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2010 YORKINFO PARTNERSHIP

The Planning and Economic Development Committee recommends the adoption of the recommendation contained in the following report dated January 24, 2011 from the Commissioner of Planning and Development Services.

1. RECOMMENDATION

It is recommended that:

1. 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 2010.

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 2010 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 eleven meetings and seminars in 2010. The Partnership looks toward continuous improvement by using task forces to develop common business applications, establish data standards and licence agreements and identify specifications for core geospatial information such as Orthophotography.

Each year the Partnership also holds an Annual General Meeting (AGM). This year's AGM was a workshop format and focused on revitalizing Partnership participation, identifying further opportunities for the Partnership to work together to enhance our effectiveness in addressing business requirements and to identify how the Partnership might best be leveraged to meet the challenges that our organizations will be facing over the next few years. The AGM was well attended by representatives from all Partnership committees and sub-committees, and management and technical staff.

The results from the workshop were analyzed and a draft action plan was prepared and presented to the Coordinating Committee for approval. Key actions include:

1. Change governance structure to hold both Coordinating Committee and Information Management and Technology meetings on the same day thus reducing duplication of information between two groups and reducing the time staff have to be out of the office.
2. Increase the use of topic-based meetings to educate non-GIS professionals on how the technology can benefit them in their business activities.
3. Expand the use of web mapping to provide information to the public through the development of mashups on Google Maps and the creation or sharing of Google-like interactive mapping applications.
4. Continue to build on 3D visualization as a design and communication tool.
5. Improve awareness of Partnership goals and benefits within Partner organizations through the development of a GIS and Partnership Awareness Kit that can be used to effectively communicate to internal management and staff.

The action plan was approved by the Committee and was integrated into the 2011 Partnership work plan.

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. Forty-eight 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.

“Mash-up” workshops give Partners the ability to make their information available through Google Maps

In June, a workshop was presented by York Region Geomatics and the Toronto and Region Conservation Authority to share knowledge, experience and materials that would enable all YorkInfo Partner agencies to develop and make their information available through Google Maps. Topics covered included: scenarios where use of a Google Maps “mash-up” is suitable; methods to create locations to “mash-up” on Google Maps; tips and tricks; and, a “how-to” on using the Google Maps “mash-up” code provided by York Region Geomatics. A demonstration showing the ease of embedding a “mash-up” of Regional services into a municipal website sparked further collaboration discussions.

The workshop was very well received by all. It was unanimously acknowledged that use of Google Maps will improve the usability of corporate websites. Going forward more knowledge-sharing workshops have been identified as a key benefit to realize for the partnership.

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 support Partner 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, create efficiencies and better service the public

Partner organizations collaborate on many activities large and small throughout the year. The following highlight just a few of the 2010 collaborations:

Regional Planning Atlas increases access to growth-related information

The Regional Planning Atlas 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.

3D models effectively communicate current and future scenarios

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

The Region trained planning and GIS staff from the Towns of Aurora, Newmarket and Markham on creating 3D buildings, scenarios, flythroughs and videos. 3D models of over 90,000 existing buildings, acquired through First Base Solutions Inc., were also supplied for the Towns to use as context for their planning needs. The model is used primarily as an analytical tool for staff and consultants to understand characteristics for growth and revitalization areas. 3D visualizations are often easier to understand than 2D maps and have been found to be an extremely effective communication and consultation tool at public meetings. 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.

Early in 2011, the Region will be working with interested Partners in implementing yrGeo3D, a web-based application which provide users with the ability to navigate through various 3D scenarios.

Collaborative effort produced City of Vaughan Election Map Book in three days

Geomatics provided software resources and technical support to assist the City of Vaughan in the creation of a 500 page election polling map series. These maps were distributed in hardcopy to candidates and were made available to the public at the Clerks' counter for residents to more easily determine if they were on the Voters' List.

Data sharing for operational and 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. A few of the key projects that benefited from the exchange of data between organizations this year include:

- Local Official Plan Conformity and Secondary Plan mapping support
- Use of 2009 orthophotography for Newmarket Hydro
- Storm water data for Source Water Protection
- Catch basins for West Nile virus larviciding program

Markham/York Roads data sharing pilot will assess feasibility of maintaining one set of core geographic databases to meet the needs of both organizations

The Town of Markham and the Region initiated a joint pilot project to evaluate the feasibility and determine the technical process of integrating road data maintained by the Town of Markham into the York Region road database. This would reduce or eliminate the duplication of effort of maintaining two separate databases that cover the same geographic area and enhance the overall quality of the information. If the pilot is successful, the Town and the Region will investigate establishing a similar process for parcel and address points information thereby creating further efficiencies and reduced costs. A common geography could be used for both organizations' web mapping base which would deliver a more unified user experience for the public.

A maturing Partnership requires a review of its goals

As the Partnership has matured beyond the goals established in its original Charter, it is time to review and revise the Charter's goals to reflect the Partnership's evolution beyond a focus on datasharing to the development and sharing of business applications.

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 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.

For more information on this report, please contact Debra Kelloway, Manager, Analytics and Applied Mapping, Geomatics Branch at (905) 830-4444 ext. 1536 or Karen Close, Acting Director, Geomatics Branch at ext. 1529.

The Senior Management Group has reviewed this report.

YorkInfo Partnership Charter

York Region covers 1,776 sq. km., with a population of 1,053,455 in 2010 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:
 - o governance framework
 - o policies
 - o standards
 - o technology
 - o information
 - o knowledge and training
 - o access
- Efficient creation and maintenance of spatial data
 - o reduce duplication of effort and costs
 - o 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
 - o 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.

- o make every reasonable effort to attend meetings and be reasonably available for consultation between meetings to ensure a continuous flow of communication is maintained
- o 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
- o be an active participant and illustrate professional behaviour and integrity when communicating with participants of the Partnership
- o 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

