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NEW APPROACH TO GIS TRAINING

The Planning and Economic Development Committee recommends the adoption of the recommendation contained in the following report July 21, 2006, from the Commissioner of Planning and Development Services:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report describes the new modularized approach to GIS training offered to Regional Staff, York Regional Police and YorkInfo Partners by the Geomatics Branch. It also highlights the important features and benefits of the modularized training program.

3. BACKGROUND

With the integration of geospatial information and maps into the Region's business operations, it is essential that staff are trained in the use of GIS and its tools, from accessing interactive maps on the web to power users utilizing GIS software. Since 2000, Geomatics has coordinated the development and delivery of a comprehensive two-day training course that included lectures and practical exercises on GIS and mapping. The course was sufficient for new users to start utilizing desktop GIS technology, but the training can be intensive and sometimes overwhelming for some.

Geomatics staff who provide technology support for the expanding GIS user community in the corporation indicated the need for a phased approach that would give staff the opportunity to learn the basics of GIS and build advanced skills. The evolution of the Geomatics Self Service Environment, which consists of corporately accessible published maps, map templates, and geospatial information, combined with technology advancements, further supported the need to evolve the GIS training program for the corporation.

3.1 New Approach

In January 2006 Geomatics developed and introduced a new modularised and phased approach to providing GIS training. The expanded curriculum includes a one-day introductory course and several short topic-specific sessions, which help users to develop more advanced knowledge and skills on areas of specific interest in half-day modules.

4. ANALYSIS AND OPTIONS

Corporate staff, York Regional Police, and YorkInfo Partners are using GIS technology with increasing efficiency for various purposes such as planning and analysis to support decision making and enhanced services. Through the new modularized training program, the Geomatics Branch introduces staff to new technology and develops the skills of existing users to more advanced levels. This allows the Region and participating partners to take advantage of existing geospatial information, and to make their business processes more effective.

4.1 Modularized Approach

The modularized approach divides knowledge and practical skills in GIS technology into topic-specific modules. Modules are combined into courses which can be single or multi-modular, general, or targeted to particular client needs.

This approach provides significant benefits:

- Modules were developed based on identified user needs from feedback and previous course evaluations.
- Modules can be easily customized to target clients' specific needs.
- Modularized structure enables a phased approach to GIS training which builds on staff's existing knowledge and develops new skills required to enhance their performance.
- Modules are focused and mindful of staff time commitment.
- Modules are developed by various Geomatics Branch staff members based on their area of expertise.
- Once developed, modules are easily re-combined into new courses, avoiding duplication of effort on course development.

4.1.1 Course Delivery in 2006

Nine new courses at general/conceptual, introductory and advanced skill levels are scheduled for delivery in 2006:

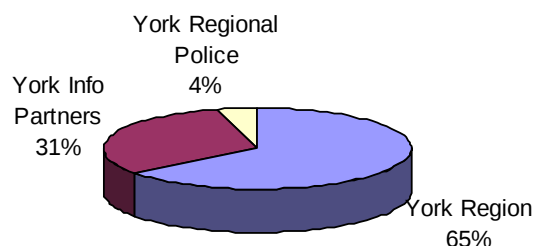
GIS Training Courses in 2006

Course Name	Level	No. Sessions/yr
What on Earth is GIS	Conceptual	2
GIS On Line	Introductory	2
Intro to ArcGIS. Level 1	Introductory	4
Labelling and Annotation in ArcMap	Advanced	2
Geocoding in ArcMap	Advanced	2
Tabular Operations in ArcMap	Advanced	2
Advanced Mapping in ArcMap	Advanced	2
Creation and editing of spatial data	Advanced	2
Metadata	Advanced	2

4.1.2 Participation and Satisfaction Rate

Since January 2006, 71 participants from York Region, York Regional Police and YorkInfo Partner organizations have taken advantage of the GIS training provided by the Geomatics Branch. A total of 311 training hours have been delivered. Participation is distributed between these three categories as follows:

GIS Training Participation in 2006



The Geomatics Branch is constantly seeking ways to enhance module content and delivery. All training participants are asked to evaluate the courses they have taken and to provide their feedback and suggestions for course improvement. Evaluation response shows a high rate of client satisfaction with the expanded modularized training curriculum and the way the courses are delivered.

More than 90% of respondents expressed “Strong Agreement” or “Agreement” with statements of satisfaction regarding the level at which the material was delivered, the instructors’ knowledge of subject, and facilitation skills. More than 96% of respondents indicated that they would recommend these courses to others and would also take another GIS course delivered by the Geomatics Branch.

5. FINANCIAL IMPLICATIONS

The re-designed training program provides cost-saving financial benefits to York Region, York Region Police, and the YorkInfo Partnership by:

- Providing up-to-date technology training without the high cost associated with vendor-based education.
- Creating efficiencies in future course customization and development with modularized approach.
- Allowing flexibility of gradual skill development with choice and timing of topic-specific modules.
- Enabling staff to split their time according to training needs rather than commit 2 consecutive days.

6. LOCAL MUNICIPAL IMPACT

The Geomatics Branch welcomes and encourages participation of YorkInfo Partner organizations in the Region's GIS training. Since the beginning of 2006, 16 course participants from local area municipalities have taken advantage of the program. Benefits realized by participating organizations include the effective utilization of existing geospatial information and an opportunity to contribute to shared geospatial information for more efficient use of resources. Courses are offered to YorkInfo Partners at no additional charge, representing cost savings per student ranging from \$150 - \$2500 for a vendor specific course.

7. CONCLUSION

In response to the expanding GIS user community and integration of GIS technology into business processes and delivery of services to the public, the Geomatics Branch developed and implemented a new cost-effective and efficient modularized training program. Combined with the evolution of geospatial information, internet mapping tools and creation of the Self Service Environment, the training program provides participants with the knowledge and tools that enable informed decision making, while developing their knowledge and practical GIS skills in areas of interest and to the level they require.

The Senior Management Group has reviewed this report.