URISA BRITISH COLUMBIA CHAPTER

PRESENTATION ABSTRACTS – December 6th, 2016

Single vs. Multi-Purpose Apps: Where, When, and Why?

Presented by Brian Pont, Safe Software Inc.

GIS applications can serve two purposes: making data publicly available, and converting raw data into intelligent information to meet a specific need. In this presentation, we explore where and when each are appropriate, and how their design can be planned, and even combined, to save GIS department's time and effort.

Attendees will examine how a regional transportation authority leverages its public datastore to provide individual APIs, and look at a nation-wide cloud-based project to deliver public data as practical information. The presentation will also delve one step further into the concept of non-apps that use event driven processing to deliver location information to subscribers without a front-end map at all.

Custom Web Map Applications – A New Approach for Coquitlam

Presented by Mike Esovoloff, City of Coquitlam

Over the last year 18 months, GIS and IT staff have been transforming the web mapping environment at the City of Coquitlam. Transitioning away from the one-map-fits-all approach, the City of Coquitlam has developed numerous web map applications using Esri technology including Web AppBuilder, Portal for ArcGIS, Collector for ArcGIS and ArcGIS Online to improve and enhance a variety of business and operational processes. This mAppification has widely been regarded as a success within the organization and has resulted in both excitement and support to further expand the development of GIS spatial solutions and web map applications moving forward.

This presentation will examine the reasoning and methodology behind the transition to focused GIS apps, demonstrate the applications currently in use by Coquitlam staff, and discuss future plans for expanded use of ArcGIS Online and Portal technologies focusing on:

- Easier and more efficient access to wider variety of information and data
- Field usage (mobile GIS) including communication of information from field staff back to GIS staff
- Improved spatial tools and queries
- Elimination and/or reduction of paper-based map products with near real-time access to data
- Context-specific maps to assist various public works crews with the exact information that they need
- Presentation of utility data in multiple layers and formats depending on end user needs (i.e. customized presentation for project planning, asset management or field operational purposes)

- Combined multiple data sources and business applications into spatially-driven web applications
- Simple interfaces/simple to use
- Users can access data, videos and reports via a web application that were once limited to only those with the desktop tools and software
- Cloud-based web maps provided to contractors for data editing and updates
- Live, interactive data editing tools for various department staff for project planning, management and customer service needs (ability for non-GIS staff to edit and manage their own data being presented in maps to others in the organization).

Driving Change: Mobile Implementation and the rise of Geo-apps

Presented by Kristy Brown, City of Prince George and Karen Stewart, ESRI Canada

This presentation is a brief introduction to the City of Prince George's Cityworks implementation and how, after only one year, the City is using the program, collected data, service levels and custom reporting to drive change. This change is highlighted through case studies of the City's modernized utility locate process and the pilot implementation of a new mobile service request solution, which are lite versions of the solution based on mobile App technology. As well, this presentation will discuss the City's move to paperless asset inspections, and how they have implemented Apps for work orders and inspections that are in use by some of their Public Works employees. These Apps run on tablets and smartphones, enabling real-time data updates into the CMMS. All these projects will lead to greater public works efficiency and better customer service.

PlanIt: City of Vancouver's Street Use and Construction Coordination Toolset

Presented by Lindsay Kelly and John Galambos, City of Vancouver

The City of Vancouver Engineering and GIS team have been developing a custom built street use and construction coordination application over the past 3 years improve the visibility of street construction and activities to city staff and the public. Within this single purpose geospatial tool, users can enter construction project related information for the long term coordination of work and in the shorter term, view planned events or permits to avoid conflicts on the street. The application supports both a flexible map view and the ability to print information in a summary report for executive review.
Key Features of the presentation:

- Project development methodology: Agile with a small nimble team of subject matter experts
- Developed focusing on fast web mapping experience (JavaScript, OpenLayers 3, and ElasticSearch)
- Integration with key ERP systems (Hansen, POSSE)
- Developed to support the Open 511 API
- Advanced Project geospatial conflict detection rules
- Application and data visualization pillars

Why your map sucks and you don't even know it

Presented by Will Cadell, Sparkgeo

Geospatial has become an insanely big business. Web maps are a key piece of that puzzle. In many ways the web map or map platform is the tip of the geospatial spear. It is where you are able to distribute or deliver a key piece of your business value. Indeed we often talk about maps helping to "turn the business dial". That delivery however can be done well, poorly or somewhere in-between, traditionally it has been hard to determine where on this spectrum your geospatial app sits. However, now that we are increasingly using the web to deliver that value, we can actually determine how people interact with our apps, by using analytics. Let's start asking some serious questions of our maps and apps: If we really want to "turn the business dial" shouldn't we actually know what numbers are actually on that dial? What if we started asking our maps to convert? What if data could help us build better maps, like data helps the web community? We will be walking the audience through some ways to use analytics to determine activity and engagement in web mapping applications.

CrowTrax – A Crow Attack Mapper

Presented by Jim O'Leary, Langara College

The CrowTrax web site at http://giscourses.net/crowtrax/crowtrax.html went live in April, 2016. The original purpose of the web site was to publicize the new Geographic Information Systems program at Langara College Continuing Studies. However, the response was unexpected. Soon the web site had over 1,000 reports of crow attacks and major media outlets were calling the College for interviews with the authors of the site. Seems everyone has a crow story!
This presentation describes the architecture of the CrowTrax web site and discusses the responses that the authors had to the web site. The presentation concludes with thoughts about using web maps of this nature to generate public interest in geospatial subjects.

BikeMaps.org: Volunteered geographic information for cycling safety

Presented by Colin Ferster, University of Victoria

Cities increasingly promote active transportation modes, such as cycling, as healthy and economical transportation choices. However, traditional approaches to collecting cycling safety data have limitations. For example, bike crashes are under-reported, especially minor crashes and crashes that do not involve motor vehicles. There is no formal mechanism for reporting near misses, which may deter ridership for potential cyclists and function as a precautionary signal for city planners. In response to this need for information, BikeMaps.org was launched to collect and share volunteered geographic information about cycling collisions, near misses, hazards and thefts. People can make reports, view reported incidents, get updates, and view visualizations of the data using a web map or smartphone application. Nearly 4000 incidents have been reported globally. Most of the incidents have been reported in areas where BikeMaps.org was actively promoted using earned traditional media, social media, attendance at cycling events, and guerilla marketing. There have been greater rates of use in cities with higher cycling mode shares. The majority of incidents are reported by cyclists commuting to work. Based on the submitted incidents, the BikeMaps.org team perform spatial analyses to generate map products that are important for ongoing engagement of volunteers and can be used by city planners for monitoring and planning cycling facilities.

The next 10 years of Civic Tech

Presented by Luke Closs, ReCollect

The single GIS web mapping application is already dead. But even though it's dead, it's not going anywhere.
In this talk, we'll talk about the broader technology trends that have killed the single GIS app - the rise of mobile apps, the plummeting cost of the cloud, Software as a Service, and APIs. We will follow these trends to finish with five 10-year predictions for civic tech, and look at how they will impact GIS professionals.