Deloitte.

City of Winnipeg

311 Project

Cost Analysis – In-House Centre



October 5, 2007

FINAL DRAFT

CITY OF WINNIPEG
311 PROJECT
IN-HOUSE MODEL

OVERVIEW

The financial model which follows has been prepared for the purpose of summarizing the cost to establish and operate a consolidated 311 Contact Centre under an internal model, in which the City of Winnipeg assumes the responsibility for constructing and operating the 311 centre.

In general, this internal model contemplates the following broad principles:

1. The consolidation of the 22 existing department-based call centres into one 72 seat consolidated 311 contact centre.
2. Implementation of first-class contact centre technology to assist in the receiving, handling, and disposition of inquiries from the citizens of Winnipeg.
3. The cross-training of the existing staff from the 22 department-based centres to effectively and efficiently handle all types of calls from the citizens of Winnipeg.

This model gives regard to the following items:

i. The Centre will operate 24 X 7 – 365 days a year.
ii. The technology solution for the In-House model is consistent with that of the Hybrid Model contained in the RFP.
iii. Utilization of the staff currently supporting the 22 existing call centres at current rates of pay.
iv. Recognition of and compliance with the requirements of the current collective bargaining agreements.
v. Service level requirements – 80% of calls answered within 30 seconds with an abandon rate of 4% or less.

Included in this analysis are the following:

- List of the significant assumptions
- 5 year cost projection to operate the In-House 311 centre
- Overview of the infrastructure costs assumed in the financial model
- A Determination of CSR Head Count
- Draft Organization Chart
- Draft Position Summaries
- Appendix I – Calgary Call Arrival Patterns
- Appendix II – Cost Projections – Years 6 to 11

In summary, a Consolidated 311 Contact Centre under the In-House model would employ an estimated 108 staff and would cost the City approximately $7.1 million annually to operate.

CITY OF WINNIPEG
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ASSUMPTIONS

I. Direct Labour & Benefits

1. **CSR Head Count** - head count of 91 CSRs based on:
   - 2.4 million calls annually with an average handle time (call length) of 118 seconds.
   - Work schedule and time off policy used to determine headcount contained in "Agent Head Count" worksheet was based on the requirements of the Collective Bargaining Agreements, as well as current actual experience.
2. **Split Between Clerk A and Clerk B** - based on actual staffing of the current 22 call centres, including 2.5 FTE (full time equivalents) based on 25 part time staff used by the Transit Department to handle customer inquiries.
3. **Annual Salary** - based on actual salary data from the 22 existing centres.
4. **Statutory Holiday Premium** - double time premium paid to all staff who work on a statutory holiday.
5. **Benefits %** - 16.5% covers all statutory benefits (eg. EI and CPP) plus supplemental benefit plans (eg. health, pension etc.).
6. **Salary Adjustment** - A 2.0% annual salary adjustment has been applied to the current salaries.

II. Legacy Costs

1. **Head Count Opening -** is the estimated number of staff currently employed by the 22 department-based centres who would become available for the 311 Contact Centre.
2. **Upfront Deployment** - is the estimated number of CSR staff required for the centre - see point #1 above.
3. **Reassignment to 311 Admin** - As part of the 311 administrative structure there are up to 7 administrative positions that are anticipated to be staffed by Clerk C and Senior Clerk. It is assumed that some of the more senior staff currently supporting the 22 existing centres will have the capability and skills to take on these positions. Accordingly, it is assumed that existing 5.5 staff will be used to fill these administrative roles.
4. **Redeployment** - The net result of the staff requirements of the 311 Centre, including 91 CSR, 4 supervisors, and up to 7 adminitrative positions, results in all available staff have employment within the 311 Centre.
5. **Average Salary** - is the average salary of across the existing staff, plus benefits.
6. **Severance - WAPSO Staff** - as a result of the consolidation of the 22 centres into the 311 Centre a net loss of 1 WAPSO position (5 WAPSO staff to redeploy and 4 new WAPSO postions created for the 311 Centre).

III. Management & Support

1. **Head Count -** is the estimated head count and positions necessary to manage the 311 Contact Centre. This assumes that functional support, such as human resources and finance, will be provided to the centre from the existing resources of the City and thus has not been duplicated in this model. Please see the attached organizational chart.
2. **Annual Salary** - based on the average of the Steps contained within the applicable Job Classification for the position.
3. **Benefits %** - 16.5% covers all statutory benefits (eg. EI and CPP) plus supplemental benefit plans (eg. health, pension etc.).
4. **Salary Adjustment** - A 2.0% annual salary adjustment has been applied to the current salaries.

IV. General Overhead

1. Covers the general operating costs such as office equipment, office supplies, insurance, general repairs, recruiting, advertising, promotion, training, etc.
2. These amounts are fairly representative of contact centre of the proposed size.
3. **Inflation Adjustment** - A 2.0% annual inflation adjustment has been applied to these overhead costs.
4. Includes an estimate of the cost to develop and deliver training for the 311 program using the assistance of a 3rd party.
5. The general overhead does not include the costs associated with the marketing of the 311 initiative.

ASSUMPTIONS

V. Infrastructure Costs

1. The infrastructure is scoped for 72 seats, which represents the maximum number of seats used concurrently by the 311 Contact Centre to support 2.4 million calls using the day of week and intraday calling patterns from the Calgary 311 centre (see Appendix I). The 72 seats also provides for some modest growth.
2. **Facilities -** Lease of a 10,800 square foot facility at $22.00 per square foot (Class B space). Call centres are typically measured on the basis of the # of square feet per workstation (ie. total square feet of the facility ÷ # of workstations). This measurement ranges from as little as 110 square feet per workstation to as much as 175 or more. For purposes of the 311 Contact Centre for the City of Winnipeg, the facility was based on 150 square feet per workstation.
3. **T1 Lines** - Assumes 7 T1's at a price of $1,200 per T1 per month.
4. **Data Lines** - is the estimated annual cost for the 311 Contact Centre to tie into the City of Winnipeg telephony backbone.
5. **Switch / ACD and CRM -** are the two largest technology expenditures, for which pricing was determined through consultation with recognized providers of both components of the technology solution.
6. **CTI / WFM / IVR -** pricing based on industry standard estimates for this type of technology and are subject to change.
7. **P.C.'s and Software -** quantities based on size of the centre and number of staff and assumes dual monitors on all workstations. Pricing is based on current pricing for technology capable for supporting the current software requirements of the centre and for the next 5 years.
8. **Furniture -** an analysis of the furniture requirements of the centre was undertaken with the assistance of a third party. The outcome of that analysis was that the cost of "mid-level" furniture necessary to outfit the centre was estimated to cost $600,000.
9. **Power Supply -** 311 Contact Centre is supported by a UPS and an alternate power supply (diesel generator) in the event of a power failure.
10. **Depreciation -** All costs have been amortized over 5 years, except for furniture, other equipment, and leasehold improvements which are over 11 years. The assumption is that the technology purchased for the centre will be sufficient to support the needs of the centre for the next 5 years, after which certain pieces will require upgrading or replacing.
11. **Internal Finance Charge -** A 5.50% internal financing charge has been included to cover the cost of financing the purchase of the infrastructure.
12. **Maintenance -** maintenance on software and major technology has been assumed at market rates ranging from 17% to 25% of the capital cost.
13. **Transition and Integration Costs** - transition and integration costs have been estimated at $300,000. This estimate is based on all available information, including estimates provided by the respondents to the RFP.
14. **Inflation Adjustment** - A 2.0% annual inflation adjustment has been applied to maintenance.
15. **Secondary Site** - assume the use of an existing facility equipped with a PC and internet access. The cost of providing phone service to this secondary site has been included in this model.
16. **Knowledge Management Development** - assumes the use of a 3rd party consultant to assist in the development of the content, structure and process surrounding the Knowledge Management application.
17. **Project Implementation -** $500,000 has been included to cover any costs associated with the implementation of the In-House centre, including staffing, facilities, and general expenses.

ASSUMPTIONS

Glossary of Terms

CSR	Customer Service Representative - answers the calls offered by the citizens of Winnipeg
T1 Line	T1 is a widely used standard in telecommunications in North America to transmit voice and data between devices. Each T1 supports 24 phone lines.
CTI	Computer Telephony Integration - is technology that allows interactions on a telephone and a computer to be integrated or co-ordinated. As contact channels have expanded from voice to include email, web, and fax, the definition of CTI has expanded to include the integration of all customer contact channels (voice, email, web, fax, etc.) with computer systems.
ACD	Automatic Call Distribution - a phone system that routes a large volume of incoming calls to a pool of waiting agents.
CRM	Customer Relationship Management - Software utilized to manage all aspect of an interaction between a CSR and a caller.
WFM	Workforce Management - software utilized to develop staffing strategies and schedules to handle expected calls volumes based on historical call volumes and arrival patterns.
IVR	Interactive Voice Response - Is a system which triages calls based on telephone-based menu options selected by the caller and routing the call in a manner which results in the most effective and efficient resolution of the call.
Occupancy	Occupancy - is the measure of the percent of time that an agent is occupied over a period of time, typically a 1 hour period or for the entire day. "Occupied" includes the time the CSR is talking to the caller, the time spent wrapping-up/documenting the call after the caller has hung -up, and any other productive function pertaining to the resolution of the call such as sending a fax etc.

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IN-HOUSE FINANCIAL MODEL

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
I. Direct Labour & Benefits						
Head Count						
CSR - Clerk A	45.00	45.00	45.00	45.00	45.00	
CSR - Clerk B	46.00	46.00	46.00	46.00	46.00	
Team Leads - Clerk C	4.00	4.00	4.00	4.00	4.00	
Total FTE's	95.00	95.00	95.00	95.00	95.00	
Call Volume	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	
Average Salary						
CSR - Clerk A	29,191	29,775	30,370	30,978	31,597	
CSR - Clerk B	37,886	38,644	39,417	40,205	41,009	
Team Leads - Clerk C	43,945	44,824	45,720	46,635	47,567	
Total Salary						
CSR - Clerk A	1,313,595	1,339,867	1,366,664	1,393,998	1,421,877	
CSR - Clerk B	1,742,756	1,777,611	1,813,163	1,849,427	1,886,415	
Team Leads - Clerk C	175,780	179,296	182,882	186,539	190,270	
	3,232,131	3,296,774	3,362,709	3,429,963	3,498,563	
Benefits @ 16.5%	533,302	543,968	554,847	565,944	577,263	
Subtotal	3,765,433	3,840,741	3,917,556	3,995,907	4,075,825	
Add: Statutory Holiday Premium	36,067	36,788	37,524	38,274	39,040	
Add: Overtime Premium (2%)	64,643	65,935	67,254	68,599	69,971	
Add: Shift Premium	28,808	28,808	28,808	28,808	28,808	
Total Salaries & Benefits	3,894,950	3,972,273	4,051,143	4,131,589	4,213,645	
Salary Adjustment		2.0%	2.0%	2.0%	2.0%	
Total Labour & Benefits	**$ 3,894,950**	**$ 3,972,273**	**$ 4,051,143**	**$ 4,131,589**	**$ 4,213,645**	**$ 20,263,600**

IN-HOUSE FINANCIAL MODEL

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
II. Legacy Costs						
CSR Staff (Clerk A, B, C)						
Head Count - Opening	100.50					
Less: Upfront Redeployment	95.00					
Less: Reassign to 311 Admin	5.50					
Awaiting Re-deployment	-	-	-	-	-	
Less: Redelopyment	-	-	-	-	-	
Head Count - Undeployed	-	-	-	-	-	
Average Head Count	-	-				
Average Annual Salary	$ 40,319	$ 41,125	$ 41,948	$ 42,787	$ 43,643	
Salary Adjustment		2.0%	2.0%	2.0%	2.0%	
	$ -	$ -	$ -	$ -	$ -	
Severance - WPASO Staff	69,730					
Total Legacy Costs	**$ 69,730**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 69,730**

IN-HOUSE FINANCIAL MODEL

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
III. Management & Support						
Head Count						
Admin - Clerk B	1	1	1	1	1	
Training & Coaching - Sr. Clerk	1	1	1	1	1	
Manager - WAPSO 6	1	1	1	1	1	
Supervisor - WAPSO 3	1	1	1	1	1	
Quality - Clerk C	1	1	1	1	1	
WFM & Reporting - Clerk C	1	1	1	1	1	
Knowledge Mgmt - Sr Clerk	3	3	3	3	3	
Systems Specialist - WAPSO 3	1	1	1	1	1	
Reporting Analyst - WAPSO 3	1	1	1	1	1	
Programmer Analyst - P.A.2	2	2	2	2	2	
BTS Supervisor - WAPSO 5	0.2	0.2	0.2	0.2	0.2	
Total FTE's	13.2	13.2	13.2	13.2	13.2	
Average Salary & Benefits						
Admin - Clerk B	$ 36,968	$ 37,707	$ 38,462	$ 39,231	$ 40,015	
Training & Coaching - Sr. Clerk	47,087	48,029	48,989	49,969	50,968	
Manager - WAPSO 6	90,000	91,800	93,636	95,509	97,419	
Supervisor - WAPSO 3	59,854	61,051	62,272	63,518	64,788	
Quality - Clerk C	42,938	43,797	44,673	45,566	46,477	
WFM & Reporting - Clerk C	42,938	43,797	44,673	45,566	46,477	
Knowledge Mgmt - Sr Clerk	47,087	48,029	48,989	49,969	50,968	
Systems Specialist - WAPSO 3	59,854	61,051	62,272	63,518	64,788	
Reporting Analyst - WAPSO 3	59,854	61,051	62,272	63,518	64,788	
Programmer Analyst - P.A.2	51,043	52,064	53,105	54,167	55,251	
BTS Supervisor - WAPSO 5	75,000	76,500	78,030	79,591	81,182	
Total Salary						
Admin - Clerk B	$ 36,968	$ 37,707	$ 38,462	$ 39,231	$ 40,015	$ 192,383
Training & Coaching - Sr. Clerk	47,087	48,029	48,989	49,969	50,968	245,043
Manager - WAPSO 6	90,000	91,800	93,636	95,509	97,419	468,364
Supervisor - WAPSO 3	59,854	61,051	62,272	63,518	64,788	311,483
Quality - Clerk C	42,938	43,797	44,673	45,566	46,477	223,451
WFM & Reporting - Clerk C	42,938	43,797	44,673	45,566	46,477	223,451
Knowledge Mgmt - Sr Clerk	141,261	144,086	146,968	149,907	152,905	735,128
Systems Specialist - WAPSO 3	59,854	61,051	62,272	63,518	64,788	311,483
Reporting Analyst - WAPSO 3	59,854	61,051	62,272	63,518	64,788	311,483
Programmer Analyst - P.A.2	102,086	104,128	106,210	108,334	110,501	531,260
BTS Supervisor - WAPSO 5	15,000	15,300	15,606	15,918	16,236	78,061
	697,840	711,797	726,033	740,553	755,364	3,631,587
Benefits @ 16.5%	115,144	117,446	119,795	122,191	124,635	599,212
Subtotal	812,984	829,243	845,828	862,745	880,000	4,230,799
Salary Adjustment		2.0%	2.0%	2.0%	2.0%	
Total Labour & Benefits	**$ 812,984**	**$ 829,243**	**$ 845,828**	**$ 862,745**	**$ 880,000**	**$ 4,230,799**

IN-HOUSE FINANCIAL MODEL

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IV. General Overhead						
Total General & Admin Costs	$ 196,400	$ 200,328	$ 204,335	$ 208,421	$ 212,590	$ 1,022,073
Inflation Adjustment		2.0%	2.0%	2.0%	2.0%	
Training - Develop & Deploy	$ 100,000	$ -	$ -	$ -	$ -	$ 100,000
Total Overhead	**$ 296,400**	**$ 200,328**	**$ 204,335**	**$ 208,421**	**$ 212,590**	**$ 1,122,073**

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IN-HOUSE FINANCIAL MODEL

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
V. Infrastructure Costs						
Facilities and Telephony						
Facilities	$ 237,600	$ 242,352	$ 247,199	$ 252,143	$ 257,186	$ 1,236,480
T1 Lines	100,800	102,816	104,872	106,970	109,109	524,567
Data Lines	7,500	7,650	7,803	7,959	8,118	39,030
	$ 345,900	$ 352,818	$ 359,874	$ 367,072	$ 374,413	$ 1,800,077
Inflation Adjustment		2.0%	2.0%	2.0%	2.0%	
Annual Depreciation						
Switch / ACD	$ 96,678	$ 96,678	$ 96,678	$ 96,678	$ 96,678	$ 483,388
WFM & Quality Assurance	28,082	28,082	28,082	28,082	28,082	140,408
CTI & IVR/VRU	37,860	37,860	37,860	37,860	37,860	189,300
CRM	400,000	400,000	400,000	400,000	400,000	2,000,000
P.C.'s & Software	58,668	58,668	58,668	58,668	58,668	293,339
Servers & Storage	30,960	30,960	30,960	30,960	30,960	154,800
Other Equipment	30,059	30,059	30,059	30,059	30,059	150,295
Miscellaneous	5,667	5,667	5,667	5,667	5,667	28,333
Furniture & Fixtures	56,818	56,818	56,818	56,818	56,818	284,091
Leasehold Improvements-LHI	65,746	65,746	65,746	65,746	65,746	328,732
Internal Finance Charge	273,264	224,301	172,646	118,149	60,656	849,016
Total	$ 1,083,801	$ 1,034,839	$ 983,183	$ 928,687	$ 871,193	$ 4,901,703
Maintenance	$ 358,378	$ 365,546	$ 372,857	$ 380,314	$ 387,920	$ 1,865,015
Inflation on Maintenance		2.0%	2.0%	2.0%	2.0%	
Integration & Transition Costs	$ 300,000	$ -	$ -	$ -	$ -	$ 300,000
Project Implementation	$ 500,000	$ -	$ -	$ -	$ -	$ 500,000
Knowledge Management Develop.	$ 250,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 370,000
Total Infrastructure	**$ 2,838,079**	**$ 1,783,202**	**$ 1,745,914**	**$ 1,706,073**	**$ 1,663,527**	**$ 9,736,795**
Grand Total - In-House	**$ 7,912,143**	**$ 6,785,047**	**$ 6,847,220**	**$ 6,908,828**	**$ 6,969,761**	**$ 35,422,998**

CITY OF WINNIPEG
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IN-HOUSE MODEL

COST PER MINUTE - IN-HOUSE MODEL

Total Cost Per Minute

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
I. Direct Labour & Benefits	3,894,950	3,972,273	4,051,143	4,131,589	4,213,645	20,263,600
II. Legacy Costs	69,730	-	-	-	-	69,730
III. Management & Support	812,984	829,243	845,828	862,745	880,000	4,230,799
IV. General Overhead	296,400	200,328	204,335	208,421	212,590	1,122,073
V. Infrastructure Costs	2,838,079	1,783,202	1,745,914	1,706,073	1,663,527	9,736,795
Total - Dollars	$ 7,912,143	$ 6,785,047	$ 6,847,220	$ 6,908,828	$ 6,969,761	$ 35,422,998
Minutes	4,720,000	4,720,000	4,720,000	4,720,000	4,720,000	$ 23,600,000
Cost Per Minute	$ 1.676	$ 1.438	$ 1.451	$ 1.464	$ 1.477	$ 1.501

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INFRASTRUCTURE COSTS

Number of CSR Work Stations: ***72.00***

I. Summary

Description	Cost	Installation and/or Training	Annual Maintenance Rate	Annual Maintenance	Depreciation Period in Years	Annual Depreciation	Internal Finance Charge
Switch / ACD	$ 458,388	$ 25,000	17.0%	$ 77,926	5	$ 96,678	$ 26,586
WFM & Quality Assurance	122,408	18,000	17.0%	20,809	5	28,082	7,722
CTI & IVR/VRU	109,300	80,000	25.0%	27,325	5	37,860	10,412
CRM	800,000	1,200,000	25.0%	200,000	5	400,000	110,000
P.C.'s & Software	286,839	6,500	5.0%	14,342	5	58,668	16,134
Servers & Storage	149,800	5,000	12.0%	17,976	5	30,960	8,514
Other Equipment	330,650	-	0.0%	-	11	30,059	18,186
Miscellaneous	28,333	-	0.0%	-	5	5,667	1,558
Furniture & Fixtures	600,000	25,000	0.0%	-	11	56,818	34,375
Leasehold Improvements-LHI	723,210	-	0.0%	-	11	65,746	39,777
Total	**$ 3,608,929**	**$ 1,359,500**		**$ 358,378**		**$ 810,537**	**$ 273,264**
Per Seat - Excl. LHI	**$ 58,961**					**$ 9,421**	**$ 2,986**
						Rate =	**5.50%**

II. Details

Switch / ACD	Unit Cost	# of Units	Total Cost
ACD (incl. voicemail)	$ 6,367	72.0	$ 458,388
Witness Digital Recording	Included	72.0	-
Preview Dial	Included	72.0	-
Installation	Included	72.0	-
Total			$ 458,388
Hybrid Pricing Template - Tab 6. Switch - ACD			

Servers & Storage	Unit Cost	# of Units	Total Cost
Storage - Digital Recording	$ 69,550	1.0	$ 69,550
Fax Server	16,050	1.0	16,050
Web Server	16,050	2.0	32,100
Spare Servers	16,050	2.0	32,100
Total			$ 149,800
Hybrid Pricing Template - Tab 11. Misc Servers			

WFM & Quality Assurance	Unit Cost	# of Units	Total Cost
License - WFM	$ 776	72.0	$ 55,854
Server - WFM	26,750	1.0	26,750
License - Quality Assurance	375	72.0	26,964
Server - Quality Assurance	12,840	1.0	12,840
Total			$ 122,408
Hybrid Pricing Template - Tab 9. WFM			

Other Equipment	Unit Cost	# of Units	Total Cost
UPS	$ 42,800	1.0	$ 42,800
Generator & Installation	207,000	1.0	207,000
WAN / LAN Equipment	58,850	1.0	58,850
A/C - Computer Room	22,000	1.0	22,000
Total			$ 330,650
Hybrid Pricing Template - Tab 14. Other & 12. LAN / WAN			

CTI & IVR/VRU	Unit Cost	# of Units	Total Cost
CTI	$ 856	72.0	$ 61,632
IVR	482	72.0	34,668
Server - CTI	6,500	2.0	13,000
Other			-
Total			$ 109,300
Hybrid Pricing Template - Tab 7. CTI & Tab 8. IVR			

Miscellaneous	Unit Cost	# of Units	Total Cost
Laptops	$ 2,298	5.0	$ 11,492
Docking Station	373	4.0	1,494
LCD Projectors	2,674	2.0	5,348
Secondary Site - Prep Costs	1	10,000.0	10,000
Total			$ 28,333
Hybrid Pricing Template - Tab 5. Desktop PCs			

CRM	Unit Cost	# of Units	Total Cost
License	$ 8,819	72.0	$ 634,980
Server	69,550	2.0	139,100
Storage	25,920	1.0	25,920
Other			-
Total			$ 800,000
Hybrid Pricing Template - Tab 10. CRM			

Furniture & Fixtures	Unit Cost	# of Units	Total Cost
Cubicle & Chair	$ 5,500	72.0	$ 396,000
Supervisors & Support Staff	8,400	10.0	84,000
Office Suite	9,000	5.0	45,000
Training Room & General	75,000	1.0	75,000
Total			$ 600,000
Hybrid Pricing Template - Tab 4. Furniture			

P.C.'s & Software	Unit Cost	# of Units	Total Cost
CPU, KB, Mouse, Outlook	$ 1,390	100.0	$ 138,993
Additional Software	589	126.0	74,151
Monitors	320	200.0	63,986
MS Office	373	26.0	9,709
Total			$ 286,839
Hybrid Pricing Template - Tab 5. Desktop PCs			

Leasehold Improvements-LHI	Unit Cost	# of Units	Total Cost
Build Costs	$ 55	10,800.0	$ 594,000
Computer Room & Racking	150	600.0	90,000
Wiring - Data / Voice	285	106.0	30,210
Racking	1	9,000.0	9,000
Total			$ 723,210
Hybrid Pricing Template - Tab 3. Facilities			

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CALCULATION OF CSR HEAD COUNT

I. Daily Activity

Hours Per Day at Work	7.00
Less Paid Off-Line Time:	
Coffee Breaks	(0.50)
Personal Time	(0.30)
Other	(0.20)
	(1.00)
Hours Per Day Taking Calls	**6.00**

II. Annual Work Days

# of Week Days Per Year	260.00
Less Paid Days Off:	
Vacation	(22.50)
Sick	(10.00)
Stat Holidays	(12.00)
Training	(1.00)
Other Days Off	(5.00)
	(50.50)
Net Working Days Annually	**209.50**

III. # of FTE

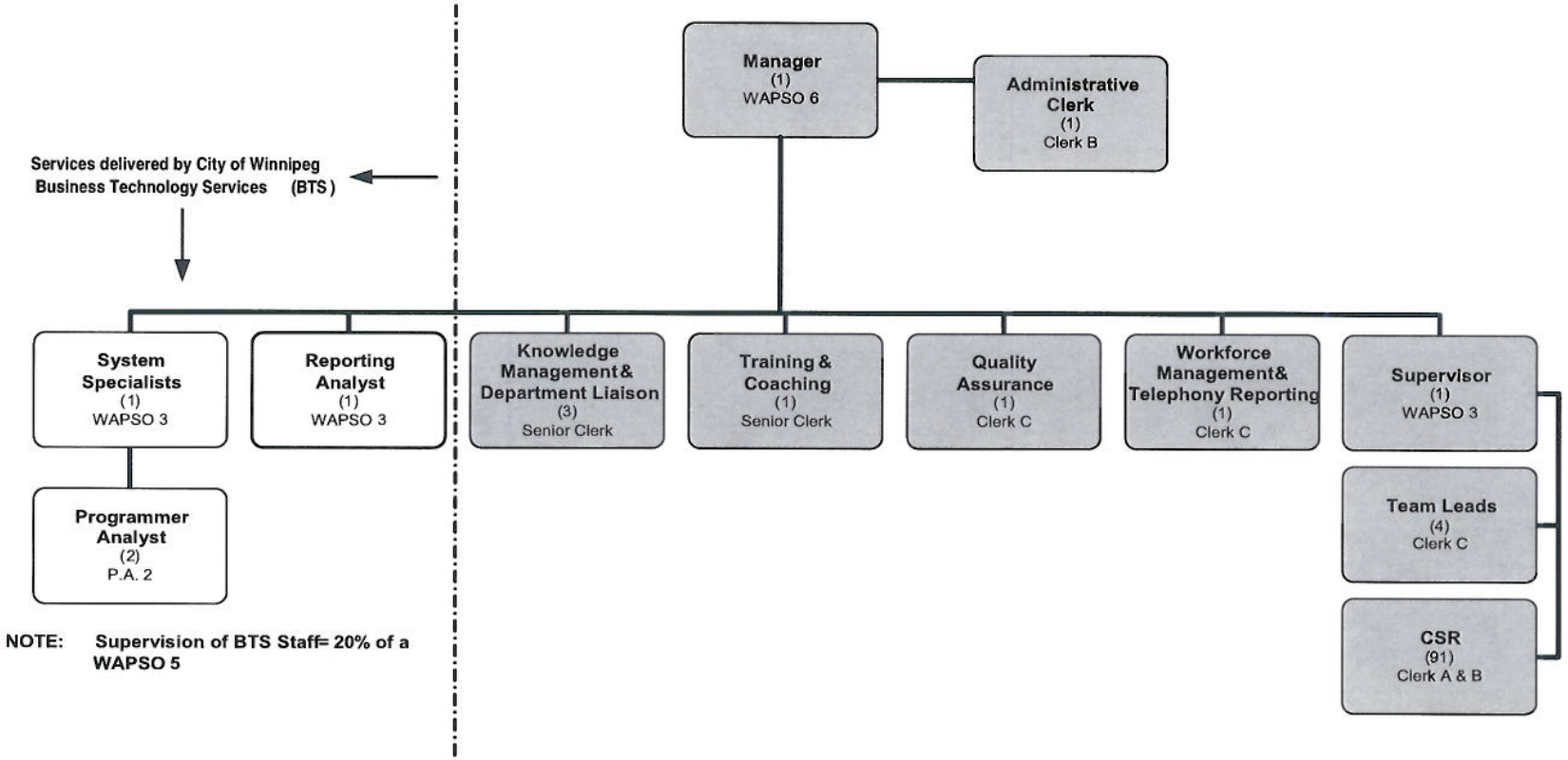
On-line Hours Per Year	1,257.00
Occupancy	68.75%
Handle Hours Per Year	864.19
# of Interactions Annually	2,400,000
AHT (Seconds)	118.0
Total Handle Time - Seconds	283,200,000
Total Handle Time - Hours	78,667
# of Full Time CSR	**91.00**

Occupancy Assumption

Shift	% of Calls	Occupancy	Wtd Average Occupancy
8 to 4	80%	75%	60.00%
4 to 12	15%	50%	7.50%
12 to 8	5%	25%	1.25%
Weighted Average			**68.75%**

311 Unit Organizational Chart
(Internal Model)

Last Updated July11, 2007



NOTE: Supervision of BTS Staff= 20% of a WAPSO 5

DRAFT

Draft Position Summaries – 311 Internal Model

Position Title (number of positions)	Job Classification	Job Summary
Manager (1)	WAPSO 6	Responsible for the overall operation of the 311 unit.
Supervisor (1)	WAPSO 3	Responsible for the overall operation of the 311 operations centre.
Administrative Clerk (1)	Clerk B	Provides administrative support to 311 unit staff.
Knowledge Management & Department Liaison (3)	Senior Clerk	Responsible for researching, analyzing, gathering, and organizing data for the 311 CRM knowledge base.
Training & Coaching (1)	Senior Clerk	Responsible for the research, needs assessment, development, scheduling, facilitation and working co-operatively with Team Leads to facilitate training for the 311 unit.
Quality Assurance (1)	Clerk C	Responsible for completing all quality assurance monitoring relative to the performance of CSR and CSR II positions.
Workforce Management & Telephony Reporting (1)	Clerk C	Responsible for managing the shifting schedules for the 311 centre by projecting needs, analyzing trends, & recommending minimum staffing requirements.
Team Leads (4)	Clerk C	Responsible for the daily operations of the 311 centre including supervising, coaching, mentoring and on-the-job training of CSR & CSR II.
CSR II (91)	Clerk B	Responsible for responding to customer inquiries including calls transferred from the CSR's to resolve issues which require further research, discretion or to manage difficult callers.
CSR (91)	Clerk A	Responsible for responding to customer inquires.
The following services delivered by City of Winnipeg Business Technology Services (BTS)		
System Specialist (1)	WAPSO 3	Provides desktop I.T. support for 311 unit staff.
Reporting Analyst (1)	WAPSO 3	Provides report development for 311 & City staff.
Programmer Analyst (2)	P.A. 2	Provides implementation, maintenance, support, and operation of the information systems and technologies critical to the 311 Unit CRM.
Information Systems Coordinator (20% of an FTE)	WAPSO 5	Supervision and coordination aforementioned BTS Staff to maintain the service level agreement for I.T. services.

Total Positions = 108.20 FTE's

Assumptions: CSR positions are full time, consistent with CUPE collective agreement.

The City Of Winnipeg

311 Project
Cost Analysis - In-House Centre

Appendix I
Calgary Call Pattern

Appendix I - Calgary Call Arrival Patterns

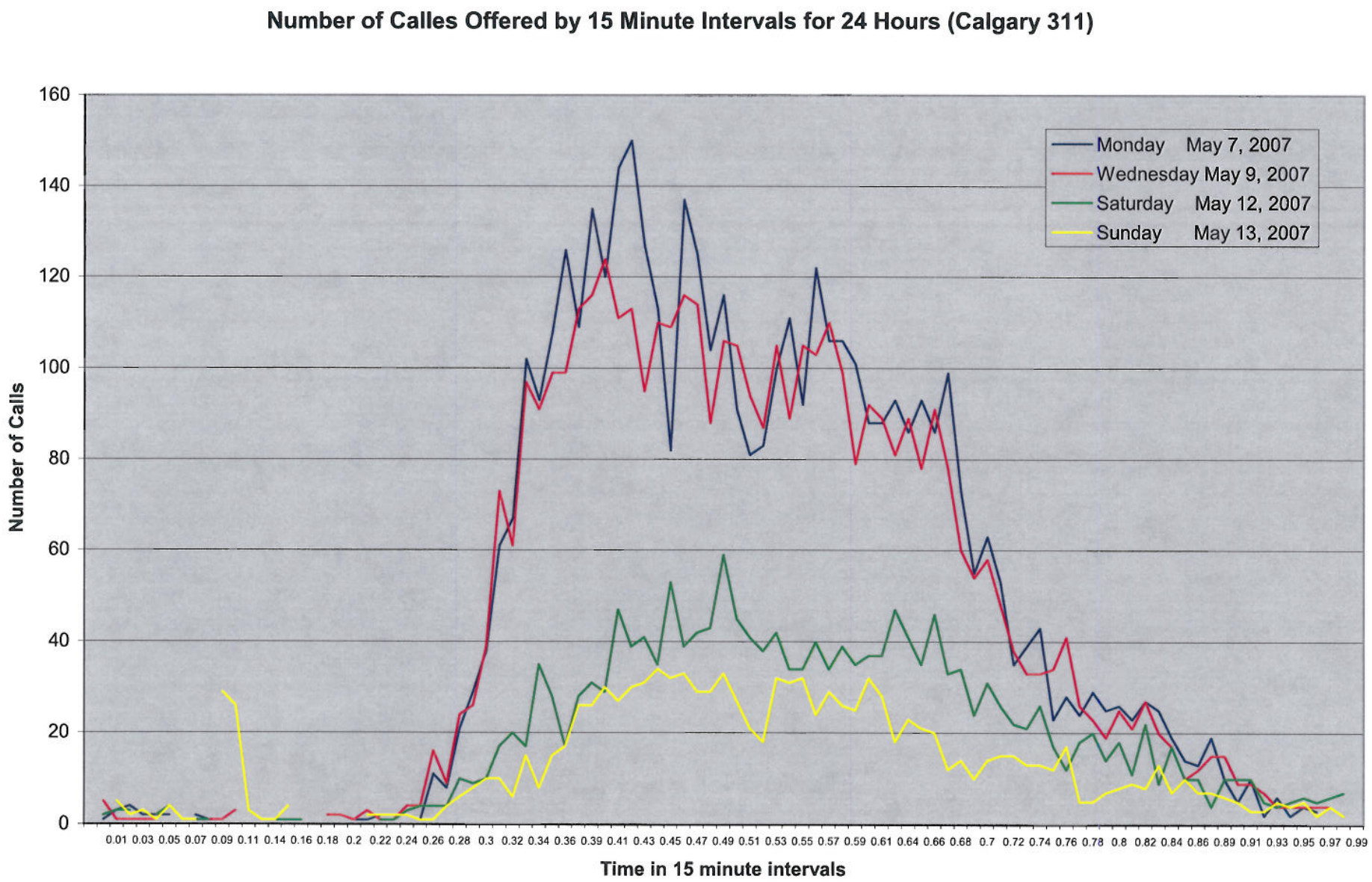
CALGARY 311 NUMBER OF CALLS OFFERED BY 15 MINUTE INTERVALS				
Time	Mon May 7, 2007	Wed May 9, 2007	Sat May 12, 2007	Sun May 13, 2007
00:00	1	5	2	
00:15	3	1	3	5
00:30	4	1	3	2
00:45	2	1		3
01:00	2	1	2	1
01:15	2		4	4
01:30				1
01:45	2		1	1
02:00	1	1	1	
02:15		1		29
02:30	3	3	2	26
02:45				3
03:00	3	1	1	1
03:15			1	1
03:30	2	1	1	4
03:45		1	1	
04:00	1			
04:15		2	2	1
04:30		2		
04:45	1	1	1	
05:00	1	3		2
05:15	2	1	1	2
05:30		1	1	2
05:45		4	3	2
06:00	1	4	4	1
06:15	11	16	4	1
06:30	8	9	4	4
06:45	21	24	10	6
07:00	29	26	9	8
07:15	38	39	10	10
07:30	61	73	17	10
07:45	67	61	20	6
08:00	102	97	17	15
08:15	93	91	35	8
08:30	108	99	28	15
08:45	126	99	17	17
09:00	109	113	28	26
09:15	135	116	31	26
09:30	120	124	29	30
09:45	144	111	47	27
10:00	150	113	39	30
10:15	127	95	41	31
10:30	113	110	35	34
10:45	82	109	53	32
11:00	137	116	39	33
11:15	125	114	42	29
11:30	104	88	43	29
11:45	116	106	59	33

CALGARY 311 NUMBER OF CALLS OFFERED BY 15 MINUTE INTERVALS				
Time	Mon May 7, 2007	Wed May 9, 2007	Sat May 12, 2007	Sun May 13, 2007
12:00	91	105	45	27
12:15	81	94	41	21
12:30	83	87	38	18
12:45	100	105	42	32
13:00	111	89	34	31
13:15	92	105	34	32
13:30	122	103	40	24
13:45	106	110	34	29
14:00	106	99	39	26
14:15	101	79	35	25
14:30	88	92	37	32
14:45	88	89	37	28
15:00	93	81	47	18
15:15	86	89	41	23
15:30	93	78	35	21
15:45	86	91	46	20
16:00	99	78	33	12
16:15	73	60	34	14
16:30	55	54	24	10
16:45	63	58	31	14
17:00	53	48	26	15
17:15	35	38	22	15
17:30	39	33	21	13
17:45	43	33	26	13
18:00	23	34	17	12
18:15	28	41	12	17
18:30	24	26	18	5
18:45	29	23	20	5
19:00	25	19	14	7
19:15	26	25	18	8
19:30	23	21	11	9
19:45	27	27	22	8
20:00	25	20	9	13
20:15	19	17	17	7
20:30	14	10	10	10
20:45	13	12	10	7
21:00	19	15	4	7
21:15	10	15	10	6
21:30	5	9	10	5
21:45	10	9	10	3
22:00	2	7	5	3
22:15	6	4	4	5
22:30	2	4	5	4
22:45	4	4	6	5
23:00	3	4	5	2
23:15		4	6	4
23:30	1	2	7	2
23:45				
Total	4482	4234	1783	1218

NOTE:
The above is not intended to represent the absolute number of calls within a 15 minute interval, but rather illustrate the expected call arrival patterns

The above call volumes for Calgary do not include Transit calls. The City of Winnipeg 311 Contact Centre will handle Transit calls and therefore the actual call patterns may differ from those shown above.

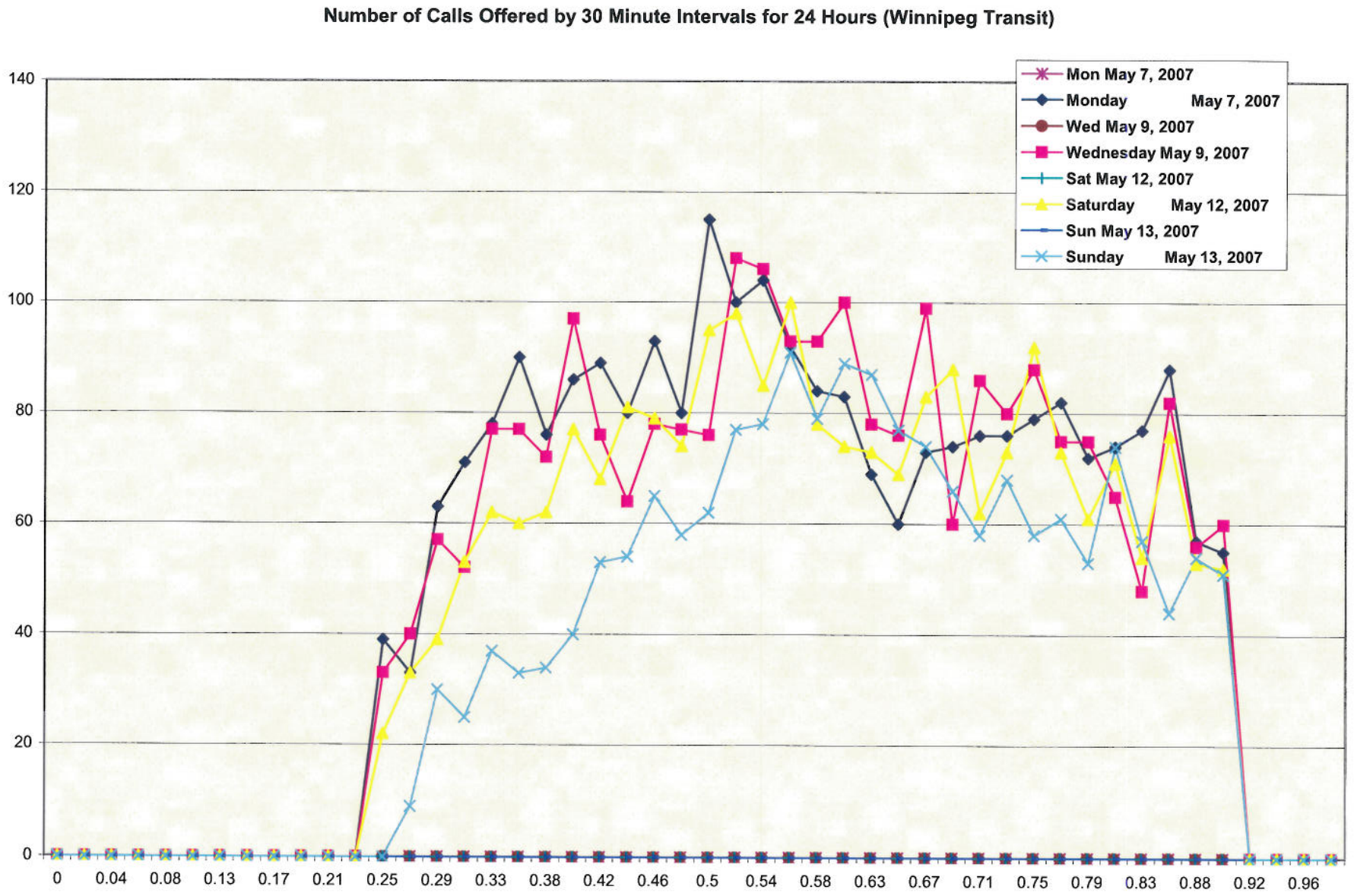
Appendix I - Calgary Call Arrival Patterns



Appendix I - Arrival Patterns Winnipeg Transit

WINNIPEG TRANSIT NUMBER OF CALLS OFFERED BY 15 MINUTE INTERVALS				
Time	Mon May 7, 2007	Wed May 9, 2007	Sat May 12, 2007	Sun May 13, 2007
00:00	0	0	0	0
00:30	0	0	0	0
01:00	0	0	0	0
01:30	0	0	0	0
02:00	0	0	0	0
02:30	0	0	0	0
03:00	0	0	0	0
03:30	0	0	0	0
04:00	0	0	0	0
04:30	0	0	0	0
05:00	0	0	0	0
05:30	0	0	0	0
06:00	39	33	22	0
06:30	33	40	33	9
07:00	63	57	39	30
07:30	71	52	53	25
08:00	78	77	62	37
08:30	90	77	60	33
09:00	76	72	62	34
09:30	86	97	77	40
10:00	89	76	68	53
10:30	80	64	81	54
11:00	93	78	79	65
11:30	80	77	74	58
12:00	115	76	95	62
12:30	100	108	98	77
13:00	104	106	85	78
13:30	92	93	100	91
14:00	84	93	78	79
14:30	83	100	74	89
15:00	69	78	73	87
15:30	60	76	69	77
16:00	73	99	83	74
16:30	74	60	88	66
17:00	76	86	62	58
17:30	76	80	73	68
18:00	79	88	92	58
18:30	82	75	73	61
19:00	72	75	61	53
19:30	74	65	71	74
20:00	77	48	54	57
20:30	88	82	76	44
21:00	57	56	53	54
21:30	55	60	52	51
22:00	0	0	0	0
22:30	0	0	0	0
23:00	0	0	0	0
23:30	0	0	0	0
Total	2468	2404	2220	1796

Appendix I - Call Arrival Patterns - Winnipeg Transit



The City Of Winnipeg

311 Project
Cost Analysis - In-House Centre

Appendix II
Cost Projections - Years 6 to 11

Appendix II - Cost Projections - Years 6 to 11

CITY OF WINNIPEG
311 IN-HOUSE MODEL - YEARS 6 TO 11

Additional Assumptions

1. All operating statistics (call volumes, average call length, and service level requirements) are unchanged from the assumptions in the first 5 years.
2. **Direct labour & Benefits** - all assumptions for the first 5 years remain unchanged for years 6 to 11. Head count unchanged from the first 5 years. Salaries adjusted for a cost of living adjustment of 2% annually
3. **Legacy Costs** - No legacy costs in Years 6 to 11. Legacy costs ended at the end of Year 1.
4. **Management & Support** - all assumptions for the first 5 years remain unchanged for years 6 to 11. Head count unchanged from the first 5 years. Salaries adjusted for a cost of living adjustment of 2% annually
5. **General & Admin** - Make-up of General & Admin remains unchanged from the first 5 years. Amount increased 2% annually to reflect inflation.
6. **Infrastructure** - Components of the infrastructure are unchanged from Years 1 to 5, however, a "refreshing" of technology is assumed to occur at the start of Year 6 as follows:

Switch / ACD	Technology upgraded at a rate of 33% of the original cost in Year 1
WFM & Quality Assurance	Technology replaced with new equipment - Year 1 cost plus 8%
CTI & IVR/VRU	Technology replaced with new equipment - Year 1 cost plus 8%
CRM	Technology upgraded at a rate of 33% of the original cost in Year 1
P.C.'s & Software	Technology replaced with new equipment - Year 1 cost plus 8%
Servers & Storage	Technology replaced with new equipment - Year 1 cost plus 8%
Other Equipment	Estimated life assumed to be 11 years, therefore no refresh required at the start of Year 6
Miscellaneous	Technology replaced with new equipment - Year 1 cost plus 8%
Furniture & Fixtures	Estimated life assumed to be 11 years, therefore no refresh required at the start of Year 6
Leasehold Improvements-LHI	Estimated life assumed to be 11 years, therefore no refresh required at the start of Year 6

Assumptions regarding the other components of the infrastructure (real estate and telephony) are unchanged from Year 1 to 5. Amount adjusted for inflation at a rate of 2% annually.

	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total
I. Direct Labour & Benefits							
Head Count							
Total FTE's	95.00	95.00	95.00	95.00	95.00	95.00	
Call Volume	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	
Total Labour & Benefits	$ 4,297,918	$ 4,383,876	$ 4,471,554	$ 4,560,985	$ 4,652,204	$ 4,745,249	$ 27,111,785
Salary Adjustment	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Total Labour & Benefits	**$ 4,297,918**	**$ 4,383,876**	**$ 4,471,554**	**$ 4,560,985**	**$ 4,652,204**	**$ 4,745,249**	**$ 27,111,785**
II. Legacy Costs							
Staffing							
Avg. Head Count Undeployed	-	-	-	-	-	-	
Average Annual Salary	$ 45,241	$ 46,146	$ 47,069	$ 48,010	$ 48,971	$ 49,950	
Total Legacy Costs	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
III. Management & Support							
Head Count	13.2	13.2	13.2	13.2	13.2	13.2	
Total Salary & Benefits	$ 897,600	$ 915,552	$ 933,863	$ 952,540	$ 971,591	$ 991,022	$ 5,662,167
Inflation Adjustment	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Total Labour & Benefits	**$ 897,600**	**$ 915,552**	**$ 933,863**	**$ 952,540**	**$ 971,591**	**$ 991,022**	**$ 5,662,167**
IV. General Overhead							
Total General & Admin	$ 216,841	$ 221,178	$ 225,602	$ 230,114	$ 234,716	$ 239,411	$ 1,367,862
Inflation Adjustment	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Total Overhead	**$ 216,841**	**$ 221,178**	**$ 225,602**	**$ 230,114**	**$ 234,716**	**$ 239,411**	**$ 1,367,862**

Appendix II - Cost Projections - Years 6 to 11

CITY OF WINNIPEG
311 IN-HOUSE MODEL - YEARS 6 TO 11

V. Infrastructure Costs							
Facilities and Telephony							
Facilities	$ 262,330	$ 267,576	$ 272,928	$ 278,386	$ 283,954	$ 283,954	$ 1,649,128
T1 Lines	111,291	113,517	115,788	118,103	120,465	120,465	699,630
Data Lines	8,281	8,446	8,615	8,787	8,963	8,963	52,056
	$ 381,902	$ 389,540	$ 397,330	$ 405,277	$ 413,383	$ 413,383	$ 2,400,814
Inflation Adjustment	2.0%	2.0%	2.0%	2.0%	2.0%		
Annual Depreciation							
Switch / ACD	$ 28,713	$ 28,713	$ 28,713	$ 28,713	$ 28,713	$ 28,713	$ 172,279
WFM & Quality Assurance	25,273	25,273	25,273	25,273	25,273	25,273	151,641
CTI & IVR/VRU	34,074	34,074	34,074	34,074	34,074	34,074	204,444
CRM	118,800	118,800	118,800	118,800	118,800	118,800	712,800
P.C.'s & Software	52,801	52,801	52,801	52,801	52,801	52,801	316,806
Servers & Storage	27,864	27,864	27,864	27,864	27,864	27,864	167,184
Other Equipment	30,059	30,059	30,059	30,059	30,059	30,059	180,355
Miscellaneous	5,100	5,100	5,100	5,100	5,100	5,100	30,600
Furniture & Fixtures	56,818	56,818	56,818	56,818	56,818	56,818	340,909
Leasehold Improvements-LHI	65,746	65,746	65,746	65,746	65,746	65,746	394,478
Internal Finance Charge	83,398	71,060	58,136	44,597	30,416	15,561	303,167
Total	$ 528,648	$ 516,309	$ 503,385	$ 489,847	$ 475,665	$ 460,810	$ 2,974,664
Inflation - Equipment	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maintenance	$ 395,679	$ 403,592	$ 411,664	$ 419,897	$ 428,295	$ 436,861	$ 2,495,988
Inflation on Maintenance	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Integration & Transition Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Project Implementation	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Knowledge Management Develop.	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 180,000
Total Infrastructure	**$ 1,336,228**	**$ 1,339,441**	**$ 1,342,379**	**$ 1,345,021**	**$ 1,347,343**	**$ 1,341,054**	**$ 8,051,466**
Grand Total - In-House	**$ 6,748,587**	**$ 6,860,047**	**$ 6,973,397**	**$ 7,088,659**	**$ 7,205,854**	**$ 7,316,735**	**$ 42,193,280**