

APHEO GIS Interest Group Membership Survey – 2019

Introduction & Purpose:

In late 2019 a survey was sent out to the APHEO *GIS Interest Group* membership to determine the following (see Appendix for full survey):

1. Whether you feel there is value in continuing the *GIS Interest Group* (Yes, No).
2. If yes, to get an idea of your commitment to attaining the tasks summarized in the introduction section of the Appendix.
3. If yes, to get an idea of your capacity to provide online training to group membership.
4. If no, to determine what options would be best for GIS within APHEO (e.g. website resource).

Below are the findings of the survey for your consideration.

Please be advised that all APHEO working group activity was paused in early 2020 due to the focus of membership on COVID-19 related activities. It is hoped that there will be further guidance coming from APHEO as to when working group activities can recommence in short order.

Key Findings:

- Response rate: 18 of 40 members responded to the survey (45%). However, 22 group members have never attended a meeting according to attendance records dating back to 2018 and may have not responded to the survey. This may indicate that there was a higher overall real response rate among active members.
- All survey respondents (n = 18) want to continue membership in the *GIS Interest Group*.
- Almost 40% of respondents indicated that they have little to no GIS experience.
- About 83% of respondents indicated that they wanted to continue meeting and also have a website GIS resource presence on the APHEO website.
- About 84% of respondents indicated that they wanted a quarterly meeting schedule.
- About 77% of respondents indicated that they would volunteer to provide training or presentations on their GIS-related work to the group membership.
- Main commentary themes included:
 - Having time to attend meetings was the barrier.
 - Desire to have focussed meetings that add value through group learning.

Results & Discussion by Survey Question:

The following analysis of the survey data is presented in the same order as the survey questionnaire. Percentages are rounded up or down to the nearest whole number.

Discussion topics are my own and are in no way complete or concrete. I look forward to your feedback and ideas/suggestions around the results of each of the survey questions. We will have this discussion at our next *GIS Interest Group* meeting. However, please feel free to contact me at any time between now and then.

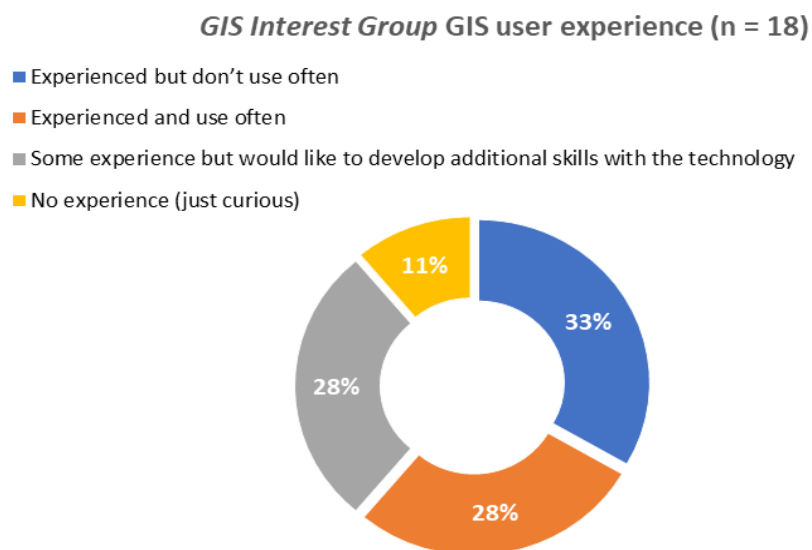
1. Are you willing to continue as a member of the *GIS Interest Group*?

Eighteen out of 40 group members responded to the survey (45%). Of those, 100% indicated that they wanted to continue as members of the *GIS Interest Group*. In terms of non-response, it is difficult to fully attribute whether survey respondents were active members or not. However, of the 12 respondents who voluntarily identified themselves at the end of the survey, 75% of them were active members. From this, it could be inferred that the majority of respondents who indicated they wanted to continue active membership in the *GIS Interest Group* were active members based on past meeting attendance.

2. GIS Experience?

About 61% of respondents indicated that they were experienced GIS users (Figure 1). Twenty-eight percent of respondents indicated that they did not have a lot of GIS user experience and want to develop more GIS-related skills. This is a real opportunity for the *GIS Interest Group* to be an educational, skills development and knowledge transfer resource for group membership and APHEO overall. This was indicated in the summer 2019 survey that Sean Marshall had compiled as well. Skill development could be achieved during meetings, with website resources and having experienced users commit to being available through the APHEO list-serve to help less experienced GIS users work through GIS-related challenges.

Figure 1:



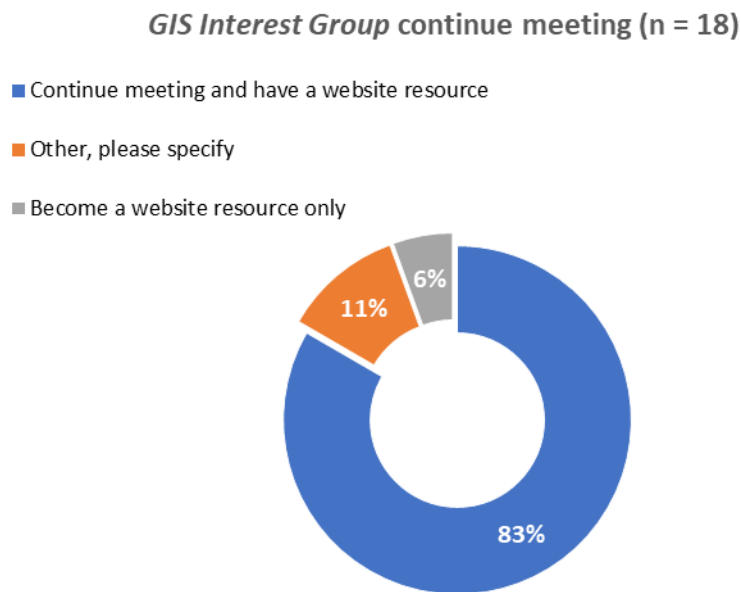
Source: APHEO *GIS Interest Group* Membership Survey 2019

3. Do you feel that the *GIS Interest Group* should continue meeting on a regular basis or would it be best to devolved into a resource section on the APHEO website for example?

About 83% of survey respondents indicated that they wanted to have the *GIS Interest Group* continue to meet and be a website resource (Figure 2). Two comments associated with this question indicated that if the group did not continue to meet then the website should remain, be updated and be maintained as is done with other APHEO working groups.

Given the responses to this question, it is clear that the *GIS Interest Group* will continue to meet. As well, it is clear that the website resources will need to be updated and maintained. I believe that the website can be developed into an excellent source of GIS-related educational material, how-to information, and a valuable repository for spatially-related epidemiological knowledge.

Figure 2:



Source: APHEO *GIS Interest Group* Membership Survey 2019

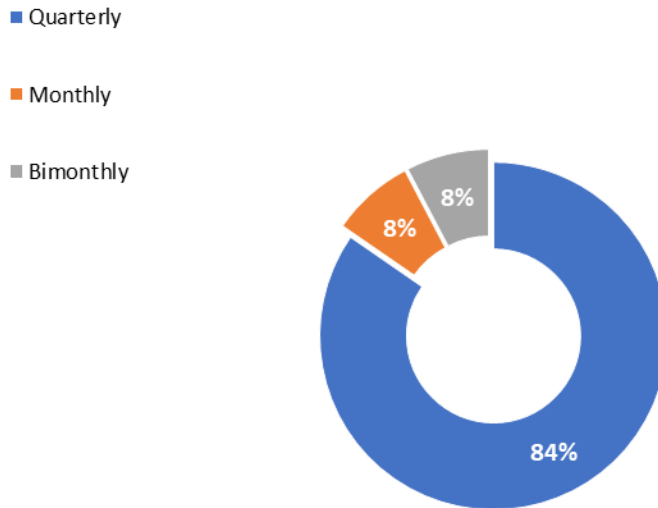
4. If you desire to continue to have live meetings (e.g. teleconferences with screen sharing), what frequency of meeting do you feel would best be practical/meet your needs?

About 83% of respondents to this question indicated that they wanted to meet quarterly (4-times per year) (Figure 3). This was the meeting frequency that was previously in place and it seems to continue to work for most members of the *GIS Interest Group*.

I had discussed our need for video-conference support with Public Health Ontario (PHO) in late 2019. They were supportive of our needs and volunteered PHO resources to help with our meetings. However, COVID-19 has driven the use of platforms such as *MS Teams* and *Zoom* to the point that we are all likely somewhat to very familiar with their functionality. This will be beneficial for the *GIS Interest Group* moving forward.

Figure 3:

GIS Interest Group meeting frequency (n = 13)



Source: APHEO *GIS Interest Group* Membership Survey 2019

5. If you desire to continue to have live meetings (e.g. teleconferences with screen sharing), would you be willing to potentially provide training or present some GIS-related work you have done/are doing to the group in the form of an online presentation?

About 77% of survey respondents indicated they would be willing to provide online training or present some GIS-related work to the membership of the *GIS Interest Group* (Figure 4). However, personal workload was mentioned as a potential interfering factor in the comments to this survey question.

Given that 13 survey respondents answered this question, it could be assumed that at least 10 members of the group would be willing to provide training or share their GIS-related work with the rest of the group on an ongoing basis. This is very encouraging as we had discussed also adding guest presentations from academic, government and business agencies as well. We had also discussed having a presentation done at each *GIS Interest Group* meeting. It would be beneficial for group members to have an educational component at each of our quarterly meetings.

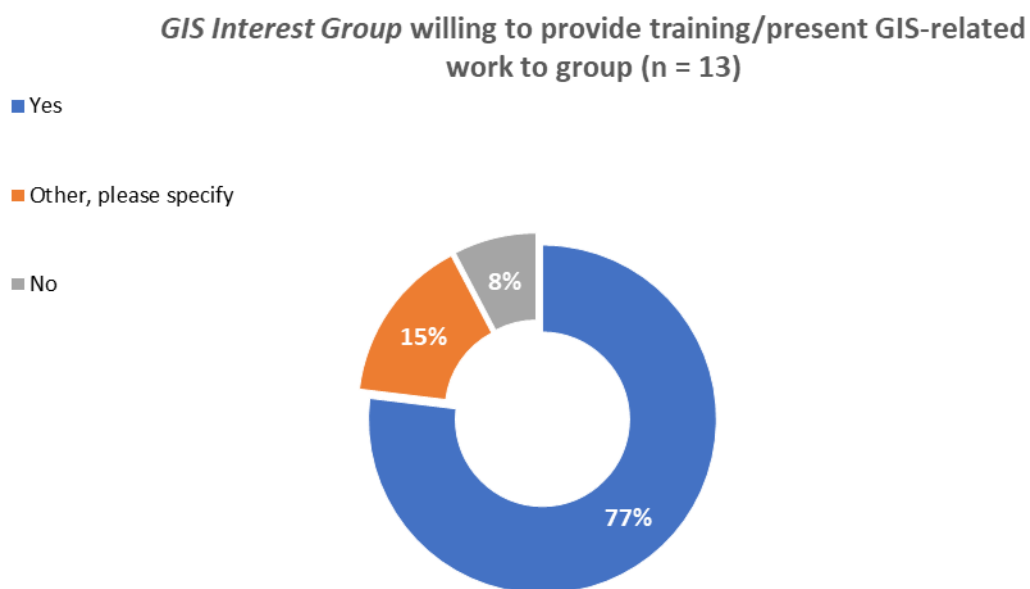
Specific ideas around presentations were provided and are listed below. It is clear that a diversity of GIS-related topics were on the minds of *GIS Interest Group* members. All of the ideas below are GIS subjects that could be presented in an online format during a one hour meeting.

Specific ideas for future presentation content provided were:

- Current projects: discussion of GIS challenges and successes related to current Ontario based projects.
- Brainstorming all the projects we would like to do (or have been asked to do) where we don't have the capacity/data/ resources we need to get done.

- Projects of interest: highlight really interesting work that has been done outside Ontario/Canada, or maybe within Ontario but outside the health sector.
- Speakers from academic disciplines who are active in these areas - Local Examples of GWR with Ontario Data - ESRI Landscape, R Landscape, Q-GIS Landscape - Redistricting in Environmental Health (Novel techniques for determining inspection districts) - Working with ON-MARG - applications and techniques - Vector-borne examples for active tick surveillance - BI Integration.
- Best practices documents, GIS strategy, discussion of the roles of epidemiologists and other data analysts when it comes to GIS.
- Having a problem solving section (Q&A) agenda item, case studies, tip of the month, etc. I recognize this would be an increased workload for the Chair of the GIS Group, but may increase interest in the group and facilitate discussion?
- Meetings could include a 'show and tell' agenda item where people could volunteer to demonstrate interesting GIS projects they have been working on and/or ask for advice solving problems.
- A 'Tips and Tricks' document in the resources page or section of the agenda to provide guidance on common activities, some examples include - best practices for choosing icons for facilities (schools, hospitals, mosquito traps, etc.) on maps - choosing colour schemes - discussion of common data sources (e.g. roads, water) - understanding when to use shape files, layers, layer packages, map packages.
- The group should explore common GIS themes (e.g. PCCF).
- Using third party add-on software, e.g. StaTScan, GeoDa Using built-in (purchased) extensions, e.g. tracking analyst, network analyst Cartography in GIS Basic spatial stats.

Figure 4:



Source: APHEO *GIS Interest Group* Membership Survey 2019

6. Please list any barriers you have experienced to attending *GIS Interest Group* meetings/ Do you have any other *GIS Interest Group* related comments/suggestion?

In terms of barriers to *GIS Interest Group* meeting attendance, time availability and scheduling was the most common topic theme addressed by survey respondents. Meeting attendance being quarterly could make it easier to schedule, but meeting attendance could fluctuate due to conflicting priorities. Other commentary addressed the issue of having more focus in our meetings. Essentially, it was mentioned that we need less discussion around structure and more around GIS and epidemiology. This should be the primary goal of the *GIS Interest Group* moving forward. We will be able to address this issue more at our next meeting where we formally begin the process of creating focused terms of reference and meeting goals.

Specific barriers to attendance and other commentary provided were:

- At times it seemed to be more formality than substance. The purpose of meetings should be action driven, and if little action then probably other means for communication should be used.
- Availability due to other work commitments.
- Competing priorities.
- Meetings not scheduled in advance, too infrequently (lose momentum), mostly information discussions without much 'doing'.
- Other provincial teleconferences, workload, etc.
- The meetings can be lengthy and the conversation unfocused. The group would benefit from a terms of reference and/or statement of purpose.
- Time availability. GIS is more investment oriented (learning something new to apply later) so it can be difficult to protect time.
- Time commitment.
- I enjoy learning more from those who are at a higher technical capacity in GIS. Geography-related issues can be frequently overlooked by provincial/larger center-based organizations. The group may choose to serve in an advocacy or resource group informing data collection or interpretation of analyses by larger organizations.
- I have been a largely silent participant in the group, I'm not sure I've attended any of the meetings. I have often felt that many of the discussions were beyond my current skill set so I did not have anything to offer or gain from them (whether or not that is actually true). That being said, I think this group is a great resource for people like me who are looking to enhance their GIS skills within the public health epi context.
- I think we should try to have a hands-on workshop. Could be on any of the topics mentioned above.
- We should work on developing a one-day workshop. Perhaps could make it an annual thing?

Conclusion/Next Steps:

There appears to be a strong consensus amongst survey respondents that the *GIS Interest Group* should continue to meet online on a quarterly basis and perhaps have an in-person meeting around the annual APHEO conference. The survey conducted by Sean Marshall was clear at laying out directions for future workflow for the group. The current membership survey added more direction to help flesh-out these points and added clarity in terms of agreeing to continue to meet as an online group, to focus on education and knowledge exchange and to develop and maintain a website repository for spatially-related epidemiological resources.

It would be beneficial to begin this process with our next meeting. I will wait for direction from APHEO as to when we can begin to meet again and to get an idea from the group membership when that would be feasible given our necessary focus on the pandemic. I foresee that some of this work can be done concurrently with our knowledge exchange priorities, in that the terms of reference can be worked on between meetings and presented to membership during the first part of our online meeting with plenty of time for a GIS-related presentation.

Thank you again for participating in the survey and for your continued membership in the APHEO *GIS Interest Group*. I am encouraged by your responses and feel we have a strong direction on which to move forward. After sending this survey out to the group membership I will begin the process of planning for our next meeting keeping in mind our current focus on COVID-19.

Appendix: GIS Interest Group Membership Survey 2019

Introduction: As you know, the *GIS Interest Group* had been meeting on a regular basis since 2017 under the leadership of Sean Marshall. There has been a break in the meeting frequency since the summer of 2019 when Sean left the group. In that final meeting the group had done some work in laying out ideas for improving the *GIS Interest Group* via an informal survey that was circulated to the membership. A summary of the results of the survey include:

- Develop written goals
- Develop terms of reference
- Develop work plan
- Promote the WG to a broader audience
- Develop strategies for knowledge translation
- Institute online presentations related to GIS processes and research related to public health
- Develop training and how-to guidelines
- Have a yearly face-to-face meeting at the annual APHEO Conference

I am contacting you now as I have offered to coordinate moving the *GIS Interest Group* forward over the next couple of years, with your help, and want to get a sense of:

1. Whether you feel there is value in continuing the *GIS Interest Group* (Yes, No)
2. If yes, to get an idea of your commitment to attaining the tasks summarized above
3. If yes, to get an idea of your capacity to provide online training to group membership
4. If no, to determine what options would be best for GIS within APHEO (e.g. website resource)

If you desire to remain anonymous please do. There is no requirement to identify yourself. However, keep in mind that we are a small survey population so you may inadvertently identify yourself by the specifics you provide in your survey answers.

All information supplied in this survey will be presented in an aggregate report with individual written responses categorized to protect the identities of those who participated.

If you have questions or concerns about this survey please contact me directly at:

John.cunningham@healthunit.org

613.345.5685 (2270)

Thank you for your contribution.

John Cunningham (LGLDHU)

Name (optional):

1. GIS experience:

No experience (just curious)

Some experience but would like to develop additional skills with the technology

Experience but don't use often

Experience and use often

Other (please specify)

Comments:

2. Do you feel that the *GIS Interest Group* should continue meeting on a regular basis or would it be best to devolved into a resource section on the APHEO website for example?

Continue meeting

Become a website resource

Other (please specify)

Comments:

3. If you desire to continue to have live meetings (e.g. teleconferences with screen sharing), what frequency of meeting do you feel would best be practical/meet your needs?

Monthly

Quarterly

Semi-annually

Annually

Other (please specify)

Comments:

4. **If you desire to continue to have live meetings (e.g. teleconferences with screen sharing), would you be willing to potentially provide training or present some GIS-related work you have done/are doing to the group in the form of an online presentation?**

Yes

No

Other:

Comments:

5. **If you desire to continue to have live meetings (e.g. teleconferences with screen sharing), do you have any specific ideas for the future content/format of the *GIS Interest Group* meetings?**

Comments:

6. **Do you have any other *GIS Interest Group*-related comments/suggestions:**

Comments:

Thank you for participating in this survey. The results will be analyzed, aggregated and presented to the APHEO *GIS Interest Group* as a summary document via the GIS List Serve.

If you would like to be contacted personally to discuss your responses or have other ideas/thoughts to share please leave an email address or telephone number for follow-up purposes so that I may get in touch with you personally:

Email address:

Telephone number: