







Inter-agency Collaboration for Active Mode Shift

Mängere West, Auckland

Interim Report

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Executive Summary

This research, funded by the Ageing Well and Healthier Lives National Science Challenges, examines the barriers and enablers to inter-agency collaboration in the design and provision of active travel infrastructure. It has been conducted as part of the wider ACTIVATION research programme investigating the delivery and impacts of neighbourhood interventions for active travel.

The key questions the research seeks to answer are:

- 1. How can improved inter-agency collaboration support the delivery of active mode shift?
- 2. What factors limit inter-agency collaboration and how do they impact the provision of active modes infrastructure?

The case study for the research is Kāinga Ora's redevelopment of Māngere West in Auckland. Following a preliminary document analysis, interviews were conducted with representatives of organisations involved in the redevelopment: Kāinga Ora, Auckland Council, Auckland Transport and consultants contracted by these agencies.

A socio-technical systems approach is used to consider the technological and social interactions within and between organisations that shape urban environments. The approach highlights how factors, such as governance structures and decision-making processes, institutional norms and rules and expectations, influence practices and outcomes.

Seven themes were established in the analysis: inter-scalar integration, knowledge exchange, neighbourhood-scale integration, inter-personal relationships, transaction costs, funding responsibilities, and funding flexibility. Below we summarise these findings and identify the challenges that agencies face when collaborating in the provision of active travel infrastructure.

- A critical issue was a disconnect between strategy and the funding for delivery. The strategy
 documents produced by each of the agencies indicated a general alignment of objectives
 supporting mode shift to increase active travel and reduce emissions. However, pathways to
 the design and delivery of infrastructure and environments to achieve these goals were not
 well coordinated between agencies.
- Knowledge exchange activities as part of the wider Auckland Housing Programme were identified as an enabler of inter-agency collaboration. Regular 'round table' meetings have taken place between Kāinga Ora, Auckland Council and its CCOs, and an MOU was signed in 2016. A 'Partnering Agreement' is also being prepared between Auckland Transport and Kāinga Ora. These activities have helped align and coordinate the delivery of the AHP and generate trust and understanding between the agencies.
- Maintaining effective inter-personal relationships across the teams involved in the redevelopment was seen as a critical to a successful collaboration, and was helped by regular stakeholder meetings. Staff turnover was a hindrance to collaboration except where it involved staff movement between the agencies. This could be beneficial if it increased familiarity with ways of working, processes and requirements between organisations. However, high staff turnover also meant increased workloads for affected departments, reducing their capacity to collaborate effectively, and at times leading to breakdowns in communication.
- Determining funding responsibilities, especially for the future management of assets, has required negotiation between the agencies. Reaching agreement over who would be

- responsible for funding and maintaining streetscape improvements and neighbourhood amenities is a critical concern shaping Kāinga Ora's development plans.
- The burden of asset maintenance plays a key role in decision-making. Kāinga Ora has significant capital to invest in developments and create safe and welcoming environments for active modes. However, transport infrastructure and assets will be vested to Auckland Council at completion and therefore depend on Auckland Council and Auckland Transport sign-off on proposed designs. In a constrained funding environment, tight budgets can lead to resistance to unfamiliar or novel designs that might be seen as a potential maintenance burden.
- Socio-technical regimes change slowly and the automobility landscape is deeply entrenched within contemporary land use and transport planning agencies. In addition, structural barriers and the siloed-nature of contemporary urban planning pose a significant challenge to collaborative projects. To create more attractive environments to support mode shift to active travel will require more than informal communication and knowledge exchange exercises. Pragmatic solutions, niche trials, collaborative working groups, stakeholder flexibility, and potentially, new organisational structures, may be needed to build momentum for change within the regime.

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Introduction

The aim of this research is to determine barriers and enablers to inter-agency collaboration in the design and provision of active travel infrastructure. We utilise frameworks designed to investigate the institutional logics, processes and practices that exist across the various stakeholder agencies involved. The case study for this research is Kāinga Ora's redevelopment of Māngere West

Inter-agency collaboration or interorganisational collaboration are multi-stakeholder partnerships and interactions, often involving a combination of different non-governmental and governmental agencies. Partnerships may emerge informally through pragmatic responses to complex issues, but may be, or become, more formalised through official partnership agreements or memorandums of understanding (MOUs) (Bardach, 1998). In recent years, inter-agency collaboration has received increasing attention as a way of improving community wellbeing and environmental and public health outcomes (Cross et al., 2009). Creating neighbourhoods that better support active travel options and mode shift fit into a bigger picture around community wellbeing, climate change and the need to decarbonise the transport system.

Climate change has long been identified as a 'wicked problem'. It is commonly understood that 'wicked' problems require solutions that cross agency boundaries and they cannot be solved through linear policy thinking where problems are fragmented into component parts. Instead, solutions to complex and wicked problems demand a collaborative and adaptive inter-agency approach (Scott & Merton, 2021). It can also be argued that designing a sustainable neighbourhood is a 'tangled' problem (Dawes et al, 2009). In contrast to wicked problems, the primary source of complexity for tangled problems is the jumble of actors required to solve them. Consequently, tangled problems inherently require intensive coordination and knowledge sharing (Gasco-Hernandez et al., 2022).

Integration of land use and transport planning is not a new goal for New Zealand; it goes back many years. For example, amended section 30(1)(gb) of the RMA, added in 2005, stated explicitly that "[Regional] Councils must give effect to the Act by ensuring "the strategic integration of infrastructure with land use through objectives, policies, and methods". A desire for better integration between land use and transport planning is a recurrent theme in strategic planning and policy documents from the national to local level.

Yet, implementation and delivery of integration continues to be problematic in New Zealand, as elsewhere. In the literature review section of this report, we will present international examples that highlight complex legal and institutional barriers to integration, often emanating from a longstanding structural separation of land use and transport decision-making. Identifying and addressing these barriers and developing interlocking planning processes will be critical to achieving sustainable transport outcomes.

The research reported here investigates the inter-agency relationships, interactions and decision-making that influenced the design and provision of active modes infrastructure in Māngere West. Active modes, such as cycling, walking and other micro-mobility devices, combined with growing public transport use are argued to reduce harmful emissions and pollution through reducing reliance on cars (Keall et al., 2018). Active travel outcomes can also improve health outcomes through increasing levels of physical activity (Shaw et al., 2017). In areas like Māngere West, where significant urban intensification is taking place, there is a danger that without corresponding investment in mode shift away from reliance on private cars, increasing density may negatively impact safety and health outcomes for residents. While achieving mode shift requires multiple levers, a key factor is the presence of nearby amenities and services that can be easily accessed through walking and cycling.

Here, Kāinga Ora's Māngere West development is well placed, with Māngere's town centre around one kilometre away. Multiple playing fields and parks are also nearby, however poor accessibility is a key area for improvement as Māngere is fragmented by the 20 and 20A state highways.

In the following section, we introduce the ACTIVATION research programme of which this investigation is a part; describe Kāinga Ora's Auckland Housing Programme and the Māngere West housing development; and review Kāinga Ora, Auckland Transport, Auckland Council and Ministry the for Environment policy documents relevant to the provision of active modes infrastructure. This is followed by a review of the key academic literatures that have informed the inquiry – socio-technical systems theory and a multi-level framework for understanding socio-technical transitions. A description of the research methodology is then provided along with key findings of the research. In the final section, we discuss the study findings in light of the literature and reflect on avenues for improving inter-agency collaboration to enable better delivery of active modes infrastructure.

Research Context

ACTIVATION: Activating Change Through InterVentions for Active Travel In Our Neighbourhoods

ACTIVATION is a research programme investigating the delivery and impacts of neighbourhood interventions for active travel. The research is being conducted in Māngere, Auckland and central Christchurch, funded by the Ageing Well and Healthier Lives National Science Challenges. The Auckland project follows Te Ara Mua — Future Streets, a researcher-practitioner collaboration that involved retrofitting neighbourhood streets to support safe and easy active travel (i.e., walking, cycling and public transport). ACTIVATION is investigating the mix of built environment and socio/cultural interventions required to promote health and wellbeing through mode shift to active travel and the organisational factors that support and impede their delivery.

A knowledge outcome for the ACTIVATION project is to better understand the relationships between stakeholder agencies that support the delivery of active travel infrastructure. The practitioner engagement and agency partnerships formed in the Māngere case study area will be examined to identify the barriers and facilitators to integrated co-design, planning and delivery processes. Data will be generated via interviews, workshops, and system mapping focused on everyday logics, process and practices within each agency. The research team's goal in undertaking the research is to inform design and delivery processes for active travel infrastructure and thereby improve the mobility choices and wellbeing of residents.

The Auckland Housing Programme

Kāinga Ora's Auckland Housing Programme (AHP) is constructing new dwellings and neighbourhoods at a scale unprecedented in recent times. Between \$4.2 to 4.3 billion is expected to be invested into housing across the region by 2024. Almost 7,000 new homes are either planned, consented, or currently being built – a mix of public rental, affordable and market rate housing. A range of housing types are being built, with most developments including some form of medium-density housing.

The AHP includes a wide variety of smaller housing developments spanning many sites across Auckland and several large-scale neighbourhood redevelopments of more than 2,000 units. Māngere is one of the largest of these precincts, with the others being Northcote, Tamaki, Oranga, and Roskill. The redevelopments replace existing low-density state housing with medium-density housing,

achieving around 200% uplift in total available housing. The age and poor condition of many clusters of state housing present an opportunity to master plan renewals at a neighbourhood scale. Spatial planning is undertaken at a precinct level, which then informs planning at the neighbourhood level. Significant investment in infrastructure is included in these large-scale redevelopments (including upgrades to transport, water, stormwater, parks and open spaces). External consultants have been contracted to master plan the AHP precinct, and in Māngere West this has been undertaken by Isthmus Group. The AHP forms part of the government response to a severe shortage of private and public housing, and the downstream consequences of high private rents and house prices and increasing rates of overcrowding and homelessness (Gordon et al., 2017; Murphy, 2020).

Mängere West

The Māngere Development currently encompasses Māngere West and Aorere, with the potential to add other neighbourhoods in the future. Similar to other large-scale redevelopments, Kāinga Ora is following a mixed tenure approach in Māngere. The agency's approach to mixed tenure tends to involve segmenting each neighbourhood into "superblocks", where one block will be composed of public housing and the other two blocks will be a mixture of affordable and market rate housing. Approximately 2,700 state houses are to be replaced by up to 10,000 new houses over the next 10–15 years in Māngere. The stated increase in housing will include around 5,000 new state homes and around 5,000 'Kiwbuild' and market homes.¹

The Māngere West neighbourhood redevelopment is of significant scale, with 230 existing state homes projected to be replaced by around 340 new state homes and around 600 affordable and market-rate homes. The build partners in Māngere West are Mike Greer and Fletchers. Their designs must follow Kāinga Ora's guidelines and pass a design review stage. As well as providing homes, Kāinga Ora's mandate includes developing thriving and sustainable communities, of which active travel and recreational opportunities are key components.

The Mangere West redevelopment includes most of the land along the northern end of Bader Drive. Figure 1 shows the various stages and development zones. Stage 1 involves sites either side of Bader Drive. The northern-most zones on Cessna Place are beginning to reach completion, while most of the development zones to the west of Bader Drive remain at the planning stage. The currently active developments include the first half of Stage 1A – 1-5 Bader Drive, 23-32 McKenzie Road and 1-7 Cessna Place.

 $^{1}\underline{\text{https://kaingaora.govt.nz/developments-and-programmes/what-were-building/large-scale-projects/}$

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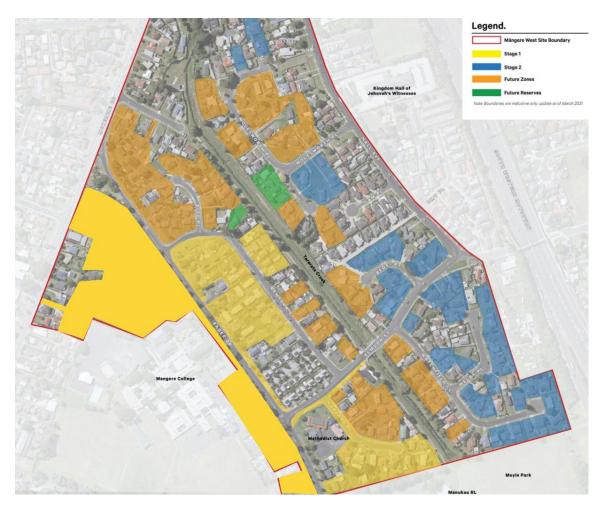


Figure 1: The stage plan for Kāinga Ora's Māngere West redevelopment (https://mangeredevelopment.co.nz/neighbourhood/mangere-west/)

Active modes infrastructure in Mangere

Māngere Central had an active travel infrastructure upgrade in 2015/16 through the Te Ara Mua – Future Streets project. Future Streets was a neighbourhood-scale suburban retrofit to make active travel safer and easier, with designs that also reflected the area's cultural identity (Mackie et al., 2018). 'Soft' initiatives such as training courses and bike events were supported alongside the infrastructure upgrades. Further active travel upgrades for Māngere have been proposed by Auckland Transport (AT), but progress has been slow, with most active travel projects cut in the 2020 'emergency budget'. The plans included a number of protected cycleways connecting with existing infrastructure running between the airport and the Māngere Bridge (including the recently opened walking and cycling bridge to Onehunga), a cycleway along Bader Drive and an upgraded shared path across Highway 20 to Māngere Central Park. In 2021, Innovating Streets for People (ISfP) projects in Bader Drive and Māngere East applied co-design and tactical urbanism principles to keep alive the prospect of street changes to reclaim road space for active modes. AT have also prepared a Māngere East Cycling Single-Stage Business Case, but it is yet to produce any confirmed projects.

Strategy and policy settings for active transport in Auckland

Appendix 1 provides a review of key strategy and policy documents relevant to planning and delivery of active modes infrastructure in Auckland. To briefly summarise the content and implications of these documents we draw on an analysis by Smithers (2020). Broadly, both national and local strategy and

policy documents highlight the importance of integration, but pathways toward implementation are often vague beyond an aspirational level, with committed funding frequently missing, and policies that lack strategic integration. Smithers' (2020) analysis of the implications of the National Policy Statement: Urban Development (NPS: UD) for land use and transport integration makes clear the complexity of the current policy environment. He points out that key policy documents for transport and land use planning commonly reference each other but rarely provide the authority to direct decisions. Specifically, most documents require decision-making to "take account of" but do not "give effect to" relevant policies, requiring minimal practical integration for land use and transport planning agencies. This makes for a complex and challenging planning environment in which central and local government agencies operate.

Using Mangere West as an 'on the ground' example, we will examine the inter-agency collaboration occurring under these policy settings for the design and delivery of active modes street infrastructure. Before reporting on the empirical study, we will discuss theoretical approaches used in the research literature to investigate and understand the challenges of inter-agency collaboration to support a modal transition to active travel through changes to the street environment.

Literature Review

To explore the enablers and constraints for effective inter-agency collaboration in land use and transport planning, several areas of literature are useful. Firstly, socio-technical systems theory is relevant for understanding the social and material processes and networked relationships of organisations. Secondly, the multi-level perspective provides a framework for understanding socio-technical transitions. This networked understanding allows the various scales of governance and decision-making that impact integration between land use and transport planning agencies to be examined.

A socio-technical systems approach

Land use and transport planning agencies are large and complex socio-technical systems (Bijker, 1995; Bijker & Law, 1992; Orlikowski & Iacono, 2001). The regulatory (e.g., policies, legislation and guidelines) and technological components (e.g., software, databases and other digital components) that inform decision-making within these agencies are bound up in the various social aspects of organising. These social aspects include inter-personal relationships, institutional cultures and norms of practice (Fedorowicz et al., 2014). Urban planning outcomes are therefore shaped by these various social and, more specifically, organisational features – such as governance structures and decision-making processes; key users and stakeholders; institutional norms, rules and expectations; and the need for external resources (Dawes & Pardo, 2004; Pardo, Gil-Garcia, & Burke, 2008).

If both technological and social forces shape the outcomes of urban planning, then solutions to urban planning problems must likewise consider both technological and social aspects (Bijker, 1995; Janssen et al., 2010). Overlooking social aspects of change can lock in 'business-as-usual' practices and decision-making by masking the 'ways of working' that prevent better planning outcomes. For example, established ways of working often become highly familiar and automatic to those working within existing systems, and taken-for-granted practices tend to go unseen, presumed to be unproblematic (Orlikowski & Iacono, 2001). A socio-technical systems analysis explicitly calls for an examination of the interwoven nature of social and technical aspects of organisational practices, and how they ultimately influence practices and outcomes.

Organisational systems tend to be nested within larger social and political environments and these can influence collaborative practices (Janssen et al., 2010; Lee et al., 2011). For example, in a review of public sector collaboration research, Yang and Maxwell (2011) identified 11 factors interacting in a complex fashion that influenced the success of outcomes. They found that environmental factors (e.g., external funding, statutory mandates) were significant in influencing the types of collaborations that emerged, demonstrating a high dependence on external conditions. While identifying commonalities and patterns in public sector collaborations, the study concluded each network is unique due to specific institutional settings, goals, ways of functioning, membership and governance. As covered in the document analysis, Smithers' (2020) review of New Zealand's NPS: UD provides a clear example of how a lack of regulatory alignment can impede integrated planning.

Socio-technical systems also operate across multiple boundaries, between different regulatory or funding bodies, and while some organisational networks may coexist, others will have competing interests. Crossing multiple boundaries also implies there will be multiple, overlapping internal and external stakeholders (Chun & Rainey, 2005). Hence, socio-technical observations can be wide-ranging as they usually encompass the ways of working of both technical and organisational staff and management within a collaboration and among participating organisations (Fedorowicz et al., 2014). All of these individuals and groups stand to benefit from a deepened awareness of how socio-technical factors intertwine.

A significant application of the socio-technical approach to multi-sectoral collaborations has focussed on assessing the progress of sustainability and 'green' transitions.

A multi-level perspective on collaboration

Inter-agency collaboration in the Māngere West study is investigated from a multi-level perspective (MLP). The MLP approach conceptualises the complex dynamics of socio-technical systems, and the interactions of different stakeholders within them, across multiple levels: macro (landscape), meso (regime) and micro (niche) (see Figure 2). This actor-based approach contends that existing socio-technical systems form a 'regime' stabilised by shared rules and practices, and that developments at multiple levels link together and reinforce each other as a result of the interplay of many processes and actors (Geels, 2002; 2004). In Māngere West, the organisational rules, practices and logics of Auckland Transport, Kāinga Ora, Auckland Council and Waka Kotahi comprise the most relevant 'regimes' within which the design and delivery of active modes choice is taking place.

At the highest structural level, the 'landscape' forms a broad exogenous environment beyond the direct influence of regime and niche actors. Landscape pressures tend to build gradually but can sometimes appear suddenly, triggering changes in logics and practices at the regime level (Geels & Schot, 2010). Some relevant changes at a landscape level that have been argued to put pressure on transport and urban planning regimes are: the environment (e.g., climate change), spatial structures (e.g., urban layouts, infrastructure), macro-economics (e.g., oil prices), politics (e.g., government viewpoints, budgets), culture (values/behaviour change) and global pandemics (Geels, 2012; Larbi et al., 2021; Moradi & Vagnoni, 2018; Schindler et al., 2018; Whitmarsh, 2012).

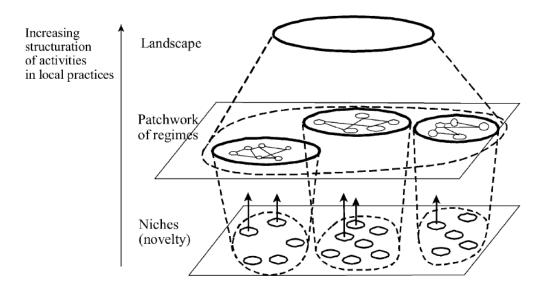


Figure 2: A hierarchy of socio-technical dynamics (Geels, 2002).

The term 'regime' refers to dominant practices and the shared logics, resources and routines on which they draw. Urban and transport planning socio-technical regimes are stabilised by their various logics and routines. Innovations within the regime will draw on these structural elements and typically reproduce dominant practices. At the micro-level, niches are where radical innovations emerge. Dedicated actors associated with particular niche ideas or technologies offer a level of protection in early phases (Kemp et al., 1998). Te Ara Mua – Future Streets and the Innovating Streets for People projects can be considered niche ideas that have changed the Mangere streetscape, but most importantly seek to influence the way in which street improvements are conceptualised, planned, and delivered. These niche ideas and technologies can unsettle existing socio-technical regimes, if only temporarily or in minor ways (Geels & Schot, 2007). Occasionally, an innovation may disrupt the dominant socio-technical regime enough to cause lasting change, or may eventually overturn it entirely.

While active travel and environmentally sustainable transport options are playing a role in the dominant urban planning and transport regimes, their practices and technologies largely remain niches, associated with activists and experimentation (Geels, 2012). In New Zealand, active modes knowledge and practices are evident within transport planning agencies. However, the delivery of active travel infrastructure, while good in places, remains inconsistent and active modes are rarely prioritised. Active travel remains a niche travel habit, with 'soft' transport policy options (e.g., information-based) achieving only modest impacts on travel behaviours (Whitmarsh & O'Neil, 2012). However, structural level changes (e.g., infrastructure mode reallocation, densification) can disrupt travel habits (e.g., driving), leading to renegotiation and more sustainable active travel behaviours (Whitmarsh, 2012). Niche-level technological advances can also impact the dominant regime. For example, advances in battery technologies (energy density improvements and cost reduction) have significantly expanded the use-potential and accessibility of e-bikes, so that people are increasingly using them and consequently demanding better cycling infrastructure (Edge et al., 2020). Equally, at a landscape level, changing societal values and expectations due to, for example, growing recognition of anthropogenic climate change and the need to decarbonise the transport system, are creating topdown pressure for sustainable alternatives to automobility (Delbosc, 2017).

Mackie et al. (2021) use a multi-level perspective to describe the barriers and enablers to five niche street projects to promote wellbeing in New Zealand. In their analysis, they found that external projects originating from outside the transport agency – often requiring greater levels of collaboration – faced more barriers to implementation than those internally developed. Niche streetscape interventions, such as the Te Ara Mua – Future Streets project in Māngere, struggled to gain conceptual 'buy-in' and did not attract strong senior-level support. Without out this acceptance at the regime level, these niche projects struggled to effectively navigate through the complex planning system.

The importance of combining multiple levels of analysis in the study of organisational phenomena has been increasingly recognised in literature on socio-technical transitions (Fuenfschilling & Binz, 2018; Kern, 2012; Raven et al., 2012). The multi-level perspective provides a framework for considering how individual and collective actions play a role in the interdependence of different levels of collaboration and competition in the context of inter-agency and multi-sectoral networks (Geels, 2020). As Bedwell et al. (2012) argue, collaborative processes and their effects often occur at multiple scales. Concerning inter-agency collaboration, the wider socio-technical regime, particular organisations and individuals may all be identified and analysed as a network. To understand inter-agency collaboration, the multi-level nature of cooperation and competition must be fully explored (Austen, 2018).

Socio-technical systems approach to inter-agency collaboration

Public sector collaborations are widely understood as shared activities between two or more agencies that are intended to increase public value through working collaboratively (Bardach, 1998). Effective working partnerships require adherence to common standards and the negotiation of mutually beneficial contacts (Thomson & Perry, 2006). Generally, success is measured by the achievement of common goals when stakeholder partners share knowledge and resources in planning and management decision-making (Austen, 2018).

Ineffective or failed inter-agency collaborations are common. Rod and Paliwoda (2003) report a failure rate of 50% to 70% for attempts at multisector and multiparty collaborations. Failure often occurs when broad challenges related to knowledge creation and exchange are not addressed. If not appropriately confronted, these challenges produce a knock-on effect of breakdowns in coordination that can lead to an inability to effectively integrate the skills, knowledge and perspectives of the collaboration partners. Recent theorisation by Sørensen and Torfing (2021) suggests collaboration flows down from the 'upstream' strategy level to 'downstream' implementation and delivery. While upstream issues related to inter-agency collaboration such as strategic planning alignment, knowledge sharing and expertise recruitment have attracted more attention, they argue downstream issues related to implementation and evaluation remain more problematic.

Zuzul's (2019) study of collaborations in two smart city projects highlights how high-level conceptual divergences can flow down to integration issues during implementation and delivery. Both projects structured collaboration around the development of 'boundary objects' that could integrate actors' various expertise. 'Boundary objects' were defined as processes, concepts and other entities that could bridge across organisational boundaries and act as shared reference points for collaborators (Fominykh et al., 2015). However, in both projects, these boundary objects became the site of conflict that exacerbated rather than attenuated differences. Zuzul (2019) concluded that the participants had divergent perspectives on what the 'smart city' concept implied and this created ambiguities about what material outcomes were being sought through the projects. These divergent perspectives became a 'matter battle', where differing expectations around a physical object or space (e.g., land, infrastructure) become a site of conflict. Urban spaces are regular sites for such 'high-stakes' conflicts,

as the outcomes of developments occupy a permanent physical space. The land can only exist in one configuration that, once set, takes significant effort to reconfigure differently. Consequently, even minor disagreements can be fraught and emotional (Boyer, 2019). Effective inter-sectoral collaborations therefore require the sharing of knowledge and early alignment of underlying conceptual understandings to avoid such *matter battles*.

Interpersonal relationships can facilitate effective inter-agency collaboration, especially where they involve trust, knowledge sharing and shared goals (Alhassan et a., 2021). In Politis et al.'s (2017) study of built environment interventions to improve physical activity in Canada, key informants described how interpersonal relationships between staff in different sectors were the most important factor in inter-agency collaboration. Personal relationships fostered a commitment to continuing to work together, and were particularly important in the absence of formal agreements and protocols However, employee churn can undermine a partnership's sense of shared purpose, especially if formal mechanisms are not in place to induct new staff into collaborative ways of working. In the researcher – practitioner partnership behind Te Ara Mua – Future Streets, a collaborative breakthrough followed onsite visits, which reinforced that making life better for local people was a unifying concept and shared project purpose (Witten et al, 2018).

Trust

Interpersonal and institutional trust are hallmarks of effective collaborative partnerships. Respect and understanding across the involved parties help to promote trust and opportunities to efficiently share and utilise knowledge (Kamaşak and Bulutlar, 2010). Where there is institutional trust, employees are more likely to believe that the systems and hierarchies of decision-making are effectively contributing to desired goals (Ellonen et al., 2008).

Responsibilities within networked interactions overlap (often at different scales), and when trust is weak, organisations may be sceptical of collaboration and see themselves competing with other agencies for scarce resources (Austen, 2018; Linden, 2010). Common sources of distrust between collaboration partners can be divergent worldviews regarding the problems being faced, differing goals, a lack of policy communication or knowledge exchange (Lee & Lee, 2018) and/or a desire to achieve organisational goals and maintain a level of autonomy. Collaborative partners can therefore face a dilemma between the expectation of transparency between stakeholder agencies and a desire to remain independent and adaptive to changing circumstances. In the struggle to balance these conflicting pressures, a high level of inter-agency trust can be drawn on to promise both explicitness and opportunity (Börjeson, 2018). In the absence of trust, public sector managers tend to react to calls to work together by trying to read implicit signals about who will ultimately be held individually accountable for programme success or failure (Scott & Merton, 2021)

Transaction costs

Inter-agency collaboration to achieve the strategic goals of emissions reductions and mode shift are arguably far from the BAU approach in New Zealand. Without established models to draw on, attempts at inter-agency collaboration can often generate high transaction costs relating to the time, effort and financial costs of working together (Scott & Merton, 2021). Clarifying leadership and governance structures, shared objectives and responsibilities from the outset and achieving a high level of goal commitment from stakeholders are likely to reduce transaction costs for the collaboration as a whole (Scott & Boyd, 2020). However, inclusive decision-making, requires ongoing negotiation and dispute management and this takes time and an emotional commitment. When progress is slow, frustration and uncertainty can arise. To build trusted relationships and reduce transaction costs in more complex areas of collaboration, Ansell & Gash (2008) suggest a 'small wins' approach, whereby

seeking successes in less challenging areas of collaboration can form building blocks to taking on more complex issues.

An alignment between the values and personal motivations of staff and the objectives of the collaboration, termed 'mission valance' by Wright and Pandey (2011), can also enhance goal commitment. An organization's mission can be a powerful and positive force.

Research Aim

To examine the inter-agency relationships and interactions that influence the design and provision of active modes infrastructure within a neighbourhood scale redevelopment.

Key questions:

- 1. How can improved inter-agency collaboration support the delivery of active mode shift?
- 2. What factors limit inter-agency collaboration and how do they impact the provision of active modes infrastructure?

Methods

The neighbourhood scale of Kāinga Ora's Māngere West redevelopment means infrastructure – such as roads and walkways – is integral to the design and delivery of a sustainable and thriving community. Recent research has highlighted the value of case studies for influencing decision-making within multistakeholder partnerships. Beyond providing practical examples, case studies can help decision-makers make sense of local context and reflect on pathways through complex inter-agency interactions. Well told 'believable stories' have been shown to increase acceptance by local people and decision-makers of environmental changes to support walking and cycling (Le Gouais et al., 2021).

The primary data collection methods used for this research have been document analysis and interviews with representatives of organisations involved in the Māngere West redevelopment: Kāinga Ora, Auckland Council and Auckland Transport. The organisations were contacted, informed about the study and approval sought to approach up to three employees for participation in the research. Additionally, the researchers became aware of the involvement of several external consultants who were or had been involved in active travel related projects in the development area.

Kāinga Ora were supportive of the research and the use of one of their AHP developments as a case study. Ethical approval was obtained from Massey University's Human Ethics Committee (NOR 20/43) and Kāinga Ora's ethics committee.

Following approval from the organisations, potential interviewees were identified, contacted, and invited to participate. The participants were informed that permission had been given by their organisation, but that they were under no obligation to take part in the research. Informal discussions with employees assisted the researchers to identify potential participants for the research.

This first round of interviews was conducted between July 2021 and March 2022 and included seven participants: three from Kāinga Ora, one from Auckland Council, one from Auckland Transport, and three individuals involved in the Māngere West development but external to those organisations. The interviews lasted up to 60 minutes and focussed on the participants' day-to-day activities and interactions, what logics they followed, and what decision-making processes were important. We also asked about the types of interactions they had with external agencies and what constraints and obstacles they faced within collaborations. Each interview was audio recorded and transcribed.

The interview data were analysed thematically using a framework developed from socio-technical systems and multi-level perspectives. Each interview transcript was read and the data coded into themes before data from all interviews were compiled into a thematically sorted document. Each theme was then reviewed with close attention to existing socio-technical studies literature on interagency collaboration. The draft report was circulated to the participants for their feedback before publication.

Findings

The thematic analysis of interview data is presented under the following thematic headings: Interscalar integration, knowledge exchange, neighbourhood-scale integration, inter-personal relationships, transaction costs, funding: responsibilities, and funding: flexibility.

Inter-scalar integration

Inter-scalar integration is the alignment of strategy, objectives and expectations and the sharing of concepts and knowledge across different organisational levels. Analysis of Kāinga Ora, Auckland Council and Auckland Transport strategy documents suggests a general alignment of strategic objectives seeking sustainability through mode shift. Kāinga Ora consulted across multiple external agencies on their 'Sustainable Transport Strategy' and believe it aligns "really well" with the strategies of transport agencies. Kāinga Ora interviewees indicated the Strategy has been a "collaborative model ... right from the beginning". They see themselves as "in this together ... [we] want the same outcomes" and need to "work together ... to make sure we deliver in a collaborative way ... A lot of these things we can't do ourselves ... [we need] to partner with other organisations to deliver". (KO1)

Kāinga Ora's urban design team see the Sustainable Transport Strategy (see Appendix 1 for details) as being about doing medium-density well, providing density with amenity and demonstrating to the wider community that Kāinga Ora is able to achieve its stated goals. For Māngere West, design elements consistent with the plan are widening pavements and planting trees along Bader Drive. The design is also intended to create passive surveillance and make the local laneways look and feel safer. The goal is to make walking "feel like a much more easy choice". (KO2)

There is confidence amongst the strategy team that the urban design team will translate these aspects into their neighbourhood designs, since "they are really strong with this stuff" already, but the Strategy helps them "to really push for bigger changes that mightn't been supported before."

However, if there is high-level strategic alignment between agencies, it is not well networked, meaning the delivery of these strategies remains relatively uncoordinated. Problems materialise downstream at a project management and delivery level — especially around agreement and coordination of funding responsibilities. Consequently, strategic goals are difficult to follow through and can often meet resistance when reaching the resource consenting and engineering planning approval stages.

Each of the organisations commented on the challenge of translating strategy and policy down to delivery. Auckland Transport state they are looking at how to translate high-level strategic goals into the outcomes they deliver.

"it's something that we've been grappling with, because we will provide advice at these higher levels. And they're not always followed through when you come down to the resource consent or engineering plan approval stage." (AT)

Similarly, Auckland Council also report issues of connecting strategy to delivery:

"I think we find, in general, that ... sometimes a strategic direction, does get lost at the delivery phase." (AC)

In relation to transport, the critical issue seems to be connecting strategy to funding for delivery:

"If you're talking about transport-specific projects, it's the funding element ... there may be an aspiration to deliver it, we just can't ... because the funding is not there for it. That's our biggest problem at the moment." (AC)

With each agency facing a similar challenge, integration becomes all the more difficult as strategy integration at one scale does not easily translate into collaborations at other scales. This can lead to costly breakdowns in communication.

"...that's where you can experience quite a lot of delays ... in some cases we may provide conflicting advice ... there's not a lot of clarity around why they've done that." (AT)

As will be discussed later, common organisational challenges like staff turnover can aggravate these issues.

"...that's ... in the context of, you know, the usual things of people changing ... jobs and leaving and coming and going from both organizations." (AT)

All agencies working in Māngere West referred to a disconnect between strategy, design and delivery as an issue in the collaboration. For example, our Auckland Transport interviewee found that the civil works partner would present designs that seemed to them to be inconsistent with the overall outcomes being sought by Kāinga Ora.

"Sometimes we found there can be a disconnect between what Kāinga Ora is seeking as an outcome and what Piritahi are putting forward ... [leading to] quite a lot of delays, potentially ... re-litigating matters, which may have already been discussed ..." (AT)

They also acknowledged that Kāinga Ora likely faced similar problems when dealing with different teams within Auckland Transport.

"... and then from AT's point of view, we're obviously not blameless, in all cases, in terms of potential inefficiencies ... in some cases we may provide conflicting advice." (AT)

Remarking on this apparent disconnect between aspirational strategy documents and an adequate pathway toward funding and delivery an external consultant commented:

"You go, well, we've done it, we wrote the strategy and it's like, but you're not actually doing it. No one said there was an implementation plan and nobody funded the implementation." (C1)

Knowledge exchange

Kāinga Ora started with a knowledge sharing process with Auckland Council early into the AHP. Developing a good relationship with Council was considered critical as successful outcomes would depend on coordination and alignment with Council teams. Early goals were to identify Council information, plans and strategies for the neighbourhoods destined for redevelopment and explain Kāinga Ora's development plans. For example, it was recognised that programmes like Auckland Transport's 'Connected Communities' could impact on development opportunities. Kāinga Ora was looking to understand the existing infrastructure like transport, but also other aspects (e.g., pipe capacities) to develop what they call a 'Key Moves' plan.

"... we have a good relationship with Council, in the sense that we've got our own specific people looking after that relationship. So, from very early on it was like, okay this neighbourhood is our next ... one we're going to start looking at. In the first stage, it's ... knowledge sharing ... what Council information do you have that's relevant? So this example there's area plans, there was a few capital projects like 'connected communities'." (KO2)

Knowledge exchange between agencies is an important aspect of inter-agency collaboration. The level of knowledge exchange between agencies also varies at different scales. Again, at the strategic level there was evidence of some collaboration between Kāinga Ora, Auckland Council and Auckland Transport, as well as Waka Kotahi. It was reported that at one stage there were fortnightly meetings between Kāinga Ora and Auckland Council around higher-level strategies and intended outcomes for Māngere. However, a step down from strategy, at the master planning level, there seems to have been less regular contact between Kāinga Ora and the other agencies:

"Once it gets to the master planning ... I don't think it's quite a fortnightly picture ... it's more of a provide feedback approach, which is something that I've been looking into of how do we carry on that kind of relationship at the next phase." (KO1)

It is hoped that getting everyone "around the table" at an earlier phase and "address[ing] those problems along the way, before ... consenting" might help reduce the amount of "pushback" Kāinga Ora faces due to finer "details [that] might not work for ... other agencies."

The founding document for the inter-agency collaboration was an MOU signed in 2016 between Homes Land Community (HLC) and Auckland Council and its Council Controlled Organisations (CCOs) (e.g., Auckland Transport and Watercare). With HLC becoming a subsidiary of Kāinga Ora, there has been an assumption that the MOU has carried over. However, while there was confidence that "all parties understand what Kāinga Ora is trying ... to achieve", it was felt by some that the MOU was "out of date" (AT).

Tightening ways of working together have involved multiple activities, but they have not necessarily involved all parties at all stages. For example, a new 'partnering agreement' between Kāinga Ora and Auckland Transport was under development in early 2022 "looking at current processes and how … can improvements be made … so there's a benefit for both parties going forward" (AT).

Neighbourhood-scale integration

The importance of inter-agency collaboration is heightened due to the relatively novel requirements of Kāinga Ora's AHP. In particular, the size of the AHP, the neighbourhood scale of its development, and Kāinga Ora's mandate to create 'thriving communities' are pushing them to consider aspects of urban development beyond simply producing houses. The impetuous for Auckland Transport to work more closely with Kāinga Ora has developed as the agency's large-scale neighbourhood developments have begun in earnest. With Kāinga Ora master planning urban intensification, there is a clear demand for integration with infrastructure provision and transport planning. Auckland Transport see this is a critical aspect of the AHP:

"[The planned] higher density growth ... really highlights the need for more integration and obviously presents opportunities in terms of how mode shift is achieved. Because mode shift in these brownfield areas is kind of a pretty fundamental plank." (AT)

In setting up the AHP, Kāinga Ora developed a business case for each precinct. For Māngere West, the agency has a dedicated project team as well as a wider 'Māngere Project Working Group'. Working at a neighbourhood-scale increases the opportunity for Kāinga Ora to create "environments that contribute to thriving communities", as set out in their Statement of Intent.² Similarly, Auckland Council have an AHP team who are able to work closely with Kāinga Ora on each precinct. As a regional transport authority, Auckland Transport predominantly has an infrastructure focus. They do

² https://kaingaora.govt.nz/assets/Publications/Statement-of-Intent/Statement-of-intent-KO007-2019-v12.pdf

not have an equivalent dedicated manager for Māngere West and this was raised as a potential issue by multiple interviewees:

"Kāinga Ora would have done their business cases for the housing program; our business cases would be down to the delivery of a particular piece of infrastructure ... not in relation to the program as a whole." (AC)

Our Auckland Transport contact was aware of this issue around integrating infrastructure decision-making to a neighbourhood-scale:

"[we] need to work through some of the key issues around the implementation, particularly at a kind of neighbourhood level ... matters of funding and delivery responsibility." (AT)

Auckland transport do have a lead for each area, but this is not a dedicated role working solely on Kāinga Ora's AHP precincts:

"We don't have an overarching delivery contact ... there's no one who has necessarily been assigned to Māngere West. So all the improvements are kind of happening pretty incrementally ... that will only happen probably when we have clarity around a program or schedule of works. And we understand what AT is actually going to be building ... for Māngere West. That's not in place at the moment. It's fair to say it's not in place for any of the neighbourhoods, and that's something that we're working on at the moment. So yeah, we don't have a single kind of delivery point of contact." (AT)

As will be discussed in the following section, various specialists from Auckland Transport have taken part in the AHP meetings hosted by Auckland Council. This allows Auckland Transport to take part in discussions regarding Mangere West and other AHP precincts and to guide Kainga Ora toward infrastructure designs and solutions the transport agency is likely to support at a later stage:

"We go to those Project Working Group meetings. And we kind of cover off the whole of Māngere jointly ... [We] try as much as possible to have a key point of contact within AT ... [so] that we can provide consistent advice." (AT)

The different stages of the development process are likely to involve different Auckland Transport key contacts (e.g., master planning, resource consents, engineering approvals etc.). An external consultant on a cycling infrastructure project in the area commented that there had been limited inter-agency interaction for them at this stage, adding that nearer delivery they would expect closer collaboration "[they're] only starting to get lines on a map ... [where] they might want a potential network". The consultant saw coordinating the delivery of the houses with the infrastructure as important, but it would need to be at the right time: "because we might build a cycleway in two years, and they might take five years to build their development" (C3). With a Kāinga Ora stage already underway and some housing complete in Māngere West, this response was somewhat surprising. However, the consultant was keen to emphasise that their work in the meantime was to push the agencies beyond looking only at infrastructure delivery:

"[we need to] stop ... thinking about this project as a cycleway project and start thinking about it as a project to get people cycling ... which requires fifteen other levers to be pulled rather than just laying concrete out on the road." (C3)

Inter-agency collaboration at a neighbourhood-scale can spark local land ownership issues, with the value of the same piece of land being viewed differently by each stakeholder. Tararata Stream is an example of this, where the value, or more precisely the future value, of the land has led to conflict between the stakeholders. For Kāinga Ora, the walkway to the side of the stream presents an

opportunity to create a green corridor onto which their new housing can front. Away from the busy Bader Drive, they see the stream walkway as a key active travel route between the new dwellings and Mangere town centre.

"What we'd like to do is ... turn it in to something active and vibrant, whereas at the moment it's lined on both sides by backyard fences ... [we] would've liked to have done straight away ... [but] we've got a big stormwater management plan ... to sort out first ... because ... we don't want to ... develop and then the stormwater engineers come along and rip everything up because they've got to widen the stream or whatever." (KO3)

Designing Tararata Stream to be pleasant and safe place to walk or cycle becomes more complex, since it also serves as a key piece of infrastructure for Watercare, an Auckland Council CCO charged with water management. Watercare need to be convinced that the stream will be able to handle stormwater events before resource consent will be provided to Kāinga Ora. At a strategy level, these potential conflicts seem less concerning:

"One of the big key moves in Māngere ... was Tararata Creek ... we do strategies ... where we work really closely with council to make sure it aligns and ... they've got their own documents that talk about the need to improve the creek and so, we would partner with them as we do that work." (KO1)

However, at a delivery level, the competing interests in the function of the stream have been more challenging to resolve. Kāinga Ora now face frustrating delays to resource consenting for the development, which threaten to limit the extent to which the stream walkway can be transformed:

"... if we were an individual developer, we'd get away with it ... [but] because the council are aware of the scale that we're operating at, they're saying "whoops, no, you can't put in any resource consents for development until this issue is resolved." (KO3)

There is also a local 'Stream Team' community group who are concerned with the ecological health and amenity value of the stream.

"The Stream Team is a local community group that are quite strongly advocating for good outcomes in Tararata stream ... whilst we've kind of got some long-term good visions to make sure that stream is really good ... we need to resolve the storm water ... [and] ensure that the fish are protected during construction, and in the long term." (KO2)

After an early incident that upset the Stream Team, Kāinga Ora have been careful to ensure they do no further damage to the stream as a site for local biodiversity. At strategy and master planning levels, the importance of the stream as a natural resource is recognised but this message also needs to be conveyed to their development contractors.

Consequently, the future of the stream and Kāinga Ora's aspiration to create an attractive local corridor for active travel has become a complex 'matter battle'. The stream corridor needs to meet multiple functions that are controlled by different agencies. Before the development can continue a resolution that appears all parties will be needed.

Making space for the community's voice to be heard as a stakeholder in their local neighbourhood is something which Kāinga Ora representatives say they are careful to promote. Yet, navigating the inter-agency collaboration in Māngere may have caused some uncertainty about each agency's role in community engagement. Auckland Council listens to feedback from local boards, but felt that the onus was on Kāinga Ora as the developer to consult with the community about their projects:

"That's not necessarily dealt with by council, that's kind of Kāinga Ora ... [they] do their consultation with the community on their plans, the community voice from our side comes in through the local board." (AC)

Kāinga Ora representatives said they "engage really heavily" with the local community "once things are actually detailed out" and they are "looking at designing things specifically". This process involves first talking to their tenants and then later doing broader community engagement. However, it is worth noting that the agency "don't engage with the community ... [at] a precinct level".

"... at that strategy level, we still really want to capture the community aspirations ... [but] we are relying heavily on council for that voice on their own strategies and their own engagement ... [we] look ... at the local board plan and then what council has said the aspirations are for that particular neighbourhood." (KO1)

Similarly, Kāinga Ora interviewees suggested the agency engages "really heavily with mana whenua" as they "develop strategies in Auckland" and "have a hui almost every couple of weeks". While the agency is clearly engaging with a variety of communities at multiple levels, the lack of engagement at the precinct level presents questions around how a local community voice can feed into a neighbourhood vision before some aspects of the development are set.

From the perspective of one consultant, there was an issue with strategy development being disconnected from local community contexts. They felt that each agency brought their own separate strategic vision to the redevelopment, and questioned whether any spoke specifically to the people of Māngere:

"AT go we want Māngere to ... [have] safer walking and cycling and a vibrant community ... and then Kāinga Ora is like we want cohesive communities and Council is like we want a thriving Auckland where talent comes to live. They're not specific goals to Māngere and so everyone's just like 'I can't get behind that' ... we want to ... celebrate ... people's actual identity." (C2)

Inter-personal relationships

The personal connections interviewees had made across the agencies were a key aspect in advancing inter-agency collaboration in Mangere West.

Our Auckland Council interviewee emphasised that successful collaboration came from maintaining good inter-personal relationships across each agency: "relationships are a really strong part of the success out there" (AC). They explained that their relationship with Kāinga Ora and coordination in regard to Māngere West were bolstered by knowing a number of ex-Auckland Council employees now working for Kāinga Ora on that project: "he's been around for quite some time". It became apparent that Kāinga Ora were currently absorbing staff from other organisations such as Auckland Council and Auckland Transport, and were perceived to be doing well at retaining them.

"I think the fact that they've got a good retaining of staff, they don't have a very high turnover of staff at the moment helps the process." (AC)

That individuals on Council and Kāinga Ora teams were known to each other was believed to contribute to an environment of "open and honest conversations". While Auckland Council were struggling with workloads due to a loss of staff, our Council interviewee also stressed there were benefits to having ex-council staff working in Kāinga Ora:

"[It's] really beneficial to us ... because they can educate Kāinga Ora in terms of processes and the difficulties ... [and] the financial complexities for council." (AC)

However, staff turnover for Auckland Council and Auckland Transport was still a concern with comments indicating managers were having to "cover ... a lot of work at the moment" in both agencies.

In an attempt to maintain inter-personal relationships across agencies involved in the AHP, Auckland Council were running regular meetings with their CCOs and Kāinga Ora. It was hoped that by meeting regularly, and using established processes of knowledge exchange, the risk of relationship and coordination breakdowns due to staff turnover would be reduced. A monthly meeting provided new employees involved in higher-level planning across the AHP with a regular opportunity to connect with information, people and processes.

"We set up monthly meetings, which include all of our council asset owner specialists, so parks, community facilities, AT, Watercare, and our healthy waters department ... and the Kāinga Ora development managers ... we really nut out the problems ... we kind of act as ... a one point of contact. So if there's a problem ... then they come to us and we try and get the right people in the room ... So collaboration is our big thing at that particular level." (AC)

This approach has been welcomed by Kāinga Ora who commented on the benefit of having dedicated Council staff aligned with their dedicated development managers and precinct teams.

"I found it reasonably stable ... they have quite specific teams for different neighbourhoods. Which I think works reasonably well because each of our neighbourhoods more or less has a different development manager ... [so] it's always the same person for the same neighbourhood." (KO2)

While the regular stakeholder meetings have been a useful exercise in knowledge exchange, the informal nature of the meetings has at times been a drawback. It was noted that without formal agreements, misunderstandings can occur or expectations may change over the course of a project. Kāinga Ora reported that this had occurred in the Māngere development.

"I think the person-to-person level is quite informal ... [we] do kind of have to have some minutes and some note taking ... [but] we've been slightly burnt by Council, in that we thought we had agreement for the master plan ... and then ... the resource consent ... raised some problems. And that's purely because we probably took a slightly too informal approach and didn't get like an official endorsement or sign off, of an earlier vision. And over the course of two-or-three years people change and that sort of stuff happens." (KO2)

Nevertheless, inter-agency meetings at multiple levels have helped to keep stakeholders reasonably well informed about Kāinga Ora's strategic objectives and high-level plans for Māngere West. However, even with these knowledge exchange exercises, communication breakdowns have seemingly occurred. There was discussion amongst interviewees of a disagreement or misalignment of expectations around the delivery of active travel routes through the Māngere West development.

As discussed earlier, Kāinga Ora's master plan indicated the renewal of the Tararata Stream corridor to make it the main walking and cycling route through the development, linking up with Auckland Transport's existing cycleway network in Māngere. Another reason for this plan was the "elephant in the room" – the routing of the light rail network through Māngere. The long-awaited decision over the light rail route through Māngere was yet to be announced, but Bader Drive was known to be a likely option:

"Bader Drive is always going to potentially be a light rail route ... [and] it's got heavy vehicles on it. It's not a chill place to take your kids for a bike ride. Maybe if you're commuting, but I think what we've discovered at the moment is that it's not people's priority in Māngere ... That's the pointy end of poor integration between the master plan and AT." (C2)

On working with the community around walking and cycling, several consultants for Kāinga Ora mentioned the need to focus on generating interest in cycling through making it easy and accessible as a leisure activity. In agreement with Kāinga Ora, they saw the Tararata Steam, rather than Bader Drive, as the best option to provide a safe and enjoyable cycling route.

It was a surprise to Kāinga Ora's Māngere West team, then, when Auckland Transport started consulting with the community about a cycleway down Bader Drive.

"[We knew] they were quite keen on it going down Bader Drive ... I think that topic was kind of discussed at the master planning phase ... [but] might not have been completely resolved ... Auckland Transport were going to deliver, not necessarily us. But it's through our neighbourhood. So it was perhaps a slight surprise when it ended up in public consultation." (KO2)

This account suggests that the informal discussions during the project meetings did not resolve the divergence between the two agencies' plans for the cycling network within the neighbourhood. Some sort of breakdown in commination occurred, resulting in Auckland Transport beginning a process to progress their cycleway plan without resolving the issue with Kāinga Ora.

Consultants interviewed suggested that as external agents their ability to cross between agency 'silos' could be particularly useful for developing inter-agency relationships and collaborations. Working on specific projects they would liaise with people across Kāinga Ora, Auckland Council and Auckland Transport and coordinate their activities, with one interviewee suggesting that:

"Consultants that work with big organisations ... have better internal networks within those organisations than the people who work there." (C3)

They argued that where organisations are heavily siloed, an external consultant could be more connected with different teams — "a big part of our role" — than an organisation's employees. This advantage was particularly relevant when doing "innovative or progressive or creative things … in a way that the organisation hasn't done before." (C3)

The structure of each organisation and the protocols for contacting particular staff members were identified as potential impediments to inter-agency collaboration. The excerpt below illustrates one consultant's difficulty getting in touch with the right people in agencies involved in a collaborative project:

"... trying to find who at Kāinga Ora to talk to, probably took two to three months ... [At Auckland Transport] there's kind of a protocol as to who's allowed to talk to who ... you actually have to go through a process of meeting the person ... that has that relationship with that person before you can even find out who they are and whether you can call them." (C3)

Developing a network of personal connections within each agency, as the following quote describes, could speed up the process: "I just said to my client, I'm going to get in touch with them. They're a friend of mine…". However, for the project in Māngere West, this option was not available: "Kāinga Ora was a little bit different … they're bigger … you don't want to do the wrong thing" (C3).

This consultant suggested that while drawing on inter-personal relations was a useful tactic, it was also one that needed to be applied with care.

Distinctions were made between organisational protocols that could frustrate collaborative efforts and the skills of individuals who worked hard to build inter-agency relationships. Some engineers within Auckland Transport were noted to have a broad perspective and the skills to engage in local community issues and work across different teams. There was agreement that "it's all about relationships" and valued team members were those who "know how to navigate" across different departments and are able to contact the right people and say, "Couldn't we figure this out together?" (C2).

Transaction costs

'Transaction costs' relate to the time, effort and direct financial costs associated with working with other parties to deliver outcomes. As touched upon above, differences in organisational structures and protocols were a source of frustration for stakeholders involved in the Mangere West development. These differences required additional time and effort to resolve and also increased uncertainty about what would be delivered.

Kāinga Ora interviewees discussed how they needed to learn the organisational differences between Auckland Council and Auckland Transport when trying to collaborate with them in Māngere West:

"Council are quite open to putting some of their planners onto our ... team ... who we have our regular meetings, catch ups with, and then we bring in staff from across council as needed along the way ... [Auckland Transport] have a model where they have one point person ... who we need to go through ... It is a bit more hierarchical." (KO1)

The more hierarchical organisational structure of Auckland Transport was said to make it challenging to develop inter-personal relationships. However, from Auckland Transport's perspective, having a lead for each area was seen as a way of reducing the potential for inconsistent responses from the agency. Through working towards a partnering agreement, Kāinga Ora staff felt they had been able to break down barriers to collaborating with Auckland Transport on a neighbourhood-scale:

"... it's a little bit more difficult to break into an organisation that operates under that model, so we're breaking down those barriers a bit and I think this partnership model at a neighbourhood level will help break that down a little further. We have a lot of support from Auckland Transport. It's just been a little bit more difficult." (KO1)

Auckland Council were also aware of the organisational differences between them and Auckland Transport and that this could add extra time and effort to projects involving the transport agency:

"The only problem, that can sometimes take quite a while, is to get signed off feedback from AT to Kāinga Ora, just because of the processes that they have to work through ... it's just, it's really probably more processes being different, as opposed to the overall culture between the two organizations ... It's a lot better than what it used to be." (AC)

As the Kāinga Ora urban design team have developed their master plan for Māngere West, they have needed to be cognisant of the plans Auckland Transport have for the area. As one of the first AHP precincts to be developed, master planning for Māngere was relatively advanced before a more active involvement of Auckland Transport. A Kāinga Ora interviewee noted that encountering even small differences between agencies' plans could take significant resources to resolve: "... it's really interesting, in that like a 10% misalignment ... [can] have quite a different outcome on the particular street". The design team interviewee spoke about the positioning of bus stops as an example of the level of detail involved in collaborative design decisions:

"It's important ... [to] know does AT have any plans to move bus routes ... [if] we put forward suggestions for moving bus stops and AT have gone away and said 'good thought' but no 'we're not going to do that for x, y and z'. Those are the sorts of things we do try and build into the master plan." (KO2)

Even after the work of aligning the master plan with the plans of external agencies is completed, further divergence can be faced at the delivery stage:

"And then once you get down to the micro-scale you start to run into a bivvy of engineers that all have their individual opinions." (KO2)

Planning street trees was discussed as another area of conflict and negotiation that had arisen at the delivery-level in Māngere West. The Kāinga Ora design team spoke about street trees as an important part of providing a walkable environment and recognising that "Māngere is under catered for in street trees". Their objective to provide increased shade through street trees aligns well with Auckland Council's 'Urban Ngahere (Forest) Strategy'. This strategy emphasises the array of benefits street trees provide to a community and acknowledges the current unequal distribution, particularly the absence of street trees from many social housing areas.

However, a Kāinga Ora urban designer expressed frustration that for a variety of reasons in many situations far fewer trees could be planted than desirable and intended:

"I'm working on a street design that's got like three trees when it should have twelve ... it doesn't meet the urban Ngahere strategy ... Some of these new streets I'm finding that we're losing the ability to plant trees, because of pipes and setbacks, and all these like really specific engineering things. That seem to be based in Auckland Transport that don't quite align with some of their bigger loftier goals." (KO2)

For this interviewee, it was a common issue across the agencies that the aspirations in good urban designs can be watered down at the delivery stage: "You can say we will do density well but then actually ... there is good, and then the detail of that can be a little bit mediocre". (KO2)

Recognising the scale of Kāinga Ora's housing programme, Auckland Council have looked to support the agency in delivering housing at pace and reduce some transaction costs. For example, the consenting processes have been streamlined for Kāinga Ora:

"Kāinga Ora ... [are] in a bit of a rock and a hard place, because they've got this huge programme to deliver, and there's a lot of expectations on them ... And we don't want to be seen as ... the roadblock in any of that. So we try and accommodate what we can ... We've even got to the point where we've changed processes. In our consenting side, they've got a dedicated consenting team to help with Kāinga Ora's volume of work that's coming in. So I think as a council, we've really done a lot to help accommodate Kāinga Ora in terms of delivering their housing program." (AC)

Funding: responsibilities

The negotiation and expectations of funding responsibilities, especially future management of assets, was the most commonly discussed issue amongst the interviewees, across agencies. Reaching agreement over who would be responsible for funding streetscape improvements and neighbourhood amenities was a critical concern. On these matters, the difficulties of inter-scalar integration and the disconnect between strategy and implementation and delivery were most acute. Agreements on provision at a strategic level became problematic when responsibilities for funding were blurred at the delivery level.

While Kāinga Ora is clearly leading the Māngere West development and organising the delivery of housing in the neighbourhood, there is ambiguity around who has responsibility for funding aspects of the master plan outside their land. While a private developer would not be responsible for many things beyond their boundary lines, under their mandate to create 'thriving communities', Kāinga Ora's concerns are broader. The question being determined through the AHP is what are the boundaries of that responsibility:

"Under the new mandate to create thriving communities, where does that stop and start? I'm not sure we've answered that ... [with the] master plan approach we're already building beyond our individual ownership. As to what the benefits we can do along the way. But within our scope that's kind of, it's quite an asterisk. Yeah, I'd love to resolve absolutely everything. But there's a limit to how much money we're willing to spend, or how much influence we can have." (KO2)

The Kāinga Ora interviewees were all aware of the need to be careful to not overextend their capacity and "fall into the trap of expectations of fixing all the problems", which they do not have the capability to do. Consequently, they emphasised that their role is to collaborate and partner with agencies to deliver their master plans:

"We try and partner where we can ... [we're] a collaborative agency ... we're not the answer for all these problems ... [brokering] partnerships and get those working, is a really big part of our role." (KO1)

As with any developer, the RMA requires Kāinga Ora to mitigate certain environmental effects arising from their development – for example increasing traffic volumes. However, their stated goals indicate a commitment to deliver broader social and environmental outcomes, well beyond mitigation. Delivering their Sustainable Transport Strategy in Māngere West calls for collaboration with Auckland Council and Auckland Transport. Some aspects of walking and cycling improvements within the neighbourhood are the Tararata Stream pathway upgrade, improvements to the sidewalks and streetscape and changing street layouts within the developments. However, the funding responsibilities to deliver improvements to the walking and cycling environment within the neighbourhood remain under discussion.

A key division in funding responsibilities lies between capital expenditure (CAPEX) to build the improvements and operating expenditure (OPEX) to maintain the improvements. Kāinga Ora has capital to build some infrastructure improvements in their neighbourhood, but they are not the land owner and do not intend taking responsibility for their future maintenance. Most improvements to walking and cycling infrastructure in the neighbourhood will be vested to, and become the responsibility of, Auckland Council and Auckland Transport. Kāinga Ora must therefore liaise with these partners to ensure they will accept future ownership of neighbourhood improvements. Consequently, Auckland Transport reviews the 'fit' and long term costs associated with Kāinga Ora's plans:

"Kāinga Ora's master plans ... are looking at changes to the local road network that will be vested to AT and will ultimately have responsibility for so ... we want to ensure that ... there is a level of cost effectiveness in terms of whole of life costs, but we also need to make sure that they are fit for purpose." $(AT)^3$

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³ These assets will technically be vested to Auckland Council and then managed by Auckland Transport on their behalf.

Auckland Council similarly "provide feedback" to Kāinga Ora during the regular project meetings on assets that will be vested to them:

"If it's affecting our assets, or especially assets that are going to be vested to council, we obviously have a vested interest about what they're developing ... because we will ... take over the maintenance obligations." (AC)

A key aspect in both agencies' decision-making regarding the improvements to the neighbourhood is their projected maintenance costs. Once built, each asset will be added to the annual maintenance budget of the asset-owning agency. Negotiation is underway to determine what upgrades will be included to the streetscapes in Mangere West and what cost sharing agreements will be made with Auckland Transport. There have been challenges in reaching an agreement over the funding responsibilities and what will be delivered:

"Some of the discussions with our assets team around the KO areas ... can be problematic, both from the funding and delivery coordination point of view. Because ... [the asset team] has its own program around maintenance and renewals. And they do overlap with some of these KO areas." (AT)

To gain resource consent for their street-level improvements, Kāinga Ora were required to produce a "local area traffic management plan". However, the plan was not supported by Auckland Transport, who stated that it included "too much" in the design that they "can't maintain it all, so strip it down". According to the Kāinga Ora team member, this was mainly in reference to "traffic calming in sort of various guises, all the way through from humps to coloured tarmac" (KO3). However, the proposed coloured tarmac was supported by Auckland Transport because they believed "bang for buck [it] is quite effective". According to this interviewee, "the capital cost for [Auckland Transport] … is not an issue … it's the long-term maintenance."

A similar situation arose around several 'pocket parks'. Kāinga Ora and Auckland Council shared similar aspirations to provide open green spaces in the new development, but agreement over what would be delivered was problematic. As a Kāinga Ora interviewee remarked:

"... we'd love to leave behind a whole lot of parks ... and so would they, but they're saying 'well we just don't have the money to maintain them, so no thank you'." (KO3)

Rather than multiple pocket parks, Auckland Council proposed a single "small neighbourhood park" of 3000 square meters. Reaching a compromise around funding responsibilities was explained by our Auckland Council interviewee:

"[We] have limited funding. So we don't want gold-plated assets that come to us ... [with] an expectation that we have to maintain them to that level. So it's about working together to help Kāinga Ora achieve what they're seeking to achieve ... [but] at a level that Auckland Council can maintain in the future." (AC)

As an example of the difficulties that can be encountered when trying to hand over assets to another agency, Kāinga Ora and Auckland Transport interviewees both described a problem encountered at Kāinga Ora's Mount Roskill site, another large-scale neighbourhood redevelopment. Kāinga Ora were investigating the delivery of 'play streets' within their AHP neighbourhoods, essentially making streetscapes more people-orientated and fun for children to use. The proposal apparently ran into issues as it would require hand over to Auckland Council's 'Parks' team and, since it would be placed on a street, also needed acceptance by Auckland Transport:

"... we were keen to do a play street but the detail of that can be quite difficult in what that looks like and who maintains it, who's property those pieces of equipment sit on. All that detail ... we need to

engage really early on, so we're not handing over a resource consent with something that just won't work." (KO1)

"[Kāinga Ora] were looking to progress ... a 'Play Street' ... [on] a key local route that they were upgrading ... looking at trying to integrate play elements ... Ultimately, council parks made a call on that and just essentially, from a policy point of view, indicated that it couldn't be supported, because ultimately, it would be 'Parks' who would need to actually fund that operational expenditure." (AT)

As our Auckland Transport interviewee pointed out, the challenge posed by the design "is a great micro example ... of that overlap between not just one and two, but multiple different agencies, in terms of creating a play space around the road". Clearly, developing the design presented a challenge from an inter-agency collaboration perspective. However, as one Kāinga Ora interviewee explained, they did not necessarily see that as a bad thing:

"We're just running into those complexities because, we're ... doing things better than what's been done in the past. It would be easy not to put a new street in." (KO2)

The proposed play street idea was ultimately dropped. According to Auckland Transport, there were design issues related to safety that needed resolving, but it was not necessarily an unacceptable design to implement. Rather, they state that the final decision was from the Auckland Council's Parks team:

"We understood what they're trying to do ... we did actually advance the design, kind of beyond the concept level for that ... But the decision came down to an asset management matter ... [for] Auckland Council, Parks, so it wasn't pursued at the end of the day." (AT)

Cost share arrangements remain a matter for negotiation and have so far been resolved on a caseby-case basis. This practice is not seen as ideal by the participating organisations and there is hope that funding responsibilities can be better aligned in the future:

"When you get to the pointy end of things, that's when people need to bite the bullet and actually think through, for instance, what's the cost share? What's ... [a] fair outcome? But to be honest, at the moment, it's all fairly case by case. And I don't think it should be like that ... KO has its own funding source, AT has a separate funding source, so ... we've started looking at what those principles should be, but I think they're definitely not fully resolved yet." (AT)

Unsurprisingly, similar negotiations are ongoing between the stakeholder agencies involved in the Tararata Stream project. There is a need to reach agreement between Kāinga Ora and Watercare around the funding responsibilities for the upgrade:

"The conversation they're having ... [about] Tararata Creek greenway ... It's like 'well you're going to build these homes you need to upgrade the storm water system. Who pays for it?' I think that's where they're stuck at the moment ... [it's] a tension I noticed in that project." (C2)

Conversely, changing the existing street layouts within Māngere West, an aspect of Kāinga Ora's development intended to improve walkability, has required less challenging inter-agency collaboration. In seeking to incorporate more walkable street designs and layouts, Kāinga Ora has been less reliant on acceptance from other agencies or hampered by the need to navigate limitations in asset maintenance:

"Through connected communities ... if we come into a community and we see ... old town planning layouts ... 1960s ... cul-de-sacs and so there's a lot of that throughout Māngere ... it's great if you've got a car, but if you're walking there's lots of areas that you can't get through ... So what we ... do

quite a lot is bring roads through, so where we own land at the end of a cul-de-sac ... we can actually punch roads through." (KO3)

In these situations, Kāinga Ora can choose to forgo using the space for housing and instead increase the connectivity of the neighbourhood. This decision mostly involves a CAPEX contribution to improve active travel without significant impacts on their own OPEX, or that of an external agency.

Funding: flexibility

The potential routing of the proposed Auckland light rail line down Bader Drive, through the heart of Kāinga Ora's Māngere West development has required careful consideration from the agency.

"Some of those really early key moves ... [are] looking at Bader Drive as a boulevard. You know we identified it obviously as having existing transport, public transport. But also, the sort of 'elephant in the room' is potential light rail ... knowing that nothing was locked in, there was like this sort of awkwardness around well how can we stage things." (KO2)

The uncertainty around the light rail route contributed to Kāinga Ora's decision to split the development into five stages. Those located closer to the town centre will be master planned later, so that the final routing of light rail can be taken into account. During the Māngere working group meetings, discussions were held about the need to be "careful about your staging" to ensure newly built houses would not need to be demolished. With the light rail group being a "very tight knit, confidential, confidentiality bound group", it has been difficult to make plans. Some teams within Kāinga Ora are involved with planning details around light rail, but are bound by confidentiality and cannot share information with other colleagues until that information is in the public domain.

The uncertainty around light rail highlights the difficulties that can arise due to different project lead times and the relative inflexibility of existing funding models. This has important implications for interagency collaboration as our Auckland Transport interviewee explained:

"Funding mechanisms for transport planning have a long lead time and generate a lot of momentum, which makes it hard to be nimble and react to changes. This also makes inter-agency collaboration more difficult as collaboration often requires a level of flexibility to accommodate the requirements of other stakeholders." (AT)

Similar to the inflexibility of asset maintenance budgets, project funding is often tied-up far in advance of delivery phases. Transport projects have a long lead time and "once you've actually identified a project and it's got funding it's not necessarily easy to change that to respond to things on the fly" (AT).

This presents challenges when attempting to collaborate with other agencies and respond to the requests of partner agencies.

Summary

"There are lots of people who get the big picture vision and lots of people that know the detail. But it's the connection, drawing the connection between the two that is quite a missing skill in the wider built environment profession." (KO2)

This quote offers a poignant summary of the observations and experiences of interviewees from across the agencies. Inter-agency collaboration is a key challenge in contemporary governance internationally and while there has been growing attention to improving performance, effective solutions are not fully understood (Scott & Merton, 2021).

This report has introduced Kāinga Ora's Māngere West development as a case study of contemporary inter-agency collaboration and identified significant barriers to effective inter-agency collaboration. The most critical is the disconnect between strategy and implementation and delivery (within and across agencies) and ambiguity around funding responsibilities for delivering agreed outcomes. The lack of coordination between objectives set at a strategic level and corresponding funding commitments at a delivery level was a shared frustration for the interviewees. There was evidence of valuable knowledge exchange processes that had helped each party understand the intentions and expectations of others in providing an improved active travel environment in Māngere. However, each agency approached the Māngere West neighbourhood bound by their own established set of rules, logics and practices.

At a national level, the NPS: UD sets out government expectations for change in land use and transport planning. Mode shift towards active travel and public transport, away from dependence on the private motor vehicle, underpins the goals of this policy. Drawing on the language of social-technical systems and multi-level theory, climate change and the health impacts of car dependency, including declining rates of physical activity, are among the 'landscape' level catalysts for the policy change. Correspondingly, programmes such as Waka Kotahi's 'Innovating Streets for People', 'Reshaping Streets' and 'Regional Streets for People' have supported 'niche' streetscape innovations – using tactical urbanism interventions, often co-designed with local communities, to reclaim road space for active modes. Researchers can also play a role in niche spaces by being a catalyst for innovation in programmes like ACTIVATION. These niche level interventions have an implicit goal of challenging political and societal expectations at a landscape level – shifting public perceptions on what urban streetscapes and transport networks can look like in the future. The agencies that make up the land use and transport planning 'regime' are at the coalface in terms of effecting change from strategy development through to on-the-ground delivery of new urban forms. As this research has shown, for these agencies giving effect to the inter-agency collaboration necessary to bring about change is a challenging task. They face multiple structural, organisational impediments to working together more effectively.

The Māngere West case study provides a clear example of how inter-agency collaboration varies across different scales of engagement. Strategy documents from each agency imply a broad, but somewhat hazy commitment to shared goals. However, this strategic alignment is not well networked. Without a deeper coordination of strategy and delivery, inter-agency collaborations may be networked only in structure and not necessarily in function (Willem & Lucidarme, 2014). As indicated in the analysis of the NPS: UD by Smithers (2020), land use and transport strategy and policy documents are inadequately networked, blocking the possibility of delivering integrated urban environments.

The stakeholder agencies we talked with were aware of the lack of integration at delivery, and the need to translate high-level strategic goals into the outcomes delivered at a neighbourhood scale. There was evidence of some efforts to improve integration at delivery within the Māngere West development. Through maintaining inter-personal connections, Auckland Council's regular 'Māngere Project Working Group' meetings with stakeholder agencies helped develop trust and presented an opportunity for knowledge exchange. This forum also provided opportunities for 'small wins' that have gradually aligned the stakeholders towards workable solutions (Ansell & Gash, 2008). The chance for Kāinga Ora to engage with, and hear feedback on its plans from Auckland Council and its CCOs was particularly helpful to building collective understanding and trust between collaborators.

However, downstream aspects (Sørensen and Torfing (2021) of collaboration for the Māngere West development were at times still problematic, namely around the funding responsibilities for infrastructure and asset management. With a lack of detailed procedures for inter-agency collaboration, these elements of the collaboration were negotiated on a 'case-by-case' basis. Work is ongoing to formalise partnerships between Kāinga Ora, Auckland Council and Auckland Transport. For now, the partnership relied heavily on developing trust through a network of inter-personal relationships between the agencies. There were several examples shared by participants where breakdowns in communication had still occurred. As demonstrated by Scott and Boyd (2020), a lack of clear leadership structure can cause higher 'transaction costs' due to misunderstandings and unclear expectations and responsibilities. For example, while Kāinga Ora's development manager would attend working group meetings, there was no equivalent Auckland Transport area manager for the Māngere West precinct, with relevant contacts changing at different stages of the development process. Kāinga Ora's focus is explicitly at the neighbourhood scale, while Auckland Transport's organisational structure for infrastructure delivery is primarily at a city scale.

Informal communication and knowledge exchange exercises will also not resolve the ingrained structural barriers that challenge collaborative projects. Socio-technical regimes change slowly and the automobility landscape is deeply entrenched within contemporary land use and transport planning agencies. Creating more attractive environments for active travel will require pragmatic solutions, like collaborative working groups and niche trial projects, but will also necessitate the creation of new organisational structure to overcome the siloed-nature of contemporary urban planning. There was also need to be flexibility from stakeholders, which is not easily accommodated within current organisations and funding structures. The rigid and constrained nature of the transport funding environment can make collaborating in niche innovations, which generally represents most active travel projects, a resource intensive activity – well beyond the resources often reserved for such projects (Mackie et al., 2021). Informality therefore results in a *lack of teeth* when it comes to actually assigning the responsibility for funding the delivery of generally agreed upon strategies.

Tight operating budgets were a primary concern for Auckland Council and Auckland Transport, which led to hesitancy about taking responsibility for additional assets installed by Kāinga Ora. Part of the knowledge exchange process involved gaining an understanding of the funding limitations local governments faced, particularly in managing assets. Poor coordination of funding responsibilities was cited by all interviewees as a critical issue in inter-agency collaboration. Each agency had overlapping concerns in Māngere West but which party should be responsible for any ongoing funding responsibilities was being managed on a case-by-case basis. While aspects like sidewalks were relatively minor and easily resolved, other larger or more costly assets such as parks and cycling infrastructure required negotiation of potential cost-share arrangements. The Tararata Steam is a clear case-in-point

Inter-agency collaboration has also been strained by understaffing and staff turnover. Kāinga Ora seemed to have suffered less from these issues than Auckland Council and Auckland Transport. Due to the strong reliance on inter-personal relationships to support the collaboration, the weakness of any single agency in this aspect becomes a weak link in the chain. A disconnect was also noted at times between project agencies and their sub-contractors, who had not taken part in higher-level knowledge exchange processes and had less understanding of the purposes and requirements of strategic objectives. Creating more formal partnership agreements between stakeholder organisations would likely help coordinate strategy with delivery and reduce ambiguity around funding responsibilities. It would also reduce the risks of losing key inter-agency contacts and connections when staff members leave (Politis et al., 2017). It was encouraging then, that the interviews revealed the preparation of a partnering agreement between Kāinga Ora and Auckland Transport. Useful partnership aspects to focus on would be funding responsibilities, processes and ways of working, and aligning planning and delivery activities with shared strategic objectives.

A question remains around the capacity for Kāinga Ora to sustain their commitment to prioritising active and public transport travel for residents in their new developments. Pushing development partners away from BAU practices and designs could result in increased transaction costs, with prolonged negotiation required between agencies. Previous research has shown the process to gain institutional acceptance within Auckland Transport for novel street designs or traffic control devices can be resource intensive and pose a barrier to progress (Opit & Witten, 2018). While a Kāinga Ora interviewee suggested the agency had 'patient capital' to commit to innovative solutions, the agency faces significant political pressure to deliver new houses quickly and meet targets (e.g., Neilson, 2022). It will be difficult for the agency to balance that pressure to delivery quickly with its other strategic objectives, such as creating thriving communities and environmental wellbeing. As this research has shown, delivering on its 'Sustainable Transport Strategy' will require extensive inter-agency collaboration, which will mean depending on agreements and negotiation with external agencies. Under the current transport regime, delivering active travel infrastructure and amenities and mode shift remains a niche activity, making it likely to be a time and resource intensive activity.

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Appendix 1: Policy Document Review

This policy document review examines the content and intentions of several key documents related to land use and transport planning in Auckland and New Zealand. The focus of this review is limited to those policy or strategy documents that have direct relevance to the Māngere West case study. Primarily the documents considered are therefore from Kāinga Ora, Auckland Council and Auckland Transport. Other documents are also mentioned to provide a wider 'landscape' view of the context in which decision-making regarding Kāinga Ora's Māngere West development is taking place.

Better Integration between land use and transport planning has long been recognised as a critical objective to achieve greater sustainability. The development of the Unitary Plan, Auckland's guiding spatial planning document since the amalgamation of Auckland's eight previous local authorities in 2010, is premised on integration. The desire for integration goes further back. The 2007 royal commission on Auckland governance highlighted the need for a 'super city' council that could service the complex and overlapping needs of a growing city. Local Government New Zealand identified that the current planning system (comprising RMA, LGA and LTMA) was "unwieldy and not well integrated" and that furthermore, there was "little alignment between strategies, funding, regulation and decision making to integrate land use and infrastructure development, set spending priorities, and manage growth" (Productivity Commission, 2016, p. 230). Under the Local Government (Auckland) Amendment Act (LGAAA) 2004, the region's councils were required to integrate their land transport and land-use provisions to give effect to the growth concept advanced by the Auckland Regional Growth Strategy. That strategy itself, released in 1999, described a way forward to manage growth primarily through "integrating rapid transit investment with transit-supportive, higher density mixed land uses" (Auckland Regional Growth Forum, 1999). Clearly, integration has been a key development and growth goal for Auckland for some time.

Kāinga Ora

Officially 'Kāinga Ora – Homes and Communities', this organisation is a Crown agency established in late 2019. It was formed as a merger of Housing New Zealand, Homes, Land, Community (HLC) and KiwiBuild. The legislative framework under which Kāinga Ora operates puts in place principles that go far beyond its functions as a social landlord or urban development agency. The organisation makes it clear that it has been tasked with building communities, not just houses. They are in the position of having significant funding and a mandate to shape new developments and the communities that will live there. On their website, they emphasise that collaboration between Kāinga Ora and other organisations will be crucial in their endeavours.

Sustainable Transport Strategy (2021)

This strategy positions Kāinga Ora's large-scale neighbourhood regeneration activities as a unique opportunity to "shape choices, trial solutions, and collaborate across the sector to integrate urban development and transport" and contribute towards "healthy, resilient and sustainable transport behaviours for generations to come". The strategy expands on its aspiration for collaboration stating: "Close, collaborative partnerships are critical to ensure our actions support and enable sustainable transport outcomes".

At the core of the document are three strategic outcomes: 'Accessible and Inclusive Communities', 'Safe and Healthy Communities', and 'Sustainable and Resilient Communities'. Each outcome includes a series of sustainable transport goals that outline the various ways it is expected the outcome will be achieved, the required changes, and what targets will be used to assess success. The 'Safe and Healthy Communities' is particularly relevant here as it involves the promotion of the "safety and health of all

residents and visitors" and "encouraging active travel through high-quality walking and cycling facilities and high-quality public transport infrastructure and services". The goals of this strategic outcome are:

- 1. Recreational open space to create healthy active communities by enabling safe and convenient access to recreation open space
- 2. Health focus Build streets where people's health is at the core of the design
- 3. Vision Zero Adopt 'Vision Zero' principles to prevent serious injury and death within the transport system of large-scale development sites.
- 4. Social safety to ensure people feel comfortable and confident while moving around the neighbourhood.

These strategic outcomes combine survey-based targets involving feedback from residents and other targets tied to standards set by international organisations, such as the World Health Organization, and principles such as Vision Zero and CPTEP (Crime Prevention through Environmental Design).

The objectives and targets of each of these strategic outcomes clearly link to promoting and supporting walking and cycling within Kāinga Ora's neighbourhood developments. They also clearly require significant inter-agency collaboration to be successful — since many of the goals will be impossible to achieve without cooperation from local government and road controlling authorities. For example, creating an environment in Māngere West that is reflective of Vision Zero principles will be impossible without cooperation from Auckland Transport. They state the strategy is intended to be "a starting point for integrated solutions, working with relevant authorities through collective agreement". Specifically achieving the strategic outcomes will be "a collaborative effort" involving Kāinga Ora and "local and central government agencies, and mana whenua".

Auckland Council

Auckland Plan 2050

The Auckland Plan is a statutory document prepared by Auckland Council and provides a strategic picture for accommodating the city's growth over the next 30 years. The Plan also provides a base for the Unitary Plan, Auckland spatial plan, and other strategy and policy documents that sit beneath it. As required by legislation, the Auckland Plan acknowledges the integrated nature of both land use and infrastructure planning. It also proposes a quality compact approach to accommodating growth and the objective of linking land-use planning with infrastructure delivery and funding through the 'Development Strategy' and 'Long Term Plan'.

When it comes to implementing the Auckland Plan 2050, the Council state that alongside "all Aucklanders", aligning relationships between key organisations will play a critical role in achieving the desired outcomes. The document outlines that successful implementation will depend on:

- Good relationships among partners and stakeholders
- Strong alignment in planning and investment
- Effective coordination and agreement
- Taking up opportunities to innovate and do things differently.

While the Plan's 'Focus Area 5' specifically requires integrating land-use and transport planning, it does not discuss any need for or function allowing partnering across land-use and transport planning agencies. The focus of integration in the document is the relationship between the different scales of central and local government. It also does not indicate how such integrated planning decisions will be made in practice, or how success will be accessed.

The 'Development Strategy' recognises that the "future planning and funding decisions of providers ... requires long lead in times" and that the "scale and complexity ... means that aligning land use planning and infrastructure provision is essential to delivering good outcomes". However, there are no specific frameworks introduced to direct integration of the planning and funding decisions of the collaborative partners.

Auckland Council's 2021-2031 'Long Term Plan' sets out what the Council intends to do, its priorities and activities and how this will be budgeted for the next decade. Key issue Two (climate action package) and Three (infrastructure support) have direct relevance to inter-agency collaboration for active travel. Key issue Two restates the Council's commitment to reducing greenhouse gas emissions by 50% by 2030 and reaching net zero emissions by 2050. The Plan states that their existing programme of investing in walking and cycling infrastructure will play a role in reducing emissions. However, no specific commitment of additional funding is stated for active modes in this section. Key issue Three is retitled 'supporting growth in a few key areas' further into the document. There is mention of a compact city approach that uses infrastructure more efficiently but nothing specifically related to walking and cycling. For transport delivery, it is stated that part of the plan will be increasing active transport through ongoing expansion of the walking cycling network. The Auckland Transport Alignment Project (ATAP) is also included as an assumption that considerable central government funding will continue to be made available to undertake various forms of capital expenditure to encourage mode shift.

Auckland Transport Alignment Project (2021)

The ATAP was originally established in 2015 as a joint initiative between central government and Auckland Council to improve alignment over how the city's transport system should develop over the next 30 years. It is an inter-agency partnership that includes the Ministry of Transport, Waka Kotahi, KiwiRail, the Treasury, Auckland Council, Auckland Transport and the State Services Commission. The most recent iteration of this partnership states in bold from that outset, the focus will be on mode shift: "ATAP 2021-31 encourages mode-shift and supports housing and climate change objectives".

ATAP has several strategy documents. Of relevance to promoting active travel through integration is the 'Better Travel Choices' strategy document from December 2019, which focusses on mode shift from private cars to public transport and active travel.

Here, mode shift is described as involving the shaping of urban form and making shared and active modes more attractive through influencing travel demand and transport choices. The document identifies that for mode shift to be effectively achieved, these strategies need to "come together in an integrated way".

Part of the plan is to: "Ensure the layout and design of new urban areas supports the use of public transport, walking and cycling", by:

- Making it a priority to sequence the development of key growth areas to integrate with delivery of major PT initiatives
- Locating higher intensity land uses near rapid transit
- Supporting the early introduction of PT through innovative funding agreements with landowners and developers
- Ensuring that detailed layouts and designs of streets support high levels of walking and cycling for short to medium length trips

The ATAP has also allocated \$400 million to Kāinga Ora's Auckland Housing Programme (AHP), with the funding expected to cover local transport needs associated with the redevelopment.

The ATAP also signposts continued development of "area-based approaches" to cycling improvements that have presently been introduced in Henderson, Mangere East and Manukau.

Auckland Transport

Auckland Regional Land Transport Plan (2015-2025)

Auckland's Regional Land Transport Plan (RLTP) is a policy developed under the requirements of the Land Transport Management Act (LTMA) and which is directed by Government Policy Statements and the National Infrastructure Programme. It forms part of the Land Transport Management programme, which represents the combined intentions of Waka Kotahi, AT and KiwiRail to respond to growth and other challenges facing Auckland in the next 10 years.

Primarily the RLTP sets out the optimal timing and sequencing of projects to ensure integrated strategic outcomes. The RLTP acknowledges that a component of the Auckland Plan's transformational shift is to deliver four transport priorities, one of these being "to integrate transport planning and investment with land use development".

The document also states the desire to reduce the amount of travel required through integration of land use and transport planning, thereby "reducing the need for travel by supporting good land use planning and offering travel planning programmes".

There is a stated aspiration for a "One System" approach that "necessitates a new way of planning and managing Auckland's transport system." It requires "greater collaboration between agencies responsible for transport planning" with the aim of "strategic planning and integration of transport and land use in a more effective, efficient and affordable way".

Coordination with the Council's 'Future Urban Land Supply Strategy' (FULSS) over the timing of future transport interventions is stated as "a key required outcome".

Roads are also acknowledged as being inseparable from the places adjacent to them and that "[g]ood planning for walking and cycling is inseparable from good land use planning", because "distances seem much shorter if the journey is safe and interesting".

Vision Zero for Tāmaki Makaurau

Released in 2018, Auckland Transport's 'Vision Zero' approach to road safety states a commitment to have "zero deaths of serious injuries on our transport systems by 2050". Beyond their Strategic Priority One, to reduce transport deaths and serious injuries – especially for vulnerable transport users, there are twelve additional priorities. Notably, these include 'Providing a safe transport environment by increasing investment in safe infrastructure', 'Creating safe and healthy streets through safe active modes including access to public transport, schools and town centres', and 'Embedding Vision Zero in land use planning, placemaking and design'. The latter priority has a single target to measure performance: "Vision Zero incorporated into key planning, placemaking and design documents".

The agency will do this "together" with their partners by "offering rapid public transport and healthy active lifestyles, with attractive walking and cycling spaces" encouraging "more travel ... on foot, by bike and on public transport". With Kāinga Ora also having adopted a goal of Vision Zero in their Sustainable Transport Strategy, this strategic alignment potentially offers a bridge towards greater integration to deliver active mode shift.

There are various targets associated with the agencies' strategic priorities. The pathway toward zero in 2050, has several interim targets: no more than 250 deaths and serious injuries by 2030, and no

more than 575 by 2021. This latter target was not achieved, with 620 deaths and serious injuries on Auckland roads in 2021 – an increase of 19 percent (Jacobson, 2022)

The question therefore remains as to whether Auckland Transport's commitment to Vision Zero has successfully reorientated its institutional culture and filtered through the agencies various departments and teams. It is concerning that the public updates on the agency's progress toward their targets seems to have ceased around 30 July 2020.

Ministry for Environment

National Policy Statement Urban Development (2020)

The National Policy Statement Urban Development (NPS: UD) is administered by the Ministry for Environment with support from the Ministry for Housing and Urban Development (MHUD). It is operative under the Resource Management Act (RMA) and replaces the previous statement on 'Urban Development Capacity' released in 2016. The NPS: UD is a response to the persistent under-supply of affordable housing in New Zealand cities. It places pressure on local government to increase housing supply through urban densification. While the NPS: UD does emphasise the need for local authorities to integrate land use with transport planning, as Smithers (2020) shows, there are limited legal powers to ensure integration actually happens.

The policy statement intends for land use plans to zone levels of density based on levels of transport accessibility. However, for transport integration to succeed the NPS: UD will be largely dependent on other policies. According to Smithers (2020), a fundamental problem for the NPS: UD is that it can only direct decisions made under the RMA, but it cannot direct decisions made under other planning legislation (e.g., LGA or LTMA). The corollary is that local authorities may struggle to respond to the Statement in the integrated manner that was envisioned.

In Auckland, local roads, public transit and walking and cycling networks are managed by Auckland Transport – making the organisation a critical actor for achieving the integrated outcomes envisaged by the NPS: UD. Yet, AT operate primarily under the remit of the aforementioned LTMA not the RMA, meaning the organisation will not be legally required to act with effect to the Statement. This raises questions about how well integrated the response to the NPS: UD will be and also what forms of interagency collaboration will occur and how effectively will they function.