National SCIENCE Challenges

BUILDING BETTER HOMES, TOWNS AND CITIES

Ko ngā wā kāinga hei whakamāhorahora

Stakeholder Workshop Feedback Report

Urban Narrative

04 May 2018

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Contents

Chapter 1: Introduction

Since November 2017 Urban Narrative has held two stakeholder consultation meetings comprising a hui and workshop with Maraenui residents and Napier City Council. During this period, an extensive literature review has also been carried out on value based urban design and relevant software applications (APPS) with particular attention given to human computer interface in order to identify best practice to devise novel digital ethnographic tools to capture a communities and an individual's values and human needs.

The purpose of the Stakeholder Workshop Feedback Report is threefold. The report outlines the results of the stakeholder workshop held in Maraenui on 23 February 2018. Furthermore, it summarises important aspects of the literature review in relation value based urban design. Lastly, a future plan is proposed in terms of the development of digital tools to enable the Maraenui community to articulate shared values and prioritise challenges through their day-to-day experiences, as well as consideration given to how data can be used to better inform decision making for future investment of urban infrastructure.

A full copy of the review undertaken on digital software and tools is available to read as part of the Progress Report October 2017 to April 2018.

Chapter 2: Māori and non-Māori Urban Design Principles for Better Homes Towns and Cities

The workshop was structured around the earlier review of Māori and non Māori cultural values and human needs in particular Te Aranga Design Principles (Te Aranga, 2008), Papakainga Design and Development Process by Awatere et al (2010) and Maslow Hierarchy of Needs (1943).

Te Whare Tapa Whā depicts Māori health as comprising four integral cornerstones (Ministry of Health, 2018); the individual cornerstones are briefly described in Table 2.1. While there is no direct discussion of urban design context in Te Whare Tapa Whā, it is understood that a shortcoming or demise in one cornerstone will undermine the stability of the whole system of a person or community's health and well-being (Ministry of Health, 2017)

Taha tinana (physical health)	Good physical health is required for optimal development, where physical 'being' supports inner essence and provides shelter from the external environment. For Māori the physical dimension is just one aspect of health and well-being and cannot be separated from the aspect of mind, spirit and family.
Taha wairua (spiritual health)	The capacity for faith and wider communication, where health is related to unseen and unspoken energies, where the spiritual essence of a person is their life force. This determines individuals and communities by who and what we are, where we have come from and where we are going. A traditional Māori analysis of physical manifestations of illness will focus on the wairua or spirit, to determine whether damage here could be a contributing factor.
Taha whānau (family health)	The capacity to belong, to care and to share where individuals are part of wider social systems. Whānau is seen as providing inner strength to be who we are. This is the link to ancestors, ties with the past, the present and the future. As such, understanding the importance of whānau and how whānau (family) can contribute to illness and assist in curing illness is fundamental to understanding Māori health issues
Taha hinengaro (mental health)	The capacity to communicate, to think and to feel mind and body are inseparable. Thoughts, feelings and emotions are integral components of the body and soul. This is about how we see ourselves in this universe, our interaction with that which is uniquely Māori and the perception that others have of us

Table 2.1 Four cornerstones of Māori health and well-being from *Te Whare Tapa Whā*

In comparison, *Te Aranga Design Principles* (Te Aranga, 2008) were developed to provide guidance for design of the environment by engaging with mana whenua; enhancing mana whenua visibility in the design of the public realm and cities; and for enhancing development outcomes. Based on Māori cultural values, Te Aranga Māori Cultural Landscape Strategy was developed to articulate Māori interests and design aspirations in the built environment through a hui in Te Aranga and led to the formulation of the Te Aranga Design Principles. As such it comprises seven core values that underpin *Te Aranga Design Principles* as described in Table 2.2.

In a similar vein, the later publication *Developing Māori Urban Design Principles* by Awatere *et al*. (2010) recommends taking a wider holistic cultural approach to urban development to address inequality in Māori and non-Māori home ownership and standards of housing by including Orangatanga and Mauritanga as part of a set of nine Māori urban design principles and values listed in Table 2.2.

Rangatiratanga	the right to exercise authority and self-determination within one's own iwi/ hapū realm
Kaitiakitanga	managing and conserving the environment as part of a reciprocal relationship, based on the Māori worldview that we as humans are part of the natural world
Manaakitanga	the ethic of holistic hospitality whereby mana whenua have inherited obligations to be the best hosts
Wairuatanga	the immutable spiritual connection between people and their environments
Kotahitanga	unity, cohesion and collaboration
Whanaungatanga	a relationship through shared experiences and working together which provides people with a sense of belonging
Mātauranga	Māori / mana whenua knowledge and understanding
Orangatanga	*Maintaining the health and well-being of the community*
Mauritanga	*Understanding of community history, identities, character*

Table 2.2 Māori Seven Urban Design Principles from *Te Aranga Māori Cultural Landscape Strategy* (Te Aranga, 2008) plus two additional principles of Orangatanga and Mauritanga from *Papakāinga Urban Design* (Awatere et al 2010)

The review highlighted several striking similarities between Maslow's Hierarchy of Needs and Te Whare Tapa Wha and the Māori Urban Design Principles. The four arears of alignment are briefly outlined below.

- The requirement for good physical health (Taha tinana) through shelter from the external environment which Maslow expresses as a basic physiological need in terms of food, water, shelter and rest.
- The requirement for self-determination within one's own iwi or hapū realm (Rangatiratanga) which shares similar characteristics to Maslow's need for esteem in terms of local democracy and listening to people's voices.
- The need for being part of a wider social system (Taha whanau) or, as Maslow indicates, having a sense of belonging or love.
- The spiritual essence (Taha wairua) or self-actualisation in Maslow's terms.

These four areas of alignment will in the future be used as points of reference for developing digital tools for data storytelling about an individual or community's cultural values and needs within an urban built environment.

Chapter 3: Maraenui Stakeholder Workshop, Napier

3.1 General

From consultation with local cultural and political representatives, Napier City Council nominated the Maraenui Neighbourhood as a partner for the development of digital tools to enable local citizens to express their cultural, social, religious and political values to aid future urban design decision making. The consultation process comprised an earlier hui based at the Pukemokimoki Marae on 29 November 2017 followed by a stakeholder workshop at EIT Learning Centre in Maraenui on 23 February 2018 as shown in Figure 1.1. The format and outputs from the stakeholder workshop are reported as follows

Figure 1.1: Maraenui Stakeholder Workshop at EIT Learning Centre in Maraenui

3.2 Stakeholder Workshop at EIT Learning Centre in Maraenui

The objectives of the stakeholder workshop held at EIT Learning Centre in Maraenui on 23 February 2018 were as follows:

1. To introduce University of Waikato academic staff and establish working relationships with Maraenui citizens and their cultural and political representatives, together with key staff from Napier City Council and other relevant Napier organisations;
2. To enable Maraenui community to express relative priorities based on earlier studies of Māori and non Māori cultural values and human needs in relation to soft and hard infrastructures of the neighbourhood

In planning the workshop, it was appreciated that Maraenui has already been the focus of research on multiple previous occasions, not all of which has been perceived as being beneficial by the Maraenui communities themselves. It was therefore important at the initial meeting to understand the views being expressed and clearly communicate the benefits the project will bring to Maraenui, not just to the researchers. In addition, issues relating to relationships between Maraenui community members and Napier City Council were voiced, and expectations regarding the project, and its potential benefits in terms of solid outcomes for the community and Council's ability to fund any identified outcomes were traversed and clarification sought. By the close of the workshop, community representatives were persuaded of the benefits of the project and expressed willingness to become involved.

3.3 Workshop Structure and Methodology

The workshop comprised a mix of stakeholders including local residents, ward councillors, council staff and representatives of social/health services. Each exercise comprised three working groups, composed of 10-15 participants at any one given time. The informal structure of the workshop allowed participants to step in/out of the session, which allowed engagement with a broader spectrum of the community, in particular young families, who could not attend the entire duration of the workshop. The importance of hearing 'quiet voices', which are often overlooked in traditional consultations, was paramount.

The workshop opened with a presentation by the University of Waikato researchers, introducing the aims of the urban narrative project, and providing information about the fourteen Māori and non-Māori cultural values and human need listed in Table 1.1.

The participants were subsequently organised into three groups of five participants to explore the relative importance participants attached to the Māori and non-Māori cultural values and human needs using a set of pre-labelled cards. Planned as three separate exercises, the groups of participants discussed the relative importance attached to each value or need and how it translated into a requirement for urban infrastructure and subsequently into a software application (APP) to create digital data stories. A more detailed description of the workshop exercises is given as follows.

Te Aranga Māori Urban Design Principles	Maslow's Hierarchy of Needs
Rangatiratanga	Self Actualisation
Kaitiakitanga	Esteem
Manaakitanga	Belonging
Wairuatanga	Safety
Kotahitanga	Physiological
Whanaungatanga	
Mātauranga	
Orangatanga	
Mauritanga	

Table 1.1 Cultural Values and Human Needs explored at Maraenui Stakeholder Workshop

Exercise 1: Discuss and choose five values you consider important for Maraenui?

For the first exercise, each group were presented with fourteen cards which represented the fourteen-core value identified in Table 1.1. Blank cards were provided for workshop participants to include additional values that had not been identified on the pre-labelled cards, but that they considered were important to Maraenui.

Participants were asked to rank the different cultural values and human needs based on their relative importance. Each participant was allocated five dots and asked to place the dots on the cards that most represented that values of Maraenui as shown in Figure 1.2a. By the end of the exercise, the values, which resonated most with Maraenui workshop participants, were easily identifiable as these had the greatest number of dots on the cares. These value cards were then used in Exercise 2, outlined below.

Figure 1.2a. Exercise 1. Participants place yellow dots placed on five cards to indicate relative importance of cultural values and human needs for Maraenui.

Figure 1.2b. Exercise 2. Participants indicate on reverse-side of cards urban design measures that relate to prioritized cultural values and human needs for Maraenui.

Exercise 2: How would you express your top five values in practice?

For the second part of the exercise, participants were asked to write on the back of the cards identified as key values from Exercise 1, a set of indicators which best describes the value. This was a group exercise, so allowed different stakeholders the opportunity to discuss their

interpretation of individual values. Through this method of storytelling a set of indicators were identified by each group.

<u>Exercise 3: What technologies could you imagine using?</u>

The final part of the exercise required participants to identify possible ways to measure and present data and information about the cultural values and human needs prioritized in previous exercises. Three examples were given as possible measurement tools, which were photos, texts and mapping. However, participants were encouraged not to let their knowledge of pre-existing technologies constrain their ideas.

3.4 Workshop Results and Analysis

3.4.1 Relative ranking of cultural values and human needs

Figure 1.4 shows the relative ranking of twelve cultural values and human needs discussed as selected by Maraenui workshop participants. As shown, the community tended to favor the Māori Urban Design Values above those expressly identified in Maslow's Hierarchy of Needs. All the Māori Urban Design Values feature in this list, whereas only three values within Maslow's Hierarchy of Needs are present.

This preference towards Māori Urban Design values perhaps could be explained, in part, by the ethnic population of Maraenui which is 47% Māori (The Population Experts and Napier City Council, 2013). This is considerably higher than Napier City as a whole, which is below 20% (Stats NZ Tatauranga Aotearoa, 2013), as well as New Zealand as a nation.

Whanaungatanga and Wairuatanga were the two Māori values that were ranked highest. Based on literature reviews about value based urban design, and discussions that took place during the course of the workshop, it is understood that both values relate to connectivity, be it between people or the environment. As set out in Fig. 1.6 participants emphasised the role physical spaces have in facilitating connectivity within the Maraenui community, in particular social relationships. Kotahitanga was ranked fourth highest, again, this appeared synonymous with a sense of community cohesion with participants referencing the need for quality physical spaces, but also an awareness of community activities/events to facilitate unity.
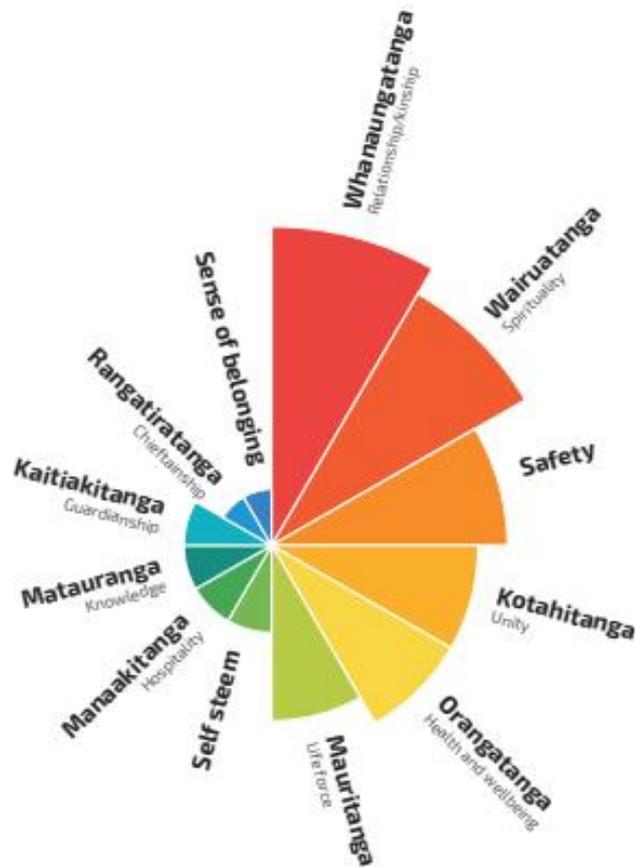
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Figure.1.4 Relative ranking of cultural values and human needs by Maraenui workshop

The value participants identified as most relevant within Maslow's *Hierarchy of Needs* was safety. Participants broadly defined safety in terms of physical infrastructure and social relationships. In particular, the safety of children was identified as important within the context of Maraenui. It is interesting to note that 2013 census data shows that Maraenui has a much higher proportion of younger people (0 to 17 years) compared to Napier City as a whole (The Population Experts, 2013). Interestingly, there are similarities between how participants expressed the concept of 'safety' and the Māori values of Whanaungatanga and Wairuatanga in terms of a connected Maraenui.

Another need participants identified as important from Maslow's hierarchy was self-esteem. Whereas safety is a basic need, self-esteem is a psychological need, so perhaps more abstract. Participants understood self-esteem within the context of a community, not just an individual, identifying education and self-governance as two key factors that can instil self-esteem. The need to recognise community achievements was another important aspect that was identified by participants. Self-esteem was also seen as synonymous with a sense of community pride.

As set out in the preceding paragraph, participants were able to put forward additional values on blank cards, which did not perhaps align with the values that were pre-printed on the card. Four main additional values were identified by participants, three of which are associated with a Māori world view.

- Te Ao Māori (Word View); Te Ao Huri Huri (Changing World)
- Taonga tuku iho (Heritage)
- Turangawaewae (A place where one has rights of residence)
- Love of Children

While none of these values were ranked highly by participants, it is worth noting that the first two values emphasise the importance of a person being able to place themselves in the wider context, particularly in relation to the natural environment (land), but also in relation to the community (people). This was a recurring theme throughout the course of the workshop. This holistic, collective and non-hierarchical approach to a value system, stemming from a Te Ao Māori perspective, differs from perspectives captured in Maslow's Hierarchy of Needs, which is akin to a more Western worldview associated with individualism.

The third value, Turangawaewae, is a value that is embedded in Māori culture. It appears to relate to values such as Rangatiratanga (chieftainship) and Whanaungatanga (kinship); the term quite literally translated as a 'place to stand'. The final theme emphasizes the importance of children within Maraenui. The need to consider and prioritise children and youth was recurring theme throughout the course of the workshop, often expressed in how participants understood the values on the pre-labelled cards.

2.4.2 Urban Indicators and Guiding Principles

Having identified relative ranking of cultural values and human needs within the Maraenui workshop, further examination was made of the indicators or guiding principles ascribed by participant groups for each core values. The urban indicators are shown plotted on Figures 1.5 and 1.6.
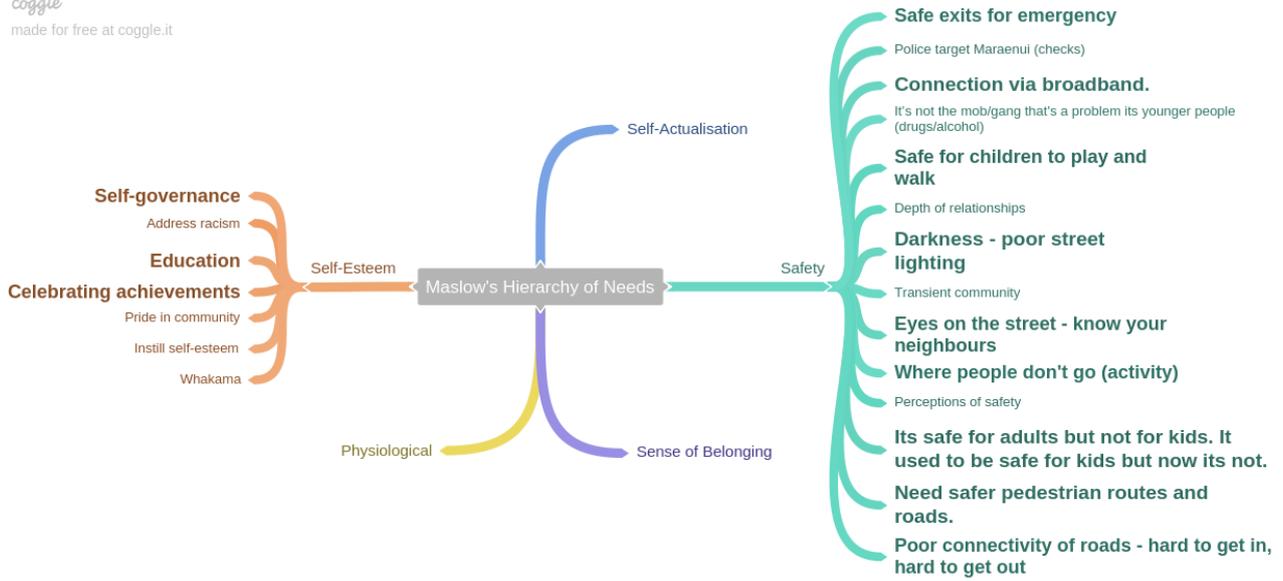
Maslow's Hierarchy of Needs

Self-Actualisation

Self-Esteem
- **Self-governance**
- Address racism
- **Education**
- **Celebrating achievements**
- Pride in community
- Instill self-esteem
- Whakama

Safety
- **Safe exits for emergency**
- Police target Maraenui (checks)
- **Connection via broadband.**
- It's not the mob/gang that's a problem its younger people (drugs/alcohol)
- **Safe for children to play and walk**
- Depth of relationships
- **Darkness - poor street lighting**
- Transient community
- **Eyes on the street - know your neighbours**
- **Where people don't go (activity)**
- Perceptions of safety
- **Its safe for adults but not for kids. It used to be safe for kids but now its not.**
- **Need safer pedestrian routes and roads.**
- **Poor connectivity of roads - hard to get in, hard to get out**

Physiological

Sense of Belonging

Figure. 1.5 Urban indicators participants identified for Maslow's Hierarchy of Needs

Maori Urban Design Principles

Mauritanga Life-force
- Creation of people - papatuanuku and ranginui)
- Breath of life (connecting through breath)
- Hongi, water, vibration - Law of attraction
- **Environmental - Manaaki**
- Whakahoa (befriend)

Kaitiakitanga Guardianship
- **First meeting of people** Example: Mauri is held for matatini festival and is passed to each region holding the festival (like the olympic torch**
- Care and nurturing.
- **Facilitate connections, stories, events, digital essence.**

Matauranga Knowledge
- Atua, Whakapapa
- **Environment - community**
- Laws - customs

Wairuatanga Spirituality
- **Church/community group**
- Religious beliefs and **congregation**
- **Socialising outdoors**
- **Cultural connection to land and plants**
- **Minority engagement with gardening**
- **Ancestors and diaspora**
- Karakia (to recite ritual chants/pray)
- **Powhiri (welcome)**
- **Customs**
- Waiata (to sing)
- Ensuring there is a place like Marae for people.
- Outreach
- The 'vibe' of the community. For example in Rotorua there is a strong feeling of wairua cultural aspects

Whanaungatanga Relationships/Kinship
- **Physical places where people connect. Quite strong in Maraenui**
- **Spaces where we live, play, mourn etc**
- **Sports, cultural, educational activities and space**

Orangatanga Health and Well-being
- **Rongoa**
- Linked to safety

Kotahitanga Unity
- **Awareness of community events**
- Social housing changes have displaced communities
- **Helping each other with rides/lift sharing**
- **Community -space we live and play**
- Recognising diversity (whakapapa)
- **Quality physical space for people and organisations to come together**
- **Importance of having a hub/base** e.g shopping centre**
- **Connected communities**

Manaakitanga Hospitality

Rangatiratanga Chieftainship
- **Environmental connections**
- **Self-awareness**
- **Ownership**
- Whakapapa,Mentors, Rangatahi 'Ko Au Ko Maria, Ko Mana Ko Au
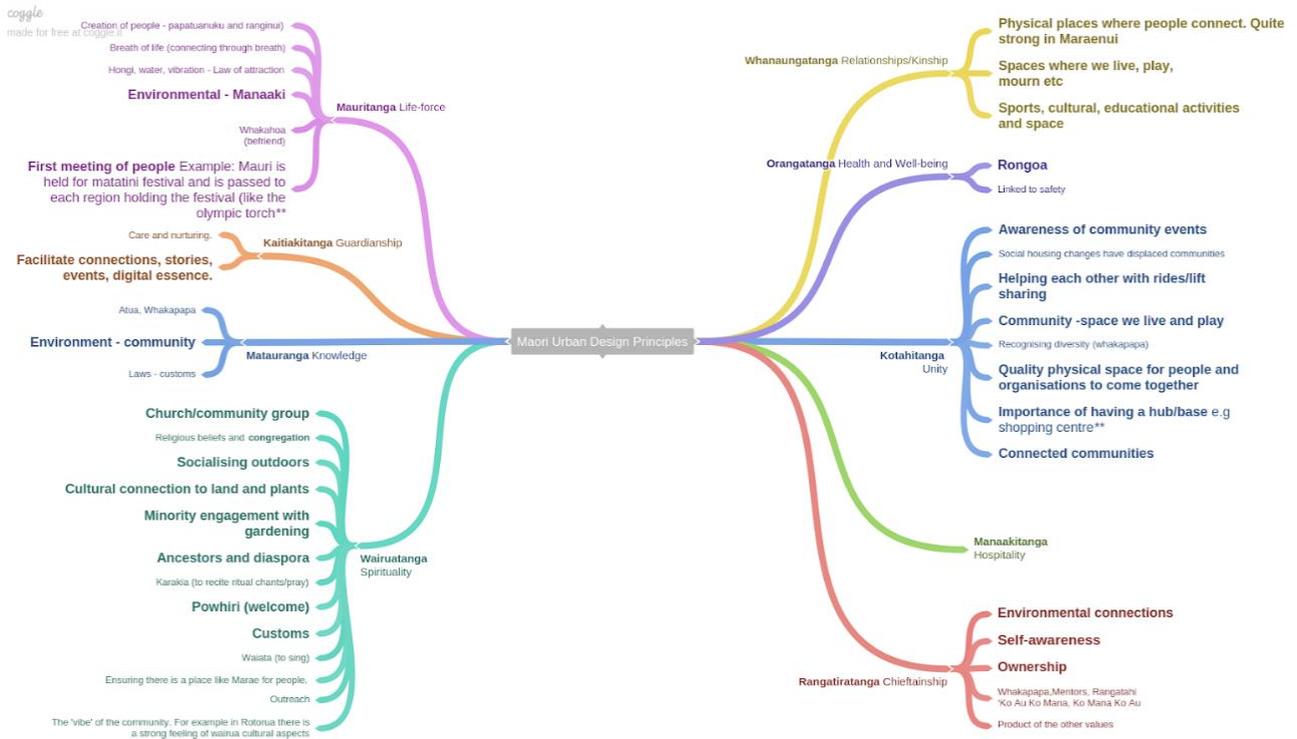- Product of the other values

Figure 1.6. Urban indicators participants identified for Māori Urban Design Cultural Value

The information plotted in Figures 1.5 and 1.6 provide a valuable insight into how Maraenui workshop participants expressed the cultural values considered most important to them. Following a preliminary review of the data, the urban indicators participants identified for each value were translated into practical actions and a set of guiding principles for urban planners as follows.

- Children-friendly spaces
- Spaces for community events and activities
- Safe, accessible and social able spaces for all
- Access to educational facilities
- Well-lit streets and footpaths
- A space for the community to share information (online and in real-life)
- Active citizens engaged in decision making
- Spaces to welcome and host visitors
- Safe pedestrian footpaths
- Footpaths and streets are well connected in Maraenui and the surrounding area
- Access to recreational spaces
- Protection of the natural environment
- Spaces to practice customs (singing, prays, chants, meetings)
- Community focal point
- Acknowledgment of community heritage and culture
- Access to health services

These guiding principles relate to both hard (physical built environment) and soft (facilitating institutions) infrastructure. Based on these guiding principles a suite of digital tools can now be developed to capture the necessary data to inform 'why' rather than 'what' people desire for future development in Maraenui. In turn, the digital tools can enable citizens to articulate shared urban values and prioritise challenges through their day-to-day experience, leading to a co-created urban design brief (the 'what').

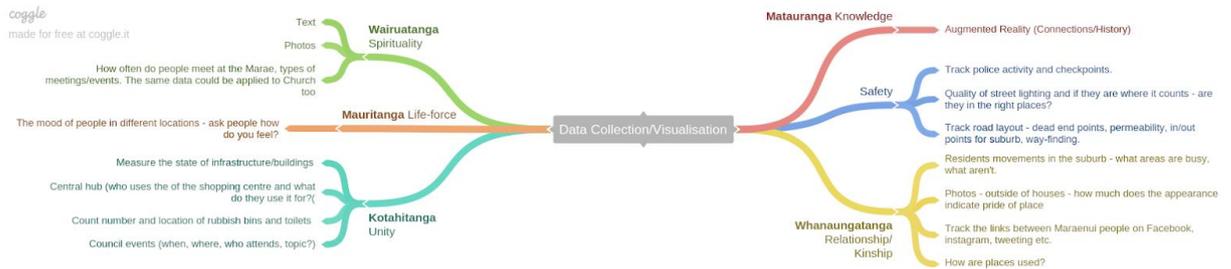### 3.4.3 Data Collection and Visualization

Figure. 1.7 Proposed Measurement and Visualisation of Cultural Values and Human Needs

Following the preliminary establishment of urban indicators and guiding principles to address the relative ranking of cultural values and human needs, participants began to propose methods to measure and visualize data to characterise these values and principles. It was observed that participants appeared to find this exercise most challenging out of the three. This was partly due to the need for a high degree of prerequisite knowledge about communication technologies via mobile apps and the Internet of Things (IoT). Nevertheless, as shown by Figure 1.7, participants indicated a willingness to gather and shared digital data about a wide variety of activities including individual movements, community gatherings, mental wellbeing as well as the condition of the built environment (street lightning, roads, pathways). However, this willingness was dependent on developing a collaborative framework that allows communities to work with experts from University of Waikato and Napier City Council to develop digital tools specifically tailored to capture data relevant to the community that could be used to inform future urban design decision making. Hence by facilitating the transfer of knowledge from 'experts' to citizens, it is envisaged that citizens shall be able to engage in the design, production and application of digital tools.

3.5 Summary

3.5.1 Key Findings

The workshop revealed several interesting characteristics about Maraenui that will inform future design and implementation of digital tools for data storytelling.

1. Participants expressed a preference for Māori Urban Design values over Maslow's Hierarchy of Needs, even when the two sets of values and needs were aligned. Hence, there was a similar preference for a holistic, non-hierarchical approach, towards a value system where one value was often intrinsically linked to that of another.
2. The workshop also highlighted the importance of contextualizing urban design values/principles at a neighbourhood scale, while recognizing how Maraenui sits in relation to the city-wide scale of Napier.
3. Participants indicated a willingness to gather and share digital data about a wide variety of activities, however this willingness was dependent on developing a collaborative framework with University of Waikato and Napier City Council for the design, production and application of digital tools.
4. Lastly Cultural Values and Human Needs were readily translated into urban indicators or design principles such as creating an urban infrastructure to support a child friendly environment

3.5.2 Outcome

The workshop enabled citizens to articulate shared urban values and prioritize these values by anecdotal storytelling. Utilizing the information from the bibliometric analysis of existing apps, and the preliminary guiding principles identified from the workshop, a suite of digital tools can now be developed to capture the data based on the guiding principles/values. This data will help inform the framework of the urban design brief.

The workshop identified a need to further develop the community's understanding of ICT, apps and IoT so the everyday citizen is better equipped to explore ideas and capture data themselves. However, the workshop was the initial step towards equipping the Maraenui community stakeholders with the tools they require to co-create a site-specific urban design brief for Maraenui.

Ongoing engagement with Napier City Council and communicating the progress of the project with all community stakeholders in Maraenui, is identified as critical to the project success. Stakeholders are invited to provide feedback on the report as well as offers views around the 'next step' in the project. As it stands, it is envisaged that a pilot app will be ready for trial by a group of Maraenui community by the end of May.

To facilitate dialogue between all interested parties, Urban Narrative has also a dedicated webpage which provides information about the project's objectives, activities and partnerships, available at https://urbannarrative.nz/activities/.

Chapter 4: Future Plans

To summarise, there have been two valuable opportunities to meet Maraenui residents along with local political and cultural representatives as early steps towards building trust and sharing outlooks on cultural values and worldviews to inform future data gathering and storytelling in relation to the surrounding neighbourhood (urban environment).

I)   Prototype APPS and Hackathon.

Based on the initial discussions about shared cultural values at EIT Maraenui Hui in March, plans are underway to design prototype digital ethnographic tools during the next four months (May to September) based on the relative ranking of cultural values (Fig 1.4) and corresponding urban indicators (Figs 1.5 and 1.6). The digital tools use following approaches:

- Design of prototype APPS inspired by iNaturalist, Vespa Velutina and Loss of Night exemplars.
- Collection and filtering, clustering and dating of social media (i.e. Tweets and Instagram) from targeted local community groups for topic analysis and sentiment analysis

Having designed and built these prototype digital tools, a weekend Hackathon is planned in Maraenui to test their attractiveness, relevance and robustness.

II)   Napier City Council Strategic Plans

At the same time, it is recognised that the project's success depends on its ability to connect with Napier City Council's own strategic documents, ongoing community projects and spending plans. Napier City Councils Long Term Plan is presently under review and currently out for public consultation. Initial examination of the current Long Term Plan (2015-2025) shows clear overlaps with Urban Narrative, in particular with Desired The Community Outcomes. In fact, cross-examination of the key values identified in the Maraenui workshop and The Community Outcomes in the Long Term Plan show four main overlapping areas which are set out below:

● Safe and secure communities

● Communities that value and promote their unique culture and heritage

● An environment that is appreciated, protected and sustained for future generations

● Strong leadership that is connected to its community

At a more localised level, non-statutory documents present opportunities for collaboration with established community groups working alongside Napier City Council. One example is the Maraenui Renewal: Concept Plan Development, which is the first step towards developing a concept plan to guide the urban renewal process in Maraenui. This document outlines the need to confirm a set of values in order to progress the project. Likewise, Napier's City Vision specifically identifies 'our people, our stories' as one of six core principles. While the geographical area of this City Vision does not presently include Maraenui, many of the principles are aligned with those of Urban narrative. Consequently, Urban Narrative is well-placed to created digital tools and platforms that generate authentic narratives to support safe and secure communities for future generations.

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