**REPORT on Congress 2014:**
**Special panel on a Proposal for a Canadian Historical Geographic Information Network**

This session was well attended with members of the CCA, the CAG and the Canadian Historical Association being represented. The meeting commenced with a short introduction from former ACMLA president and leader of the Canadian Geomatics Community Round Table initiative, **James Boxall**, in which he spoke about how Canada was moving towards interoperability and collaboration in using GIS data, on a multitude of fronts. In this context, a network for Historical GIS can be seen as part of a wider evolution of spatial data infrastructure throughout the country.



*Continued next page…*

Geographer **Don Lafreniere**, from the Human Environments Analysis Laboratory at Western (and now at Michigan Technical University) made his presentation entitled "Towards a Canadian Historical Spatial Data Infrastructure." He discussed in some detail his experiences with urban historical GIS-based projects, especially in London, ON and Victoria BC. Don concluded with the questions of how to proceed towards a Canadian historical Spatial Data infrastructure, including some of the questions about data and funding that we had agreed to begin to explore.

## Challenges
### *Representing Past Environments*

- Need to place historical problems, patterns, populations in their temporally-specific, representative environments

  - Google/ESRI Basemaps inadequate

- Very little historical spatial data ready for use

- Canadian HSDI needs to be 'raw', not curated for a specific research project

- 'Environment' is complex, difficult to recreate.

Don concluded with the questions of how to proceed towards a Canadian historical Spatial Data infrastructure, including some of the questions about data and funding that we had agreed to begin to explore.
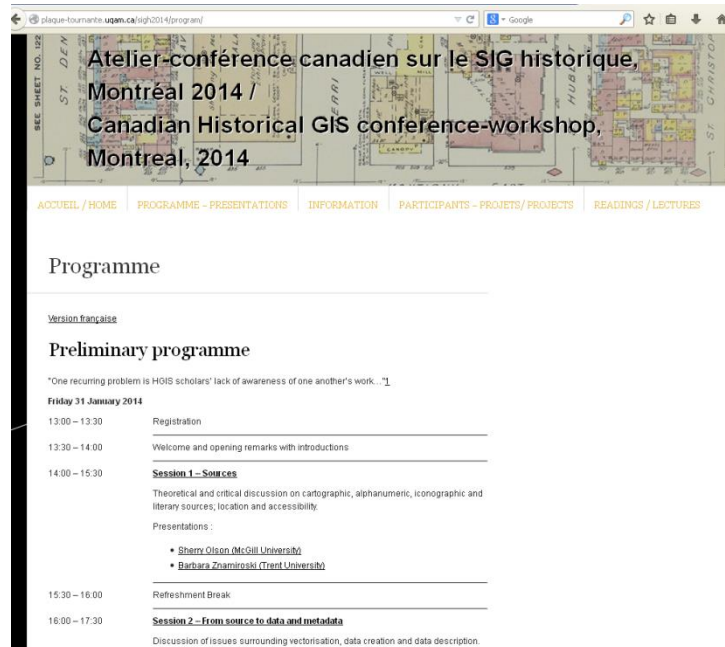
## Final Considerations and What is next?

- Towards a Canadian Historical Spatial Data Infrastructure
  - National Reference File for 1881 a start…

  - Metadata standards for historical data (need data librarians involved!)

  - Standards for sampling, analytical capability of datasets, historical interpolation

  - Major questions- Immigrant experience, industrialization, migration, westward expansion

  - Go it alone or partner with NHGIS in US?
    - Big Data Initiative, others?

Where's the Pot of Gold?

*Continued next page….*

Next on the agenda was historian **Léon Robichaud**. Léon first reported on the meetings which took place last February in Montreal as part of the Atelier-conférence canadien sur le SIG historique / Canadian Historical GIS conference-workshop. The website for this conference is accessible at http://plaque-tournante.uqam.ca/sigh2014 .



Following a brief run-through of the speakers and some of the issues brought up at that conference, Léon discussed work that he and his colleagues at the University of Sherbrooke have been doing related to building pilot-project versions of tools and resources specifically aimed at serving Historical GIS needs in Canada. They have been exploring alternatives for database construction and structuring, metadata standards, and a variety of ways of discovering and reviewing software tools and datasets useful for practitioners of historical GIS. The work of Léon and his team can be seen as establishing the context and laying the groundwork for further development of a proposal for Canadian Historical GIS network.

Finally, **Byron Moldofsky** presented a brief version of the exploration of the HGIS network idea first presented with Marcel Fortin, last year at the CCA/ACMLA meeting. The complete presentation may be accessed at: http://www.hgis-sigh.ca/Carto2013_presentation.html. The major addition to this was a table based on the chapters of the recent book publication *Historical GIS Research in Canada*, launched just the previous day at Congress 2014. The table summarizes the data used in each project/chapter described in this book, and attempts to show how each might make a valuable contribution to a data collection of Historical GIS resources for Canada. We hope that these contributions might form the beginnings of such a data resource.

| Historical GIS Research in Canada - University of Calgary Press | | | | | | |
|---|---|---|---|---|---|---|
| Chapter/area/subject | Period | Scale | Data sources | Techniques | Hist. Anal. | Potential contribution to CHGIS Network |
| 1. Victoria BC development | 1861-1911 | City | Historical maps<br>Historical texts<br>Municipal records<br>Census records | Mapping by race<br>Mapping by ownership<br>Text-based analysis | | Census boundaries<br>Historical street layers<br>Georeferenced maps |
| 2a. St. Lawrence Seaway dev't | 1954-1959 | Region | Historical maps<br>Historical texts<br>Historical air photos<br>GPS Fieldwork | Overlay on Google Earth<br>Geo-exploration (ground-truthing) | | Georeferenced maps<br>Georeferenced air photos |
| 2b. Welland Canal dev't | 1829-1973 | Region | Historical maps<br>Historical texts<br>Historical air photos<br>GPS Fieldwork | Overlay on Google Earth<br>Geo-exploration (ground-truthing) | | Georeferenced maps<br>Georeferenced air photos |
| 3. Don Valley history | 1858-1950 | City/area | Historical maps<br>Historical texts<br>Historical air photos | Mapping industrial sites<br>Mapping hydro changes | | Historical site layers<br>Historical hydro layers |
| 4. Knox Church-shed, Toronto | 1882-1887 | City/neigh. | Historical maps<br>Congregation Rolls | Mapping congregants/moves<br>Mapping by occupation | | Historical street layers |
| 5. South-Central Ontario "atlas" | 1850-1985 | Region | Historical maps (inc. Topo.)<br>Historical texts (eg. Mills)<br>Historical air photos | Mapping mill sites<br>Mapping land use changes | | Georeferenced maps<br>Georeferenced air photos<br>Historical site layers |
| 6. Ottawa's Urban Forest | 1928-2005 | City | Historical air photos<br>Historical texts | Measure forest canopy<br>Correlate to textual history | | Georeferenced air photos<br>Historical canopy layers |
| 7. Kahnawake First Nation | 1880-1900 | Reserve | Historical survey maps<br>Historical landuse maps<br>Tribunal records | Mapping of records<br>Comparison of sources | | Georeferenced maps<br>Historical layers<br>Critical analysis of indigenous and conventional sources |

At this point the floor was opened for general comments and discussion. A lively discussion followed.

Although quotes from individual members of the audience will not be attributed for privacy reasons, some overall impressions can be conveyed. Primarily, there was general agreement, a "motherhood issue", that interoperability, open access and sharing of historical GIS data in Canada would be an excellent result if it could be achieved, with benefits for all members of the research community, and the public. However, there were different ideas about what constituted these data, and whether the issues of scale and resolution of different types of data could be accommodated within one database structure. The idea of such a project providing a data depository for archival purposes was generally accepted, but the question of who would host such an operation (and especially, who would pay for its maintenance) was somewhat imponderable. It was generally agreed that any such project should fit within the current structure of standards developed by the Canadian Geospatial Data Infrastructure (CGDI), and that in many ways Historical SDI could be characterized as just another "special interest" group within the larger picture of SDI evolution in Canada – such as the federal/international Arctic Spatial Data Infrastructure project being developed – and that coordination with other

geospatial community efforts (such as the Canadian Geomatics Community Round Table initiative) would be a useful way to proceed.

Most attendees were enthusiastic about the prospects for a Canadian Historical GIS Network initiative to proceed, and several had suggestions of data sets they would be willing to contribute, or whose contribution they thought should be pursued. Given this reaction, we are encouraged and determined to follow up the initiative with further meetings and other community-building efforts as much as possible (including the upcoming CGC Round Table and ACMLA meetings,) and to come up with a proposed course of action (and a formal proposal for collaboration and funding) in the near future. Stay tuned!