

4. PREPARING FOR YEAR 2000 WITHIN THE
REGIONAL MUNICIPALITY OF OTTAWA-CARLETON

COMMITTEE RECOMMENDATIONS

That Council approve the following:

- 1. The establishment of a total project estimate of \$19,200,000 for the Year 2000 project;**
- 2. The pre-approval of the 1998 spending plan of \$7,900,000 for the Year 2000 project;**
- 3. An increase in the Chief Administrative Officer's delegated signing authority to \$250,000 for expenditures related to the Year 2000 project.**

DOCUMENTATION:

1. Finance Commissioner's report dated 13 Jan 98 is immediately attached.
2. Extract of Draft Minute, Corporate Services and Economic Development Committee meeting of 03 Feb 98 follows the report and includes a record of all votes.

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf.
Your File/V/Réf.

DATE 13 January 1998

TO/DEST. Co-ordinator
Corporate Services and Economic Development Committee

FROM/EXP. Finance Commissioner

SUBJECT/OBJET **PREPARING FOR YEAR 2000 WITHIN THE REGIONAL
MUNICIPALITY OF OTTAWA-CARLETON**

DEPARTMENTAL RECOMMENDATIONS

That the Corporate Services and Economic Development Committee and Council approve the following:

- 1. The establishment of a total project estimate of \$19,200,000 for the Year 2000 project;**
- 2. The pre-approval of the 1998 spending plan of \$7,900,000 for the Year 2000 project;**
- 3. An increase in the Chief Administrative Officer's delegated signing authority to \$250,000 for expenditures related to the Year 2000 project.**

BACKGROUND

There are about 24 months or 500 working days until the turn of the century. The Regional Municipality of Ottawa-Carleton is in a race against time along with every other public and private sector entity in the world to ensure that the day-to-day business of the Corporation is not impacted by technology failures caused by this particular date change.

At the core is a technology problem connected to how dates are stored and manipulated in computer systems. Many systems only use the last two digits of the year and the computer ends up getting confused about whether "00" is "2000" or "1900" when sorting and calculating differences between years. This is the main technical issue, although the extent of the technical problem is actually broader based.

The latest figures by economists place the world wide estimate for dealing with the Year 2000 problem at around \$1.5 trillion. The estimates for the costs of Year 2000 within the United States ranges from \$135 to \$275 billion, and the estimated cost for the US government alone is around \$30 billion. In Canada the federal government is still in the process of identifying the costs of Year 2000, but the estimate to date is around \$2 to \$3 billion. Early estimates show that the cost to the Canadian economy will be somewhere between \$12 to \$20 billion.

The Year 2000 problem has the potential to impact every area of the Region's operations. Essentially, any item that runs on batteries or plugs into a wall needs to be assessed for Year 2000 compatibility. Potentially Year 2000 issues could affect our business systems and computing infrastructure, our facilities management systems (such as those that control the heating and ventilation systems or elevators), and the process control systems (embedded systems that are used to control such processes as the production of clean drinking water or removal of contaminants from the sewage discharge).

The Region could also be impacted by the Year 2000 problems experienced by our suppliers, external contractors, the local utility companies and other business partners that we depend on to carry out our day-to-day business.

DISCUSSION

Work to address the Year 2000 issue has been going on in the Region for about two years. A number of projects are under way that directly or indirectly address some of the identified problems. Some of the long range initiatives include the Financial Services Renewal (FSR) project, the PeopleSoft Human Resources Information System (HRIS) project, the Improving Client Service (ICS) project in Social Services, and the new Water Billing system (AQUASYS). However, much is still to be done.

In order to maximize our chances of being Year 2000 ready, the entire Corporation needs to be very focused and committed to this problem.

A Year 2000 Project Office has been created in support of this concept. A project manager has been assigned to the project and a Year 2000 Task Force with cross-functional representation has been established and mandated with addressing all aspects of the Year 2000 problem within the RMOC. Management Committee also approved a freeze on new development in order to re-direct the focus of all Information Technology (IT) resources to the Year 2000 problem.

Activities are focused in three areas:

- raising awareness of the potential Year 2000 challenges;
- identification and analysis of potential problems;
- establishment of priorities and work plans.

To date several hundred applications and software packages have been identified that have to be evaluated, tested and potentially retrofitted or replaced, and new Year 2000 issues are uncovered

each day. The Region relies heavily on packaged software for many of the everyday computing requirements. Many of the vendors who sell these products have yet to release a Year 2000 compliant version, making the process of predicting the full impact of the problem quite difficult. In addition, some systems have many components, and although the base system might be Year 2000 compliant, it may run on a platform, or with associated components that are not, making the identification issue quite significant.

The Year 2000 problem potentially extends to every system in use within the Corporation, and represents the largest IT project that has ever been undertaken within the Region. Given the number of issues that must be addressed, and the complexity of some of the issues and solutions, it is possible that a large amount of the work may not be completed by 01 January 2000. It is essential to ensure that the most critical problems get addressed first.

As part of the Year 2000 review, an analysis is being done prior to identifying potential modifications or replacement of any existing system that will examine the potential for:

- de-commissioning the existing system;
- replacing the system with a manual process; and
- developing a contingency in the form of a “work around” to enable the system to continue to operate past 01 January 2000 (for lower priority systems).

Developing priorities and setting the final work plan for Year 2000 will occupy the next few months, although work on “obvious” high priority Year 2000 problems will continue. Management Committee has approved six criteria for measuring risk associated with Year 2000 challenges. The following criteria will be used to establish priorities within the Year 2000 work plan:

- Loss of life/limb or potential health hazard to staff or the public;
- Major disruption in service to the public;
- Major loss in revenue;
- Legal exposure based on statutory requirements;
- Loss or damage to facilities, equipment and systems; and
- Damage to the image of the Corporation.

Although identifying projects and workplans is an essential step, implementation is complicated by the labour market shortage of experienced professionals. There has been a marked increase in the turnover rate of positions that fall into the category of “hot skills” as the high technology sector continues to grow. The Information Systems Division in the Finance Department had to replace 11 people in 1997 as a testament to the impact of this trend on the Regional Municipality.

Federal government spending on Year 2000 will impact the availability of local consultants and this has driven up the per diem rates on a monthly basis to the point where many are more than double what they were a year ago. One of the biggest risks for the Year 2000 program at the RMOC will be the availability of enough staff and external consultants to complete the work plans.

To help mitigate this risk, the Region is working closely with the municipalities of Ottawa, Gloucester, Nepean and Kanata and with the Federal Government to identify opportunities to share information and costs of solutions wherever it is feasible.

SPENDING PLAN

The Year 2000 Task Force was directed by Management Committee to develop a Corporate Year 2000 capital budget and has come up with an estimate of \$19,280,000 for the cost of Year 2000 within the RMOC (see attached capital budget pages at Appendix B). There are six categories of work associated with Year 2000 expenditures:

- Project Management Costs;
- Embedded systems-process control systems within the utilities of Environment and Transportation Department (examples include: the sewage treatment system at ROPEC, the control system for the water filtration plant at Lemieux Island, the pumping stations for the supply of water to residents and business, traffic management systems);
- Facilities management systems (examples include: elevators, heating and ventilation systems, security systems and building access control systems);
- Business systems and packages software (examples include: mainframe applications, database systems, client server applications and off-the-shelf software);
- Hardware and network infrastructure upgrades (examples include: network servers, data communications equipment which link different locations, telephone systems); and
- Corporate contingency.

A more detailed breakdown is included at Appendix C.

Much of the work will be performed by outside vendors and therefore, many of the costs associated with these projects cannot be estimated with any degree of accuracy at this stage in the analysis. Although staff hope the costs will be less than \$19,280,000, final estimates will not be available until the evaluations are all complete.

Not included in the above estimates are a number of IT initiatives already under way that have a direct relation to the problem in that they also address some existing critical Year 2000 issues:

- Financial Services Renewal (FSR) Project;
- Municipal Geographic Information Systems Partnership Project;
- Replacement Water Billing System;
- PC hardware replacement program;
- Retention strategy for Information Systems employees;
- Human Resources Information System (HRIS) Project.

While all of these projects received previous approval under separate budgets, they bring the total projected spending related to Year 2000 to close to \$30,000,000 or about 1% of the Region's annual budget for the next two years. Industry estimates are that medium to large sized corporations could spend up to 5% of their annual budgets on Year 2000 over the next two years.

The deadline for addressing Year 2000 priorities is fixed. **It is 01 January 2000.** The Region will be spending an average of about \$800,000 per month for the next 24 months. Therefore speed in bringing in outside consultants to do the work is paramount to the success of the project. Each day that is lost is a missed opportunity to complete a small portion of the workplan and will potentially increase the work that will not be completed by 01 January 2000.

To shorten the process of selecting consultants, per diem rates are being established with the City of Ottawa through a joint RFP process.

However, the current delegated authority limits for the Chief Administrative Officer are such that most of the projects in this program will have to go to Committee and Council for approval, and this could result in some significant scheduling delays for the project.

Therefore, it is recommended that the delegated authority levels for the Chief Administrative Officer be raised to \$250,000 for expenditures against the Year 2000 Capital budget. This increased authority would allow a number of small and medium sized projects to get started faster, and would offset the reduction in the number of consultant days that can be purchased within the existing delegated authority limits caused by escalating rates.

PUBLIC CONSULTATION

Public consultation is not required.

EXPENDITURE JUSTIFICATION

Year 2000 is a real problem that could seriously impact the Region's ability to carry on regular day-to-day business and could result in significant legal exposure if steps are not taken to address the problem. Work on this project must be completed prior to 31 December 1999.

FINANCIAL STATEMENT

Authority of \$19,280,000 is required to address the evaluation and replacement/retrofitting of affected applications.

The specific apportionment of the funding between reserve funds will be finalised as part of the 1998 Capital Budget.

Pre-approval of the 1998 spending requirements of this project in the amount of \$7,900,000 represents a pre-commitment against the 1998 Capital Budget.

Subject to Council Approval.

*Approved by
J. C. LeBelle
Finance Commissioner and Treasurer*

APPENDIX "A"

PREPARING FOR YEAR 2000 WITHIN THE REGIONAL MUNICIPALITY OF
OTTAWA-CARLETON
13 January 1998

PROPOSED CORPORATE YEAR 2000 CAPITAL BUDGET

1. Project Management Costs	\$ 580,000
2. Embedded systems-process control systems within the utilities of Environment and Transportation Department (examples include: the sewage treatment system at ROPEC, the control system for the water filtration plant at Lemieux Island, the pumping stations for the supply of water to residents and business, traffic management systems)	\$ 8,800,000
3. Facilities management systems (examples include: elevators, heating and ventilation systems, security systems and building access control systems)	\$ 500,000
4. Business systems and packages software (examples include: mainframe applications, database systems, client server applications and off-the-shelf software)	\$ 6,600,000
5. Hardware and network infrastructure upgrades (examples include: network servers, data communications equipment which link different locations, telephone systems)	\$ 1,800,000
6. Corporate contingency	\$ 1,000,000
TOTAL:	<hr/> <u>\$19,280,000</u> <hr/>

<u>Department/Cost Centre</u>	<u>1998</u>	<u>1999</u>	<u>2000 Total</u>	<u>Comments</u>
Project Management Costs				
<i>Project Management Office</i>				
<i>Business Services Branch - ISD</i>	190,000.00	170,000.00	80,000.00	440,000.00 Staff and benefits, other office expenses
Sub-Total	60,000.00	80,000.00	0.00	140,000.00 Temporary position
	250,000.00	250,000.00	80,000.00	580,000.00
Embedded Systems	3,000,000.00	4,000,000.00	1,800,000.00	8,800,000.00 Process control applications within ETD (Water, Mobility Services, WEPD, etc.)
Planning and Development App.	250,000.00	250,000.00	0.00	500,000.00 Facilities management systems
Business Systems:				
<i>Project Management Office</i>				
<i>Business Services Branch - ISD</i>	125,000.00	125,000.00	0.00	250,000.00 Consultants
<i>Software</i>	50,000.00	50,000.00	50,000.00	150,000.00 Packaged software to replace existing systems
<i>Consultants</i>	600,000.00	650,000.00	600,000.00	1,850,000.00 ISD Supported Applications (Non-mainframe based systems)
<i>Consultants</i>	750,000.00	250,000.00	0.00	1,000,000.00 ISD Supported Applications (Mainframe based systems)
<i>Consultants</i>	100,000.00	0.00	0.00	100,000.00 ISD Supported Applications used by SSD
<i>HelpLine Branch - ISD</i>	25,000.00	75,000.00	100,000.00	200,000.00 Consultants
<i>Environment and Transportation</i>	600,000.00	500,000.00	250,000.00	1,350,000.00 Consultants and packaged software (ETD Business Applications)
<i>Health</i>	150,000.00	50,000.00	0.00	200,000.00 Consultants and packaged software (Health Department Applications)
<i>Social Services</i>	1,000,000.00	500,000.00	0.00	1,500,000.00 Consultants and Packaged Software (Other SSD Legacy Applications)
Sub-Total	3,400,000.00	2,200,000.00	1,000,000.00	6,600,000.00
Hardware Infrastructure				
<i>Environment and Transportation</i>				
<i>Technology Infrastructure - ISD</i>	200,000.00	200,000.00	50,000.00	450,000.00 ETD - File and Applications Servers, network infrastructure
<i>Consultants</i>	50,000.00	150,000.00	100,000.00	300,000.00 Systems Integration
<i>Network Software Systems</i>	50,000.00	50,000.00	50,000.00	150,000.00 ISD - OS, Exchange, backup software, network software
<i>Hardware Networking Components</i>	0.00	100,000.00	0.00	100,000.00 ISD - Mainframe hardware upgrades
<i>Telecom and Test Equipment</i>	200,000.00	400,000.00	200,000.00	800,000.00 ISD - Test/replacement servers, networking equip, telecom (not desktops, printers)
Sub-Total	500,000.00	900,000.00	400,000.00	1,800,000.00
Corporate Contingency	500,000.00	500,000.00	0.00	1,000,000.00 Contingency for the unexpected
TOTAL	7,900,000.00	8,100,000.00	3,280,000.00	19,280,000.00

APPENDIX "C"

REGIONAL MUNICIPALITY OF OTTAWA-CARLETON CURRENT INVENTORY OF YEAR 2000 APPLICATIONS/ISSUES (as of 13 January 1998)

All systems/items listed below must be evaluated for Year 2000 compliance. Some of this work is already complete or in progress. This list excludes applications at the Ottawa-Carleton Regional Police Services and at OC Transpo.

CORPORATE WIDE APPLICATIONS **(affects all departments)**

NOTE: Some of these applications are duplicated under other departments.

E-Mail (Internal)
E-Mail (External)
Office, Office 95, Office 97 (which include):

- MS Word
- MS Project
- MS Excel
- MS Powerpoint
- MS Access

FoxPro for Windows
Org Chart Plus for Windows
Corel
Winfax Pro
Jetform
Omnipage scanning software
Reference Manager (RefMan)
All Financial Systems (A/R, A/P, Inventory, General Ledger, etc.)
HRIS - PeopleSoft
HRIS - Crystal Reports generator
SCOPUS (complaint tracking)
Maximizer
Vision (GIS system)
RIS/Internet

ISD MAINFRAME NETWORK SYSTEMS:

All Windows NT, Novell Netware, Sun Solaris Servers and all specialized servers (includes utilities and specialized software on the server)
Shared printer servers
All links to remote sites
External Internet Access
All other electronic communication links - Internal/External

TELEPHONE SYSTEMS:

All telephone equipment and software associated with:
External 7-digit (receptionist's lines)
External 7-digit - direct dial (DID links)
Automated attendant (links)
Internal - 4 digit dial - same location
Internal - 4 digit dial - other locations
Long distance service
Voice mail
Voice mail trees (incoming external)
FAX
Cell phones
Beepers

FACILITIES MANAGEMENT:

For all Regional facilities:

- security systems
- heating and ventilation systems
- elevator systems
- other specialized building control systems
- emergency backup generators

CORPORATE FLEET:

RMOC Vehicles
Test and vehicle repair equipment
Automated fuel dispensing systems

OTHER ITEMS/ISSUES:

Internal / External Mail / External couriers, etc.
External Supplier Chain
Photocopiers, other reproduction equipment
All other vital upstream/downstream business partners (eg. Hydro, Bell, Municipalities, Province, etc.)

REGIONAL CHAIR AND COUNCILLORS; **CHIEF ADMINISTRATIVE OFFICER'S** **OFFICE;** and **REGIONAL CLERK'S** **DEPARTMENT**

Inactive Records
TDMS (Official Languages) System

Vote Tracking System
Voter Notification System
Mail Logging System
Corporate Records Management System
Contracts/Agreements System

ENVIRONMENT AND
TRANSPORTATION DEPARTMENT

Inventory
Counter Orders
Water Meter
RIMS
ArcView
FlowSearch
Mapinfo 4.1
MBADES
MeterMaster
MSC/C++
R&R
Signaplot
StatGraphics
Training System
Turbo CAD
AutoCAD
dBASE III+
dBASE IV
PC/Anywhere
ProComm
Reachout
Timeline

AA
AB/SCADA
ABH I/O
AccRate
ACSIW
AGAT
ArcView
AT Timer
ATR
Autocad R12/R13, Lite, etc.
Bennie
C&O Info
CASSWorks
CCOST
CDI
CIRCUS
CMMS
CMS
Collision
ColRep
Compumod
Concrete
Consult

ContractPrep
CountBoards
DataLoggers
DataRadio
Dic_Jon
DOS
DSGN
DynaFlec
EASI-I
EASI
ECAM
ERWIN
ETS
FinRow
FinTrack
FIX
FoxPro
Gandalf
Gasboy
Geoware
Gint
HVAC
HWIS
HYDRANT
Inq
InstrumInd
InstrumLab
InstrumSWQ
InterVolt
LIMS-C
LIMS-I
LIMS-R
Logic
MailReg
MapCon
MapInfo
Maximizer
MBADES
MiscFox
MOEE
Mooney
MSDS
Nematron
NewLeaf
OPMS
OPSS
Oscar
PanelMate
PayVoucher
PBTS
PC/Anywhere
Permits
PMS
PowerBuilder

Procomm	Road Needs
QNX Trail	Service Req
Reachout	SID
Rental	Sign Guide
RIMS	Sign Manual
RMS	Signal Check
RoadCut	STCS
RoadNeeds	TMCS-L
Rockwell	TRS
RSX	Update
RTA	Work Forecast
RWIS	Water Meter
Sample	ROMS
SBDS	Download 1
SCADA-LB	Download 2
SCADA-R	FlowSearch
Scopus-H	Jet Form
Scopus-SW	MeterMaster
SigmaPlot	MeterRead
SigWin	MSC/C++
SolidPlan	Oracle 7.2
StatGraphics	R&R
STEVEL	Scanners
SuperPMS	Symbol App Developer
SWIS	Upload 1
SysArch	Upload 2
Telesafe	Crystal Reports
TI	MicroStation
Timeline	InRoads V7.0
TMCS	StormWorks V7.0
Trail	DraftWorks V2.1
CaBiT	CogoClassic
TSIPS	InterPlot IPLOT Server 8.0
Turbo Cad	Visio 4
Utopia 2.1	CLIX
VALVE	CLIX - MicroStation
Vault	CLIX - InRoads
Visual Basic	CLIX - Iplot
Watcom	PKZIP (Win 3.1)
WEIS	PKZIP (Win NT,95)
WSC	Aerial
Bellcust	225 Link
Detector Sys	3m Vehicle Detection
DM	Aapex
EASI reports	Cpack
Essedit	Freeze Frame 2
Hydro	Husky
ISR	Kcontrol
L8Dnld	Multipro
L9Dnld	Netsim
Location Ref	Thumbs
Mail System	Transyt-7F
Payment Sys	Traxfax
QCL	Time Space Diagram Windows 2

AutoVue
 McTrans
 Project
 CogoWorks V2.1
 FieldWorks V7.0
 InterPlot IPLOT Client 8.0
 InterPlot HPGL Server
 InterPlot Driver Pack
 Imagineer 2.0
 MicroStation V5
 CADscript V6.0
 LEGATO NetWorker
 NT Workstation V4.0
 NT Server V4.0
 JetDirect Print Server Software
 PC PATHFINDER MAP
 Images-3D
 Hec-RAS
 Cogo-PC Plus
 Woods
 P-Frame
 S-Frame
 Bricom
 Structs
 Quick Basics
 Sign Design
 SCADA - Water Division
 QNX Loretta
 Backup Exec
 Power Chute
 Thawing Machines
 Diesel Generators
 Datasondes
 Level meters, autosamplers
 Rain gauges
 Temperature Loggers
 Sutron Dataloggers
 Quick Basic
 SoftRisk version 3
 Professional File

FINANCE DEPARTMENT

Assessment
 Contracts/Tenders (excel)
 Debenture System
 Legal Imprest (Acct)
 Logbook
 Receipts
 Budget (Operating)
 Budget (Capital)
 Work in Progress
 Accounts Receivable
 ASAFIN
 Insurance Claims

Insurance Registry
 Development Charges (Finance/Planning
 Departments)
 Enterprise 5000 v. 3.1.6

**OTTAWA-CARLETON HEALTH
DEPARTMENT**

Activity Reporting System (ARS-Adult)
 Smoking Stages of change
 Family Index System (FIS)
 Adult Volunteer Database
 Combook
 Health Info Santé
 TB Screening Application
 Your Heart Health
 Heart Health Database
 Bon Appetit
 Child & Adolescent Division Budget database
 CCAC visits
 Certificate generation program
 Activity Reporting System (ARS-CAD)
 Immunisation Record Information System
 (IRIS)
 Family Index System (FIS)
 School Health Record System (SHR)
 Hep "B" Tracking System
 IRIS Utility Program
 Meningo Search
 Parent Baby Info Line
 Prenatal Intake System
 Activity Reporting System (ARS-HSP)
 Dental Indices Program (DIS)
 Children in Need of Treatment (CINOT)
 Dental System
 HIV Surveillance (Contact)
 Sexual Health Clinic Program
 SITE - Needle Exchange Program
 RDIS (See Environmental Health /
 Communicable Disease Control
 CINOT / CAS (Children in Need of Treatment)
 CINOT 5
 Dental Indices Program
 IRIS (AMOH Use)
 Autoclave
 Cash register
 Bioinventory System (BIOS - Vaccine inventory
 and ordering system)
 Reportable Disease Information System (RDIS)
 Beach Statistics Info. System
 Complaints
 Food Handler Training
 Health Inspection Database
 Pool Statistics Information System
 Water Sample Database (RHU)

Interactive Voice Response (IVR)
Activity Reporting System (ARS-Adult)
Combook
Q.S.R. NUDIST
EPI Info. Version 6
SPSS Ver. 6.1.3
The SAS System Ver 6.11
Mitel Superset 7 - telecommunications pkg.
Program Planned Budgeting (Ministry
budgeting system)
InMagic DB/Text

HOMES FOR THE AGED

Compusis/Staff Scheduler
Trust Fund Accounting
Applicant Tracking
Resident documentation
Blood pressure meters
Digital thermometers
Digital timers on bathtubs
VCRs

HUMAN RESOURCES DEPARTMENT

Job Evaluation
First Aid
EAP System
CCInfo
Peoplesoft
Confined
LTD Database (Foxpro)
Medical Records (Foxpro)
WCB/Accident Database
Immunization
Job Evaluation
Payroll (Mapper)

INFORMATION AND PUBLIC AFFAIRS DEPARTMENT

Quark Xpress v. 3.3

INFORMATION SYSTEMS DIVISION (FINANCE DEPARTMENT)

BACKUP:

Colorado Tracker 250 v. 4.03
PCZIP/PKUZIP v 2.04
WinZip V.6.2

CHARTING:

Org Chart Plus
Visio

DATA MODEL:

System Architecture

ERWin

DEPARTMENTAL:

Intellilink

DESKTOP:

Exchange
SMS
Word Viewer

DEVELOPMENT:

Pro C
Access
FoxPro
PowerBuilder
Visual Basic

FAX:

WinFax
WinFax Pro

FORMS:

Jetform Central
Jetform Filler v 4.22

HARDWARE INFRASTRUCTURE:

Postal Union
Gandalf - Router software v. 3.1.0
Gandalf - Router software v. 3.2.1
Gandalf - Router software v.3.1.1b
Gandalf - Router software v 3.2.2.
Gandalf - Router software v M2507
Gandalf Console software v 1.0.0
3 Com - FDDI Ring
3 Com - FDDI Ring Builder 1.0.1
3 Com - Hub software v 4.0.1
3 Com - Switch software v 8.1.1.
Mitel - ISDN Nodes
Baranof - MailCheck v 3.00
Novell MPR v 2.00
Shiva v 4.0 and v 5.0
Gandalf - TFTP
What's Up
Blackhole
Novell NOS
NT Server

MAINFRAME CONNECTIVITY:

Attachmate - PEP
Attachmate - Cadet
Attachmate - InfoConnect v 2.1

OPERATING SYSTEMS:

Solaris

DOS
NT Workstation
Windows 95
Windows NT

PEOPLESOFT:

PeopleSoft Application
PeopleSoft Tools

TELEPHONES:

Mitel - IVR
Mitel SX2000
Mitel - OPS Manager
Mitel Tasks
TELCO
Mitel - Voice Mail

PUBLISHING:

Corel Ventura
Image Assistant
WordScan
CorelDraw v 5.0 and v.7.0
OmniPage and OmniPage Pro v 5.04e

RDBMS:

R2D/Objectstar
SQL Server Windows
Oracle

REPORTING:

Crystal Reports

RESEARCH:

Computer Select
Technet

TRACKING:

Utopia v. 2.1
Maximizer
MS Project v. 4.0

UNIX:

Linux - Red Hat
BASH
BSD
Cron (from NeXTStep 3.3)
fvwm
GNUgcc
GNUtar
GNUZip
HPNP
TCSH
Top
Traceroute

xpm
Unix v. 5.3

WEB SERVER/INTERNET:

AgendaBuilder
Datamaker
CORIM
PDF Mailserver
SQL2HTML
Upload.cgi
swish
Acrobat Distiller
Acrobat Exchange
Internet Explorer
NeXTStep v. 3.3
OpenBase v/ 5.0.1
Perl v.5.002
SafetyNet v. 2.5r1
WebObjects v. 2.0
wwwwais v. 2.5
Acrobat Reader v. 2.1
Apache v 1.2
Netscape

COMPLIANT:

CD-Oasys
CD Roll
Computer Centre Runs
Phone Reports
R.I.S.

LEGAL DEPARTMENT

Time Reporting System
Amicus Attorney v 1.5.3.
Word Perfect v. 5.1

PLANNING AND DEVELOPMENT

APPROVALS DEPARTMENT

Timberline (Property Management/Legal)
Joint Housing
Property Management Reporting
Employment Survey
Columbus
PHD
Lotus 1-2-3 for Windows

SOCIAL SERVICES DEPARTMENT

Daycare
Automated Intake
Central Client Index
EPD - Employment Programs including ACT,
YEPP, ESU

Home Help
Home Support
Payment Processing System
Residential Care
Special Care / Supplementary Aid
Youth Assistance Program
Welfare
Dental System
Line 1000
CIMS Comprehensive Income Maintenance
CWT - CaseWorker Technology
Citrix Data Entry and Remote Communications
Application
Front end processor communications link to
CIMS
Infoshare
Joblink - Case Management - ERC
Choices Career Assessment - ERC
Ontario Works Technology (OWT)
Contact 4 - ERC
Proxnet Security Software (West ERC)
Client Registration (ERC) file retrieval using
bar coding via Case ID
Eligibility Review Credit Bureau Application
Community Placement and Resources
Outreach Statistics Packages
Ontario Works Participation Agreement
DSS - Decision Support System Applications
SSD Problem-Help messaging system
Winway (French and English) Resume Writer
Corel Office Suite (French and English)
Typing Tutorials for clients (French and
English)
Social Services - Finance and Administration
Budget (EXCEL)
Corporate Finance (EXCEL applications)
Overpayments (ACCESS and EXCEL)
Overpayment calculator

WINDOW ON THE REGION

OSCAR 1
Rooms
Composter Receipts (Excel)
Print Shop Work Order charges (WOTR and
finance)
Scopus (Call tracking)
24 hour service
Sytos Plus v 1.21

PREPARING FOR YEAR 2000 WITHIN THE
REGIONAL MUNICIPALITY OF OTTAWA-CARLETON

Finance Commissioner's report dated 19 Dec 97

Mr. G. Geddes, Manager, Year 2000 Project, made a presentation on the preparations within the RMOC for the Year 2000. He spoke about a spending plan that calls for a total expenditure of \$19.2 million in the next three years, and he provided budget estimates related to that amount. He alluded to a number of cooperative efforts presently underway and he presented Year 2000 options saying the intent is to ensure that the day-to-day business of the regional corporation will not be impacted by technology failures caused by this particular date change.

The Committee heard from the Environment and Transportation Commissioner, M. Sheflin, who began by saying the systems that will be impacted are considered as infrastructure and products that are consumed, much like electricity and fuel: they are an integral part of the RMOC's operation. The Year 2000 will affect components controlled by the SCADA system at the Lemieux Island and Britannia Pumping water plants, as well as embedded systems that compose part of the water distribution system. In addition, the operations at the Robert O. Pickard Environment Centre and at the Trail Road Landfill site will be affected. Many activities associated with the maintenance of roadway infrastructure are controlled by embedded systems that have a date component. Other systems including distribution networks, pressure zones and reservoir fillings are controlled through the SCADA system: from these automated control processes, the department has made significant gains in efficiency and has kept costs low. For these reasons, the resolution of Year 2000 compliance problems must be considered as an ongoing investment in department's infrastructure to support day to day business. While staff will continue to work over the next two years repairing or replacing systems, it must be stated that all problems will not be able to be addressed before January 1, 2000; staff are trying to minimize both the number and the impact of the problems that remain after that date. Mr. Sheflin concluded by saying that all systems would have to have been renewed and replaced over a period of time, however something that may have been done in five years will have to be done before the Year 2000 deadline.

The Social Services Commissioner, D. Stewart spoke about the Improving Client Service (ICS) initiative launched in 1994, saying its aim was to reduce and re-direct administrative resources and focus on employment outcomes. The department is in the final stages of this process and many applications have been automated. The department has 32 applications and 12 mainframe-based, client-led applications, as well as 19 applications associated with the requirements of the senior levels of government.

Extract of Draft Minute
Corporate Services and
Economic Development Committee
03 February 1998

The Committee heard from Dr. G. Dunkley, Deputy Medical Officer of Health, who indicated the Department is reviewing all its systems and has identified 8 applications that could be done more efficiently. Some programs that are not Year 2000 compliant are: Immunization Records (160,000 records); Restaurant Inspections (12,000 inspections); communicable disease monitoring systems that feed into large provincial systems; client-patient records, specifically for the dental clinics and requiring close cooperation with the Social Services Department. Dr. Dunkley pointed out that many systems in use are provincial systems, and the department has been pressuring the Ministry of Health to assume its part of the responsibility with respect to Year 2000 compliance, without much success to date.

The Planning and Approvals Commissioner, N. Tunnacliffe, spoke about the systems required to operate and manage buildings owned or leased by the RMOC (62 owned, 64 leased). Computers operate fire alarms, access, heat, ventilation, elevators; they ensure the elimination of toxins such as carbon monoxide from underground garages; they operate systems specific to the requirements of law enforcement agencies and they ensure emergency power is available in long term care facilities such as Homes for the Aged. He said it will be critical, on January 1 2000, if any of these systems are unable to operate.

The Finance Commissioner, J. C. LeBelle spoke about the technology infrastructure staff looking at many other areas, for example, Wide Area Networks, and seeking alternatives for systems that will not be compliant before Year 2000. The most cost-effective solution may be to ensure mainframe compliance. With respect to Local Area Networks (LAN), network servers will have to be examined and made compliant. In the area of Personal Computers, any pre-Pentium chip PC will need to be replaced. Mr. LeBelle said there is relative certainty that the telecommunications system is Year 2000 compliant but staff will need to ensure all elements are operational and this will also be addressed over the next 18 months.

Councillor A. Munter asked if it were fair to assume that the cost of equipment and skills being purchased was \$5 million. Having received an affirmative reply, he posited that, had the Region started the process one year ago, this cost could have been halved. The Councillor also presumed that upgrades will be to the latest versions and the best systems available. He inquired as to what component of the \$19.2 million represents Year 2000 and what component represents state-of-the-art applications that will negate having to spend more money in subsequent years. G. Geddes replied there is not a simple answer to this question. Mr. Sheflin added the amounts could not easily be determined, however some guestimates could be made. As to whether there would be requests for additional funding to address emerging problems, the Commissioner said staff will make the appropriate risk analysis before eliminating any system. In reply to a question about the source of the funding, Mr. LeBelle confirmed it would come from a number of reserve funds from each business entity and this information will be outlined in the Capital Budget document.

Extract of Draft Minute
Corporate Services and
Economic Development Committee
03 February 1998

Councillor R. Cantin said he believed approximately \$3.5 million is spent in an average year in all the budgets of the corporation, therefore this represents an incremental cost of 50% of regular business. Mr. LeBelle noted that the costs are associated with repairs and replacement and coming up with alternatives. With regard to the Environment and Transportation Department, Councillor Cantin asked whether suppliers could not provide major assistance. Commissioner Sheflin confirmed staff would investigate this option first, as these are the systems that have allowed regional costs to be kept low three years in a row, and he confirmed there will be no increase in rates for solutions or for upgrades. Councillor Cantin put forward a Motion calling for approximately half the requested amount to be approved, subject to subsequent amounts being approved as part of the budget deliberations.

Councillor M. Meilleur confessed she could not understand how the situation with Year 2000 had arisen, given the number of experts in the field and the information technologies available. Commissioner LeBelle pointed out there is growing acknowledgment that using only two digits to save space and reduce size was a strategic error made in the early days of computer development. Councillor Meilleur asked whether all the applications/programs listed in the report were obsolete. Mr. LeBelle replied in the negative. He clarified staff want to do a complete inventory of all technology in all departments to ensure there are no problems. He speculated many applications listed will not be affected. In reply to a question from Councillor Meilleur on product life-cycles, G. Geddes indicated these have dropped from 7 years to 6 months and even to every quarter for some applications and he speculated this situation may be profit-driven.

Councillor G. Hunter said he hoped there would be some kind of audit of the need to examine so many programs. Commissioner LeBelle assured the Councillor there will be prioritization as staff anticipate some difficulty in acquiring the resources needed and keeping the resources currently available.

In an effort to explain the relevance of dates on microprocessors, and in response to further questions from Councillor Hunter, the Director, Water Environment Protection Division, Ms. N. Scheppers, gave the example of a level indicator inside the SCADA system. She said there could be a problem if there is an embedded chip with a date inside the system. Staff are attempting to identify the critical parts of all these interconnecting systems, to ensure they communicate with one another and continue to function.

Councillor L. Davis said there are concerns staff are requesting a "blank cheque". She asked whether there is any in-house expertise relative to the industry to ensure the money isn't being spent carelessly. Mr. Geddes indicated there is such expertise in house. In addition, tenders have been broken down into several components and are being advertised through the open bidding system. The problem is the lack of expertise on Year 2000 in the industry and this may have an impact on the RMOC. Also, suppliers cannot guarantee per diem rates for 6 months as the Region would prefer.

Extract of Draft Minute
Corporate Services and
Economic Development Committee
03 February 1998

Councillor D. Beamish asked about costs identified for the year 2000 in the spending plan, specifically whether these apply to 1999 expenditures. G. Geddes said these amounts would cover the costs of upgrading the systems identified as being upgradable at a later date. Councillor Beamish wanted to know whether systems purchased recently and touted as being Year 2000 compliant were later found not to be compliant. Mr. LeBelle said he was not aware of any specific circumstance where this might have occurred. The Director, Information Systems Division, Ms. S. Lechner, added that staff have not completed their evaluation, however if it were discovered this has happened, the matter would be discussed with the product supplier.

Councillor A. Loney moved the report recommendations, saying he saw the issue as two-fold: is there a problem with Year 2000 compliance (there is a recognition this is the case) and does Council trust the advice of staff. He expressed the belief staff will do its best to protect the investment and he suggested it was time to proceed.

Councillor R. Cantin asked whether staff could comment on his proposal to provide half the requested funding at this time. The Finance Commissioner said he could appreciate the discomfort of Council in this regard, and if the Committee felt more comfortable with a revised number, staff would undertake what work it can at this time. Councillor Meilleur asked if a reduced amount would not preclude signing a more acceptable contract and expose the Corporation to losing a good provider. Mr. Geddes agreed this was a risk, citing as an example his having lost the ability to hire two consultants because the funding was not in place.

Councillor R. van den Ham said the discussions have confirmed both his instinct and his confidence that regional staff will not spend what they don't have to spend. He agreed this is a difficult decision to make but he could not support a recommendation for reduced funding.

Councillor G. Hunter indicated that, while he felt more comfortable with this matter than before, he was still hesitant about the increase in the delegation of authority. He asked that the Chief Administrative Officer be given a direction to devise a significant reporting mechanism to keep Council informed about what is being discovered through the evaluation and if upward adjustments need to be made. He expressed the hope the \$19.2 million represents the worse case scenario that Council will have to face.

Pursuant to the presentations, the Committee considered the departmental recommendations.

That the Corporate Services and Economic Development Committee and Council approve the following:

Extract of Draft Minute
Corporate Services and
Economic Development Committee
03 February 1998

- 1. The establishment of a total project estimate of \$19,200,000 for the Year 2000 Project;**
- 2. The pre-approval of the 1998 spending plan of \$7,900,000 for the Year 2000 Project;**
- 3. An increase in the Chief Administrative Officer's delegated signing authority to \$250,000 for expenditures related to the Year 2000 Project.**

CARRIED