

## **COMMITTEE OF THE WHOLE MARCH 3, 2003**

### **ENTERPRISE GEOGRAPHIC INFORMATION SYSTEM (GIS) PROJECT STATUS REPORT**

#### **Recommendation**

The Commissioner of Economic/Technology Development and Communications in consultation with the Director of Information Technology Services and the Manager of WEB and GIS Development recommends:

1. That this report be received for information.

#### **Purpose**

The purpose of this report is to update Council on the status of the GIS Project. This report covers the Project activities for the period of Year 2002.

#### **Background - Analysis and Options**

The GIS Project activities carried out in Year 2002 were in accordance with the outlined activities in the GIS Strategy. Council approved the GIS Strategy on October 29, 2001.

#### **Project Activities**

After completing the Development Tracking Application (DTA) in Year 2001, the GIS Enterprise Project activities in Year 2002 were focused on:

- Staffing and Human Resources – Acquiring necessary staffing resources
- Information Management – Enriching the GIS mapping information repository
- Infrastructure – Acquisition of GIS development tools
- Functionality – Enhancing the DTA functionality and Development of the initial set of Enterprise GIS applications

Attachment A provides details of the Year 2002 activities and their status.

#### **Project Budget**

The total of the approved Capital and Operating Budgets for completion of the GIS Project Year 2002 activities was approximately \$1.3 million. The actual amount spent and committed for Year 2002 activities is approximately \$1.2 million. Detailed information of the 2002 GIS Budget and Actual spending is available.

#### **Project Management Approach**

Munirom Technologies Inc. (MTI) was contracted as the primary GIS applications developer. The role of MTI was to collect functional requirements from users of GIS and to develop appropriate GIS applications. To achieve this, MTI held numerous workshops in Year 2002 and based on the information collected at the workshops has developed the GIS functionality. As of now, the developed GIS functionality has been delivered by MTI and is currently going through a testing and acceptance process with the user departments.

#### **Project Achievements for Year 2002**

1. The Corporate Information Resource Management project has begun focusing on establishing a policy framework and enterprise data model governing enterprise data.

2. A number of GIS servers (internet/intranet, Oracle Geodatabase, and Teranet GeoServer servers) have been implemented and integrated into Corporate LAN, supporting a number of applications.
3. The database contains a live list of Development Applications that are entered as they arise at the Planning Department.
4. The database contains digital maps that define where these applications are.
5. The first reorganization of data for the database is complete. This includes the Parcel Fabric, the Street Centre, the Application Polygons and some M-Plans.
6. There are approximately 50 users of DTA (Development Tracking Application) from the Planning, Finance, Legal, Urban Design and Clerks Department. As a result, the Planning Department will utilize DTA to its full potential as part of their day to day activities.
7. Infrastructure Data Model is well designed that will hold the spatial representation of Vaughan's infrastructure. This model is designed in harmony with the GIS Corporate Data Model.
8. AMANDA RSN to PIN and RSN to AROLL correlation tools have been almost completed, allowing for data conversion of the AMANDA system to take advantage of GIS technology.
9. The installation of GEOSERVER for Teranet is complete. This product gives monthly online transactional access to the registry office POLARIS database.
10. GIS maintenance/development tools RFP has been smoothly processed, and the final report will be submitted to Council shortly.

Attachment B provides a general overview of Enterprise GIS Projects completed and planned.

#### Steps Being Taken to Improve Phase II ( Year 2003 Projects)

Based on the overall status assessment of the 2002 GIS Projects, several activities and actions have been identified to improve GIS service delivery to our end users. The following actions are being taken:

1. The WEB and GIS Development Staff will be working closely with the Information Technology Services Department. This will ensure that best practices of Project Management, Systems Development, Information Management, and Quality Control are more rigorously applied and expected from the GIS consultant.
2. Highly motivated and committed end-user departments are a key factor to the acceptance and sustainability of the GIS applications. In order to enhance the understanding of GIS projects scope and impact of the GIS activities on the end user community, a senior level Steering Committee will be established to provide direction, set priorities, and to identify and oversee GIS project resources.
3. For the 2003 GIS project deliverables, staff will be reporting on a quarterly basis to inform Committee on the progress and challenges. Staff will provide a list of activities that will have detailed technical specifications and work plan developed. Deliverables will be clearly and specifically defined.

#### Conclusion

Significant amount of effort has been committed to the GIS Enterprise Project. A significant amount of progress has been achieved as a result. Based on the information provided in this report, the GIS Project is proceeding on time, on budget and in accordance with the GIS Strategy.

#### Attachments

Attachment A – GIS – Year 2002 Activities Details  
Attachment B – Vaughan Enterprise GIS Projects

**Report prepared by:**

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Respectfully submitted,

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Frank Miele  
Commissioner of Economic/Technology Development and Communications

ACTIVITY	STATUS / COMMENTS
<b>Staffing and Human Resources</b>	
1.3 Manager – hiring of the GIS Project Manager	COMPLETE
1.4 GIS Outsourced Services – technical, application, programming services	COMPLETE
6.7 Training – technical and end-user training	COMPLETE
<b>Information Management (Data Maintenance and Acquisition)</b>	
2.1 SLRN Data Conversion and Maintenance – Single Line Road Network creation, including the master address and street name database.	Delivered – Currently in Testing & Acceptance stage with Community Planning Department
2.2 SLRN Maintenance Tool Development – creation of procedures and automated tools to maintain the SLRN	Delivered – Currently in Testing & Acceptance stage with Community Planning Department
3.1 PARCEL Integration – creation of an integrated map, consisting of several layers such as assessment data, and AMANDA	Delivered – Currently in Testing & Acceptance stage with GIS development group
7.2 Infrastructure Data Conversion – taking existing infrastructure data and spatially enabling it and correcting it. This involves fitting infrastructure location to the Vaughan mapping base, ensuring all lines are properly connected, etc.	Delivered – Currently in Testing & Acceptance stage with Engineering Department
<b>Infrastructure (Hardware/Software/Operations)</b>	
6.2 ORACLE/GIS Server – acquire the primary GIS application server	COMPLETE
6.1 GIS RFP Process – preparation of documentation to define specifications and actual process of vendor response evaluations	COMPLETE – Staff to produce final report to Council
6.3 / 6.4 GIS Technology Acquisition – purchase and installation of the GIS tools for GIS applications development and data management. This is required in order to create a self-sufficient applications development environment.	On-going – no issues
6.5 GeoServer – acquire a server to enable Web users to access mapping information and attributes	COMPLETE

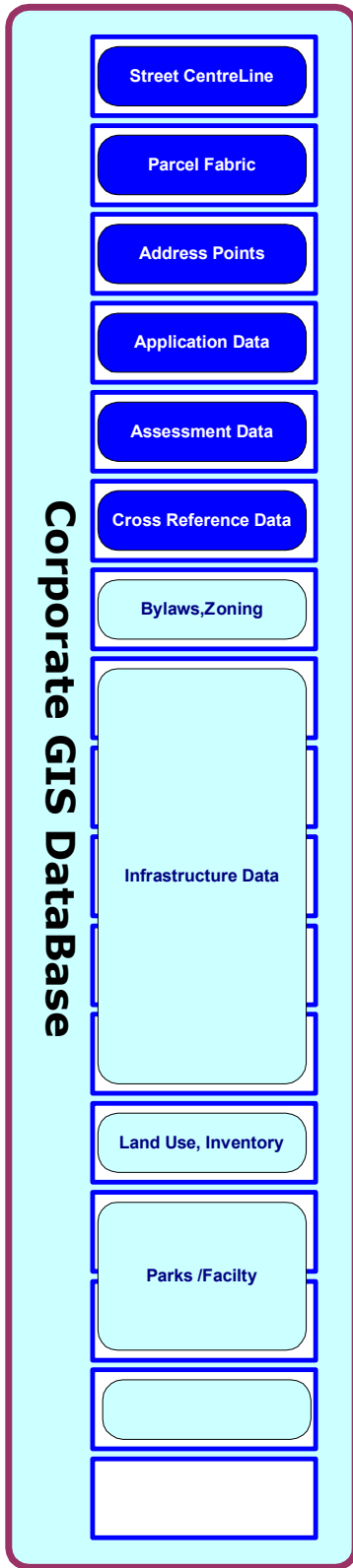
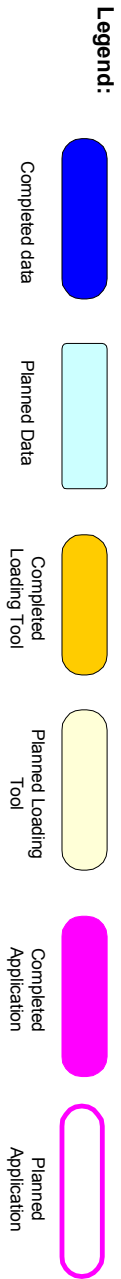
ACTIVITY	STATUS / COMMENTS
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**Functionality (Application Development / GIS Enhancement)**

Development Tracking Application (DTA) Enhancements – application to keep track of land parcels and their varying stages of development status	Delivered – Currently in Testing & Acceptance stage with Community Planning Department
GIS Data Correlation – cross-reference of Teranet geographic database with the MPAC property database	On-going – Requires MPAC License Agreements to be signed, MPAC data to be refreshed, and correlation index updated
4.1 IRM Enterprise Data Design – creation of a corporate enterprise data model	On Hold – Requires formation of a corporate Steering Committee to provide direction and make decisions related to data management
5.1 GIS Standards Design – preparation of the Corporate GIS data standards document	Delivered – Currently in Review & Acceptance stage with GIS development group
8.1 Application Priority Process – establish a multi-departmental steering group that decides on the priorities for application development	On Hold – Requires formation of a corporate Steering Committee to provide direction and make decisions related to applications priorities
7.1 Infrastructure Data Design – define proper data structure to hold spatial representation of Vaughan’s infrastructure	Delivered – Currently in Testing & Acceptance stage with Engineering Department
8.2 AMANDA Spatial Enable – make necessary modifications to the AMANDA database to enable AMANDA data to be used with GIS	90% Complete – requires technical information from Buildings Standards Department to complete integration with AMANDA, followed by Testing & Acceptance by Buildings Standards Department
8.3 Customer Service Spatial Enable – make modifications to the J.D. Edwards product to provide GIS functionality to CSMS	Delivered – Currently in Testing & Acceptance stage with GIS development group  Scope of this project was reduced due to budget constraints

Attachment B – Vaughan Enterprise GIS Projects

Vaughan Corporate GIS Projects



Database Loading Tools



Business Applications

