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2009 YORKINFO PARTNERSHIP

The Planning and Economic Development Committee recommends the adoption of the recommendation contained in the following report dated December 17, 2009, from the Commissioner of Planning and Development Services.

1. RECOMMENDATION

1. It is recommended that this report be circulated by Geomatics staff to the YorkInfo Partners for information.

2. PURPOSE

This report informs Committee and Regional Council about the activities and achievements of the YorkInfo Partnership for 2009.

3. BACKGROUND

The Geomatics Branch of York Region leads and coordinates the YorkInfo Partnership to work together to create and operate a geospatial information infrastructure among tax-funded, not-for-profit organizations that operate within York Region. Membership includes the nine local municipalities, the Lake Simcoe Region Conservation Authority (LSRCA), the Toronto and Region Conservation Authority (TRCA), the York Catholic District School Board, and the York Region District School Board.

4. ANALYSIS AND OPTIONS

The YorkInfo Partnership collaboratively develops and delivers an annual work plan that is guided by the *YorkInfo Partnership Charter (Attachment 1)*. The work plan results in the development of common standards and policies, the sharing of knowledge and skills, the creation and maintenance of quality geospatial information, the development and acquisition of tools, reduced duplication of efforts and costs, and supports the delivery of efficient programs for all member organizations.

This report outlines the activities and achievements of the Partnership's 2009 work plan, and also describes specific products and services delivered to Partners through Memoranda of Understanding.

YorkInfo Partnership coordinated through a governance framework

The Partnership is coordinated through a framework of member representatives participating on an Executive Board, Coordinating Committee and an Information Management and Technology Team. These committees convened a total of eight meetings and seminars in 2009. In addition, the Partnership's sixth Annual General Meeting was held on September 18 and focused on Innovation and Portal Technologies. The AGM was well attended by representatives from all Partnership committees and sub-committees.

Knowledge transfer and training provided to all Partners through Region's corporate GIS training program

Cost-effective flexible GIS training promotes expanded use of GIS

York Region Geomatics provides Partners with access to its corporate GIS training curriculum. Fifty-two participants from the partner agencies, including planning, engineering and GIS professionals, participated in nine introductory to advanced level courses.

The expanded use of geospatial information and technology throughout organizations results in improved business processes and more efficient use of resources. This up-to-date technology training is provided without the high cost associated with vendor-based education. The modularized curriculum allows flexibility of gradual skill development with choice and timing of topic-specific modules.

Spatial data creation and maintenance reduces duplication of effort and creates a common information base

Key geospatial information supports business activities

Geomatics maintains and distributes regular quarterly updates of over 80 administrative, infrastructure, environmental and societal geospatial databases to the Partners to support their business activities. Key information delivered includes:

- Road Network
- Parcel Fabric
- Address Points
- Draft Approved Plans and Pending Plans of Subdivision
- Forestry
- Water and Wastewater Facilities
- Lakes and Rivers

Critical infrastructure data and mapping supports emergency management

In support of emergency management activities, Geomatics coordinates with the Region's Emergency Management Branch, Regional Departments and municipal Community Emergency Management Coordinators (CEMCs) an annual review and update of infrastructure located within the Region that are critical to the Region's well-being, operations and continuity. The *Emergency Management and Civil Protection Act* requires maintenance of this vital emergency management tool. Updated critical infrastructure geospatial information is distributed to each local municipality and updated maps are provided to the CEMCs each January.

Joint initiatives enhance sharing opportunities and create efficiencies

AtlasPlus increases access to growth-related information

AtlasPlus is an advanced interactive suite of planning applications that supports planners in participating agencies with their sustainable growth activities. Automated processes simplify database population and maintenance. Technology upgrades improved performance and report formats were enhanced making them more consistent between the views. Training was provided to local administrators enabling in-house training of additional planning and engineering staff to enable scenarios building for current and future density calculations, impact of regulations and distribution of notifications.

Orthophotography for 2009 and beyond – all Partners participated

Orthophotography and digital elevation models (DEM) have become essential information in support of Regional and local municipal operations, programs and strategies. They provide rich geographic context for infrastructure, community and long range planning activities, emergency response, and communication with the public.

By partnering on the acquisition of this fundamental dataset, organizations were able to procure it at 50% less than if they had obtained it independently. The contract allows for acquiring 2011 and an option for 2013 imagery. The delivery of this high resolution imagery was completed this fall. Partners were able to leverage the Region's knowledge in loading this large database onto their internal infrastructure.

3D models effectively communicate current and future scenarios

The Partnership reduces the effort and costs of creating urban structure models through sharing 3D model techniques and approach. 3D models effectively visualize and communicate current and future scenarios of urban growth in Regional centres and corridors.

The Region worked with the Town of Richmond Hill on a successful pilot project to create a 3D model in support of their Official Plan. 3D models of existing buildings acquired through First Base Solutions Inc. were supplied to the Town as a base. The Region trained planning and GIS staff on how to create proposed buildings, fly throughs and videos. The model was primarily an analytical tool for Staff and consultants to understand appropriate characteristics for growth within Richmond Hill, and as a communication and consultation tool at public meetings.

This approach was expanded to include the Towns of Aurora and Newmarket giving them the skills necessary to create scenarios to support their growth initiatives. Similar pilot projects have been identified in discussions with the Town of Markham and the City of Vaughan. The goal is to have the Region maintain the existing building models, provide and manage the technology infrastructure and Partner organization to create future scenarios for inclusion into the shared database.

GIS coordination supports FireCAD public safety services

Richmond Hill Fire Department and Vaughan Fire and Rescue Service have entered into a joint venture with York Regional Police to share a Computer Aided Dispatch (CAD) system that supports fire and police emergency response vehicle dispatch services for eight of York Region's nine municipalities. The Region's geospatial information (single line road network, parcels) provides the location and contextual framework for the FireCAD system. The acquisition and integration of additional geospatial information (fire hydrant, storm water pond) from the participating municipalities is coordinated through the Partnership framework. Maps were created with updated fire zone and fire alarm areas data to ensure each fire service has access to current, corresponding information supporting the coordination of activities and communication.

Local municipalities supported in producing high quality Official Plan and zoning maps

Geomatics works with local municipalities to deliver high quality cartographic products in support of official plan mapping and zoning by-laws.

In 2009, Geomatics assisted the Township of King toward completion of the Schomberg Community Plan through customized training, creation of custom templates, symbology and standards and sharing of information management best practices. The Region provided similar support to the Town of Georgina on its Official Plan mapping. Wellhead protection area and aggregate information were provided to East Gwillimbury in support of their official plan mapping activities. The Region also assisted the Town of Richmond Hill with migrating their official plan data into a GIS platform. Extensive support was provided to the Town of Whitchurch-Stouffville related to its zoning by-law mapping.

Several local municipalities agreed to the use of their zoning information in support of the Region's Land Evaluation Agricultural Review as a part of its Greenbelt Conformity exercise.

Data sharing for project support results in cost savings and efficiencies

Data sharing is one of the primary goals and benefits of the Partnership. Creating and maintaining data by the appropriate source and sharing with other partner organizations significantly reduces duplication and costs. Some of the key projects that benefited from the exchange of data between organizations this year include:

Road, parcel and address information was made available to Turtle Island Recycling on behalf of Aurora, East Gwillimbury, Georgina, King, Newmarket and Whitchurch-Stouffville to assist in waste collection routing in an effort to make improvements and create efficiencies to the waste collection process.

In support of the Region's *Inflow and Infiltration Reduction Program – Flow Monitoring* project, the Partnership worked together to provide existing and proposed pipes, manholes, pump stations and chambers to the consultant.

In preparation for a walkability study to be undertaken by the Region in 2010, organizations that had sidewalk and walkway data provided it to the Region. In areas where this information does not exist, or is not complete, the Region contracted its creation and the data will be provided to Partners.

As the sharing of data for specific projects has become more regular, the Partnership has formed a task force mandated to making the data sharing process more efficient and effective through the establishment of principles and protocols.

Memoranda of Understanding signed by all Partners

Memoranda of Understanding that ensure that the purpose, goals, roles and responsibilities, protocols, terms and fees are clearly defined and intellectual property rights are protected have been finalized with all YorkInfo Partners.

5. FINANCIAL IMPLICATIONS

YorkInfo Partnership fees and information and resource sharing agreements contribute toward defraying the expenses related to data creation, information management, distribution, products and services that benefit all Partners. This approach reduces duplication and avoids cost expenditures among the tax-funded organizations of York Region. Reduced duplication and cost sharing benefits the Region, local municipalities, conservation authorities and school boards.

6. LOCAL MUNICIPAL IMPACT

All nine local municipalities are members of the YorkInfo Partnership. They and the Region have the responsibility to deliver services that fully employ the best use of technology for the best value to our residents. Through this cooperative approach, the Partnership maximizes benefits realized through the implementation and maintenance of an efficient information infrastructure that is essential to manage the challenges of rapidly growing urban areas alongside agricultural lands and environmentally sensitive sites.

7. CONCLUSION

The YorkInfo Partnership continues to collaborate in the sharing of geospatial information, applications and resources to enhance opportunities, create efficiencies, reduce duplications and maximize return on investment. Significant advancements in these areas were made this year through a collaborative approach to developing 3D models and visualization.

For further information about this report, please contact Debra Kelloway, Manager, Analytics and Applied Mapping, Geomatics Branch at (905) 830-4444 extension 1536 or Nancy Prout, Director, Geomatics Branch at ext. 1529.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)

YorkInfo Partnership Charter

York Region covers 1,776 sq. km., with a population of 1,028,159 in 2009 and comprises both rapidly growing urban centres alongside vast farmlands, and environmentally sensitive areas including the Oak Ridges Moraine, Lake Simcoe, the adjacent Holland Marsh, significant woodlands, headwaters and wetlands. With approximately 30,000 new residents each year, the pressures related to developing infrastructure such as sewers, roads, schools and transit to support the growth while conserving green space and water resources are overlaid with the pressures of rising expectations associated with more efficient service delivery and infrastructure.

The YorkInfo Partnership comprises key municipal and education organizations with the responsibility to deliver services that fully employ our best use of technology for the best value to our residents. Through cooperation the Partnership and its members can develop an efficient information infrastructure that is requisite to manage the challenges of rapidly growing urban areas alongside vast farmlands and environmentally sensitive sites.

The YorkInfo Partnership works together to create a geospatial information framework among the Partners that enhances sharing opportunities, creates efficiencies and common applications. By developing standards and facilitated by open policies and technology, duplication of effort will be reduced, costs avoided, access to information will increase and new business processes will be implemented among tax-funded organizations and their constituents enhancing service to the residents and businesses in York Region.

Vision

Our communities will be enriched through the provision of a coordinated geospatial information infrastructure.

Mission Statement

The Partnership will develop a Geospatial Information infrastructure enabling efficient integration and access to mapping technologies and information.

Principles

Strong partnerships evolve from mutual respect and complementary strengths, combined with collaborative planning and decision-making. Consequently, the YorkInfo Partnership is guided by the following principles:

We will

- Create and share data and knowledge in a coordinated and cooperative manner
- Enable access to spatial information for internal operations and the public
- Respect intellectual property
- Operate in a financially responsible manner through the efficient use of resources

- Adopt standards that enable interoperability
- Communicate and promote understanding of the Partnership's activities
- Foster awareness of geomatics

Goals

- Create a geospatial framework to facilitate sharing of accurate, current, relevant geographic information including:
 - governance framework
 - policies
 - standards
 - technology
 - information
 - knowledge and training
 - access
- Efficient creation and maintenance of spatial data
 - reduce duplication of effort and costs
 - jointly invest in the creation and maintenance of core geographic information such as:
 - Orthophotography
 - Parcel Fabric
 - Single Line Road Network
 - Address Points
- Create efficiencies and economies of scale related to the development and acquisition of tools, licences and training
- Create opportunities for joint initiatives
- Present a strong, unified voice in the geomatics sector at provincial and federal levels
- Provide coordinated GIS emergency management planning and support

Organizational Framework for the YorkInfo Partnership

The Partnership is co-ordinated through a framework of members participating in a Co-ordinating Committee, Executive Board and Information Management and Technology Team. Task forces and standing committees of appropriate representatives and duration may be established as required to meet objectives. Representatives may include GIS users, as well as management and professional staff who are GIS professionals.

Membership

Members participating in the Partnership are tax-funded, not-for-profit organizations that operate within York Region and include municipal governments, conservation authorities and school boards.

Current members of the YorkInfo Partnership are:

- Regional Municipality of York
- Town of Aurora

- Town of East Gwillimbury
- Town of Georgina
- Township of King
- Town of Markham
- Town of Newmarket
- Town of Richmond Hill
- City of Vaughan
- Town of Whitchurch-Stouffville
- Lake Simcoe Region Conservation Authority
- Toronto and Region Conservation Authority
- York Catholic District School Board
- York Region District School Board

Operating Practice

Communication is the key ingredient to ensure that the Partnership is successful in achieving its identified goals. Therefore

- Regular meetings of the Executive Board, Co-ordinating Committee and Information Management and Technology Team will be held.
- Annual objectives and work plan will be developed.
- Additional committees and task forces will be established and reviewed as required to meet the work plan.
- Communication channels for the YorkInfo Partnership will include, but are not limited to scheduled meetings, recorded meeting minutes, email and telephone correspondence. Materials will be distributed in a timely, pertinent manner to ensure that sufficient time is allowed for members to review.
- Meetings will be conducted in a manner which encourages open communication, meaningful participation and timely resolution of issues.
- Members will communicate their key initiatives and individual initiatives may be explored to encourage Partnership opportunities.
- Members will
 - respect and value other members' contribution. We will foster a culture that allows all members to express opinions freely and that is inclusive of the diversity existing throughout York Region encompassing both urban and rural issues for maintaining communities and managing growth.
 - make every reasonable effort to attend meetings and be reasonably available for consultation between meetings to ensure a continuous flow of communication is maintained
 - prepare for each meeting sufficiently in advance so as to enable him/her to be an informed participant and obtain the necessary information, approvals, and management support for the group's activities
 - be an active participant and illustrate professional behaviour and integrity when communicating with participants of the Partnership
 - advise their respective organizations of the activities of the groups and disseminate necessary details throughout their individual organizations

- o review the charter as needed.

Executive Board

The Executive Board is a sub-set of the Co-ordinating Committee and is currently comprised of a maximum of five members with representation from the Region, rural, large and small municipalities, and conservation authorities.

Chair: Director of Geomatics, York Region
Co-Chair: Partner Representative

It is the responsibility of the Board to provide a leadership role in the coordination of the YorkInfo Partnership activities including drafting agendas, reports and recommending priorities. Membership will be for a two-year term and, with the exception of the first year, with one third expiring their term of office, notwithstanding the Chair.

Meeting Schedule: Quarterly

Co-ordinating Committee

The Co-ordinating Committee is comprised of one representative from each Partnership organization.

Chair: Director of Geomatics, York Region
Co-Chair: Same Partner Representative as Executive Board

It is the responsibility of the Co-ordinating Committee to:

- Establish a working framework that includes:
 - o Vision
 - o Mission Statement
 - o Principles
 - o Goals
 - o Organizational Framework
- Establish guidelines, policies, standards
- Provide direction to sub-committees
- Identify opportunities and issues
- Develop and monitor the Partnership's annual work plan

Meeting Schedule: Quarterly

Information Management & Technology Team

The Information Management and Technology Team is comprised of one representative from each of the Partners' organization.

Chair: York Region

Co-Chair: Partner Representative

It is the responsibility of the Team to:

- Achieve consensus on the technical means of achieving the Partnership's goals
- Share knowledge about GIS data issues and data sources in York Region
- Communicate finding to the Co-ordinating Committee for coordinated action
- Recommend and develop standards

Meeting Schedule: Three meetings annually, with additional special topical sessions as necessary for work plan

Secretariat

York Region will provide the secretariat and co-ordinate activities including scheduling of meetings, facilities, and coordination and distribution of minutes.

Additional Standing Committees and Task Forces

Such committees along with membership and duration may be established as required to meet the objectives and annual work plan.

YorkInfo Partnership Organizational Framework

