He Raraunga Hāpori - Mapping demographic change and social service provision for Māori communities in Aotearoa New Zealand regional settlements

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Background

While much has been written about the decline of smaller settlements and the factors affecting regional growth in Aotearoa New Zealand (Spoonley, 2016), little is known about how Māori¹ communities are affected by regional-level change (although see Simmonds et al. (2016)), and how Māori wellbeing might be measured across different social, economic, environmental, and cultural domains (Ryks et al., 2018). Although iwi² and hapū³ have limited influence over structural changes in the regions (e.g., population change), there is value in understanding how relevant indicators might point to the regeneration and overall wellbeing of Māori communities (Ryks et al., 2018). An exploratory framework (Ryks et al., 2018) was developed that linked Mason Durie's Te Pae Mahutonga model of Māori wellbeing (Durie, 1999) to the measurement of different types of community capital and infrastructure (Emery & Flora, 2006). The framework is used as the basis for developing several key indicators for understanding Maori wellbeing in the regions. It provides a snapshot into the wellbeing of a community at a given point in time and measures change over time to help understand regeneration or decline. This work reflects on the rights and interests of Maori in regional development at a time when many settlements are either being swamped by urban growth or are isolated and unsupported.

He Raraunga Hāpori is a project that is part of Phase 2 of the He Pā Harakeke: Thriving Regions North Island research programme and is funded through the Building Better Homes, Towns and Cities (BBHTC) National Science Challenge. The purpose of the project is to build an evidence base about the wellbeing of Māori in regional settlements. Building on regional indicators work completed in Stage 1 (see Ryks et al., 2018), the aim of the project is to incorporate the needs and aspirations of Mana Whenua⁴ and Hau Kāinga⁵, the mapping of services in the region, and the impact of

⁵ Māori local peoples

¹ Indigenous people of Aotearoa New Zealand

² Large social units in Māori society, commonly thought of as "tribes", "peoples", or "nations"

³ The primary social unit connecting people to whenua (land)

⁴ Māori Indigenous peoples with customary rights/authority over an identified area

wider demographic change. The project adopts a place-based and Kaupapa Māori⁶ approach and is currently working with Mana Whenua in Pōkeno. Pōkeno is experiencing rapid population growth and transformation through new housing development and business infrastructure. Previously a small rural hub that was bypassed by State Highway 1⁷, Pōkeno has since been transformed with the development of two milk processing plants (predominantly Chinese-owned) and largescale housing subdivisions as the Auckland Commuter zone has now extended to the area (Ryks et al., 2019). Based on the 2018 census, Māori comprise about 16% of the Pōkeno population (n=2,544), down from 26% in 2013 (Stats NZ, 2018), but this is set to change as diverse new residents migrate from Aotearoa's largest city – Auckland. Mana Whenua and Hau Kāinga are concerned about a lack of a physical space and the need for a marae⁸ where they can meet and host visitors as development around them continues to expand and the demand for land increases. Key research questions include:

- 1. How do the needs and aspirations of Mana Whenua in Pōkeno compare to regional level indicators of Māori wellbeing and future demographic change?
- 2. What are the range of services (including housing, health and social services) that exist for Mana Whenua in Pōkeno and how do these compare to the needs and aspirations identified above?
- 3. How can demographic and spatial analysis (including GIS story maps) be effectively used to give voice to Mana Whenua in Pōkeno and empower them in their discussions with local and central government?

Methods

This research explores these questions through both data-focussed and Māori community driven approaches. The data-driven approach involved extending and updating the framework of indicators of regional Māori wellbeing, developed by Ryks et al. (2018), with more recent data, and including a service mapping component. Data for 18 population indicators came from publicly available datasets including: Census; the Te Kupenga Māori social survey; the Electoral Commission; and the Māori Land Court. Data for service mapping also came from a variety of publicly available sources, including Ministry for the Environment; Ministry of Health; Ministry of Education; Ministry of Social Development; local government authorities; and Google Maps.

The analysis in this paper focussed on one of our case-study sites, Pōkeno, where academic and community researchers have been working closely with Te Hau Kinga me

⁶ Kaupapa Māori is a Māori centred framework or approach that draws on Māori ways of knowing and being

⁷ State Highway 1 is the main arterial transportation route in Aotearoa

⁸ Māori meeting house, especially as a social, cultural or ceremonial forum

Ngā Mana Whenua o Pōkeno⁹ to understand and support their vision and aspirations. Together we have developed StoryMaps using ArcGIS. These are co-designed to tell the story of Mana Whenua and Hau Kāinga in Pōkeno and act as a tool that can be utilised to support community aspirations - including making the case for a marae build within the Pōkeno township. StoryMaps are interactive and multimedia digital stories that can be inclusive and participatory (Cisneros et al., 2023; Du et al., 2022), and present data and research findings in more engaging ways. Through this process we recognise that geography is a practice intimately tied to historic and ongoing colonisation, and in particular the alienation and control of Indigenous lands (Kukutai et al., 2022; Rose-Redwood et al., 2020; Smith, 2021). Through our work we attempt to use the tools of modern geography - such as Geographic Information Systems, and particularly StoryMaps - to support Mana Whenua and Hau Kāinga narratives and aspirations.

Results

Our data-focussed approach produced a range of population indicators, with a Māori focus, which show how communities change over time. For instance, a brief snapshot of change since 2013 in Pōkeno is provided below:

- Waiora¹⁰: 0 hectares of land is Māori-owned land (unchanged since 2013).
- **Te Oranga¹¹:** The population identifying as Māori increased by 170% to 405 people; Māori rates of home ownership (53%) and involvement in volunteer activities (20%) increased by 23 and 2 percentage points respectively.
- **Toiora¹²:** Māori employment (71%) and educational success (19%) increased by 12 and 13 percentage points respectively.
- Mauriora¹³: Iwi affiliation data from the 2018 census was not of suitable quality for analysis; very strong connection to ancestral marae as tūrangawaewae¹⁴ (67%) declined by 4 percentage points across the Waikato region.

The service mapping exercise provides valuable information about the range of services (in their broadest sense) that are available, and how these might align with community wellbeing, needs, and aspirations. For instance, a brief snapshot of service availability across the four Te Pae Mahutonga domains for Pōkeno is provided below:

• Waiora: 21 km freshwater (0% 'green/swimmable' quality); 48% of pre-human wetlands remaining.

⁹ A Charitable Trust officially established in 2020 as 'Te korokoro Māori o Pōkeno – the Māori voice of Pōkeno' and sits within Pōkeno township representing Ngaati Naho and Ngaati Tamaoho whānau that were born and raised in Pōkeno.

¹⁰ Environmental protection

¹¹ Participation in society

¹² Healthy lifestyles

¹³ Secure cultural connection

¹⁴ Standing place; right of residence and belonging through genealogical links and kinship

- **Te Oranga:** Public housing waitlist (Waikato District) is 270; 2 Māori wards on local government council; 2 private 'core' services (supermarket, NZ Post shop)
- **Toiora:** 4 health services (0 kaupapa Māori¹⁵); 5 education services; 34mins to metropolitan hospital.
- Mauriora: 0 Māori medium education services; 0 Marae.

Our community-focussed work with Te Hau Kāinga me Ngā Mana Whenua o Pōkeno involved producing two sets of StoryMaps. The first StoryMap reframes academic publications and quantitative data to highlight: the history of colonisation in Pōkeno; the ongoing place of Te Hau Kāinga me Ngā Mana Whenua; and their aspirations for the future of Pōkeno. The second StoryMap is designed to tell narratives of Pōkeno from both Mana Whenua and settler families, highlighting the importance of place in Pōkeno and to help the growing Pōkeno community understand the history and the cultural significance of particular places in the town they have chosen to live in. The published StoryMaps are for the community to use and share when advocating for their aspirations. It has been argued that digital StoryMaps can "decolonise the map" by centring Indigenous narratives and communities on their own terms (Beimers, 2022; Blackwell, 2016; Palmer & Korson, 2020). We also found that the StoryMaps process has been a positive mechanism to include and forge better relationships with the wider community.

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¹⁵ Māori centred services underpinned by Māori ways of knowing and being