



**THE CITY OF WINNIPEG**

# **REQUEST FOR PROPOSAL**

**RFP NO. 192-2008**

**APPENDIX D – LEGACY SYSTEMS**

	<b>Application Name (and Acronym)</b>	<b>Application Purpose</b>	<b>Package or In-house Developed</b>	<b>Interface Types Currently existing</b>	<b>Major Database</b>	<b>Major Data Structure</b>	<b># of Clients</b>	<b>Program Language</b>	<b>Processing Platform</b>	<b>Department</b>	<b>Comments</b>
1	AACS (Appeals Application Control System)	Support for Board of Revision - appeals management	inhouse	Accessed by Tax	Oracle	RDB	< 100	VB.NET	Wintel	City Clerks	Information is not for public access
2	AMANDA Information and Service Request System	Automates functions within departments such as planning, building, inspections, bylaw enforcement, prosecutions, fire etc. Can be modified to meet any dept requirements	Package	Peoplesoft - batch - interface was developed by vendor	Oracle	Relational	150	PL/SQL and PowerBuilder	Windows 2000	Planning, Property & Development	
3	CAMA (Computer Assisted Mass Appraisal)	Assessment valuation and management System	Package	Powerbuilder interface to/from Manta (Batch)	Oracle	RDB	180	Centura, COBOL, Fortran	Windows 2003 Server	Assessment	Batch, but runs every 2 minutes
4	Class	(Registration and booking system)	Package	Credit Card Processing Realtime and Batch	Oracle	Relational	100 approx. internal users	C++/Visual Basic	Wintel	Community Services	
5	IntraView	On-street Incident Reporting System	In-house	IntraView is the web based reporting mechanism for the Contact On-Street incident management system.  Contact generates the content for IntraView	MySQL	RDB	30	VisualAge Java	Browser	Transit	
6	Emergency Radio Dispatch System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Water & Waste	Not an application/system

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7	(FIRS) Fire Inspection & Reporting System	Scheduling and tracking of Fire Inspections	In-house	None	DB/2	RDB	20 fire inspectors 10 work stations	SmallTalk	Windows XP	Fire Paramedic Service	
8	Geographical Information System (GIS)	See separate page for description									
9	Handi-Transit Address Database (interacts with iRide)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Transit	<u>Unknown.</u> All Handi address management should occur through the iRide Reservation System
10	ICIVIEW	View current insect control crew activity and the status of listings (area to be treated). Also used by Foremen to determine daily work assignment.	In-house	None	Oracle	RDB	< 25	VB, ASP, WebMap	Windows 2003	Community Services - Insect Control	
11	Inspector Boundaries System (Information System)	See separate page for description									
12	MANTALite - public access for registered users only	Roll viewing, views MANTA data	In-house	Daily Batch Interface from Manta	Oracle	RDB	Potentially thousands	ASP	Windows 2003	Property Assessment	Current recommendation is MantaLite as opposed to Manta. Will need to be reviewed.

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13	Navigo Interactive Internet Trip Planner (Internet/web based)	Interactive Transit trip route planner	In-House	Navigo derives all data in real time from the UTOPIA Service Data Persistent Object Store. It cannot function independently. Navigo requests can be submitted as properly formatted XML directly to JMS based request queues.	Service	UTOPIA Persistent Object Store	10,000/day	Java	Open, Apache Tomcat, JSP, J2EE	Transit	
14	ON-TRAC Work Assignment	Define and allocate bus operator work assignments	In-house								Not Required re: Herb Vossler
15	Parking Database	Parking Tickets Parking Permits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	This database contains data that is older than 1999 and has been settled. The new data is contained in the T2 PowerPark Flex application
16	RESPONSE Customer Concern Information Management	Automation of customer complaints and commendations. Automated workflow of incident information	In-house	Rich function Java client. <u>No external interfaces</u> . Internal interfaces to Bus Operator records, work assignment, dispatch data.	Service Delivery,	RDB	30	CA Plex, Java Client, System i Server	Portable multi-platform Java Client, System i DB2/UDB server and host code	Transit	Includes ON-TRAC work assignment

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17	Synergen (Information & Service Request System)	work input, flow and management	Package	Batch is available needs to be purchsed. Realtime would need custom development	Oracle	Relational	450	PL/SQL Oracle Forms	Windows Server	Water & Waste	Vendor is now Oracle
18	T2 PowerPark Flex	Unified Parking Management System	Package	Credit Card Processing - Batch only	Oracle SQL Server on Cash Side	Relational	20	Microsoft®.NET	Wintel	Winnipeg Parking Authority	

**N/A - Not Applicable**

## **Geographical Information System (GIS) Environment at the City of Winnipeg**

At the City of Winnipeg the GIS environment is a mix of decentralized and centralized (i.e. corporately shared) databases and applications.

The decentralized focus involves the departments running their own GIS applications for maintaining and displaying their GIS data to fulfill their business operational needs, which include Call Centre needs.

The corporate focus consists of:

- An environment of gathering the data found throughout the various departments and bringing this data into one central warehouse referred to as the Spatial Data Infrastructure (SDI). The SDI consists of two components: a central database in Oracle format as well as the data marts where data is published to in various formats to serve specific purposes such as MapInfo or Intergraph's GeoMedia SmartStore. The purpose of this central GIS data environment is to make it easier for employees to get at the GIS data found throughout the City from one convenient location. This data is used by a number of users at the City for viewing, analysis and as a common reference for the maintenance of other data. This data has a set refresh schedule so that employees do not have to look for more up-to-date data.
- An application called iView that is used to display all the data that exists in the SDI database. The iView application can be considered as a window or a catalogue for all the data that exists in the SDI database. Over one million on-line maps are produced annually. The application has been built as a toolkit where new data can be added or its display changed easily through a table driven format. The toolkit can also be used to develop other spin-off applications quickly around a common look and feel where application code can be reused to perform address, intersection, roll number and various other search formats, map printing etc.

At the City the majority of the GIS environments involve the Intergraph GeoMedia suite of products with data stored in Oracle. Other pockets of GIS vendor products and data formats do exist. The following exist at the City:

GIS database formats:

- Oracle 8.1.7, 9i, 10g
- MapInfo
- SQL Server
- AutoCAD (DWG, DXF)
- ESRI
- MapGuide Format
- MapXtreme Format
- SmartStore – Intergraph
- Intergraph GeoMedia in MS Access format

- Orthophotos:
  - 1998 (with 2000 partial update)
    - Black and white, 20 cm resolution
    - Formats: TIF, MrSid, ECW compressed TIF (Intergraph)
  - 2002
    - Colour, 20 cm resolution
    - Includes about 2000 sq km of the surrounding area of the City of Winnipeg
    - Formats: TIF, ECW compressed TIF (Intergraph)
  - 2005
    - Colour, 20 cm resolution
    - Includes about 2000 sq km of the surrounding area of the City of Winnipeg
    - Formats: TIF, ECW compressed TIF (Intergraph)

#### GIS Web-based Viewing Software:

- GeoMedia Web Map Pro – Intergraph
- MapXtreme – MapInfo
- MapGuide – AutoDesk

#### GIS Desktop Viewing Software:

- MapX - MapInfo

#### GIS Analysis Software:

- MapInfo
- GeoMedia Pro – Intergraph
- ARCVIEW - ESRI

#### GIS Maintenance Software:

- GeoMedia Pro – Intergraph
- GeoMedia Public Works Manager – Intergraph
- GeoMedia Transportation Manager – Intergraph
- GeoMedia Parcel – Intergraph
- GeoMedia Transaction Manager – Intergraph
- MapInfo
- AutoDesk Map - AutoDesk

#### Extract Transform and Load (ETL) Software

- Intergraph Data Warehouse Toolkit
- ETL – In-house custom developed
- ETL – Merging – In-house custom developed
- Intergraph GeoMedia Pro Version 6.0 that has the utility called Publish to GeoMedia SmartStore Warehouse.
- Oracle
- MapGuide
- MapXtreme

## System Description Corporate GIS Environment

**Department:** Corporate Information Technology

**Date:** March 12, 2007

### Part I

**Identify the computer architecture (Windows, Linux, etc) the system runs on and computer language (CPP. Databases, etc.).**

Data environment:

Name: Spatial Data Infrastructure Data (SDI) environment:

- Windows 2003 server running:
  - Oracle 9i to be moved in the next month to Oracle (10.2.0.2)
- Windows 2003 file server running:
  - MapInfo format
  - SmartStore format – Intergraph
  - Orthophotos

Applications:

Name: Extract Transform Load (ETL) Processes

- Purpose to:
  - Pull data:
    - Oracle to Oracle
    - MapInfo to Oracle
  - Push data:
    - Oracle to MapInfo
    - Oracle to Intergraph's SmartStore format
- Windows XP Desktop running:
  - GeoMedia Pro V 6.0
  - Intergraph Data Warehouse Toolkit Version 6.0
  - Oracle Client - Version 9.2.0.6.0 or higher

Name: iView

- Windows 2003 server running:
  - IIS V 6.0
  - Intergraph Web Map Version 6.0 with Hot fix 06.00.34.85
  - Oracle Client - Version 9.2.0.6.0 or higher
- Written in VB, ASP, VB.net, ASP.net accessing:
  - Web Map to create and display the map
  - Oracle, MapInfo and SmartStore data
- Desktop:
  - Plug-in requirements:
    - Active CGM to render the map, future SVG plug-in



- Plug-in not required to render a raster map (this is an application option that can be selected)

## **Part II**

**Identify if the system is a package, shrink wrap application, or in-house developed software.**

Data environment:

Name: Spatial Data Infrastructure environment (SDI)

- Oracle - In-house developed data schema
- MapInfo – In-house developed
- SmartStore – Intergraph shrink-wrap application using GeoMedia Pro Version 6.0 that has the utility called Publish to GeoMedia SmartStore Warehouse.

Applications:

Name: Extract Transform Load (ETL) Processes are a combination of:

- Data Warehouse Toolkit – Shrink wrap application from Intergraph
- MapInfo format - Shrink wrap - MapInfo
- Publish data to SmartStore format – Intergraph shrink-wrap application using GeoMedia Pro Version 6.0
- Other automated ETL processes that are in-house developed.

Name: iView

- In-house developed based on Intergraph's GeoMedia Web Map Pro product

Name: GIS Viewing, Analysis and Maintenance functions

- GeoMedia Web Map Pro – Intergraph
- MapInfo
- GeoMedia Pro - Intergraph

## **Part III**

**Identify if the interface is in batch mode (file to file) or online live.**

Name: Extract Transform Load (ETL) Processes are a combination of:

- Data Warehouse Toolkit – Batch mode
- MapInfo format – Batch mode
- SmartStore – Batch mode
- Other processes that are in-house developed.

Name: iView

- On-line live (Web-based mapping application)

## **System Description Decentralized GIS Environment**

**Department: Corporate Information Technology**

**Date: March 12, 2007**

The following departments have decentralized GIS applications that ultimately tie to customer service in their departments:

Planning, Property and Development

Water and Waste

Public Works

Community Services

Property Assessment

City Clerk's

Winnipeg Transit

Winnipeg Police Service

Fire Paramedic Service

Winnipeg Parking Authority

## Information on the Inspector Boundaries System Interface

Without knowing where this listed resource came from and what system it was specifically identifying, I don't know what to answer and I'll explain why:

- There are six(6) inspection branches in PP&D as we speak:
  - Commercial Building Inspections
  - Commercial Electrical Inspections
  - Commercial Plumbing and Mechanical Inspections
  - Housing Inspections
  - Existing Building Inspections
  - Zoning Field Inspections
- Seven(7) if you include our ability to also store the Health Department's Inspection Boundaries
- These boundaries are all identified in AMANDA in one shape or format depending on how they were designed to be used and maintained
- It is my understanding that these are the up to date inspection district areas and this is where all day-to-day changes to area boundaries are maintained and saved.
  
- There are also some needs for graphical representation of these inspection boundaries from time to time and I believe:
  - The desk top publishing person in our department has and maintains an example of these boundary maps on our website
    - [http://www.winnipeg.ca/ppd/maps\\_info.stm](http://www.winnipeg.ca/ppd/maps_info.stm)
  - Plus I believe that these boundaries are also stored in Geomedia as layers which can be used to combine with the City's Base map etc to product larger wall size maps for display of said boundaries
  
- There used to be an old dbase system called inspection boundaries that may still exist in some form and is being used through the inspection branches.
  - However, I would be dubious of the accuracy of the data as to who is updating it with changes and where is the information being drawn from.
  - I would also ask why we are using this system when we already have the ability to connect to all PP&D inspections boundary systems through AMANDA.
- If this is the "system" that is being referenced then I would strongly advise you to divorce yourself from this system as it may be inaccurate, it may also be being maintained on antique software and at the last point it seems to be rather redundant to have this system around.

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