Online engagement – linking their digital world to ours

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1 Introduction

People who attend stakeholder and community engagement activities often fit into one of three categories – retirees and people with time of their hands, people who stand to lose something of value to them and people who are passionate about a cause or issue (and your project just happens to fit into this category). They are the ultra-motivated, the people who turn up to meetings and displays and unfortunately the people who skew our engagement data as they are not representative of the broader population.

The rest of us sit in the "I should get involved but I'm too busy", the "that's kind of interesting, but not enough to make me do anything", the "I planned to go but I forgot" or the oblivious to the entire situation category. It's this larger group of people that we're missing through traditional approaches to engagement and they are the most important to ensuring representative input is fed into our planning processes. To engage these people we have to understand how to make it easy for them to participate in the discussion especially when they are usually time poor, they want to give and get information quickly and they now carry their digital life with them wherever they go.

The other side of the story is that it's time consuming, and often difficult, to translate rafts of qualitative data gained through engagement processes into something meaningful that we can use to inform planning decisions.

To address both these issues, an online e-engagement tool named Collaborative Community Map was developed to give stakeholders the opportunity to provide meaningful input into spatial planning processes. It was borne out of a desire to gather a more representative data set from stakeholders by allowing people to participate in engagement activities at a time and place that suits them. It is a light weight mapping application that is viewed in a standard internet browser and uses the Google Maps interface as its source of mapping data. It allows people to participate in engagement activities and provide information from their own computers, thus broadening the reach of engagement programs. It gathers spatially located data to assist project teams in mapping constraints and concerns associated with planning and design proposals by enabling stakeholder comments and their associated locations to be mapped. These can then be drawn into a GIS environment for further analysis and visualisation.

This paper explores a number of case studies where the Collaborative Community Map was used during planning processes. It shows how by linking their digital world to ours we have gathered more representative datasets, made the engagement process more transparent, broadened the reach of our engagement program and gained valuable spatial data which has helped us to better understand the places and spaces we are planning. This approach is applicable to any spatial planning process.

Visit www.collaborativemap.org to view the mapping tool.

2 Engaging with stakeholders and the community

We plan places for people, so it makes sense that the people we are planning for are given the opportunity to input into the planning process. As society evolves we are becoming more interested in and able to make our voices heard. As planners it is important that we harness this non-technical expertise to improve our projects as we progress planning, rather than just standing and defending our expert choices against public opposition once the planning process is complete.

We operate in planning systems that usually have some form of legislated stakeholder and/or community consultation process wrapped around them. In my experience, most of these legislated processes occur at the end of the planning process and by only doing what is required we are missing the opportunity to improve our planning.

Arnstein's seminal paper 'A ladder of citizen participation' (1969) has shaped the practice of modern public participation. Her approach showed a spectrum of citizen involvement from manipulation through to citizen control. This ladder has further evolved in recent years and still forms the basis of the International Association for Public Participation's (IAP2) Public Participation spectrum (www.iap2.org) as shown in Figure 1. The IAP2 spectrum is the current dominant framework for public participation. The relationship between the two engagement outlines is shown in Table 1.

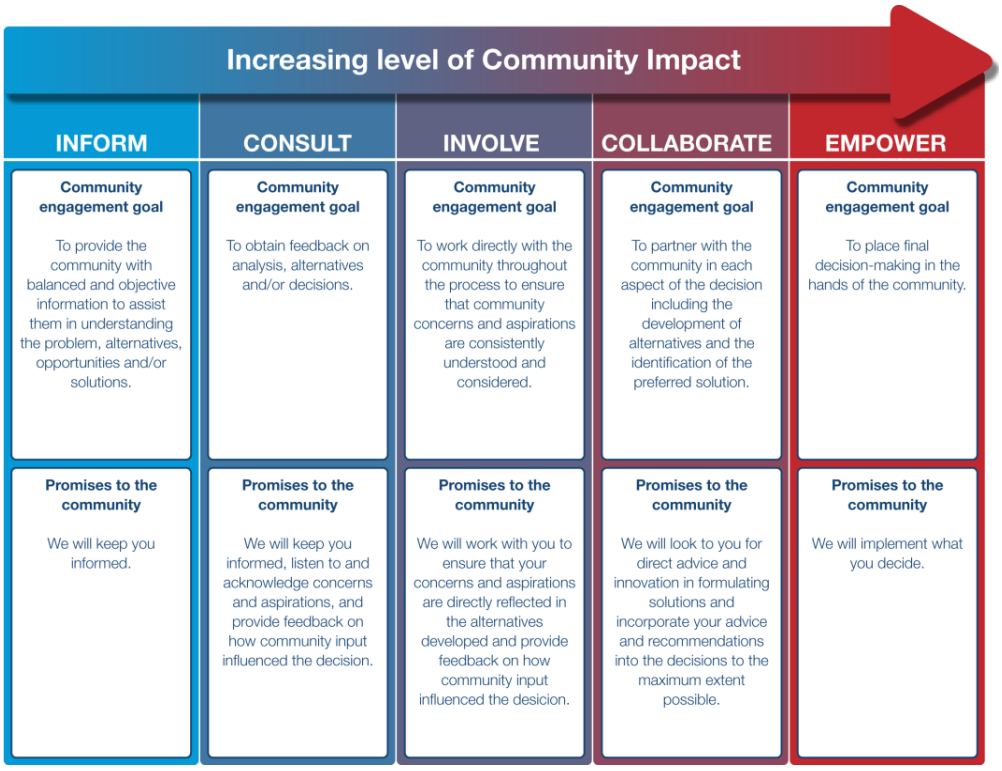

Figure 1: IAP2 Public Participation Spectrum ©

Ladder of citizen participation (1969)	IAP2 Public Participation Spectrum (2004)
Citizen control	n/a
Delegated power	Empower
Partnership	Collaborate
Placation	Involve
Consultation	Consult
Informing	Inform
Therapy	n/a
Manipulation	n/a

Table 1 Ladder vs. spectrum

We've moved on from a time where people could be manipulated into thinking in certain ways or just allowed to vent as a form of therapy, into a space where those who are interested and willing to get involved can have a more meaningful discussion about the issues at hand. It could even be argued that the 'inform' level of the IAP2 spectrum is no longer accepted as a suitable means of engaging with people about planning projects.

At the same time that people's expectations are changing about how they should be able to participate in planning processes, people's access to information via the internet and their constant connectedness to social media presents opportunities to engage in new ways.

Engaging people online could fit into any level of the IAP2 spectrum, it just depends how it is undertaken. Collaborative Map is often used as a *consult* or *involve* level engagement tool to gather information from people about what they need/want prior to planning starting or to gather feedback on plans once they have commenced. That said, it is one tool in the overall engagement toolkit and does not replace face-to-face engagement methods.

3 About Collaborative Community Map

Collaborative Map is an online engagement tool and enables us to gather a more representative data set from stakeholders by allowing people to participate at a time and place that suits them. Through using Google Maps, the familiar interface allow people to engage quickly with the tool and use Google Map's features such as street view as part of the engagement process. More information such as design options or planning layers can be loaded on to the map depending on the level and type of engagement required. The comments that are placed with the tool can also linked with social media such as Facebook and Twitter to further broaden the reach of stakeholders.

The data that is gathered is spatially referenced and directly assists project teams with mapping the constraints and concerns associated with the planning and design proposals from the stakeholder comments. These comments can be drawn into a GIS environment for further analysis and visualisation.

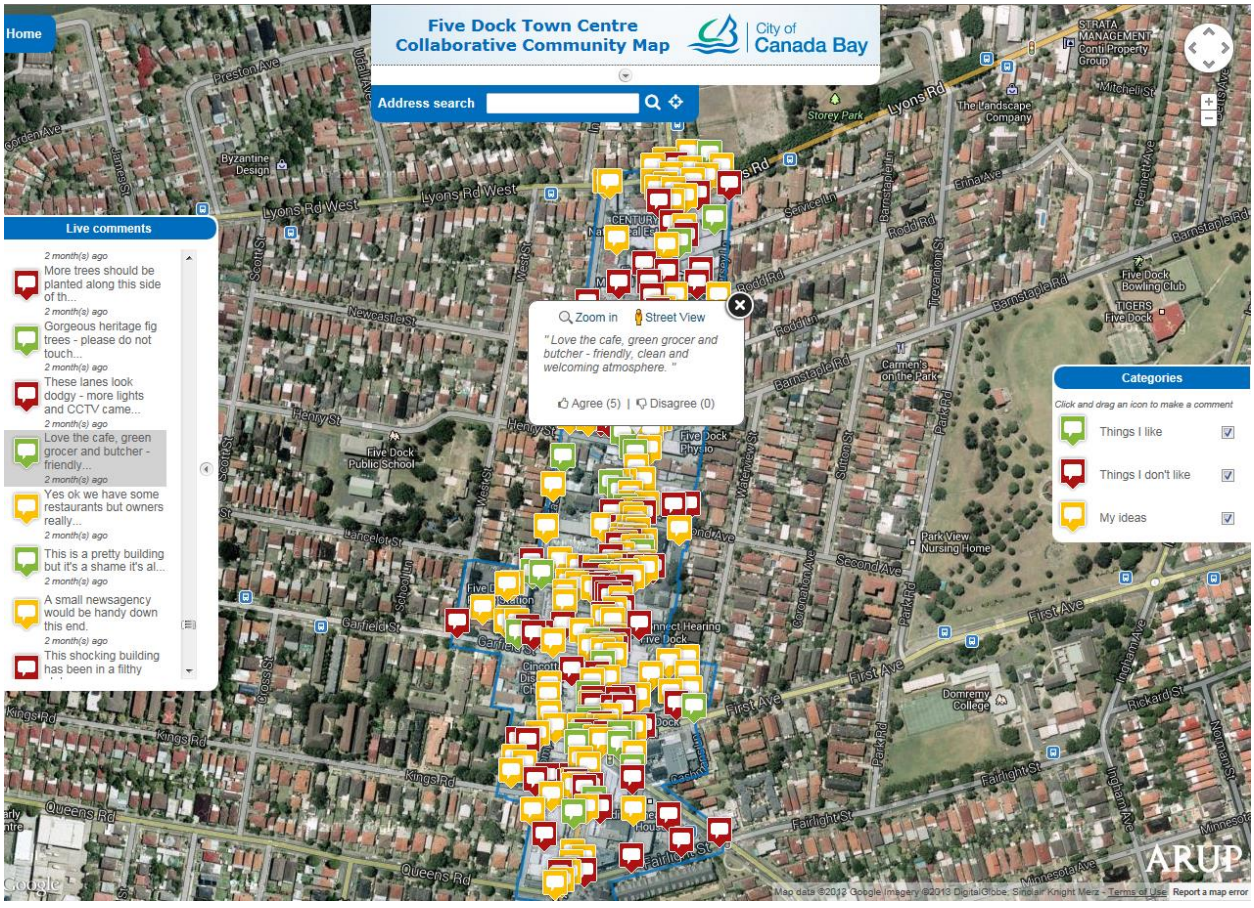

Figure 2: Screen shot of Collaborative Community Map

4 Collaborative Community Map case studies

The mapping tool has been used for a number of applications including master planning, landscape master plans, initial information gathering during preliminary design phases, parking, traffic and pedestrian studies as well as for the display of concept designs for linear infrastructure.

4.1 Master planning / urban design / landscape master planning

For this type of project the tool is used multiple times throughout the design process. It is first used to gather broad feedback about the area that is being planned, for example what people like, don't like and any ideas they may have for the area. This information helps planners to better understand the space from the perspective of users and to understand what will and won't be accepted in relation to changes to the space.

Initial options for the design of the space are then uploaded into the tool to show people what could be done. Comments can be collected on all comments and analysed spatially to understand what people liked and didn't like about the options.

Once a final option has been decided, this can again be displayed for final comments.

An example of this process is shown below for the Bald Hill Reserve Landscape Masterplan. Community engagement began by asking people to tell us what needed improving, what was important and what their ideas were. This information was used as an input into the overall site analysis process to help shape options for the masterplan. Three options were displayed to the community for the site and comments related to each option were gathered and analysed. The final option was a mix of aspects from the three options. The final draft Landscape Masterplan was again uploaded to the tool for final comments from the community. This stage of engagement was the formal 'public notification period' for the project.

Figure 3: Screen shots from the tool: (1) Improve, important and ideas, (2) Concept options, (3) Final draft Landscape Masterplan

4.2 Parking and transport studies

The tool has been used on a number of transport related studies. For these projects it is interesting to gather users' perceptions of the transport environment in a spatial format and compare this with actual speed, accident and congestion data. The comparison shows areas where perception doesn't match the data which shows the team that they need to gather more (or more up-to-date) data or work with the community to understand this perception.

An example (as shown in Figure 3) of this is a traffic study where there was a perception of speeding occurring on a local street, but the data was not showing this as a fact. It was determined that additional data collection was required to ensure that the data was accurate for this location.

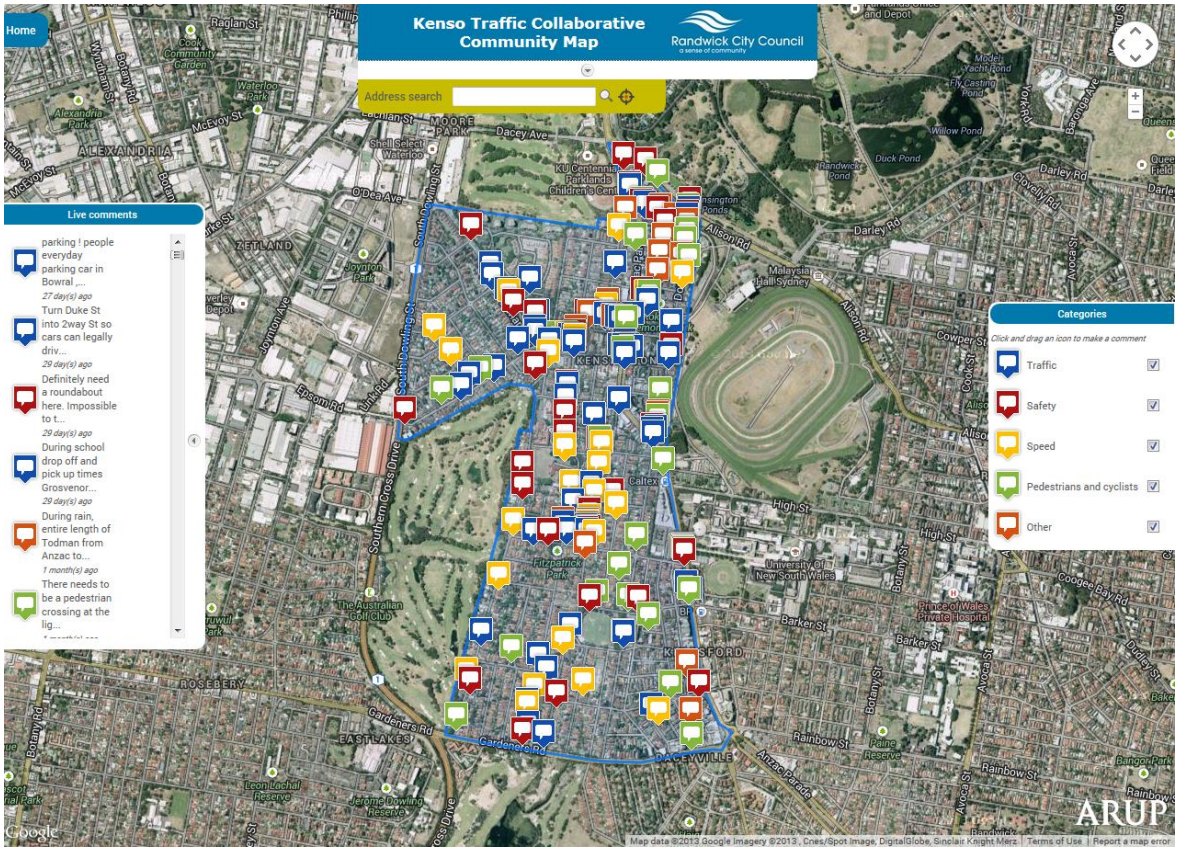

Figure 3: Screen shot of a transport study Collaborative Community Map

Another example (shown in Figure 4) is of a parking study which utilises the collaborative map and analysis to display the conflicting opinions of user groups, in this case paying for parking. These diagrams were used in workshops to work with different users to understand the different needs come to an equitable solution.

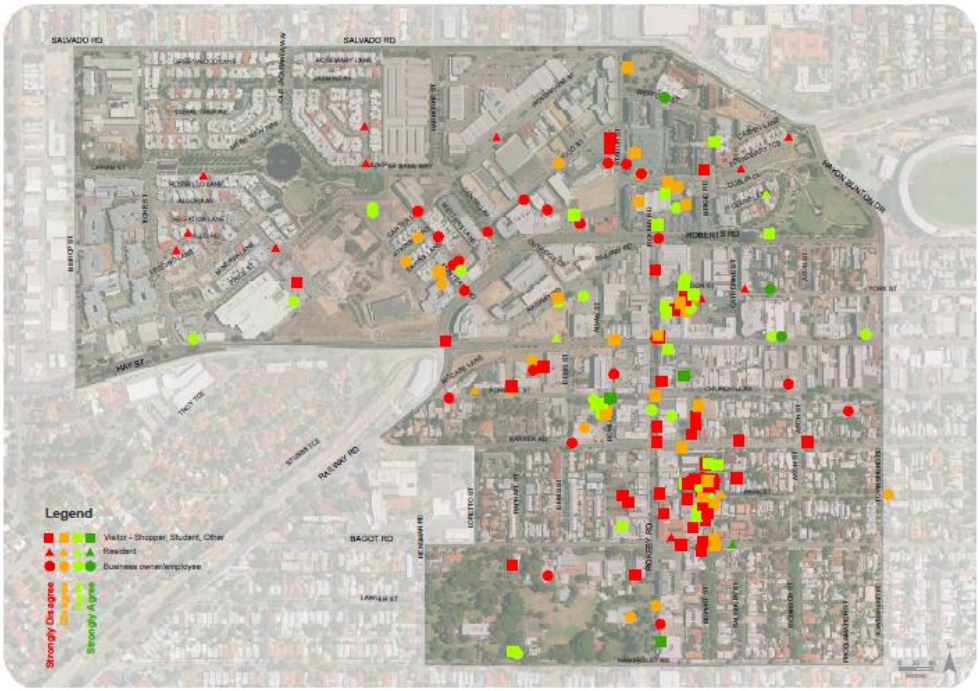

Figure 4: Screen shot of a transport study Collaborative Community Map

4.3 Infrastructure design

The tool has also been used to show infrastructure design to the community. This has been achieved by brining CAD designs into a GIS format and uploading these into the tool as shown in Figure 5. This allows people to see and comment on proposed designs. These comments can then be used to refine design as it progresses.

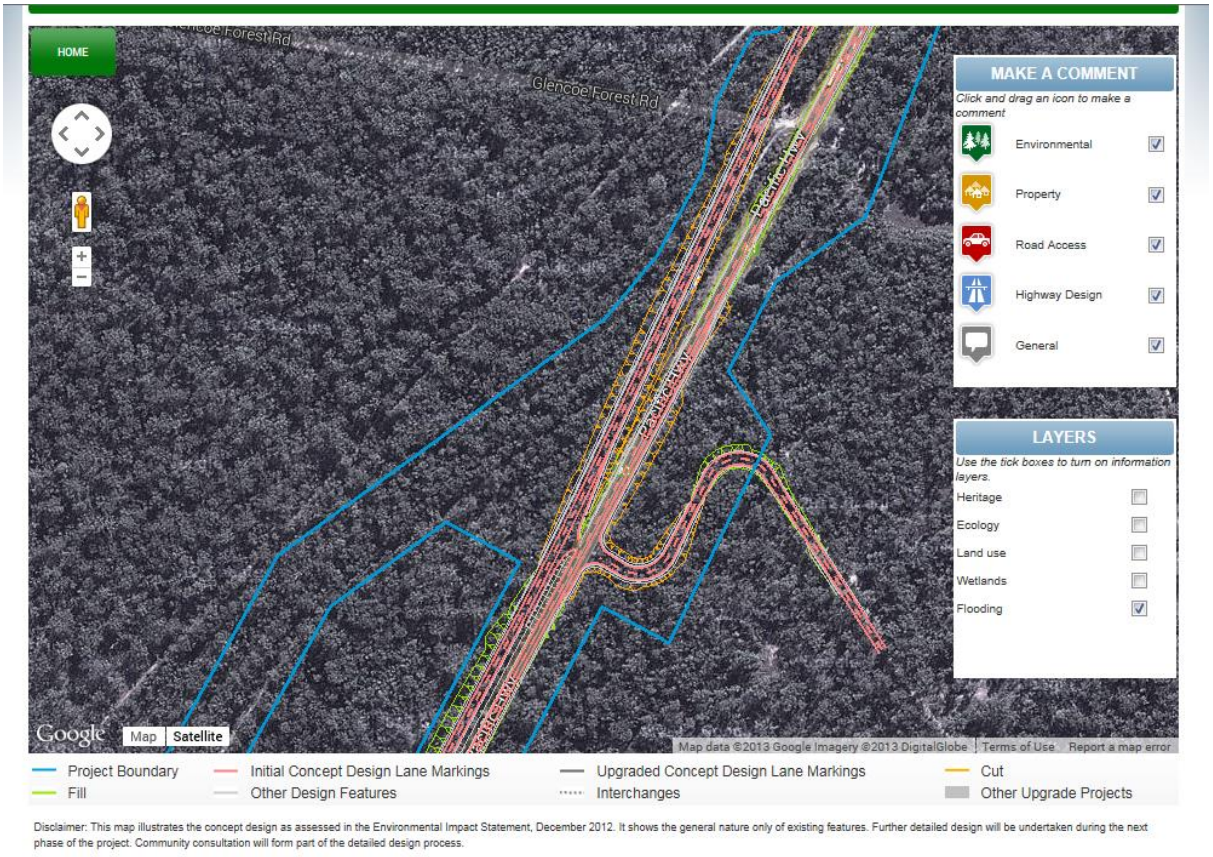

Figure 5: Screen shot of an infrastructure design Collaborative Community Map

5 Reporting from Collaborative Community Map

The key benefit of the mapping tool to the planning practice is the ability to spatially map community comments to see trends and compare this information with other spatial datasets. Figure 6 shows comments input by the community on a road planning project. Figure 7 shows these comments mapped in GIS.

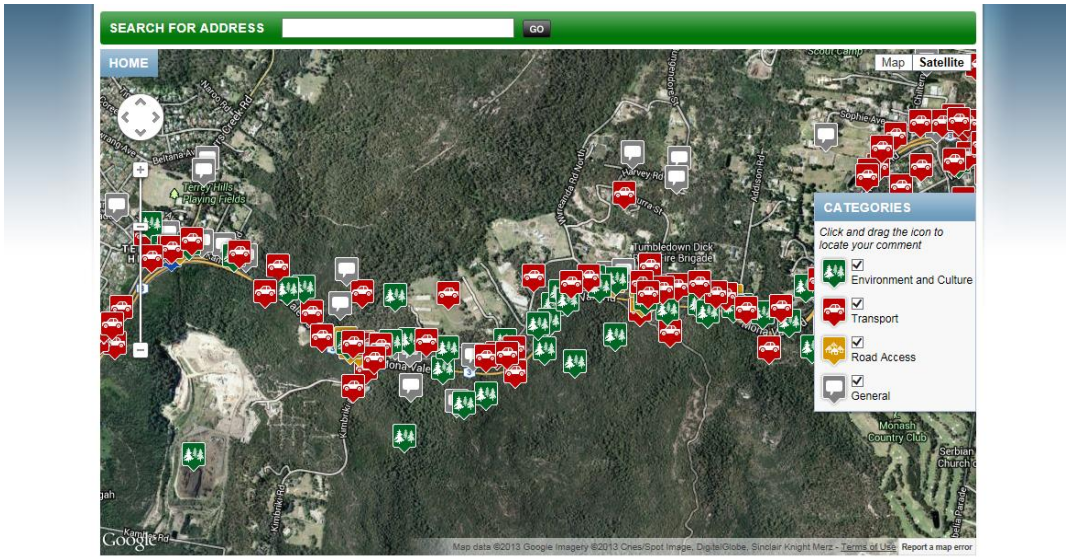

Figure 6: Data input by the community

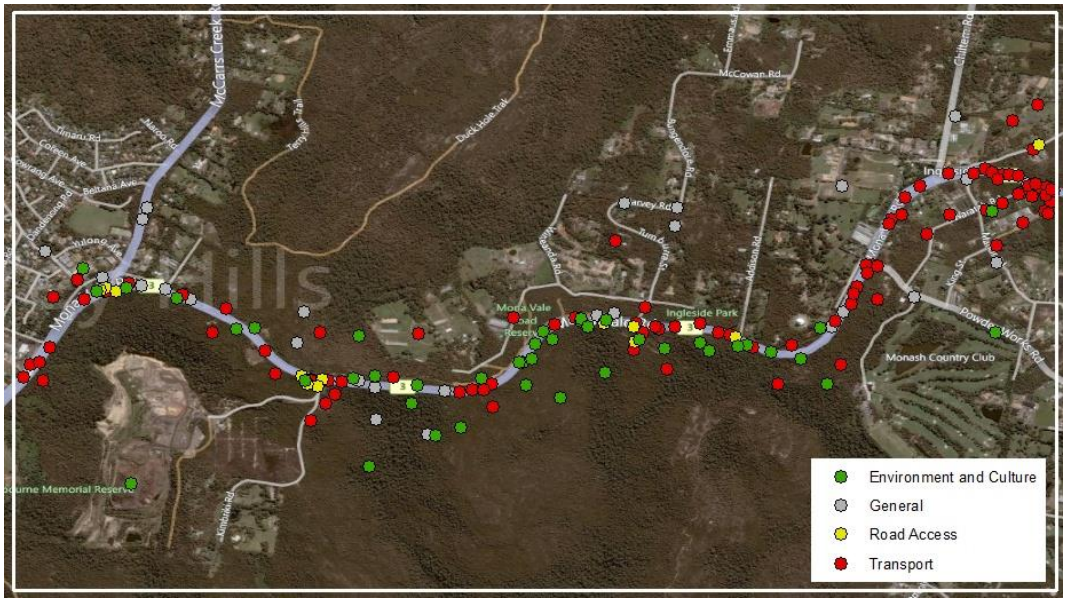

Figure 7: Comments mapped in GIS

By mapping these comments spatial clusters can be seen. Figure 8 shows a 'hot spot' analysis of 'environment and culture' comments. These comments align will with heavily vegetated areas of the corridor.

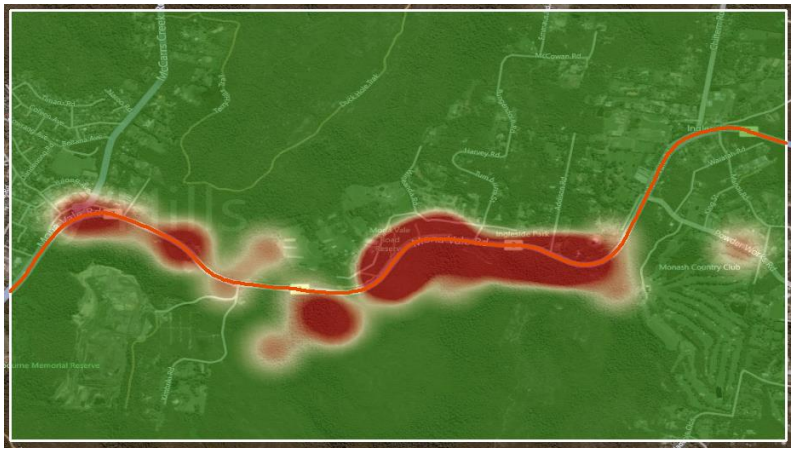

Figure 8: Hot spot analysis of 'Environment and Culture' comments from Figure 2 map.

Figure 9 shows a 'hot spot' analysis of 'transport' comments. These comments align will with steeper areas of the corridor where trucks climbing at slow speeds are considered to be a significant traffic problem.

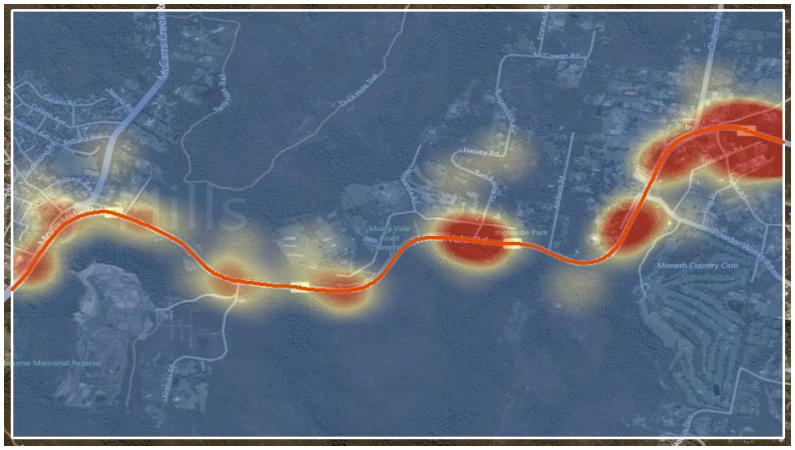

Figure 9: Hot spot analysis of 'Transport' comments from Figure 2 map.

Figure 10 shows a 'hot spot' analysis of 'road access' comments. These comments align will intersections throughout the corridor.

Figure 10: Hot spot analysis of 'Road Access' comments from Figure 2 map.

The analysis of comments from the community for this map deployment showed that community comments were very much in line with the technical analysis of the corridor. This is important as it shows that people who use the corridor are experiencing the issues that from a technical analysis perspective we would expect.

6 How this is advancing the planning practice

As planners we need to better understand the places we are planning for. By seeking information from the people who live/work/use these places we are reducing our assumptions and therefore the risk that we miss something that would mean our plans aren't accepted by stakeholders and the community.

Utilising online engagement tools not only allows us to broaden the reach of engagement activities and involve more people in the process, but allows us to output this information in ways that assist the technical analysis and planning process.

The ways that tools like Collaborative Community Map are benefitting the planning practice:

- *Engagement is more efficient* – online engagement is cost effective and efficient. Setting up and analysing the output of online tools is much cheaper than trying to reach the same number of people via traditional face-to-face means.
- *Engagement activity is more transparent* – people can see what others are saying and that there may be different positions on the issue. Often we see an action group form around an issue and their voice is the only one picked up in media reports and heard in public forums.
- *Engagement outputs are easier to 'sell' to technical colleagues* – It is much easier to 'sell' the benefits of an engagement process when the outputs can be viewed in a format compatible with other technical data. It gives this information more credibility in the process.
- *Engagement can happen at any time* – people can use online engagement tools at any time, from any place. Online engagement allows them to participate as they please instead of us dictating when they can participate in the process.
- *Engagement outcomes can be shown spatially* – engagement inputs and how they have helped to shape planning outcomes can be fed back to stakeholders and the community in a spatial format. This clearly shows where their inputs have / have not been adopted and we can explain why this has occurred.
- *Engagement outcomes show us the areas people are most interested in* – the spatial outputs will show areas that people are most interested in. This helps us to focus our attention on these areas as required.

7 Conclusion

The use of spatial mapping for stakeholder and community engagement activities is an emerging trend that enhances our ability to integrate engagement inputs into planning processes. By using these tools we have gathered more representative datasets, made the engagement process more transparent, broadened the reach of our engagement program and gained valuable spatial data which has helped us to better understand the places and spaces we are planning.

8 References

Arnstein, S. R., 1969. A Ladder of Citizen Participation. *Journal of the American Institute of Planners,* July.35(4).

International Association for Public Participation , 2013. *IAP2's Public Participation Spectrum.* [Online] Available at: www.iap2.org.au [Accessed 2013].