S.	471X	12:50:00 PM	5:01:00 PM	251	72,783	7	Material/Equipment Breakdown
5/25/2012	Lake T.S.	111X	3:30:00 PM	4:55:00 PM	85	850	7	Material/Equipment Breakdown
5/25/2012	Lake T.S.	1412X	3:24:00 PM	7:11:00 PM	227	61,744	7	Material/Equipment Breakdown
5/27/2012	Lake T.S.	121X	8:21:00 AM	1:55:00 PM	334	11,356	7	Material/Equipment Breakdown
5/27/2012	Nebo T.S.	331X	3:43:00 PM	3:43:00 PM	-	-	7	Material/Equipment Breakdown
5/27/2012	Nebo T.S.	331X	3:43:00 PM	5:39:00 PM	116	34,184	7	Material/Equipment Breakdown
5/28/2012	Nebo T.S.	341X	4:08:00 PM	9:46:00 PM	338	5,022	7	Material/Equipment Breakdown
5/29/2012	Parkdale S/S	PA-3	9:13:00 PM	2:25:00 AM	312	88,920	7	Material/Equipment Breakdown
5/29/2012	Nebo T.S.	3512X	8:49:00 PM	12:15:00 AM	206	2,678	7	Material/Equipment Breakdown
5/30/2012	Dundas T.S.	2D2X	8:26:00 PM	11:11:00 PM	165	2,830	7	Material/Equipment Breakdown
5/31/2012	Cope S/S	CP-7	7:28:00 PM	11:55:00 PM	267	5,073	7	Material/Equipment Breakdown
6/1/2012	Carlton T.S.	M11	8:00:00 AM	8:47:00 AM	47	6,063	7	Material/Equipment Breakdown
6/1/2012	Carlton T.S.	M11	9:44:00 AM	2:16:00 PM	272	30,054	7	Material/Equipment Breakdown
6/1/2012	Mohawk S/S	MK-10	9:16:00 AM	11:35:00 AM	139	139	7	Material/Equipment Breakdown
6/2/2012	Horning T.S.	441X	7:55:00 AM	11:55:00 AM	240	2,400	7	Material/Equipment Breakdown
6/2/2012	Winona T.S.	W15X	7:18:00 AM	9:01:00 AM	103	2,266	7	Material/Equipment Breakdown
6/4/2012	Beach T.S.	7812DF	2:10:00 PM	4:16:00 PM	126	3,906	7	Material/Equipment Breakdown
6/4/2012	Mountain S/S	MT-5	10:26:00 PM	4:45:00 AM	379	4,548	7	Material/Equipment Breakdown
6/5/2012	Lake T.S.	1811X	3:54:00 AM	3:29:00 PM	695	34,069	7	Material/Equipment Breakdown
6/5/2012	Winona T.S.	W12X	6:36:00 PM	8:45:00 PM	129	1,677	7	Material/Equipment Breakdown
6/5/2012	Baldwin S/S	BD-2	3:26:00 PM	8:15:00 PM	289	15,235	7	Material/Equipment Breakdown
6/7/2012	Winona T.S.	W15X	2:36:00 AM	4:35:00 AM	119	11,982	7	Material/Equipment Breakdown
6/8/2012	Taylor S/S	F2	4:15:00 PM	4:45:00 PM	30	780	7	Material/Equipment Breakdown

6/9/2012	Carlton T.S.	M10	3:14:00 PM	4:33:00 PM	79.00	227,540	7.00	Material/Equipment Breakdown
6/9/2012	Wentworth S/S	WT-9	2:56:00 AM	4:12:00 AM	76.00	4,104	7.00	Material/Equipment Breakdown
6/9/2012	Winona T.S.	W14X	6:43:00 AM	9:00:00 AM	137.00	2,192	7.00	Material/Equipment Breakdown
6/10/2012	Horning T.S.	421X	12:52:00 PM	1:37:00 PM	45.00	65,430	7.00	Material/Equipment Breakdown
6/10/2012	Horning T.S.	492X	12:52:00 PM	1:37:00 PM	45.00	21,420	7.00	Material/Equipment Breakdown
6/10/2012	Horning T.S.	4111X	12:52:00 PM	1:37:00 PM	45.00	2,475	7.00	Material/Equipment Breakdown
6/10/2012	Horning T.S.	481X	12:52:00 PM	1:27:00 PM	35.00	69,755	7.00	Material/Equipment Breakdown
6/11/2012	Lake T.S.	1811X	2:30:00 PM	8:15:00 PM	345	345	7	Material/Equipment Breakdown
6/14/2012	Carlton T.S.	M10	7:14:00 AM	7:14:00 AM	-	-	7	Material/Equipment Breakdown
6/15/2012	Carlton T.S.	M17	11:15:00 AM	11:28:00 AM	13	35,672	7	Material/Equipment Breakdown
6/15/2012	Carlton T.S.	A4	11:15:00 AM	12:37:00 PM	82	14,432	7	Material/Equipment Breakdown
6/16/2012	Lake T.S.	161X	12:30:00 PM	2:05:00 PM	95	1,900	7	Material/Equipment Breakdown
6/18/2012	Bunting T.S.	M61	12:45:00 AM	4:40:00 AM	235	3,760	7	Material/Equipment Breakdown
6/19/2012	Lake T.S.	1311X	6:29:00 AM	9:50:00 AM	201	3,819	7	Material/Equipment Breakdown
6/19/2012	Parkdale S/S	PA-3	5:32:00 PM	6:02:00 PM	30	5,518	7	Material/Equipment Breakdown
6/19/2012	Nebo T.S.	341X	1:20:00 PM	1:55:00 PM	35	560	7	Material/Equipment Breakdown
6/20/2012	Beach T.S.	7411X	12:15:00 PM	1:25:00 PM	70	1,120	7	Material/Equipment Breakdown
6/20/2012	Horning T.S.	4491X	2:25:00 PM	7:00:00 PM	275	36,006	7	Material/Equipment Breakdown
6/20/2012	Nebo T.S.	3512X	8:34:00 PM	1:42:00 AM	308	4,004	7	Material/Equipment Breakdown
6/21/2012	Dundas T.S.	2D14X	12:09:00 PM	2:00:00 PM	111	3,552	7	Material/Equipment Breakdown
6/21/2012	Mohawk T.S.	0642X	6:19:00 AM	6:21:00 AM	2	1,776	7	Material/Equipment Breakdown
6/21/2012	Newton T.S.	291X	8:24:00 PM	9:44:00 PM	80	1,360	7	Material/Equipment Breakdown
6/22/2012	Nebo T.S.	3511X	6:42:00 AM	10:11:00 AM	209	263,942	7	Material/Equipment Breakdown
6/24/2012	Parkdale S/S	PA-5	12:50:00 PM	12:51:00 PM	1	250	7	Material/Equipment Breakdown
6/24/2012	Elmwood S/S	EL-9	7:19:00 AM	9:30:00 AM	131	1,834	7	Material/Equipment Breakdown
6/24/2012	Parkdale S/S	PA-5	10:29:00 AM	7:30:00 PM	541	76,270	7	Material/Equipment Breakdown
6/25/2012	Elmwood S/S	EL-4	12:42:00 PM	2:05:00 PM	83	996	7	Material/Equipment Breakdown
6/25/2012	Nebo T.S.	341X	10:09:00 AM	10:39:00 AM	30	420	7	Material/Equipment Breakdown
6/26/2012	Nebo T.S.	3541X	5:05:00 AM	6:05:00 AM	60	120	7	Material/Equipment Breakdown
6/26/2012	Nebo T.S.	3512X	7:20:00 PM	9:35:00 PM	135	8,100	7	Material/Equipment Breakdown
6/28/2012	Bunting T.S.	M61	11:35:00 AM	4:35:00 PM	300	2,400	7	Material/Equipment Breakdown
6/28/2012	John S/S	JN-1	2:23:00 PM	3:55:00 PM	92	1,472	7	Material/Equipment Breakdown
6/28/2012	John S/S	JN-1	3:30:00 PM	3:50:00 PM	20	360	7	Material/Equipment Breakdown
6/28/2012	Nebo T.S.	3642X	9:25:00 PM	11:20:00 PM	115	1,610	7	Material/Equipment Breakdown
6/29/2012	Dundas T.S.	2D14X	2:10:00 PM	5:00:00 PM	170	5,440	7	Material/Equipment Breakdown
6/30/2012	Nebo T.S.	331X	5:42:00 PM	9:06:00 PM	204	10,404	7	Material/Equipment Breakdown



6/30/2012	Nebo T.S.	331X	8:42:00 PM	8:57:00 PM	15	660	7	Material/Equipment Breakdown
6/30/2012	Nebo T.S.	331X	11:42:00 PM	1:00:00 AM	78	78	7	Material/Equipment Breakdown
7/1/2012	Beach T.S.	7411X	6:03:00 AM	11:02:00 AM	299	136,330	7	Material/Equipment Breakdown
7/1/2012	Bunting T.S.	M62	8:46:00 AM	8:48:00 AM	2	4,480	7	Material/Equipment Breakdown
7/1/2012	Bunting T.S.	M62	8:00:00 AM	8:00:00 AM	-	-	7	Material/Equipment Breakdown
7/1/2012	Elgin T.S.	5301X	6:21:00 AM	7:32:00 AM	71	99,350	7	Material/Equipment Breakdown
7/1/2012	Lake T.S.	1812X	9:19:00 AM	11:05:00 AM	106	1,484	7	Material/Equipment Breakdown
7/1/2012	Ottawa S/S	OT-5	6:03:00 AM	6:05:00 AM	2	932	7	Material/Equipment Breakdown
7/1/2012	Mohawk S/S	MK-2	1:15:00 PM	1:50:00 PM	35	210	7	Material/Equipment Breakdown
7/1/2012	Nebo T.S.	331X	11:42:00 PM	1:00:00 AM	78	78	7	Material/Equipment Breakdown
7/2/2012	Horning T.S.	4111X	4:48:00 PM	5:45:00 PM	57	228	7	Material/Equipment Breakdown
7/2/2012	Stirton T.S.	8511X	3:52:00 PM	3:54:00 PM	2	4,430	7	Material/Equipment Breakdown
7/3/2012	Mohawk T.S.	0821X	10:33:00 PM	12:35:00 AM	122	732	7	Material/Equipment Breakdown
7/3/2012	Stirton T.S.	8511X	8:57:00 PM	7:11:00 AM	614	614	7	Material/Equipment Breakdown
7/4/2012	Horning T.S.	4481X	11:53:00 PM	12:07:00 AM	14	210	7	Material/Equipment Breakdown
7/5/2012	Parkdale S/S	PA-5	12:59:00 AM	1:32:00 AM	33	17,424	7	Material/Equipment Breakdown
7/5/2012	Parkdale S/S	PA-5	1:00:00 AM	11:59:00 AM	659	659	7	Material/Equipment Breakdown
7/5/2012	Nebo T.S.	341X	2:06:00 PM	2:06:00 PM	-	-	7	Material/Equipment Breakdown
7/6/2012	Mohawk S/S	MK-10	4:16:00 PM	5:40:00 PM	84	672	7	Material/Equipment Breakdown
7/6/2012	Vine S/S	F5	5:50:00 PM	5:50:00 PM	-	-	7	Material/Equipment Breakdown
7/6/2012	Newton T.S.	291X	12:16:00 PM	1:04:00 PM	48	48	7	Material/Equipment Breakdown
7/7/2012	Bunting T.S.	M62	7:14:00 PM	1:15:00 AM	361	5,054	7	Material/Equipment Breakdown
7/7/2012	Carlton T.S.	M20	8:57:00 PM	11:30:00 PM	153	3,448	7	Material/Equipment Breakdown
7/8/2012	Lake T.S.	1811X	9:51:00 PM	1:54:00 AM	243	25,986	7	Material/Equipment Breakdown
7/8/2012	Ottawa S/S	OT-5	12:40:00 AM	12:55:00 AM	15	405	7	Material/Equipment Breakdown
7/8/2012	Elmwood S/S	EL-4	12:57:00 PM	1:30:00 PM	33	330	7	Material/Equipment Breakdown
7/8/2012	Newton T.S.	291X	5:55:00 AM	7:30:00 AM	95	95	7	Material/Equipment Breakdown
7/10/2012	Winona T.S.	W13X	1:11:00 AM	1:11:00 AM	-	-	7	Material/Equipment Breakdown
7/11/2012	Strouds Lane S/S	ST-6	7:04:00 AM	9:29:00 AM	145	1,740	7	Material/Equipment Breakdown
7/12/2012	Bunting T.S.	M75	8:56:00 AM	9:50:00 AM	54	3,618	7	Material/Equipment Breakdown
7/12/2012	Mohawk T.S.	0821X	12:24:00 AM	4:15:00 AM	231	1,386	7	Material/Equipment Breakdown
7/12/2012	Bunting T.S.	M75	8:58:00 AM	8:58:00 AM	-	-	7	Material/Equipment Breakdown
7/13/2012	Beach T.S.	7411X	9:50:00 PM	10:51:00 PM	1,501	147,616	7	Material/Equipment Breakdown
7/13/2012	Mohawk S/S	MK-6	7:31:00 PM	11:30:00 PM	239	239	7	Material/Equipment Breakdown
7/13/2012	Deerhurst S/S	DH-1 (3 ph)	5:37:00 PM	10:05:00 PM	268	3,216	7	Material/Equipment Breakdown
7/13/2012	Ottawa S/S	OT-5	9:50:00 PM	2:24:00 AM	274	62,448	7	Material/Equipment Breakdown

7/14/2012	Central S/S	CE-1	2:59:00 PM	10:45:00 PM	466	2,891	7	Material/Equipment Breakdown
7/16/2012	Beach T.S.	7411X	1:15:00 PM	3:27:00 PM	132	1,848	7	Material/Equipment Breakdown
7/17/2012	Horning T.S.	4111X	5:28:00 PM	10:45:00 PM	317	2,853	7	Material/Equipment Breakdown
7/17/2012	Highland S/S	HI-3	12:32:00 PM	2:30:00 PM	118	118	7	Material/Equipment Breakdown
7/17/2012	Elmwood S/S	EL-2	6:05:00 PM	6:20:00 PM	15	180	7	Material/Equipment Breakdown
7/18/2012	Aberdeen S/S	AB-2	3:04:00 PM	3:20:00 PM	16	16,880	7	Material/Equipment Breakdown
7/18/2012	Aberdeen S/S	AB-1	3:03:00 PM	3:20:00 PM	17	3,213	7	Material/Equipment Breakdown
7/19/2012	Lake T.S.	121X	11:00:00 PM	6:00:00 AM	420	9,240	7	Material/Equipment Breakdown
7/19/2012	Wellington S/S	WL-8	1:16:00 AM	2:21:00 AM	65	1,950	7	Material/Equipment Breakdown
7/21/2012	Bunting T.S.	M75	1:31:00 AM	9:01:00 AM	450	8,100	7	Material/Equipment Breakdown
7/22/2012	Carlton T.S.	M11	5:31:00 PM	7:30:00 PM	119	1,666	7	Material/Equipment Breakdown
7/22/2012	Lake T.S.	1812X	6:29:00 PM	7:47:00 PM	78	44,292	7	Material/Equipment Breakdown
7/23/2012	Deerhurst S/S	DH-1W	2:52:00 PM	9:15:00 PM	383	4,213	7	Material/Equipment Breakdown
7/23/2012	Aberdeen S/S	AB-4	1:55:00 PM	9:50:00 PM	475	103,550	7	Material/Equipment Breakdown
7/23/2012	Nebo T.S.	331X	9:14:00 AM	2:50:00 PM	336	116,977	7	Material/Equipment Breakdown
7/24/2012	Bunting T.S.	M77	1:25:00 PM	2:55:00 PM	90	2,340	7	Material/Equipment Breakdown
7/24/2012	Parkdale S/S	PA-6	1:30:00 AM	2:50:00 AM	80	1,520	7	Material/Equipment Breakdown
7/24/2012	Dundas T.S.	2D12X	3:57:00 AM	9:35:00 AM	338	2,704	7	Material/Equipment Breakdown
7/24/2012	Nebo T.S.	3521X	1:20:00 PM	3:26:00 AM	846	6,476	7	Material/Equipment Breakdown
7/26/2012	Lake T.S.	1831X	2:24:00 AM	1:22:00 PM	658	5,264	7	Material/Equipment Breakdown
7/26/2012	Dundas T.S.	2D12X	3:12:00 PM	3:12:00 PM	-	-	7	Material/Equipment Breakdown
7/26/2012	Nebo T.S.	331X	10:27:00 AM	7:30:00 PM	543	543	7	Material/Equipment Breakdown
7/27/2012	Aberdeen S/S	AB-4	7:18:00 AM	8:45:00 AM	87	1,653	7	Material/Equipment Breakdown
7/27/2012	Hughson S/S	HU-6	9:17:00 AM	9:20:00 AM	3	1,572	7	Material/Equipment Breakdown
7/27/2012	Nebo T.S.	341X	10:00:00 AM	10:01:00 AM	1	4,112	7	Material/Equipment Breakdown
7/27/2012	Nebo T.S.	341X	11:36:00 AM	11:39:00 AM	3	900	7	Material/Equipment Breakdown
7/27/2012	Nebo T.S.	341X	9:58:00 AM	1:40:00 PM	222	1,554	7	Material/Equipment Breakdown
7/29/2012	Beach T.S.	7411X	6:19:00 PM	10:35:00 PM	256	3,840	7	Material/Equipment Breakdown
7/31/2012	Nebo T.S.	3611X	12:08:00 PM	12:48:00 PM	40	440	7	Material/Equipment Breakdown
8/1/2012	Mohawk T.S.	0721X	12:14:00 AM	1:40:00 AM	86	120,978	7	Material/Equipment Breakdown
8/4/2012	Ottawa S/S	OT-7	6:42:00 AM	8:12:00 AM	90	360	7	Material/Equipment Breakdown
8/4/2012	Deerhurst S/S	DH-3B	3:21:00 PM	4:09:00 PM	48	9,738	7	Material/Equipment Breakdown
8/5/2012	Ottawa S/S	OT-7	12:17:00 AM	4:25:00 AM	248	992	7	Material/Equipment Breakdown
8/5/2012	Elmwood S/S	EL-3	6:25:00 AM	8:20:00 AM	115	1,380	7	Material/Equipment Breakdown
8/7/2012	Lake T.S.	1431X	11:41:00 AM	5:44:00 PM	363	32,820	7	Material/Equipment Breakdown
8/7/2012	Nebo T.S.	3541X	12:00:00 PM	12:30:00 PM	30	30	7	Material/Equipment Breakdown

8/8/2012	Bunting T.S.	M61	11:22:00 PM	5:36:00 AM	-32	28,874	7	Material/Equipment Breakdown
8/8/2012	Horning T.S.	471X	3:20:00 AM	5:55:00 AM	155	2,170	7	Material/Equipment Breakdown
8/8/2012	Eastmount S/S	EA-11	12:25:00 PM	1:30:00 PM	65	1,170	7	Material/Equipment Breakdown
8/8/2012	Strouds Lane S/S	ST-3	9:07:00 PM	10:00:00 PM	53	18,806	7	Material/Equipment Breakdown
8/11/2012	Highland S/S	HI-1	12:30:00 PM	2:30:00 PM	120	840	7	Material/Equipment Breakdown
8/14/2012	Beach T.S.	7411X	11:20:00 AM	1:25:00 PM	125	2,125	7	Material/Equipment Breakdown
8/15/2012	Nebo T.S.	331X	10:05:00 AM	10:05:00 AM	-	-	7	Material/Equipment Breakdown
8/15/2012	Nebo T.S.	331X	10:05:00 AM	2:55:00 PM	290	73,058	7	Material/Equipment Breakdown
8/16/2012	Glendale T.S.	M16	2:45:00 PM	3:02:00 PM	17	272	7	Material/Equipment Breakdown
8/16/2012	Vansickle T.S.	M41	7:02:00 AM	7:03:00 AM	1	2,222	7	Material/Equipment Breakdown
8/16/2012	Vansickle T.S.	M41	7:01:00 AM	11:55:00 AM	294	1,176	7	Material/Equipment Breakdown
8/18/2012	Glendale T.S.	M14	1:40:00 PM	1:45:00 PM	5	55	7	Material/Equipment Breakdown
8/22/2012	Central S/S	CE-11	12:07:00 PM	12:48:00 PM	41	1,271	7	Material/Equipment Breakdown
8/24/2012	Vansickle T.S.	M41	8:18:00 PM	11:10:00 PM	172	5,848	7	Material/Equipment Breakdown
8/25/2012	Nebo T.S.	3541X	6:46:00 AM	6:57:00 AM	11	2,739	7	Material/Equipment Breakdown
8/25/2012	Nebo T.S.	3631X	2:16:00 AM	7:00:00 AM	284	239,844	7	Material/Equipment Breakdown
8/26/2012	Ottawa S/S	OT-7	1:10:00 PM	1:20:00 PM	10	20	7	Material/Equipment Breakdown
27-Aug-12	Kenilworth S/S	KE-3	2:26:00 PM	4:05:00 PM	99.00	2,079	7.00	Material/Equipment Breakdown
28-Aug-12	Nebo T.S.	3611X	2:35:00 PM	3:40:00 PM	65.00	87,552	7.00	Material/Equipment Breakdown
31-Aug-12	Bunting T.S.	M62	3:00:00 PM	5:00:00 PM	120.00	2,400	7.00	Material/Equipment Breakdown
31-Aug-12	Lake T.S.	1311X	12:23:00 PM	3:42:00 PM	199.00	10,461	7.00	Material/Equipment Breakdown
2-Sep-12	Bunting T.S.	M75	6:40:00 PM	7:15:00 PM	35.00	350	7.00	Material/Equipment Breakdown
2-Sep-12	Newton T.S.	252X	6:11:00 PM	6:55:00 PM	44.00	1,716	7.00	Material/Equipment Breakdown
3-Sep-12	Bunting T.S.	M62	7:42:00 AM	7:44:00 AM	2.00	4,532	7.00	Material/Equipment Breakdown
3-Sep-12	Bunting T.S.	M62	3:00:00 PM	5:25:00 PM	145.00	4,930	7.00	Material/Equipment Breakdown
6-Sep-12	Elgin T.S.	5511X	1:56:00 PM	3:05:00 PM	69.00	63,246	7.00	Material/Equipment Breakdown
8-Sep-12	Bunting T.S.	M62	9:49:00 AM	9:49:00 AM	-	-	7.00	Material/Equipment Breakdown
10-Sep-12	Dundas T.S.	2D12X	11:30:00 PM	12:40:00 AM	70.00	70	7.00	Material/Equipment Breakdown
10-Sep-12	Stirton T.S.	8862X	11:15:00 AM	12:55:00 PM	100.00	200	7.00	Material/Equipment Breakdown
11-Sep-12	Horning T.S.	4491X	5:30:00 PM	7:43:00 PM	133.00	4,389	7.00	Material/Equipment Breakdown
11-Sep-12	Lake T.S.	1712X	8:44:00 PM	8:45:00 PM	1.00	33	7.00	Material/Equipment Breakdown
11-Sep-12	Nebo T.S.	3541X	6:00:00 PM	6:15:00 PM	15.00	45	7.00	Material/Equipment Breakdown
12-Sep-12	Eastmount S/S	EA-2	9:30:00 AM	10:50:00 AM	80.00	4,240	7.00	Material/Equipment Breakdown
13-Sep-12	Caroline S/S	CA-5	4:36:00 PM	5:38:00 PM	62.00	1,240	7.00	Material/Equipment Breakdown
14-Sep-12	Carlton T.S.	M21	4:10:00 PM	4:20:00 PM	10.00	100	7.00	Material/Equipment Breakdown
15-Sep-12	Stirton T.S.	8721X	10:26:00 PM	11:16:00 PM	50.00	1,500	7.00	Material/Equipment Breakdown

18-Sep-12	Dundas T.S.	2D13X	4:23:00 AM	4:23:00 AM	-	20,580	7.00	Material/Equipment Breakdown
18-Sep-12	Dundas T.S.	2D13X	6:36:00 AM	9:18:00 AM	162.00	27,042	7.00	Material/Equipment Breakdown
20-Sep-12	Beach T.S.	7321X	6:31:00 PM	4:05:00 AM	574.00	68,449	7.00	Material/Equipment Breakdown
22-Sep-12	Nebo T.S.	331X	1:07:00 PM	1:07:00 PM	-	-	7.00	Material/Equipment Breakdown
22-Sep-12	Nebo T.S.	331X	3:45:00 PM	4:20:00 PM	35.00	245	7.00	Material/Equipment Breakdown
23-Sep-12	Caroline S/S	CA-4	5:00:00 PM	6:20:00 PM	80.00	400	7.00	Material/Equipment Breakdown
26-Sep-12	Lake T.S.	1321X	3:24:00 AM	4:01:00 AM	37.00	28,816	7.00	Material/Equipment Breakdown
26-Sep-12	Eastmount S/S	EA-1	7:50:00 PM	11:10:00 PM	200.00	3,200	7.00	Material/Equipment Breakdown
27-Sep-12	Vansickle T.S.	M41	10:32:00 AM	10:32:00 AM	-	-	7.00	Material/Equipment Breakdown
28-Sep-12	Horning T.S.	481X	9:07:00 AM	9:12:00 AM	5.00	80	7.00	Material/Equipment Breakdown
28-Sep-12	Nebo T.S.	3512X	2:00:00 AM	2:15:00 AM	15.00	195	7.00	Material/Equipment Breakdown
29-Sep-12	Carlton T.S.	M10	6:18:00 AM	9:19:00 AM	181.00	7,421	7.00	Material/Equipment Breakdown
1-Oct-12	Bunting T.S.	M77	7:07:00 AM	7:45:00 AM	38.00	15,297	7.00	Material/Equipment Breakdown
2-Oct-12	Stirton T.S.	8631X	11:50:00 PM	4:18:00 AM	268.00	7,236	7.00	Material/Equipment Breakdown
3-Oct-12	Dundas T.S.	2D2X	4:03:00 AM	4:03:00 AM	-	-	7.00	Material/Equipment Breakdown
3-Oct-12	Dundas T.S.	2D6X	5:18:00 AM	5:18:00 AM	-	-	7.00	Material/Equipment Breakdown
3-Oct-12	Dundas T.S.	2D2X	5:17:00 AM	5:18:00 AM	1.00	4,074	7.00	Material/Equipment Breakdown
3-Oct-12	Aberdeen S/S	AB-2	2:48:00 PM	4:23:00 PM	95.00	1,520	7.00	Material/Equipment Breakdown
4-Oct-12	Horning T.S.	481X	4:01:00 PM	5:30:00 PM	89.00	356	7.00	Material/Equipment Breakdown
4-Oct-12	Nebo T.S.	3521X	6:07:00 AM	10:56:00 AM	289.00	3,468	7.00	Material/Equipment Breakdown
5-Oct-12	Lake T.S.	131X	10:30:00 PM	4:30:00 AM	360.00	360	7.00	Material/Equipment Breakdown
5-Oct-12	Central S/S	CE-4	9:40:00 PM	1:05:00 AM	205.00	1,640	7.00	Material/Equipment Breakdown
8-Oct-12	Vansickle T.S.	M41	10:07:00 AM	10:07:00 AM	-	-	7.00	Material/Equipment Breakdown
8-Oct-12	Vansickle T.S.	M51	10:07:00 AM	10:07:00 AM	-	-	7.00	Material/Equipment Breakdown
10-Oct-12	Bunting T.S.	M76	4:30:00 PM	8:05:00 PM	215.00	1,720	7.00	Material/Equipment Breakdown
10-Oct-12	Hughson S/S	HU-11	3:05:00 PM	3:20:00 PM	15.00	90	7.00	Material/Equipment Breakdown
14-Oct-12	Bunting T.S.	M61	3:54:00 AM	5:43:00 AM	109.00	4,033	7.00	Material/Equipment Breakdown
15-Oct-12	Nebo T.S.	331X	3:24:00 AM	5:37:00 AM	133.00	54,644	7.00	Material/Equipment Breakdown
16-Oct-12	Winona T.S.	W15X	10:12:00 AM	2:00:00 PM	228.00	14,814	7.00	Material/Equipment Breakdown
17-Oct-12	Hughson S/S	HU-11	8:50:00 PM	10:37:00 PM	107.00	31,008	7.00	Material/Equipment Breakdown
18-Oct-12	Eastmount S/S	EA-8	2:47:00 AM	3:35:00 AM	48.00	768	7.00	Material/Equipment Breakdown
24-Oct-12	Lake T.S.	141X	6:29:00 AM	9:56:00 AM	207.00	13,838	7.00	Material/Equipment Breakdown
27-Oct-12	Vansickle T.S.	M71	9:13:00 AM	9:13:00 AM	-	-	7.00	Material/Equipment Breakdown
27-Oct-12	Vansickle T.S.	M52	9:13:00 AM	9:18:00 AM	5.00	2,500	7.00	Material/Equipment Breakdown
28-Oct-12	Lake T.S.	1712X	4:20:00 PM	5:15:00 PM	55.00	825	7.00	Material/Equipment Breakdown
30-Oct-12	Dundas T.S.	2D7X	8:32:00 AM	2:15:00 PM	343.00	1,122,721	7.00	Material/Equipment Breakdown

1-Nov-12	Kenilworth S/S	KE-2	5:38:00 AM	9:05:00 AM	207.00	7,245	7.00	Material/Equipment Breakdown
1-Nov-12	Spadina S/S	SP-2	2:02:00 PM	2:55:00 PM	53.00	901	7.00	Material/Equipment Breakdown
6-Nov-12	Hughson S/S	HU-6	11:00:00 AM	12:00:00 PM	60.00	2,520	7.00	Material/Equipment Breakdown
7-Nov-12	Mohawk S/S	MK-11	3:20:00 PM	3:33:00 PM	13.00	182	7.00	Material/Equipment Breakdown
8-Nov-12	Birmingham T.S.	50X71	5:32:00 PM	5:36:00 PM	4.00	1,684	7.00	Material/Equipment Breakdown
8-Nov-12	Horning T.S.	4481X	4:15:00 PM	4:50:00 PM	35.00	420	7.00	Material/Equipment Breakdown
8-Nov-12	Wellington S/S	WL-6	2:00:00 PM	6:30:00 PM	270.00	3,240	7.00	Material/Equipment Breakdown
8-Nov-12	Stirton T.S.	8631X	5:32:00 PM	5:36:00 PM	4.00	4	7.00	Material/Equipment Breakdown
9-Nov-12	Beach T.S.	7321X	7:00:00 AM	7:45:00 AM	45.00	45	7.00	Material/Equipment Breakdown
9-Nov-12	Nebo T.S.	3532X	12:34:00 PM	4:36:00 PM	242.00	3,630	7.00	Material/Equipment Breakdown
14-Nov-12	Wellington S/S	WL-2	10:27:00 AM	12:15:00 PM	108.00	30,132	7.00	Material/Equipment Breakdown
14-Nov-12	Nebo T.S.	3631X	11:59:00 AM	12:59:00 PM	60.00	1,980	7.00	Material/Equipment Breakdown
15-Nov-12	Bunting T.S.	M81	4:20:00 AM	6:20:00 AM	120.00	360	7.00	Material/Equipment Breakdown
23-Nov-12	Mohawk T.S.	0622X	3:18:00 PM	4:10:00 PM	52.00	468	7.00	Material/Equipment Breakdown
25-Nov-12	Horning T.S.	481X	12:00:00 PM	11:42:00 PM	702.00	47,362	7.00	Material/Equipment Breakdown
25-Nov-12	Dundas T.S.	2D12X	6:41:00 PM	6:51:00 PM	10.00	80	7.00	Material/Equipment Breakdown
26-Nov-12	Wentworth S/S	WT-4	4:10:00 PM	4:23:00 PM	13.00	26	7.00	Material/Equipment Breakdown
28-Nov-12	Baldwin S/S	BD-1	6:30:00 PM	7:45:00 PM	75.00	750	7.00	Material/Equipment Breakdown
30-Nov-12	Carlton T.S.	M10	9:09:00 PM	9:12:00 PM	3.00	8,670	7.00	Material/Equipment Breakdown
30-Nov-12	Carlton T.S.	M25	9:09:00 PM	12:44:00 AM	215.00	421,573	7.00	Material/Equipment Breakdown
30-Nov-12	Carlton T.S.	M10	11:54:00 PM	11:54:00 PM	-	-	7.00	Material/Equipment Breakdown
1-Dec-12	Mohawk T.S.	0731X	10:35:00 PM	10:45:00 PM	10.00	150	7.00	Material/Equipment Breakdown
1-Dec-12	Dundas T.S.	2D13X	3:50:00 PM	11:30:00 PM	460.00	460	7.00	Material/Equipment Breakdown
3-Dec-12	Bunting T.S.	M77	3:15:00 PM	3:35:00 PM	20.00	60	7.00	Material/Equipment Breakdown
4-Dec-12	Carlton T.S.	M21	5:40:00 PM	6:50:00 PM	70.00	1,050	7.00	Material/Equipment Breakdown
4-Dec-12	Ottawa S/S	OT-7	6:22:00 AM	7:20:00 AM	58.00	232	7.00	Material/Equipment Breakdown
11-Dec-12	Bunting T.S.	M56	9:52:00 AM	10:36:00 AM	44.00	44	7.00	Material/Equipment Breakdown
17-Dec-12	Vansickle T.S.	M41	2:15:00 PM	3:00:00 PM	45.00	450	7.00	Material/Equipment Breakdown
18-Dec-12	Nebo T.S.	3611X	9:37:00 PM	12:41:00 AM	184.00	2,208	7.00	Material/Equipment Breakdown
21-Dec-12	Carlton T.S.	M18	8:39:00 PM	8:39:00 PM	-	-	7.00	Material/Equipment Breakdown
21-Dec-12	Carlton T.S.	M18	8:55:00 PM	8:55:00 PM	-	-	7.00	Material/Equipment Breakdown
22-Dec-12	Beach T.S.	7822X	2:04:00 AM	3:46:00 AM	102.00	10,157	7.00	Material/Equipment Breakdown
24-Dec-12	Nebo T.S.	3521X	12:58:00 AM	7:55:00 AM	417.00	3,336	7.00	Material/Equipment Breakdown
25-Dec-12	Aberdeen S/S	AB-2	7:06:00 PM	8:05:00 PM	59.00	1,298	7.00	Material/Equipment Breakdown
26-Dec-12	Whitney S/S	WH-3	1:36:00 PM	2:52:00 PM	76.00	988	7.00	Material/Equipment Breakdown
26-Dec-12	Strouds Lane S/S	ST-2	3:11:00 PM	4:00:00 PM	49.00	588	7.00	Material/Equipment Breakdown

26-Dec-12	Bartonville S/S	BA-4	4:55:00 PM	6:20:00 PM	85.00	510	7.00	Material/Equipment Breakdown
31-Dec-12	Lake T.S.	1411X	1:32:00 AM	3:05:00 AM	93.00	2,418	7.00	Material/Equipment Breakdown
1-Jan-13	Nebo T.S.	341X	8:13:00 AM	11:05:00 AM	172.00	25,090	7.00	Material/Equipment Breakdown
4-Jan-13	Bunting T.S.	M56	3:06:00 PM	4:20:00 PM	74.00	2,070	7.00	Material/Equipment Breakdown
4-Jan-13	Nebo T.S.	341X	6:43:00 AM	7:33:00 AM	50.00	3,150	7.00	Material/Equipment Breakdown
4-Jan-13	Vansickle T.S.	M41	12:54:00 PM	2:00:00 PM	66.00	5,214	7.00	Material/Equipment Breakdown
10-Jan-13	Dundas T.S.	2D13X	2:40:00 PM	5:30:00 PM	170.00	1,190	7.00	Material/Equipment Breakdown
11-Jan-13	Hughson S/S	HU-11	9:20:00 AM	9:28:00 AM	8.00	152	7.00	Material/Equipment Breakdown
14-Jan-13	Mohawk T.S.	0832X	12:54:00 PM	4:15:00 PM	201.00	2,613	7.00	Material/Equipment Breakdown
14-Jan-13	Aberdeen S/S	AB-2	9:05:00 AM	10:05:00 AM	60.00	3,060	7.00	Material/Equipment Breakdown
19-Jan-13	Kenilworth S/S	KE-4	8:26:00 PM	9:10:00 PM	44.00	924	7.00	Material/Equipment Breakdown
22-Jan-13	Bunting T.S.	M75	6:56:00 AM	6:56:00 AM	-	-	7.00	Material/Equipment Breakdown
22-Jan-13	Bunting T.S.	M75	6:56:00 AM	9:55:00 AM	179.00	3,043	7.00	Material/Equipment Breakdown
24-Jan-13	Winona T.S.	W14X	12:15:00 PM	12:31:00 PM	16.00	1,952	7.00	Material/Equipment Breakdown
26-Jan-13	Bunting T.S.	M81	10:57:00 AM	11:35:00 AM	38.00	2,138	7.00	Material/Equipment Breakdown
27-Jan-13	Deerhurst S/S	DH-2R	1:12:00 AM	5:30:00 AM	258.00	7,184	7.00	Material/Equipment Breakdown
28-Jan-13	Carlton T.S.	M17	5:32:00 PM	7:06:00 PM	94.00	90,335	7.00	Material/Equipment Breakdown
28-Jan-13	Vansickle T.S.	M51	5:32:00 PM	8:23:00 PM	171.00	6,669	7.00	Material/Equipment Breakdown
29-Jan-13	Nebo T.S.	3541X	5:29:00 AM	6:26:00 AM	57.00	12,917	7.00	Material/Equipment Breakdown
30-Jan-13	Mohawk S/S	MK-5	2:00:00 PM	3:00:00 PM	60.00	1,440	7.00	Material/Equipment Breakdown
31-Jan-13	Mohawk T.S.	0711X	8:41:00 PM	1:00:00 AM	259.00	2,590	7.00	Material/Equipment Breakdown
31-Jan-13	Caroline S/S	CA-4	9:51:00 AM	11:12:00 AM	81.00	1,215	7.00	Material/Equipment Breakdown
31-Jan-13	Strouds Lane S/S	ST-2	3:29:00 PM	5:56:00 PM	147.00	7,013	7.00	Material/Equipment Breakdown
31-Jan-13	Newton T.S.	291X	11:34:00 AM	12:24:00 PM	50.00	550	7.00	Material/Equipment Breakdown
1-Feb-13	Vansickle T.S.	M51	11:39:00 AM	11:40:00 AM	1.00	961	7.00	Material/Equipment Breakdown
5-Feb-13	York S/S	YK-2	8:15:00 PM	1:51:00 AM	336.00	16,550	7.00	Material/Equipment Breakdown
7-Feb-13	Winona T.S.	W14X	8:51:00 PM	8:52:00 PM	1.00	9	7.00	Material/Equipment Breakdown
11-Feb-13	Beach T.S.	7411X	1:29:00 PM	3:06:00 PM	97.00	1,843	7.00	Material/Equipment Breakdown
11-Feb-13	Ottawa S/S	OT-3	2:26:00 PM	2:32:00 PM	6.00	3,054	7.00	Material/Equipment Breakdown
11-Feb-13	Mohawk S/S	MK-3	3:55:00 PM	4:55:00 PM	60.00	6,300	7.00	Material/Equipment Breakdown
11-Feb-13	Ottawa S/S	OT-4	2:26:00 PM	5:30:00 PM	184.00	68,540	7.00	Material/Equipment Breakdown
11-Feb-13	Newton T.S.	252X	3:34:00 PM	6:25:00 PM	171.00	1,710	7.00	Material/Equipment Breakdown
11-Feb-13	Vansickle T.S.	M41	12:29:00 PM	1:55:00 PM	86.00	860	7.00	Material/Equipment Breakdown
13-Feb-13	Lake T.S.	151X	10:09:00 AM	6:09:00 PM	480.00	480	7.00	Material/Equipment Breakdown
15-Feb-13	Vansickle T.S.	M51	3:00:00 PM	4:20:00 PM	80.00	1,280	7.00	Material/Equipment Breakdown
19-Feb-13	Mohawk S/S	MK-1	9:09:00 PM	10:00:00 PM	51.00	918	7.00	Material/Equipment Breakdown



20-Feb-13	Caroline S/S	CA-4	11:50:00 PM	12:30:00 AM	40.00	1,080	7.00	Material/Equipment Breakdown
24-Feb-13	Bunting T.S.	M75	2:58:00 AM	2:58:00 AM	-	-	7.00	Material/Equipment Breakdown
24-Feb-13	Bunting T.S.	M75	2:58:00 AM	5:24:00 AM	146.00	11,832	7.00	Material/Equipment Breakdown
24-Feb-13	Lake T.S.	141X	10:30:00 AM	11:53:00 AM	83.00	996	7.00	Material/Equipment Breakdown
25-Feb-13	Carlton T.S.	M11	1:40:00 PM	3:00:00 PM	80.00	1,120	7.00	Material/Equipment Breakdown
26-Feb-13	Lake T.S.	141X	3:30:00 PM	3:50:00 PM	20.00	260	7.00	Material/Equipment Breakdown
28-Feb-13	Bunting T.S.	M56	9:23:00 AM	9:49:00 AM	26.00	32,266	7.00	Material/Equipment Breakdown
4-Mar-13	Caroline S/S	CA-4	3:45:00 PM	6:45:00 PM	180.00	540	7.00	Material/Equipment Breakdown
5-Mar-13	Horning T.S.	421X	5:40:00 PM	10:00:00 PM	260.00	260	7.00	Material/Equipment Breakdown
9-Mar-13	Bunting T.S.	M62	4:25:00 PM	5:01:00 PM	36.00	432	7.00	Material/Equipment Breakdown
9-Mar-13	Mountain S/S	MT-2	8:49:00 AM	9:20:00 AM	31.00	434	7.00	Material/Equipment Breakdown
9-Mar-13	Cope S/S	CP-2	3:15:00 PM	4:15:00 PM	60.00	1,440	7.00	Material/Equipment Breakdown
10-Mar-13	Mohawk T.S.	0731X	12:30:00 PM	12:42:00 PM	12.00	192	7.00	Material/Equipment Breakdown
10-Mar-13	Glendale T.S.	M8	8:47:00 AM	8:47:00 AM	-	-	7.00	Material/Equipment Breakdown
10-Mar-13	Nebo T.S.	341X	6:40:00 AM	8:15:00 AM	95.00	570	7.00	Material/Equipment Breakdown
11-Mar-13	Wellington S/S	WL-10	11:01:00 PM	11:55:00 PM	54.00	540	7.00	Material/Equipment Breakdown
11-Mar-13	Elmwood S/S	EL-7	6:00:00 PM	9:05:00 PM	185.00	2,775	7.00	Material/Equipment Breakdown
15-Mar-13	Horning T.S.	4111X	11:04:00 AM	11:59:00 AM	55.00	7,975	7.00	Material/Equipment Breakdown
15-Mar-13	Dundas T.S.	2D12X	10:28:00 PM	10:36:00 PM	8.00	40	7.00	Material/Equipment Breakdown
16-Mar-13	Carlton T.S.	M17	12:15:00 PM	2:00:00 PM	105.00	420	7.00	Material/Equipment Breakdown
19-Mar-13	Carlton T.S.	M10	2:50:00 AM	4:00:00 AM	70.00	840	7.00	Material/Equipment Breakdown
19-Mar-13	Carlton T.S.	M10	4:03:00 PM	4:26:00 PM	23.00	23	7.00	Material/Equipment Breakdown
21-Mar-13	Horning T.S.	462X	2:37:00 PM	3:28:00 PM	51.00	867	7.00	Material/Equipment Breakdown
24-Mar-13	Wellington S/S	WL-8	8:50:00 AM	6:55:00 PM	605.00	14,518	7.00	Material/Equipment Breakdown
25-Mar-13	Wentworth S/S	WT-1	3:10:00 AM	3:20:00 AM	10.00	40	7.00	Material/Equipment Breakdown
28-Mar-13	Horning T.S.	471X	10:11:00 AM	10:30:00 AM	19.00	19	7.00	Material/Equipment Breakdown
30-Mar-13	Carlton T.S.	M25	9:10:00 PM	9:48:00 PM	38.00	456	7.00	Material/Equipment Breakdown
31-Mar-13	Beach T.S.	7731X	12:24:00 PM	1:34:00 PM	70.00	70	7.00	Material/Equipment Breakdown
31-Mar-13	Newton T.S.	252X	3:20:00 PM	4:15:00 PM	55.00	770	7.00	Material/Equipment Breakdown
1-Apr-13	Wentworth S/S	WT-6	2:15:00 PM	2:35:00 PM	20.00	600	7.00	Material/Equipment Breakdown
1-Apr-13	Deerhurst S/S	DH-1W	2:00:00 PM	3:20:00 PM	80.00	1,280	7.00	Material/Equipment Breakdown
2-Apr-13	Elgin T.S.	5331X	3:10:00 AM	3:19:00 AM	9.00	225	7.00	Material/Equipment Breakdown
3-Apr-13	Aberdeen S/S	AB-4	3:07:00 PM	4:40:00 PM	93.00	2,232	7.00	Material/Equipment Breakdown
4-Apr-13	Nebo T.S.	3531X	2:50:00 PM	4:38:00 PM	108.00	1,080	7.00	Material/Equipment Breakdown
4-Apr-13	Nebo T.S.	3532X	4:57:00 PM	10:57:00 PM	360.00	2,520	7.00	Material/Equipment Breakdown
4-Apr-13	Dundas T.S.	2D7X	6:41:00 PM	9:25:00 PM	164.00	4,756	7.00	Material/Equipment Breakdown

5-Apr-13	Dundas T.S.	2D14X	6:20:00 PM	11:38:00 PM	318.00	318	7.00	Material/Equipment Breakdown
5-Apr-13	Mountain S/S	MT-3	1:10:00 AM	1:30:00 AM	20.00	380	7.00	Material/Equipment Breakdown
6-Apr-13	Mohawk T.S.	0622X	8:15:00 AM	9:05:00 AM	50.00	500	7.00	Material/Equipment Breakdown
6-Apr-13	Wellington S/S	WL-2	7:34:00 PM	7:55:00 PM	21.00	462	7.00	Material/Equipment Breakdown
7-Apr-13	Cope S/S	CP-5	6:25:00 PM	6:36:00 PM	11.00	88	7.00	Material/Equipment Breakdown
8-Apr-13	Dundas T.S.	2D13X	7:41:00 PM	12:20:00 AM	279.00	279	7.00	Material/Equipment Breakdown
8-Apr-13	Mohawk S/S	MK-11	5:39:00 PM	6:25:00 PM	46.00	368	7.00	Material/Equipment Breakdown
9-Apr-13	Winona T.S.	W14X	12:05:00 PM	4:20:00 PM	255.00	2,295	7.00	Material/Equipment Breakdown
10-Apr-13	Carlton T.S.	M11	8:15:00 PM	8:19:00 PM	4.00	11,372	7.00	Material/Equipment Breakdown
10-Apr-13	Ottawa S/S	OT-4	1:56:00 AM	8:37:00 AM	401.00	521,048	7.00	Material/Equipment Breakdown
10-Apr-13	Carlton T.S.	M11	7:58:00 PM	7:58:00 PM	-	-	7.00	Material/Equipment Breakdown
11-Apr-13	Nebo T.S.	3611X	6:00:00 PM	10:50:00 PM	290.00	57,420	7.00	Material/Equipment Breakdown
11-Apr-13	Aberdeen S/S	AB-4	11:17:00 PM	1:04:00 AM	107.00	321	7.00	Material/Equipment Breakdown
11-Apr-13	Mohawk S/S	MK-2	7:46:00 PM	9:00:00 PM	74.00	1,406	7.00	Material/Equipment Breakdown
13-Apr-13	Strouds Lane S/S	ST-7	6:03:00 PM	9:25:00 PM	202.00	744	7.00	Material/Equipment Breakdown
14-Apr-13	Horning T.S.	451X	11:36:00 AM	12:51:00 PM	75.00	149	7.00	Material/Equipment Breakdown
16-Apr-13	Mountain S/S	MT-10	3:19:00 PM	7:30:00 PM	251.00	251	7.00	Material/Equipment Breakdown
19-Apr-13	Carlton T.S.	M7	7:09:00 AM	12:15:00 PM	306.00	306	7.00	Material/Equipment Breakdown
19-Apr-13	Kenilworth S/S	KE-1	4:41:00 AM	5:55:00 AM	74.00	1,258	7.00	Material/Equipment Breakdown
19-Apr-13	Mohawk S/S	MK-3	4:36:00 PM	7:28:00 PM	172.00	1,204	7.00	Material/Equipment Breakdown
19-Apr-13	Elmwood S/S	EL-4	6:28:00 PM	8:10:00 PM	102.00	1,836	7.00	Material/Equipment Breakdown
20-Apr-13	Lake T.S.	1822X	1:30:00 PM	1:45:00 PM	15.00	15	7.00	Material/Equipment Breakdown
20-Apr-13	Mohawk S/S	MK-3	7:01:00 PM	7:05:00 PM	4.00	244	7.00	Material/Equipment Breakdown
23-Apr-13	Vansickle T.S.	M52	4:00:00 PM	5:55:00 PM	115.00	920	7.00	Material/Equipment Breakdown
25-Apr-13	Lake T.S.	1832X	12:16:00 AM	12:17:00 AM	1.00	728	7.00	Material/Equipment Breakdown
25-Apr-13	Lake T.S.	1831X	12:16:00 AM	12:17:00 AM	1.00	1,670	7.00	Material/Equipment Breakdown
28-Apr-13	Glendale T.S.	glm6	8:22:00 AM	1:00:00 PM	278.00	2,780	7.00	Material/Equipment Breakdown
28-Apr-13	Nebo T.S.	341X	11:14:00 AM	1:41:00 PM	147.00	1,470	7.00	Material/Equipment Breakdown
29-Apr-13	Bartonville S/S	BA-4	4:55:00 PM	5:50:00 PM	55.00	880	7.00	Material/Equipment Breakdown
1-May-13	Dundas T.S.	2D12X	3:34:00 PM	7:20:00 PM	226.00	11,748	7.00	Material/Equipment Breakdown
2-May-13	Carlton T.S.	M18	5:40:00 AM	11:55:00 AM	375.00	20,302	7.00	Material/Equipment Breakdown
2-May-13	Wentworth S/S	WT-12	1:30:00 PM	1:48:00 PM	18.00	612	7.00	Material/Equipment Breakdown
3-May-13	Bunting T.S.	M77	8:09:00 PM	12:30:00 AM	261.00	261	7.00	Material/Equipment Breakdown
4-May-13	Lake T.S.	1721X	11:55:00 AM	4:45:00 AM	1,010.00	5,050	7.00	Material/Equipment Breakdown
5-May-13	Nebo T.S.	331X	8:22:00 PM	9:36:00 PM	74.00	8,790	7.00	Material/Equipment Breakdown
7-May-13	Lake T.S.	121X	11:06:00 AM	3:00:00 PM	234.00	1,638	7.00	Material/Equipment Breakdown



7-May-13	Nebo T.S.	341X	8:41:00 PM	10:14:00 PM	93.00	1,023	7.00	Material/Equipment Breakdown
7-May-13	Nebo T.S.	341X	8:27:00 PM	10:20:00 PM	113.00	113	7.00	Material/Equipment Breakdown
10-May-13	Bunting T.S.	M61	10:30:00 AM	10:45:00 AM	15.00	165	7.00	Material/Equipment Breakdown
11-May-13	Dundas T.S.	2D7X	12:22:00 AM	12:43:00 AM	21.00	21	7.00	Material/Equipment Breakdown
16-May-13	Mohawk S/S	MK-6	2:13:00 PM	2:30:00 PM	17.00	204	7.00	Material/Equipment Breakdown
17-May-13	Vansickle T.S.	M41	2:05:00 PM	2:52:00 PM	47.00	3,760	7.00	Material/Equipment Breakdown
21-May-13	Horning T.S.	4451X	6:31:00 PM	7:48:00 PM	77.00	36,024	7.00	Material/Equipment Breakdown
22-May-13	Parkdale S/S	PA-F1	2:22:00 PM	3:13:00 PM	51.00	1,224	7.00	Material/Equipment Breakdown
24-May-13	Nebo T.S.	3621X	4:25:00 PM	5:30:00 PM	65.00	975	7.00	Material/Equipment Breakdown
24-May-13	Eastmount S/S	EA-1	8:19:00 AM	9:30:00 AM	71.00	781	7.00	Material/Equipment Breakdown
26-May-13	Horning T.S.	431X	1:12:00 PM	4:10:00 PM	178.00	2,314	7.00	Material/Equipment Breakdown
26-May-13	Winona T.S.	W14X	11:39:00 PM	1:22:00 AM	103.00	10,529	7.00	Material/Equipment Breakdown
27-May-13	Stirton T.S.	8721X	9:39:00 AM	9:42:00 AM	3.00	5,130	7.00	Material/Equipment Breakdown
27-May-13	Stirton T.S.	8722W	9:39:00 AM	9:42:00 AM	3.00	3,024	7.00	Material/Equipment Breakdown
29-May-13	Glendale T.S.	GLM23	3:25:00 PM	3:50:00 PM	25.00	49,560	7.00	Material/Equipment Breakdown
29-May-13	Dundas T.S.	2D12X	11:25:00 AM	12:12:00 PM	47.00	705	7.00	Material/Equipment Breakdown
29-May-13	Mountain S/S	MT-3	12:00:00 PM	1:00:00 PM	60.00	1,500	7.00	Material/Equipment Breakdown
30-May-13	Stirton T.S.	8511X	6:19:00 AM	10:00:00 AM	221.00	73,138	7.00	Material/Equipment Breakdown
2-Jun-13	John S/S	JN-1	10:39:00 AM	1:00:00 PM	141.00	2,538	7.00	Material/Equipment Breakdown
2-Jun-13	Vansickle T.S.	M41	2:15:00 AM	3:45:00 AM	90.00	200,250	7.00	Material/Equipment Breakdown
5-Jun-13	Winona T.S.	W15X	5:17:00 PM	7:03:00 PM	106.00	1,060	7.00	Material/Equipment Breakdown
5-Jun-13	Dundas T.S.	2D12X	9:14:00 PM	10:13:00 PM	59.00	944	7.00	Material/Equipment Breakdown
5-Jun-13	Newton T.S.	241X	12:53:00 PM	1:05:00 PM	12.00	12	7.00	Material/Equipment Breakdown
6-Jun-13	Glendale T.S.	GLM23	1:30:00 PM	1:40:00 PM	10.00	470	7.00	Material/Equipment Breakdown
6-Jun-13	Wellington S/S	WL-5	6:27:00 AM	8:20:00 AM	113.00	1,695	7.00	Material/Equipment Breakdown
6-Jun-13	Mountain S/S	MT-5	7:21:00 AM	8:55:00 AM	94.00	2,820	7.00	Material/Equipment Breakdown
10-Jun-13	Horning T.S.	481X	4:23:00 AM	5:47:00 AM	84.00	1,932	7.00	Material/Equipment Breakdown
12-Jun-13	Mohawk T.S.	0812X	1:33:00 PM	1:36:00 PM	3.00	38,091	7.00	Material/Equipment Breakdown
12-Jun-13	Vansickle T.S.	M82	5:57:00 PM	10:55:00 PM	298.00	5,364	7.00	Material/Equipment Breakdown
13-Jun-13	Vansickle T.S.	M41	12:10:00 PM	1:55:00 PM	105.00	14,070	7.00	Material/Equipment Breakdown
13-Jun-13	Vansickle T.S.	M41	5:29:00 PM	6:44:00 PM	75.00	10,050	7.00	Material/Equipment Breakdown
15-Jun-13	Mohawk T.S.	0812X	11:06:00 PM	11:59:00 PM	53.00	41,044	7.00	Material/Equipment Breakdown
15-Jun-13	Mohawk T.S.	0642X	11:06:00 PM	11:59:00 PM	53.00	31,906	7.00	Material/Equipment Breakdown
16-Jun-13	Lake T.S.	161X	12:19:00 PM	12:20:00 PM	1.00	281	7.00	Material/Equipment Breakdown
16-Jun-13	Lake T.S.	161X	1:37:00 PM	5:40:00 PM	243.00	6,318	7.00	Material/Equipment Breakdown
19-Jun-13	Carlton T.S.	M10	11:37:00 AM	12:06:00 PM	29.00	1,740	7.00	Material/Equipment Breakdown

19-Jun-13	Aberdeen S/S	AB-4	6:35:00 PM	6:45:00 PM	10.00	190	7.00	Material/Equipment Breakdown
20-Jun-13	Bunting T.S.	M76	5:45:00 AM	7:45:00 AM	120.00	2,400	7.00	Material/Equipment Breakdown
20-Jun-13	Eastmount S/S	EA-1	2:56:00 PM	3:06:00 PM	10.00	110	7.00	Material/Equipment Breakdown
22-Jun-13	Kenilworth S/S	KE-5	10:07:00 PM	10:10:00 PM	3.00	84	7.00	Material/Equipment Breakdown
22-Jun-13	Kenilworth S/S	KE-5	10:14:00 PM	10:16:00 PM	2.00	56	7.00	Material/Equipment Breakdown
23-Jun-13	Lake T.S.	1712X	11:09:00 PM	6:30:00 AM	441.00	14,400	7.00	Material/Equipment Breakdown
23-Jun-13	Mohawk T.S.	0832X	11:10:00 PM	3:30:00 AM	260.00	7,020	7.00	Material/Equipment Breakdown
23-Jun-13	Mohawk S/S	MK-10	7:54:00 AM	8:35:00 AM	41.00	656	7.00	Material/Equipment Breakdown
23-Jun-13	Dundas T.S.	2D12X	10:10:00 AM	10:50:00 AM	40.00	800	7.00	Material/Equipment Breakdown
23-Jun-13	Parkdale S/S	PA-F6	11:52:00 PM	11:45:00 AM	713.00	162,270	7.00	Material/Equipment Breakdown
23-Jun-13	Newton T.S.	291X	9:39:00 PM	10:20:00 PM	41.00	943	7.00	Material/Equipment Breakdown
23-Jun-13	Kenilworth S/S	KE-1	11:15:00 PM	11:25:00 PM	10.00	180	7.00	Material/Equipment Breakdown
24-Jun-13	Lake T.S.	161X	11:10:00 AM	3:00:00 PM	230.00	2,760	7.00	Material/Equipment Breakdown
24-Jun-13	Wellington S/S	WL-4	4:49:00 AM	5:52:00 AM	63.00	882	7.00	Material/Equipment Breakdown
24-Jun-13	Dewitt S/S	DW-Total Station	4:00:00 PM	6:16:00 PM	136.00	31,780	7.00	Material/Equipment Breakdown
24-Jun-13	Stirton T.S.	8852X	8:05:00 PM	8:40:00 PM	35.00	1,085	7.00	Material/Equipment Breakdown
24-Jun-13	Winona T.S.	W12X	3:56:00 PM	3:56:00 PM	-	-	7.00	Material/Equipment Breakdown
26-Jun-13	Carlton T.S.	A1	11:12:00 PM	3:37:00 AM	265.00	994	7.00	Material/Equipment Breakdown
27-Jun-13	Vansickle T.S.	M82	11:21:00 PM	11:21:00 PM	-	-	7.00	Material/Equipment Breakdown
28-Jun-13	Vansickle T.S.	M82	12:34:00 AM	12:34:00 AM	-	-	7.00	Material/Equipment Breakdown
28-Jun-13	Wellington S/S	WL-8	1:15:00 AM	3:48:00 AM	153.00	6,273	7.00	Material/Equipment Breakdown
28-Jun-13	Eastmount S/S	EA-8	3:25:00 PM	4:35:00 PM	70.00	630	7.00	Material/Equipment Breakdown
28-Jun-13	Vansickle T.S.	M82	11:22:00 PM	10:45:00 AM	683.00	683	7.00	Material/Equipment Breakdown
29-Jun-13	Vansickle T.S.	M41	4:08:00 PM	4:38:00 PM	30.00	300	7.00	Material/Equipment Breakdown
30-Jun-13	Dundas T.S.	2D12X	9:24:00 AM	9:35:00 AM	11.00	66	7.00	Material/Equipment Breakdown
1-Jul-13	Horning T.S.	481X	9:17:00 AM	12:29:00 PM	192.00	2,304	7.00	Material/Equipment Breakdown
3-Jul-13	Carlton T.S.	M10	10:15:00 AM	11:30:00 AM	75.00	450	7.00	Material/Equipment Breakdown
7-Jul-13	Vansickle T.S.	M41	11:53:00 PM	4:40:00 AM	287.00	7,175	7.00	Material/Equipment Breakdown
8-Jul-13	Beach T.S.	7821X	12:55:00 PM	4:49:00 PM	234.00	234	7.00	Material/Equipment Breakdown
8-Jul-13	Elgin T.S.	5481X	7:13:00 PM	9:19:00 PM	126.00	179,937	7.00	Material/Equipment Breakdown
8-Jul-13	Mohawk S/S	MK-1	10:07:00 AM	10:20:00 AM	13.00	26	7.00	Material/Equipment Breakdown
8-Jul-13	Wentworth S/S	WT-1	5:53:00 PM	10:20:00 PM	267.00	5,073	7.00	Material/Equipment Breakdown
10-Jul-13	Lake T.S.	1831X	9:46:00 PM	7:00:00 AM	554.00	2,216	7.00	Material/Equipment Breakdown
10-Jul-13	Lake T.S.	1431X	5:09:00 AM	12:08:00 PM	419.00	35,965	7.00	Material/Equipment Breakdown
10-Jul-13	Eastmount S/S	EA-2	3:25:00 PM	4:30:00 PM	65.00	1,365	7.00	Material/Equipment Breakdown
10-Jul-13	Vansickle T.S.	M51	8:04:00 PM	11:55:00 PM	231.00	1,848	7.00	Material/Equipment Breakdown

11-Jul-13	Lake T.S.	151X	3:48:00 AM	10:32:00 AM	404.00	30,831	7.00	Material/Equipment Breakdown
12-Jul-13	Bunting T.S.	M75	6:18:00 PM	7:43:00 PM	85.00	510	7.00	Material/Equipment Breakdown
12-Jul-13	Carlton T.S.	M18	12:08:00 PM	9:10:00 PM	542.00	542	7.00	Material/Equipment Breakdown
12-Jul-13	Carlton T.S.	M18	12:07:00 PM	12:07:00 PM	-	-	7.00	Material/Equipment Breakdown
12-Jul-13	Wentworth S/S	WT-3	10:16:00 AM	1:36:00 PM	200.00	20,920	7.00	Material/Equipment Breakdown
13-Jul-13	Bunting T.S.	M75	11:45:00 AM	4:30:00 PM	285.00	8,160	7.00	Material/Equipment Breakdown
13-Jul-13	Bunting T.S.	M75	11:45:00 AM	11:45:00 AM	-	-	7.00	Material/Equipment Breakdown
13-Jul-13	Carlton T.S.	M11	10:15:00 AM	10:40:00 AM	25.00	400	7.00	Material/Equipment Breakdown
13-Jul-13	Elmwood S/S	EL-9	8:38:00 PM	11:30:00 PM	172.00	3,296	7.00	Material/Equipment Breakdown
14-Jul-13	Horning T.S.	4481X	4:11:00 PM	4:47:00 PM	36.00	35,100	7.00	Material/Equipment Breakdown
14-Jul-13	Horning T.S.	4461X	4:11:00 PM	9:22:00 PM	311.00	133,891	7.00	Material/Equipment Breakdown
15-Jul-13	Horning T.S.	4461X	9:42:00 PM	1:00:00 AM	198.00	2,574	7.00	Material/Equipment Breakdown
15-Jul-13	Lake T.S.	1812X	7:05:00 PM	9:55:00 PM	170.00	1,530	7.00	Material/Equipment Breakdown
15-Jul-13	Lake T.S.	1812X	7:10:00 PM	10:10:00 PM	180.00	1,440	7.00	Material/Equipment Breakdown
15-Jul-13	Elmwood S/S	EL-10	2:08:00 PM	3:20:00 PM	72.00	576	7.00	Material/Equipment Breakdown
15-Jul-13	Strouds Lane S/S	ST-7	4:31:00 PM	6:38:00 PM	127.00	3,302	7.00	Material/Equipment Breakdown
16-Jul-13	Mountain S/S	MT-3	6:59:00 AM	9:15:00 AM	136.00	2,312	7.00	Material/Equipment Breakdown
16-Jul-13	Hughson S/S	HU-6	12:41:00 PM	2:50:00 PM	129.00	3,225	7.00	Material/Equipment Breakdown
17-Jul-13	Bunting T.S.	M61	9:05:00 PM	5:00:00 AM	475.00	7,125	7.00	Material/Equipment Breakdown
17-Jul-13	Carlton T.S.	M20	6:00:00 PM	10:20:00 PM	260.00	2,080	7.00	Material/Equipment Breakdown
18-Jul-13	Bunting T.S.	M61	5:43:00 PM	9:05:00 PM	202.00	3,030	7.00	Material/Equipment Breakdown
18-Jul-13	Carlton T.S.	M10	8:16:00 AM	2:56:00 PM	400.00	8,400	7.00	Material/Equipment Breakdown
18-Jul-13	Elgin T.S.	5331X	12:55:00 PM	1:23:00 PM	28.00	448	7.00	Material/Equipment Breakdown
18-Jul-13	Cope S/S	CP-7	1:49:00 PM	4:10:00 PM	141.00	4,371	7.00	Material/Equipment Breakdown
18-Jul-13	Wellington S/S	WL-6	3:22:00 PM	5:00:00 PM	98.00	5,194	7.00	Material/Equipment Breakdown
19-Jul-13	Dundas T.S.	m2	10:23:00 PM	7:15:00 AM	532.00	36,708	7.00	Material/Equipment Breakdown
19-Jul-13	Eastmount S/S	EA-8	11:51:00 AM	1:53:00 PM	122.00	1,586	7.00	Material/Equipment Breakdown
19-Jul-13	Vine S/S	F1	2:40:00 PM	4:00:00 PM	80.00	5,120	7.00	Material/Equipment Breakdown
22-Jul-13	Nebo T.S.	3612X	10:00:00 AM	7:00:00 PM	540.00	8,640	7.00	Material/Equipment Breakdown
26-Jul-13	Nebo T.S.	341X	3:57:00 PM	6:11:00 PM	134.00	24,120	7.00	Material/Equipment Breakdown
26-Jul-13	Nebo T.S.	341X	3:57:00 PM	3:57:00 PM	-	-	7.00	Material/Equipment Breakdown
27-Jul-13	Dundas T.S.	2D2X	4:48:00 PM	4:48:00 PM	-	-	7.00	Material/Equipment Breakdown
27-Jul-13	Dundas T.S.	2D2X	3:19:00 PM	4:16:00 PM	57.00	6,897	7.00	Material/Equipment Breakdown
28-Jul-13	Nebo T.S.	341X	4:05:00 AM	4:05:00 AM	-	-	7.00	Material/Equipment Breakdown
28-Jul-13	Glendale T.S.	M5	1:26:00 AM	4:00:00 AM	154.00	2,310	7.00	Material/Equipment Breakdown
29-Jul-13	Ottawa S/S	OT-2	1:00:00 PM	1:25:00 PM	25.00	75	7.00	Material/Equipment Breakdown

31-Jul-13	Nebo T.S.	3512X	5:27:00 PM	7:03:00 PM	96.00	1,248	7.00	Material/Equipment Breakdown
31-Jul-13	Stirton T.S.	8862X	3:40:00 PM	7:00:00 PM	200.00	810	7.00	Material/Equipment Breakdown
2-Aug-13	Carlton T.S.	M25	5:55:00 PM	6:00:00 PM	5.00	45	7.00	Material/Equipment Breakdown
3-Aug-13	Lake T.S.	1831X	7:06:00 AM	1:28:00 PM	382.00	9,406	7.00	Material/Equipment Breakdown
4-Aug-13	Lake T.S.	1431X	11:29:00 AM	4:34:00 PM	305.00	19,821	7.00	Material/Equipment Breakdown
4-Aug-13	Mohawk T.S.	0832X	9:08:00 AM	10:47:00 AM	99.00	36,827	7.00	Material/Equipment Breakdown
5-Aug-13	Beach T.S.	7441X	6:36:00 PM	10:07:00 PM	211.00	1,055	7.00	Material/Equipment Breakdown
5-Aug-13	Horning T.S.	4481X	7:56:00 PM	12:40:00 AM	284.00	2,272	7.00	Material/Equipment Breakdown
6-Aug-13	Bunting T.S.	M77	6:08:00 PM	8:09:00 PM	121.00	1,573	7.00	Material/Equipment Breakdown
6-Aug-13	Carlton T.S.	M25	3:17:00 PM	5:47:00 PM	150.00	1,500	7.00	Material/Equipment Breakdown
6-Aug-13	Newton T.S.	291X	7:22:00 AM	8:43:00 AM	81.00	13,608	7.00	Material/Equipment Breakdown
6-Aug-13	Newton T.S.	291X	7:22:00 AM	8:43:00 AM	81.00	2,997	7.00	Material/Equipment Breakdown
6-Aug-13	Vansickle T.S.	M51	2:15:00 PM	2:45:00 PM	30.00	390	7.00	Material/Equipment Breakdown
7-Aug-13	Nebo T.S.	341X	1:55:00 PM	4:08:00 PM	133.00	1,729	7.00	Material/Equipment Breakdown
8-Aug-13	Stirton T.S.	8621X	10:41:00 AM	10:42:00 AM	1.00	86	7.00	Material/Equipment Breakdown
9-Aug-13	Newton T.S.	291X	6:58:00 AM	8:10:00 AM	72.00	17,064	7.00	Material/Equipment Breakdown
11-Aug-13	Bunting T.S.	M62	5:18:00 PM	8:00:00 PM	162.00	3,240	7.00	Material/Equipment Breakdown
11-Aug-13	Mohawk T.S.	0711X	4:21:00 AM	4:34:00 AM	13.00	6,656	7.00	Material/Equipment Breakdown
11-Aug-13	Mohawk T.S.	0731X	6:39:00 AM	6:41:00 AM	2.00	2,308	7.00	Material/Equipment Breakdown
11-Aug-13	Mohawk T.S.	0711X	4:34:00 AM	12:37:00 PM	483.00	239,358	7.00	Material/Equipment Breakdown
11-Aug-13	Wellington S/S	WL-T2 Bus	4:21:00 AM	4:34:00 AM	13.00	17,225	7.00	Material/Equipment Breakdown
11-Aug-13	Eastmount S/S	EA-T2 Bus	6:39:00 AM	6:51:00 AM	12.00	7,608	7.00	Material/Equipment Breakdown
11-Aug-13	Mountain S/S	MT-6	11:35:00 AM	12:35:00 PM	60.00	1,140	7.00	Material/Equipment Breakdown
15-Aug-13	Horning T.S.	4491X	7:53:00 PM	10:27:00 AM	6,634.00	446,164	7.00	Material/Equipment Breakdown
17-Aug-13	Wentworth S/S	WT-5	4:41:00 AM	10:50:00 AM	369.00	13,653	7.00	Material/Equipment Breakdown
18-Aug-13	Spadina S/S	SP-1	1:20:00 PM	2:02:00 PM	42.00	924	7.00	Material/Equipment Breakdown
18-Aug-13	Vansickle T.S.	M42	5:52:00 PM	8:55:00 PM	183.00	183	7.00	Material/Equipment Breakdown
19-Aug-13	Elmwood S/S	EL-10	10:40:00 PM	11:05:00 PM	25.00	300	7.00	Material/Equipment Breakdown
20-Aug-13	Nebo T.S.	341X	11:35:00 AM	12:35:00 PM	60.00	60	7.00	Material/Equipment Breakdown
20-Aug-13	Dundas T.S.	2D12X	2:39:00 PM	7:30:00 PM	291.00	9,739	7.00	Material/Equipment Breakdown
20-Aug-13	Dundas T.S.	2D12X	2:39:00 PM	8:05:00 PM	326.00	15,974	7.00	Material/Equipment Breakdown
21-Aug-13	Dundas T.S.	2D14X	12:55:00 AM	3:50:00 AM	175.00	525	7.00	Material/Equipment Breakdown
22-Aug-13	Aberdeen S/S	AB-4	12:02:00 PM	1:03:00 PM	61.00	1,037	7.00	Material/Equipment Breakdown
25-Aug-13	Nebo T.S.	3611X	11:05:00 PM	11:20:00 PM	15.00	420	7.00	Material/Equipment Breakdown
25-Aug-13	Aberdeen S/S	AB-2	7:29:00 AM	10:36:00 AM	187.00	33,506	7.00	Material/Equipment Breakdown
25-Aug-13	Parkdale S/S	PA-F1	9:45:00 PM	10:00:00 PM	15.00	255	7.00	Material/Equipment Breakdown

26-Aug-13	Elgin T.S.	5411X	12:00:00 AM	1:55:00 AM	115.00	1,235	7.00	Material/Equipment Breakdown
26-Aug-13	Nebo T.S.	341X	8:31:00 PM	8:31:00 PM	-	-	7.00	Material/Equipment Breakdown
28-Aug-13	Carlton T.S.	M18	7:21:00 AM	2:38:00 PM	437.00	6,555	7.00	Material/Equipment Breakdown
28-Aug-13	Stirton T.S.	8631X	11:19:00 PM	1:25:00 AM	126.00	2,898	7.00	Material/Equipment Breakdown
29-Aug-13	Nebo T.S.	331X	11:53:00 PM	11:56:00 PM	3.00	36	7.00	Material/Equipment Breakdown
29-Aug-13	Newton T.S.	282X	9:05:00 AM	10:38:00 AM	93.00	1,209	7.00	Material/Equipment Breakdown
31-Aug-13	Carlton T.S.	M18	4:23:00 PM	6:09:00 PM	106.00	130,387	7.00	Material/Equipment Breakdown
31-Aug-13	Vine S/S	VE-Total Station	4:23:00 PM	4:28:00 PM	5.00	10,575	7.00	Material/Equipment Breakdown
31-Aug-13	Wellington S/S	WL-6	11:30:00 AM	1:03:00 PM	93.00	837	7.00	Material/Equipment Breakdown
31-Aug-13	Parkdale S/S	PA-F2	8:46:00 PM	9:47:00 PM	61.00	610	7.00	Material/Equipment Breakdown
2-Sep-13	Lake T.S.	121X	11:08:00 PM	2:55:00 AM	227.00	2,043	7.00	Material/Equipment Breakdown
3-Sep-13	Vansickle T.S.	M72	12:22:00 PM	12:31:00 PM	9.00	1,170	7.00	Material/Equipment Breakdown
3-Sep-13	Vansickle T.S.	M72	1:44:00 PM	1:44:00 PM	-	-	7.00	Material/Equipment Breakdown
3-Sep-13	Vansickle T.S.	M72	4:02:00 PM	4:02:00 PM	-	-	7.00	Material/Equipment Breakdown
3-Sep-13	Vansickle T.S.	M72	5:16:00 PM	5:16:00 PM	-	-	7.00	Material/Equipment Breakdown
3-Sep-13	Vansickle T.S.	M72	12:22:00 PM	6:20:00 PM	358.00	10,024	7.00	Material/Equipment Breakdown
4-Sep-13	Spadina S/S	SP-3	10:41:00 AM	11:15:00 AM	34.00	986	7.00	Material/Equipment Breakdown
5-Sep-13	Lake T.S.	1712X	4:05:00 PM	4:25:00 PM	20.00	280	7.00	Material/Equipment Breakdown
7-Sep-13	Wellington S/S	WL-9	8:18:00 PM	9:05:00 PM	47.00	893	7.00	Material/Equipment Breakdown
9-Sep-13	Lake T.S.	111X	12:03:00 PM	3:27:00 PM	204.00	5,865	7.00	Material/Equipment Breakdown
9-Sep-13	Mohawk S/S	MK-1	11:12:00 AM	1:00:00 PM	108.00	4,320	7.00	Material/Equipment Breakdown
10-Sep-13	Beach T.S.	7441X	2:35:00 PM	4:24:00 PM	109.00	1,199	7.00	Material/Equipment Breakdown
10-Sep-13	Elmwood S/S	EL-3	12:00:00 PM	12:50:00 PM	50.00	350	7.00	Material/Equipment Breakdown
10-Sep-13	Winona T.S.	W14X	5:58:00 PM	8:25:00 PM	147.00	4,263	7.00	Material/Equipment Breakdown
11-Sep-13	Nebo T.S.	3521X	11:24:00 AM	11:25:00 AM	1.00	1,120	7.00	Material/Equipment Breakdown
12-Sep-13	Nebo T.S.	3521X	2:02:00 AM	4:57:00 AM	175.00	4,900	7.00	Material/Equipment Breakdown
14-Sep-13	Horning T.S.	4491X	5:53:00 AM	1:07:00 PM	434.00	113,898	7.00	Material/Equipment Breakdown
14-Sep-13	Nebo T.S.	3621X	3:09:00 AM	7:15:00 AM	246.00	48,429	7.00	Material/Equipment Breakdown
21-Sep-13	Nebo T.S.	3642X	12:48:00 PM	1:19:00 PM	31.00	434	7.00	Material/Equipment Breakdown
21-Sep-13	Wentworth S/S	WT-2	3:15:00 AM	6:45:00 AM	210.00	5,250	7.00	Material/Equipment Breakdown
21-Sep-13	Wentworth S/S	WT-12	4:25:00 PM	4:40:00 PM	15.00	915	7.00	Material/Equipment Breakdown
23-Sep-13	Wellington S/S	WL-3	9:27:00 AM	10:33:00 AM	66.00	66,198	7.00	Material/Equipment Breakdown
24-Sep-13	Vansickle T.S.	M41	7:55:00 AM	4:10:00 PM	495.00	2,970	7.00	Material/Equipment Breakdown
25-Sep-13	Bunting T.S.	M77	4:45:00 AM	9:00:00 AM	255.00	255	7.00	Material/Equipment Breakdown
25-Sep-13	Elmwood S/S	EL-8	9:41:00 PM	10:42:00 PM	61.00	976	7.00	Material/Equipment Breakdown
28-Sep-13	Lake T.S.	1831X	9:55:00 AM	10:34:00 AM	39.00	273	7.00	Material/Equipment Breakdown

1-Oct-13	Carlton T.S.	M18	8:51:00 AM	6:18:00 PM	567.00	567	7.00	Material/Equipment Breakdown
1-Oct-13	Parkdale S/S	PA-F1	12:58:00 PM	4:18:00 PM	200.00	3,400	7.00	Material/Equipment Breakdown
2-Oct-13	Lake T.S.	151X	7:09:00 PM	9:09:00 PM	120.00	17,640	7.00	Material/Equipment Breakdown
2-Oct-13	Elmwood S/S	EL-8	3:01:00 PM	7:45:00 PM	284.00	4,828	7.00	Material/Equipment Breakdown
4-Oct-13	Carlton T.S.	M18	11:49:00 PM	1:30:00 AM	101.00	1,313	7.00	Material/Equipment Breakdown
6-Oct-13	Carlton T.S.	M11	4:00:00 PM	8:30:00 PM	270.00	2,700	7.00	Material/Equipment Breakdown
7-Oct-13	Central S/S	CE-4	1:01:00 PM	2:00:00 PM	59.00	1,003	7.00	Material/Equipment Breakdown
12-Oct-13	Nebo T.S.	341X	4:51:00 PM	5:30:00 PM	39.00	39	7.00	Material/Equipment Breakdown
14-Oct-13	Strouds Lane S/S	ST-2	11:38:00 AM	12:20:00 PM	42.00	18,144	7.00	Material/Equipment Breakdown
14-Oct-13	Dundas T.S.	2D2X	11:40:00 AM	12:45:00 PM	65.00	780	7.00	Material/Equipment Breakdown
15-Oct-13	Carlton T.S.	M25	2:22:00 PM	3:40:00 PM	78.00	702	7.00	Material/Equipment Breakdown
17-Oct-13	Mohawk T.S.	0711X	11:30:00 PM	12:59:00 AM	89.00	97,620	7.00	Material/Equipment Breakdown
23-Oct-13	Nebo T.S.	331X	7:23:00 PM	8:24:00 PM	61.00	793	7.00	Material/Equipment Breakdown
24-Oct-13	Lake T.S.	151X	10:14:00 PM	11:45:00 PM	91.00	5,460	7.00	Material/Equipment Breakdown
25-Oct-13	Mohawk T.S.	0711X	12:00:00 PM	12:13:00 PM	13.00	49,088	7.00	Material/Equipment Breakdown
26-Oct-13	Lake T.S.	141X	9:21:00 PM	10:15:00 PM	54.00	648	7.00	Material/Equipment Breakdown
26-Oct-13	Mountain S/S	MT-5	7:54:00 AM	10:09:00 AM	135.00	2,430	7.00	Material/Equipment Breakdown
26-Oct-13	Central S/S	CE-8	6:59:00 AM	11:15:00 AM	256.00	11,776	7.00	Material/Equipment Breakdown
27-Oct-13	Dundas T.S.	2D14X	8:28:00 PM	8:41:00 PM	13.00	364	7.00	Material/Equipment Breakdown
28-Oct-13	Mohawk T.S.	0711X	4:54:00 PM	5:40:00 PM	46.00	460	7.00	Material/Equipment Breakdown
28-Oct-13	Mohawk T.S.	0711X	6:25:00 PM	9:30:00 PM	185.00	1,850	7.00	Material/Equipment Breakdown
28-Oct-13	Vansickle T.S.	M51	3:00:00 PM	5:00:00 PM	120.00	3,000	7.00	Material/Equipment Breakdown
29-Oct-13	Mohawk T.S.	0711X	8:54:00 PM	10:15:00 PM	81.00	3,078	7.00	Material/Equipment Breakdown
31-Oct-13	Mohawk T.S.	0812X	11:08:00 AM	2:08:00 PM	180.00	139,649	7.00	Material/Equipment Breakdown
10-Nov-13	Lake T.S.	1831X	11:08:00 PM	12:31:00 AM	83.00	127,681	7.00	Material/Equipment Breakdown
10-Nov-13	Aberdeen S/S	AB-1	1:55:00 PM	4:45:00 PM	170.00	1,700	7.00	Material/Equipment Breakdown
12-Nov-13	Horning T.S.	481X	6:08:00 PM	6:42:00 PM	34.00	544	7.00	Material/Equipment Breakdown
13-Nov-13	Horning T.S.	471X	3:42:00 PM	5:24:00 PM	102.00	1,020	7.00	Material/Equipment Breakdown
13-Nov-13	Parkdale S/S	PA-F1	11:05:00 PM	11:20:00 PM	15.00	195	7.00	Material/Equipment Breakdown
14-Nov-13	Spadina S/S	SP-2	3:17:00 AM	4:50:00 AM	93.00	1,488	7.00	Material/Equipment Breakdown
14-Nov-13	Wellington S/S	WL-10	3:43:00 AM	5:00:00 AM	77.00	847	7.00	Material/Equipment Breakdown
18-Nov-13	Nebo T.S.	331X	10:49:00 AM	12:25:00 PM	96.00	192	7.00	Material/Equipment Breakdown
20-Nov-13	Glendale T.S.	M16	3:15:00 AM	5:00:00 AM	105.00	420	7.00	Material/Equipment Breakdown
23-Nov-13	Parkdale S/S	PA-F4	2:48:00 PM	3:50:00 PM	62.00	2,666	7.00	Material/Equipment Breakdown
1-Dec-13	Mohawk S/S	MK-10	12:35:00 PM	1:33:00 PM	58.00	870	7.00	Material/Equipment Breakdown
2-Dec-13	Glendale T.S.	M5	3:33:00 PM	4:04:00 PM	31.00	372	7.00	Material/Equipment Breakdown



2-Dec-13	Bunting T.S.	M77	9:04:00 PM	9:04:00 PM	-	-	7.00	Material/Equipment Breakdown
3-Dec-13	Bunting T.S.	M77	9:05:00 PM	12:30:00 PM	925.00	5,455	7.00	Material/Equipment Breakdown
3-Dec-13	Carlton T.S.	M11	11:38:00 AM	11:38:00 AM	-	-	7.00	Material/Equipment Breakdown
3-Dec-13	Carlton T.S.	M11	12:39:00 PM	4:05:00 PM	206.00	702	7.00	Material/Equipment Breakdown
5-Dec-13	Carlton T.S.	M25	4:04:00 PM	4:24:00 PM	20.00	4,000	7.00	Material/Equipment Breakdown
8-Dec-13	Horning T.S.	471X	2:19:00 PM	3:51:00 PM	92.00	237,437	7.00	Material/Equipment Breakdown
9-Dec-13	Bunting T.S.	M62	12:52:00 PM	2:20:00 PM	88.00	2,728	7.00	Material/Equipment Breakdown
9-Dec-13	Horning T.S.	431X	7:05:00 PM	8:40:00 PM	95.00	1,235	7.00	Material/Equipment Breakdown
9-Dec-13	Lake T.S.	1431X	2:12:00 PM	10:40:00 PM	508.00	27,672	7.00	Material/Equipment Breakdown
9-Dec-13	Stirton T.S.	8751WC	9:03:00 AM	9:08:00 AM	5.00	5	7.00	Material/Equipment Breakdown
12-Dec-13	Glendale T.S.	M5	9:41:00 AM	9:41:00 AM	-	4,308	7.00	Material/Equipment Breakdown
12-Dec-13	Glendale T.S.	M23	8:45:00 AM	11:19:00 AM	154.00	70,862	7.00	Material/Equipment Breakdown
19-Dec-13	Ottawa S/S	OT-4	1:15:00 AM	2:25:00 AM	70.00	1,190	7.00	Material/Equipment Breakdown
20-Dec-13	Birmingham T.S.	50X71	5:19:00 AM	6:05:00 AM	46.00	138	7.00	Material/Equipment Breakdown
20-Dec-13	Lake T.S.	1731X	9:40:00 AM	12:00:00 PM	140.00	280	7.00	Material/Equipment Breakdown
20-Dec-13	Vansickle T.S.	M51	2:47:00 AM	2:47:00 AM	-	-	7.00	Material/Equipment Breakdown
21-Dec-13	Wellington S/S	WL-11	1:36:00 AM	1:37:00 AM	1.00	483	7.00	Material/Equipment Breakdown
21-Dec-13	Wellington S/S	WL-11	12:44:00 AM	2:10:00 AM	86.00	860	7.00	Material/Equipment Breakdown
21-Dec-13	Parkdale S/S	PA-F6	11:00:00 PM	11:57:00 AM	777.00	18,340	7.00	Material/Equipment Breakdown
24-Dec-13	Horning T.S.	4481X	7:15:00 AM	1:20:00 AM	1,085.00	14,105	7.00	Material/Equipment Breakdown
25-Dec-13	Cope S/S	CP-3	7:46:00 AM	10:23:00 AM	157.00	77,244	7.00	Material/Equipment Breakdown
25-Dec-13	Dewitt S/S	DW-2 (3-ph)	11:53:00 AM	12:40:00 PM	47.00	2,350	7.00	Material/Equipment Breakdown
28-Dec-13	Dundas T.S.	2D2X	5:44:00 PM	10:12:00 PM	268.00	96,480	7.00	Material/Equipment Breakdown
29-Dec-13	Lake T.S.	1331X	7:49:00 PM	7:06:00 AM	677.00	8,801	7.00	Material/Equipment Breakdown
29-Dec-13	Nebo T.S.	3621X	6:58:00 PM	12:08:00 AM	310.00	3,720	7.00	Material/Equipment Breakdown
31-Dec-13	Dundas T.S.	2D13X	3:30:00 PM	3:45:00 PM	15.00	165	7.00	Material/Equipment Breakdown
31-Dec-13	Wentworth S/S	WT-5	3:39:00 PM	4:15:00 PM	36.00	864	7.00	Material/Equipment Breakdown





## **2-AMPCO-9y\_Attch\_IFMA Benchmarks Report**



Space and Project Management

# BENCHMARKS

Research Report #28

INTERNATIONAL  
FACILITY  
MANAGEMENT  
ASSOCIATION

### ABOUT THIS REPORT

Each year, usually in the spring, IFMA issues a multi-page benchmarking survey to its members. One question posed in the survey each year is, "What topics or areas do you have an interest in benchmarking?" The responses have been consistent throughout the years: operational costs, space, operations and maintenance, moves and facility management staffing. Instead of conducting one long survey to cover all of these areas as in years past, IFMA decided in 2001 to develop three different benchmarking surveys and rotate the series every three years. This year's survey covers space and project management, which includes move management.

An IFMA survey committee reviewed questions posed in the 2002 Project Management Benchmarks survey and developed new questions to better match today's practices. The 13-page survey was mailed to IFMA professional members in the United States and Canada in May 2006. Members were sent multiple e-mail reminders which directed them to a link on IFMA's Web site where they could download the survey. More than 660 surveys were returned by October 2006. After incomplete and duplicate surveys were removed, 647 surveys remained usable for analysis.

Findings are discussed in the sections that follow. Statistically significant findings are integrated in the text of the report. Additional copies of this report may be ordered through IFMA's bookstore. For those seeking information not presented in this report, one can order the database used to create this report. The database can be obtained in its entirety in Microsoft Excel by contacting IFMA's research department. The cost of the database varies based upon survey participation and membership. Please see the back cover of this report to determine pricing.

### ABOUT IFMA

The International Facility Management Association is the largest and most widely recognized professional association for facility management, supporting more than 18,000 members. The Association's members are represented in 124 chapters, 15 councils and one Special Interest Group (SIG), in 60 countries worldwide. Globally, IFMA certifies facility managers, conducts research, provides educational programs, recognizes facility management degree and certificate programs and produces World Workplace, the largest facility management-related conference and exposition. For more information, visit [www.ifma.org](http://www.ifma.org).

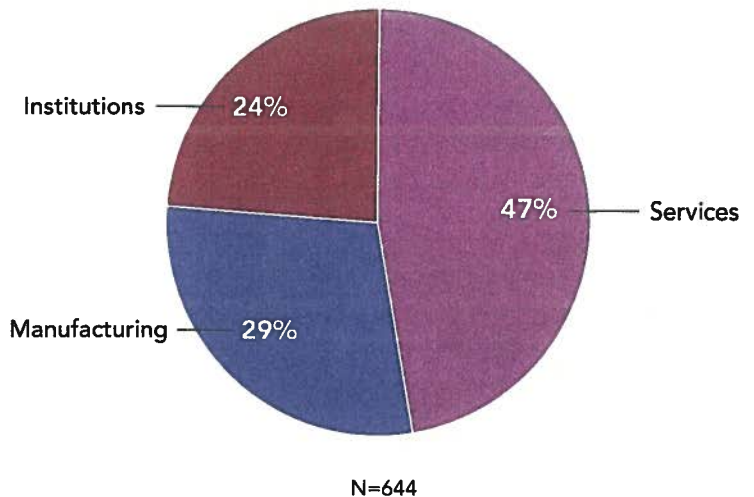
### ABOUT IFMA RESEARCH

IFMA conducts a variety of research programs that serve to strengthen the knowledge and skills of facility management professionals while advancing the facility management profession itself. From industry surveys to forecasting to best practice forums, IFMA's research department draws on the practices and opinions of facility management professionals and educators, covering topics vital to the day-to-day operations of facility professionals and the built environment in general. Whether the focus is on industry averages, benchmarking statistics or the latest on trends in the workplace, IFMA is an information leader for the facility management profession.

### INDUSTRIES REPRESENTED

Each IFMA survey includes a question asking respondents to select an industry for which they are reporting so that data can be broken out by industry sectors. It seems like an easy question, but for some respondents it can be difficult because of the multitude of products or services some companies provide. IFMA verifies each survey, usually by researching the company's Web site to confirm the industry category selected is correct.

This year, a new category was added for government organizations such as transit districts and other quasi-governmental entities. The balance of the 32 categories has been used in previous IFMA reports. These industry categories are used throughout the report. In some cases, there were not a sufficient number of responses from a specific category, so the category is not listed. The breakdown of the three main sectors – services (47%), manufacturing (29%) and institutions (24%) – is the same as in previous reports.



#### Services

- Banking – Consumer, Commercial, Savings, Credit Unions
- Investment - Securities and Investment Services
- Insurance - Life, Property and Casualty, Health, Other
- Information Services - Data Processing, Information Services, E-Commerce
- Energy Utilities
- Media – Entertainment, Broadcasting, Publishing
- Health Care
- Hotel – Hotel, Hospitality-Related
- Professional - Accounting, Engineering, Law, Consulting
- Telecommunications
- Trade - Wholesale, Retail
- Transportation
- Other Services

#### Manufacturing/Production

- Aircraft - Aircraft, Industrial Equipment
- Building - Materials, Construction
- Chemicals - Chemicals, Pharmaceuticals
- Computer - Hardware, Software
- Consumer Products - Food, Beverage or Related
- Electronics - Electronics, Telecommunications Equipment
- Energy/Mining - Energy-related Mining or Distribution
- Furnishings
- Medical Equipment
- Motor Vehicles
- Other Manufacturing

#### Institutions

- Education
- Federal - Federal Government
- State/Province - State, Provincial Government
- City/County - City, County Government
- Special Districts/Quasi-Government
- Research
- Association
- Religious, Charitable
- Other Institutions



## DESCRIPTION OF FACILITIES

### Service Industries Represented (47%)

Services	N	Percentage of Total Sample
Insurance	40	6%
Banking	37	6%
Professional	37	6%
Trade	35	5%
Investment Services	28	4%
Information Services	26	4%
Media	23	4%
Health Care	23	4%
Utilities	22	3%
Telecommunications	12	2%
Transportation	9	1%
Hotel	8	1%
Other Services	4	1%

### Manufacturing Industries Represented (29%)

Manufacturing	N	Percentage of Total Sample
Electronics	36	6%
Chemical	34	5%
Consumer Products	30	5%
Computer: Hardware/Software	28	4%
Aircraft	20	3%
Medical Equipment	15	2%
Energy/Mining	8	1%
Building	6	1%
Motor Vehicles	5	1%
Furnishings	3	0.5%
Other Manufacturing	2	0.5%

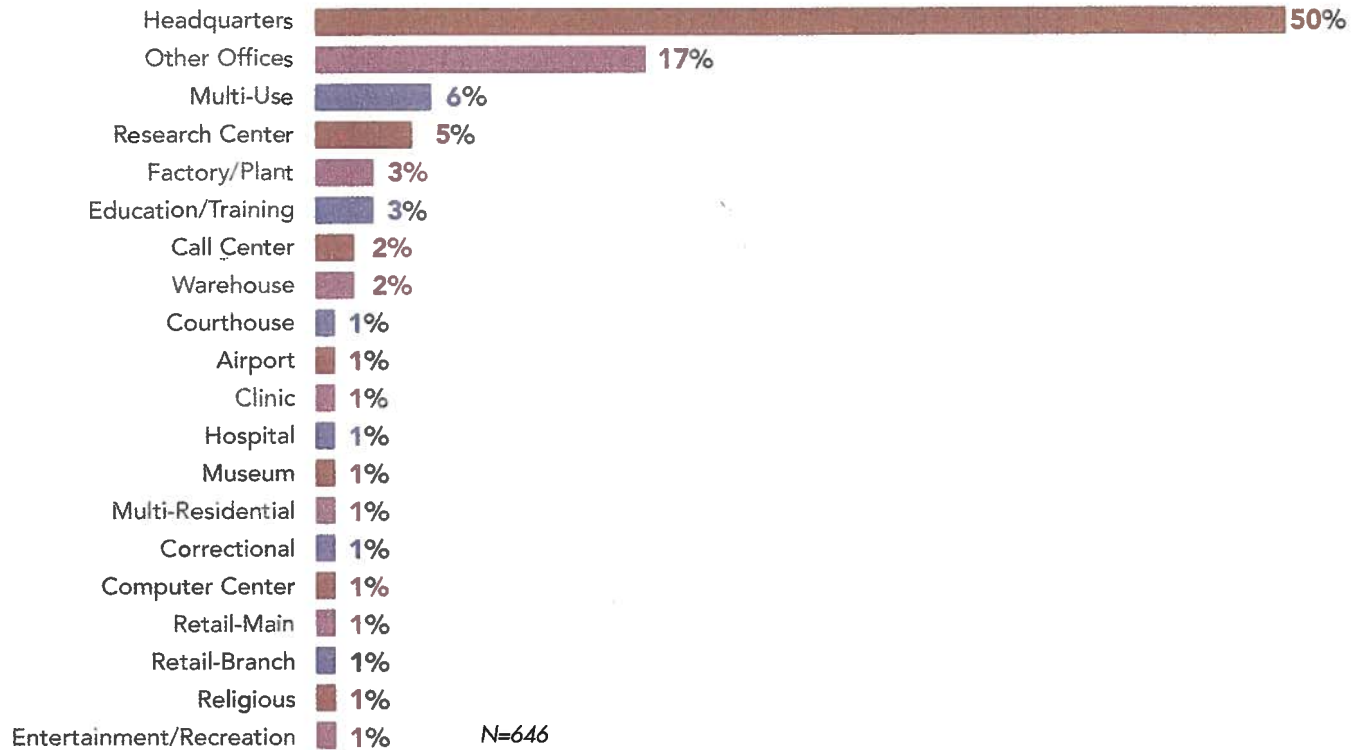
### Institutions Represented (24%)

Institutions	N	Percentage of Total Sample
City/County Government	32	5%
Education	27	4%
Association	19	3%
Federal Government	16	3%
Religious/Charitable	16	2%
State/Province Government	14	2%
Special District/Quasi-Government	13	2%
Research	12	2%
Other Institution	7	1%

## DESCRIPTION OF FACILITIES

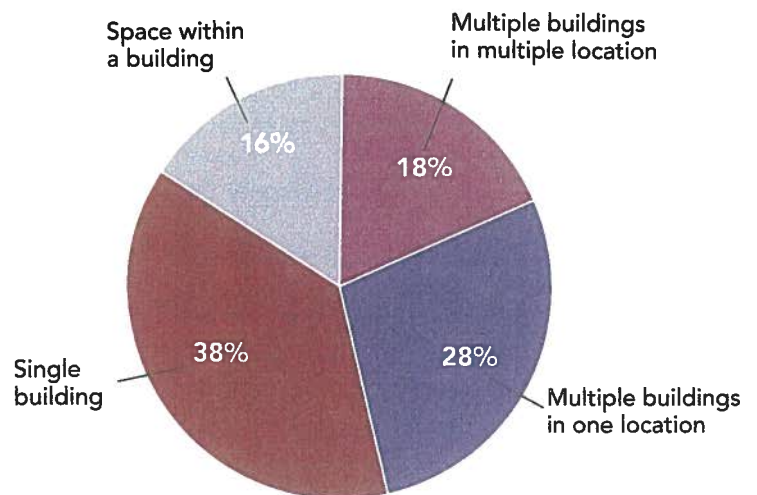
### FACILITY USE

In addition to industry, most of the statistics in this report are broken out by facility type. Half of the facility data is derived from headquarter office facilities. Another 17% represent regional, branch or other types of offices. There are 19 other types of facilities represented in this report including a new category, entertainment and recreational facilities. Six percent of the sample is categorized as multi-use facilities. These represent facilities with a mixed-use of space, mostly containing some office space but also housing manufacturing, training, labs or warehouse space.



### Facility Description

To facilitate benchmarking comparisons, respondents were asked to report on space within a building or one single use facility; however, aggregate reports for multiple facilities were allowed. More than half (54%) fit the category of a single space, but 28% of the responses were from campus sites with two or three buildings or entire portfolios of buildings (18%).



## **SECTION TWO**

### **SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT**

#### **BUILDING EXTERIOR GROSS AREA**

Owned vs. Leased by Size of Facility

#### **FACILITY RENTABLE AREA (RENTABLE)**

Owned vs. Leased by Size of Facility

#### **FACILITY USABLE AREA (USABLE)**

Owned vs. Leased by Size of Facility

#### **FACILITY ASSIGNABLE AREA (ASSIGNABLE)**

Owned vs. Leased by Size of Facility

#### **GROSS AND RENTABLE BY INDUSTRY TYPE**

#### **GROSS AND RENTABLE BY FACILITY USE**

#### **USABLE AND ASSIGNABLE BY INDUSTRY TYPE**

#### **USABLE AND ASSIGNABLE BY FACILITY USE**

#### **SQUARE FOOTAGE BY OCCUPANT**



## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

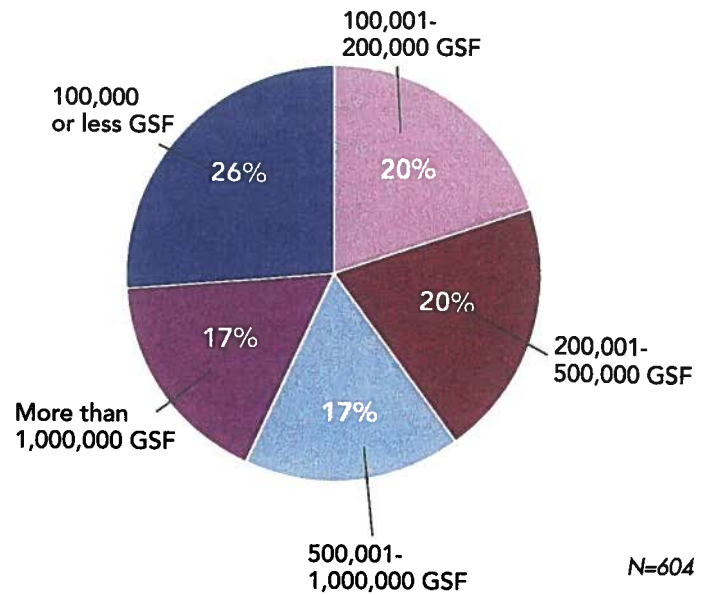
### BUILDING EXTERIOR GROSS AREA (GROSS)

Since this report focuses on space management, a space measurement worksheet and diagram incorporating IFMA's standard, ASTM E-1836-01, was included in the survey booklet. This standard defines building exterior gross area or "gross" as the sum of the floor areas on all levels of a building that are totally enclosed within the building. It includes facility interior gross area, exterior walls, major vertical penetrations, void areas and interior parking space. To learn more about these building elements, see the definitions at the beginning of the report.

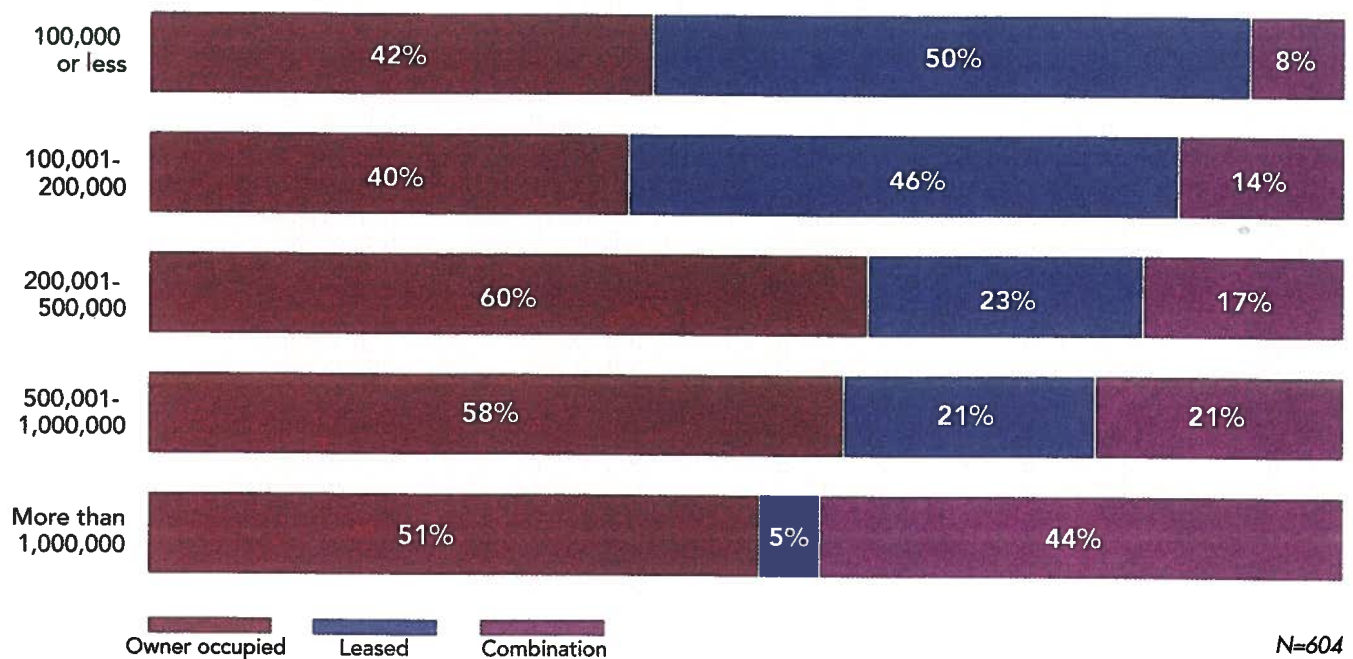
#### Gross Area

Percentile	Square Feet
99	8,092,414
95	2,957,814
90	1,670,077
75	731,897
50	250,000
25	99,250
10	49,198
5	26,500
1	8,100
Mean	776,388

N=604



### Owned vs. Leased by Size of Facility



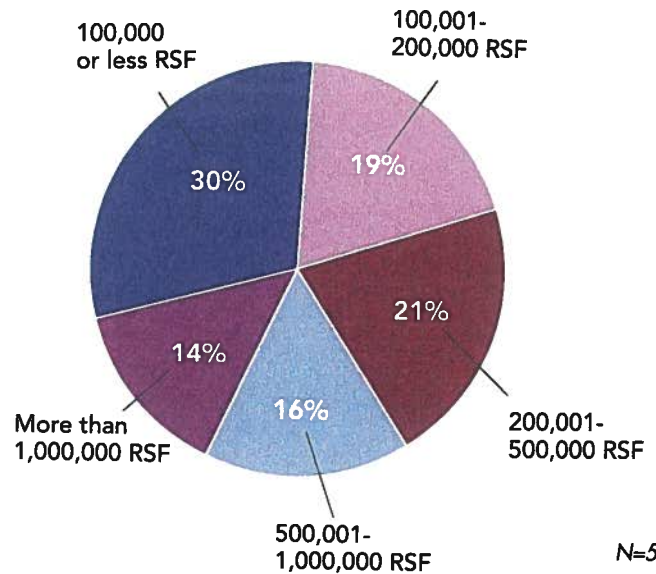
## FACILITY RENTABLE AREA (RENTABLE)

A subset of gross is facility rentable feet (Rentable or RSF). In the context of the ASTM/IFMA standard, the term "rentable," has nothing to do with leased space. Rentable area exists in both leased and owned properties. This term has a tendency to confuse people, but it will likely be changed in a subsequent version of the ASTM standard. To measure rentable area, subtract major vertical penetrations, interior parking space, exterior walls and void areas from gross area.

## Assignable Area

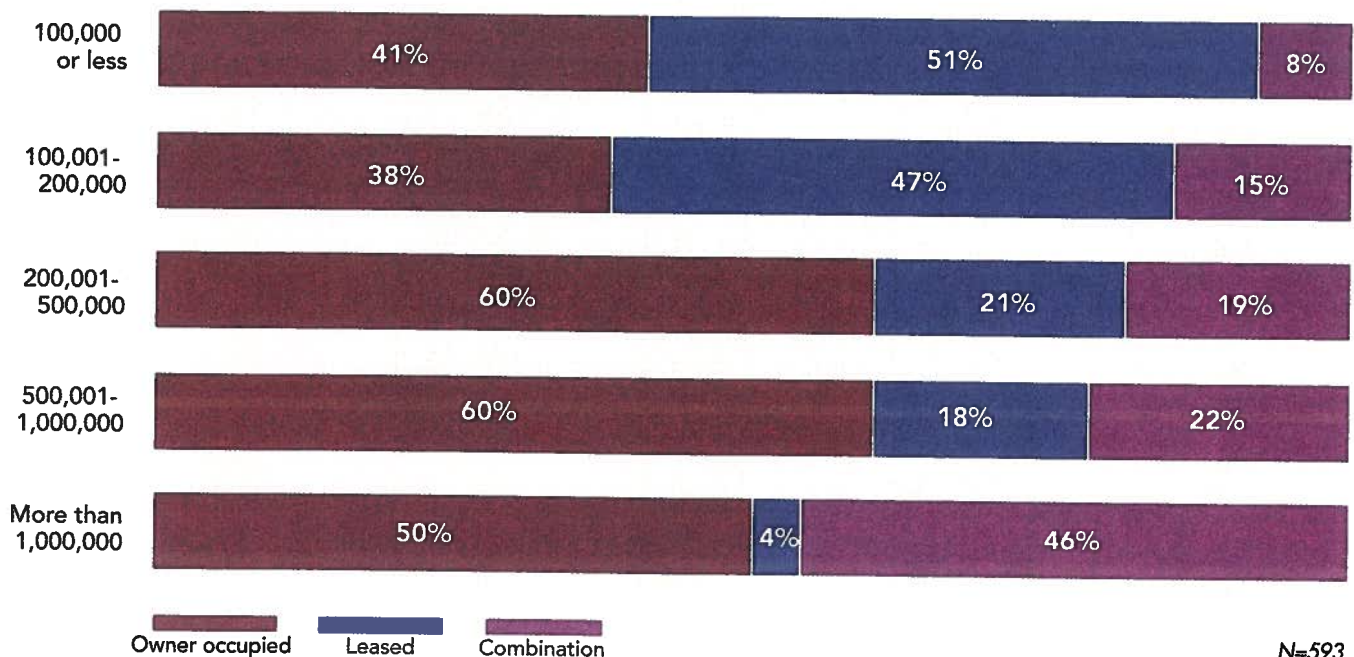
Percentile	Square Feet
99	6,107,997
95	2,225,776
90	1,387,787
75	620,873
50	210,000
25	89,500
10	41,400
5	22,100
1	6,214
Mean	627,982

N=593



N=593

## Owned vs. Leased by Size of Facility



N=593



## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

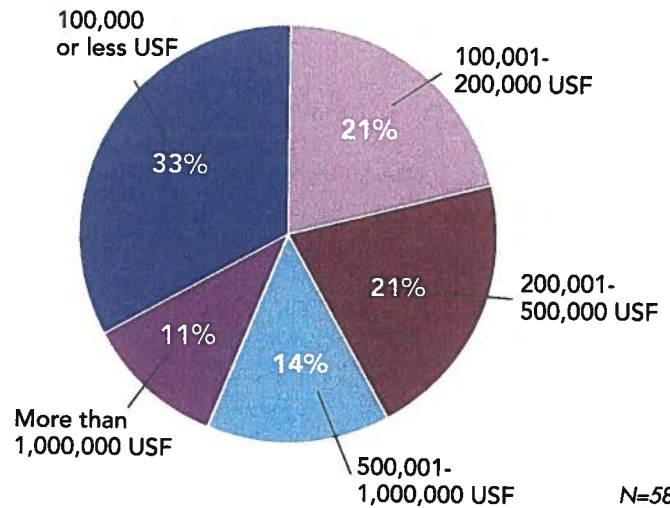
### FACILITY USABLE AREA (USABLE)

Facility usable area is space that can be assigned to occupant groups. To derive usable square feet, subtract the primary circulation, building core and service areas from the facility rentable area.

#### Usable Area

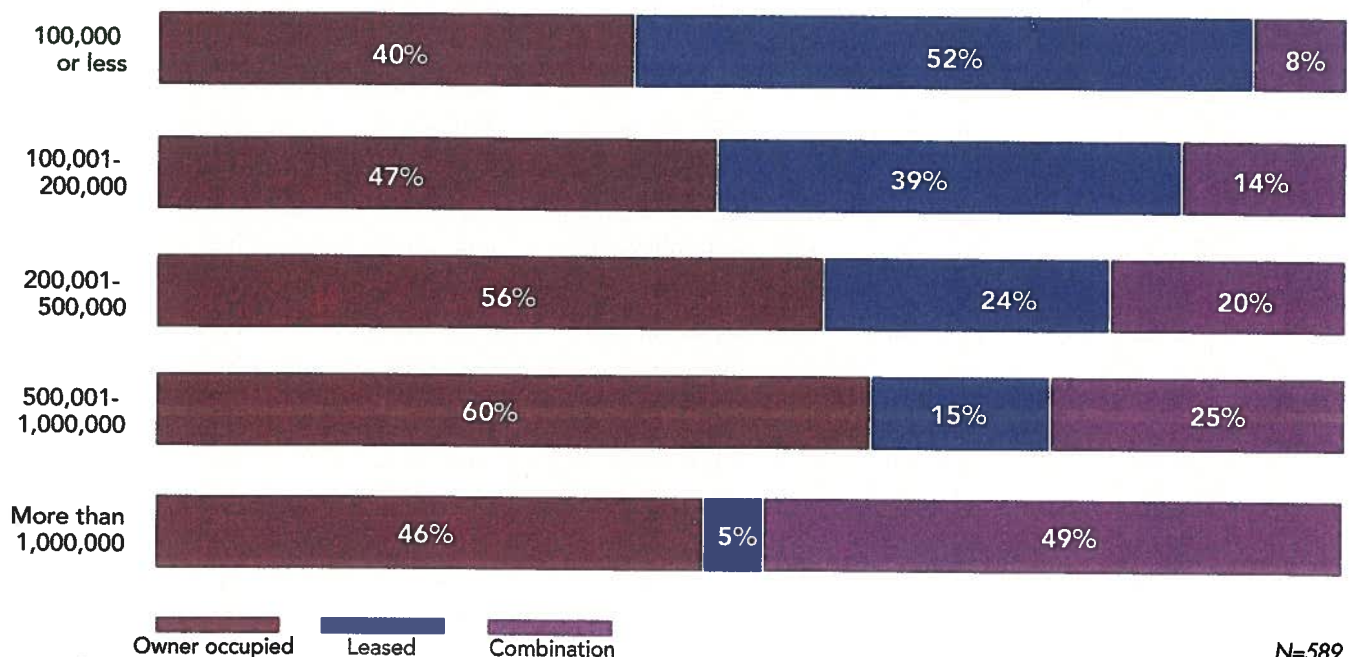
Percentile	Square Feet
99	5,895,239
95	1,986,250
90	1,178,329
75	513,354
50	173,841
25	79,678
10	36,000
5	21,591
1	5,704
Mean	544,874

N=589



N=589

### Owned vs. Leased by Size of Facility



N=589

## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

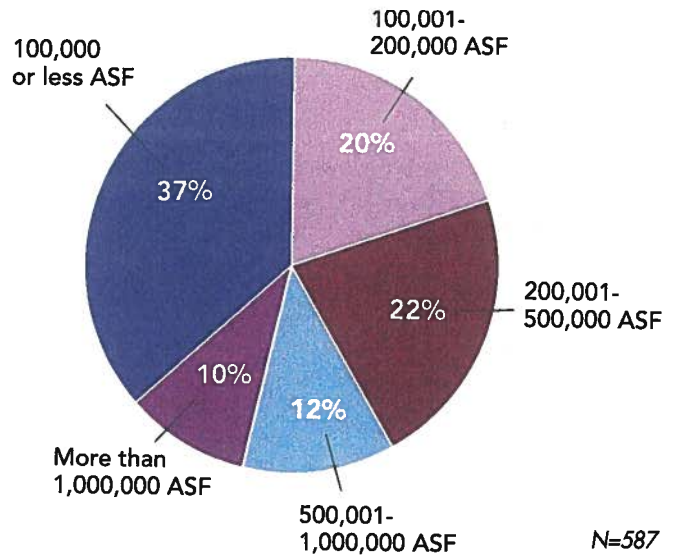
### FACILITY ASSIGNABLE AREA (ASSIGNABLE)

Not all of the respondents were able to provide facility assignable area, for this space measurement usually requires a CAFM or CAD system to derive. It is calculated by measuring the portions of the floor used to house personnel, furniture, support areas and common support areas.

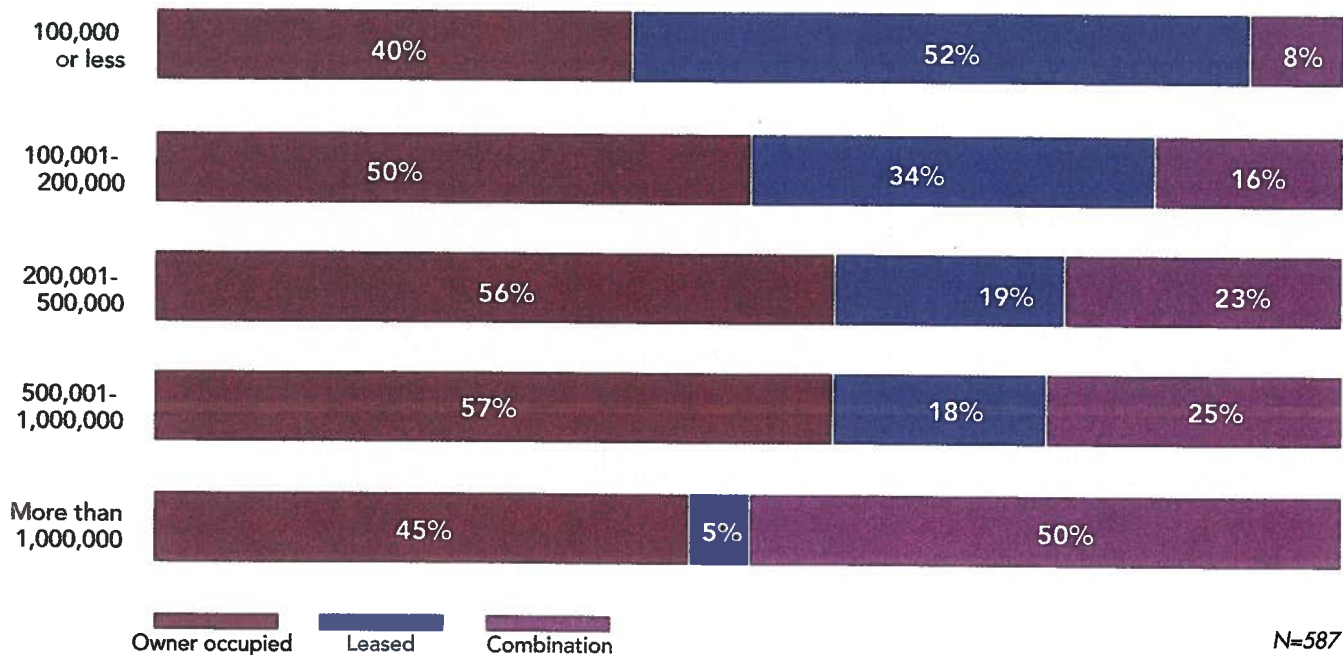
#### Assignable Area

Percentile	Square Feet
99	5,126,842
95	1,700,000
90	1,009,112
75	450,000
50	160,000
25	72,766
10	31,930
5	19,023
1	4,762
Mean	491,823

N=587



### Owned vs. Leased by Size of Facility





## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### GROSS AND RENTABLE BY INDUSTRY TYPE

	Industry Type	N	Gross Sq. Ft.		Rentable Sq. Ft.	
			Mean	Median	Mean	Median
SERVICES	Banking	31	245,187	120,968	208,814	115,250
	Investment Services	27	773,217	468,532	613,465	362,786
	Insurance	38	450,038	172,000	394,975	160,258
	Information Services	26	421,001	101,700	367,964	99,829
	Utilities	21	1,105,113	700,700	731,749	601,209
	Media	20	538,288	365,067	440,849	292,545
	Health Care	21	866,989	538,316	670,728	425,000
	Hotel/Hospitality	7	473,194	230,000	360,861	210,000
	Professional	36	256,317	135,959	368,879	93,225
	Telecommunications	12	229,210	111,073	211,391	108,130
	Trade	33	649,940	290,940	558,187	258,646
	Transportation	8	230,068	244,000	185,431	92,640
	Other Services	3	300,000	100,000	220,000	85,000
MANUFACTURING	Aircraft/Industrial	18	1,300,218	408,131	1,231,617	392,338
	Building/Construction	5	295,653	166,000	275,246	164,000
	Motor Vehicles	3	1,902,500	740,000	1,878,743	697,486
	Chemical/Pharmaceutical	31	535,967	326,080	484,369	300,000
	Consumer Products	26	569,297	228,000	528,567	195,978
	Computer: Hardware/Software	26	724,323	250,000	676,150	248,000
	Electronics	34	1,235,498	332,464	1,118,169	308,890
	Energy/Mining	7	804,016	586,837	743,206	533,225
	Furnishings	3	225,638	180,000	221,221	174,563
	Medical Equipment	14	500,536	314,492	479,117	309,500
	Other Manufacturing	2	224,091	224,091	211,897	211,897
INSTITUTIONS	Education	23	2,981,271	829,018	1,941,173	650,000
	Federal Government	14	2,095,375	715,931	1,903,386	634,591
	State/Province Government	13	1,089,114	321,646	865,176	286,345
	City/County Government	26	689,667	188,000	615,407	165,000
	Special District/Quasi- Government	13	557,544	620,853	469,987	453,000
	Research	12	1,755,337	251,400	1,312,063	736,428
	Association	17	158,871	75,500	134,672	63,023
	Religious/Charitable	14	347,545	75,500	105,368	68,000
	Other Institution	5	234,849	120,000	207,994	65,864

## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### GROSS AND RENTABLE BY FACILITY USE

Facility Use	N	Gross Sq. Ft.		Rentable Sq. Ft.	
		Mean	Median	Mean	Median
Headquarters	301	546,962	225,000	467,829	192,500
Non-HQ	99	583,474	250,000	507,124	191,516
Multi-Use	38	1,438,715	332,040	1,326,240	309,500
Research Center	30	1,176,736	350,183	979,113	284,500
Education/Training	21	3,172,991	680,000	1,932,690	614,059
Factory	17	1,178,967	333,000	1,479,856	300,000
Call Center	16	629,388	117,000	525,445	115,750
Warehouse	16	421,450	125,000	376,542	117,500
Hospital	11	1,186,201	1,000,000	1,002,917	975,000
Multi-Residential	7	1,049,802	600,000	346,000	425,000
Correctional	7	151,637	136,000	151,317	140,129
Retail - Main	6	547,722	440,000	337,547	220,000
Entertainment/Recreation	6	753,980	603,623	716,020	592,100
Museum	5	943,775	432,432	851,211	413,193
Computer Center	5	123,300	80,000	120,600	70,000
Retail - Branch	5	95,622	25,000	93,860	24,100
Courthouse	4	1,071,342	1,094,684	948,684	947,367
Clinic	4	173,153	71,500	167,574	64,398



## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### USABLE AND ASSIGNABLE BY INDUSTRY TYPE

	Industry Type	N	Usable Sq. Ft.		Assignable Sq. Ft.	
			Mean	Median	Mean	Median
SERVICES	Banking	31	186,983	108,126	175,059	95,000
	Investment Services	27	535,558	291,628	440,808	237,548
	Insurance	38	340,975	159,199	297,854	149,500
	Information Services	26	312,874	93,000	275,746	86,500
	Utilities	17	645,697	460,245	540,327	354,000
	Media	9	361,701	283,800	329,804	259,500
	Health Care	21	564,126	410,000	529,837	400,000
	Hotel/Hospitality	7	300,379	205,000	290,927	203,000
	Professional	36	176,859	98,074	169,406	86,902
	Telecommunications	12	195,587	89,130	154,239	73,127
	Trade	33	495,663	201,300	444,396	144,234
	Transportation	8	133,562	812,205	115,240	81,180
	Other Services	3	210,000	85,000	208,333	85,000
MANUFACTURING	Aircraft/Industrial	18	1,020,607	330,990	895,987	304,766
	Building/Construction	5	259,773	16,000	237,432	80,000
	Motor Vehicles	3	2,134,667	294,000	2,131,000	293,000
	Chemical/Pharmaceutical	31	327,163	243,045	299,604	226,406
	Consumer Products	26	439,175	181,498	379,435	171,000
	Computer: Hardware/Software	26	570,880	208,750	516,705	200,000
	Electronics	34	970,879	255,250	893,854	216,500
	Energy/Mining	7	662,394	479,620	510,423	231,126
	Furnishings	3	191,954	98,381	167,238	26,935
	Medical Equipment	14	42,4761	300,000	381,399	295,000
	Other Manufacturing	2	193,980	193,980	181,480	181,480
INSTITUTIONS	Education	23	1,750,605	517,102	1,583,223	400,000
	Federal Government	14	1,745,082	528,649	1,660,193	500,000
	State/Province Government	13	762,938	210,086	701,521	189,578
	City/County Government	26	559,349	156,841	500,794	150,000
	Special District/Quasi-Government	13	288,246	298,061	255,481	215,730
	Research	8	1,146,644	728,740	1,078,267	664,140
	Association	17	122,231	61,000	124,118	62,125
	Religious/Charitable	14	95,092	63,125	91,211	55,000
	Other Institution	5	192,687	55,228	172,729	100,000

## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### USABLE AND ASSIGNABLE BY FACILITY USE

Facility Use	N	Usable Sq. Ft.		Assignable Sq. Ft.	
		Mean	Median	Mean	Median
Headquarters	301	397,642	161,877	355,223	149,900
Non-HQ	99	433,155	167,530	377,810	150,000
Multi-Use	38	1,179,659	265,000	1,095,948	264,750
Research Center	30	829,357	225,797	791,884	207,110
Education	21	1,766,137	517,102	1,598,113	387,826
Factory	17	1,378,812	230,000	125,611	222,000
Call Center	16	471,866	112,500	426,000	109,500
Warehouse	16	279,236	92,160	270,166	92,110
Hospital	11	841,901	862,500	677,016	640,000
Multi-Residential	7	410,000	330,000	400,000	318,333
Correctional	7	135,088	133,370	130,298	127,500
Retail-Main	7	311,098	200,000	242,781	126,000
Entertainment/Recreation	6	559,120	411,600	506,823	392,116
Museum	5	645,743	55,228	560,050	40,836
Retail-Branch	5	105,975	73,050	102,800	69,200
Courthouse	4	841,219	818,938	775,000	750,000
Clinic	4	166,573	62,897	165,074	60,398
Data Center	2	126,325	70,400	125,825	69,900



## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### SQUARE FOOTAGE PER OCCUPANT

By dividing gross, rentable, usable and assignable by the site population (number of occupants) one can derive space per person. Overall, square footage per person has stabilized, but there are some industries and facility types in which there has been a minor decrease in space.

Percentile	Square Foot Per Occupant			
	Gross	Rentable	Usable	Assignable
99	870	842	780	768
95	706	697	645	626
90	643	600	536	520
75	484	438	382	361
50	371	333	291	257
25	277	250	216	193
10	203	188	160	130
5	162	152	124	94
1	71	59	53	40
Mean	396	362	318	295

Industry Type	N	Gross Sq. Ft.		Rentable Sq. Ft.		
		Mean	Median	Mean	Median	
SERVICES	Banking	27	389	375	376	361
	Investment Services	25	328	319	294	283
	Insurance	39	324	300	294	272
	Information Services	23	319	320	293	286
	Utilities	16	425	401	401	329
	Media	16	375	336	349	301
	Health Care	17	395	343	353	305
	Hotel/Hospitality	8	335	325	293	260
	Professional	27	368	350	339	333
	Telecommunications	12	357	341	335	294
	Trade	24	360	370	351	315
	Transportation	7	286	333	265	261
	MANUFACTURING	Aircraft/Industrial	18	425	423	411
Building/Construction		5	577	635	546	635
Motor Vehicles		3	314	300	285	300
Chemical/Pharmaceutical		28	524	484	476	437
Consumer Products		26	430	412	392	370
Computer: Hardware/Software		25	404	368	396	352
Electronics		30	409	403	386	385
Energy Related		6	373	369	346	331
Medical Equipment		13	348	365	345	352
INSTITUTIONS	Education	19	362	281	350	262
	Federal Government	13	437	430	381	348
	State/Province Government	11	445	340	370	299
	City/County Government	25	434	422	373	352
	Special District/Quasi-Government	12	423	403	364	357
	Research	12	531	546	437	375
	Association	16	392	366	345	323
	Religious/Charitable	12	393	314	317	277



# SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

## SQUARE FOOTAGE PER OCCUPANT

Facility Use	N	Gross Sq. Ft.		Rentable Sq. Ft.	
		Mean	Median	Mean	Median
Headquarters	276	382	363	348	329
Non-HQ	87	383	354	345	324
Multi-Use	32	429	420	405	389
Research Center	26	569	604	526	519
Training Center	18	390	284	345	264
Factory	14	516	502	507	496
Call Center	14	262	189	224	171
Correctional	7	236	200	173	180
Hospital	6	310	319	272	263
Multi-Residential	5	627	706	708	708
Data Center	5	505	394	474	394
Warehouse	5	512	523	494	517
Entertainment/Recreation	5	241	139	243	182

	Industry Type	N	Usable Sq. Ft.		Assignable Sq. Ft.	
			Mean	Median	Mean	Median
SERVICES	Banking	28	336	283	315	273
	Investment Services	26	250	238	225	221
	Insurance	38	257	234	232	214
	Information Services	24	257	244	236	226
	Utilities	18	342	291	290	246
	Media	18	293	250	272	238
	Health Care	16	335	287	318	276
	Hotel/Hospitality	7	245	201	240	194
	Professional	31	306	301	286	250
	Telecommunications	12	307	260	274	222
	Trade	26	304	268	264	246
	Transportation	7	245	250	229	250
MANUFACTURING	Aircraft/Industrial	18	339	304	313	286
	Building/Construction	5	521	634	464	625
	Motor Vehicles	3	275	300	285	266
	Chemical/Pharmaceutical	30	397	345	378	353
	Consumer Products	26	328	296	294	250
	Computer: Hardware/Software	26	349	308	315	275
	Electronics	30	330	305	292	255
	Energy Related	6	310	298	273	247
	Medical Equipment	14	303	313	287	281
INSTITUTIONS	Education	18	289	237	294	230
	Federal Government	13	307	269	293	250
	State/Province Government	11	323	260	320	250
	City/County Government	23	364	300	360	333
	Special District/Quasi-Government	13	328	275	305	267
	Research	12	375	321	352	308
	Association	17	319	300	317	283
	Religious/Charitable	12	305	288	280	271

## SIZE OF FACILITIES AND SQUARE FOOTAGE PER OCCUPANT

### SQUARE FOOTAGE PER OCCUPANT

Facility Use	N	Usable Sq. Ft.		Assignable Sq. Ft.	
		Mean	Median	Mean	Median
Headquarters	289	306	279	280	247
Non-HQ	87	299	290	285	260
Multi-Use	34	367	344	340	286
Research Center	29	438	399	416	357
Training Center	18	313	257	295	239
Factory	15	429	468	399	412
Call Center	15	225	152	244	160
Correctional	6	151	166	146	165
Warehouse	6	470	468	455	461
Hospital	5	230	229	224	214
Data Center	4	447	416	437	412
Entertainment/Recreation	4	214	136	208	131



## **SECTION THREE**

### **SPACE PLANNING AND UTILIZATION**

#### **TRACKING SPACE**

Purposes of Tracking Space

#### **SPACE ALLOCATION POLICIES**

#### **OFFICE TYPE**

Office Type by Worker

#### **OFFICE SIZE**

#### **SHARED WORKSTATIONS**

#### **NON-DEDICATED WORKSPACE**

#### **WORKSTATION UTILIZATION**

#### **VACANCY RATES**

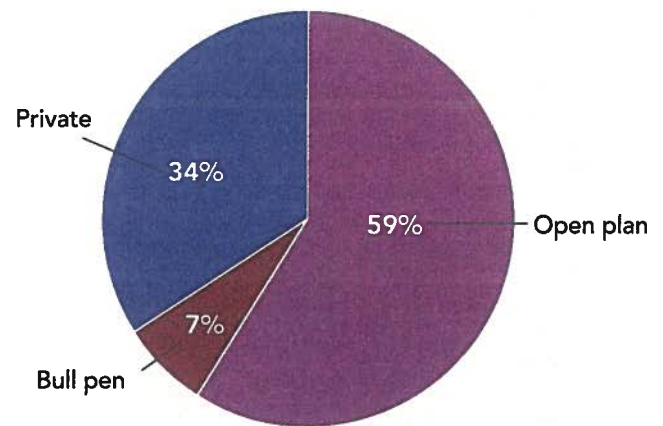
#### **COMMON SUPPORT SPACE**

#### **OFF-SITE STORAGE**

#### **CONFERENCE ROOMS**

## OFFICE TYPE

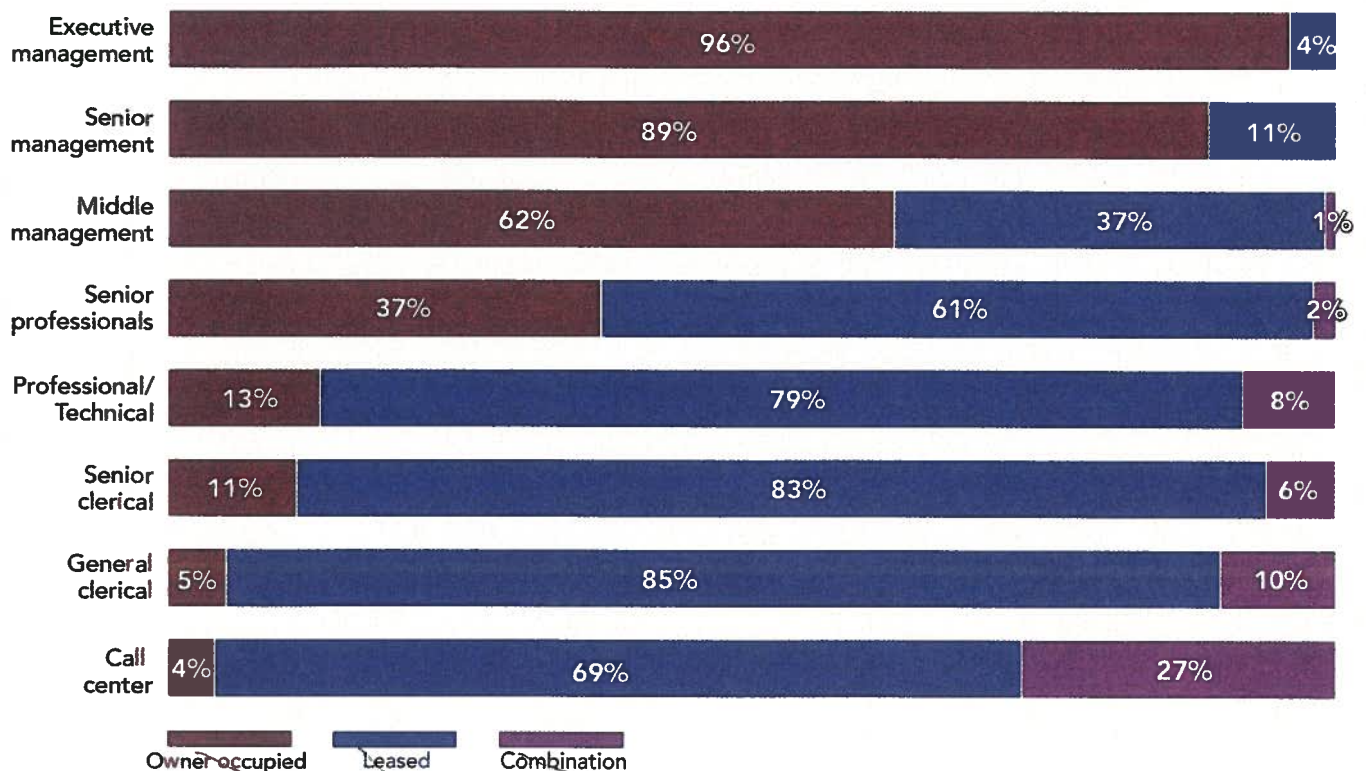
For 20 years IFMA has monitored the trend of converting private offices to workstations with open partitions and no partitions. The chart to the right shows the current ratio of private offices to open offices and bullpen seating. Since this measurement was taken in 2002, the overall ratio has remained about the same. However, when looking at this same ratio for different types of workers (see chart below), there are some minor changes.



N=587

## Office Type by Worker

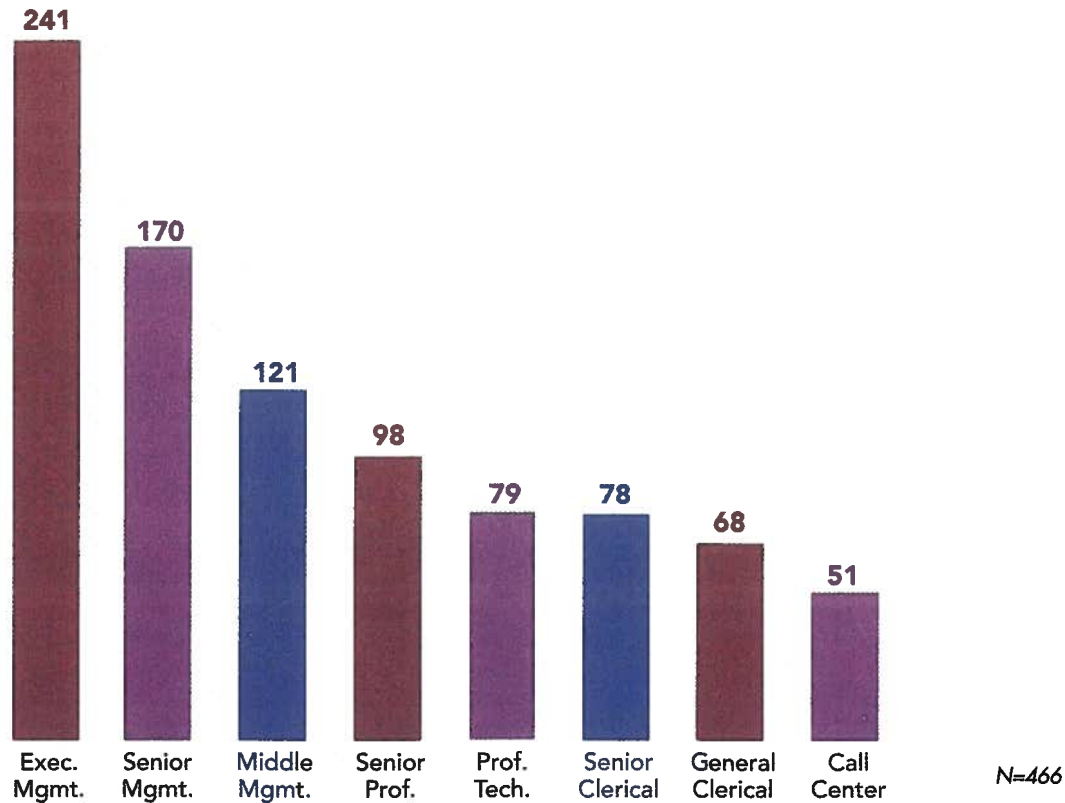
This year's results reflect a minor switch in that several positions are moving back into private offices. The percentage increase is minor, a percentage point or two since IFMA's 2002 report. The percentage of senior professionals moving back to private settings exhibited the greatest increase, from 30% 2002 to 37% in 2006. One in four call center employees (27%) work in a setting with no partitions.



N=596

## OFFICE SIZE

Although a few more workers may be assigned to a private office, the space allotted hasn't changed much. Comparing 2006 office size standards to 2002, there is virtually no change.



## Office Size by Industry

Facility Use	N	Exec. Mgmt.	Senior Mgmt.	Middle Mgmt.	Senior Prof.	Prof. Tech.	Senior Clerical	General Clerical	Call Center
Headquarters	264	244	172	119	98	79	78	68	51
Non-HQ	77	249	176	120	93	73	71	68	50
Multi-Use	29	248	176	127	104	82	82	79	61
Research Center	25	241	151	119	95	80	65	55	62
Factory	12	249	158	131	102	74	83	74	54
Education	14	201	176	135	98	76	92	65	62
Hospital	7	151	144	100	115	89	80	53	41
Multi-Residential	5	332	165	133	96	144	108	106	100
Call Center	8	228	175	123	111	64	62	56	32
Correctional	6	211	140	87	64	52	69	56	36
Data Center	5	198	149	113	61	77	67	67	25
Retail-Main	5	266	187	151	94	81	71	67	56
Warehouse	9	255	169	148	122	78	74	64	49



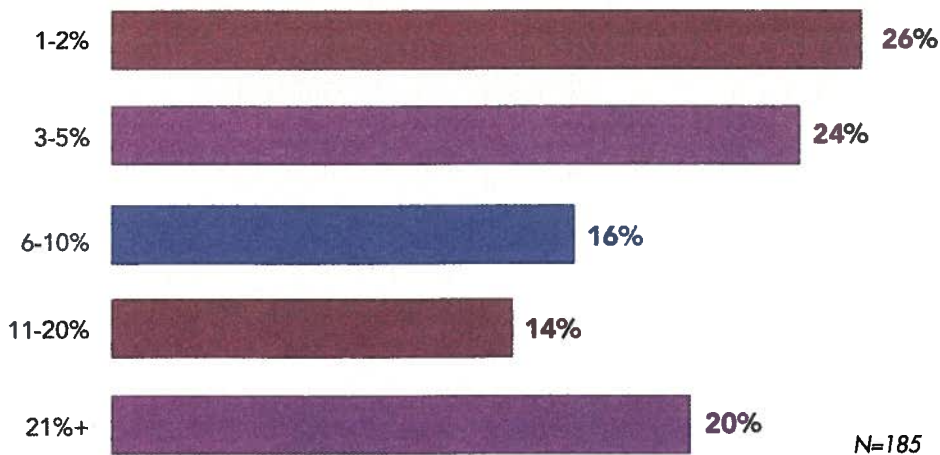
## Office Size by Facility Use

Industry	N	Exec. Mgmt.	Senior Mgmt.	Middle Mgmt.	Senior Prof.	Prof. Tech.	Senior Clerical	General Clerical	Call Center	
SERVICES	Banking	26	253	177	128	93	77	81	73	46
	Investment Services	24	236	180	121	74	64	57	52	42
	Insurance	37	239	142	103	80	65	70	59	43
	Information Services	21	201	169	110	78	81	70	57	48
	Utilities	17	267	190	133	106	86	83	78	59
	Media	19	246	173	123	96	85	77	64	51
	Health Care	13	218	161	125	99	89	81	69	49
	Hotel/Hospitality	6	248	149	88	58	59	61	58	41
	Professional	31	205	155	111	93	72	76	71	52
	Telecommunications	11	270	177	103	76	63	67	57	38
	Trade	29	262	156	113	93	62	66	60	38
	Transportation	7	242	188	84	66	52	61	54	32
MANUFACTURING	Aircraft/Industrial	18	296	193	151	115	76	85	68	62
	Building/Construction	4	335	234	149	130	69	73	69	52
	Motor Vehicles	5	234	135	114	87	82	64	61	48
	Chemical/Pharmaceuticals	29	215	146	110	96	67	80	66	58
	Consumer Products	25	223	149	105	89	69	68	64	56
	Computer: Hardware/Software	22	212	163	122	98	74	82	77	58
	Electronics	27	240	172	117	99	79	75	70	58
	Energy Related	5	337	255	192	154	123	111	94	72
	Medical Equipment	14	224	154	104	72	64	68	67	56
INSTITUTIONS	Education	18	210	175	138	124	97	92	88	71
	Federal Government	7	325	214	139	120	95	99	75	44
	State/Province Government	8	253	194	152	132	97	84	75	63
	City/County Government	21	273	224	138	139	114	104	87	57
	Special District/Quasi-Government	133	309	196	145	127	91	98	82	57
	Research	9	238	178	151	138	112	100	94	67
	Association	13	235	162	117	99	107	79	66	52
	Religious/Charitable	9	225	181	137	108	93	99	72	---
	Other Institutions	6	204	143	105	107	123	106	105	---

### SHARED WORKSTATIONS

With a number of facilities operating 24/7, it is not unusual for employees to share workstations because of multiple shifts. In this year's study, 31% of the respondents indicated that workstations within their facilities are shared. Hospitals, call centers and educational facilities were more apt to double up seating. The extent to which workstations are shared is still fairly small. Fifty percent of the respondents indicated 5% or less of the available workstations are shared.

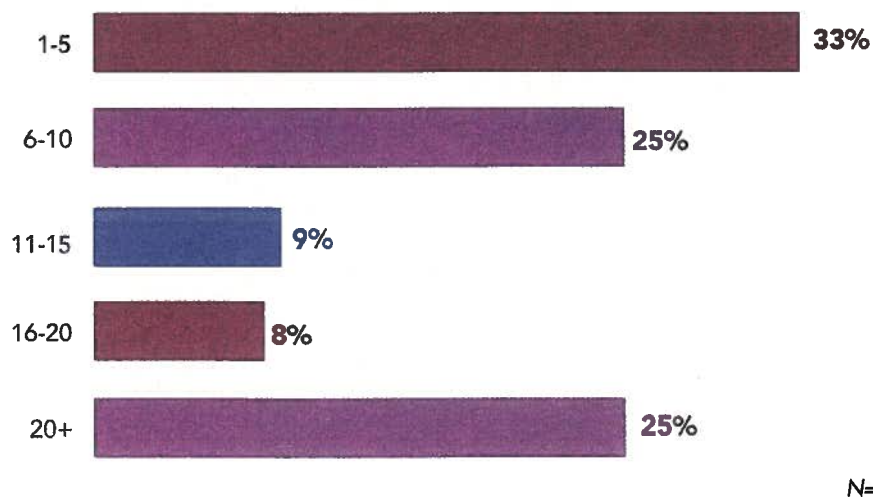
#### *Percentage Workstations Shared*



### NON-DEDICATED WORKSPACE

Just as in 2002, the same percentage of respondents, 45%, provide non-dedicated workspace for those who telecommute or drop-in. There are several industries that are more apt to offer this type of flexible arrangement. These include professional services, telecommunications, computer, consumer products and information services. The number of non-dedicated workstations provided is fairly low, as 58% set aside 10 workstations or less.

#### *Number of Non-Dedicated Workstations*





## WORKSTATION UTILIZATION

Workstation utilization is a measurement to see to what degree workstations are occupied. It is a ratio of workstations used to workstations available. The average utilization rate is 89%, which leaves some room for new hires and movement. The never ending challenge for facility managers is having available space in the department or area that requires additional seating.

Percentile	%
99	100%
95	100%
90	100%
75	98%
50	92%
25	85%
10	74%
5	63%
1	36%
Mean	89%

N=528



Facility Use	N	%
Headquarters	273	88%
Non-HQ	87	84%
Multi-Use	32	92%
Research Center	28	89%
Warehouse	15	88%
Factory	14	87%
Education	14	93%
Call Center	12	94%
Hospital	8	98%
Retail-Main	7	99%
Multi-Residential	6	95%
Correctional	6	92%
Entertainment/ Recreation	6	89%
Museum	4	95%
Data Center	3	85%

N=419

	Industry Type	N	%
SERVICES	Banking	22	89%
	Investment Services	24	87%
	Insurance	31	86%
	Information Services	22	85%
	Energy Utilities	21	87%
	Media	20	91%
	Health Care	19	95%
	Hotel/Hospitality	6	88%
	Professional	32	84%
	Telecommunications	12	84%
	Trade	29	93%
	Transportation	8	90%
	Aircraft/Industrial	14	90%
	Building/Construction	6	94%
MANUFACTURING	Motor Vehicles	4	85%
	Chemical/Pharmaceutical	32	88%
	Consumer Products	26	92%
	Computer: Hardware/Software	24	81%
	Electronics	32	87%
	Energy Related	7	71%
	Medical Equipment	12	93%
	Education	17	94%
INSTITUTIONS	Federal Government	10	91%
	State/Province Government	9	86%
	City/County Government	27	94%
	Special District/Quasi-Government	11	95%
	Research	8	92%
	Association	16	94%
	Religious	15	91%

## VACANCY RATES

The vacancy rate is somewhat tied to workstation utilization; however, the vacancy rate takes into account the square footage not being utilized. For the purposes of this report, the vacancy rate is not related to the leasing or sub-leasing of space, but rather it is a calculation derived by dividing unoccupied space available for usage by rentable square footage. Vacancy rates reported here are similar to those in 2002; however, facilities within the computer and electronics industry sectors experienced a slightly higher than average vacancy rate.

Percentile	%
99	50%
95	30%
90	21%
75	9%
50	3%
25	0%
10	0%
5	0%
1	0%
Mean	8%

N=419

Best In Class

Facility Use	N	%
Headquarters	226	8%
Non-HQ	74	8%
Multi-Use	25	9%
Research Center	22	9%
Factory	12	6%
Education	11	4%
Warehouse	8	7%
Call Center	7	15%
Hospital	6	3%
Retail-Main	6	2%
Clinic	3	0%
Museum	3	10%
Retail-branch	3	10%

Industry Type	N	%
Banking	22	6%
Investment Services	17	12%
Insurance	25	11%
Information Services	20	11%
Energy Utilities	16	10%
Media	15	6%
Health Care	17	5%
Professional	25	10%
Telecommunications	9	5%
Trade	21	6%
Transportation	6	2%
Aircraft/Industrial	13	3%
Building	5	6%
Chemical	20	9%
Consumer Products	22	6%
Computer: Hardware/Software	19	15%
Electronics	27	12%
Energy/Mining	6	8%
Medical Equipment	12	3%
Education	12	2%
Federal Government	10	4%
State/Province Government	9	6%
City/County Government	22	5%
Special District/Quasi-Government	10	4%
Research	9	6%
Association	9	3%
Religious	7	8%



### COMMON SUPPORT SPACE

Common support space is a subset of assignable area not devoted to any one occupant but provides support to several or all occupants or departments. Categories of common support space include cafeterias, auditoriums, fitness facilities, workrooms and conference rooms. One of the interesting trends revealed in the analysis of the space data is that individual space has stabilized in recent years; however, the amount of common support space has increased on both a percentage and square foot basis.

Facility Use	N	Conference Rooms	Computer Rooms/ Data Center	Training	Library/ Records Filing	Auditorium
Headquarters	250	14	5	3	5	4
Non-HQ	70	14	6	3	4	2
Research Center	28	18	4	2	5	3
Factory	13	7	4	10	3	3
Education	14	3	3	6	8	5
Hospital	8	4	1	1	2	2
Call Center	8	5	5	4	2	1
Warehouse	13	6	2	5	2	—
Multi-Use	27	10	2	3	3	2

Facility Use	N	Cafeteria	Copying/ Reprographics	Fitness Facilities	Daycare	Storage
Headquarters	250	7	4	3	2	6
Non-HQ	70	9	3	3	1	6
Research Center	28	9	4	3	2	17
Factory	13	8	2	2	1	4
Education	14	9	2	4	2	7
Hospital	8	3	1	1	1	8
Call Center	8	4	3	2	1	2
Warehouse	13	8	3	5	—	2
Multi-Use	27	8	2	1	5	5

## SPACE PLANNING AND UTILIZATION

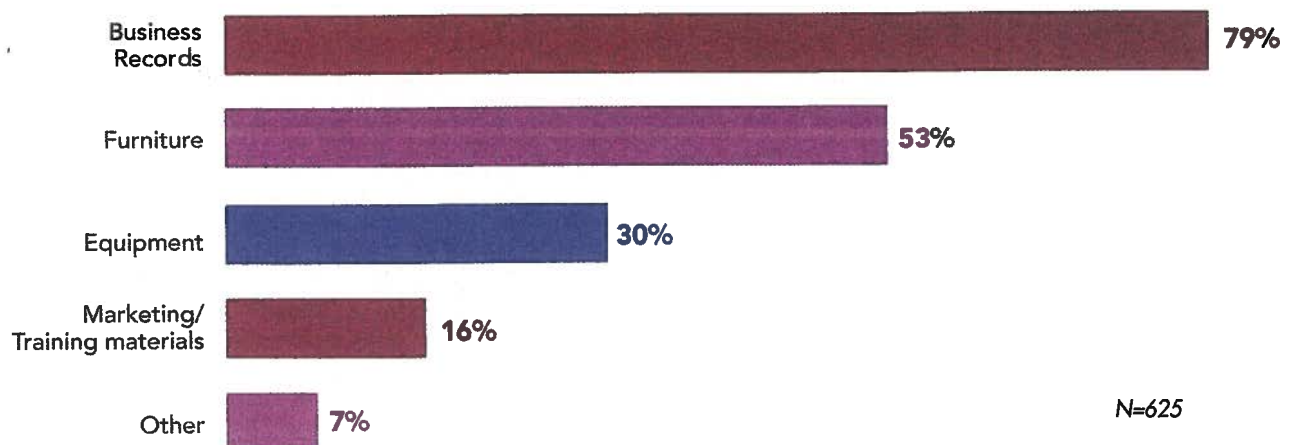
### COMMON SUPPORT SPACE

Facility Use	N	Conference Rooms	Computer Rooms/ Data Center	Training	Library Records Filing	Auditorium
Headquarters	250	6%	2%	1%	2%	1%
Non-HQ	71	6%	3%	1%	1%	1%
Research Center	27	5%	1%	1%	1%	1%
Factory	13	5%	1%	1%	1%	1%
Education	13	2%	1%	4%	3%	2%
Hospital	7	2%	1%	1%	1%	1%
Call Center	8	4%	5%	3%	1%	1%
Warehouse	13	1%	1%	1%	1%	-
Multi-Use	27	3%	1%	1%	1%	1%

Facility Use	N	Cafeteria	Copying/ Reprographics	Fitness Facilities	Daycare	Storage
Headquarters	250	3%	2%	1%	1%	3%
Non-HQ	71	3%	2%	2%	1%	3%
Research Center	27	2%	1%	1%	1%	4%
Factory	13	1%	1%	1%	1%	1%
Education	13	4%	1%	2%	2%	3%
Hospital	7	1%	1%	1%	1%	3%
Call Center	8	5%	2%	1%	1%	1%
Warehouse	13	1%	1%	3%	-	1%
Multi-Use	27	3%	1%	1%	1%	1%

### OFF-SITE STORAGE

Not every facility comes with sufficient storage or warehousing space, so it is not unusual to seek out off-site storage. In most cases, storing off-site may be a cheaper alternative and allow for a more efficient utilization of space. Business records and furnishings are the most likely items to be shifted to off-site storage.





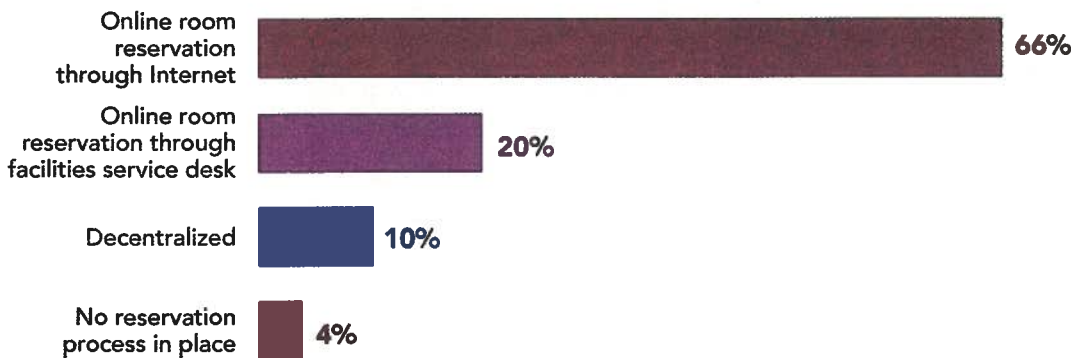
## CONFERENCE ROOMS

Given that conference rooms comprise a large portion of support space, several new questions were added to the survey regarding size and number of conference rooms. The chart below provides a breakdown of number of conference rooms based upon facility size.

Facility Size (RSF)	N	Small (4-10 Occupants)	Medium (11-20 Occupants)	Large (21-30 Occupants)	Extra Large (31+ Occupants)
Less than 50,000	52	2	2	1	1
50,000 – 100,000	97	4	3	1	1
100,001 – 250,000	139	7	6	2	1
250,001 – 500,000	82	11	9	3	2
500,001 – 750,000	54	15	16	5	3
750,001 – 1,000,000	25	22	23	7	4
1,000,001 – 1,500,000	26	32	25	8	5
1,500,001 – 2,000,000	14	38	28	10	8
2,000,001 – 3,000,000	13	42	50	16	14
More than 3,000,000	7	144	129	42	11

## Conference Room Reservation

The majority of the facilities (86%) reported using an online system to reserve conference rooms.



N=625



## 2-AMPCO-10

Ref: DSP Appendix F, Page 42, Horizon Renewal Schedule

Preamble: AMPCO summarizes the list of substations planned for renewal in 2015-2019.

Station	Assessment Station Health Index
Aberdeen	53
Baldwin	84
Central	56
Highland	52
John	83
Strad's Lane	62
Whitney	63
York	85
Grantham	58

**AMPCO notes the health index for five substations is above 60. Please provide further details on the rationale for including these stations in the 2015-2019 renewal program.**

### Response:

1 Horizon Utilities confirms that the Health Index for the following substations is above 60: John,  
2 Baldwin, York, Strouds and Whitney.

3 Horizon Utilities' 4kV and 8kV Renewal Program involves the renewal of an entire operating  
4 area served by multiple substations. The decision to renew an operating area, which involves  
5 the decommissioning of the substations within the area, is based on a composite score which  
6 includes the substation and distribution asset health, feeder dependencies within the operating  
7 area and customer impacts as a result of service interruptions within the operating area. As  
8 such, a substation may be prioritized for renewal irrespective of having a Health Index score  
9 above 60%.

10 The Strouds and Whitney substations serve the Hamilton West operating area. These  
11 substations have multiple critical components some of which have a Health Index far below the  
12 station average. The Health Index of the switchgear at the Strouds and Whitney substations is  
13 37% and 43% respectively. Kinectrics identified that both substations' switchgear had a high  
14 probability of failure within one to three years as identified on page 243 of the DSP filed as  
15 Appendix 2-4 in Exhibit 2. As such, this operating area was prioritized for renewal.

1 The John, York and Baldwin substations, in addition to the Highland substation, serve the  
2 Dundas area. These substations are single substations (i.e. one power transformer and  
3 switchgear) with no allowance for a contingency event as identified on page 16 of Appendix A of  
4 the DSP filed as Appendix 2-4 of Exhibit 2, Tab 6. York substation does not have connections to  
5 the Highland, Baldwin and John substations and therefore the load cannot be transferred in the  
6 event of a failure. Loss of this substation will leave the 400 customers served by this substation  
7 stranded without power for an extended period as identified on page 17 of Appendix A of the  
8 DSP filed as Appendix 2-4 of Exhibit 2, Tab 6. The failure of either of the Baldwin and John  
9 substations will result in a load transfer to, and overload of, a neighbouring back-up station;  
10 thereby increasing the risk of failure of the back-up station. This cascading effect is highly likely  
11 and could lead to multiple failure points, causing over 1,000 customers to be without service for  
12 lengthy periods. This operating area was also prioritized for renewal. Further information is  
13 provided on page 239 of the DSP filed as Appendix 2-4 of the DSP.



## 2-AMPCO-11

Ref: Exhibit 2, Tab 8, Schedule 1

**Preamble: Horizon indicates its entire service territory is trimmed on a 3-year cycle.**

- a) When did Horizon commence tree trimming on a 3 year cycle?**
- b) Is Horizon aware of other electricity distributors that trim on a 3 year cycle?**
- c) Please provide Horizon's budget vs. actual amounts for 2010 to 2013 and budget and year to end and end of year forecast for 2014.**

a) Horizon Utilities moved to a 3 year cycle for the pre-amalgamated City of Hamilton in 2008 to address a backlog of trimming that developed in the Hamilton area from earlier practices that were based on much longer cycles. The other areas of the City of Hamilton, specifically Ancaster, Stoney Creek, Dundas, Flamborough, as well as the City of St. Catharines were always on a three year cycle.

b) Horizon Utilities is aware of a number of LDCs that follow a 3-year cycle including: Canadian Niagara Power Inc.; Center Wellington Hydro Ltd.; Oakville Hydro Electricity Distribution Inc.; Guelph Hydro Electric System Inc.; Welland Hydro Electric System Corp.; Grimsby Power Inc.; Veridian Connections Inc.; and Niagara on the Lake Inc.

c) Tree trimming costs for 2010-2014 are provided in Table 1 below. The 2014 Actuals represent actual costs from January to May. The budget amount of \$850,000 is the year end forecast for 2014. Further tree trimming activity is scheduled for the latter half of 2014.

**Table 1: Budget vs Actual Tree Trimming**

Year	Actuals*	Budget
2010	825,674	1,816,600
2011	544,993	560,000
2012	606,328	700,000
2013	843,873	690,000
2014	77,000	850,000



**3-AMPCO-12**

**Ref: Exhibit 3, Tab 1, Schedule 1**

- a) Page 3 - Please reproduce Table 3-1, Table 3-2 to include 2011 Actual MIFRS.**
- b) Page 4 - Please reproduce Table 3-3 to include 2011 Actual MIFRS.**

**Response:**

- 1 a) The 2011 Actual MIFRS Operating Revenues are the same as the 2011 Actual CGAAP
- 2 column shown in Table 3-1.
- 3 b) The 2011 Actual MIFRS Operating Revenues and Adjustments are the same as the
- 4 2011 Actual CGAAP column shown in Table 3-3.



Ref: Exhibit 3, Tab 3, Schedule 1. Page 1, Table 3-40

**Response:**

- 1 a) Please see Table 3-40 below updated to include a column with 2011 Actual MIFRS.

**Table 3-40 - Chapter 2 Filing Requirement - Appendix 2H - Other Operating Revenue**

		2011 Board Approved	2011 Actual	2011 Actual	2012 Actual	2013 Actual	Bridge Year	Test Year	Test Year	Test Year	Test Year	Test Year
USoA #	USoA Description											
	Reporting Basis	CGAAP	CGAAP	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	Miscellaneous Services Revenues	\$ 1,879,600	\$ 1,569,529	\$ 1,569,529	\$ 1,706,389	\$ 1,477,354	\$ 1,540,645	\$ 1,542,145	\$ 1,543,671	\$ 1,545,216	\$ 1,546,785	\$ 1,549,969
4225	Late Payment Charges	\$ 987,595	\$ 918,231	\$ 918,231	\$ 876,089	\$ 842,431	\$ 825,000	\$ 825,000	\$ 825,000	\$ 825,000	\$ 825,000	\$ 825,000
4080	Distribution Services Revenue (SSS Charge)	\$ 632,440	\$ 625,832	\$ 625,832	\$ 646,467	\$ 688,150	\$ 725,012	\$ 729,918	\$ 735,335	\$ 741,093	\$ 747,081	\$ 752,724
4082	Retail Services Revenues				\$ 265,052	\$ 227,677	\$ 237,156	\$ 237,156	\$ 237,156	\$ 237,156	\$ 237,156	\$ 241,776
4084	Services Transactions Requests (STR) Revenues					\$ -	\$ 7,703	\$ 7,703	\$ 7,703	\$ 7,703	\$ 7,703	\$ 7,755
4210	Rent from Electric Property	\$ 1,244,072	\$ 1,221,138	\$ 1,221,138	\$ 1,227,373	\$ 1,826,748	\$ 1,357,728	\$ 1,377,704	\$ 1,397,980	\$ 1,418,560	\$ 1,439,448	\$ 1,481,514
4325	Revenues from Merchandise	\$ -	\$ 82,907	\$ 82,907	\$ 198,761	\$ 295,573	\$ 180,000	\$ 182,700	\$ 185,441	\$ 188,222	\$ 191,046	\$ 192,956
4390	Miscellaneous Non-Operating Income	\$ 531,948	\$ 617,047	\$ 617,047	\$ 618,452	\$ 439,481	\$ 567,084	\$ 575,590	\$ 584,224	\$ 592,988	\$ 601,883	\$ 619,939
4405	Interest and Dividend Income	\$ -	\$ 148,554	\$ 148,554	\$ 497,557	\$ 320,332	\$ 101,001	\$ -	\$ -	\$ -	\$ 70,098	\$ 82,265
<b>Miscellaneous Services Revenues</b>		<b>\$ 1,879,600</b>	<b>\$ 1,569,529</b>	<b>\$ 1,569,529</b>	<b>\$ 1,706,389</b>	<b>\$ 1,477,354</b>	<b>\$ 1,540,645</b>	<b>\$ 1,542,145</b>	<b>\$ 1,543,671</b>	<b>\$ 1,545,216</b>	<b>\$ 1,546,785</b>	<b>\$ 1,549,969</b>
<b>Late Payment Charges</b>		<b>\$ 987,595</b>	<b>\$ 918,231</b>	<b>\$ 918,231</b>	<b>\$ 876,089</b>	<b>\$ 842,431</b>	<b>\$ 825,000</b>	<b>\$ 825,000</b>	<b>\$ 825,000</b>	<b>\$ 825,000</b>	<b>\$ 825,000</b>	<b>\$ 825,000</b>
<b>Other Distribution Revenue</b>		<b>\$ 1,876,512</b>	<b>\$ 1,846,971</b>	<b>\$ 1,846,971</b>	<b>\$ 2,138,891</b>	<b>\$ 2,742,575</b>	<b>\$ 2,327,598</b>	<b>\$ 2,352,481</b>	<b>\$ 2,378,173</b>	<b>\$ 2,404,511</b>	<b>\$ 2,431,387</b>	<b>\$ 2,483,769</b>
<b>Other Income or Deductions</b>		<b>\$ 531,948</b>	<b>\$ 848,509</b>	<b>\$ 848,509</b>	<b>\$ 1,314,770</b>	<b>\$ 1,055,386</b>	<b>\$ 848,085</b>	<b>\$ 758,290</b>	<b>\$ 769,665</b>	<b>\$ 781,210</b>	<b>\$ 863,026</b>	<b>\$ 895,161</b>
<b>Total</b>		<b>\$ 5,275,654</b>	<b>\$ 5,183,239</b>	<b>\$ 5,183,239</b>	<b>\$ 6,036,140</b>	<b>\$ 6,117,746</b>	<b>\$ 5,541,328</b>	<b>\$ 5,477,916</b>	<b>\$ 5,516,509</b>	<b>\$ 5,555,937</b>	<b>\$ 5,666,198</b>	<b>\$ 5,753,899</b>



#### 4-AMPCO-14

Ref: Exhibit 4, Tab 1, Schedule 1, Page 10, Table 4-5

a) Please reproduce Table 4-5 to include 2011 Actual MIFRS.

#### Response:

1 The following table has been revised to include 2011 Actual MIFRS.

2 **Table 1: Operating Costs (MIFRS)**

	<b>2011 Actual (MIFRS) *</b>
OM&A	\$50,394,314
Less: Property Taxes included in OM&A	(507,356)
<b>OM&amp;A less Property Taxes</b>	<b>\$49,886,958</b>
Total Property Taxes	903,452
<b>Total OM&amp;A including Property Taxes</b>	<b>\$50,790,410</b>
Depreciation and Amortization	\$18,973,162
PILs (income taxes)	\$2,788,613
<b>Total Operating Costs</b>	<b>\$72,552,185</b>

3 \* Restated to include Smart Meter costs for comparability to subsequent years





#### 4-AMPCO-15

Ref: Exhibit 4, Tab 1, Schedule 1, Page 15, Table 4-6

a) Please explain the variance in property taxes for 2011 Board approved compared to 2011 actual, 2011 actual compared to 2012 actual and 2012 actual compared to 2013 actual.

Response:

1 **2011 Board Approved vs. 2011 Actuals**

2 Property taxes for 2011 Actual were \$903,452 or \$143,403 higher than the 2011 Board  
3 Approved figure of \$760,049; principally explained by the normalization of expected property tax  
4 charges and refunds over the four year recovery period. Horizon Utilities received the refunds  
5 in the following years as reported below. At the time of the 2011 Cost of Service Application,  
6 Horizon Utilities forecasted the 2011-2014 property taxes to be approximately \$3,040,196 which  
7 compares to the \$3,010,935 actual and budgeted amounts for 2011-2014 found in Table 4-6 –  
8 Property Taxes 2011-2019 in Exhibit 4, Tab 1 Schedule 1, page 15 of the Application.

9 **2011 Actuals vs. 2012 Actuals**

10 Property taxes for 2012 Actuals were \$514,770 or \$388,682 lower than the 2011 Actual amount  
11 of \$903,452; principally explained by the receipt of a tax refund based on the reassessment of  
12 values for Horizon Utilities' properties. All property tax refunds are reflected in the 2012 Actual  
13 amounts.

14 **2012 Actuals vs. 2013 Actuals**

15 Property taxes for 2013 Actuals were \$795,869 or \$281,099 higher than the 2012 Actual  
16 amount of \$514,770; principally explained by: (i) the reassessments received in 2012; and (ii)  
17 the 2013 regular tax rate increases based on actual property assessed values. The 2013  
18 assessments are indicative of fully assessed property taxes for all locations (i.e. - no refunds or  
19 reassessments are included in 2013 amounts).



#### 4-AMPCO-16

Ref: Exhibit 4, Tab 2, Schedule 2, Page 5, Table 4-13

a) Page 5, Table 4-13 - The Table references footnote (1). Please provide the footnote.

b) Page 6 – Please provide the annual non-union wage increases for 2011-2014 and proposed for 2015-2019.

c) Page 7 – Please provide a breakdown of the increase in 20 FTEs over the 2011 to 2015 period by year and job function.

#### Response:

a) There is no footnote associated with Table 4-13. The superscript <sup>(1)</sup> was used to guide the user to the cost lines which are to be added together to generate the summary line titled “Increase to payroll costs”.

b) Table 1 provides the annual non-union wage increases for 2011 to 2014 and the forecast for 2015 to 2019.

**Table 1 – Annual Non-Union Wage Increases**

2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year
3.4%	4.0%	3.6%	3.1%

2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year

As stated in Exhibit 4, Tab 2, Schedule 2, p.6, non-union wage increases are the result of annual wage increases and adjustments required to move employees closer to the competitive job rate.

c) Table 2 provides a breakdown of the increase in 20 FTE over the 2011 to 2015 period. Horizon Utilities cannot provide the breakdown by job function as the 20 FTE variance is

- 1 attributed to the combination of the hiring of new positions and the filling of positions that were  
2 vacant; it is offset by position reductions. The table has been categorized by program.

3 **Table 2 – FTE By Year and Job Function**

Program	2011	2012	2013	2014	2015	Difference
Executive	3.0	3.6	3.1	3.0	3.0	0.0
Regulatory Affairs	6.3	7.9	8.4	9.0	9.0	2.7
Corporate Finance	16.3	15.8	17.4	18.0	18.0	1.7
IST	17.9	20.7	21.0	22.0	22.0	4.1
Customer Connections	36.8	33.7	33.0	34.5	35.0	-1.8
Customer Services	7.2	6.3	6.0	6.0	6.0	-1.2
Utility Operations	2.0	2.0	2.0	2.0	2.0	0.0
Engineering and Operations	49.4	52.9	53.5	64.8	61.5	12.1
Construction and Maintenance	136.7	134.9	132.6	135.0	132.0	-4.7
Supply Chain Management	34.2	36.8	38.6	40.3	39.3	5.1
Human Resources	14.9	16.0	15.9	17.0	17.0	2.1
Business Development & Corporate Communications	3.0	2.1	3.1	3.0	3.0	0.0
Total	327.8	332.7	334.6	354.5	347.8	20.0

**4-AMPCO-17**

**Ref: Exhibit 4, Tab 2, Schedule 3, Page 2, Table 4-20**

**Preamble: Horizon provides OM&A cost per customer and OM&A cost per FTE.**

**a) Please provide any analysis and results Horizon has undertaken to compare its historical data (2011-2013) to its comparators.**

**Response:**

1 Attached please find Horizon Holdings Inc.'s 2013 Sustainability-based Annual Report, 4-  
2 *AMPCO-17\_Attch 1\_Smart Growth, Smart Grid, Smart Communities*. Please refer to pages 26  
3 and 27 of the annual report for the comparison data of Horizon Utilities' OM&A per customer for  
4 a three year average over 2010-2012 Horizon Utilities' comparative data is based on the data  
5 available in the Ontario Energy Board's Yearbook of Electricity Distributors. There is no data yet  
6 published for 2013.

7 While Horizon Utilities has provided OM&A costs per FTE, it does not compare itself on OM&A  
8 per FTE to the LDC sector because it does not consider this a valuable performance metric.  
9 For the metric to be useful, one of the two variables needs to be a standard measure across  
10 LDCs, like number of customers or kilometres of line. Since all LDCs vary widely on both  
11 OM&A and FTE variables, an LDC with comparatively low OM&A and a high FTE count could  
12 have the same metric as an LDC with a comparatively high OM&A and a low FTE count.

13 Similarly, an LDC with a comparatively high OM&A and a high FTE count could have the same  
14 metric as an LDC with comparatively low OM&A and a low FTE count. Ranking results of  
15 OM&A per FTE would be unhelpful for these reasons.





EB-2014-0002  
Horizon Utilities Corporation  
Responses to Association  
of Major Power Consumers  
in Ontario Interrogatories  
Delivered: August 1<sup>st</sup>, 2014  
4-AMPCO-17\_Attch 1- Smart Growth. Smart Grid. Smart Communities

## **4-AMPCO-17\_Attch 1 - Smart Growth. Smart Grid. Smart Communities**



# SMART GROWTH. SMART GRID. SMART COMMUNITIES.

2013 Sustainability-based Annual Report





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## BOARD CHAIR AND CEO MESSAGE

# Smart Growth. Smart Grid. Smart Communities.

MAX CANANZI,  
President and CEO,  
and ROBERT CARY,  
Chair, Board of Directors

■ **In 2013, the Horizon family of companies broke new ground in its ongoing pursuit of sustainable development.** We extended our reach to support municipal 'smart growth' objectives through our 'smart grid' programs, beginning the journey to truly smart communities.

By year end, Horizon Utilities Corporation had put in place a number of critical building blocks – new system tools and network infrastructure – for establishing a solid smart grid foundation for our customers. We did so while demonstrating our ongoing commitment to delivering an essential service – safely, reliably, and affordably – while providing strong customer and shareholder value.

This dual focus on innovation and value ensures that our company is well positioned to meet ever growing and evolving customer needs, industry demands and market pressures, now and well into the future. At the same time, we are doing our part to strengthen the resiliency of our communities to thrive, grow, and prosper.

In support of these longer term goals, Horizon Utilities conducted a full-scale review of its major assets in 2013, including its distribution network, buildings and fleet. The detailed knowledge of their condition, performance and life expectancy formed the basis of a comprehensive 20-year capital investment plan. We developed the plan to be sustainable, ensuring customer rates will remain among the lowest in the province and that we continue to support growth within our communities. The responsible renewal of our system ensures customer service and reliability will be maintained and improved well into the future.

In a continuing effort to operate our system with enhanced speed and accuracy, Horizon Utilities has been rapidly implementing its smart grid functionality. By 2016, our multi-year strategy of delivering real-time information about what is happening on the entire distribution system will largely be in place, saving valuable time and resources.



Our team made significant progress in 2013 toward this goal by expanding the capability and linkages of our Geographic Information System, Outage Management System, and Advanced Metering Infrastructure. We also successfully completed a two-year, \$5.9 million substation renewal project that provides enhanced automation, improving the real-time operation of these major network assets.

Horizon Utilities is also going beyond traditional utility practices with its new customer connection program inspired by municipal smart growth objectives. Our new connection program and unique infill development database combine to quickly locate properties offering startup cost savings to customers in partnership with city economic development departments. We were honoured to receive the Quality Urban Energy Systems of Tomorrow (QUEST) *Community Energy Builder* Award for this program.

Horizon Utilities' employees take pride in providing an essential service to their 240,000 customers. When our communities faced two extreme weather storms in 2013, our team rose to the challenge, making personal sacrifices without hesitation, and working around the clock to ensure power was restored to customers as quickly as possible.

Each and every day, our employees demonstrate their ongoing and genuine dedication to service excellence. This showed in our highest ever customer satisfaction rating of 95%, achieved in 2013. As well, we hit a remarkable safety milestone of 2.6 million hours without a lost-time injury, while at the same time improving productivity. We take great pride in being ranked among the *Top 10 Employers in Hamilton-Niagara* for the third consecutive year.

Our competitive energy services company, Horizon Energy Solutions Inc., continued to see growth. In 2013, it expanded its business through solar photovoltaic generation, metering services for utilities and commercial customers across Ontario, Conservation and Demand Management (CDM) marketing services for other utilities, and streetlight maintenance for municipalities.

Financially, Horizon Holdings Inc., through its subsidiaries, invested \$36.5 million in infrastructure improvements in 2013. We earned a net income of \$17.7 million – above plan due to increased revenue and lower controllable expenditures. Shareholder dividends totaling \$13.7 million were paid to the holding companies of the cities of Hamilton and St. Catharines in 2013. We achieved all this while maintaining among the lowest rates in every customer class in Ontario.

At Horizon Holdings, we believe that excellence in service, safety, reliability and economic performance are all enhanced through our disciplined adherence to triple bottom

line sustainability reporting. Our company-wide focus on the social, environmental and economic outcomes of our practices informs the business decisions we make and resulted in Horizon Utilities becoming the first company in Canada to earn the *Sustainable Electricity Company™* designation from the Canadian Electricity Association (CEA).

We are proving that customers and shareholders can simultaneously benefit – that the combination of low rates, sound financial performance and sustainable development

is possible. With continuing vigilance for innovative thinking, sound management, and fiscal discipline, our Board and management remain focused on making strategic decisions that extend long-term value to our communities – the people, businesses and institutions we proudly serve.

The Horizon family of companies is delivering the future today – building smart grids and supporting smart growth objectives – making us the smart choice for smart communities. ☺

**“Horizon is going beyond traditional utility practices with its new customer connections program, inspired by municipal smart growth objectives.”**



**ROBERT CARY**  
Chair, Board of Directors



**MAX CANANZI**  
President and CEO



# 2013 HIGHLIGHTS



**MICHAEL KIRKOPOULOS,  
DIRECTOR OF CORPORATE  
COMMUNICATIONS,  
CITY OF HAMILTON**

*"I want to commend the entire team at Horizon Utilities. During the past two storm events they worked around the clock operationally, and in emergency response and communications to ensure the City of Hamilton and its residents had power restored as quickly as possible. From the front line, right up to the executive team, the lines of communication were always open and staff was available night and day to answer any questions or concerns."*

## A story of storms

■ **2013 has gone down in the history books and personal memories** of Ontarians as a year in which two devastating extreme weather storms plunged major parts of the province into darkness, creating hardship for many.

On July 19, extraordinarily high winds and thousands of lightning strikes felled hundreds of trees, pulled wires down, and knocked power out to 20,000 customers in Hamilton and St. Catharines. While half of our affected customers were restored within 24 hours, it would take nearly three days to restore power to all customers.

Just before Christmas, on the darkest day of the year, as many of our employees were home enjoying the holidays with their families, a blanket of ice disrupted service to large parts of the province. 30,000 customers in our communities were affected.

As the phone calls, emails, Facebook posts and tweets poured in from worried customers, our employees filed back through our doors, ready to get to work.

**MOLLY HAYES' TWEET:**

*Hi!! I am working  
Christmas Day for the  
Spectator and we're  
hoping to go out and  
talk to some hydro  
workers (the heroes  
of the week!)*  
03:29 PM - 24 Dec 13

While outside workers struggled in the icy weather to remove 300 fallen trees and limbs from power lines, our Control Room, Call Centre and social media teams worked around the clock fielding calls, providing vital information, receiving updates from customers, and generally assisting in any way they could. We also used various communications tools, including a range of digital options and social media channels – Twitter and Facebook. This helped

us readily exchange information with our customers and our communities, updating people on the extensive efforts underway to help them. ●



2.6 million  
hours without a  
lost-time injury

# Safety is non-negotiable!



■ **At Horizon Utilities, every employee understands the importance of a sound safety culture.**

It is critical for the well-being of our people and the public. The electricity distribution business can be a dangerous one – high voltage equipment, precarious heights, confined underground spaces and, at times, storms. No project begins without a thorough safety review, identifying risks and hazards, as well as precautions and emergency measures.

Safety is a top concern of our Board of Directors and it is instilled in our employees and contractors from day one. Our Joint Health and Safety Committees are comprised of employees from across the organization, including senior executives, to ensure we can make decisions swiftly, as needed. Safety visits on any work site are a common occurrence and provide an important opportunity for employees to discuss relevant safety issues with management.

As of December of 2013, Horizon Utilities logged

2.6 million hours without a lost-time injury – equivalent to working for three years and four months without a lost-time injury. It is an achievement in which each and every one of us takes great pride.

In 2013, we put an increased focus on incident investigation and risk assessment, sharing our findings and developing mitigation strategies to prevent incidents. We implemented a new Health and Safety management software to help us achieve an even higher level of performance, risk mitigation and compliance. And, as a visual expression and reminder of our commitment to the safety and well-being of our people – at work and at home – we unveiled our new Safe and Healthy brand.

We extend our culture of safety into the community in many ways, including delivering electrical safety and conservation education sessions to 12,000 elementary school students at 28 schools in Hamilton and St. Catharines annually. ☺



Horizon Utilities' new Smart Growth inspired connection policy and infill development database help connect businesses to available commercial properties with low startup costs.

**BRIAN YORK, MANAGER, ECONOMIC DEVELOPMENT & TOURISM SERVICES, CITY OF ST. CATHARINES**

*"With the help of Horizon Utilities' new Smart Growth program, the City of St. Catharines is better positioned to attract new businesses and encourage infill development. Horizon's business and community focus on sustainable development gives us a competitive edge."*

**NEIL EVERSON, DIRECTOR, ECONOMIC DEVELOPMENT, CITY OF HAMILTON**

*"Since amalgamation, the City has been virtually on its own in promoting infill redevelopment in Hamilton. But today, we no longer just have an ally in this cause – instead we have a full-fledged partner in Horizon Utilities."*

## Smart Growth program is a first

■ **For a community to thrive, the lights need to be on.** But being a local electricity distribution company means a great deal more at Horizon Utilities. We are in tune with our communities, working closely with business, industry and municipal leaders assisting them to achieve their goals, in tangible ways.

One of the economic choices Horizon Utilities made as a company in 2013 was to change its approach to customer connections to support infill development, and thereby expand the way it helps its communities with economic development. Our business is now leveraging existing infrastructure and resources to make the startup costs for infill development more attractive and affordable when compared to greenfield development.

We created an infill development database that has a listing of the vacant commercial and industrial locations in Hamilton and St. Catharines and we cross-referenced these properties with the capacities of transmission stations, the Horizon Utilities' supply voltage fronting the properties and

the records of customer-owned assets left behind, like transformers and switchgear.

In addition, Horizon Utilities developed a new smart growth-inspired Customer Connection policy, one that only includes the direct capital cost and incremental operating cost of connection and removes the indirect system enhancement costs previously charged.

The two initiatives combined serve to reduce the startup costs for any company that chooses an infill property in our communities. Not only is Horizon Utilities assisting our communities by making it more attractive for new businesses to leverage existing infrastructure, but it is also helping to preserve green space by taking pressure off greenfield development in its own and other communities.

The early feedback from customers is that the new customer connection program and infill development database have provided them with a unique resource in finding just the right location to do business. ●





# 240,000 CUSTOMERS

5<sup>th</sup> largest distribution company in Ontario



## 436

dedicated and highly skilled employees

## 3,400

kilometers of overhead and underground lines

1.6 MW OF COMMERCIAL ROOFTOP SOLAR-PHOTOVOLTAIC GENERATION IN OPERATION AND 2.5 MW IN THE APPLICATION STAGE



## \$134 MILLION

contribution in "direct economic value" to local communities

## \$582 MILLION

total assets



Employee Satisfaction

**COMMITTED TO SUSTAINABLE DEVELOPMENT AND ENERGY CONSERVATION**



First utility designated a Sustainable Electricity Company™ by Canadian Electricity Association (CEA)

Top 10 Hamilton-Niagara Employer three years in a row



**A+ INDEPENDENT ASSURANCE ON SELF-DECLARED GRI FILING FOR FOURTH CONSECUTIVE YEAR ACCORDING TO GLOBAL REPORTING INITIATIVE SUSTAINABILITY GUIDELINES**



Big Bike  
for Heart  
and Stroke.



# SOCIAL SUSTAINABILITY



When we think about social responsibility, it brings to mind the word “community”. To us, a community is more than just streets and buildings. A community is comprised of people as well as the places where they live and work. At Horizon Utilities, we understand the value of developing and maintaining mutually beneficial relationships with our local stakeholders. The company and our employees take an active interest in contributing to a variety of initiatives that generate value for our local communities.



# Customer satisfaction means “being easy to do business with”

## ■ What better story could any company have to share than an excellent customer satisfaction rating?

As usual, our residential and business customers were interviewed by an independent, third-party survey expert. While we have consistently garnered at or above 90 per cent over the past seven years of our participation, 2013 was

particularly gratifying. We achieved our highest customer satisfaction rating ever — 95% for overall performance.

Horizon Utilities scored particularly high in the areas of Company Leadership, Corporate Stewardship, and Operational Effectiveness. The survey results also tell us that we continue to match or surpass our industry peers in the areas of Power Quality and Reliability and Price and Value. 🍌



**SID RIDGLEY,  
PRESIDENT,  
UTILITYPULSE**

*“What impresses me most about Horizon Utilities is that its leadership was obsessed about customer care long before it became fashionable to do so in the utility industry. I appreciate Horizon Utilities’ passion for anticipating and preparing for changes in customer expectations. This sets it apart.”*





**"It's about being accessible to our customers and understanding their needs. They are able to reach us the way they want to."**

EILEEN CAMPBELL, VICE PRESIDENT,  
CUSTOMER SERVICES



## We're talking and listening to you

■ **Being easy to do business with is the cornerstone** of our approach to delivering excellent customer service. In 2013, Horizon Utilities found more ways for our customers to conveniently connect with us. Last year, we had over a million contacts through our expanded use of digital communications technologies – our website, online account management, and social media. We launched a new mobile website to provide service any-time, anywhere, and on any device.

### CONNECTING CONVENIENTLY

We also increased our social media activity on Twitter and Facebook, and increased our number of our Twitter followers from under 1,000 to well over 3,000. Social media is proving to be an invaluable tool for connecting with our customers, and this was never more apparent than during the two major storms of 2013.

New technologies play a key role in how we connect with customers. However, we understand that for some, the most important thing is to be able to call and speak to someone.

Our Customer Care Centre, which received an "A" rating from our customer survey in 2013, fielded over 300,000 calls in 2013, answering within 30 seconds over 81 per cent of the time.

Through *MyElectric*, customers can enjoy 24/7 online access to their account. This web portal provides customers with consumption data from their smart meters to help them track and manage their energy use and costs. Customers can sign up for personal email alerts that let them know when their costs or consumption are reaching a specified budget threshold. An innovative "predict my bill" feature also forecasts the next bill so customers can make adjustments in their energy use to save cost or stay on budget. ☀

**SUSAN CLAIRMONT,  
COLUMNIST,  
THE HAMILTON  
SPECTATOR, "TWEET  
RELIEF ON A POWER-  
CHALLENGED WEEKEND,"  
JULY 23, 2013**

*"I had never gone searching for a Horizon Utilities Twitter account before, but within minutes somebody tweeted it and I followed. From then on I was tweeting up my own storm."*



# Going beyond for our communities

## ON THE JOB

■ **When customers require assistance to pay their bills,** Horizon Utilities is there to help by providing financial support through the Low Income Energy Assistance Program (LEAP) and the Late Payment Settlement Fund (LPS). LEAP is funded by Horizon Utilities and administered in Hamilton by the United Way of Burlington and Greater Hamilton and in St. Catharines by the United Way of St. Catharines and District. In 2013, more than \$330,000 was provided through these programs, assisting 770 families in our communities that were experiencing difficulties paying their electricity bills.

Horizon Utilities also offers the bill payment Arrears Management Program, as required by the Ontario Energy Board (OEB), to ensure that residential customers have an alternative to an interruption of service. The program allows eligible customers to defer their outstanding billings in installments over a number of months provided that they pay an initial down payment. We have assisted approximately 650 households enrolled in the Arrears Management Payment Program.

## AND OFF THE JOB

**Each year, Horizon Utilities and its employees go beyond their everyday work** to give a little bit more to the community.

Our employees focus on a variety of local charities to support. In 2013, the Horizon Employees' Charity Fund raised and donated \$75,766 to 61 local charities in Hamilton and St. Catharines. 🍌

**NANCY MCINTOSH  
COMMUNITY & DEVELOPMENT COORDINATOR,  
COMMUNITY CARE ST. CATHARINES & THOROLD**

*"Thank you for your thoughtful donation through our Adopt an Angel Christmas Program. Your generosity truly made Christmas lovely for those who may otherwise have not had any gifts at all. You not only provided those gifts, but the memories that come with them."*

**HORIZON UTILITIES  
CUSTOMER, NEIGHBOUR 2  
NEIGHBOUR CENTRE,  
HAMILTON MOUNTAIN**

*"I can't tell you how much this helps me ... thank you. When my child got sick and I had to reduce my hours at work, I didn't know what I was going to do to pay my bills. I didn't even know this kind of help existed!"*

**KERRY LUBRICK, DIRECTOR,  
EMPLOYMENT & INCOME  
SUPPORT DIVISION,  
COMMUNITY AND EMERGENCY  
SERVICES DEPARTMENT,  
CITY OF HAMILTON**

*"Horizon Utilities' staff provides immediate responses to Ontario Works Case Managers, which helps in case planning with individuals or families facing power disconnection. In times of emergencies ... Horizon is an active partner by ensuring effective and efficient sharing of information and reconnection of electric power. Horizon is a valued community partner."*



Bruce Trail Weed Pull.



Horizon Employees' Charity Fund cheque presentation.





Completing installation of a smart grid switch.

# Our greatest asset is our highly engaged workforce



■ **Horizon Utilities' employees are dedicated to serving our customers.** This showed during the storms of 2013, and is apparent every day. Our highly engaged team is extremely proud of the work they do to support our communities. Every two years, we conduct an employee satisfaction survey. 2013 marked a new high in employee engagement and satisfaction.

While our employees are genuinely dedicated to the customers we serve, Horizon Utilities is dedicated to its employees. We live our core values and provide excellent employee communication, leadership development, performance management, learning opportunities and a wide range of chances to grow and succeed.

Horizon Utilities' culture of safety, which is instilled in each and every employee and contractor, and our enhanced wellness strategy, are the key contributors to our employees' satisfaction.

For the third year in a row, Horizon Utilities has once again been named one of the Hamilton-Niagara's Top Ten Employers. That means not only are we a great place to work for our employees, but also that we are able to attract the best and the brightest to serve our communities well into the future. ☺





# A smart grid

■ **In terms of technology investments,** we are particularly excited about our new Outage Management System (OMS). 2013 was a critical planning and development year in preparing the OMS to be integrated with our Supervisory Control and Data Acquisition system (SCADA), Geographic Information System (GIS), Advanced Metering Infrastructure (AMI), smart meters, and our entire inventory of assets. The result of this important project will be improved customer service through the real-time knowledge of the state of our entire electricity distribution system. We will be able to detect, diagnose and initiate restoration quicker and decrease the dependence on receiving calls or tweets from customers to identify service interruptions.

Our long-term vision is to have a fully intelligent, integrated network with all systems functioning seamlessly and automatically. Our near-term goals for 2014 include replacing the underground residential cable in subdivisions dating back to the 1950s and 1960s. This older infrastructure needs to be replaced because it has reached the end of its useful life. We are continuing to add intelligent switches that include monitoring and electric operation along critical points in our network, and eventually throughout. This technology allows our system operators to switch circuits remotely from our Control Centre and restore power more quickly to our customers – ultimately leading to improved productivity, better reliability and an enhanced customer experience. ●



**PROFESSOR  
NAFIA AL-MUTAWALY,  
M.ENG., PH.D.  
MOHAWK COLLEGE**

*"Through the Horizon Utilities-Mohawk College Research Collaboration, our new microgrid test facility will help to identify ways we can improve reliability, power quality and asset management. Horizon Utilities' leadership in this area is beneficial for the industry at large and will provide employment opportunities for our co-op students and graduate students."*



|||||

**RICHARD BASSINDALE,  
SUPERVISOR,  
ENGINEERING & ASSET  
MANAGEMENT**

*"Six years ago I joined Horizon as an Engineer Intern and never looked back. Because of the people I work with, the challenging tasks and hands-on training, I have been able to achieve my professional designation.*

*Without this program, I would not have been able to learn about power systems and help shape the future of the communities we serve.*

*Horizon is a place where, at the end of the day, I know I have made a difference."*

|||||



## Renewing now – ready for tomorrow

■ **Our workforce is among the best in the business, and we intend to keep it that way.** We know that takes significant planning and time. It can take up to seven years for some of our skilled trades to acquire full competency. Therefore, while we are continuously renewing our infrastructure, so too are we constantly engaged in our workforce planning.

In 2013, we enhanced our Apprenticeship Program. We hired a Technical Trades Coordinator and created an Apprenticeship Council to ensure that the Apprenticeship Program meets our business needs, identifies strategies for new topics of discussion, defines success factors and approves changes to the program structure and protocol.

Our apprenticeship orientation was formalized and levels of competency are reviewed at various stages to verify that the training is successful, and our apprentices are truly ready for their next level of skill development. In addition, several of our most experienced and talented employees took on the role of mentors and received specialized training to provide them with the skills necessary to facilitate the transfer of knowledge effectively. This initiative supports Horizon Utilities' commitment to continuous improvement and the fostering of a learning environment.

Additionally, Horizon Utilities is ensuring that new engineers are joining our ranks, recruiting graduates straight out of university to become part of our Engineer Intern program. ●



**95%**  
Customer  
Satisfaction

**94%**  
Contractor/Developer  
Satisfaction

**AMONG THE LOWEST**  
residential *and* commercial  
distribution rates  
in all customer classes



**2.6 MILLION HOURS WITHOUT A LOST-TIME INJURY  
(AUGUST 2010 TO DECEMBER 2013)**



**\$3.5 MILLION IN EMPLOYEE-DRIVEN PRODUCTIVITY SAVINGS**

**\$13.7 million**  
Shareholder Dividends

**\$36.5 million**  
Infrastructure investments

**\$2.7 MILLION IN CONSERVATION INCENTIVES  
ARRANGED FOR BUSINESS CUSTOMERS**

**25,000,000 kWh**

reduction in energy consumption from our  
conservation programs = enough to power  
2,607 homes for a year



**5.9 million kilograms**

less of greenhouse gas emissions from our  
conservation programs = 1,800 cars



### **2013 AWARDS**

Environmental Excellence Award from Electricity Distributors Association  
CEA Environmental Commitment Award  
BLOOM Sustainability Leadership Award  
Quality Urban Energy Systems of Tomorrow (QUEST) Community Energy Builder Award  
Sustainable Hamilton Best Sustainability Report  
Hamilton Environmentalists of the Year Award of Merit  
Bruce Trail Conservancy Patron Award



Horizon Utilities  
employees on  
the Bruce Trail.

# ENVIRONMENTAL SUSTAINABILITY



While Horizon Utilities provides an essential service, we know that the real essentials of life come from our environment. Clean air to breathe, clean water to drink, and healthy land for a sustainable food supply.

The environment is our home. It is where we all live, work, and play. Looking after it now means it will be there to look after us, well into the future. As such, every decision we make and every program we implement is measured on its impact to the environment. In 2013, we made great progress in keeping our environment clean, healthy, and sustainable. We received numerous awards in recognition of our efforts.

## CONSERVATION

# Big picture, little picture – all good

■ **Horizon Utilities delivered outstanding conservation results**, as a company and for our customers and communities. These efforts saved money, reduced demand on the electricity grid and helped make our air cleaner.

In 2011, the Ontario Energy Board, which regulates the electricity sector in Ontario, gave all utilities aggressive energy reduction targets to achieve by the end of 2014. When 2013 ended, Horizon Utilities had achieved 57 per cent of demand savings and 80 per cent of energy savings toward its targets. These results place Horizon Utilities in the top 10 in demand savings and top 21 in energy savings among the 76 local distribution companies in Ontario that are participating in CDM activities.

Through its various conservation programs, Horizon Utilities provided \$2.7 million in incentives to business customers. In total, the economic impact of our commercial programs and the money invested by customers in their retrofit projects was over \$18.2 million. Companies making investments find that conservation projects pay for themselves quickly and produce long-term savings, making their businesses more sustainable.

## COLLECTIVE GOOD

While it is easy to understand the benefit of saving money, the big picture benefits of conservation are sometimes overlooked. The more we all conserve energy, the more the overall demand for electricity goes down. This, in turn, keeps the market price for electricity lower than it would be otherwise. It also means we reduce the need for additional sources of electricity generation or the need to purchase electricity from other jurisdictions, and that can be a big cost savings to everyone in Ontario.

Overall, in 2013, Horizon Utilities helped reduce peak demand (required generation) for electricity by 34 megawatts (MW). Our programs also helped customers save 25,000,000 kilowatt-hours (kWh) of energy consumption, which is equivalent to saving enough energy to power 2,607 homes for a year.

There is huge environmental benefit as well. Saving energy reduces our carbon footprint and collectively Horizon Utilities and its customers reduced greenhouse gas emissions by 5,900,000 kilograms – the equivalent of the CO<sub>2</sub> generated by 1,800 cars. In other words, Horizon Utilities and its customers helped everyone breathe easier. 🌱



**Horizon and its customers  
saved enough energy to power  
2,607 homes for a year.**







Aerial view of Oakville.

## Horizon Energy Solutions helps Oakville Save!

■ **Horizon Energy Solutions Inc. (HESI)** offers a suite of energy Conservation and Demand Management (CDM) services to local distribution companies.

In 2013, HESI continued its partnership with Oakville Hydro Electricity Distribution Inc. to deliver all aspects of the Ontario Power Authority's (OPA) CDM **saveONenergy**<sup>OM</sup> program. Last year, HESI's Commercial Program Agents worked closely with Oakville Hydro business customers to process applications for Industrial, Commercial & Institutional Programs. The result was a 14 per cent increase in applications from 2012, allowing Oakville Hydro to directly inject almost \$1 million of OPA **saveONenergy**<sup>OM</sup> efficiency incentives into its community.

In the fall of 2013, HESI helped Oakville Hydro launch a unique marketing campaign, *Oakville Saves!*, to build further awareness of the conservation programs available to its customers in partnership with the OPA under the provincial umbrella of **saveONenergy**<sup>OM</sup>. 🌱

## Social benchmarking pilot program

■ **Social Benchmarking is a new** and exciting way Horizon Utilities is partnering with the OPA to help people save energy, easily and with a greater impact to our communities. This project was made possible through the financial support of the OPA.

The pilot program seeks to empower 50,000 customers to drive energy conservation by utilizing industry leading behavioural science, gaming mechanics and rewards, including *AIRMILES® for Social Change*. The program will be delivered through multiple digital channels, including a web portal, mobile website and email to engage and motivate our participating customers. 🌱





# Conservation matters

## saveONenergy<sup>OM</sup> – HOME ASSISTANCE Program

- 3,244 low income customers received energy efficiency measures through the Ontario Power Authority's **saveONenergy<sup>OM</sup> HOME ASSISTANCE** program. The program provides free energy saving retrofits and products
- Horizon Utilities reached out to local social housing agencies and housing co-ops to offer the assistance to eligible affordable housing tenants.

## peaksaver PLUS<sup>®</sup> in 2013

- 4,500 additional customers were provided with programmable, wireless thermostats and in-home energy displays to help them understand and reduce their energy use.
- 12,000 customers are now participating in residential demand response programs.
- 4,000 customers each received up to \$650 for upgraded home furnaces and central air conditioning systems with the **saveONenergy<sup>OM</sup> HEATING AND COOLING INCENTIVE** program.

**saveONenergy<sup>OM</sup>**  
**peaksaver PLUS<sup>®</sup>**

## saveONenergy<sup>OM</sup> – for Business in 2013

- 432 businesses in St. Catharines and Hamilton filed **saveONenergy<sup>OM</sup> RETROFIT** applications, with 312 completed projects receiving more than \$1.9 million in incentives.
- 416 more small businesses in St. Catharines and Hamilton took advantage of the lighting program.

## Lighting Retrofit successes in 2013

- Mark's, a national clothing retailer in St. Catharines, completed an innovative lighting retrofit project that produced the largest percentage demand reduction in kilowatts at one location for all of Horizon's customers. The new lighting will save 13.1 kilowatts - 22 per cent of this retailer's average monthly demand – and over 60,000 kilowatt-hours of energy consumption annually.
- Hamilton Waterfront Trust undertook a major LED lighting (light emitting diode) retrofit project at its Williams Fresh Cafe in 2013 – and started saving energy and money right away. The new LED lighting reduces energy consumption by 83 per cent (almost 50,000 kWh in energy savings). At a total cost of \$6,800, minus a \$3,800 **saveONenergy<sup>OM</sup>** incentive cheque, the project cost of \$3,000 was less than its projected annual energy savings of \$5,500 – this project paid for itself in under half a year and will produce lasting financial environmental benefits.

saveONenergy<sup>OM</sup>, saveONenergy HOME ASSISTANCE<sup>OM</sup>, saveONenergy HEATING AND COOLING<sup>OM</sup>, saveONenergy SMALL BUSINESS LIGHTING<sup>OM</sup>, saveONenergy RETROFIT<sup>OM</sup> are official marks of the Ontario Power Authority and are used under sublicense. peaksaverPLUS<sup>®</sup> is a registered trademark of Toronto Hydro Corporation. Used under sublicense.





## The paperless trail

■ **Paper is not only costly**, but the trees needed to make paper produce oxygen and keep our air clean, for all to breathe. So, we are always finding new ways to go paperless. Our Paper and Copier Reduction Policy, along with innovations in our communications processes, resulted in an 8% reduction in paper usage in 2013, compared to 2012.

In 2013, we also helped our customers go paperless by adding ePost™, Canada Post's free digital mailbox, to our range of billing payment options. For one of our largest customers, the City of Hamilton, we replaced 2,000 individual paper bills for various locations, plus postage costs, with one single electronic file.

Additionally, we initiated a funds transfer solution with our vendors, suppliers and commercial customers, speeding up the process and saving time, money and paper. ●

## Getting everyone on board with sustainability

■ **In 2013, our Supply Chain Management team implemented a policy** to encourage our vendors and suppliers to follow the path to sustainability. We drafted the Sustainable Procurement Policy as part of a five-year plan of the Supply Chain Management Strategy.

This means we are seeking partnerships with suppliers who not only provide the best materials at the lowest cost, but who also have sustainability mandates and efforts in place, or are willing to institute them. We have added a points weighting system for sustainability practices to our supplier selection matrix.

Horizon Utilities and its ratepayers enjoy cost savings, while increasing awareness around sustainability and reducing the impact on the planet. ●



12 Mile Creek  
St. Catharines.





# Renewing our buildings – sustaining our communities

■ **One of the key ways Horizon Utilities demonstrates our commitment to our communities and the environment** is through the renewal and modernization of its existing buildings – extending their lifespan. By choosing to renovate existing buildings rather than relocating, Horizon provides stability in its immediate community and for its ratepayers.

In 2013, as part of the long-term Building Renewal and Renovation Project plan, Horizon Utilities updated three of its buildings with more efficient HVAC systems, new lighting systems, and automated washroom components. The result was a reduction in water consumption and the electricity needed to run the facilities. In fact, the new lighting systems reduced power consumption by 49,400 kWhs – that is enough energy to power five homes a year. ●

## GETTING A CHARGE OUT OF THE FUTURE

# Our electric vehicle charging stations



■ **Widespread use of electric vehicles has been encouraged for some time.**

As awareness grows about fossil fuels and the damage they cause to our air and environment, so too does the interest in, and demand for, electric vehicles. Horizon Utilities has had numerous hybrid electric service vehicles and bucket trucks for several years. In 2013, we added to this record a fully electric service vehicle and the installation of electric vehicle charging stations at three of our facilities.

## WHICH NEIGHBOURHOODS WILL MOST LIKELY MAKE THE LEADING EDGE MOVE TO ELECTRIC CARS?

Knowing where clusters of electric vehicles will be located is critical in helping us anticipate where the demand for electricity will increase on our system. We are currently analyzing research data and conducting a technical analysis to help us plan ahead to ensure we have our infrastructure in place to meet the new demand. ●







## Partners in preserving the health of our planet

■ **Horizon Utilities has supported the Bruce Trail Conservancy since 2010**, an organization committed to the safe and sustainable access to the Niagara Escarpment, a UNESCO World Biosphere Reserve. The Bruce Trail and the Escarpment pass through both of Horizon Utilities' service territories; Hamilton and St. Catharines. Whether it is planting trees, removing invasive species, sponsoring educational signage or other special events, our company has been involved for several years in ensuring future generations will enjoy this natural treasure.

Horizon Utilities also partnered with the Niagara Peninsula Conservation Authority, Ontario Power Generation and the City of St. Catharines on a sustainable vegetation pilot project for the 12 Mile Creek electric power corridor. The aim of this project is to replace invasive species of vegetation with native trees, shrubs, and wildflowers, and thereby increase biodiversity without disrupting power lines. 🌱



**Bruce Trail  
CONSERVANCY**



## Ready for renewables

■ **Horizon is working to be an enabler of future innovations.**

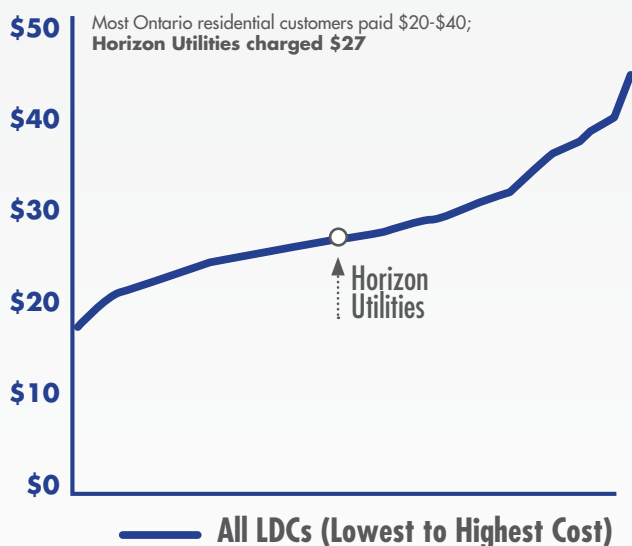
While we look at where demand might be growing, we are also looking at where supply may be growing because of the advent of smaller, distributed, renewable sources of energy. These sources of energy can supply our system with electricity. Balancing the new local supply of electricity with the new local demand, such as from electric vehicles, is a big part of what the future of electricity distribution will be all about.

Over the long term, this "distributed" generation will make our system more reliable by reducing reliance on large centralized generation plants. This will make our communities more resilient. In the meantime, in 2013 we continued important foundational work that will allow us to continually accommodate the new interest and growth in individual renewable generation projects, like rooftop solar. 🌱

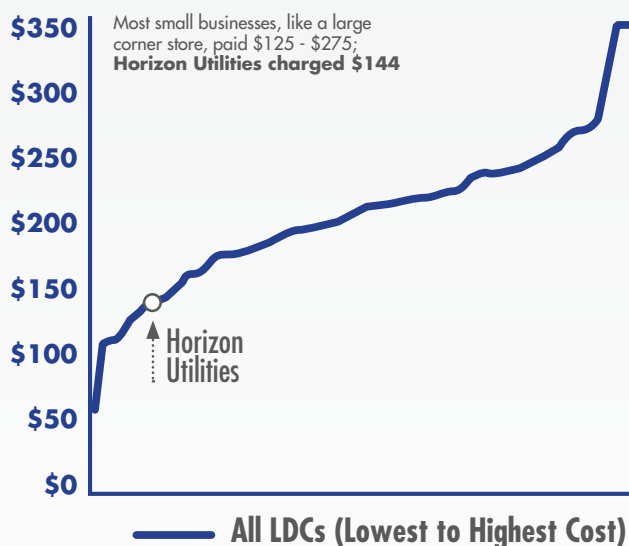


# Low and balanced customer rates

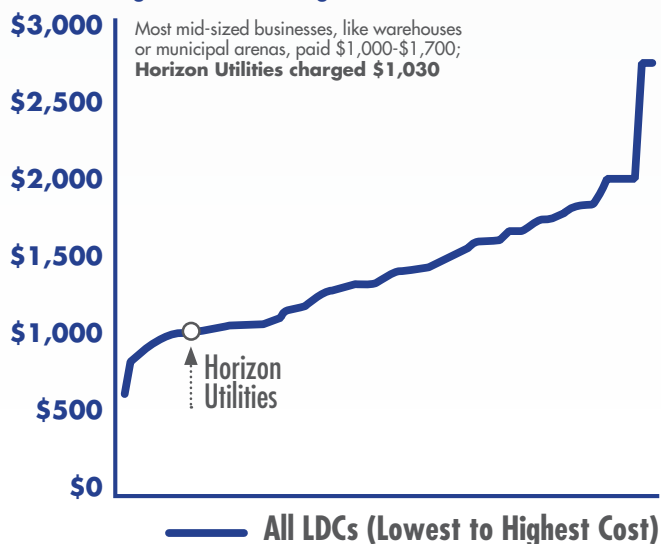
**Residential Customers 800kWh/Month**



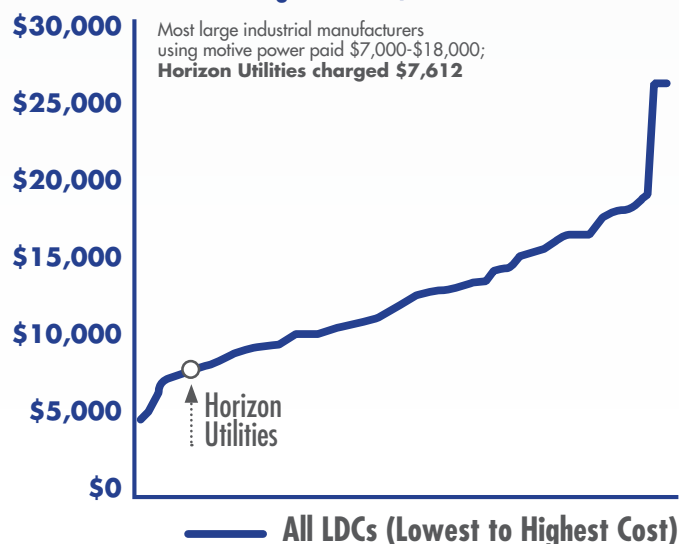
**Small Business 13,000 kWh/Month**



**Light Manufacturing 350kW/Month**



**Manufacturing 3,500kW/Month**

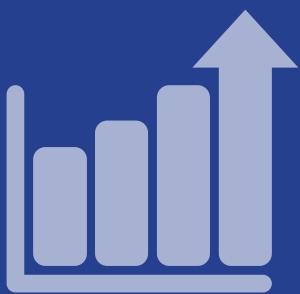


Source: 2013 OEB Tariff of Rates and Charges. NB: These four graphs represent typical customers — one residential and three commercial of varying size. The rates displayed here are the OEB's approved distribution only rates for all Ontario distributors in 2013. Data excludes Hydro One Networks because of the character of its service territory compared to other LDCs.





# ECONOMIC SUSTAINABILITY



We know the most important concern of our customers is that the lights are on, consistently and at a reasonable cost. That is the bottom line. For Horizon Utilities, however, the recipe for sustainability is broader – low rates with high service reliability for customers, reasonable dividends for shareholders, and responsible infrastructure renewal for the community.

We are leveraging all we can from our present infrastructure, maintaining and renewing it as needed, and investing in the most effective new technologies to make sure that what we do is consistently more reliable, more responsive, and more cost effective. We are creating opportunities that enable infill development and the more compact urban forms of smart growth municipal planning, which together will create the smart communities of the future.



■ **Through Horizon Utilities and Horizon Energy Solutions**, Horizon Holdings Inc. manages operations that deliver real value to households, businesses, industry and communities. We can offer communities a robust and reliable service because of the economies of scales we have gained through mergers and our business offerings.

While we have used the previous sections telling you about our story on sustainability in social and environmental terms, this one deals with the bottom-line of economic responsibility.

## SHAREHOLDER DIVIDENDS

In 2013, Horizon Holdings paid \$13.7 million in dividends to its shareholders, holding companies of the City of Hamilton and City of St. Catharines, up from \$10.7 million in 2012. The full financial results of the Corporation are presented in the accompanying *Management's Discussion and Analysis and Consolidated Financial Statements*, which are posted on the Horizon Holdings Inc. and Horizon Utilities websites.

## COST AND REVENUE COMPARISONS

Our goal is to be the best performing energy company in Ontario. We measure our controllable cost and revenue per customer and return on equity performance against our industry peers. The accompanying figures are from the Ontario Energy Board's Yearbook of Electricity Distributors, with an average of the most recent three reported years used to smooth out single year exceptions.

On balance, Horizon Utilities operates with much less revenue per customer than other LDCs. From 2010 to 2012, we required an average of \$422 of revenue per customer per year, a key comparative indicator of rates (Figure 1). By comparison, Horizon Utilities was 19 per cent below the \$521 for the Golden Horseshoe LDCs and 17 per cent below the Ontario average of \$508.

Horizon Utilities was able to operate with less revenue because its controllable costs (operations, maintenance and administration or "OM&A") of \$186 per customer, on a three-year average, were 33 per cent lower than the Ontario

### Controllable Costs and Revenue per Customer Comparison

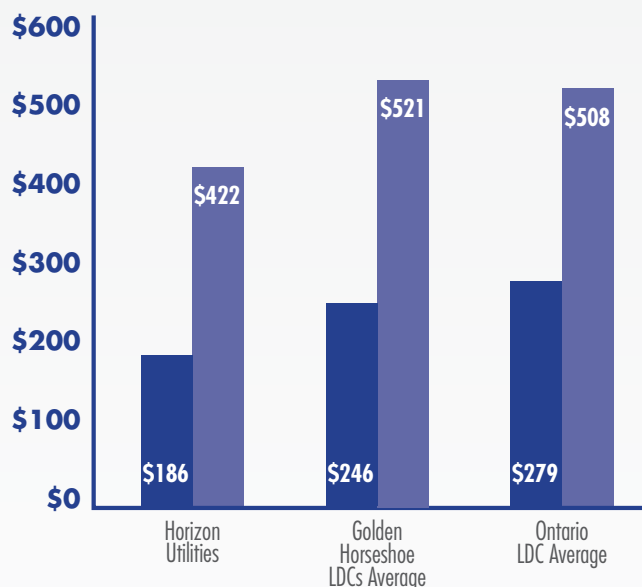


Figure 1

■ Controllable Cost per Customer 2010-2012 Avg.  
■ Distribution Revenue per Customer 2010-2012 Avg.

### Controllable Costs per Customer

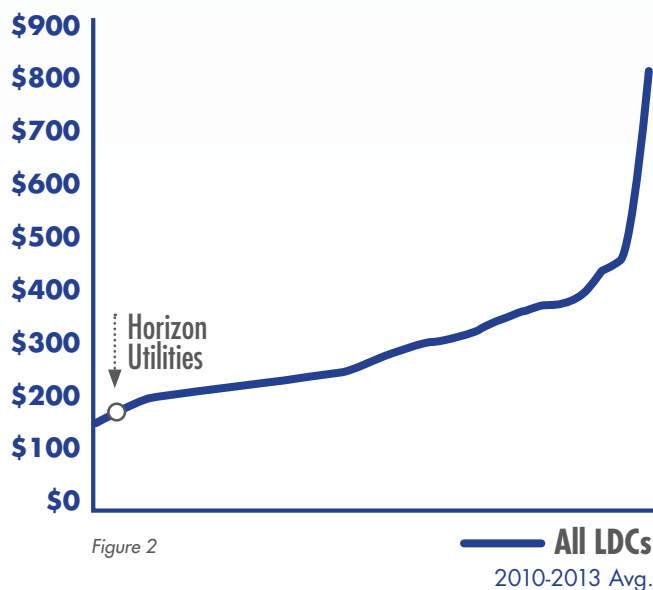


Figure 2

Figures 1-3, Source: Graph data on pages 26 and 27 is based on OEB Yearbook of Electricity Distributors data from 2010-2012 and excludes Hydro One Networks Inc.



average of \$279, and also lower than the \$246 for the 25 distributors in the Golden Horseshoe (Figure 1).

In 2012, Horizon Utilities had the fourth lowest controllable costs per customer (OM&A) of 72 LDCs in Ontario (Figure 2).

## RETURN ON EQUITY COMPARISON

Horizon Utilities has a three-year return on equity average of 8.55% over 2010 to 2012 (Figure 3). While the OEB permitted return was 9.85, 9.58 and 9.12 percent respectively across these three years, the average of the 25 utilities in the Golden Horseshoe is 7.75% and the average of all 73 local distribution companies is lower still at 6.18%.

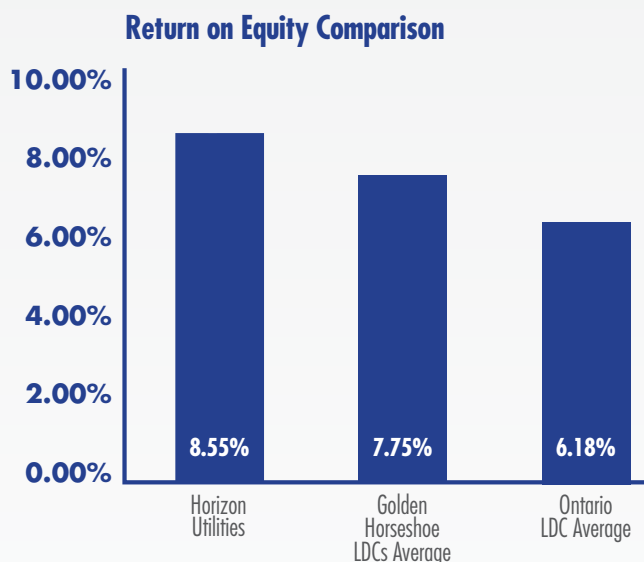


Figure 3

■ Return on Equity 2010-2012 Avg.

# CAPITAL EXPENDITURES AND INFRASTRUCTURE RENEWAL

2013 was an important year for the renewal of Horizon Utilities' electricity distribution system and for the planning, building and implementation of its smart grid.

Horizon Utilities has improved the average remaining life of many asset categories and we are continuing to modernize our system as we replace our aging infrastructure. We spent the majority of 2013 conducting a meticulous inventory of all major assets we own, documenting conditions and remaining life spans, and creating a comprehensive plan to serve our communities for the next quarter century and beyond.


Our capital plan calls for approximately \$900 million in investment over the next 20 years. Approximately \$700 million is dedicated to the renewal of the distribution system with the balance related to meeting the growth of our communities. In 2013, we invested \$36.5 million in our distribution system.

The timing for the significant renewal portion of future investment allows us to take advantage of smart grid technologies, which will enhance the delivery of exceptional



service and cost-effective operations for our customers for many decades to come. One of the key projects was the \$5.9 million dollar renewal of our substations, giving us improved reliability and operational abilities. ☀





Aerial view of downtown Hamilton.



## Low and balanced customer rates

■ **Horizon is proud to be a sector leader on customer rates.** When setting out to establish rates for our customers, we strive to maintain low rates and to ensure that our rates reflect the specific costs for serving each class of customer. This economic responsibility is a big part of our contribution to the sustainability of our communities, businesses and households.

While Ontarians may know that electricity rates are set by the Ontario Energy Board, most would be surprised to learn that distribution rates vary from one LDC to another.

For a typical residential customer using 800 kilowatt-hours of consumption per month, the distribution charge varies widely by utility. The relatively wide range is due both to cost management and, within the constraints of rate regulation, the manner in which distributors allocate their costs to different rate classes. In 2013, most distribution charges ranged between \$20 to \$40 with a few exceptions. Horizon's distribution charge is \$27.

This is illustrated more clearly for the case of a typical small commercial customer, such as a large corner store consuming 13,000 kilowatt-hours per month. The majority of utilities across Ontario charged between \$125 and \$275 for distribution in 2013. At Horizon, the customer paid \$144, among the lowest rate in Ontario.

For a light manufacturing commercial customer, such as a warehouse, or even a municipal arena, where a typical customer might use 350 kilowatts of demand, the majority of local distribution companies charge between \$1,000 and \$1,700 (with some outliers exceptions on either end). At Horizon, the same customer paid significantly closer to the lower end at \$1,030.

Similarly, a typical heavy industrial manufacturer requiring 3,500 kilowatts of capacity, would see rates varying from \$7,000 to \$18,000 per month for the distribution charge, but just \$7,612 for Horizon customers. ●







# Direct economic value to communities

■ In order to understand the financial impact on communities, Horizon Holdings measures itself using the key Global Reporting Initiative (GRI) metric of “direct economic value.”

In 2013, Horizon Holdings contributed a combined \$134.0 million to the economy of western Greater Golden Horseshoe and the province generally. This includes \$61.5 million in operating expenses, which in great part flow back into local communities. Of the \$49.3 million in capital expenditures, \$10.5 million was used to procure materials and services in our service areas. In addition, \$2.7 million in CDM incentives was used to invest in energy efficiency.

The direct economic value also includes social responsibility contributions. Combined employee and corporate charitable donations totaled \$0.3 million in 2013. Contributions include \$0.1 million provided to the United Way agencies in St. Catharines and Hamilton to support the OEB’s Low-income Energy Assistance Program (LEAP). Horizon Employees’ Charity Fund contributed \$0.1 million to 61 local charities in Hamilton and St. Catharines. ●

## Direct Economic Value Generated 2013: Horizon Holdings Inc. (\$ Millions)

Operating Expenditures	61.5
Capital Expenditures	49.3
Dividends to Shareholders	13.7
Payments in Lieu of Taxes Expense (PILs)	6.6
Energy Incentives and Rebates (Ontario Power Authority funded)	2.7
Charitable Contributions (Employees and Corporate)	0.3
<b>Economic Benefit</b>	<b>134.0</b>

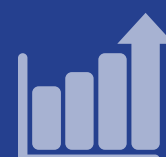
Source: 2013 Horizon Holdings Audited Financial Statements, except for charity and energy incentives, which are sourced internally.

Notes to Direct Economic Value Generated 2013. Source: Horizon Holdings’ Global Reporting Initiative™ 2013 Filing. The figure of \$0.3 million for Charitable Contributions represents the total combined employee and corporate contributions. They consist of \$0.1 million for LEAP, \$0.1 million corporate and Employee Charity Fund, and an additional \$0.1 million corporate.

## Comparative Direct Economic Value 2012 (stated in millions of Canadian dollars)

	Horizon Utilities (Not Holdings)	Horizon Utilities/ Customer	72 LDCs Average	72 LDCs Avg./Customer
Revenues	\$110.3	\$465	\$28.5	\$558
Operating Expenditures	\$51.5	\$217	\$13.6	\$266
Capital Expenditures	\$52.9	\$223	\$15.4	\$301
Payments in Lieu (PILs)	\$6.6	\$28	\$0.6	\$12

Notes to Comparative Direct Economic Value 2012. NB: Data generated by Distribution Utilities only. See full GRI filing for additional details. Source: Ontario Energy Board (OEB). LDCs are compared here because only their data is published by the OEB. 2012 data is used because 2013 is not yet published. Averages are simple averages. Hydro One Networks Inc. is excluded because its service territory differs greatly from other LDCs. Charity contributions are not included because they are not published by the OEB.





City of Hamilton solar generation installation at 330 Wentworth St. North. Left-right: Geoff Lupton, City of Hamilton, Max Cananzi, President and CEO, Hamilton Mayor Bob Bratina and Scott Knapman, Vice President, Horizon Energy Solutions Inc.



**DAVID KALBARSKI,  
MANAGING DIRECTOR,  
AVVIA RENEWABLE ENERGY**

*"It has been a pleasure working with Horizon Utilities. Our company has dealt with many LDCs regarding FIT and MicroFIT projects and Horizon is by far one of the best for service. Because of your help, the FIT project ran as smoothly as possible. We are looking forward to working with you on other FIT projects."*

## COMPETITIVE SERVICES

# Horizon Energy Solutions Inc.

■ **Helping our communities and clients become more sustainable and resilient is at the core of Horizon Energy Solutions Inc. (HESI).** HESI is Horizon Holdings' competitive services provider and renewable energy developer. Commercial clients and LDCs throughout Ontario benefit from our expertise with an affordable suite of services, including metering, conservation and demand management, and streetlight maintenance. Generating renewable electricity locally means our clients and communities lessen their carbon footprint, fostering increased energy independence and resilience, all while enjoying a revenue stream.

HESI also provides metering solutions with a comprehensive range of meter management, sealing, compliance testing, asset tracking, certification and meter service provider services.

## CAPTURING THE SUN

In 2013, HESI reached commercial operation of 1.6 MW of renewable electricity, equivalent to powering 188 homes annually. The impact on our air quality is equivalent to taking 259 cars off the road for a year.



This came through seven commercial rooftop solar projects, including the City of Hamilton's large Wentworth Operations Centre. Also in 2013, HESI prepared applications for 11 additional solar rooftop projects in various communities to potentially provide the Ontario grid with an additional 2.5 MW of clean energy.

## PROVIDING HIGH QUALITY EXPERTISE AND EQUIPMENT

HESI's roster of LDC and commercial clients benefiting from its cost-effective and excellent metering services continued to grow in 2013. All field operations are conducted by fully trained meter journeypersons with years of experience in the trade. We ensure dedicated supervisory staff, support clerks, and engineers are allocated to support all processes and maintenance. We deliver a high degree of quality and customer satisfaction in all work, and are one of only a few meter service providers in Canada to meet the standard required for registration under the ISO 9001:2008 Registered Quality Management System.



## SAVING ENERGY, SAVING MONEY

Saving energy and saving money is made possible through HESI's suite of energy management services tailored to the needs of all customer types. We pride ourselves on being a leader in conservation and demand management, helping customers to lower their energy usage, and having a positive impact on their bottom line. Our turnkey energy management programs and products allow our clients, including other LDCs, to assist their customers to conserve and save. In 2013, we continued to work with LDCs to tailor programs to target local and regional needs.

All this means that HESI is benefiting all Ontario energy customers by contributing to lowering the overall demand on the grid, thereby helping to put off the need to build new generation sources. ●



Final commissioning of metering for a HESI solar PV installation.

**BOB MYERS**  
**DIRECTOR, CDM AND METERING SOLUTIONS**  
**OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.**

"Oakville Hydro Electricity Distribution has been using Horizon Energy Solutions' MSP services for several years with great results. Its service level and timely response to IESO trouble reports enables Oakville Hydro to meet the requirements of regulated wholesale market rules. HESI also provides monitoring of meter seal expiry and registration of new or upgraded meter installations and can be relied upon to provide direction and advice on all aspect of wholesale metering and meter communications."



# Cost of Service 2014 rate application

■ **2013 was a critical year for the future renewal and sustainability of Horizon Utilities.** We began the significant task of preparing a Cost of Service Application to the Ontario Energy Board under their new Renewed Regulatory Framework. On a periodic basis, Horizon Utilities, like all distribution utilities in the province, must present its investment requirements to the OEB for review and approval. The outcome of this process is the rates we may charge customers to support the renewal and operation of our distribution system.

Roughly one-fifth of a monthly residential electricity energy bill represents delivery charges that Horizon Utilities collects. We use these charges to run our entire operations today – and to plan renewal projects for decades to come. Our application

to the OEB must detail our every need and how we plan to prioritize our work to ensure the safe, reliable and affordable delivery of electricity to our customers. The task involves the extensive participation from every department in our organization.

To prepare for our application, Horizon Utilities undertook a major public consultation process, engaging our customers directly and asking them to tell us what is most important to them. Our plan on rebuilding our system was shared and we explained how their needs and demands for our services will be met well into the future. The results of this consultation were incorporated in our Cost of Service Application and filed with the OEB. ●

## “A+” Horizon’s 2013 self-declared Application Level for its Global Reporting Initiative (GRI) Filing

■ **For the sixth year in a row, Horizon Holdings** has fairly and transparently reported its social, environmental and economic performance under the Global Reporting Initiative™, the most widely-used international sustainability reporting framework.

The cornerstone of the GRI is its Sustainability Reporting Guidelines, which provide guidance to companies on how to measure and report on a “triple bottom-line” basis by giving equal weight to social, environmental and economic matters.

In 2013, as in 2010, 2011 and 2012, Horizon Holdings reported in accordance with the GRI “G3” Guidelines (including the Electric Utilities Sector Supplement) at the A+ application level – answering all questions and receiving external assurance for its filing.



Since 2010, Horizon has continued to enhance its sustainability policies and programs, including refining its sustainability data management and reporting processes. Since 2009, Ernst & Young LLP (EY) has also conducted a third-party review of Horizon’s self-declared application level and provided limited assurance over a selection of Horizon’s reported GRI indicators since 2009. In 2013, EY reviewed 15 specific indicators. (A copy of EY’s 2013 assurance statement can be viewed at [horizonholdingsinc.com](http://horizonholdingsinc.com) and [horizonutilities.com](http://horizonutilities.com).) ●

### GRI SUSTAINABILITY DISCLOSURE CATEGORIES

*Economic • Environment • Labour Practices and Decent Work • Human Rights • Society • Product Responsibility*

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# Horizon Holdings Inc.

## Five Year Consolidated Summary (stated in thousands of Canadian dollars)

	2013	2012	2011	2010 (Note 1)	2009 (Note 1)
<b>STATEMENT OF INCOME</b>					
Net electricity revenue	101,467	107,389	99,494	91,217	88,583
Other income from operations	12,824	11,902	9,267	10,517	10,369
	114,291	119,291	108,761	101,734	98,952
Operating expenses	61,534	57,140	58,355	46,762	44,855
Depreciation and amortization	20,231	18,555	16,772	26,978	25,012
	81,765	75,695	75,127	73,740	69,867
<b>Income from operating activities</b>	<b>32,526</b>	<b>43,596</b>	<b>33,634</b>	<b>27,994</b>	<b>29,085</b>
(Loss) gain on disposal of property, plant and equipment	(1,707)	(1,442)	(1,644)	99	92
Net finance charges	(6,592)	(8,804)	(10,716)	(9,639)	(9,185)
Payments in lieu of income taxes	(6,548)	(7,169)	(5,305)	(5,771)	(6,471)
(Loss) income from discontinued operations	-	(5)	1,088	25	-
<b>Net income</b>	<b>17,679</b>	<b>26,176</b>	<b>17,057</b>	<b>12,708</b>	<b>13,521</b>
<b>STATEMENT OF FINANCIAL POSITION</b>					
<b>Assets</b>					
Current assets	133,624	143,020	110,630	106,710	97,872
Non-current assets	448,577	424,049	387,401	367,056	355,521
	582,201	567,069	498,031	473,766	453,393
<b>Liabilities and shareholders' equity</b>					
Current liabilities	101,872	96,780	213,143	90,692	114,015
Long term borrowings	189,252	189,395	39,592	155,554	116,000
Other non-current liabilities	52,470	47,602	26,182	45,125	45,578
Shareholders' equity	238,607	233,292	219,114	182,395	177,800
	582,201	567,069	498,031	473,766	453,393
<b>STATEMENT OF CASH FLOWS</b>					
Net cash from operating activities	42,280	42,172	32,318	43,730	27,715
Net cash used in the acquisition of property, plant and equipment and intangible assets	(49,315)	(56,975)	(35,414)	(39,193)	(44,775)
Net cash from other investing activities	519	434	1,806	144	142
Net cash from long term borrowings	-	33,803	-	39,554	-
Net cash (used in) from other financing activities	(9,334)	11,205	1,038	(10,556)	(11,404)
Net (decrease) increase in cash and cash equivalents	(15,850)	30,639	(252)	33,679	(28,322)

Note 1: Horizon Holdings Inc. transitioned from Canadian Generally Accepted Accounting Principles (Canadian GAAP) to International Financial Reporting Standards (IFRS) effective January 1, 2012. The financial results for 2011 have been restated in accordance with IFRS for comparative purposes. The financial results for 2009 and 2010 are presented in accordance with Canadian GAAP applicable to those periods.



# SUSTAINABILITY POLICY

**Doing business sustainably** is essential to Horizon Holdings' success as a provider of electricity and innovative energy solutions to the communities we serve. We are committed to delivering value to our shareholders by providing our customers with safe, reliable and efficient electricity and innovative energy solutions. This policy sets forth Horizon Holdings' commitment to the health, safety, environment and well-being of our employees and contractors, our products and services, and the communities we serve.

## **SAFETY**

The safety of our employees, contractors, customers and the public is paramount. We will continually strive to meet and exceed all legal safety requirements. We will not undertake any activity without proper safety procedures and equipment being in place.

## **ENVIRONMENTAL RESPONSIBILITY**

We will work to minimize our impact on the environment and seek to continually improve our environmental performance. We will work to reduce waste, emissions of greenhouse gases and other air pollutants, and undertake to manage hazardous materials in a manner that meets or exceeds all government requirements. We will work with stakeholders to resolve land use conflicts in ways that protect the environment.

## **ECONOMIC PERFORMANCE**

Our success depends on the success of our customers and communities. We will return dividends to our shareholders that are consistent with ensuring sufficient investment for the provision of ongoing innovative and cost-effective energy products and services at competitive rates to our customers in the communities we serve.

## **DOING BUSINESS ETHICALLY**

We will meet or exceed all applicable laws and regulations relevant to our areas of business activity in the jurisdictions in which we operate. We will continue to implement and maintain ethical business practices and sound systems of corporate governance. We will not tolerate harassment or discrimination in any of our relationships, whether with employees, contractors, customers, or other stakeholders.

## **OUR EMPLOYEES**

Our employees are Horizon Holdings' ambassadors to our customers and the communities we serve. We will provide employees with development opportunities in a safe, healthy and satisfying working environment. We will encourage the participation of employees in the continual improvement of our health, safety, environmental and social performance, and in the development of new and innovative energy products and services to our customers.

## **MANAGING RISK**

We will meet or exceed all health, safety, and environmental regulatory requirements. We will evaluate the economic, social, and environmental risks of our business and take precautionary actions to address them. We will incorporate health, safety, environmental, and social considerations into our business decisions.

## **OUR COMMUNITIES**

Our activities reach far and wide into the communities that we serve. The supply of energy products and services represents a major contribution to the health and well-being of our customers and their communities. We will actively participate in the social, economic, and institutional development of the communities in which we operate. We will engage our stakeholders through open and transparent consultation and verifiable public reporting of our sustainability performance.

**"Horizon Utilities is a great partner for Greater Niagara Chamber of Commerce. As we continue to foster the economic strength of our communities, we are fortunate to be able to leverage Horizon's leading edge approach to triple-bottom line sustainability practices as a benefit to business location."**

**WALTER SENDZIK, CEO, GREATER NIAGARA CHAMBER OF COMMERCE**



# CORPORATE GOVERNANCE

**Horizon Holdings Inc.** is incorporated under the Ontario Business Corporations Act and, throughout 2013, was subject to a Shareholders Agreement with Hamilton Utilities Corporation and St. Catharines Hydro Inc., its two shareholders.

The Shareholders Agreement requires that the Board of Directors observe the standards of corporate governance which apply to publicly traded corporations to the extent practical. Although it is not a public corporation, Horizon Holdings Inc. recognizes the role of good governance in a successful business enterprise and provides voluntary disclosure on its corporate governance practices.

Horizon Holdings Inc. owns all the shares in each of the two subsidiaries through which it operates, namely Horizon Utilities Corporation and Horizon Energy Solutions Inc.

At present, accountability and responsibility for Committee oversight in Horizon Holdings Inc. and Horizon Energy Solutions Inc. is the responsibility of the full Board of Directors of the respective companies. Horizon Utilities, for its part, has three Board Committees in addition to its Board of Directors.

## Responsibilities of the Board of Directors

The Canadian Securities Administrators (CSA) has published comprehensive guidelines for effective corporate governance. The guidelines cover a broad spectrum of good governance practices and elaborate specifically on a number of major areas where Boards should explicitly assume stewardship:

- *Development of corporate governance principles and guidelines*
- *The integrity of senior management and staff throughout the organization*
- *Strategic planning process and approval of a strategic plan*
- *Risk assessment*
- *Integrity of internal controls and management information systems*
- *Succession planning and management performance*
- *Employee and public safety*

The Boards of Directors of Horizon Holdings Inc. and of Horizon Energy Solutions Inc. have assumed stewardship with respect to the areas identified by the CSA and fulfill such stewardship responsibilities directly. These two Boards have established written mandates for themselves and each has adopted a comprehensive statement of Governance Guidelines.

The Board of Directors of Horizon Utilities Corporation has also assumed stewardship with respect to the areas identified by the CSA and fulfills such stewardship responsibilities directly and with supporting oversight by its Committees.

The CSA also provides guidelines with respect to the composition of the Board of Directors, including that the majority of Directors should be independent. The Boards of Directors of Horizon Holdings Inc. and Horizon Energy Solutions each consist of five directors, all of whom are presently independent as defined by the CSA. The Board of Directors of Horizon Utilities Corporation consists of 10 directors, all of whom are also presently independent. The Chair of the Board is an independent Director, as are the Chairs of all Horizon Utilities' Board Committees. The independent members of each Board meet without management in attendance for part of each Board meeting.

Board composition also meets the requirements of the Ontario Energy Board's Affiliate Relationships Code (ARC). This code regulates the contractual arrangements between related parties and requires that at least one-third of a regulated distribution company's Directors are independent from its non-regulated affiliates.

All new Directors of Horizon Holdings Inc. and its two subsidiaries receive a comprehensive orientation with respect to the role of the Board, the business of the Corporation and the legislative and regulatory environment affecting the electricity sector. All three Boards have adopted a Code of Business Conduct, including a Conflict of Interest Policy. The Boards undertake an annual assessment of the Board and, in the case of Horizon Utilities Corporation, each Committee.

Annually, each of the companies' Boards request and receive an independence letter from its Auditors.

By letters dated February 5, 2014, KPMG LLP has confirmed that it is independent with respect to Horizon Holdings Inc. (and its related entities) within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulation from January 1, 2013 up to the date of its letters.

The Strategic and Financial Plans for the Corporations are approved and monitored directly by their respective Board of Directors.

## HORIZON UTILITIES CORPORATION BOARD COMMITTEES

There are three Committees of the Board with respective oversight mandates as follows:

- *Audit and Risk Management Committee: risk management, internal control, financial information, and annual audit; as well as the information systems activities of Horizon Utilities Corporation.*
- *Human Resources and Corporate Governance Committee: succession planning, management objective setting and performance, compensation and safety activities of the Corporation. This Committee also covers all governance issues.*
- *Nominating Committee: constituted as required for the evaluation of Board composition and nomination of prospective Directors of the Board as may be required.*

## MANDATE OF MANAGEMENT

The Board approves the mandate of the Chief Executive Officer and annual corporate objectives consistent with the recommendations of the CSA.

The permitted business activities of the Corporation are outlined in its Shareholder Agreement. The mandate of the Chief Executive Officer and annual corporate objectives are consistent with the Shareholder Agreement. The authority limits of the Chief Executive Officer, as delegated by the Board, have been formally documented and executed by the Board.

In addition, the Board of Directors annually reviews the Chief Executive Officer's objectives, evaluates the Chief Executive Officer's performance and monitors the succession planning process.

# THE HORIZON FAMILY OF COMPANIES

## HORIZON HOLDINGS INC.

Horizon Holdings Inc. is an investment holding company owned 78.9 per cent by Hamilton Utilities Corporation and 21.1 per cent by St. Catharines Hydro Inc. Horizon Holdings Inc. owns 100 per cent of the common equity of Horizon Utilities Corporation and Horizon Energy Solutions Inc.

### Board of Directors

Robert Cary, Board Chair  
Alexander (Sandy) Adam\*  
Paul Benson  
Douglas J. Harrison\*\*  
Edward Minich  
Joan Wepler

### Management and Officers

Max Cananzi, President & CEO  
John G. Basilio, Senior Vice President & Chief Financial Officer  
Neil Freeman, Vice President, Business Development & Corporate Relations  
Sarah Hughes, Vice President, Finance\*\*\*\*

## HORIZON UTILITIES CORPORATION

Horizon Utilities Corporation is a regulated local electricity distribution company serving more than 240,000 residential and business customers in Hamilton and St. Catharines, Ontario. Horizon's 436 employees are committed to delivering a safe and reliable supply of electricity, providing unparalleled customer value and helping create a culture of energy conservation in Ontario.

### Board of Directors

Robert Cary, Board Chair  
Alexander (Sandy) Adam  
Paul Benson  
John Bergsma  
Patrick Crowley  
Douglas J. Harrison  
Edward Minich, Chair, Audit and Risk Management Committee  
Margaret T. Nelligan, Chair, HR/Governance Committee  
Joseph Rinaldo\*\*  
Marnie Spears\*  
Joan Wepler

### Management and Officers

Max Cananzi, President & CEO  
John G. Basilio, Senior Vice President & Chief Financial Officer  
Indy Butany-DeSouza, Vice President, Regulatory and Government Affairs  
Eileen Campbell, Vice President, Customer Services  
Danielle Diaz, Vice President, Finance\*\*\*  
Sarah Hughes, Vice President, Finance\*\*\*\*  
Kathy Lerette, Vice President, Utility Operations  
Brenda Schacht, Vice President, Human Resources

## HORIZON ENERGY SOLUTIONS INC.

Horizon Energy Solutions Inc. is a local energy company dedicated to providing commercial and residential customers with easy, turnkey green energy solutions that generate benefits for the customer and the environment.

### Board of Directors

Robert Cary, Board Chair  
Alexander (Sandy) Adam\*  
Douglas J. Harrison\*\*  
Paul Benson  
Edward Minich  
Joan Wepler

### Management and Officers

Max Cananzi, President & CEO  
John G. Basilio, Senior Vice President & Chief Financial Officer  
Sarah Hughes, Vice President, Finance\*\*\*\*  
Scott Knapman, Vice President

\* until June 25, 2013

\*\* as of June 25, 2013

\*\*\* as of August 19, 2013

\*\*\*\* until January 30, 2013

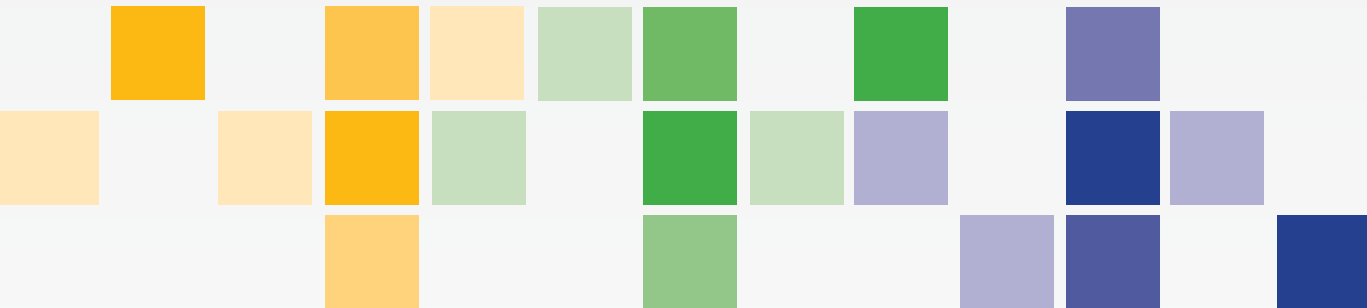
\*\*\*\*\* as of July 1, 2013

## **BELIEFS, MISSION, VISION**

**Beliefs:** Employees are our most valuable asset.  
Our customers are the reason we exist.

**Mission:** Our employees create value for shareholders, customers and the communities we serve through the safe and reliable delivery of electricity and innovative energy solutions.

**Vision:** Our vision is to be the leader in providing innovative energy solutions to the communities we serve.



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#### 4-AMPCO-18

Ref: Exhibit 4, Tab 2, Schedule 3, Page 31

a) Please provide Human Resources costs/FTE for the 2011 to 2013 actuals and forecast costs for 2014 to 2019.

Response:

1 The following tables summarize total costs for the Human Resources Division per FTE for the  
2 years 2011 to 2013 (actuals) and budget 2014 to 2019 as detailed in Exhibit 4, Tab 3, Schedule  
3 3, p.11. The Human Resources costs include Corporate Services, Healthy Workplace and  
4 Safety and Human Resources.

5 **Table 1: Human Resource Costs per FTE 2011 - 2014**

2011 Actuals	2012 Actuals	2013 Actuals	2014 Bridge Year
\$ 7,276	\$ 8,286	\$ 8,546	\$ 9,277

7 **Table 2: Human Resource Costs per FTE 2015 - 2019**

2015 Test Year	2016 Test Year	2017 Test Year	2018 Teat Year	2019 Test Year
\$ 10,007	\$ 10,185	\$ 10,471	\$ 11,018	\$ 10,971





#### 4-AMPCO-19

Ref: Exhibit 4, Tab 2, Schedule 3, Page 37

a) Please provide Information Systems and Technology costs/customer for the 2011 to 2013 actuals and forecast costs for 2014 to 2019.

Response:

- 1 Horizon Utilities' Information Systems and Technology costs/customer for the 2011 to 2013 actuals and forecast costs for 2014 to
- 2 2019 are as per the table below:

3 **Table 1: IST Costs/Customer**

Programs	2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year	2015 Test Year	2016 Test Year	2017 Test Year	2018 Test Year	2019 Test Year
Information Systems and Technology OM&A <sup>(1)</sup>	3,082,463	3,438,364	3,482,754	4,082,455	4,192,256	4,666,469	4,800,502	4,952,143	5,181,188
Number of Customers <sup>(2)</sup>	237,305	238,488	240,114	241,692	243,319	245,123	247,036	249,021	250,909
Information Systems and Technology Costs per Customer	\$ 12.99	\$ 14.42	\$ 14.50	\$ 16.89	\$ 17.23	\$ 19.04	\$ 19.43	\$ 19.89	\$ 20.65

(1) Per Table 4-31 IST Program Costs

(2) Per Table 3-28 and 3-29. Customer counts were incorrectly stated in Table 4-20 for 2011, 2012 and 2013 Actual and the above customer counts are the corrected figures.



#### 4-AMPCO-20

Ref: Exhibit 4, Tab 3, Schedule 3, Page 38

a) Please provide Corporate Communications costs/customer for 2011 to 2013 actuals and forecast costs for 2014 to 2019.

#### Response:

- 1 Horizon Utilities provides the Corporate Communications department cost per customer for the years 2011 through 2013 and
- 2 forecast for 2014 through 2019 in the table below.

#### 3 Table 1: Corporate Communications Costs per FTE

Corporate Communications Costs per Customer

Programs	2011 Actual	2012 Actual	2013 Actual	2014 Bridge Year	2015 Rate Year	2016 Rate Year	2017 Rate Year	2018 Rate Year	2019 Rate Year
Corporate Communications Costs OM&A <sup>(1)</sup>	1,098,676	945,125	1,064,847	1,127,509	1,143,176	1,171,246	1,197,486	1,222,395	1,249,236
Number of Customers <sup>(2)</sup>	237,305	238,488	240,114	241,692	243,319	245,123	247,036	249,021	250,909
Corporate Communications Costs per Customer	\$ 4.63	\$ 3.96	\$ 4.43	\$ 4.67	\$ 4.70	\$ 4.78	\$ 4.85	\$ 4.91	\$ 4.98

(1) Per Table 4-29

(2) Per Table 3-28



**4-AMPCO-21**

**Ref: Exhibit 4, Tab 4, Schedule 2**

- a) Page 1 - Horizon indicates it participates in a variety of surveys and certain of these are of such a confidential nature that they cannot disclose the existence of such survey.**
  - i. Please provide a listing of the surveys Horizon has participated in since 2011.**
  - ii. Please explain further why Horizon cannot disclose the existence of certain surveys.**
- b) Page 1 – Please provide a summary of overtime costs from 2010 to 2013 (budget vs. actual) budget vs. year to date/end of year forecast for 2014 and forecast overtime costs for 2015-2019.**
- c) Page 1 – Please explain further the additional premium payments for on-call and shift work and provide details of these costs for the years 2010 to 2013 (actuals) and budget 2014 to 2019.**
- d) Page 1 – Please confirm the costs that are calculated as a percentage of employee wages.**
- e) Page 2 – Please provide the pay grades for management employees.**
- f) Page 2 – Please explain how the pay grade is treated and merit increases work when an employee is at the top of their pay grade.**
- g) Page 3 – Please provide the recent settlements in the Hamilton area and Ontario that Horizon typically considers in the collective bargaining process.**
- h) Does Horizon consider the wage increases and benefits structure of the Ontario Public Service?**
- i) Page 3 – Please identify the organizations that Horizon considers to be relevant comparators.**
- j) Page 5 – Does Horizon’s formal performance review for Union employees include written documentation?**
- k) Page 7 – Does Horizon’s calculation of FTE include overtime hours paid?**
- l) Page 7 – Please provide a summary of vacancies for 2010 to 2013 actuals and forecast 2014.**

m) Please identify positions that have been vacant for longer than i) 6 months and ii) 12 months for the years 2011 to 2014.

n) Page 7 – Please confirm if Appendix 2-K includes vacancy dollars.

o) Page 7 – Please provide independent contractor amounts for the years 2010 to 2013 actuals and forecast 2014.

p) Page 8 – Please reproduce Table 4-53 and Table 4-54 with Non-management - Union and Non-union shown separately

q) Page 8 – Please provide a summary of incentive pay amounts for management, union and non-union for 2011 to 2013 actuals and 2014-2019 forecast.

r) Page 8 – Please describe how incentive pay is calculated for management, union and non-union employees.

s) Page 14 – Horizon provides a detailed explanation of additional new positions in 2014. Please link these positions to a division within Horizon's organizational chart.

t) Page 16 – Horizon references a decrease of 3 FTE in 2016 compared to 2015 (line 3) and 2.5 fewer FTE (line 6) in 2016 than 2015. Please reconcile.

u) Page 18 – In Table 4-56 Horizon provides the cost of its employee benefits program. Is Horizon considering any benefit reform during the 2015-2019 period?

v) Does Horizon survey its employees for feedback? If yes please provide details and the last year an employee survey was completed.

**Response:**

1 a) i) Horizon Utilities has participated in the following surveys since 2011:

- 2 • 2012 - MEARIE Management Salary Survey (Hay)
- 3 • 2013 - MEARIE Management Salary Survey (Hay); Compensation Cost
- 4 Benchmarking Study sponsored by Hydro One (Mercer); LDC Executive Short-Term
- 5 Incentive Plan Design sponsored by third party Electricity Distributor (Mercer)

6 ii) Horizon Utilities signed a confidentiality agreement with MEARIE that prohibited the

7 disclosure and existence of this survey at the time of Application. All surveys are now listed

8 in part a i) above.



b) The following Tables 1 and 2 summarize overtime costs budgeted for all years from 2010 to 2019; actual results from 2010 to May 2014; and forecasted for the balance of 2014:

**Table 1: Overtime Costs from 2010 to 2013 (Budget vs. Actual)**

	2010 Budget	2010 Actuals	2011 Budget	Last Rebasing Year -2011- Board Approved	Last Rebasing Year -2011 - Actual	2012 Budget	2012 Actuals	2013 Budget	2013 Actuals
<b>Total Overtime Pay</b>									
Management (including executive)	\$ -	\$ -	\$ -	\$ 73,060	\$ 129,317	\$ -	\$ 75,502	\$ -	\$ 173,261
Non-Management (union and non-union)	\$ 1,008,592	\$ 1,993,951	\$ 1,176,556	\$ 1,284,379	\$ 1,962,703	\$ 1,461,920	\$ 1,450,965	\$ 1,242,869	\$ 2,232,507
<b>Total</b>	\$ 1,008,592	\$ 1,993,951	\$ 1,176,556	\$ 1,357,440	\$ 2,092,020	\$ 1,461,920	\$ 1,526,466	\$ 1,242,869	\$ 2,405,769

**Table 2: Overtime Costs from 2014 to 2019**

	2014 Budget	2014 Actuals	2014 Forecast
<b>Total Overtime Pay</b>			
Management (including executive)	\$ 54,735	\$ 30,987	\$ 52,223
Non-Management (union and non-union)	\$ 1,776,452	\$ 526,242	\$ 1,018,799
<b>Total</b>	\$ 1,831,187	\$ 557,229	\$ 1,071,022

	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget
<b>Total Overtime Pay</b>					
Management (including executive)	\$ 56,268	\$ 57,844	\$ 59,463	\$ 61,128	\$ 62,840
Non-Management (union and non-union)	\$ 1,784,646	\$ 1,793,425	\$ 1,824,343	\$ 1,868,656	\$ 1,929,016
<b>Total</b>	\$ 1,840,914	\$ 1,851,269	\$ 1,883,806	\$ 1,929,784	\$ 1,991,856

c) Horizon Utilities pays a shift premium for all hours worked between 7:30 p.m. and 7:30 a.m. This premium applies to Troubleperson and Operator classifications which require 24 hour coverage, 365 days a year. Horizon Utilities also pays on-call premiums to employees who are designated to be available outside of regular business hours.

The following Tables 3 and 4 summarize on-call and shift work costs for the years 2010 to 2013 (actuals) and budget 2014 to 2019:

1 **Table 3: On-call and Shift Work Costs 2010 - 2013**

	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals
<b>Total On Call and Shift Work Costs</b>				
Management	\$ 50,023	\$ 51,200	\$ 54,881	\$ 52,035
Non-Management (union and non-union)	\$ 98,582	\$ 105,869	\$ 124,081	\$ 127,268
Total	\$ 148,605	\$ 157,069	\$ 178,962	\$ 179,303

3 **Table 4: On-call and Shift Work Costs 2014 – 2019**

	2014 Budget	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget
<b>Total On Call and Shift Work Costs</b>						
Management	\$ 45,800	\$ 47,082	\$ 48,401	\$ 49,756	\$ 51,149	\$ 52,581
Non-Management (union and non-union)	\$ 146,622	\$ 150,727	\$ 154,948	\$ 159,286	\$ 163,746	\$ 168,331
Total	\$ 192,422	\$ 197,810	\$ 203,348	\$ 209,042	\$ 214,895	\$ 220,913

4  
5 d) The following costs are calculated as a percentage of employee wages: Workplace Safety and Insurance Board ("WSIB")  
6 premiums, Employer Health Tax ("EHT") premiums, Canada Pension Plan ("CPP") contributions, Employment Insurance ("EI")  
7 premiums, Ontario Municipal Employee Retirement System ("OMERS") contributions, Life Insurance premiums, and Long-Term  
8 Disability ("LTD") premiums.

e) This information is being provided in confidence for the reason set out in separate correspondence related to confidential treatment of certain interrogatory response.

f) Pay grades are adjusted annually as described in Exhibit 4, Tab 4, Schedule 2, p.2:

*“Pay grades are adjusted annually based on an inflationary adjustment set in consultation with a third party compensation specialist that factors market and economic conditions.”*

In the event that an employee reaches the top of the pay grade, the pay increase generally follows the annual adjustment in the pay grade based on satisfactory performance. All pay increases are reviewed and approved by EMT.

g) A review of Ministry of Labour “Collective Bargaining Highlights” between May and September of 2013 indicated average annual base wage increases between 2.5% - 2.8% in the construction and transportation, communications and utilities sectors in Ontario. In addition, the Table 5 below provides recent collective bargaining settlements that were considered by Horizon Utilities.

**Table 5 – Recent LDC Wage Settlements**

Organization	Effective Date	Term	2011	2012	2013	2014	2015	2016
Veridian	1-Apr-11	4 year	3.00%	3.00%	3.00%	3.00%		
Welland	1-Apr-11	4 year	2.75%	2.75%	3.25%	3.25%		
Kitchener Wilmont	1-Apr-12	3 year		2.75%	2.80%	2.85%		
Grimsby	1-Jun-12	2 year		2.80%	2.80%			
London	1-Jan-13	3 year			2.50%	2.50%	2.50%	
Powerstream	1-Apr-13	3 year			2.75%	2.75%	2.75%	
Ottawa	1-Apr-13	4 year			2.60%	2.70%	2.70%	2.80%
Oakville	1-Jul-13	3 year			2.50%	2.50%	2.50%	

h) Horizon Utilities reviews market data from both the private and public sectors (including other LDCs) when considering wage increases. The benefits program is generally benchmarked against other LDC's given that the majority of the workforce is unionized and subject to negotiated benefit plans.

i) Horizon Utilities' most relevant comparators include LDCs such as PowerStream Inc., Enersource Hydro Mississauga Limited, Hydro Ottawa Limited, Veridian Connections Inc. Toronto Hydro-Electric System Limited, and Hydro One Networks Inc. It also considers employers in the manufacturing and construction sectors in Ontario including Hamilton and St. Catharines.

j) Horizon Utilities conducts formal performance reviews for unionized employees annually that include written documentation.

k) Horizon Utilities' calculation of FTE is based on regular work hours and does not include overtime hours.

l) The following Table 6 provides a summary of vacancies at year end for 2010 to 2013 actuals. Vacancy numbers include those positions not backfilled.

**Table 6: 2010 – 2013 Year End Vacancies**

2010	2011	2012	2013
12	13	7	2

Current vacancies are under active recruitment and Horizon Utilities cannot forecast vacancies at year end 2014. Horizon Utilities will continue to engage contract resources to temporarily fill any vacant positions to meet organizational and customer demands.

m) Table 7 below details positions that were vacant for longer than 6 months or one year and not backfilled. Horizon Utilities did not have any vacancies greater than 6 months in 2012 and 2013.

47 **Table 7: Positions Vacant for Greater Than 6 Months and One Year in 2011 and 2014**

2011	
Vacant greater than 6 months	
Director, Engineering and Operating	
Director, Construction and Maintenance	
Distribution Engineer	
Financial Advisor	
Vacant greater than 1 year	
Manager, IT Projects	
Manager, Regulatory	
Specialist, Commodity Management	
IFS Subject Matter Expert	
2014	
Vacant greater than 6 months	
Revenue Protection Specialist	

48  
49 (n) Appendix 2-K provides actual employee complement and compensation for 2011 to 2013  
50 and does not include vacancy dollars. Horizon Utilities assumes that all positions are fully  
51 staffed for 2014 to 2019 and therefore includes potential vacancy dollars. However, Horizon  
52 Utilities engages contract resources to provide interim support for vacancies that are difficult to  
53 fill as referenced in Exhibit 4, Tab 4, Schedule 2, p.7

54 o) As referenced in Exhibit 4, Tab 4, Schedule 2, the following Table 8 summarizes the  
55 independent contractor amounts paid from 2010 to 2013. Horizon Utilities is not able to forecast  
56 independent contract costs to the end of 2014; however, contractor cost as of May 31, 2014 are  
57 detailed below:

58 **Table 8: Contractor Costs from 2011 – 2014 YTD**

2010	2011	2012	2013	2014 YTD (May)
\$ 490,586	\$ 737,422	\$ 920,061	\$ 1,236,714	\$ 288,279

60

61 p) Table 4-53 and Table 4-54 have been reproduced to show Non-Management for Non-union and Union separately.

62 **Revised Table 4-53: Chapter 2 Filing Requirements – Appendix 2-K - Horizon Utilities' Employee Complement and**  
63 **Compensation – 2011 Board-Approved – 2014 Bridge Year**

	Last Rebasing Year -2011- Board Approved	Last Rebasing Year -2011 - Actual	2012 Actual	2013 Actual	2014 Bridge Year
<b>Number of Employees (FTEs including Part-Time)</b>					
Management (including executive)	67.0	62.8	66.0	65.7	77.0
Non-Management (Non-union)	41.0	37.2	42.6	46.4	47.3
Non-Management (Union)	241.1	227.8	224.1	222.5	230.3
Total	349.1	327.8	332.7	334.6	354.5
<b>Total Salary and Wages including overtime and incentive pay</b>					
Management (including executive)	\$ 8,387,295	\$ 8,057,110	\$ 8,572,299	\$ 9,018,046	\$ 9,904,725
Non-Management (Non-union)	\$ 3,323,292	\$ 2,885,896	\$ 3,338,538	\$ 4,040,667	\$ 4,246,765
Non-Management (Union)	\$ 18,120,690	\$ 17,778,378	\$ 17,711,667	\$ 19,075,546	\$ 19,484,521
Total	\$ 29,831,277	\$ 28,721,383	\$ 29,622,505	\$ 32,134,258	\$ 33,636,011
<b>Total Benefits (Current + Accrued)</b>					
Management (including executive)	\$ 1,902,998	\$ 1,970,084	\$ 2,244,892	\$ 2,490,296	\$ 2,769,927
Non-Management (Non-union)	\$ 912,415	\$ 894,381	\$ 1,050,915	\$ 1,281,409	\$ 1,371,551
Non-Management (Union)	\$ 5,005,814	\$ 4,618,380	\$ 5,116,489	\$ 5,520,610	\$ 5,768,012
Total	\$ 7,821,226	\$ 7,482,845	\$ 8,412,296	\$ 9,292,315	\$ 9,909,490
<b>Total Compensation (Salary, Wages, &amp; Benefits)</b>					
Management (including executive)	\$ 10,290,293	\$ 10,027,194	\$ 10,817,192	\$ 11,508,342	\$ 12,674,651
Non-Management (Non-union)	\$ 4,235,707	\$ 3,780,277	\$ 4,389,453	\$ 5,322,076	\$ 5,618,317
Non-Management (Union)	\$ 23,126,504	\$ 22,396,758	\$ 22,828,156	\$ 24,596,156	\$ 25,252,533
Total	\$ 37,652,503	\$ 36,204,229	\$ 38,034,801	\$ 41,426,573	\$ 43,545,501

64



**Revised Table 4-54: Chapter 2 Filing Requirements – Appendix 2-K - Horizon Utilities' Employee Complement and Compensation – 2015 - 2019**

	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget
<b>Number of Employees (FTEs including Part-Time)<sup>1</sup></b>					
Management (including executive)	77	77	77	77	77
Non-Management (non-union)	48	48	48	48	48
Non-Management (union)	223	220	219	219	219
Total	348	345	344	344	344
<b>Total Salary and Wages including overtime and incentive pay</b>					
Management (including executive)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (non-union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total	\$ 33,808,561	\$ 34,470,180	\$ 35,339,657	\$ 36,322,399	\$ 37,339,426
<b>Total Benefits (Current + Accrued)</b>					
Management (including executive)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (non-union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total	\$ 10,024,679	\$ 10,252,949	\$ 10,603,484	\$ 10,907,691	\$ 11,228,386
<b>Total Compensation (Salary, Wages, &amp; Benefits)</b>					
Management (including executive)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (non-union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Non-Management (union)	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]
Total	\$ 43,833,240	\$ 44,723,129	\$ 45,943,141	\$ 47,230,090	\$ 48,567,812

q) The following Tables 9 and 10 summarize incentive pay amounts for management, union and non-union for 2011 to 2013 actuals and 2014-2019 forecast:

**Table 9: Incentive Pay 2011 Board Approved - 2013 Actuals**

	Last Rebasing Year -2011- Board Approved	2011 Actuals	2012 Actuals	2013 Actuals
<b>Total Incentive Pay</b>				
Management (including executive)	\$ 1,060,434	\$ 777,144	\$ 892,838	\$ 1,013,254
Non-Management (Non-union)	\$ 230,517	\$ 129,646	\$ 176,968	\$ 221,132
Non-Management (Union)	\$ -	\$ -	\$ -	\$ -
Total	\$ 1,290,951	\$ 906,790	\$ 1,069,807	\$ 1,234,387

**Table 10: Incentive Pay 2014 - 2019**

	2014 Budget	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget
<b>Total Incentive Pay</b>						
Management (including executive)	\$ 1,094,641	\$ 1,125,291	\$ 1,156,800	\$ 1,189,190	\$ 1,222,487	\$ 1,256,717
Non-Management (Non-union)	\$ 281,113	\$ 288,985	\$ 297,076	\$ 305,394	\$ 313,945	\$ 322,736
Non-Management (Union)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 1,375,755	\$ 1,414,276	\$ 1,453,876	\$ 1,494,584	\$ 1,536,433	\$ 1,579,453

r) Horizon Utilities seeks to encourage a performance culture by aligning employees' efforts with the strategic goals of the company through the incentive plan. All non-union employees at Horizon Utilities participate in an incentive pay program that is tied to the achievement of both individual and corporate objectives set annually. Union employees do not participate in an incentive pay program. The incentive payout is "re-earnable" each year and does not form part of an employee's base salary. Incentive payouts are calculated as a percentage of the participant's actual base salary and the target payout differs relative to the salary grade level. The successful achievement of annual objectives (100%) pays out at the target percentage of the

base salary. The range of incentive payouts is 50% (threshold) to a maximum of 150% of target for outstanding performance on the achievement of annual objectives. Performance below the threshold (50%) results in no pay out. Horizon Utilities follows a formal and disciplined approach to the development and assessment of annual objectives.

s) The following list provides the additional new positions by division in 2014 as detailed in Exhibit 4, Tab 4, Schedule 2, p.14:

- Manager, Engineering Systems & Asset Records – Utility Operations
- Supervisor, Engineering Systems – Utility Operations
- Supervisor, Design Technician – Utility Operations
- Distribution Engineer – Wholesale Metering and Communications – Customer Services
- Engineering Design Technician (2) – Utility Operations
- GIS Developer (2) – Utility Operations
- Records Coordinator – Utility Operations

t) The 2016 workforce will consist of 2.5 fewer FTE than 2015. Line 3 should state 2.5 FTE instead of 3 FTE as it was rounded to the nearest whole number. For consistency purposes it should have been stated as 2.5 FTE.

u) Horizon Utilities regularly reviews benefit program costs with benefits providers to assess opportunities for cost mitigation as described in Exhibit 4, Tab 4, Schedule 2, p.18. Horizon Utilities will explore potential benefit plan changes from 2015 to 2019 for all staff in conjunction with the 2015 collective bargaining process.

v) Please see Horizon Utilities' response to Interrogatory 1-CCC-7.