EVALUATING COMMUNITY ENGAGEMENT THROUGH ARGUMENTATION MAPS: A CASE STUDY OF THE 'QUEEN WEST TRIANGLE'

by

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Title: Evaluating Community Engagement Through Argumentation Maps: A Case Study of the 'Queen West Triangle'

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Abstract: Web-based Spatial Decision Support Systems (SDSS) are applications that use the Internet as a way to disseminate and collect information related to decisions about space. Certain web-based SDSS tools can be considered a Public Participatory Geographic Information System (PPGIS). PPGIS is a field of research within geography that examines the confluence of GIS and the involvement of citizens in decision-making processes. One such tool is ArguMap, an Internet distributed technology that provides users with the ability to attach comments to objects (such as buildings) portrayed on a map, resulting in discussions with spatial reference. This paper presents a case study using ArguMap in the context of the Queen West Triangle, an area of approximately 20 acres of former industrial land in Toronto experiencing redevelopment. The case study was operated in conjunction with Active 18, a citizen's group concerned with sustainable development of the area. It is shown that while use of the ArguMap presents technological challenges, it offers great potential as a means of informing and engaging the public in decision-making processes and leveraging the position of community organizations.

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Chapter 1: Introduction

The desire to build sustainable and inclusive societies has come with the recognition of the value of involving the public in various planning and decision-making processes. It is believed that incorporating local knowledge and opinions into decisions creates results that are more readily accepted and relevant within communities. To this end, the field of geography includes a branch known as Public Participation Geographic Information Systems (PPGIS): the confluence of social activity (participatory activities, grassroots organizations, governmental decision-making, policy-making, planning, etc.) and geographic information systems. (Niles & Hanson, 2001). PPGIS is evolving in many directions, so that the manifestations of PPGIS are taking on many forms. One such form is web-based Spatial Decision Support Systems (SDSS), which aim to develop internet-based solutions to facilitate decisions related to space. Argumentation Map (ArguMap) is a web-based SDSS proof-of-concept, first proposed by Rinner (1999), which provides a platform for discussions related to space. This project presents a case study focusing on the 'Queen West Triangle' and the community organization Active 18. This case study provides an opportunity to evaluate the ArguMap prototype in order to understand its impact and improve its effectiveness.

1.1: Background on ArguMap and Active 18

ArguMap is a computer-based, Internet-distributed tool that provides users with the ability to attach comments to objects (such as buildings) portrayed on a map. In this manner, ArguMap offers a unique tool that facilitates discussions related to geographic places. ArguMap was developed with a range of user groups in mind, and can be used in any situation requiring stakeholders representing a variety of backgrounds to collaborate on decisions related to space. As a decision support tool, ArguMap provides visual reference to spatially associated discussions.

The ArguMap prototype used in this case study was developed by Keßler (2004). It uses a combination of the MySQL database and Java Servlets on the server-side, and the mapping package GeoTools Lite and a custom discussion forum on the client-side. This case study will be the first use of the tool in a realistic context.

Active 18 is a collective of residents, business owners and concerned citizens interested in Ward 18, an area in southwestern Toronto. The association has formed as a result of concerns over proposals for development in this area, which the organization has named the 'Queen West Triangle.' The goal of Active 18 is to represent the opinions of those concerned with development in this area, as well as to raise awareness regarding the potential changes. The organization is interested in promoting holistic, sustainable development in the area and avoiding piece-wise development that is not connected to a conscious plan. To date, Active 18 has organized a community charrette which produced a community vision and plan for the neighbourhood. The steering committee has also met with the City of Toronto planning department and the developers of the sites. As the proposed buildings do not adhere to the city plan for the neighbourhood (for example, some proposed buildings would exceed height restrictions), Active 18 is attempting to open the dialogue between the City of Toronto and the developers to explore other options. These three parties are working through a communication process that may result in involving the Ontario Municipal Board for resolution. Active 18 is attempting to raise its profile in order to strengthen its position to oppose the current development proposals, and have welcomed the concept of using the ArguMap tool to increase dialogue and engagement in the issue. Concurrently, the study allows for a greater understanding of this prototype, which is still in its research and development stage.

1.2: Purpose

Thus, the purpose of this study is to operate a reality-based case study using the ArguMap prototype in order to evaluate its role as a spatial decision support tool in the context of community engagement. In particular, the study will attempt to gain a greater understanding of two elements of using the prototype: the users' experience with the tool as a technological application, and their experience with the prototype as a method of engagement.

1.3: Significance & Limitations

This study is significant to the field of PPGIS in that it provides an opportunity to evaluate the ArguMap concept in order to improve and understand its function as a web-based spatial decision support tool. It will provide valuable insight into further developments, such as developing steps to distribute ArguMap to planners or other community organizations. As the discussion was open to public participation, the study will also provide insight into a range of related results such as challenges in engaging the public and how the tool is understood.

The study is limited by the pre-determined time frame in which this research paper had to be completed. This affected the recruitment of the participants, as well as the length of the ArguMap operating period.

1.4: Scope

The geographical scope of this project was limited to the 'Queen West Triangle,' an area identified and labelled by Active 18. This area is bound by Queen Street West to the north, Dovercourt Road to the east, Gladstone Road to the west and Sudbury Street to the south, shown in Figure 1.1. In terms of time, the ArguMap operated during an 18-day period in the month of June 2006. Operating the case study in conjunction with Active 18 established a particular position within the issue. While there are many stakeholders involved in the issue such as current homeowners, business owners, developers, urban planners, think-tanks, and so forth, the time restraints of the project necessitated a focused scope. As a result although participation was welcome from all stakeholders, the study was specifically promoted to residents and business owners of the Queen West Triangle.

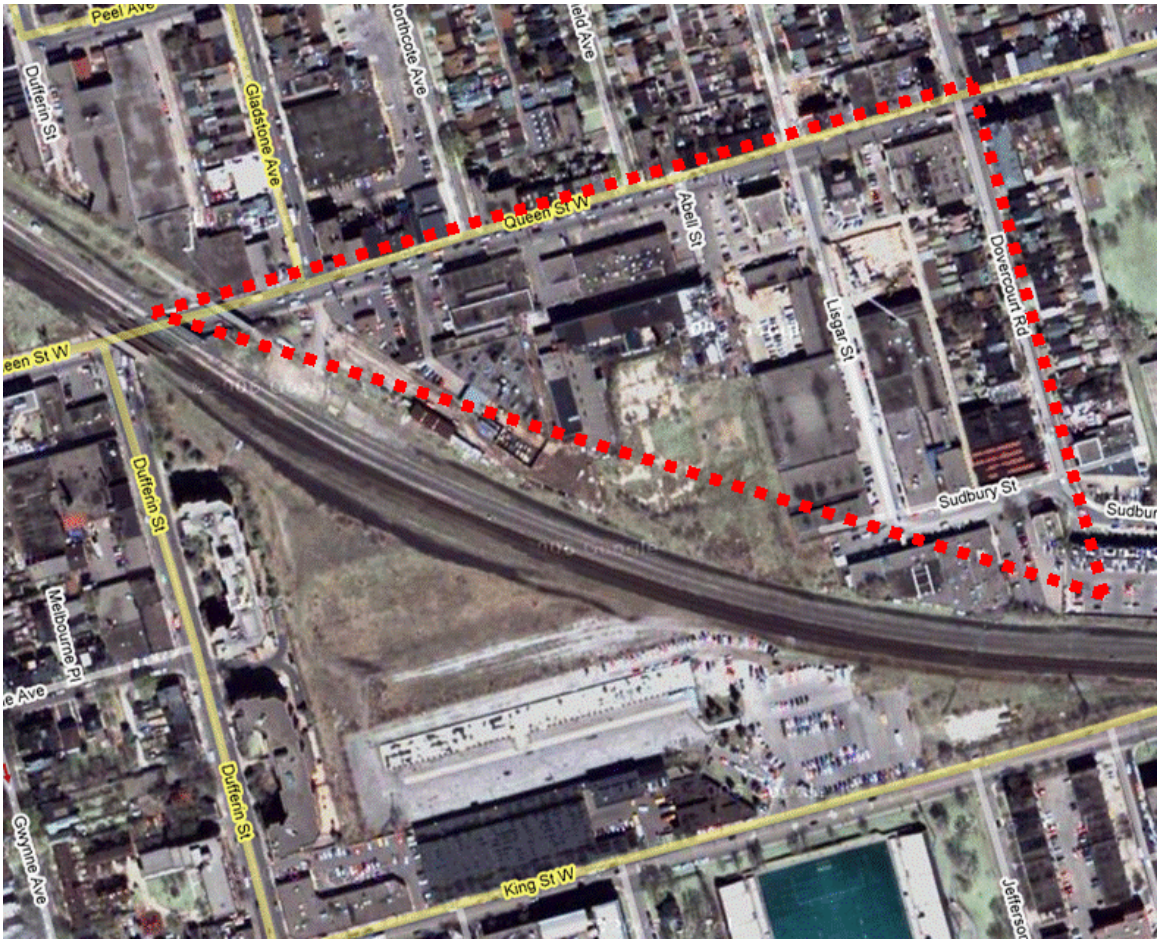

Figure 1.1: The 'Queen West Triangle' identified in red. (Source: Google Maps)

2: Literature Review

This case study is one initiative in a dynamic and innovative field. The following review of literature is structured into three sections. The first section introduces work related directly to the ArguMap concept. This will be followed by the placement of ArguMap developments within the greater realm of web-based Spatial Decision Support Systems (SDSS) research. The third portion of the review will widen the scope further by locating ArguMap and web-based SDSS work within the larger field of Public Participation Geographic Information Systems (PPGIS) research.

2.1: The ArguMap Prototype and Related Research

The ArguMap prototype is the result of research focusing on computer-based, spatially-related discussions. Drawing from argumentation theory, computer-supported cooperative work and PPGIS concepts, Rinner (1999) developed an Argumentation Map Model (Figure 2.1).

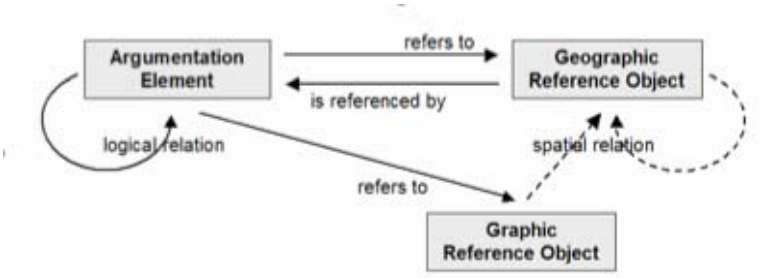

Figure 2.1: Argumentation Map Model (Source: Rinner, 2005)

The Argumentation Map Model shows that argumentation elements (such as comments) can refer to geographic objects and visa versa. Argumentation elements can also refer to graphic reference objects that the user can create on the map (this functionality was disabled in the Active 18 case study for its lack of relevance to the situation). This model was developed into a software prototype by Keßler (2004). His thesis focused on the theoretical background and technical architecture of the prototype. The first testing of the ArguMap tool occurred through a case study organized by Christopher Sidlar centred on general planning issues at the University of Toronto. The usability and utility of the ArguMap were analyzed. The utility evaluation focuses

directly on the results of the case study by using quantifiable criteria to evaluate the contributions made by participants. Utility was measured through the design of a ratio, whereby

utility = actual use / potential use, following that the highest utility had values closest to one. This ratio provides an important understanding of the application and case study, especially because they create a measure whose results can be comparable across ArguMap case studies. The usability analysis provides a more general framework to understand the ArguMap prototype. Criteria were developed to evaluate general usability and function usability of the tool. The study concluded that overall, usability of the prototype is high. Key challenges noted by the study focus on the nature of the discussion threads and understanding the degree to which all the functions of the tool were used. The study provides an additional method for interpreting the results of ArguMap case studies.

2.2: Web-based Spatial Decision Support Systems

The ArguMap prototype and related work falls within the larger field of web-based Spatial Decision Support Systems (SDSS) research. The advancement of tools such as Java/Java Script, Servlets and VB Script has allowed the development of progressive applications that has made online participation in spatial decision-making processes possible. In addition to ArguMap, a number of other initiatives have built upon the concept of using the Internet to engage people in planning processes. Table 2.1 outlines a number of web-based SDSS applications, provided for reference.

While these applications have the linking of public participation objectives and GIS in common, there are great differences in terms of interactivity, usability and functionality. Specific lessons can be learnt from each case, but it is also possible to identify common trends in these experiences. The following paragraphs will examine these trends with respect to benefits, process/barriers, and evaluation.

Bradford Community Statistics Project	http://www.bcsp-web.org/mapguide_site/maingeo.cfm
East St.Louis Action Research Project (ESLARP)	http://imlab9.landarcch.uiuc.edu/~eslarp/egrets/index.htm
Erie International Airport	http://gis.csengineers.com/erie/viewer.htm
GeoMed	http://www.pisa.intecs.it/projects/GeoMed
GIS/MCE for Planning	http://ta-www.jrc.it/marina/adage/introsub.htm
I-map Delaware River Basin	http://bassriver.state.nj.us/imap_delbasin/
Interactive Landscape Plan Konigslutter am Elm	http://thuja.land.uni-hannover.de/
"Openspace" of Salford University	http://www.ties.salford.ac.uk/pg/xiao/openspace-main.html
Open Spatial Decision Making (OSDM)	http://www.ccg.leeds.ac.uk/mce
Orange County Interactive Mapping - City of Orlando, Florida	http://www.cityoforlando.net/public_works/esd/gis/interactive_mapping.htm
Pilsen Project - Urban Design Visualization of Pilsen	http://www.evl.uic.edu/sopark/new/RA/#sub1
Resource Management Mapping Service - Illinois	http://space1.itcs.uiuc.edu/website/rmms/
Spatial Discourse	Not available online; Fraunhofer Inst. for Autonomous Intelligent Systems
Spatial Understanding and Decision Support System (SUDSS)	Not available online; Jankowski 1997
Town of Clover Planning Analyst	http://www.lic.wisc.edu/clover_web/history_bkgrnd.htm
Vernetzter Bebauungsplan - Landkreis Freising	http://fs.mapsailor.de
Virtual Slaithwaite Project	http://www.ccg.leeds.ac.uk/slaithwaite/
Wyoming Oil and Gas Resource Assessment Mapper	http://wogra.wygisc.uwyo.edu/wyoims2/wims2awo

Table 2.1: Examples of web-based Spatial Decision Support Systems

(Sources: Compiled from Keßler 2004, Steinmann et al. 2004, Carver et al. 1999)

The application of web-based SDSS to community decision-making processes offers a range of potential societal benefits. Firstly, these tools respond to the criticism that GIS technology is elitist by offering solutions that (in theory) are accessible to a non-expert user (Carver et al. 1999, 2001a; Peng 2001; Craig 1998). Online tools also offer an alternative to traditional public meetings that require in-person attendance. By operating on the Internet, these SDSS are not restricted by time or location (Carver 2001; Kingston 2000; Peng 2001). In addition, individuals uncomfortable with speaking in public can voice their opinions in a more detached environment, and a wider, more representative

audience can be reached (Carver et al. 1999, 2001a; Craig 1998; Kingston 2000; Peng 2001). Such applications hold advantages for planners. The nature of the data received from the public in this format is generally more complex, and is easier to process and analyze than data collected from traditional public meetings (Kingston 2000; Carver et al. 1999, 2001a). For example, in a traditional public meeting a note-taker would have to record vocalized comments from participants. Conversely, contributions made via a web-based SDSS will be in electronic format, and thereby easier to organize and analyze. In addition, web-based SDSS contributions can take on different forms other than text contributions, such as polls. Web-based SDSS also hold benefits for community organizations, by raising the stature of organizations by allowing them access to analyzing, exploring and presenting information in a multifaceted and meaningful manner (Craig 1998).

It is important to note the challenges and barriers faced by web-based SDSS. The largest and most significant challenge given that these tools have been developed for public participation, is that of the 'digital divide.' Varying degrees of access to technology and computer literacy are issues that each application encounters (Carver 1999, 2001a,b; Kingston 2000; Peng 2001). Researchers have also noted that while the technology exists for web-based SDSS to develop in a number of different contexts, there is a lack of actual applications (Carver 2001a,b; Steinmann et al. 2004). There are a number of barriers accounting for this shortage. Firstly, the majority of applications are developed and implemented by those working in academia. Due to limited funding and multiple responsibilities, it is difficult for these individuals to maintain applications over time (Steinmann et al. 2004). There are also barriers for planners to adopt web-based SDSS, one of the main end users for whom the technology is intended. Firstly, there is a disconnect between web-based SDSS developers and planners resulting in a lack of awareness in the planning profession. Additionally, researchers have noted reluctance for planning professionals to give up decision-making power for fear of trivialization of the planning process, and/or a reservation of the ability of the public to give valid opinions (Carver et al. 1999, 2001b; Steinmann et al. 2004). Another challenge faced by web-based SDSS includes facilitating public understanding of spatial problems (Carver et al. 1999, 2001a; Kingston 2000). Lastly, due to the nature of the Internet there is the issue of bias in system authoring and control, copyright, and confidentiality (Carver et al. 1999).

Applications of web-based SDSS have allowed for the development of evaluation processes. Studies by Peng (2001) and Carver (2001a) outline requirements recommended for a successful application and modes of evaluating. These include allowing the user to explore, evaluate and experiment with the data, with the capacity to build various scenarios and participate in some type of forum; providing data that are understandable and non-partisan, and creating a transparent process that allows the user to submit information to those with final decision-making power and to see the results, in order to build trust. Operating an application within this framework will ensure the use will be aligned with the intentions of public participation.

Research related specifically to evaluating web-based SDSS has been completed by Steinmann et al. (2004) in a study that examined the interactivity, usability and visualization of twelve American and European applications. Interactivity was assessed using the e-participation ladder (Figure 2.2). Interactivity increases with moving up the 'ladder': the most simplistic form of interaction is an online service directory, and the most complex form is an online decision support system. A barrier in the level of communication from one-way to two-way is noted between moving from a basic directory to the more interactive applications of discussions, surveys and web-based SDSS.

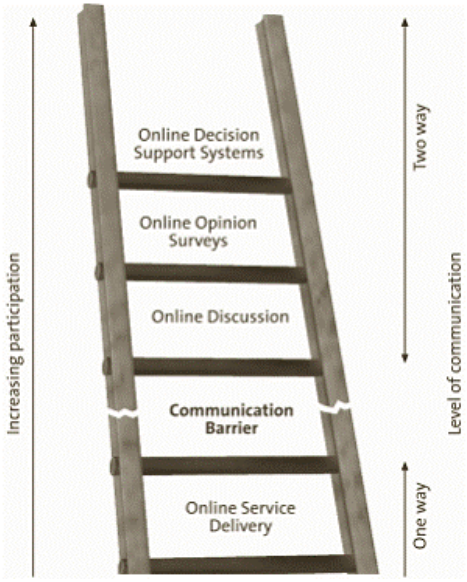

Figure 2.2: The e-participation ladder (Source: Carver 2001a)

Usability was evaluated through six criteria: suitability of the web application for the task, suitability of the data, degree of user guidance through the application, overall understandability and intuitiveness, data description/metadata, and degree of personalization. The final component of the evaluation assessed the quality of the application's visualization. Steinmann et al. note a number of key trends present in evaluating the twelve case studies. In terms of interactivity, none of the applications could be considered a SDSS, the highest level of the e-participation ladder. Usability, evaluated using a rank score method between 1-5, was found to be medium with scores in each category ranging between 2.5-3.5. Quality of visualization was similarly ranked and with results in mid-range scores, indicating the potential for improvement.

The field of web-based SDSS is evolving rapidly, and experiencing unique forces as the result of technological, social and institutional processes. Though each application and case is unique and context-specific, similar benefits and challenges are shared. Similarly, modes of evaluation are developing a basis with which to understand the outcomes of these initiatives. It is within this context that the Active 18 case study exists.

2.3: Public Participation Geographic Information Systems

Web-based SDSS are one mode within a larger realm of theory and practice related to Public Participation Geographic Information Systems (PPGIS). PPGIS concepts evolved from the realizations of the power of GIS to facilitate and inform decision-making processes, and the desire to transfer this ability to non-experts in various capacities. Given that GIS is widely used in development and planning, an interest arose to use the technology as a tool to involve the public in these processes (Abbot et al. 1998). In addition to web-based SDSS, other forms of PPGIS that have evolved include asset mapping and participatory mapping.

While a complete overview of all PPGIS research to date is beyond the scope of this paper, it is relevant to highlight major conceptual themes in the research in order to fully comprehend and contextualize the field of web-based SDSS and the Active 18 ArguMap case study. Five main themes can be identified: public participation theory, PPGIS processes, evaluating PPGIS, the challenge of accessibility, and the role of PPGIS in community organizations.

PPGIS theory identifies a number of issues that are a result of the confluence of public participation and GIS in decision-making processes. While researchers underscore the importance of involving the public to achieve relevant solutions (Craig 1998, McCall 2004), other authors question the very assumption that the public has a desire to be involved (Carver 2003, Steinmann et al. 2004). Further work seeks to analyze the factors that compose the process by defining relevant terms such as public, participation, and empowerment (Carver 2003, Ramasubramanian 2000, Schlossberg et al. 2005). Researchers have also attempted to understand the degree of decision-making power non-experts should be given, and what types of knowledge non-experts can be assumed to have (Steinmann et al. 2004, Abbott 1998). These overarching ideas provide a foundation from which the Active 18 ArguMap case study can be understood.

A second theme appearing in PPGIS literature focuses on process by attempting to define optimal methods for implementing PPGIS projects. Work in this area examines a range of topics, including evaluating research design (Jankowski et al. 2001; MacEachren et al. 2004; Nyerges et al. 2002) and socio-political frameworks (MacEachren et al. 2004; Smith 2003; Ghose et al. 2003; de Man 2003). The value of this research lies in its ability to break down the complex process of implementing a PPGIS project into comprehensible components. PPGIS projects experience a two-fold challenge in technology and socio-political aspects.

PPGIS evaluation has also received considerable attention in the literature. While it is acknowledged that each PPGIS experience is context specific and requires unique evaluation, researchers have attempted to develop various frameworks for understanding the impact of work in this field (Barndt 2002; Carver 2003; Haklay 2003; Howard 1998; McCall 2004; Rugg 2003). These methods of evaluation focus on understanding the impact of the application within a greater societal context, as opposed to specific application components. The evaluation criteria focus on both empirical aspects such as determining value, analyzing process, roles within a greater agenda (Barndt 2002), and accommodating local perceptions (Haklay 2003) as well as technological aspects including spatial cognition (Howard 1998), tools of visualization and natural spatial queries (Haklay 2003).

Accessibility, one of the fundamental challenges to the success of PPGIS initiatives, is an issue closely examined in the literature. Research within this theme has

moved beyond simplistic discussions of computer access to analyze empowerment issues in all stages of PPGIS project implementations (Chambers 2006). In work by Laituri (2003) and Tulloch (2003), frameworks for evaluating the accessibility are developed. Research in this area provides valuable insight into understanding the complex dimension of accessibility.

Lastly, a notable article published by Ramasubramanian (2000) examines the interaction of PPGIS initiatives with community organizations. Increasingly, community organizations are taking greater responsibility in their management of persons with special needs. Ramasubramanian's research focuses on how these organizations are using data to make decisions, and how PPGIS technologies and techniques could further benefit their goals.

The research presented in this section has provided an overview of the developments within the field of PPGIS, and more specifically, web-based SDSS and ArguMap. It is in this context that the case study has been implemented, and from this foundation of knowledge that questions can be formulated regarding the implications of this case study.

Chapter 3: Methodology

This case study used the ArguMap prototype in order to evaluate its role as a spatial decision support tool in the context of community engagement. The case study was structured as an embedded, single-case design (Yin 2003). This design denotes a case study that focuses on one case and involves multiple units of analysis. In the Active 18 ArguMap case study, the units of analysis focus on two elements of using the prototype: the user's experience with the tool as a technological application, and their experience with the prototype as a method of engagement. The following is a detail of the methods employed to implement the ArguMap prototype within the Active 18 context. Figure 3.1 illustrates the sequence of steps taken to conduct the case study.

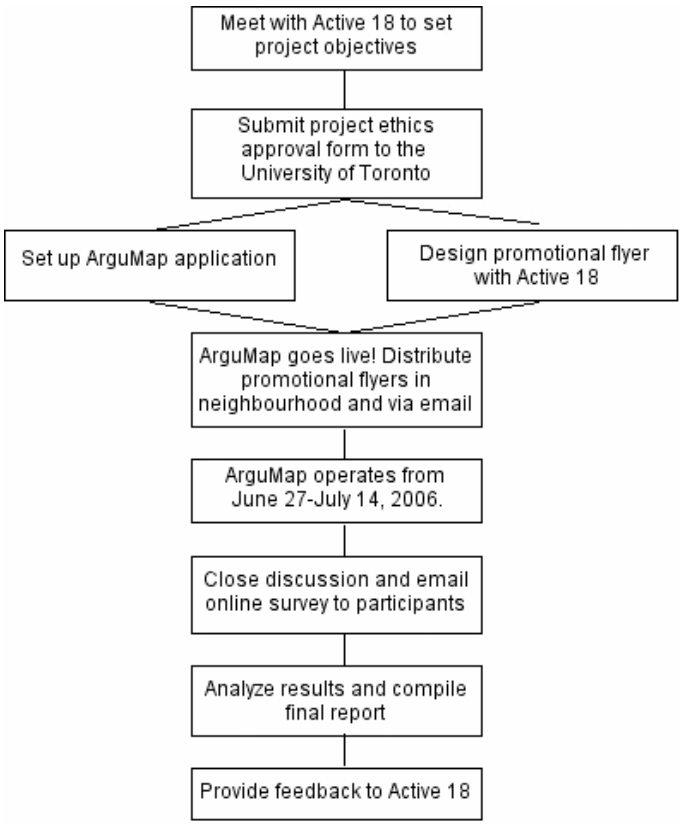

Figure 3.1: Methodology Flowchart

A preliminary assessment by the researcher of Active 18's objectives determined that the ArguMap prototype had the potential to benefit the organization and raise general awareness about development issues in the Queen West Triangle. The first step in

securing the case study required contacting Active 18 and proposing the concept to an audience that had no prior knowledge of ArguMap or web-based SDSS. It was important to use language that was accessible and clear. Figure 3.2 illustrates a flyer that was used to inform the client about the tool, in combination with an email that proposed the case study to the Active 18 steering committee. This email was positively received with interest to participate, and a meeting occurred between the researcher and a member of the Active 18 steering committee. During this meeting the prototype was demonstrated on a laptop and aspects of the tool were clarified. The objectives, timelines, and responsibilities of each party were determined. This meeting was followed by the successful completion of the University of Toronto ethics approval process.

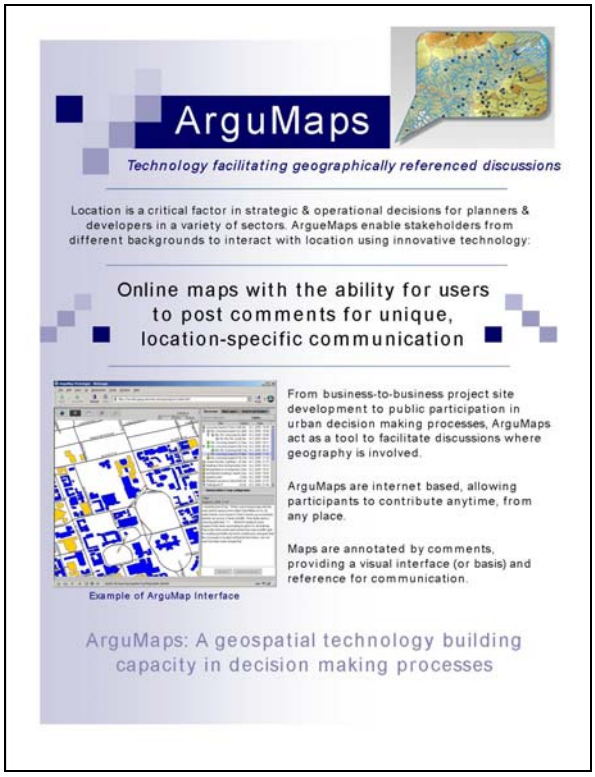

Figure 3.2: ArguMap flyer used to promote tool to Active 18

Once the agreement of participation in the case study was confirmed, construction of the ArguMap tailored to the Active 18 context commenced. The files were loaded onto the University of Toronto server. A map of the Queen West Triangle was constructed in

ArcGIS using files from the University of Toronto map library. The road network, buildings and railway layers were sourced from DMTI Spatial, Inc. A satellite image of the area was provided by the City of Toronto database. These layers were clipped to include the area just beyond the geographical boundaries of the Queen West Triangle.

While the road and rail layers and the satellite image did not need modification beyond clipping, the building layer required adjustment to accurately represent the issue at hand. There are three site locations with proposals for development: 1171 Queen Street West, 48 Abell, and 150 Sudbury. Figure 3.3 illustrates a map provided by Active 18 from which the shape of the proposal sites were digitized. To allow each proposal site to be displayed in a different colour, each site was created as its own layer.

Figure 3.3: Map provided by Active 18 to design ArguMap layers

The colours used in the application were chosen to facilitate the users' understanding of the map. Roads were illustrated in aqua blue, railways in gray, buildings in light yellow, and the three proposal sites in shades of pink/purple. Opinions and comments submitted by the participants with a map reference (known as contributions with references) were illustrated in red and yellow. The right side of the ArguMap interface consists of three sections, maneuvered by tabs at the top of the screen. The main

tab is the discussion forum; the second tab displays the map layers (allowing users to turn layers off and on), and the third tab offers search and analyze functions. Figure 3.4 shows the ArguMap interface with the 'other users' references' layers turned off to display the original colours of the map before the start of the discussion.

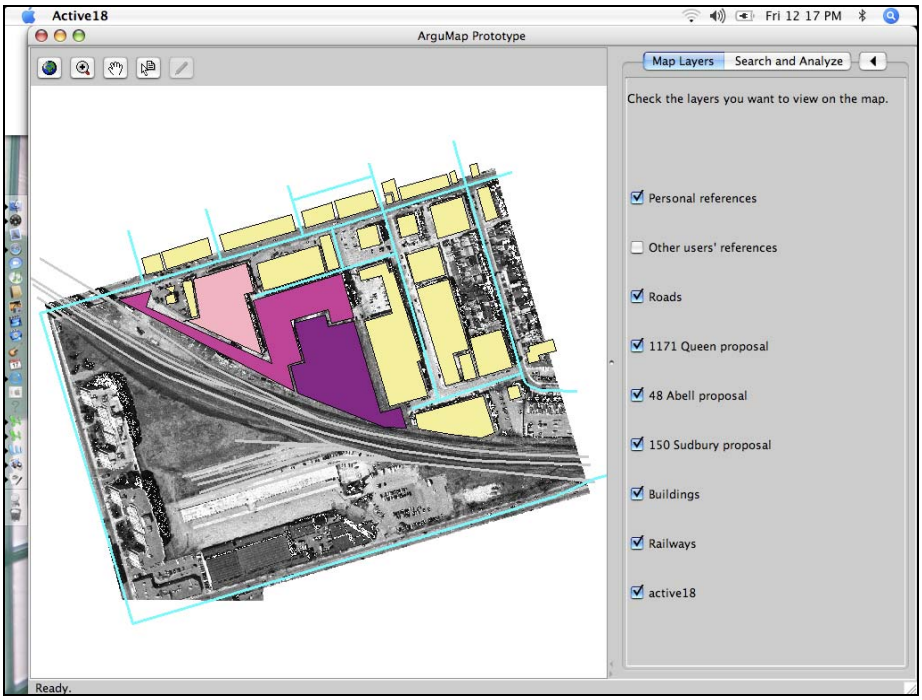

Figure 3.4: The ArguMap interface with 'other users' references' layer off

An instruction page was also constructed to inform users of how to use the ArguMap (Appendix 1). This html page is the first point of contact once users click on the link from the Active 18 homepage. The page explained the purpose of the study and also provided a link to the consent form (Appendix 2). Instructions on how to operate the ArguMap were given in four steps: Launching the application, creating a user account, reading the discussion and joining the discussion. As shown in Figure 3.5, screenshots were used to highlight the functions of the application. From this instruction page, the user could launch the application. An email address was also provided in the event the user had any questions or comments.

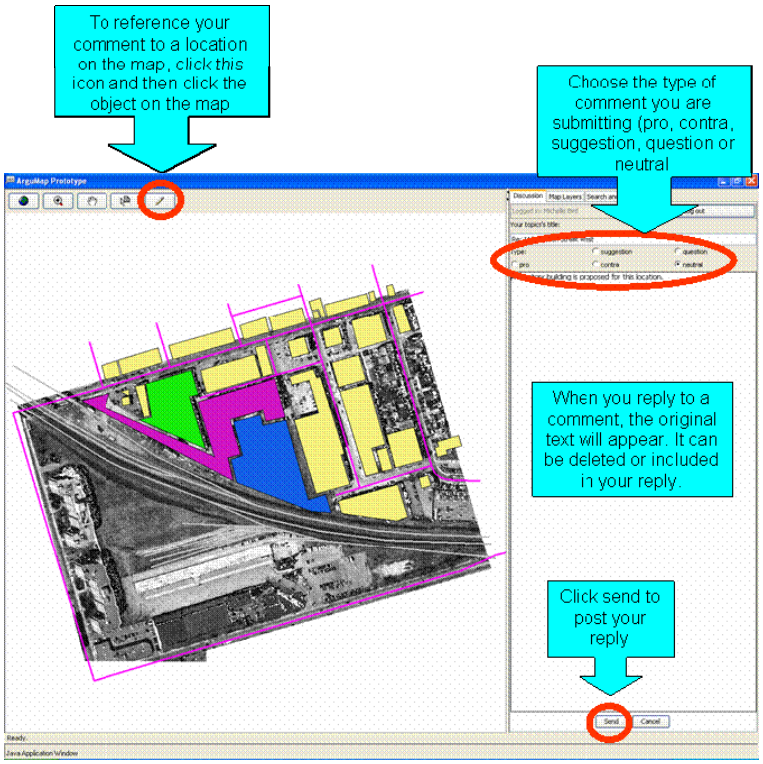

Figure 3.5: Screenshot from instruction page demonstrating ArguMap functions

In order to facilitate the discussion, five 'starter' discussion threads were submitted to the discussion board by the author. Three of these threads were related specifically to the three site proposals, and had references to the map: 1171 Queen Street, 48 Abell Street, and 150 Sudbury Street. The text of these contributions contained information about what currently existed on the site, and the proposed changes. The two other 'starter' threads did not have references to the map, and focused on general opinions of the area. The titles for these threads were "What do you want to see?" and "What makes the Queen West Triangle unique?" In terms of viewing the discussion, it was decided that all of the threads and replies would open upon launch of the application, so that the user could get an initial understanding of the discussion. The topic title column was widened and the author initials column was shortened to maximize the user's view of the threads.

Concurrent to the setup of the application was the development of the promotion of the case study. The selection of participants was largely influenced by the time constraints of the case study. It was determined that the case study would be open to the public, however the study was promoted to residents and business owners living and

operating within the Queen West Triangle. The members of the Active 18 steering committee felt that because of their busy schedules and responsibilities, they would be unable to offer more support in an alternative fashion, such as attending or organizing a special workshop. Thus, it was determined that the application would be active for a determined time frame with an open call for participation. A promotional flyer was designed by the researcher and the Active 18 contact, shown in Figure 3.6.

Figure 3.6: Promotional flyer designed to attract case study participants

A survey to be completed by the participants was designed (Appendix 3). The goal of the survey was to gather feedback regarding two elements of the ArguMap: its utility as a mode of generating discussions related to place, and its technical efficiency. The online service Survey Monkey (www.surveymonkey.com) was used to build and distribute this survey.

The Active 18 ArguMap went live on Tuesday, June 27, 2006 and was to operate until Tuesday, July 11, 2006 but was extended until Friday, July 14, 2006. The link to the Active 18 homepage was activated, and 200 promotional flyers were hand-distributed to businesses and residents in the Queen West Triangle. The flyer was also sent to the Active 18 mailing list of approximately 100 recipients. The discussion was monitored by the researcher during this period. A follow-up email was sent to the Active 18 mailing list

on July 10. The discussion was closed on July 14 by disabling the login function of the application and removing the link from the Active 18 homepage. The participants were contacted via email thanking them for their contributions and requesting their feedback via the online survey.

Chapter 4: Analysis

This chapter presents the results and analysis of the Active 18 ArguMap case study. The results are presented in section 4.1 and the analysis in section 4.2.

4.1 Results

The Active 18 ArguMap case study produced three sources of data. Part A details the website access statistics and the participation statistics. Part B presents the contributions submitted by the participants. Lastly, the participant survey is detailed in Part C.

4.1.1 Participation Statistics

The following tables illustrate a summary of statistics for the Active 18 ArguMap application.

Table 4.1: Website Access Statistics

Number of times the following files were loaded:	
*Link from the Active 18 homepage	Total: 153; unique IP: 98
*Image 1 on instruction page	Total: 136; unique IP: 89
*Consent form	Total: 11; unique IP: 8
*Webstart.jnlp	Total: 112; unique IP: 44
*Argumap.jar	Total: 61; unique IP: 40

Note: The IP addresses of the author and developers not included

Table 4.1 shows the website's access statistics by a measure of the number of times various files were loaded from the University of Toronto herodot server. The 'link from the Active 18 homepage' and 'image 1 on instruction page' are measuring the same file: essentially the number of visits to the initial start page. These two measures should be the same, however there is a discrepancy. The link from the Active 18 homepage was loaded 153 time in total and 98 times from unique Internet Provider (IP) addresses; image 1 on the instruction page was loaded 136 times in total of which 89 of these occurrences were from unique IP's. Similarly, the statistics for the files 'webstart.jnlp' and 'argumap.jar' are an indication of the number of times the application was launched. Again, these numbers should be the same but a discrepancy is present. The file 'webstart.jnlp' was loaded 112 time, 44 of these occurrences from unique IP addresses, while 'argumap.jar' was loaded 61 times, 40 of which were from unique IP addresses.

Lastly, the consent form was accessed 8 times from unique IP addresses (11 times in total), a number that is congruent with 16 registered participants. It should be noted that unique IP addresses are not the most accurate indication of unique site visits as some locations do not have dedicated addresses, and some individuals could have accessed the files with more than one IP.

Table 4.2: ArguMap Participation Statistics

Number of registered participants (not including developers)	16
Number of registered participants that posted contributions	12
Number of contributions	26
Contributions by type:	
*Pro	2
*Contra	2
*Neutral (default)	13
*Question	3
*Suggestion	6
Number of contributions with map references	1
Number of contributions per person	Mean 2.17; Median 1.5; Mode 1
Number of new threads started	4
Total number of replies	22
Order of replies:	
*1st Order	13
*2nd Order	5
*3rd Order	2
*4th Order	2
Frequency of replies to threads	Mean 2.44; Median 3; Mode 4
Number of replies containing the original text	8
Number of duplicate/error contributions	3

Note:All statistics do not include the five starter threads submitted by the researcher

Table 4.2 summarizes the application's participation statistics. Not including the case study developers, 16 participants registered to and subsequently logged in to the ArguMap. Of these 16 participants, 12 actually posted contributions. There were a total of 26 contributions made to the discussion, not including the 'starter' threads imputed by the author. Of the five types of contributions that are possible, 'neutral' was the most selected option with 13 contributions. This is most likely because it is the default option. There were 6 contributions marked 'suggestion', 3 contributions marked 'question', 2 contributions marked 'pro' and 2 contributions marked 'contra'.

Not including the 'starter' contributions, only one other contribution had a reference to the map. No other contributions had map references. Four new discussion

threads were started (again, not including the 'starter' threads). The average number of replies to a thread was 2.44 (median 3), with the total number of replies being 22. Of these 22 replies, 13 were 1st order (direct replies), 5 were 2nd order (reply to reply), 2 were 3rd order (reply to 2nd order reply), and 2 were 4th order (reply to 3rd order reply). The number of replies containing the original text of the thread was 8.

The average number of contributions per participant was 1.63 (median 1.5). There were a total of 3 erroneous or duplicate contributions, all made by the same participant. In this case, it appears that the user did not fully understand the functionality as they made the same mistake three times: the user pressed reply but then pressed send without altering the original text, then pressed reply again and entered their contribution.

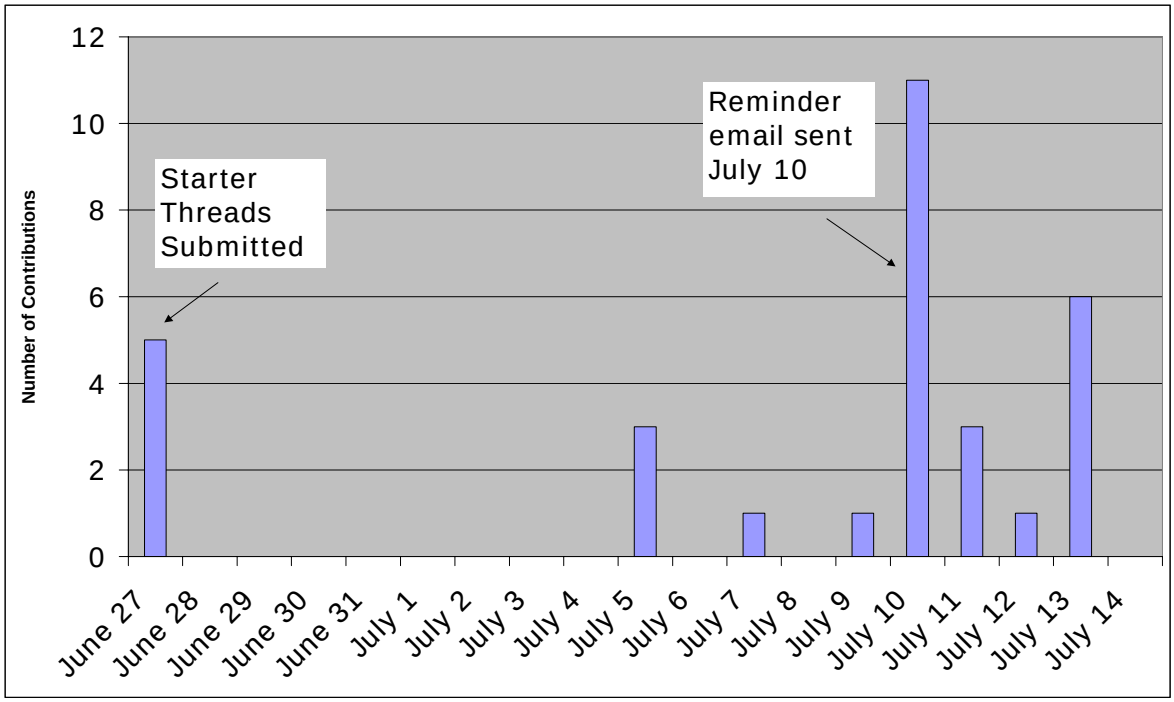

Figure 4.1: Contributions by Date

Lastly, Figure 4.1 is a barchart illustrating the number of contributions by date. The contributions on June 27 were the 'starter' threads submitted by the author. This shows that there was no activity during the first 9 days of the study, and that all contributions were submitted during the later part of the study period.

4.1.2 Contribution Content

The ArguMap prototype offered a platform for a dynamic discussion of the issues in the Queen West Triangle. Appendix 4 contains the text for all of the contributions made in the Active 18 ArguMap. Figure 4.2 illustrates the ArguMap discussion at the end of the study period.

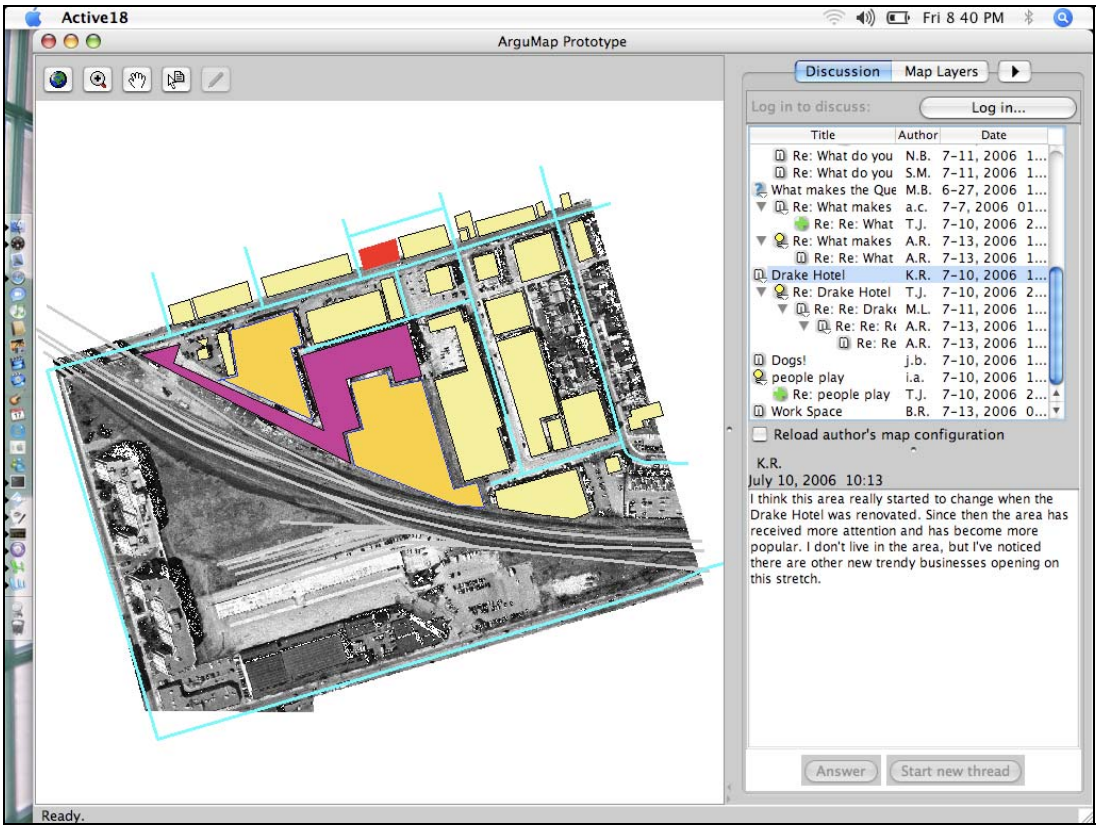

Figure 4.2: Screenshot of Active 18 ArguMap discussion at the end of the study period

In total, the discussion contained nine threads. The first three threads were 'starters' posted by the researcher to inform users of the proposed changes for three specific sites. The first thread, '1171 Queen West', received two 1st order replies. The second thread, '48 Abell', received one 1st order reply. '150 Sudbury' was the third thread, which received four replies. Three of these replies were 1st order replies, and one was a 2nd order reply. These three threads all started with map references, but none of the participants referenced the map in their replies.

The next two threads, also imputed by the researcher, did not contain map references. The first, 'What do you want to see?', received six replies: three 1st order, one

2nd order, one 3rd order and one 4th order. The 4th order reply was a result of the user "A.R." creating a double entry in this thread, with the 3rd order reply simply containing another participant's text while the 4th order entry contained his/her own ideas. The second thread, 'What makes the Queen West Triangle unique?' received four replies: two 1st order and two 2nd order. Again, the author "A.R." created a double entry with one reply containing no new content, and the other reply containing an original response.

The sixth thread in the discussion is labeled 'Drake Hotel' and is the only occurrence of a participant using the map reference function. This contribution received four sequential replies: one 1st order, one 2nd order, one 3rd order and one 4th order. There is a third instance of the author "A.R." creating a double entry, in this case posting the same contribution twice.

'Dogs' is the title of the seventh thread, receiving no replies. The eighth thread is named 'People Play' and received one 1st order reply. The final thread is entitled 'Work space' and received no replies.

While it is impossible to describe the general opinion of the participants towards the issue of development in the Queen West Triangle, it is possible to identify a number of key themes that reoccur in the responses. Table 4.3 illustrates these themes that are both implicitly and explicitly stated within the contributions. Some contributions contained more than one theme. These themes are: pro 'smart' growth as championed by Active 18; promoting unique design ideas; the desire for public/green space, accessibility for all income groups, and maintaining the area's 'culture.'

Table 4.3: Contribution Themes

Reoccurring Themes in Contributions	Total Contributions with Reference to this Theme
Pro 'smart' development	6
Desire for green/public space	6
Maintaining 'culture'	5
Accessibility for all income groups	3
Desire for unique design	3

Opinions focusing on 'smart' development appeared in six of the contributions, such as 'development is good but it has to be sustainable and pleasing for the eyes' submitted by H.B. Some specific suggestions were made that participants felt would be 'smart' development initiatives, such as preserving the existing building at 48 Abell

(K.R.) and a call for designing more live/work spaces (B.R.). Related to this theme is opinions on the desire for unique design, vocalized by J.B. '[re: 150 Sudbury proposed townhouses] Are they going to be the same style as the ones South on Dovercourt? Their uniform design is boring and ugly. There is such an opportunity to create something more interesting.' And 'I support increased density and development but it is vital to provide space for artist studios, cultural industries, small business and light industrial….perhaps even to make up for some of the work space that has been lost to condo development in other parts of the city.' (B.R.)

A second equally popular theme was that of increasing green/public space, which also appeared in six of the contributions. The vacant lot at 150 Sudbury was seen to be a great opportunity for unique development: 'This vacant space is huge! I'd love to see a community garden space spring up' (M.L.), 'Here's the opportunity to plan some greenspace' (T.J). Other ideas for greenspace were proposed by A.C.: 'I would suggest that a bike/walking path be created that basically follows the edge of the railway line' and T.J.: '…don't forget the basic need to for play space for grownups as well as children, dogs and everyone. Grass, trees, space is all really necessary in this area.'

The participants also explored of the concept of culture, and recognized the need to maintain the culture of the Queen West Triangle area as a source of identity and appeal. Though the term 'culture' is vague and can be interpreted in many ways, participants had some shared opinions on what composes the Triangle's culture. H.B. mentions 'It is a neighbourhood which has become a home for culture and arts (art galleries, interior design, fashion design)' and S.M. states 'The issue however is, how much can the Queen West Triangle be gentrified without losing it's "culture."' T.J sees the change in culture in the types of new restaurants that are opening: "Polished wood and fancy cocktails instead of a mish mash of laminated second hand furniture and affordable prices," as well as stating "I'd like to see some kind of 'active prevention' at work to enforce some of the old feeling." M.L states '[re: impact of Drake Hotel] This makes me feel as if the gentrification process has gone past the point of no return for this little stretch of Queen, pushing that arty/independent/community possibilities further west or somewhere else.' Thus while there is no specific definition of the culture of the Queen West Triangle, a set of common opinions surrounding preserving this culture is clearly present in the discussion.

A last theme reoccurring in the discussion was that of accessibility for all income groups. T.J. states “I know quite a few people who live in the area who would never go to some of the newer places [restaurants and bars] because they are too expensive….[new developments] are driving out some people who have lived here and given to the community for years,’ while S.M. writes ‘…my hope is that the new changes are deemed ‘accessible’ to both the new occupants of the neighbourhood as well as the older ones.’ This illustrates the recognition of the value of having a community composed of mixed income groups.

4.1.3 Survey Results

Once the Active 18 ArguMap discussion was closed, each of the participants received an email requesting their feedback via an online survey. The response to the survey was excellent: 100% of the participants fully completed the survey. Appendix 3 documents the survey questions and responses.

The survey was composed of five parts: The Active 18 Issue, Creating an Engaging Discussion, Using the ArguMap Tool, Demographics and Additional Feedback. Table 4.4 illustrates the questions and responses to Part One of the survey: ‘The Active 18 Issue’. This part of the survey was designed to understand the participant’s relationship to the issue, as this influences their contributions.

Part one of the survey illustrates that 13 of the 16 participants have been to the Queen West Triangle, and 50% were aware of Active 18 and/or the proposed changes. 68.75% of the participants replied that the proposed developments are very important or important to them, while 12.5% of respondents were undecided and 18.75% felt the issue was somewhat important to them.

Table 4.5 shows part two of the survey: ‘Creating an Engaging Discussion.’ These questions were designed to assess the user’s experience with respect to learning and expressing opinions about the development issue. Participants were asked to rate six statements on a scale from Strongly Agree to Strongly Disagree.

Table 4.4: Survey Part 1

1: The Active 18 Issue

Have you been to the Queen West Triangle Area?

	Response Percent	Response Total
Yes	81.25%	13
No	18.75%	3
	Total Respondents	16

Were you aware of Active 18 and/or the proposed neighbourhood developments before this experience?

	Response Percent	Response Total
Yes	50.00%	8
No	50.00%	8
	Total Respondents	16

Please rate your opinion of the importance (to you) of the development issue and the proposed changes in the Queen West Triangle area.

	Response Percent	Response Total
Very Important	31.25%	5
Important	37.50%	6
Undecided	12.50%	2
Somewhat Important	18.75%	3
Not Important	0%	0
	Total Respondents	16

Table 4.5: Survey Part 2

2. Creating an Engaging Discussion

After using the Active 18 ArguMap:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I have a greater understanding of the issue	12.5% (2)	56.25% (9)	12.5% (2)	18.75% (3)	0% (0)
I felt comfortable voicing my opinions by posting comments.	12.5% (2)	75% (12)	12.5% (2)	0% (0)	0% (0)
The discussion was relevant to the issue.	12.5% (2)	87.5% (14)	0% (0)	0% (0)	0% (0)
My interest in the developments of the Queen West Triangle has increased since engaging in the discussion.	0% (0)	62.5% (10)	18.75% (3)	18.75% (3)	0% (0)
I feel more connected to the issue.	0% (0)	68.75% (11)	18.75% (3)	12.5% (2)	0% (0)
The tool is an effective platform for gathering opinions.	50% (8)	25% (4)	12.5% (2)	12.5% (2)	0% (0)
				Total Respondents	16

Participants offer positive feedback with respect to becoming engaged in the Active 18 issue. For each of the statements, the 'Agree' option is most frequently selected. 11 of the 16 users agreed or strongly agreed with the statement, 'I have a greater understanding of the issue', while 2 users were undecided and 3 users disagreed. The statement 'I felt comfortable voicing my own opinions by posting comments' had 2 users strongly agree and 12 users agree. The most unanimous collective opinion occurred with the statement 'The discussion was relevant to the issue' with all participants agreeing (87.5%) or strongly agreeing (12.5%).

62.5% of participants agreed that their interest in the developments of the Queen West Triangle has increased since engaging in the discussion, while 18.75% of users were undecided and 18.75% disagreed. Similarly, 68.75% of participants agreed with the statement 'I feel more connected to the issue' while 18.75% were undecided and 12.5% of users disagreed. Finally, 50% of participants strongly agreed and 25% agreed that 'The tool is an effective platform for gathering opinions', with 12.5% of users undecided and 12.5% in disagreement with this statement.

Respondents to part 3 of the survey, 'Using the ArguMap Tool', is shown in Table 4.6. The questions contained in this part of the survey were designed to elicit responses regarding the application's functionality in terms of ease of use. Users were asked to rate their opinion with regards to certain functions by selecting one option: Very Easy, Easy, Somewhat Difficult, Difficult or I Did Not Use this Function.

The responses for this part of the survey are less uniform than the previous parts. While 31.25% of users replied that 'Accessing the ArguMap from Active 18's webpage' was easy (and 12.5% replied it was very easy), an equal 31.25% of users replied that it was difficult (and 25% answered somewhat difficult). 'Creating a username and logging in' was marked easy or very easy by 13 of the 16 participants, while 3 participants rated this function somewhat difficult or difficult. Participants were also divided in their opinion of 'Understanding the map (streets, buildings)' with a 50/50 percentage split between easy and somewhat difficult.

Table 4.6: Survey Part 3

3. Using the ArguMap Tool Please rate your opinion on the ease of use for the following functionality:					
	Very Easy	Easy	Somewhat Difficult	Difficult	I did not use this function
Accessing the ArguMap from the Active 18 webpage	12.5% (2)	31.25% (5)	25% (4)	31.25% (5)	0% (0)
Creating a username and logging in	12.5% (2)	68.75% (11)	6.25% (1)	12.5% (2)	0% (0)
Understanding the map (streets, buildings)	0% (0)	50% (8)	50% (8)	0% (0)	0% (0)
Reading the various discussion threads	18.75% (3)	81.25% (13)	0% (0)	0% (0)	0% (0)
Zooming and moving around the map	0% (0)	25% (4)	37.5% (6)	37.5% (6)	0% (0)
Starting a new discussion thread	0% (0)	62.5% (10)	12.5% (2)	0% (0)	25% (4)
Replying to a comment (without referencing the map)	0% (0)	81.25% (13)	6.25% (1)	0% (0)	12.5% (2)
Replying to a comment (with a reference to the map)	0% (0)	6.25% (1)	6.25% (1)	0% (0)	87.5% (14)
Reading all comments related to a specific building	6.25% (1)	12.5% (2)	0% (0)	0% (0)	81.25% (13)
Turning map layers on and off	0% (0)	12.5% (2)	25% (4)	12.5% (2)	50% (8)
Overall participation	0% (0)	50% (8)	31.25% (5)	18.75% (3)	0% (0)
				Total Respondents	16

‘Reading the various discussion threads’ was a well-encountered function with 100% of users deeming it very easy (18.75%) or easy (81.25%). Conversely ‘Zooming and moving around the map’ was more challenging as 75% of participants replied this was somewhat difficult or difficult, the remaining 25% replying easy.

62.5% of participants rated ‘Starting a new discussion thread’ easy, although 12.5% rated it somewhat difficult and 25% replied they did not use this function. While 81.25% rated ‘Replying to a comment (without referencing the map) easy, 87.5% of users answered they did not use the function to ‘Replying to a comment (with a reference to the map). ‘Reading all comments related to a specific building’ received an ‘I did not use this function’ rating of 81.25%, though 18.75% replied this was very easy or easy. Participants were highly divided over the ease of ‘Turning map layers on and off’ with

ratings of 12.5% easy, 25% somewhat difficult, 12.5% difficult and 50% not using the function.

The ease of use of overall participation was rated easy by 50% of the participants. 31.25% replied it was somewhat difficult, and 18.75% rated the experience difficult.

Questions referring to 'Demographics' composed part 4 of the survey, shown in Table 4.7.

Table 4.6: Survey Part 4

4. Demographics

Please select your gender.

	Response Percent	Response Total
Male	43.75%	7
Female	56.25%	9
Total Respondents		16

Please select your age range.

	Response Percent	Response Total
0-19	0%	0
20-29	18.75%	3
30-39	56.25%	9
40-49	18.75%	3
50-59	6.25%	1
60+	0%	0
Total Respondents		16

Where do you live?

	Response Percent	Response Total
Within the Queen West Triangle	12.50%	2
Within 5km of the Triangle	50%	8
Within 10km of the Triangle	25%	4
Within the Greater Toronto Area	12.50%	2
Outside the GTA	0%	0
Total Respondents		16

Please select the option that most reflects your opinion to the following statements:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I am comfortable with basic computer operating functions.	75% (12)	25% (4)	0% (0)	0% (0)	0% (0)
I learn new things easily on computers.	43.75% (7)	43.75% (7)	12.5% (2)	0% (0)	0% (0)
I have a good sense of direction and understand maps easily.	75% (12)	25% (4)	0% (0)	0% (0)	0% (0)
				Total Respondents	16

The case study included 9 female participants and 7 male participants. Most of the participants (56.25%) fell into the 30-39 age range, with the remainder equally divided among the 20-29 and 40-49 category (18.75%) and one user in the 50-59 category (6.25%). 50% of the participants live within 5km of the Queen West Triangle and an

additional 25% live within 10km. Only 12.5% of participants actually live in the Queen West Triangle, and the remaining users live within the GTA.

The last portion of this section is designed to determine the participant's computer and geographic literacy. 100% of the users strongly agreed or agreed to the statement 'I am comfortable with basic computer operating functions,' while 87.5% of users strongly agreed or agreed that they 'Learn new things easily on computers' (12.5% were undecided). Lastly, 75% of participants strongly agreed that they 'Have a good sense of direction and understand maps easily', while an additional 25% agreed.

The final part of the survey allowed participants to provide additional written feedback. Five users provided comments, listed in Table 4.8.

Table 4.8: Survey Part 5

5. Additional Feedback
Comment 1: The greatest strength of the tool, in my view,is facilitating a discussion about any kind of physical spatial location. There can be value for environmental applications such as forestry, geology. The greatest difficulty I had was navigating around the map and zooming in and out.
Comment 2: Too many technical challenges. It kept freezing after I created a login and downloading Java took a long time.
Comment 3: The interface needs to be way more user friendly. It is interesting but not fun to use.
Comment 4: - installation of the application was tedious and difficult - various 'information' layers were not that well constructed -- a google satellite map provides as much detail - issues were not well identified - experience of the survey was worthwhile
Comment 5: Argumap odd name. Only a working name? Must we argue? A good idea for urban planning, advocacy. I had problems with the magnification tool. I couldn't control the zoom in and zoom out to display what I wanted. Didn't contribute to the discussion. Nothing useful to say.

These comments provide valuable feedback with respect to understanding the impact of the Active 18 ArguMap, and also provide insight into the characteristics of the participants.

The aggregation of these results in the form of participation statistics, contribution content and survey results provide extensive and informative data that is analyzed and discussed in the following paragraphs to gain an understanding of the impact of the ArguMap application and possibilities for future development.

4.2 Analysis

The Active 18 ArguMap case study has provided a wealth of information that offers an excellent opportunity to understand the impacts of this tool in a number of different ways. To explore these varied implications, this discussion is composed of three aspects: general critique, technical experience, and engagement experience. In Part A, a general critique will assess the results of the case study, discussing advantages and disadvantages of specific elements of the study's research design. Part B discusses the users' technical experience, exploring how the user encountered the prototype and lessons learned. Lastly, part C focuses on the users' engagement experience, analyzing the ArguMap as a tool for public participation.

4.2.1 General Critique

The Active 18 ArguMap case study results have both encouraging and disappointing aspects. The most positive element of the results is the actual discussion generated by the application. The contributions contained excellent ideas and the beginnings of good dialogue between the participants. The contents of the contributions are certainly actionable and can be incorporated into Active 18's documentation.

However, the case study also contained some disappointing results. First, the functionality forming the very basis for the ArguMap tool – the ability to link comments to places within the map – was used only once of all the contributions. The major reason explaining this occurrence could be that the discussion related to the Queen West Triangle didn't necessitate spatial reference. While three of the 'starter' threads focused on the areas with proposed changes, the users tended to respond with opinions of general ideas for the area, not specific suggestions for locations within the area. This underlies the need to implement the ArguMap in situations where geography is very prominent and the discussion is more focused.

The second disappointing aspect of the case study was the number of participants. 16 individuals created logins (though only 12 contributed to the study) after a distribution of 200 flyers and a notice via the Active 18 email list of approximately 100 recipients. This is most likely a result of the case study's research design and the timing of the study. When the researcher contacted Active 18 in early April, the association had just completed a community charrette on March 5, 2006. This charrette was attended by the

steering committee (a strong group of influential professionals) and led by an experienced architect and urban designer. Prominent urban planners, designers, architects, development economists, landscape architects, cultural producers and other members of the community attended this one-day event to develop a community vision for the Queen West Triangle. If the case study were operating in conjunction with this charrette, it is most certain that the results would be different as the study would be attached to the excitement of the highly promoted event, and the ArguMap could have been an alternative to those that could not attend in person. As it stands, the application was launched after the charrette with the community vision document already published. Individuals involved in the charrette process may have found participating in the ArguMap discussion redundant. These people, with valuable insight into the situation, could have introduced specific detail that would have been informative for users unaware of the issue. In addition, operating the case study in conjunction with the charrette would provide an indication of the value of using ArguMap. Comparative studies of the number of participants and the type of contributions received in both the charrette and ArguMap could provide an understanding ArguMap's value as a tool of engagement.

The number of participants was also a result of the recruitment method. If an in-person training session or information session were organized, the number of participants and the type of data received would be different. As well, participation required leaving a valid email address which could have served as a deterent.

In addition, it was found that the timing of the case study after the charrette implied that while Active 18 was supportive of the study, they did not champion the project because it somewhat lacked context. This underscores the need to implement the ArguMap tool within the processes and needs of the community organization.

Finally, it should be noted that time was needed for the discussion to gain momentum. During the first week of the application's operation, there were very little contributions, as noted in section 4.1a. The first few registered participants would leave one comment, whereas those users registered near the end of the study period would leave multiple comments. This identifies the need to allow time for the discussion to build, and the value of having 'starter' threads to stimulate the discussion.

4.2.2 Technical Experience

The participant's technical experience can be divided into two phases: the initial start-up process (informed by the access statistics) and the participation process (informed by the participation statistics and the user survey).

The study's access statistics provide insight into the user's initial start-up process. The discrepancy between the numbers noted in section 4.1a indicates there were interruptions in the start of the application, of which the technical cause of this is not understood. In addition to understanding this discrepancy, improving other elements offer the potential for a more efficient and engaging user start-up process. The user experience to launch the application contained a number of barriers and challenges. First, the initial start page from the Active 18 website could have had a more complex and intuitive design. The start page was text-heavy and had basic design, not favourable characteristics for attracting individuals to use a new technology with which they are not familiar. A major challenge for many individuals was downloading Java. One user sent an email reporting a problem downloading Java: this individual was attempting to use the application at work and was not permitted to download Java on their machine, and therefore was unable to run the application. The user survey reported that 56.25% of users found accessing the ArguMap somewhat difficult or difficult. This identifies the need to create a more streamlined, user-friendly process to ensure that the user does not become disengaged before they even launch the application.

In terms of the user's participation process, although 16 users registered, only 12 contributed comments. This illustrates that people are interested in the issue (or the technology) but don't necessarily want to participate. In the additional feedback section of the user survey, one participant wrote, "Didn't contribute to the discussion. Nothing useful to say." This is to be expected as there will always be individuals that are interested in an issue, but do not want to engage in dialogue.

From the discussion and the user survey, it can be seen that once users have launched the application, the participation process became easier to navigate. Overall, the users were more comfortable with the discussion board aspect of ArguMap, and not as comfortable with the GIS aspect of the tool. Functions of the ArguMap that are similar to other applications present on the Internet were highly utilized and mostly rated 'easy' in

the user survey. These functions include creating a login, reading discussion threads and replying to posts. Users were comfortable engaging in an online discussion, as 4 new discussion threads were started and the average number of replies to threads was 2.44. The discussion illustrated complexity as higher-order replies were submitted. It is interesting that 8 of the 21 replies included the original thread text. Including this text in a reply has the potential to make the discussion more difficult to read, as it is necessary to scroll to the bottom of the contribution to read the new comments. This could be avoided by offering the option to include original text. Lastly, the comfort of the participants with the discussion board aspect of the ArguMap tool is demonstrated in the lack of errors. Only one user misused the tool by creating double postings. Allowing users to delete their own comments could reduce incidences of error (this function would need to be disabled as soon as replies become attached to comments).

It was more challenging for participants to use the GIS functions of ArguMap such as understanding the map, panning and zooming, and turning map layers on and off. The fact that these basic GIS functions presented a challenge to some users implies that using more complex functionality (such as linking a contribution to an object on the map) invariably would be difficult. In order for participants to use the spatial reference function, the tool-tips that provide understanding of the map and basic GIS functions need to be improved. Labeling the features of the map including the road names and buildings (instead of requiring the user to roll the mouse over each object for names to appear) would facilitate the user's understanding of the map. This is especially true in the case of the Queen West Triangle where the irregular shapes of the proposal sites present an unfamiliar perspective of the area. As well, the icons related to manipulating the map could be more expressive, especially those related to the unfamiliar functionality of linking contributions to objects. These icons could be bigger, use text and have a more informative tool-tip when the user places the mouse over the button. Furthermore, when a user starts a new thread or replies to a thread, the writing space could contain a prompt message such as "Is your comment related to a place on the map? Link your comment by clicking this icon, then click the location!", in addition to any original text. Lastly, the ability to incorporate pictures into the ArguMap, or the use of 3-D visualization would greatly facilitate spatial understanding. In essence, further research needs to occur to understand how to assist users in optimizing the GIS functions of ArguMap.

Thus, the user's technology experience indicates that while participants comprehend the discussion board aspect of the tool, further development is needed to increase understanding of the GIS aspects of ArguMap. The results of the survey illustrate mixed response to its overall ease of use. This data demonstrates the great potential for improving the technical components of the tool.

4.2.3 Engagement Experience

The ArguMap application provided a valuable and relevant platform for disseminating information regarding developments in the Queen West Triangle and gathering opinions on this subject. The user's engagement experience can be understood by examining the nature of the contributions, inferences of the participant's characteristics, and results of the participant survey.

The comments contributed by the users in the ArguMap discussion were intelligent and insightful. They demonstrate that ArguMap has a good capability for gathering public opinions on decisions related to space. These ideas could be incorporated into formal planning processes or could be used by a community organization as a source of data. The tool provided a platform for users to voice their opinions and respond to others. This specific discussion generated strong ideas illustrated by the reoccurring themes discussed in section 4.1b. However, the discussion needs to be placed within the context of the characteristics of the participants to attempt to understand the type of user the case study attracted, and the types of users excluded from the discussion.

The content of the contributions indicates that the users participating in the ArguMap discussion had a general understanding of urban issues and community development. Participants used informed language such as 'gentrification,' 'urban sprawl,' 'density,' 'sustainability,' 'urban planning,' 'map layers,' 'spatial location,' and 'official plan' illustrating their awareness of such concepts. The participant survey provides further insight into the nature of the users. The participants were comfortable with technology, as well as with maps. More than half the participants live in or within 5km of the Queen West Triangle. 50% of the participants were aware of the issue and/or Active 18 before the ArguMap experience, and a significant portion of the participants feel the changes in the area are very important or important to them. All of this

information infers a study group that is computer literate, comfortable with technology, and has a high level of awareness regarding urban planning issues.

The user groups not included in the study can be inferred. From this information, neither teenagers nor retired individuals participated in the study. This is especially important in the Queen West Triangle situation as Active 18 has noted that the majority of houses located on Dovercourt Road south of Queen are owned by (mainly retired) individuals of Italian and Portuguese descent. When the researcher hand-distributed flyers in this area, this observation was confirmed. These homeowners were polite, but were not aware of the developments and were confused by the idea of using the Internet to voice their opinions. The fact that all of the participants were comfortable with basic computer operating functions also speaks to the exclusion of individuals without access or knowledge of computers. This is an important recognition, as it is these individuals (most likely from lower income groups without access or knowledge of using online applications) that are most affected by the process of gentrification. As interest in development increases and property values rise, it is the marginalized groups of the community that will be forced to move or change their lifestyles in response to the changes. It is important to note that accessibility is more complex than access to a computer and the Internet. Ramasubramanian (2000) discusses the need for a 'critical world view.' It is not enough for these individuals to be taught how to use a computer; it is necessary to expose them to the ideas that compose the issue and ways of vocalizing their thoughts through writing. Only then does the technology have meaning and relevance.

In summary, the participants of this ArguMap case study represented a certain demographic that is computer literate and aware of urban processes. For a tool aiming at public participation, this highlights the lack of representation of the community and the challenges of accessibility. This inequality was mainly a result of the research design, dictated mainly by the restriction of time. Indeed, further studies could achieve a more representative milieu of opinions by operating initiatives such as a offering face-to-face workshops or getting more relevant community organizations involved.

The final element in understanding the user's engagement experience involves examining the participant survey. Overall, the application was very well received by the participants, with three-fourths of users replying agree or strongly agree to 'the tool is an

effective platform for gathering opinions.' Most notably, all of the users felt that 'the discussion was relevant to the issue.' This is important as a fundamental requirement of a public participation tool. More testimony supporting the ability of ArguMap to engage the public include a high proportion in agreement or strong agreement of 'comfort in voicing opinions by posting comments.' Overall, there was a fairly good response to questions related to becoming more engaged in the issue itself once the case study experience was complete. More than half the users felt they had a greater understanding of the issue, that their interest in the issue had increased since using ArguMap, and agreed that they felt more connected to the issue. This demonstrates the ability of the technology to truly engage the public in various processes.

This discussion has examined the case study in terms of research design, technological experience, and engagement experience. It illustrates a number of key learnings that must be taken into consideration for future development and application of ArguMaps, and may inform PPGIS research with respect to project implementation and challenges.

Chapter 5: Conclusions

This case study has afforded valuable insight into the challenges and benefits of using the ArguMap technology as a method of public participation. Like many other PPGIS applications, ArguMap offers the benefits of bringing GIS technology to those not familiar with the technology and offering a viable alternative to attending public planning meetings. As a web-based application ArguMap can be available at any time and can be accessed from any web-enabled location, allowing participation from a wider range of participants. The quality of the contributions made in the study illustrate that ideas generated through the tool is complex and easy to process. This study has also illustrated how ArguMap can generate ideas from the public that can be valuable in leveraging the position of community organizations.

The study has also underlined a number of challenges in using this technology. The main challenge is that of accessibility. The results illustrated that while users were comfortable with the discussion board aspects of ArguMap, they did not readily understand the GIS aspects of the tool. Therefore, there is a need to further research methods of making this functionality more user-friendly. If this 'tech-savvy' user group found this challenging, how much of a barrier would it present to other user groups with less computer know-how? This represents a great opportunity for further developments.

This study has also illustrated the importance of context and process. While the study was enthusiastically received by Active 18, it occurred during an unfavourable time. This highlights the importance of using technology during the most advantageous context, and ensuring it is highly integrated into the community organization's process so that they play a strong role in championing the application and they find value in its results.

A number of future recommendations can be made with regards to ArguMap. The first recommendation focuses on implementing an improved version of the prototype in a case study situation that has a greater emphasis on specific spatial elements. A study of a site with specific proposals for a variety and number of objects (buildings, roads, etc.) within the map would necessitate linking contributions to places within the map. In this manner, such a case study could provide a stronger quantitative analysis of the utility of the functions of the application, as well as gathering results that are more directed and

actionable. Further research could examine how these results affected development outcomes as well.

A second recommendation involves understanding how an urban planner or community organization would use the results of the ArguMap. What types of results are most valuable? How does the data get processed and analyzed? What additional functionality (such as a report generator) would benefit planners and community organizations? In this manner, the application could be developed further to benefit the intended user groups.

A final recommendation focuses on how to package the ArguMap tool so that it can be fully implemented from installation to study completion by targeted provider groups, such as urban planners and community groups. Currently ArguMap is a research prototype, not yet market ready. What type of process would need to be designed so that non-programmers could install the application? What barriers does the provider encounter? Could an installation interface be designed to guide the upload process? At the writing of this paper, an improved version of the ArguMap using Google Maps is in development. This would reduce the amount of GIS knowledge needed to operate the technology. Research in this direction would move the technology towards true integration in relevant sectors.

As technology continues to advance, so does our ability to develop it into manifestations that benefit our societies. While challenges are ever present, so is the desire and ability to overcome these barriers and create valuable, relevant solutions. The Active 18 ArguMap is an illustration of this, and can only serve to inform improvements and solutions for future developments.

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Appendix 1: Active 18 ArguMap HTML Instruction Page (plain text format)

Welcome to the Active 18 ArguMap!

This discussion uses ArguMap, an innovative online discussion tool that adds a new element to conventional discussion forum structures with the ability to link your comments to places on a map. ArguMap is being tested as part of a research project for the Masters in Spatial Analysis program at the University of Toronto and Ryerson University. The study is examining the utility of ArguMap to generate dialogue and engage the community in the issues surrounding the development of the Queen West Triangle. The ArguMap is still in development, and this site is testing its prototype. Any questions can be directed to argumap@gmail.com. We look forward to your feedback!

How to Use ArguMap:
The following information will help you understand how to use the ArguMap. The sections are:
1. Launch the application
2.Create a user account
3. Read the discussion
4. Join the discussion

To bypass this information and go straight to the ArguMap click here.

By participating in this discussion you agree to the terms and conditions stated in the consent form.

How to Use ArguMap

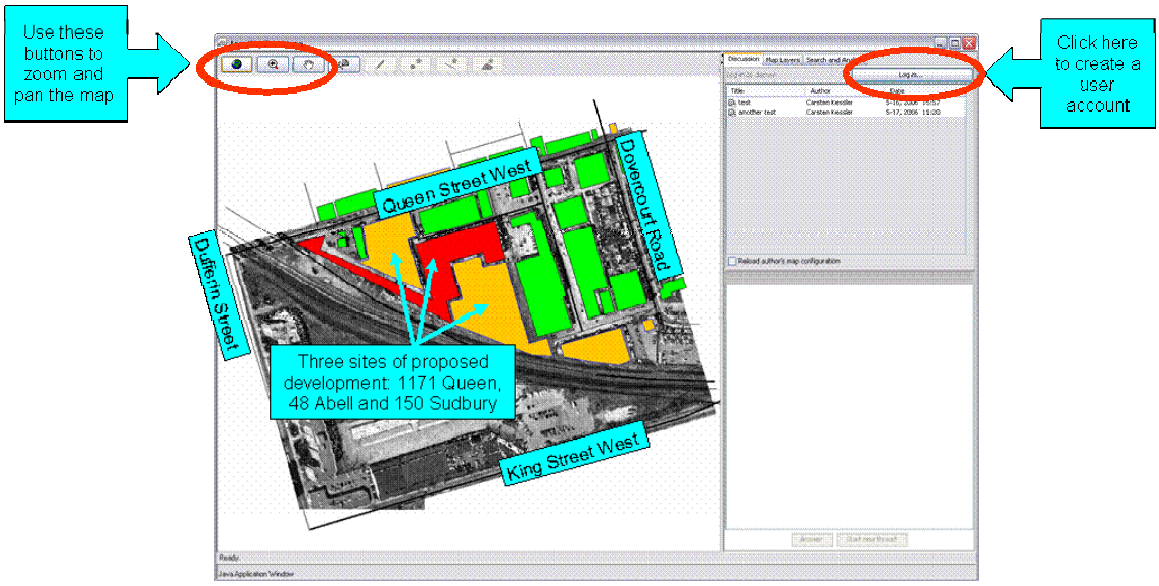
1. Launch the ArguMap application.

You will need Java 2 Platform to run ArguMap. If you don't have Java, you can download it for free from the following sites:
Java for PC Users (Download JRE 5.0 Update 6 Runtime Environment)
Java for Mac Users

2. Create a user account.

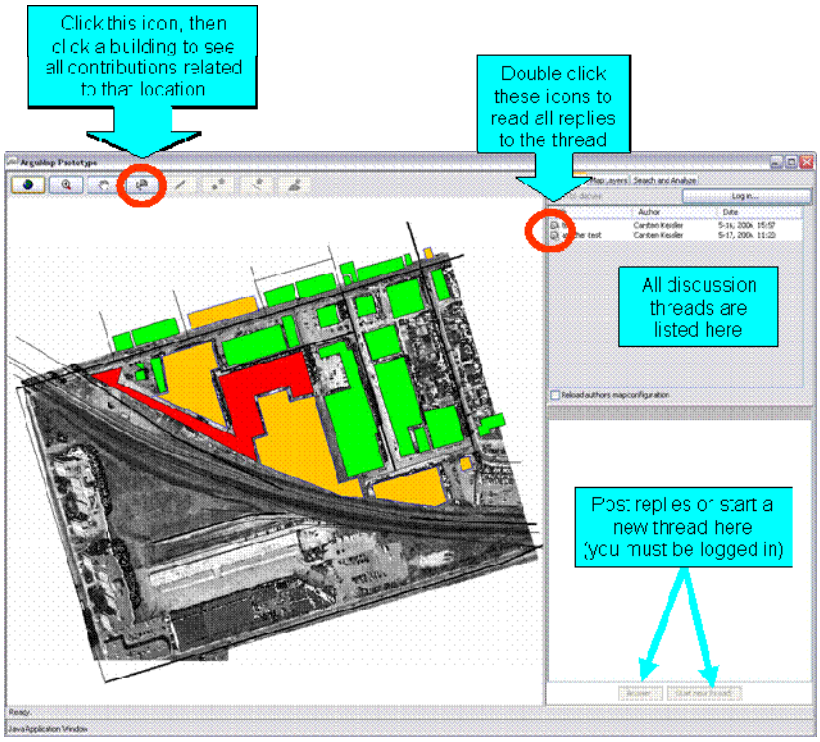
The user interface will resemble the image below. Create a username and password to be able to contribute to the discussion. Your comments will be identified by your initials. You will be asked to input a valid email address. This email will be kept confidential. You will only be contacted once via email to inform you when the discussion is about to close (mid July) and to request your voluntary feedback in a 5 minute online survey.

Locate yourself within the map: find the major streets, and the three proposed developments. Roll the mouse arrow over the other buildings to read their labels.

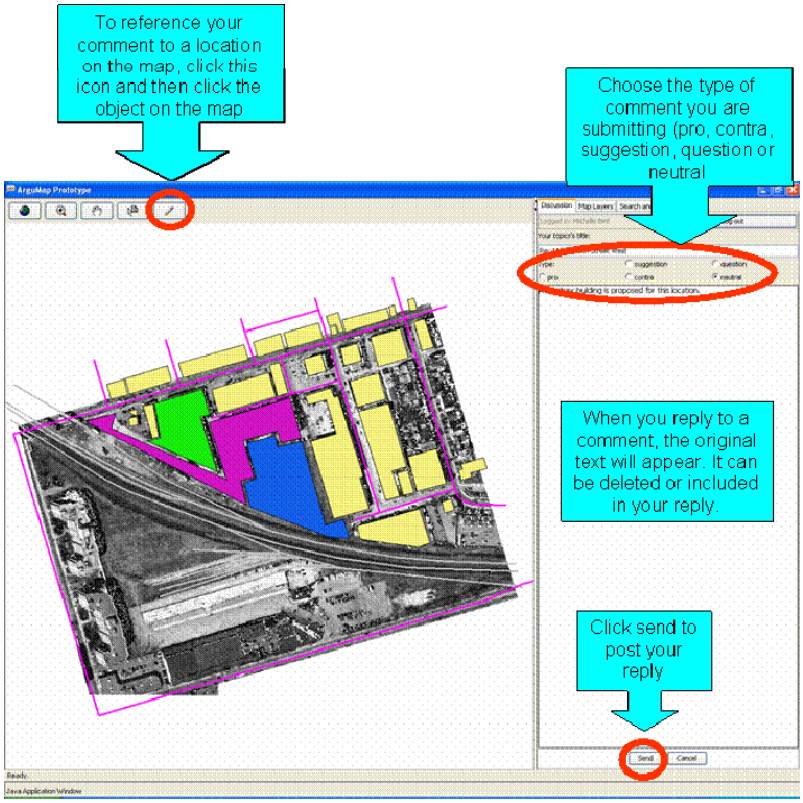


3. Read the discussion.

Read the current discussion threads by double clicking the icon to the left of the thread. You can read all the comments related to a specific building by clicking the icon in the upper left part of the screen called 'Select Contributions by Reference.'



4. Join the discussion.
When you answer a thread, you can use the pencil icon to attach your comment to a place on the map.



[Click here to start the ArguMap application!]

Appendix 2: Active 18 ArguMap Case Study Informed Participant Consent Form

The purpose of this research is to test the Argumap software, a map-based discussion forum for spatial decision support situations. This research project is supervised by Professor Claus Rinner of the University of Toronto. Partial funding is provided by the GEOIDE Network of Centres of Excellence. The investigator on this project is Masters of Spatial Analysis candidate Michelle Bird.

Participation in this study is open to the general public; you are invited to participate in this study in order to contribute your valuable opinions and perspectives. It is noted that participation in this study is voluntary. You have the right to refuse to participate in this study, and to withdraw from the study at any time, without any negative consequences.
As a participant, you will have access to all functions of the Argumap tool while it is operational. The Argumap tool provides a neighbourhood map and an online discussion forum, in which you can express comments and concerns about current urban planning issues. Please note that the discussion will be moderated by the investigators and the investigator reserves the right to remove inappropriate comments (such as those with explicit language or any form of discrimination). You will also have an opportunity to provide feedback through a questionnaire that will be made available shortly after the end of the participation period.

There are no foreseeable risks or inconveniences by participating in this study. Potential benefits include learning about development issues in the Queen West Triangle and about current research in spatial decision support systems. There is no financial compensation for participating in this study.

Contributions (expressed comments and concerns) will be stored using an alphanumerical code consisting of your initials in combination with the date of the contribution. This information may be used in publications. Participant names and email addresses are required to set up user accounts, and these data are stored in a server-side database that is password-protected and can only be accessed by the supervising professor and research investigator. Data will be maintained up to one year after the end of the participation procedures in order to allow for the analysis of the case study, and will be destroyed afterwards.

By reading this consent form, you agree to the following terms:

- I agree to participate in the study which just has been described to me.
- I have read and understood the information presented above about the procedures and risks involved in this study and have received satisfactory answers to my questions related to this study.
- I understand that if I have any questions or concerns resulting from my participation in this study, I may contact the experimenter or the laboratory director (Dr. Claus Rinner, 419-978 6047, rinner@geog.utoronto.ca, Sidney Smith Hall room #5068).
- Data on my performance will be used exclusively for scientific purposes and will be recorded and maintained in confidence by, and available only to Dr. Rinner and researchers working under her supervision.
- I am aware that I may withdraw from the study at any time without any negative consequences.

I have read the informed consent form and have had the nature of the study explained to me. All questions have been answered to my satisfaction. With full knowledge of all foregoing I agree, of my own free will, to participate in this study.

Appendix 3: Participant Survey

1. The Active 18 Issue

Have you been to the Queen West Triangle Area?

	Response Percent	Response Total
Yes	81.25%	13
No	18.75%	3
Total Respondents		16

Were you aware of Active 18 and/or the proposed neighbourhood developments before this experience?

	Response Percent	Response Total
Yes	50.00%	8
No	50.00%	8
Total Respondents		16

Please rate your opinion of the importance (to you) of the development issue and the proposed changes in the Queen West Triangle area.

	Response Percent	Response Total
Very Important	31.25%	5
Important	37.50%	6
Undecided	12.50%	2
Somewhat Important	18.75%	3
Not Important	0.00%	0
Total Respondents		16

2. Creating an Engaging Discussion

After using the Active 18 ArguMap:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I have a greater understanding of the issue	12.5% (2)	56.25% (9)	12.5% (2)	18.75% (3)	0% (0)
I felt comfortable voicing my opinions by posting comments.	12.5% (2)	75% (12)	12.5% (2)	0% (0)	0% (0)
The discussion was relevant to the issue.	12.5% (2)	87.5% (14)	0% (0)	0% (0)	0% (0)
My interest in the developments of the Queen West Triangle has increased since engaging in the discussion.	0% (0)	62.5% (10)	18.75% (3)	18.75% (3)	0% (0)
I feel more connected to the issue.	0% (0)	68.75% (11)	18.75% (3)	12.5% (2)	0% (0)
The tool is an effective platform for gathering opinions.	50% (8)	25% (4)	12.5% (2)	12.5% (2)	0% (0)
			Total Respondents		16

3. Using the ArguMap Tool

Please rate your opinion on the ease of use for the following functionality:

	Very Easy	Easy	Somewhat Difficult	Difficult	I did not use this function
Accessing the ArguMap from the Active 18 webpage	12.5% (2)	31.25% (5)	25% (4)	31.25% (5)	0% (0)
Creating a username and logging in	12.5% (2)	68.75% (11)	6.25% (1)	12.5% (2)	0% (0)
Understanding the map (streets, buildings)	0% (0)	50% (8)	50% (8)	0% (0)	0% (0)
Reading the various discussion threads	18.75% (3)	81.25% (13)	0% (0)	0% (0)	0% (0)
Zooming and moving around the map	0% (0)	25% (4)	37.5% (6)	37.5% (6)	0% (0)
Starting a new discussion thread	0% (0)	62.5% (10)	12.5% (2)	0% (0)	25% (4)
Replying to a comment (without referencing the map)	0% (0)	81.25% (13)	6.25% (1)	0% (0)	12.5% (2)
Replying to a comment (with a reference to the map)	0% (0)	6.25% (1)	6.25% (1)	0% (0)	87.5% (14)
Reading all comments related to a specific building	6.25% (1)	12.5% (2)	0% (0)	0% (0)	81.25% (13)
Turning map layers on and off	0% (0)	12.5% (2)	25% (4)	12.5% (2)	50% (8)
Overall participation	0% (0)	50% (8)	31.25% (5)	18.75% (3)	0% (0)
			Total Respondents		16

4. Demographics

Please select your gender.

	Response Percent	Response Total
Male	43.75%	7
Female	56.25%	9
Total Respondents		16

Please select your age range.

	Response Percent	Response Total
0-19	0%	0
20-29	18.75%	3
30-39	56.25%	9
40-49	18.75%	3
50-59	6.25%	1
60+	0%	0
Total Respondents		16

Where do you live?

	Response Percent	Response Total
Within the Queen West Triangle	12.50%	2
Within 5km of the Queen West Triangle	50%	8
Within 10km of the Queen West Triangle	25%	4
Within the Greater Toronto Area	12.50%	2
Outside the Greater Toronto Area	0%	0
Total Respondents		16

Please select the option that most reflects your opinion to the following statements:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I am comfortable with basic computer operating functions.	75% (12)	25% (4)	0% (0)	0% (0)	0% (0)
I learn new things easily on computers.	43.75% (7)	43.75% (7)	12.5% (2)	0% (0)	0% (0)
I have a good sense of direction and understand maps easily.	75% (12)	25% (4)	0% (0)	0% (0)	0% (0)
			Total Respondents		16

5. Additional Feedback

Comment One: The greatest strength of the tool, in my view,is facilitating a discussion about any kind of physical spatial location. There can be value for environmental applications such as forestry, geology. The greatest difficulty I had was navigating around the map and zooming in and out.
Comment Two: Too many technical challenges. It kept freezing after I created a login and downloading Java took a long time.
Comment Three: The interface needs to be way more user friendly. It is interesting but not fun to use.
Comment Four: - installation of the application was tedious and difficult - various 'information' layers were not that well constructed -- a google satellite map provides as much detail - issues were not well identified - experience of the survey was worthwhile
Comment Five: Argumap odd name. Only a working name? Must we argue? A good idea for urban planning, advocacy. I had problems with the magnification tool. I couldn't control the zoom in and zoom out to display what I wanted. Didn't contribute to the discussion. Nothing useful to say.

Appendix 4: Active 18 ArguMap Contributions

Each discussion thread is identified by its title. When 2nd and 3rd order contributions include the original thread text, this text is identified by the colour gray. The text has not been altered in any fashion. In parenthesis at the beginning of the contribution initials identify the author, and the type of contribution is also noted.

Thread 1: 1171 Queen West Proposal

(author - neutral) Two residential buildings have been proposed for this site. A ten storey building with retail at grade and residential above is proposed on Queen Street West, and a 26-storey residential tower is proposed for the southern portion of the site.

> (D.B. - suggestion) Re: 1171 Queen Proposal Two residential buildings have been proposed for this site. A ten storey building with retail at grade and residential above is proposed on Queen Street West, and a 26-storey residential tower is proposed for the southern portion of the site.==========This seems like a good idea, on the basis of the residential configuration. Height is a good way to overcome the nastiness of railway tracks, as the majority of tenants will be living high enough above them for it not to be a problem.In terms of retail though, one can only hope that the configuration of the Queen West frontage will echo what can already be found to be working along that street.Access is a big deal here too- maybe a street should extend south from Queen- just east of Northcote, and linking up with Abell. One of the challenges of the site is that it's only loosely hooked up with the surrounding street grid. For any and all of these projects to be a success for Queen West and for the area as a whole, attention should be paid to putting more streets into the triangle, and maybe even connecting with the other side of the tracks (it looks like there are some big buildings there, along Dufferin).
>
> (K.R. – question) Re: 1171 Queen Proposal How would a 26-storey tower feel when you are walking around this area? I agree that we should be increasing density in general in Toronto to reduce urban sprawl, but I think it is also important to think about scale. Tall buildings can make an area lose its feeling of connectivity and intimacy....they block out the sun creating shadows.

Thread 2: 48 Abell Proposal

(author – neutral) This site consists of two parts. The first part contains the Lamp Building, a U-shaped 3-storey brick building that formerly housed industrial activities and now contains live-work units and light industrial/commerical enterprises. The second part of the site is a linear piece of land extending along the railway corridor (currently vacant).The proposed redevelopment consists of 4 parts:1. A 25-storey (399 unit) residential building facing Abell Street with live-work units facing the private lane;2. A 19-storey (214 unit) affordable rental housing building on the southwest portion of the site;3. A 3-storey (5 unit) live-work building on the northwest corner of the site;4. A commercial parking lot.

(K.R. – contra) Re: 48 Abell Proposal If there is already a building here, why would it get torn down just to build another one? When I've walked by this building, it looks like it is in good shape. It is more sustainable to maintain existing structures to reduce construction waste.

Thread 3: 150 Sudbury Proposal

(author – neutral) This site is currently vacant. The proposed redevelopment consists of a 16-storey residential building at the southest portion of the site, and three rows of 5.5 storey residential buildings in townhouse form. The proposal also calls for the extention of Sudbury Street.

(D.B. – question) Re: 150 Sudbury Proposal This site is currently vacant. The proposed redevelopment consists of a 16-storey residential building at the southest portion of the site, and three rows of 5.5 storey residential buildings in townhouse form. The proposal also calls for the extention of Sudbury Street.==========What does the Sudbury street extension call for? Will it line the tracks and curve northwards up to Queen (via Abell)? Will it cross the tracks at some point (perhaps where the 48 Abell and 150 Sudbury proposals meet by the tracks)?

(J.B. – question) Re: 150 Sudbury Proposal I would like to see the plans for the townhouses. are they going to be the same style as the ones further south on dovercourt? their uniform design is boring and ugly. there is such an opporunity to create something more interesting.

(T.J. – suggestion) Re: 150 Sudbury Proposal This site is currently vacant. The proposed redevelopment consists of a 16-storey residential building at the southest portion of the site, and three rows of 5.5 storey residential buildings in townhouse form. The proposal also calls for the extention of Sudbury Street.the site is vacant! so use that to it's advantage. here's the opportunity to keep plan some greenspace. i like the idea of maintaining some smaller rise/townhouse spots but agree that if they all look the same in the same way as the nearby townhouses it can all look a bit too like Pleasantville.

(M.L. – neutral) Re: Re: 150 Sudbury Proposal This site is currently vacant. The proposed redevelopment consists of a 16-storey residential building at the southest portion of the site, and three rows of 5.5 storey residential buildings in townhouse form. The proposal also calls for the extention of Sudbury Street.the site is vacant! so use that to it's advantage. here's the opportunity to keep plan some greenspace. i like the idea of maintaining some smaller rise/townhouse spots but agree that if they all look the same in the same way as the nearby townhouses it can all look a bit too like Pleasantville. This vacant space is huge! I'd love to see a community garden space spring up in this not so little pocket. With all the condo development and so-called 'higher end' businesses opening up, it would be really refreshing to have a space where people in the area, (regardless of when and where they moved), could meet, organize, plant things, grow things, learn about

gardening and learn about each other :) People coming together to form a community doesn't always happen on it's own. This space could provide a great catalyst for neighbourhood development.

Thread 4: What do you want to see?
(author – neutral) What do you want to see for this neighbourhood? Do you live in the Queen West Triangle? What changes have you already seen? How should the area grow and evolve?

(H.B. – neutral) Re: What do you want to see? What do you want to see for this neighbourhood? Do you live in the Queen West Triangle? What changes have you already seen? How should the area grow and evolve?I do not live in the Queen West Triangle but I do spend time in the neighbourhood and I would really hate to see it develop as Yorkville has. I saw the Queen West area develop in the past 5 years as it turned into toronto's new trendy area. It is a neighbourhood which has become a home for culture and arts (art galleries, interior design, fashion design...).I do not know enough about the proposed building/redevelopment projects to deeply criticize them, but I do have an aversion to seeing the blossoming area transform itself in a high-rise parking-lot. Development is good but it has to be sustainable and also pleasing for the eyes. otherwise we will end up with a city that looks like Toronto's waterfront!

(T.J. – contra) Re: Re: What do you want to see? What do you want to see for this neighbourhood? I have lived in this area for the past 12 months (and nearby for 3 yrs) and even in that time the changes have been pretty constant - from the drake/gladstone renovations, starbucks, trendy restaurants etc. while a few more brunch spots has been really welcome, i fear that new developments have more of an upmarket feel than a low key, funky spot. Polished wood and fancy cocktails instead of a mish mash of laminated second hand furniture and affordable prices. i know quite a few people who live in the area who would never go to some of the newer places because they are a too expensive. it is of course attracting a clientele from other parts of TO to the come down to the new up & coming area but it is unfortunately also driving out some people who have lived here and given to the community for years. i'd love to see some green space - some public space ESPECIALLY if high rises are being built. bellwoods isn't so far away, but it would be nice to have a spot in this triangle where people can hang out on a sunny day. unfortunately i can see a whole batch of condos being built and the only consideration for green space being a condopass access only pool and bbq area that is only open to those trendy young folk who decide to buy and live in the "oh so trendy queen west area"

(N.B. – neutral) Re: What do you want to see? What do you want to see for this neighbourhood? Do you live in the Queen West Triangle? What changes have you already seen? How should the area grow and evolve?I don't live in this area and don't really know it. I understood there were a lot of changes this past few years with some renovations. It is becoming fancier but I think it should stop there. If it

was an area for artists, spaces for them should be kept. Also I don't think having high-rise building in this area would look good. I would imagine more like a public square where people can gather...

(S.M. – neutral) Re: What do you want to see? What do you want to see for this neighbourhood? Do you live in the Queen West Triangle? What changes have you already seen? How should the area grow and evolve?It is apparent that this neighbourhood has gone through the process of gentrification. The issue however is, how much can the Queen West Triangle be gentrified without losing it's "culture". By culture I mean the various cultural shops as well as the retailers who both live and work in the community. The Queen West Triangle needed a change in order to evolve into a financially and socially viable community. I have seen the difference that new bars as well as restaurants have had on the community. That being said it is my hope that the new changes are deemed "accessible" to both the new occupants of the neighbourhood as well as the older ones.

(A.R. – suggestion) Re: Re: Re: What do you want to see?I completely agree that this area more than high rises need more What do you want to see for this neighbourhood? I have lived in this area for the past 12 months (and nearby for 3 yrs) and even in that time the changes have been pretty constant - from the drake/gladstone renovations, starbucks, trendy restaurants etc. while a few more brunch spots has been really welcome, i fear that new developments have more of an upmarket feel than a low key, funky spot. Polished wood and fancy cocktails instead of a mish mash of laminated second hand furniture and affordable prices. i know quite a few people who live in the area who would never go to some of the newer places because they are a too expensive. it is of course attracting a clientele from other parts of TO to the come down to the new up & coming area but it is unfortunately also driving out some people who have lived here and given to the community for years. i'd love to see some green space - some public space ESPECIALLY if high rises are being built. bellwoods isn't so far away, but it would be nice to have a spot in this triangle where people can hang out on a sunny day. unfortunately i can see a whole batch of condos being built and the only consideration for green space being a condopass access only pool and bbq area that is only open to those trendy young folk who decide to buy and live in the "oh so trendy queen west area"

(A.R. – neutral) Re: Re: Re: Re: What do you want to see? I completely agree that this area, more than high rises, needs more green spaces. Especially the train tracks area, it has been a 'brown space' ever since I have lived in Toronto. There is a need for spaces where the community can interact.

Thread 5: What makes the Queen West Triangle unique?

(author – neutral) Voice your opinion on the elements that define the Queen West Triangle as a neighbourhood.

(A.C. – neutral) Re: What makes the Queen West Triangle unique? this is a formerly industrial area with an interesting opportunity.i have taken my dog on walks along the railway tracks for many years. for me one of the most unique features of the railway corridor is the excellent view of the downtown.i would suggest that a bike/walking path be created that basically follows the north edge of the railway line.additionally, there should be some consideration placed on pedestrian linkages that allow for passage from the north to the south side, probably at Sudbury St.thanks,Andrew C.

(T.J. – pro) Re: Re: What makes the Queen West Triangle unique? this is a formerly industrial area with an interesting opportunity.i have taken my dog on walks along the railway tracks for many years. for me one of the most unique features of the railway corridor is the excellent view of the downtown.i would suggest that a bike/walking path be created that basically follows the north edge of the railway line.additionally, there should be some consideration placed on pedestrian linkages that allow for passage from the north to the south side, probably at Sudbury St.thanks,Andrew C.- an industrial area with such a close geographical link to the strong artist community. i think a bike/walking path would be a great idea. why not use the talent of local artists to incorporate the tracks and some of the old industrial area with access to a park/play area, art structures and yes keeping the view of the city. done right, it could be developed as a safe and pedestrian/dog friendly area of TO while retaining some of the dirty and grungier aspects of the area (in a good way)

(A.R. – suggestion) Re: What makes the Queen West Triangle unique?One of the buildings that I like the most and that I a Voice your opinion on the elements that define the Queen West Triangle as a neighbourhood.

(A.R. – neutral) Re: Re: What makes the Queen West Triangle unique? One of the buildings that I like the most and that I appreciate in Toronto is the Gladstone Hotel. I remember the warehouse being used by artists as a studio. The community had a life on its own even before this sudden 'development project.' So I would like to see more information given to the community about the pros and cons of such a project.

Thread 6: Drake Hotel

(author – neutral) I think this area really started to change when the Drake Hotel was renovated. Since then the area has received more attention and has become more popular. I don't live in the area, but I've noticed there are other new trendy businesses opening on this stretch.

(T.J. – suggestion) Re: Drake Hotel - absolutely the drake has changed the area - or been the most noticeable (most easily blamed/credited) change for this area from a dodgier yet funky area of galleries and divey bars to such a trendy spot for the fashionable folk of TO. their advertising alone is incredible and the area is now referred to as 'just by the drake' - whether you like it or not. personally i

prefer more of the old mix of young folk, older settled families who have been here for years and the assortment of freaks who wander around the streets. further west in parkdale the change is also happening with the area becoming less dangerous and more populated during the evenings, but it is also becoming so much more expensive and will i think eventually drive out many of the artists and local characters who have helped form this area. i'd like to see some kind of "active prevention" at work too to enforce some of the old feeling - community activites, drop in art centres and a couple of more casual pub places where locals can hang out on the patio, drinking beer and talking rubbish without all the pretentious "there to see or be seen" scenesters (seensters?) NOT a gabbys or chain pub, but a really cool, unpretentious spot to chill out no matter what you're wearing or who you are - with a mix of people of all ages, backgrounds and demographics - the chic and the freaks

(M.L. – neutral) Re: Re: Drake Hotel -I agree. It would be great to see some development 'just by the Drake' that was a little more down to earth and 'neighbourhoody' - development that actually reflected the community already there and not just the big money moving in. How possible is this though at this point in time? In the couple of years since the Drake's arrival, I would guess that property values around there on Queen have risen, with current landowners seeing a great opportunity to make themselves a good buck. This makes me feel as if the gentrification process has gone past the point of no return for that little stretch of Queen, pushing that arty/independant/community possibilities further west or somewhere else. It would be great to halt that before we're overrun a la Queen/Spadia in ten years time.

(A.R. – neutral) Re: Re: Re: Drake Hotel -I agree. It would be great to see some development 'just by the Drake' that was a little more down to earth and 'neighbourhoody' - development that actually reflected the community already there and not just the big money moving in. How possible is this though at this point in time? In the couple of years since the Drake's arrival, I would guess that property values around there on Queen have risen, with current landowners seeing a great opportunity to make themselves a good buck. This makes me feel as if the gentrification process has gone past the point of no return for that little stretch of Queen, pushing that arty/independant/community possibilities further west or somewhere else. It would be great to halt that before we're overrun a la Queen/Spadia in ten years time. I agree in some ways, but I would like to add that the area became more accessible for different types of music.

(A.R. – neutral) Re: Re: Re: Re: Drake Hotel I agree in some ways, but I would like to add that the area became more accessible for different types of music.

Thread 7: Dogs

(J.B. – neutral) one of my first thoughts after reading all the proposals for these new buildings - a lot of people means a lot of dogs! it seems like everyone wants to have a

dog, judging from the population you encounter on any given day in trinity bellwoods park. it doesn't look like there are any parks planned for this area.....

Thread 8: People Play

(I.A. – suggestion) I dont live in the area, but I've "played" there at night and if the proposal is more living space that means more open space. People need a place to "play". That means green grass growing, big trees and recreation. (whether its bike, skateboard, roller or otherwise.) Is that in consideration?

> (T.J. – pro) Re: people play I dont live in the area, but I've "played" there at night and if the proposal is more living space that means more open space. People need a place to "play". That means green grass growing, big trees and recreation. (whether its bike, skateboard, roller or otherwise.) Is that in consideration?PLEASE, PLEASE, PLEASE developers, people with the big bucks, don't forget the basic need for play space for grownups as well as children, dogs and everyone. Grass, trees, space is all really necessary in this area

Thread 9: Work Space

(B.R. – neutral) From what I can tell the proposed developments don't include any genuine work space. They do call for some live/work but due to the proximity to residential as well as the size, many forms of work would not be permitted or possible. The city planning department considers live/work to be residential and the official plan calls for the development of the area to be employment neutral. I support increased density and development but it is also vital to provide space for the artist studios, cultural industries, small businesses and light industrial that are in the neighborhood and perhaps even to make up for some of the work space that has been lost to condo development in other parts of the city.