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Information Item No. 3
Transportation Standing Committee
March 26, 2015

TO: Chair and Members of Transportation Standing Committee
Original Signed

SUBMITTED BY: _____
Greg Keefe, Director Finance & Information, Communications & Technology

DATE: February 17, 2015

SUBJECT: Wheelmap.org- Apps to increase Accessibility Awareness in Halifax

INFORMATION REPORT

ORIGIN

Motion of the Transportation Standing Committee on December 3, 2014 to request a staff report on the possibility of the municipality utilizing wheelmap.org or a similar online resource to increase accessibility in Halifax.

LEGISLATIVE AUTHORITY

Section 15 of Administrative Order 2014-006-ADM: *"Council hereby delegates to the CAO the authority to add datasets to the Open Data Catalogue upon recommendation from staff."*

BACKGROUND

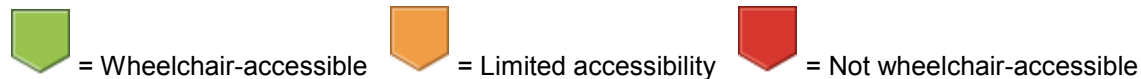
A presentation was made by staff to the Transportation Standing Committee (TSC) on December 3, 2015 regarding options to increase awareness of accessibility issues in the municipality. The Committee was introduced to capabilities of a web application known as "Wheelmap" as a possible tool to support this objective. The TSC requested a report on the possibility of using this app or similar resources to increase accessibility awareness in Halifax.

DISCUSSION

Wheelmap is an app that can be used through a web browser or is downloadable for iPhone and Android mobile devices. The app functions as a crowd sourced map that displays information related to wheelchair-accessible public spaces. The base map service over which the crowd sourced information is overlaid is a global open-sourced mapping product called OpenStreetMap.

Wheelmap was launched in September of 2010 by a non-profit organization called SOZIALHELDEN that is based out of Berlin, Germany. This organization was founded in 2004 by two cousins Raul Krauthausen and January Mörsch. Aside from Wheelmap, SOZIALHELDEN is involved in a number of other projects to try to raise awareness and sensitize people to common social problems and to promote a change in social thinking.

From a functionality point of view, Wheelmap's main goal is to increase the awareness of wheelchair-accessible public spaces by allowing users to tag places of interest on a base map using one of three pre-defined tags;



Users are also encouraged to upload photographs and/or enter comments regarding the place of interest they tag, although this is not a requirement. A person does not need to be logged in to tag existing places, however a registered account with OpenStreetMap and with Wheelmap is required in order to upload photos, add comments, or add new places of interest.

Other Similar Online Resources

While there are many similar apps in the market space which identify accessible places for people with disabilities, many are currently limited in the cities that are well represented. Most however are capable of providing coverage to any city in the world as they almost all leverage a map service like Google or OpenStreetMap that have global coverage. Here are a few examples;

- Able Road - <http://www.ableroad.com/>
- Access Together - <http://www.accesstogether.org/>
- AXS Map - <http://www.axsmap.com/>
- Planat - <http://www.planat.com/>
- Jaccede - <http://www.jaccede.com/en/>

The one thing all of these apps have in common is that they are only as good as the data entered into them. All of these apps rely on crowdsourcing; the process of obtaining needed content by soliciting contributions from a large group of people, typically an online community. This crowd sourced content is then overlaid on a base map to provide location based context.

One of the inherent risks of crowdsourcing is there is no validation of the data. Just as in the case of Wikipedia, what is entered is really only moderated by fellow contributors and this can lead to erroneous information. Furthermore, from the apps reviewed for this report, there are not any guards against entries being overwritten or modified, thus no guarantee that an entry won't be changed by someone else.

Another online resource that should be mentioned is the upcoming app Mapability being created by Halifax entrepreneur Jamie Newman. Mapability is similar to those apps mentioned above in that it uses an open source base map (OpenStreetMap) to help identify places of interest. However, Mapability tries to set itself apart by focusing more on travel routing and even goes as far as providing path finding within certain buildings.

Mapability also tries to distinguish itself by not limiting its audience to persons with disabilities. If you would like to take a scenic route, or simply avoid heavy traffic roads, Mapability purportedly will give you walking routes around your preferences. Unfortunately at this time there is no way to review this app as it has not yet been released. For more information visit the official web site at <http://www.mapability.ca/>.

With so many options available in the accessibility app market space, it is staff's opinion there is no direct benefit in aligning with just one specific offering. In the world of web development and app creation there are many external factors that make identifying the long term viability of any one product almost impossible. Mobile devices and platforms are evolving at an ever increasing rate, and there are no guarantees that app developers will continue to support all potential combinations.

Currently, the municipality does not have a policy on mobile app development or support of externally generated apps. The experience with other municipal jurisdictions varies across the country. Staff will be researching and developing a proposed policy in 15/16. Until a policy is developed, there is no basis to adopt any of the aforementioned apps in the quest to increase awareness about accessibility. Legal Services and Corporate Communications however, have suggested there is nothing preventing the municipality from publicizing the existence of Wheelmap on the Halifax website. Staff therefore will add [wheelmap.org/en/](http://www.wheelmap.org/en/) to the list of "Other Useful Links" on the Accessibility page of the municipal website (<http://www.halifax.ca/accessibility/>) and add a disclaimer that the municipality does not endorse the third party site and is not responsible for its content. Under this scenario, Wheelmap is free to make whatever changes it wants to its application and Halifax is free to remove the link to the app from the website at any time.

Open Data

An immediate and perhaps more impactful action to support the desire of the municipality to increase accessibility awareness would be to work within the parameters of the recently adopted Open Data Administrative Order 2014-006-ADM and focus on the release of "accessibility related data" owned by the municipality.

All of the aforementioned applications are dependent upon data being feed to them in order to be useful. It is worth noting that Halifax's Open Data service has already enabled Halifax to enhance Wheelmap and all other apps (like Mapability) that utilize map services like OpenStreetMap. Due to the transparency of releasing some of our corporate "authoritative" data through Open Data, the mapping technicians at OpenStreetMap have already contacted our staff and are now using our municipal civic addressing data (including the street network) to keep their product up to date.

In addition to this, there is also an opportunity to open up more authoritative data in the near future thanks to efforts underway in numerous corporate data-related initiatives. A good example of this is the work underway to build a high quality data repository of all of the municipality's infrastructure assets under the Enterprise Asset Management (EAM) Program. The end result of this initiative will be the ability to release high quality data on such things as building accessibility, bus stop accessibility, curb cuts and walkways, all of which could add value to accessibility awareness.

In the interim, staff recommend working with the HR Diversity Coordinator, Laughie Rutt, to identify possible existing datasets containing accessible related data and to prioritize those in terms of their release through Open Data. It has been suggested such datasets may include:

- Access-A-Bus pick up locations
- Accessible parking spots
- Public facilities for meetings (non-HRM locations used for community meetings that are accessible)
- Elections polling locations

- Accessible bus spots
- Accessible playgrounds - Westmount is an example
- Trails - accessible or has steps

Currently, there are three datasets available on the halifax.ca/accessibility page in the form of PDFs that could be converted to an open format and released through Open Data. The datasets relate to accessible pedestrian signals, accessible trails, and accessible transportation services. It is staff's intention to review these data sets, prepare them for release, and recommend to the CAO they be added to the Open Data Catalogue in accordance with Section 15 of Administrative Order 2014-006-ADM. Other datasets can then be prioritized and recommended for release once due diligence reviews have been conducted.

In summary, it is staff's opinion that focusing effort on the discovery and release of "accessibility related" data sets through Open Data is the most expedient means to accomplish the promotion and education objectives discussed by the Transportation Standing Committee. As well, this approach has the benefit of aiding all app developers in this space as opposed to requiring the municipality to align itself with a particular accessibility app offering.

FINANCIAL IMPLICATIONS

There are no financial implications to the recommendations.

COMMUNITY ENGAGEMENT

The discussion and views of the community based Accessibility sub-committee of TSC were considered in the preparation of this report. No additional specific community engagement was undertaken.

ATTACHMENTS

N/A

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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