

Signature Programme Evaluation: 2016 - 2019

Report to inform road safety innovation

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Executive Summary

Introduction

This report provides a synthesis of outcomes and learning to date from the Signature Programme, to inform road safety strategy and planning. The report is intended to give insight into the factors that drive successful system change, and which can be applied more widely to other demonstration projects that may unfold.

Four independent initiatives were delivered under the auspices of the Signature Programme:

- Behind the Wheel (the Māngere pathfinder project for High Risk Young Drivers programme)
- Future Streets (a controlled intervention study trialling innovative street design processes, based in Māngere)
- Visiting Drivers (a road safety programme targeting visitors to New Zealand)
- Eastern Bay of Plenty rural road safety case study, concluded in 2015.

The first three projects listed above are collectively referred to throughout the report as ‘operative’ Signature Projects, reflecting their continuation until at least 2017.

The evaluation explores progress across four domains seen as central to the success of the Signature Programme (detailed in the evaluation rubric in [Appendix 1](#)): collaborative practice, system change, culture change, and road safety outcomes. Two evaluation questions guided the evaluation:

1. **To what extent, and in what ways, have Signature Projects met the intended objectives of the Signature Programme?** This is explored in [section 3](#), which details the approach and outcomes to date from each Signature Project.
2. **What transferrable learning from the Signature Programme can help inform the Safe System approach and road safety strategy?** This is explored in [section 4](#), which reflects on factors that can support innovation in road safety, drawing on a wide range of literature in this area, and reflects on the overall Signature Programme experience.

Signature Project delivery against Programme objectives

Collectively, projects delivered on the Signature Programme’s objectives; in particular, demonstrating the features of collaborative practice in innovation projects that are necessary to bring about system change and facilitate culture change. They provided valuable learning about challenges that can arise and necessary ingredients for success. Progress to date indicates positive direction of travel toward longer-term programme objectives.

At a programme level, there is some evidence to suggest that the aims and intentions of the Signature Programme are being achieved:

- There is broad evidence of successful collaboration, and in some respects, their influence expanded.
- Each project is taking innovative approaches to changing systems that impact on road safety, and challenged existing models. However, the spread of system changes beyond the areas where projects are placed is mixed.

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- The projects are all displaying how different elements of the safe system approach can be applied locally.
 - All three operative Signature Projects involved taking elements to scale, with varying degrees of success.
 - The projects show evidence of some local and regional-level system change, and in some projects, there are national-level changes also emerging.
 - It is too soon to establish if the projects have delivered reductions in deaths and serious injuries (and may well be impossible to definitively attribute), but the available evidence indicates that the interventions are supportive of this outcome.

Taken together, all Signature Projects have, to varying degrees, demonstrated value by prototyping new approaches that offer transferable learning to other projects and wider scaling; challenge entrenched practices and systems; and in their own right have made positive changes to road safety delivery in New Zealand communities.

Learning from the Signature Programme

Our exploration of the Signature Programme, together with the related literature, reveals a range of learning that can support future innovative demonstration projects.

Partnerships

Collaborative partnerships within each project brought a range of benefits, most importantly the tangible successes that resulted for each project. There was a common view that none could succeed through the efforts of one organisation alone. They brought in new ways of thinking and approaches, and reduced a range of risks for partners by sharing ownership of issues and solutions. Factors that supported successful partnerships included the following:

- Common purpose and shared ownership, where each sees the role they bring.
- Leadership to drive change and hold the course across partners; with supportive governance structures for collaboration, and flexibility when multiple agencies are involved.
- Clear structures, processes, and coordination roles; each project had project leads/managers who could bring together partners, engage stakeholders, coordinate/negotiate activity and provide central points of contact. In some cases, these roles were distributed across partners.
- Building respect and trust, built on a willingness of all partners to come together, bring something to the table, and adapt delivery.

Knowledge translation

These projects indicate that translating knowledge and evidence into action for road safety requires approaches that engage with the user journey and equip people with the knowledge, and environment, that allows safe interaction with their surroundings. As projects proceeded, learning environments were often created that enabled information sharing, reflection and adaptation.

Communities of practice

The three operative projects all showed features of ‘communities of practice’, or partnerships that use each other’s experience as a learning resource about a particular domain. This enabled participants to work together in making sense of and addressing challenges, and in turn support project outcomes.

People-centred approaches

People-centred approaches seek to understand an issue from the perspectives of those using the system. All three operative Signature Projects made extensive use of people-centred approaches, which engaged with key aspects of the user journey in ways that involved and valued citizens' participation and input.

Reframing risks

In a literature review prepared for the Signature Programme (Davies et al 2019), we identified three key mechanisms for reducing perceptions of risk:

- Reframing or redefining the 'problem', by looking at issues in different ways so that new approaches can be fostered; the Vision Zero policy is an exemplar of this approach.
- Prototyping, to allow ideas and designs for an 'imagined future' to be tested at relatively low cost and at lower risk.
- Acknowledging the role of failure, recognising that a system that learns and innovates requires a willingness to tolerate failure, and the ability to deal with failure quickly.

All three operative Signature Projects reframed the nature of the issues each were dealing with, which enabled new responses to be developed.

The influence of systems in innovation

A highlight of this evaluation is the influence that system factors have in constraining or enabling the delivery of innovative solutions, and their wider scaling. The findings indicate that local niche innovations are as important for the systemic barriers that they reveal, as they are for the impacts that they have on a local community. If innovations are simply treated as local level pilots, we lose sight of the system issues that can constrain or enable successful outcomes, and the broader system levers and changes that we need to scale local innovation.

The findings point to a range of systemic barriers that include rules and systems that constrain design innovation; regulations that constrain developing new processes to improve user experience; and policy or investment priorities that shift resources. Yet despite system barriers, there is evidence from all four sites of some system change, including greater openness to rapid trials and investment for infrastructure expansion; national level resources; and agency and industry practice.

Taking pilots to scale

Scaling is not simply about the spread of a programme to a wider range of beneficiaries ('scaling out'); it can include influencing and changing systems, rules, policies and practices ('scaling up'), and strengthening practice and challenging norms and beliefs in behaviours and practice ('scaling deep'). The literature indicates that scaling innovative projects such as these involves a range of elements including:

- A clear sense of what is being scaled, including the focus of the programme/intervention, and the elements that are being carried into wider implementation.
- A clear pathway for the scaling that is envisaged. This can include the planned extent or size of the programme; the range of activities being scaled and their links with other programmes; and the changes in organisational capacity that is needed.

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- An understanding of the context and environment that the scaling is being directed to, which may be quite different to the initial ‘test beds’, or areas where the initial prototypes were developed.
 - People who can act as enablers or champions for wider systems implementation and change.
 - Building operational capacity to scale, and adaptive capacity to flexibly respond to challenges and circumstances.
 - Adequacy, flexibility and stability of funding.
 - Embedding monitoring and evaluation systems.

Conclusions

The evidence from this evaluation indicates that the Signature Programme is delivering on its intent, to enable and facilitate projects that are ambitious, innovative, and apply the Safe System principles and approach with the aim of reducing deaths, serious injuries, or the risks of these occurring.

Our findings suggest that road safety innovation can be both evidence-based and offer opportunities for exploring new approaches. We see innovation as a function that is both centrally and locally driven. National strategy and agencies are able to fund, support and implement road safety innovation projects such as the Signature Programme, and there is a role for local government to work in the same way and to embed innovation functions within their own systems.

The value of the niche innovations supported by the Signature Programme is not just for their intended or realised outcomes, but for providing locations for learning to take place for wider system scaling. The projects indicate that effectively enabling innovation requires a mandate, an innovation function, and resourcing.

The Safe System approach was a pivotal backdrop to the Signature Programme, with the intention that the four goals - safe speeds, safe road use, safe vehicles and safe roads and roadsides – would be delivered through each of the four Signature Projects. It is worth noting that while a ‘Safe System’ approach had mixed levels of recognition and explicit application, stakeholders across all three operative projects agreed that many aspects of Safe System were evident in how each project operated.

1. Introduction and background to the Signature Programme

Background to this report

The Signature Programme was established to enable and facilitate the implementation of projects that are ambitious, innovative, and apply the Safe System principles and approach with the aim of reducing deaths, serious injuries, or the risks of these occurring.

The Signature Programme is an umbrella initiative that links four Signature Projects. It was put forward in the second Safer Journeys Action Plan (2013-15), to contribute to *Safer Journeys: New Zealand's Road Safety Strategy 2010-2020*.

This report provides a synthesis of outcomes and learning to date across all workstreams of the Signature Programme, to inform road safety strategy and planning. The intention is that this report will give insight into the factors that drive successful system change, and which can be applied more widely to other demonstration projects that may unfold.

At the time of writing (April 2018), four independent initiatives are being, or have been, delivered under the auspices of the Signature Programme, in different areas of New Zealand:

- Behind the Wheel (the Māngere pathfinder project for the wider High Risk Young Drivers programme).
- Future Streets (a controlled intervention study trialling innovative street design processes, based in Māngere).
- Visiting Drivers (a road safety programme targeting visitors to New Zealand).
- Eastern Bay of Plenty rural road safety case study, concluded in 2015.

The first three projects are collectively referred to throughout the report as 'operative' Signature Projects, as they were implemented through to at least 2017.

The Signature Programme evaluation draws together, over 2016-2019, analysis of existing monitoring data and analysis of road safety data, together with regular engagement with project teams and national stakeholders. The evaluation activities integrated with existing monitoring processes, and to minimise burden on stakeholders. The evaluation was in many respects the learning mechanism for the Signature Programme, and provided a forum through which individual project learning could be shared across all Signature Projects.

Two evaluation questions guided the evaluation:

1. **To what extent, and in what ways, have Signature Projects met the intended objectives of the Signature Programme?** This is explored in [section 3](#), which details the approach and outcomes to date from each Signature Project.
2. **What transferrable learning from the Signature Programme can help inform the Safe System approach and road safety strategy?** This is explored in [section 4](#), which reflects on factors that can support innovation in road safety, drawing on a wide range of literature in this area, and reflects on the overall Signature Programme experience. The system factors that constrained or enabled innovation to spread from these pilot/prototype initiatives are explored in the context of socio-technical systems theory.

An evaluation rubric, in [Appendix 1](#), details the outcomes envisaged by the Signature Programme against which the Signature Projects are assessed.

Safe system framework

Underpinning the Signature Programme is the Safe System approach, represented in Figure 1 below. This provides a platform for continuous improvement and innovation in improving road safety. The framework has widespread international support and is consistent with leading road safety thinking.

A driver of the Signature Programme was that while specific effort has gone into embedding the Safe System approach into New Zealand's road safety systems, there are still many areas of everyday practice that do not reflect the Safe System approach. The Signature Programme was intended to showcase how aspects of the Safe System approach could be implemented through innovative demonstration projects.

Four key principles underlie the Safe System approach adopted in New Zealand:

Human fallibility: People make mistakes and crashes are inevitable.

Human vulnerability: The human body has a limited ability to withstand crash forces without being seriously injured or killed.

Shared responsibility: Road system designers and road users must all share responsibility for managing crash forces to a level that does not result in death or serious injury.

All of system approach: It will take a whole-of-system approach to implement the Safe System in New Zealand and all elements of the system need to be strengthened. As shown in [Figure 1](#) below, this includes roads and roadsides, speeds, vehicles, and road use – so that if one part fails, other parts will still protect the people involved.



Figure 1: Safe System framework

Socio-technical systems thinking

A central analytical frame for this final report in the Signature Programme evaluation series is socio-technical systems theory. This frame of thinking explores how niche innovations progress to become embedded as business as usual within systems and organisations. A ‘socio-technical transition’ is one where social and technological forces come together to create substantial shifts in transport, energy and other systems (Geels 2011). [Figure 2](#) below displays the process through which socio-technical transitions are theorised to occur, or which may be prevented from occurring through the rules that govern systems. There are three levels of interplay in this figure, which future sections will explore with specific reference to the Signature Projects:

- Niches: the locus for radical innovation; often protected spaces where innovation can operate or flourish.
- Socio-technical regimes: the ‘deep structure’ of established rules and systems that stabilise current practice.
- Socio-technical landscape: the wider context that influences niche and regime dynamics, including trends, values, ideologies and macro-economic patterns (Geels 2011).

Put briefly, socio-technical systems theory proposes that the combination of rules that are regulative (explicit and formal), normative (values, expectations, rights and responsibilities) or cognitive (the frames through which meaning or sense is made), together act within social technical regimes that are interlinked and maintain the stability of a system. These regimes combine socio-cultural, policy, science, technological and market forces that can act as powerful constraints on change.

For a niche innovation (in the context of this evaluation, a Signature Project), to become sufficiently embedded to ‘nudge’ changes in systems, requires a combination of factors that can work at macro (national/international); meso (city); and micro (community) levels (Marletto 2014). This is a non-linear process involving a complex interplay of different factors. New innovations must break through to the socio-technical regime as opportunities arise, creating adjustments, stabilising and eventually establishing themselves as the new regime, in turn influencing or shifting the socio-technical landscape.

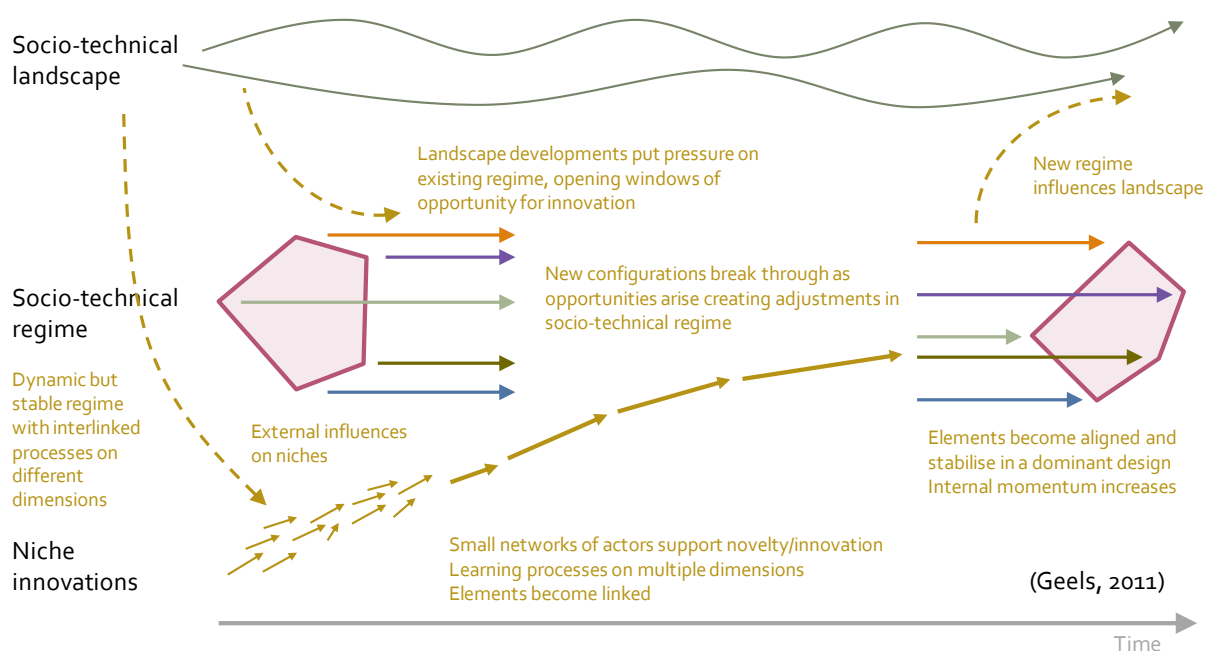


Figure 2: Socio-technical transitions from niche innovations to systemic change

In the sections that follow, we explore the shifts in systems that Signature Projects have brought about, and (briefly) consider these in the light of socio-technical systems theory.

2. Methods

This report draws on analysis of interviews, workshops and engagement with project leadership by the evaluation team. This is combined with key documentation from each project, including internal reporting, meeting notes, progress reporting and summative reports.

Interviews with stakeholders in NZTA, Ministry of Transport, ACC and other organisations have explored ongoing activities linked to the Signature Projects, and exploring the contribution Signature Projects have made to shifting business as usual activity

Informing this report were several pieces of work that are available as separate reports/publications:

1. A detailed evaluation framework (King et al 2015).
2. A literature scan exploring innovation transfer and how innovative thinking and practices can shift to business as usual (Davies et al 2019).
3. Annual project forums across the three Signature Projects.
4. Online surveys of stakeholders in the three projects (Field et al 2017a).
5. Project-level document analysis and interviews with project leadership, which informed annual updates (Field et al 2017b, Field et al 2017c).
6. An analysis of outcomes and learning from the Visiting Drivers initiative, including road safety and economic impacts (Field, McKegg and Schiff 2019).¹
7. A guide for road safety innovation, based on Signature Programme learning (Field et al 2019).

Illustrations in this report are drawn from sketch-noting undertaken at the programme forums in 2016 and 2017 by Carol Green.

¹ A baseline analysis of road safety data relating to all three operative projects was also undertaken; however, because of inherent limitations in some datasets, and the short timeframe of data available, these are not included in this report as they will not reliably inform conclusions regarding the projects.

3. Signature Projects: Achievements and reflections to date

KEQ1: To what extent, and in what ways, have Signature Projects met their intended objectives?

In this section of the report, we report on each of the three operative Signature Projects, exploring the intentions of each project, achievements to date, and reflections for wider implementation. We also explore reflections from the Eastern Bay of Plenty Signature Project.

An important platform of the Signature Programme evaluation is the evaluation rubric, developed in consultation with stakeholders, and detailed in [Appendix 1](#) for reference. This sets out criteria for delivery of each project against four domains: collaborative practice, system change, culture change, and road safety outcomes. We will conclude each section with an exploration of how Behind the Wheel, Future Streets and Visiting Drivers have progressed against each domain of the rubric.

The sketchnote in [Figure 3](#) below was developed during the first project forum, at which representatives of the three operative projects described their activity and learning to date.

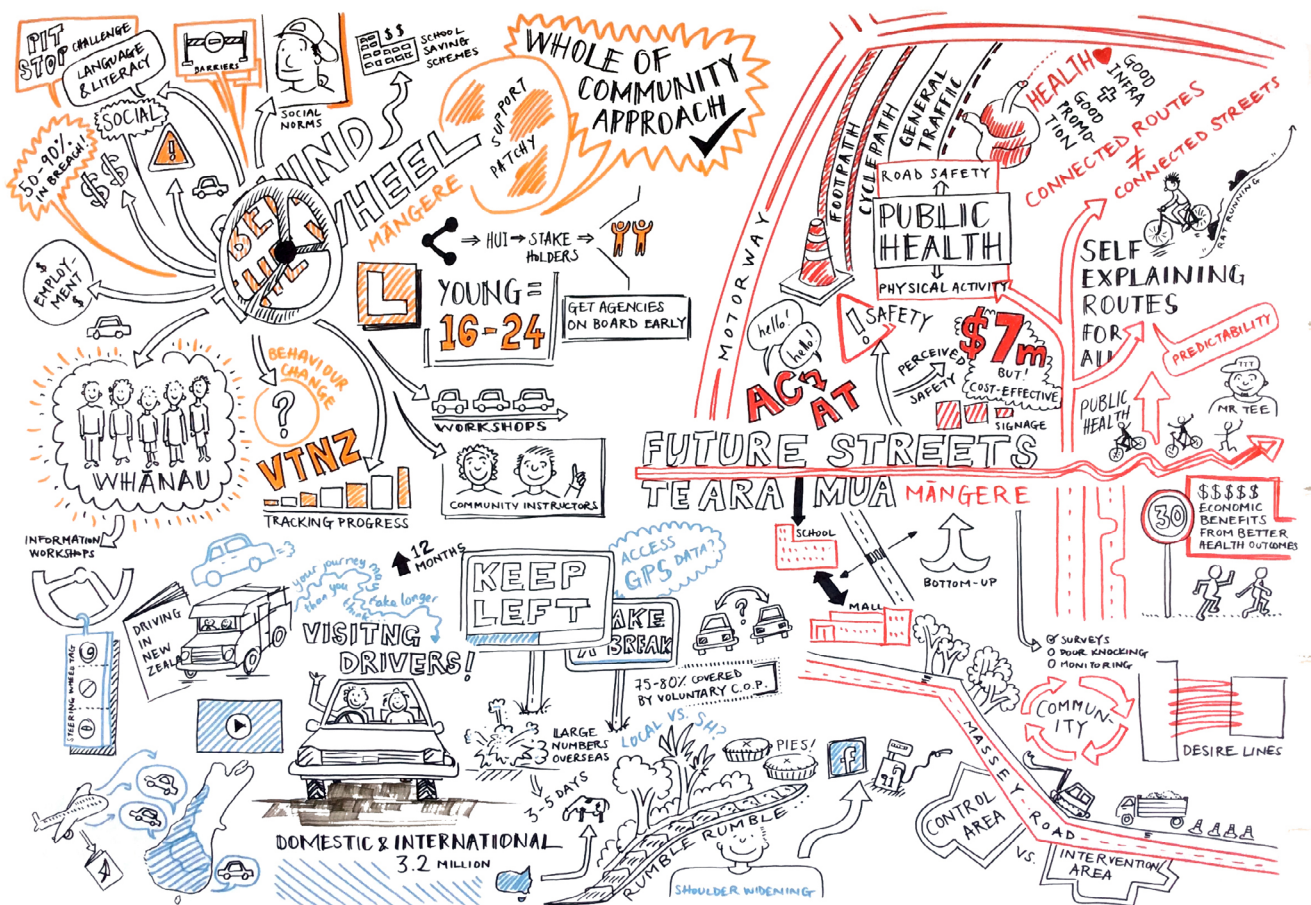


Figure 3: Sketchnote of Signature Project activity, taken from 2016 project forum

Behind the Wheel

Information for this section of the report was sourced from interviews with stakeholders in NZTA, Ministry of Transport and ACC; internal project reporting and an independent evaluation of Behind the Wheel completed in 2017.

Background to project

The Young Driver Signature Project is jointly-led by ACC and NZ Transport Agency to help support young people and their whānau to become safe and fully-licensed drivers. Behind the Wheel (BTW) is the urban pathfinder for the Young Driver project. Based in Māngere, this project was supported and partly funded by ACC to act as a test bed for wider implementation. The project has designed and trialed a range of initiatives to ensure that those people who are driving, are driving safely, and are complying with the Graduated Driver Licensing Scheme (GDLS).

From a road safety and an injury prevention perspective, BTW is potentially valuable because of the positive impact that adherence to a GDLS can have on reducing deaths and serious injuries.

BTW consists of nine initiatives, detailed in [Figure 4](#) on the following page.

Achievements to date

A project manager was appointed to oversee the project until late 2016, whereupon it became a community-led initiative. By this time, it was apparent that BTW had created significant local changes in the system of driver licensing and built community capacity within the local area. From its local base, the project forged very strong local relationships between community members, schools, service providers and agencies.

Internal reporting indicated that, with the support of a local project manager, Behind the Wheel had for the most part delivered on the nine areas of activity, with some promising signs of effectiveness apparent (Chinn 2016). The programme was:

- Demonstrating best and emerging practice to support young drivers' journey through licensing.
- Delivering innovation through a community based social marketing approach.
- Supporting many programmes and approaches to be embedded in the community with strong community buy-in.
- Creating a useful test bed for approaches that can be applied in other Young Driver projects elsewhere in New Zealand.
- Developing framework and resources that can be applied/adapted to other settings, in particular a community toolkit (Chinn 2016, Field et al 2017c).



Figure 4: Behind the Wheel activity areas

Key areas of strength in the activity areas were:

- Capacity building in community organisations and schools to deliver learner licence training.
- Additional support to ensure young people are adequately prepared for restricted and full licence tests.
- Co-designed community-based solutions that sustained community involvement.
- Relationship building/strengthening between testing agents and community providers, to ensure good communication.
- Supporting whānau/aiga/families to support their young people through their licensing journey.

Difficulties with developing a local tool to track young people's progress was a key impediment to identifying impacts. Although some progress was made locally in a range of areas, system-level and regulatory change was needed for the initiative to achieve its potential locally, and gain traction nationally. These included:

- Building driver instruction skills into the NZTA regulatory framework.
- Building practical test preparation into course provider requirements, mainstream school curriculum or work readiness programmes.

- Scaling the community-based toolkit for licensing support to national-level delivery.
- Scaling relationships between testing agents and community providers.
- Savings/funding schemes to support cost of licensing, and financing testing via MSD, or TEC funding/guidance to PTEs on incorporating licence fee costs in their programmes.

An independent evaluation of BTW was initiated in 2015 and completed in 2017. The evaluation reported on some, but not all aspects of Behind the Wheel, but their findings were generally consistent with the internal project analysis (Malatest International 2017). Key findings included:

- Community-based social marketing activities provided opportunities to increase awareness and understanding, and build new skills and knowledge. Turnout for some events were lower than expected and wider promotion and/or review of key messages may be needed.
- People who attended the Learner, Restricted/Full licensing workshops were positive about what they learned at the workshops and the whānau focus. The Licensing workshops have the potential for a broader reach into the Māngere community when compared with other Behind the Wheel activities. Engaging a network of local community workshop facilitators is critical to delivering the workshops and meaningfully engaging with participants.
- Building workforce capacity within the local community contributed to the potential sustainability of the project.

In terms of outcomes from the programme, the evaluation reported that:

- The programme increased knowledge and awareness of the importance of a licence, the licensing journey and how to achieve a full licence.
- Activities were effective for those who committed to attend; some were progressing their licence.
- Local coalitions and leadership were established to sustain social change.
- Local systems were enhanced to support the licensing journey.
- Many indicated they would act if they saw young people driving in breach, particularly those who had taken part in some community activities (Malatest International 2017).

At the time of writing, the community continues to deliver driver licensing workshops; this indicates that some level of community capacity has been built and maintained.

Transition to Drive

Since mid-2016, ACC and NZTA have been working in partnership with a national young driver licensing support programme, through the [Drive website and app](#). Building on the insights of Behind the Wheel, Drive developed a community toolkit to support community-based activities throughout New Zealand (recognising that young people won't solely rely on the internet for information).

The Drive community toolkit draws substantially on resources and materials from Behind the Wheel, including classroom-based activities, learner workshops, whānau workshops, and restricted and fully licensed workshops. The toolkit won a range of design awards including a merit in the 2017 Best Awards in the public good category.

Road safety coordinators at NZTA and ACC's Community Injury Prevention Coordinators will promote the toolkit established networks including those in government agencies, such as MSD, Corrections, MBIE, NZTA, and Te Puni Kōkiri.

Project reflections

Influencing wider thinking and system change

There are a large number of community-based drivers licensing projects occurring across New Zealand, and among these, Behind the Wheel was a highly planned, well-developed and system-focused local intervention. Its influence in the wider system should be considered in this light, and in the broader capacity of the driver licensing system at a national level to innovate.

At a national level, the drivers' licensing system is highly constrained, with key aspects such as driver instruction skills, costs and payment systems, and test content and processes tightly set within a range of rules and regulations that prevent rapid change. Behind the Wheel's greatest immediate influence was in the changes to the licensing environment within Māngere, and its direct feed into the Drive community toolkit at a national level. In concert with other local initiatives, learning from Behind the Wheel is informing thinking on the GDLS nationally.

To date, the wider GDLS system has been able to deliver relatively few changes. There are however a range of activities underway related to the national GDLS, including a review of fees and pricing, access to tests in rural areas, and policy regarding school/PTE-based training programmes. In addition, in April 2019, the government announced that it will fund the costs of getting a driver licence for young people on youth benefits, which is estimated will support some 2500 young people through the restricted licence process.

[Figure 5](#) below details the influence of Behind the Wheel from a socio-technical systems perspective:

- At a landscape level, the road toll, the perceived needs of employers and demands for driver licensing programme together drive demand for community initiatives such as Behind the Wheel.
- At the niche innovation level of Māngere, Behind the Wheel was able to implement comprehensive changes to driver licensing.
- At the system/regime level, Behind the Wheel directly influenced the community toolkit, but other elements (school curriculum, instruction skills requirements, costs and payment systems, and test processes) have remained unchanged through regulatory and rule constraints. The initiative does however provide learning to inform wider practice, and potentially system changes.

It is worth noting that while the national GDLS system has been resistant to change, should any of the current national level activity mentioned above result in regulatory changes, these are likely to become well-embedded and have long-lasting impacts.

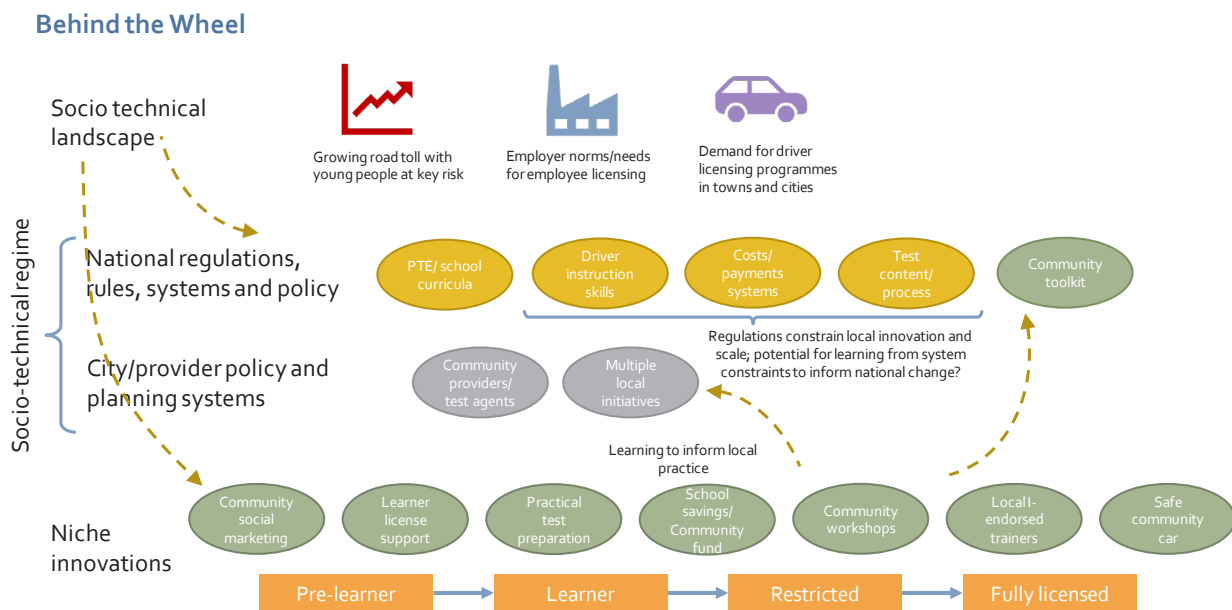


Figure 5: Influences of Behind the Wheel on national licensing systems (socio-technical depiction)

Reflections for practice

The Behind the Wheel project manager role led development and implementation, and provided a driving force for activity. This was critical for bringing together the community, getting input, driving initiatives forward, as well as being a central point of contact for project. The role provided a clear line of responsibility, leadership, direction, and enthusiasm. The project lead had a very strong background in the driver licensing field. The Māngere experience highlights the value of a dedicated salaried role in designing, implementing and sustaining community-based projects.

The extensive engagement of the community, at multiple levels within Māngere, was a key foundation for its establishment and progress. The project had significant involvement of community and target audiences developing and refining ideas, and subsequently ensuring buy-in to project implementation from the community. Engaging community leaders in the co-design approach, insight gathering and as advocates of project and associated activities, provided much-needed connection to the wider community, validated the approach, and created a foundation of project ambassadors.

Through BTW's implementation, a range of key directions for similar projects were also identified to support project implementation

- Ensuring agency conversations are aligned before engaging with communities, to reduce uncertainty.
- Ensuring either a robust cross-agency decision-making process or give delegated leadership and decision-making, along with clear on roles and responsibilities between national and local agencies.
- Exploring potential for formal agreements to strengthen partnership-working.
- Aligning initiatives with perceived needs of the community members, and managing expectations with the community about what can or can't be expected from the project.
- Ensuring quick wins in early stages to show the community that progress is being made, and to support further buy-in.

- Building community capacity to deliver many aspects of the programme, building local understanding and commitment.
- Formally seeking participation from schools, and making clear the benefits they will gain from participation.
- Information delivered in visual formats and in suitable languages, and linking with local media.

Further reflections for activating communities on road safety are discussed later in this report, drawing on the lessons from Behind the Wheel.

Agency processes were thought to limit the ability for this project to innovate, and which created delays in initial states and at key decision points. This also meant that for several agencies, contributions were limited to business as usual. The project recommended exploration of an innovation mandate at high levels within agencies.

Progress towards Signature Programme objectives

Figure 6 on the following page details the evaluation team’s assessment of progress made by Behind the Wheel against the Signature Programme rubric ([Appendix 1](#)). The project is demonstrating strong local collaboration and capacity building, it is meeting short-term goals and has reached a stage where the project is now community-led. The progress in these domains reflect the very high level of local development, engagement, ownership and momentum that has been achieved in the project in Māngere.

The project has created substantial local changes in the system of driver licensing and built community capacity in this area, and community-led driver licensing workshops continue to operate. The project has provided a range of insights and resources for application more widely. However, the strengths in local collaboration and system change have had limited translation into regional and national-level change, particularly because of deep-seated constraints in drivers’ licensing systems nationally to adapt rapidly.

Behind the Wheel / Young Drivers

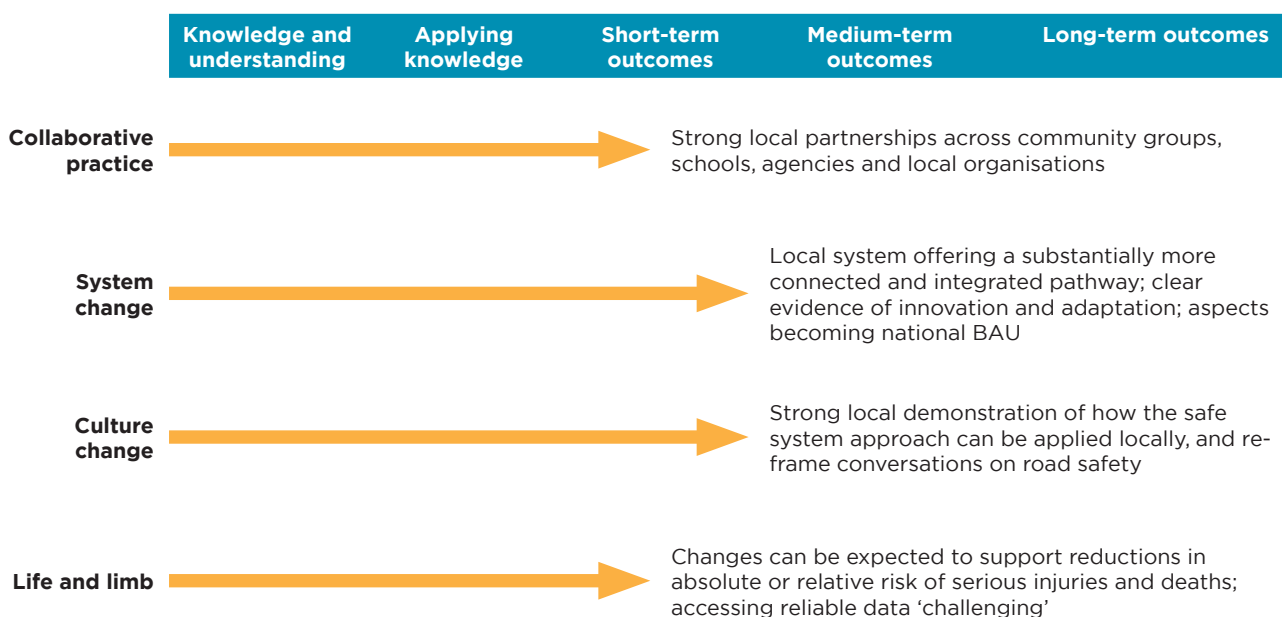


Figure 6: Behind the Wheel Rubric analysis

Future Streets

Information for this section was sourced from project reporting, publications and presentations, and interviews with Future Streets leadership.

Background to project

Te Ara Mua - Future Streets is a controlled before and after intervention study that looks to understand the interactions between the physical and human environments to support social, environmental, cultural and economic wellbeing.

The project seeks to address issues in the urban environment including safety hazards, vehicle related air pollution, health issues such as obesity, diabetes, cardiovascular disease, and other negative impacts of car dependent transport patterns. Through interventions based around Māngere town centre, a range of changes to streets and routes were implemented by 2017 to make walking and cycling easier and safer.

The Future Streets research applies leading edge thinking in urban design to selected urban streets in the Māngere town centre, with the aims of:

- Demonstrating a process for community participatory design and implementation for Future Streets in Auckland.
- Measuring and describing the integrated road safety, health, environmental and social outcomes resulting from Future Streets implementation.
- Demonstrating the use of the safe system approach in existing urban environments.
- Exploring the application of these approaches to identify the costs and benefits to future urban planning in New Zealand.

It is hoped that the project will ultimately influence the performance metrics that transport and urban planners use, and broaden the range of benefits that are considered when weighing urban transport design options.

The Future Streets team draws together stakeholders and experts from the transport, social science, public health, and urban design arenas. They are working alongside Auckland Council, Auckland Transport (AT) and NZ Transport Agency to design and implement the interventions, and monitor impacts over time. A Māori advisor to the project helped ensure the intervention areas achieve best practice in culturally appropriate participatory design.

Future Streets builds on previous research (Self-Explaining Roads) which achieved reductions in the social costs of crashes of approximately 48% over five years.

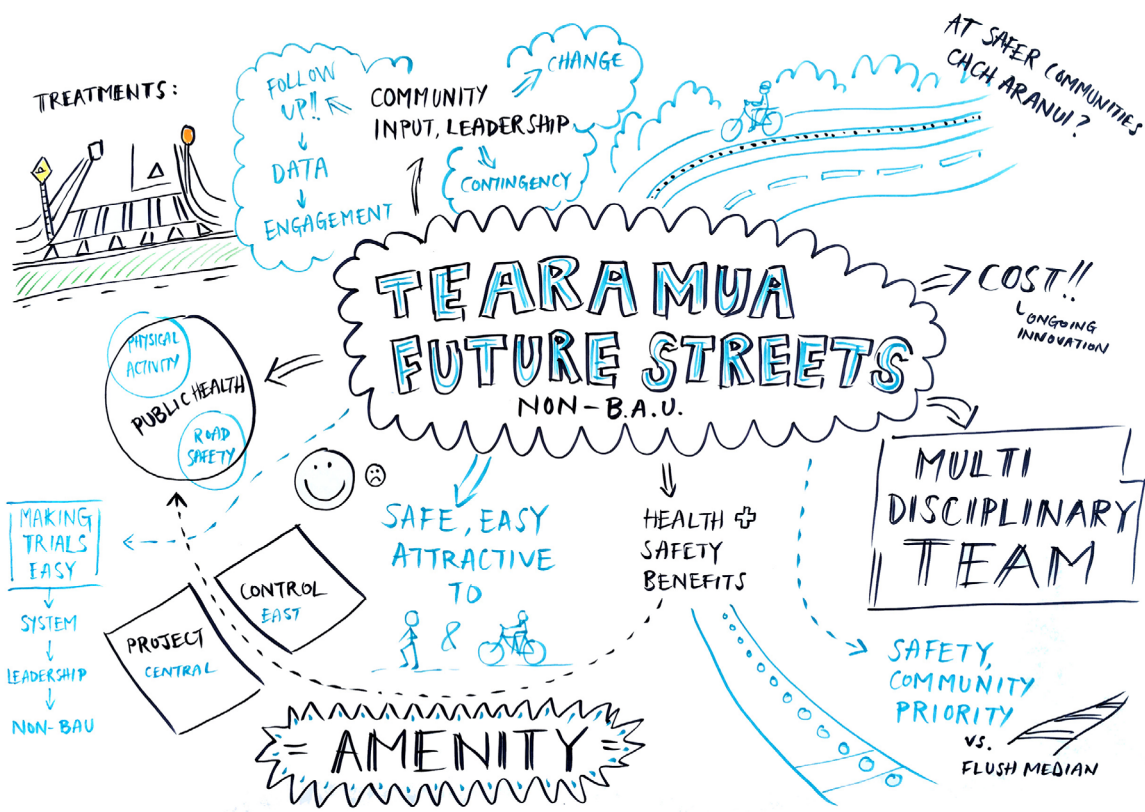


Figure 7: Sketchnote of Future Streets activity, taken from 2017 project forum

Achievements to date

Project investment and construction

The research components of the project are funded through a \$4 million grant from MBIE. The infrastructure is funded through investment from the Local Board, AT's Walking and Cycling budget and matched funding from NZ Transport Agency. At the start of the project \$3m was committed by the Māngere-Ōtāhuhu Local Board, and this commitment was increased to a total investment of \$9m. Additional funding was a result of a new bus route project in the area, an expanded AT Walking & Cycling budget and matched funding from NZ Transport Agency via the Urban Cycleway Fund.

Highly collaborative relationships were established with people from AT, NZTA and the Local Board. There was significant turnover of people at AT during the project, with none of the original leads now present in the project; whilst this may have contributed to disruption, it also marked a positive shift in priority within AT and the involvement of people (and budgets) charged with implementing walking and cycling-oriented projects. The Local Board remained a key supporter of the project.

In 2017, all construction works were completed. The street changes within the area include:

- A community trail, incorporating improvements in walking and cycling infrastructure, a design that draws on mana whenua guidance and traditions, and providing enhanced fitness opportunities for community members.
- Transformation of many roads into the mall/shopping area to include separated cycle lanes, widened pavements, and treatments such as raised tables to slow vehicle traffic.

- A new pedestrian crossing at Massey Road.
- New bus network beside the shopping centre that incorporates Future Streets elements.

The look and feel of many parts of the area has changed markedly as a result of these treatments. Changes to the parks/reserve network have contributed positively and the areas around the town centre are more inviting for the community.

There was an official opening for Future Streets by the Minister of Transport and others in 2017. A community celebration for the project had previously taken place in 2016. The photos in [Figure 8](#) below illustrate some of the street changes that have taken place within the area, such as better pathways and safer crossings. (Mackie et al 2018).

By 2017, more streets were treated than had been initially agreed to because of early budget constraints. The delivery of an enlarged package was due in part to the early design work and detailed costings, and forward visioning that took place within the project planning stage, which created a prioritised list of enhancements. Consequently, as new funding sources became available, Future Streets was ready to take advantage of these opportunities. With the subsequent inclusion of additional streets through reprioritised funding and public transport improvements, the project is now close to the originally intended scope of development.



Figure 8: Māngere before and after the Future Streets intervention (Mackie et al., 2018)

Research activity

Ongoing research and analysis for Future Streets include:

- A road user behaviour survey recording on an annual basis traffic counts, speed, people on street and where they cross, and number of cyclists. An analysis of road user interactions is also planned, which will involve video analysis of road user interactions in order to gain a more sophisticated understanding of usability.
- A pre- and post-intervention household survey matched where possible to original respondents, plus some replenishment. It involves household face to face interviews and includes health and physical activity-related questions. MBIE Future Streets funding ceased in 2018, but funding for further follow-up was secured in 2019 from the Health Research Council.
- Pre- and post-intervention focus groups and interviews with adults and schools students.

Construction delays meant that the MBIE contract was extended by two years (without additional funding), so that follow-up research could be undertaken following completion (or near-completion) of the interventions.

Impact of interventions

International research indicates it takes some years for similar interventions to start showing impacts on safety and health (Goodman et al 2014). Accordingly, Future Streets research is currently focusing on intermediate outcome measures of behaviour change.

Early stage observed changes in the intervention area include slower traffic and movement is more systematic and orderly; now it appears to be slightly slower but also easier to drive around, and much easier to walk and cycle.

Early indicators show that following the intervention, and relative to the control area, there was a reduction in speed that is in line with expectations for this stage. Reductions in speeds are clearly more evident in the intervention area where changes were made, compared to the control area ([Figure 9](#)).

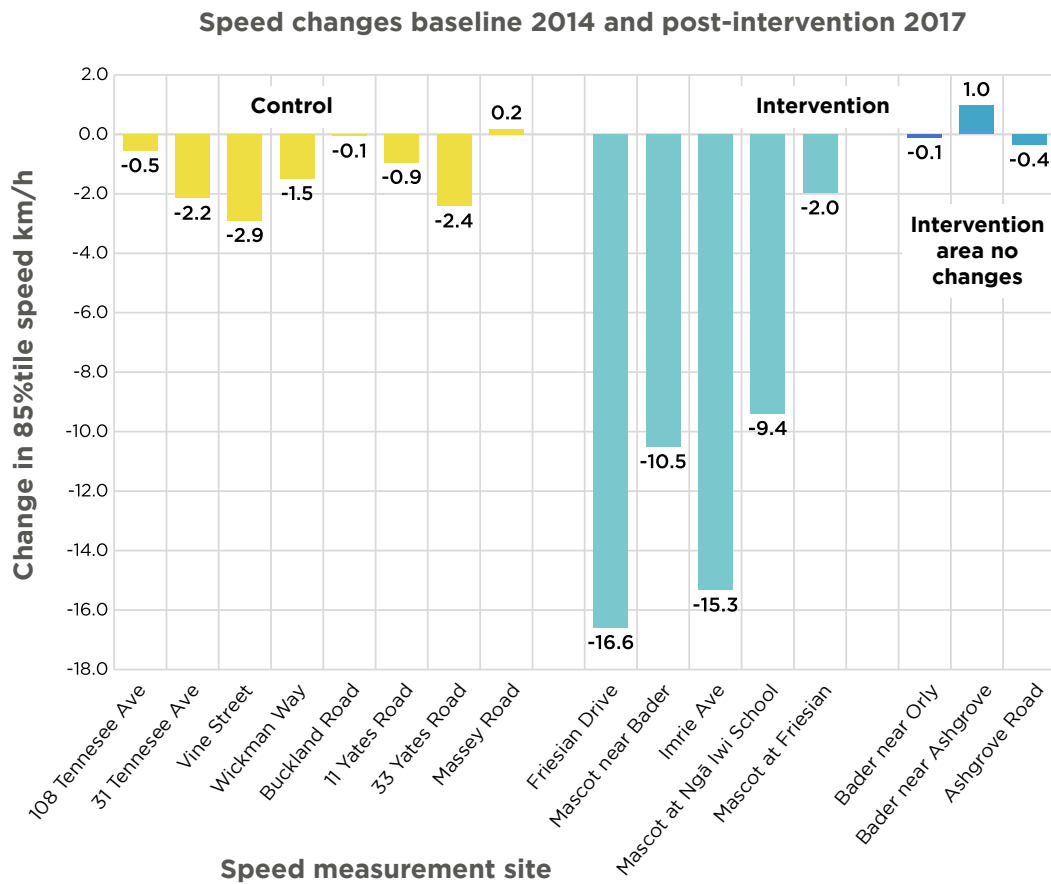


Figure 9: Future Streets speed changes

A continuing challenge is managing expectations and achieving clarity around what realistic changes can be expected and by when; ensuring that everyone is clear about when to expect changes in different metrics (for example, focusing initially on intermediate outcomes, such as reductions in vehicle speed, as an early stage indicator of longer term outcomes for people walking and cycling).

Pedestrian movement patterns also show that people are making use of the new infrastructure in the area and crossing the roads more regularly at these safer locations ([Figure 10](#)).



Figure 10: Change in pattern of pedestrian movement: Mascot Ave

At the time of writing, early stage survey analysis indicates that walking and cycling perceptions in Māngere Central have improved, relative to the control site:

- There was a stronger increase in people agreeing that it was safe for children to walk or cycle around the neighbourhood among people from Māngere Central (57% in 2014, increasing to 74% in 2017), compared to the Māngere East control area (46% in 2014, increasing to 55% in 2017).
- There was a substantial increase in people indicating that it would be easy or very easy for a child to cycle in Māngere Central (55% in 2014, increasing to 71% in 2017), with little or no change in Māngere East (41% in 2014 and 43% in 2017).

However, qualitative feedback indicates some local dissatisfaction with the loss of parking because of the bike lanes, and adjustment to other traffic interventions.

To date, the project has not yet recorded an increase in cycling on the separated cycle paths. Analysis is underway of road user behaviours, comparing control and intervention areas.

Project reflections

Partnership development

There was a great deal of learning and insight resulting from the challenges and strengths of partnership working; of note were working within systems and processes, and introducing and implementing activity that is outside business as usual (BAU). Ultimately, this project has benefited from understanding the different ways of working (both in terms of cultures and systems), and each other's perspectives.

Future Streets team members reflected that the early partnership with AT was quite challenging with the situation changing on a regular basis. However, the partnership continued to improve as the project progressed and ultimately a positive and constructive partnership developed. From their experience with Future Streets, the project team felt that a range of planning process improvements could be employed to make demonstration projects like Future Streets easier. Eventual buy-in and goodwill from partners allowed Future Streets to happen despite a challenging system (Mackie et al 2018, Witten et al 2018).

A key learning from the project was the need for the system to enable innovation, including a built-in innovation function to test potential approaches; and an innovation fund, which can respond to new ideas. This issue is discussed in more detail in section 4.

Influencing wider thinking and system change

The innovation literature frequently refers to a people-centric approach as an effective means of gaining insight, fostering innovative ideas and developing effective fit-for-purpose and sustainable solutions (Bason 2013, Tromp & van der Bijl-Brouwer 2016, Yee & White 2016). Future Streets adopted a community participatory design process to better understand local concerns and aspirations as well as to inform design solutions.

Interviews indicate that interest in the project has broadened, and there was a great deal of discussion in 2017 and early 2018 as to how the Future Streets project may be emulated more widely in South Auckland and New Zealand. There is interest at ministerial level in scaling the Future Streets concept, resulting in an intervention project titled Safe and Healthy Streets South Auckland, which at the time of writing is its early planning stages.

A desire to see smoother planning processes for innovative trials such as Future Streets, also led to a workshop called ‘Making Trials Easier’ which was delivered in March 2017 (Mackie et al 2018, submitted). This workshop was an initiative to harness the learning from Future Streets with the goal of identifying challenges and potential ways forward.

Auckland Transport’s Safer Communities Programme built from this workshop and is a local example of how lessons learnt from Future Streets have been picked up within other programmes or projects. AT's Safer Communities programme uses a localised approach to make local roads safer and create more opportunities for active transport; identifying issues and solutions to make walking in these areas safer and easier.

Plans are also emerging in relation to other developments happening around Māngere Town Centre, including the potential to incorporate some of the lessons around how innovation and research for street improvement projects like Future Streets might progress in the future (for example, how new housing developments in the area can contribute to better road designs). Conversations are taking place around the concept of cycle lanes from Māngere College to Ōtāhuhu, and linking to the airport and Māngere Bridge. Work is expected to be happening within these areas over the next few years.

In late 2017, Future Streets collected the NZTA Bike to the Future Supreme Award, and Innovation Hub Award, reflecting the contribution the project is making to cycling in New Zealand.

Figure 11 below details the influence of (and on) Future Streets from a socio-technical systems perspective:

- At a landscape level, the road toll, health inequities and widespread demands for more mobility options have influenced the establishment of Future Streets.
- At the niche innovation level, Future Streets implemented a comprehensive process of community engagement and street redesign, with a range of intended safety, activity/mobility, and social and health outcomes.
- At the city level, Future Streets has created some influence in city strategies for active transport, investment, design guidance, and to some extent has supported establishing an innovation function locally.
- At the national level, Future Streets has created some influence in walking and cycling funding, and the strategic directions of government reflect Future Streets aims. Legislation and design rules have yet to show substantial shift.

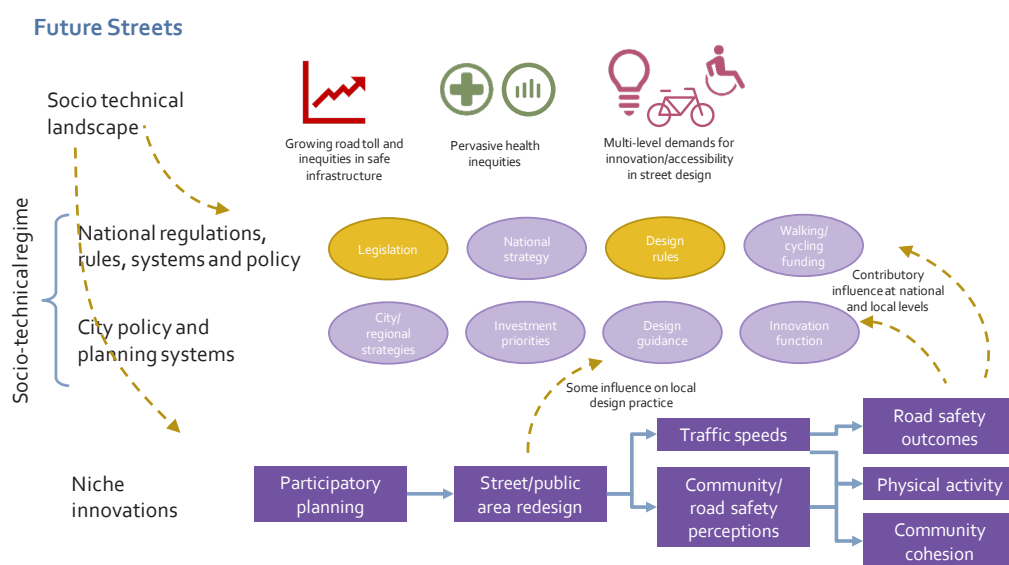


Figure 11: Influences of Future Streets on systems (socio-technical depiction)

Culture change

The project team felt that Future Streets is demonstrating the value of its comprehensive community engagement, and is making a positive contribution to community engagement across other council-led projects, as a result of some of the lessons learned through Future Streets. This is in parallel with growing awareness about 'design thinking' and consumer-centred approaches being adopted through other arms of council.

The challenges associated with influencing wider culture change were also highlighted through specific learning around the cycle lanes. For example, the mixed response to the cycle lane component of Future Streets reinforces the difficulty in establishing whole community buy-in, despite the comprehensive community engagement process that was carried out. The delays to construction also impacted on the broader community's understanding of the project, as the impacts of the relatively intense community engagement earlier in the project were likely to have diminished over time. The project team found that some residents simply wanted more information on how to use the cycle lanes, and that when the rationale for Future Streets (and the cycle lanes) were explained to people, they typically understood the changes. This may suggest that a wider local or central government mandate for projects such as Future Streets would be useful for achieving overall acceptability (Mackie et al 2018).

The improved partnership between Future Streets and AT suggests that culture change is occurring, at least with the people that the project team worked with. As time has progressed, these relationships greatly improved. The project team reports that the participating AT staff were enthusiastic about the project and proud to have been a part of the project. In 2019, AT substantially restructured its walking and cycling activity, and the Future Streets team are working to establish relationships with the new AT leadership in this area.

The challenge for Future Streets (which in the environment of the new government appears to be rapidly moving from challenge into opportunity), will be translating this culture change into the wider system. The ability to adopt a people-centric approach, which encourages co-design and co-production, continues to be identified as a challenge for the public sector. This is frequently attributed in the literature to the traditional attitudes and historical processes that are often still present within these organisations (Bason 2013, Robbins 2016, Sørensen & Torfing 2012).

Time to achieve change

One of the challenges faced by Future Streets is the lack of alignment between investment and when outcomes can reasonably be expected. This is consistent with international research (Goodman et al 2014), and does not diminish the intrinsic value of the project or the changes put in place, but it does affect the ability to claim change at an early stage following investment.

The team experienced some of the challenges of encouraging cycling in South Auckland. There are ongoing community concerns around personal safety, the potential for theft (of bikes for example), and the presence of dogs posing a threat to pedestrians and cyclists. These concerns and perceptions go beyond infrastructure interventions but will need to be addressed in some way to fully unlock the benefits of the cycle lanes within the area.

There is the possibility that future connections to other local areas will increase the number of people cycling over time as well. Connecting Māngere Town Centre cycle lanes to new (yet to be built) links to Māngere Bridge and Otahuhu for example, should help to increase the uptake of cycling. More time will be needed to see the full effect.

Progress towards Signature Programme objectives

Figure 12 below details the evaluation team's assessment of progress made by Future Streets against the Signature Programme rubric (Appendix 1). Future Streets has shown substantial progress across all four domains, reaching short-term outcomes in the life and limb domains, and extending to medium-term outcomes in collaborative practice, system change, and culture change domains.

Future Streets

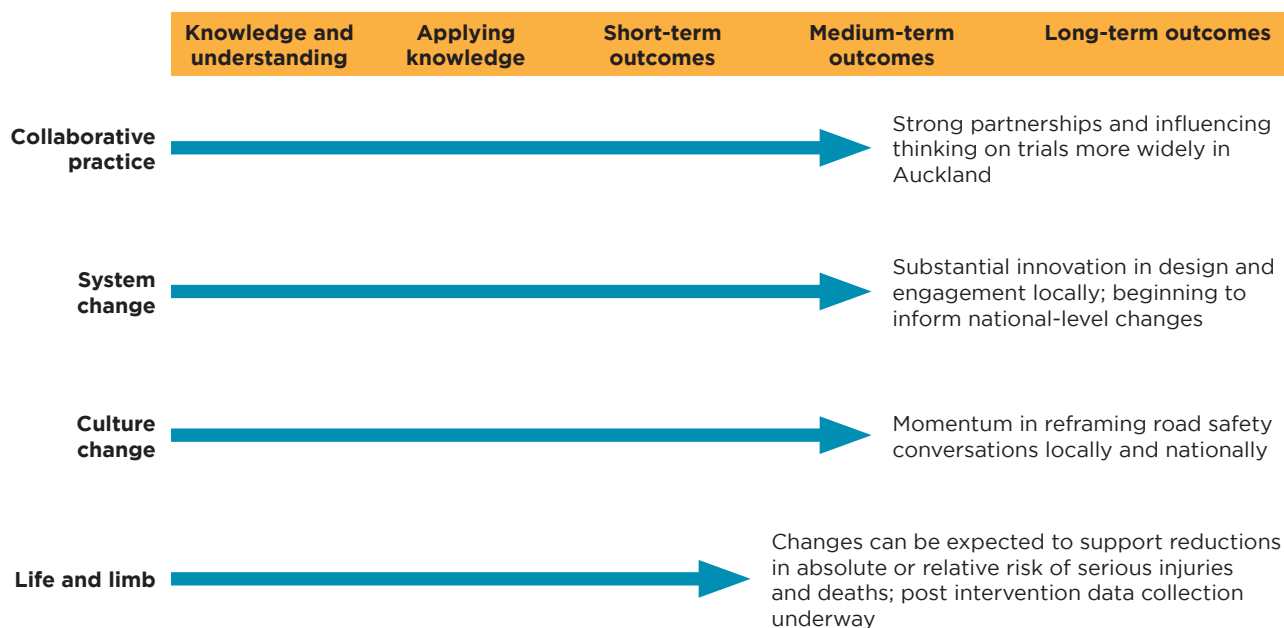


Figure 12: Future Streets rubric analysis

Visiting Drivers

Information for this section of the report was sourced from internal documentation, NZTA data and interviews with key stakeholders in the project.

Background to project

Visiting Drivers is a multi-faceted initiative to improve road safety for, and of, visiting drivers, while maintaining New Zealand's reputation as an attractive and safe tourist destination. It is based generally in Otago, Southland and West Coast, but elements support improvements nationally.

The purpose of the Visiting Drivers project is to combine the efforts of many organisations to ensure all visitors have a safe and enjoyable holiday experience. Partners include central government (including NZTA, Police, Tourism NZ, and ACC), local government, the private sector (including rental vehicle operators) and others in New Zealand and overseas.

The project is designed to support the safety and experience of visitors to New Zealand across the spectrum of travel to New Zealand, through the following:

- **Planning and booking** information that assists visitors to make well-informed and safe choices, providing consistent information about New Zealand in multiple languages.

- **In-flight** information while travelling to New Zealand.
- **On arrival** information to assist travellers with their vehicles, route planning and key elements of the road code.
- **Journey** support with journey and safety information/collateral, infrastructure to support safer journeys, and speed and enforcement of rules.



The key strands to the project are:

1. A communication and education campaign, which includes safety campaigns and messages delivered by project partners to their audiences in a variety of ways through their communications channels, and coordination of communications across partners, including responses in situations where crashes involving visiting drivers occurred.
2. A safety improvements programme, delivering roading improvements in the key intervention areas.

A Working Group met regularly to plan joint communications and campaigns, share information on forthcoming events and issues (e.g. British and Irish Lions rugby team tour) to support joint planning, and develop changes in organisational/sector practice that supported the wider goals of the programme. This was overseen by a Governance Group and supported by a communications group.

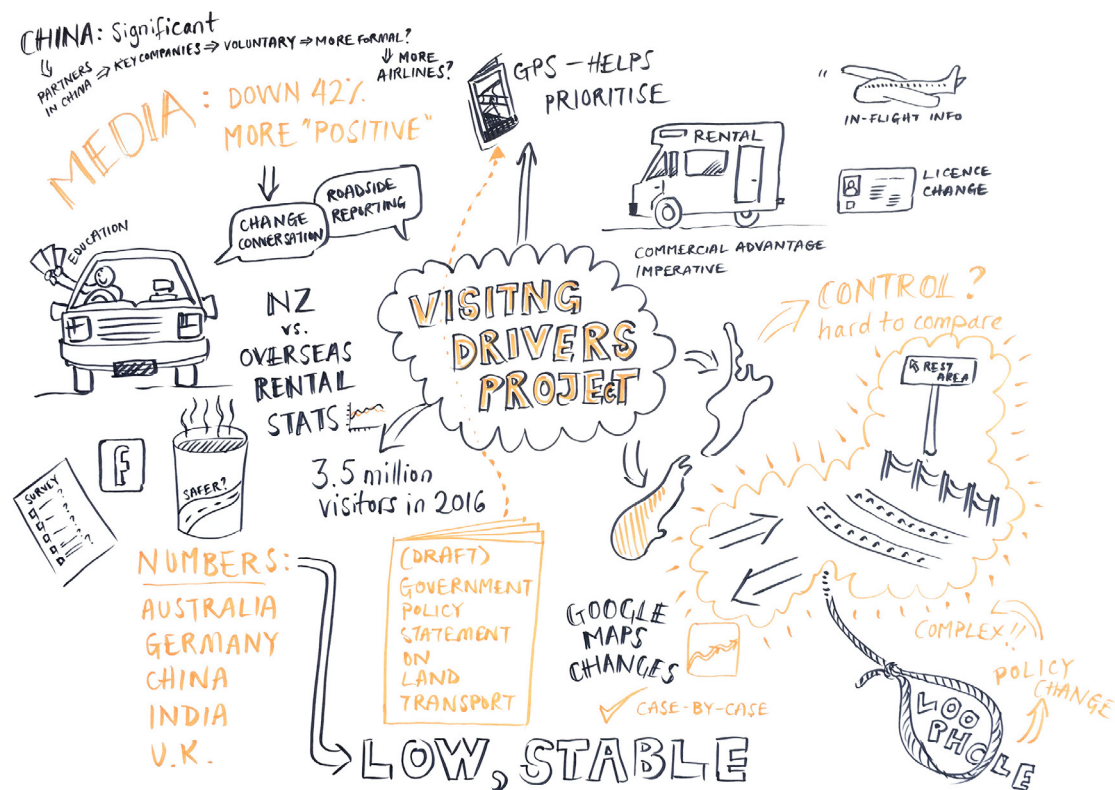


Figure 13: Sketchnote of Visiting Drivers activity, taken from 2017 project forum

The project was established in 2014 by the National Road Safety Committee as part of the Safer Journeys Signature Programme. In 2017, the project transitioned to business as usual activity, with the project’s working group disbanding. The Governance Group and communications group continue to function as needed.

Achievements to date

Crashes involving visiting drivers

A common theme among stakeholders interviewed was that deaths and serious injuries among visiting drivers has remained steady despite a strong increase in tourism numbers. This is to some extent supported by available data that indicates the level of fatal and injury crashes nationally has remained generally stable (Figure 14 and Figure 15) (Ministry of Transport 2017), whilst at the same time visitor numbers have increased substantially to reach almost four million by 2016 (Figure 16), presumably along with visiting driver numbers. This would suggest that the risk of deaths and serious injuries among visiting drivers has fallen.

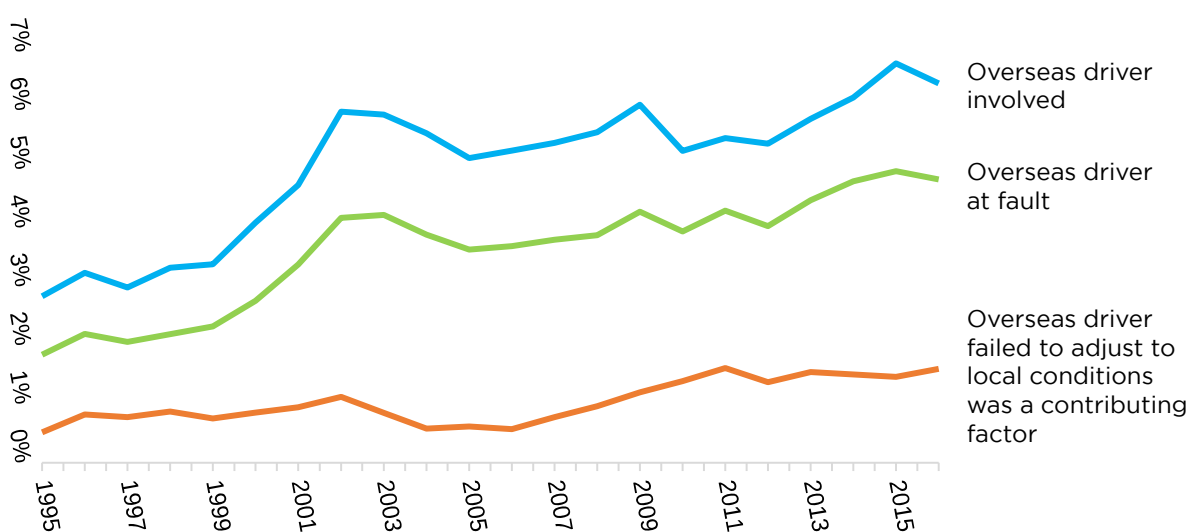


Figure 14: Percent of fatal and injury crashes that involve an overseas licence holder, 1995-2016
Source: Ministry of Transport

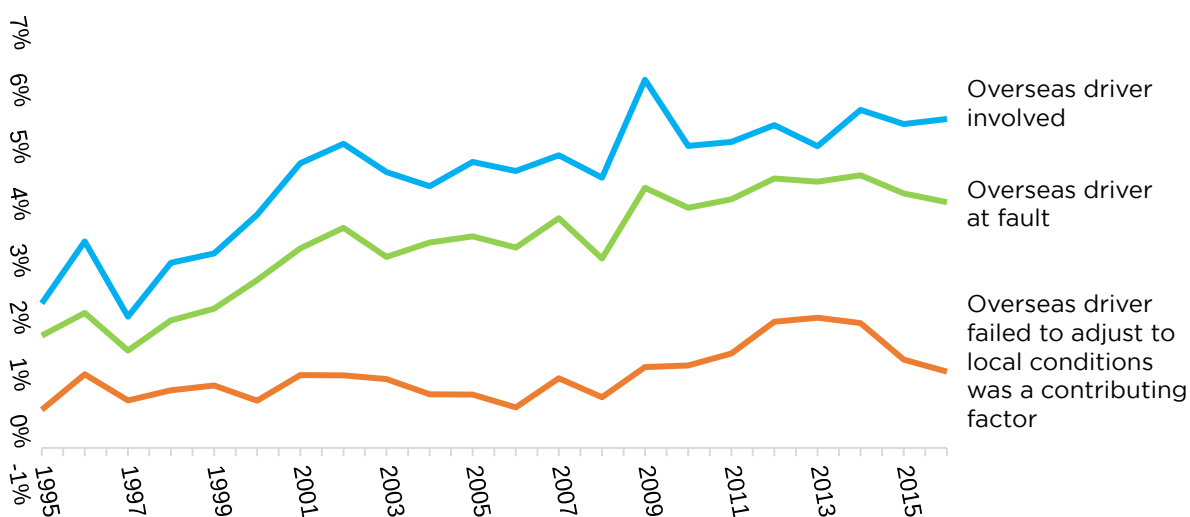


Figure 15: Percent of fatal and serious injury crashes that involve an overseas licence holder, 1995-2016
Source: Ministry of Transport

Visitor arrivals from all countries to New Zealand

By sex, 1997–2017, number of visitor arrivals

Provider: Stats NZ

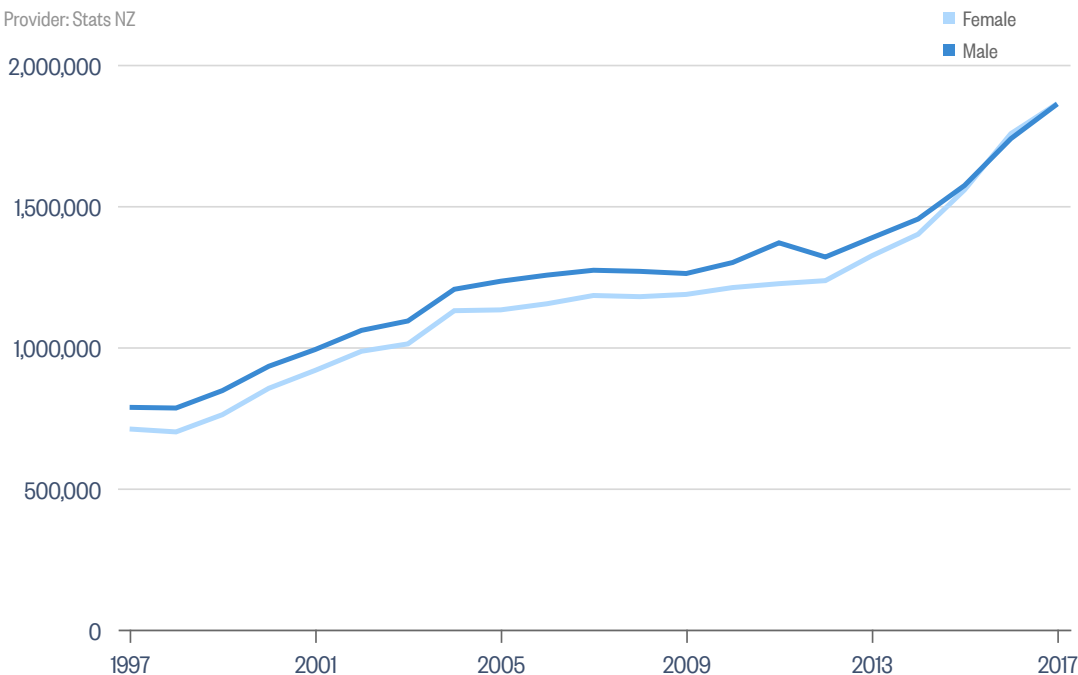


Figure 16: Visitor arrivals to New Zealand 1997-2017
Source: Figure.NZ (via Statistics NZ)

An independent analysis of crash data indicates that fatal and serious crash rates among visiting drivers in the target regions in 2016 and 2017 are estimated to be lower than they would have been if the Visiting Drivers project had not been implemented. However, given the relatively high variation in crash rates over time, it is too early to estimate these effects with a high level of confidence. Although the trends are not statistically significant, they align with other data sources, and are consistent with the intended outcomes of the project. The monetary cost associated with the average estimated reduction in crashes is around \$275,000 per year and the total social cost could be as high as around \$10.5m per year if the full value of lost life and permanent disabilities associated with these crashes is included (Field et al 2019).

In addition, interviews with stakeholders in 2018 across a range of participating organisations indicated a strong sense, particularly among rental vehicle operators, that crashes involving the rental vehicle fleet had fallen substantially since the introduction of the project. This has meant a reduction in damage costs and which in turn has positively affected profitability. These crashes may not have involved deaths or injury, but they support the reliability of the fleet and the visitor experience.

System changes

A recurrent theme of engagement in the Visiting Drivers project is the strength of collaboration across partners. Notably, all partners saw themselves as having a role to play in road safety. It is not simply that people around the table are willing to work together, but that all partners have implemented significant shifts, or ‘pivots’ in activity to support safety and visitor experience outcomes. These include the following:

- Tourism operators seeing their role in road safety, and that investing in road safety initiatives for their customers was good for business

- Tourism New Zealand buying into the Visiting Driver's purpose and messages, which are being promoted worldwide. Their campaign has also pivoted its messaging about travel to New Zealand from a focus on simply coming to enjoy the beautiful landscape and scenery, to come and enjoy, but to take care.
- Among transport agency roading engineers, there was a shift or pivot from them seeing infrastructure and roading as 'a drainpipe', to viewing roads as a key amenity for people taking advantage of New Zealand's attractions and views; roads therefore have to be safe for people to use, to pull off from and then re-enter.
- Police systematically changed how they deployed staff, going from a focus on speed and alcohol enforcement, to a focus on prevention; for example, when is the peak flow on roads, identifying where there are pinch points, and where visitors are typically getting into trouble. Police have also changed how they communicate with visitors, and they now have mobile apps in multiple languages so they can communicate more effectively. Police now tend to not report the nationality of the driver where this was not pertinent to the crash (e.g. if it was a crash that was also typical of New Zealand-based drivers).
- NZTA shifted some of its funding decisions from a purely safety focus to taking more of an amenity and wider tourism benefit focus (e.g. pull-over places for scenic views).
- Police and rental vehicle operators in some areas (Queenstown and Christchurch) shared information on clearly unsafe drivers, and assisting these drivers to make alternative travel plans.

There was general feedback that NZTA and partners had undertaken some important short-term safety messaging, such as point of sale type material, messages on coffee cups and partnering with service stations and longer-term infrastructure improvements, which included rumble strips, arrows on the road, exit signs reminding people to keep left, and road safety signage on some of key tourist routes.

An important element of system change in the Visiting Drivers project is the code of practice for rental vehicle operators. By 2017, some 80% of the rental vehicle fleet had adopted the code of practice. This was seen to have a range of benefits:

- A reduction in accidents which reduced operator costs (discussed above).
- Some operators felt there was increased business as a result of promoting that they were part of the programme.
- Businesses also saw good impacts with the visitor experience through the code of practice; they were seen as caring that they would have a safe journey.
- It was seen to have a positive effect on staff, by reinforcing an organisational/industry sense of care for customers.
- The code also enabled the industry to mitigate risk; from a media perspective, they were able to demonstrate being responsible.

The collaborative foundations of the project enabled people within the project to create new partnerships, or to link people in related areas. Some spoke of the project opening doors for people, and enabled them to be steered towards those working in relevant areas, rather than having to take ownership for a solution. People in the tourism industry found themselves in a wider series of conversations than had existed previously, such as through road controlling authorities' forums, and forward planning in NZTA.

Visitor experience

The project has surveyed people in the intervention areas about the visitor experience. Data from 2016/17 surveys indicated that generally, in the three intervention areas:

- Around half of surveyed visitors drove while in New Zealand.
- More than 90% of overseas visitors believed the roads to be safe to drive (slightly higher than domestic visitors).

Of those who drove:

- Around two-thirds felt fully prepared for driving in New Zealand.
- 40% had received information before coming to New Zealand and approximately one-third while in New Zealand.
- More than 90% felt the information received had prepared them for driving in New Zealand (New Zealand Transport Agency 2017).

Taken together, these suggest a positive visitor driving experience and that visitors are receiving information to support their driving whilst in New Zealand.

Effective coordination of communications

Many stakeholders spoke of the way in which communications (in terms of both proactive outreach through planned campaigns, and reactive responses to issues as they arose), were well coordinated and enabled all to be on the same page and telling similar stories to the media. In instances where there were visiting driver crashes, all partners were alerted and key messages were communicated. This often prevented over-dramatisation of a situation by media, particularly in instances where the type of crash was no different to one that was common among New Zealand-based drivers.

There was a sense among interviewees that the strength of the collaboration contributed to less media hype around the crashes that happened. As the project progressed, and although there were some very serious crashes, there wasn't generally the type of media attention experienced in previous years. It was also felt that the public debate became more informed, and what was reported in the media is generally more balanced, and informed by the statistics and evidence.

In volume terms, media coverage declined substantially over the course of the project, from 98 print and 54 broadcast media stories in the September to December quarter of 2015, to 57 print and 9 broadcast media for the same quarter in 2017; an overall decline of 57% across both forms of media. Twitter coverage fell from 155 in the September to December quarter of 2015, to 36 the following year, but increased to 53 in 2017 (although this remains substantially lower than the 2015 quarter) (McNamara Research Group 2018).

Business as usual transition

In late 2017, a decision was made to transition the programme to business as usual. The working group was disbanded, and the governance group considered issues on an as needed basis. Communications work in the visiting drivers space, both reactive and proactive, was continuing.

The project had reached a point where many lessons from Visiting Drivers were rolled out nationally, including some of the collateral in the rental car industry, and approaches adopted by police. From NZTA's

perspective, there were resource constraints in the organisation and new priorities to respond to, which ultimately meant a reprioritisation of NZTA resource support for the project.

However, for many stakeholders, the project was experienced as simply stopping. There were concerns regarding the loss of the people as key contacts across the programme, having all partners on the same page when issues do occur, and what appeared to be a very well-functioning structure. The ending of the working group was thought by one as signalling there are no more new initiatives that need to be undertaken.

One stakeholder thought that a strength of the programme is that people understood that it wasn't just about visiting drivers on the road, it was about the tourism experience. The risk of business as usual was losing some of the strength and relationships that helped solve a lot of problems informally.

Looking ahead, one raised the concern that the easy changes had been made, but with continued growth in volumes of people coming to New Zealand, the risk is in two to three years there will be a similar and larger problem, with an accompanying need to improve infrastructure.

A further concern was that while the industry code of practice significantly changed activity in 80% of the fleet, in the past few years new medium-sized entrants have emerged, who have not been part of the conversation and who haven't bought into the code.

Project reflections

Collaboration as a key enabler

Consistent with other Signature Projects, collaboration was a critical enabler of the goals of the programme, and not an end in itself. Across the partnership, there was an attraction to work in an inclusive environment with a shared ownership of a problem; this enabled the problem to be tackled from a variety of angles rather than siloed activity.

Each partner brought their own reasons for participation to the project. For the tourism industry, the visiting drivers issue was seen as a reputational issue, where crashes and encountering negative behaviour were eroding the tourism experience. From a road safety perspective, there was value seen in taking action to prevent crashes among this group of drivers.

It was widely agreed that no-one partner could have had enough levers they could use alone to make a significant difference; this was an issue that needed everyone at the table.

Contributors to effective collaboration included the following

- A genuine desire to be a member of the partnership, to reach individual and mutual goals
- A common purpose that brought partners together
- Skin in the game – a willingness and ability to offer something from participants' own sectors
- Good process across the partnership; this included sharing briefing papers to ministers
- Resourcing of the partnership and activities
- Respect across partners

Interviewees agreed that the partnership offered a coordinated approach, which meant issues could be dealt with at a senior level. The government resourcing, and active coordination from staff within NZTA were all helpful, along with regular meetings, action plans, and that plans were implemented.

A common theme was that collective purpose to make a difference on the issue was a key foundation for Visiting Drivers; with one interviewee noting that this has never been achieved with the freedom camping issue.

Influencing wider thinking and systems change

The rapidity and scale of influence of Visiting Drivers is striking, and appears to be driven by a shared acknowledgement of a problem, resources to coordinate activity and communications, and a willingness of all partners to play a contributory role. [Figure 17](#) below details the influence of Visiting Drivers from a socio-technical systems perspective:

- At a landscape level, the road toll, industry concerns of negative visitor experiences, and the inherent challenges of driving in New Zealand as a visitor created a demand for a central government-led intervention in this space.
- At the niche innovation level of implementation, the Visiting Drivers partnership built an integrated system of support for visitors, spanning the continuum from planning and booking travel, inflight, on arrival and support through the journey. This was achieved through a coalition of players from central government agencies, industry and local government.
- At the regime level, Visiting Drivers was able to exert rapid and widespread influence among partners, including industry practice in the target regions, road infrastructure, information sharing between operators and agencies, and coordinated messaging across the partnership. Council investment was not taken up to the degree intended. There were also national level changes made, including an industry code of practice, Police practice, driver information resources, and to some extent, NZTA investment criteria.

Importantly, for Visiting Drivers (and in contrast to Behind the Wheel), legislative change was not needed, and enabled rapid mobilisation of activity across partners. But this also had the effect that when resources were reprioritised, some aspects of project activity ended quickly.

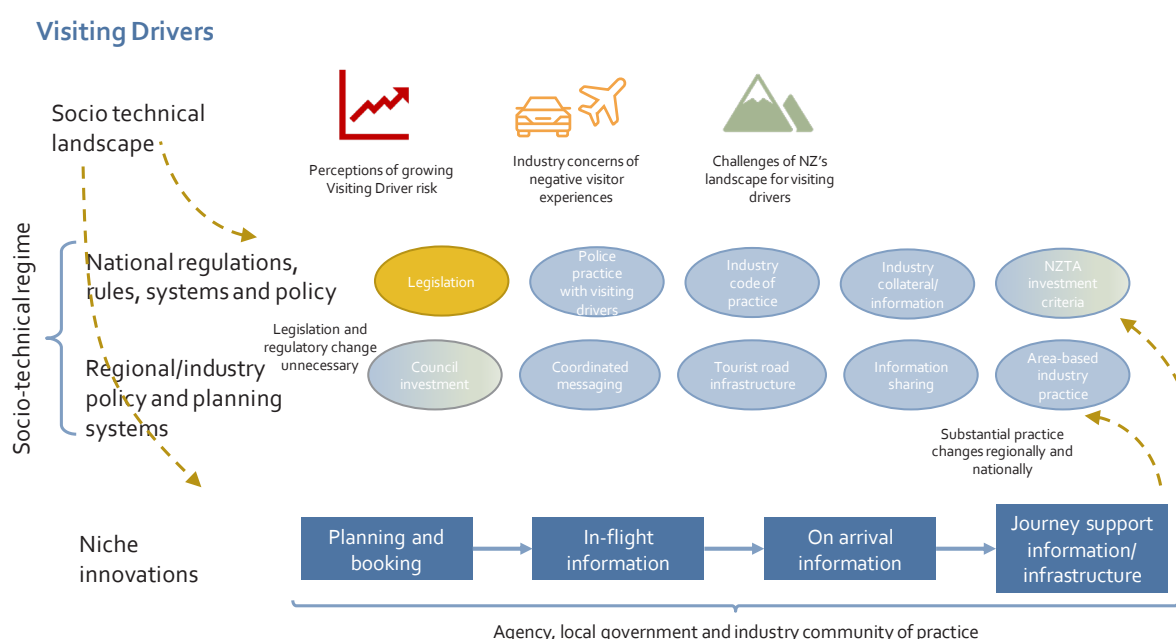


Figure 17: Influence of Visiting Drivers on systems (socio-technical depiction)

Leadership

Leadership of the issue from within NZTA was key success factor. Visiting Drivers was marked by one agency who took ownership, had the funding available, and could set up the systems around it. From this, NZTA were able to bring partners in together, but partners were then given that license or freedom to work as the expert in their areas, and to come up with solutions and deliver on these.

NZTA's leadership was noted by one interviewee as very good at keeping people focussed on solutions rather than problems, and bringing people back to the issues when they weren't thinking from a collective point of view.

Ongoing improvement

There were seen to be some aspects that didn't work as well, such as some collateral, messaging and a fund for local road improvements (the latter was under-utilised by territorial authorities, largely due to their own capacity to contribute their share of investment). There was however a clear willingness to try new approaches and to learn from activity to support ongoing improvement.

Visiting Drivers was also notable in that the Safe System approach was front and centre for all partners. Through the Visiting Driver process, partners obtained a comprehensive understanding of the Safe System approach, which informed the project's development.

Progress towards Signature Programme objectives

Figure 18 below summarises the very strong progress made by Visiting Drivers against the evaluation rubric. The project has delivered strongly against collaborative practice, system change and culture change, and the changes made can be expected in the short term to support improvements in road safety outcomes. The transition of the programme to business as usual may ultimately affect whether or not the achievements to date can be sustained.

Visiting Drivers

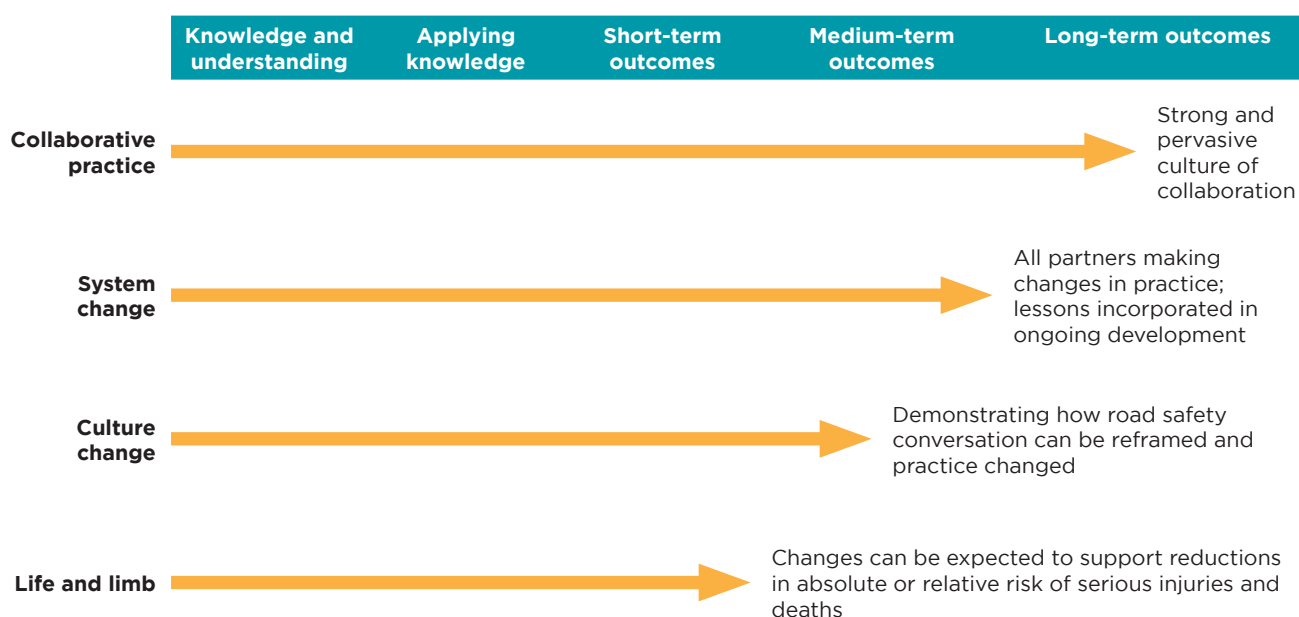


Figure 18: Visiting Drivers rubric analysis

Eastern Bay of Plenty

Background

The Eastern Bay of Plenty Signature Project was the first initiated under the Signature Programme banner, as a rural road safety case study. For many reasons, the case study was deemed completed and a decision was made not to proceed further as a Signature Project in September 2015. The New Zealand Transport Agency subsequently planned a 'Demonstration Project' in the region, focusing on roading improvements, and ACC continues to fund business as usual activities in the region.

There are two important legacies of the project that can be attributed to its extensive developmental work over 2014 and 2015:

- Signature Net: A method of graphically representing road safety information, including an automated methodology for identifying high risk curves. Implementation in Eastern Bay was seen as important proof of concept for broader application. Following this pilot, high risk curves have been mapped nationally as a tool for all road controlling authorities. This is available at roadsafetyrisk.co.nz, which is hosted by ACC.
- Intensive planning and business case activity undertaken to make a series of roads and roadside improvements; in mid-2019, a business case was approved, which would address six high risk curves, and provide tourist stopping places, roundabout, flood protection, and road widening and realignment. The full package is contingent on NZTA funding and the likely first interventions to be activated are the high risk curves and tourist stopping places.

Other initiatives that were identified as important successes of the project were:

- Community norms analysis: A comprehensive analysis of community attitudes to road safety and opportunities for a road safety campaign.
- A 'community snapshot' of key local resources, agencies and organisations.
- Road safety horizons: A compilation of road safety activity from 2008-18, across agency and local authority work programmes.

Systemic challenges

Through the other three projects we have case examples of what can be achieved through collaborative practice, and signposts to what might be important ingredients of success. The Eastern Bay of Plenty project strengthens the analysis of success factors by demonstrating what can happen when a range of critical elements are not in place.

The Eastern Bay was chosen opportunistically as a Signature Project; its choice was attractive for many reasons, including the local leadership and the area being of high social need. However, it was also a challenging area to demonstrate the application of Safe System principles, with a highly dispersed population, low collective road crash risk, and many distinct communities with their own identities.

Despite repeated attempts, partners in the project were unable to agree on a clear problem definition that the Signature Project could address. This in turn restricted the ability of partners to agree on goals, scope and activities.

There were widely acknowledged governance challenges, which included lack of shared goals and priorities, decision-making, mandate, and lack of alignment with local road safety governance. The project was described as nationally-led and locally recruited, rather than locally led and nationally supported. A loss of a key advocate for the project at an early stage created a notable leadership gap and added to the challenges of decision-making and implementation.

The project also struggled from a lack of alignment between strategic and planning priorities, and funding systems. This posed significant challenges for obtaining resource to drive project activity.

Development challenges

There was a shortage of both local capacity, in terms of the ability of agency staff to devote time in the project development – and local capability, in terms of the skills and knowledge to be able to develop and implement a complex project with multiple local, regional and national stakeholders. Progress on the project at many levels was hampered by being discretionary and peripheral to people's work programmes.

There was clearly substantial debate among partners and within agencies on the scope and core direction, multiple strands of potential activity, and changes in the area of focus.

The project was not well connected with local leadership, with confusion and frustration among council staff on progress and decision-making. The project was substantially developed in isolation from councils and local road safety governance. The funding environment remained uncertain for a lengthy period, exacerbating the challenges of project development.

Learning and future directions

A Safe System approach, that seeks to work across safe speeds, safe vehicles, safe roads and roadsides, and safe road use, is by its nature working in a complex environment. The Eastern Bay exhibited many of the characteristics of a complex environment, where relationships between stakeholders were as important as the ideas being developed.

Such complex environments occur where there are many competing ideas and challenges, outcomes are unpredictable, and understanding often emerges in retrospect. These settings require an adaptive learning approach, working in a process of continuous improvement and adaptation, rather than programmatic intervention. This also requires leadership that supports ongoing adaptation and openness to learning from failure, rather than programmatic implementation (Heifetz, Grashow and Linsky 2009).

Drawing on collective impact (Kania and Kramer 2011) and adaptive leadership approaches, the learning from this review suggest that future areas of Safe Systems innovation should prioritise the following:

- Problem definition: A mutually agreed definition of the key problem that all partners seek to address, and the goals and scope of work that follow from that
- Mandate at a governance level: The ability to make decisions to enable design and implementation, particularly short-term investments that support rapid action, learning and adaptation (i.e., building continuous improvement)

-
- Partners with complementary roles: Bringing to the table the skills, knowledge and resources of those committed to the project, with clear and agreed decision-making processes; in addition, understanding the individual strengths and weaknesses of partners and working constructively to manage these
 - Local champion(s) able to corral resources and people
 - Alignment of strategic and funding systems to mobilise resources at the project level
 - Understanding risks and responding flexibly, to ensure adaptation to challenges and opportunities.

One of the underlying features of the Signature Programme is recognition that not all Signature Projects will be successful in their goals; but that the critical aspect of Signature Projects is that learnings are documented and shared for future implementation considerations. The decision to conclude the Eastern Bay project, and to document the learnings from the project, clearly reflects this approach.

4. Signature Programme: Key learning for future road safety innovation

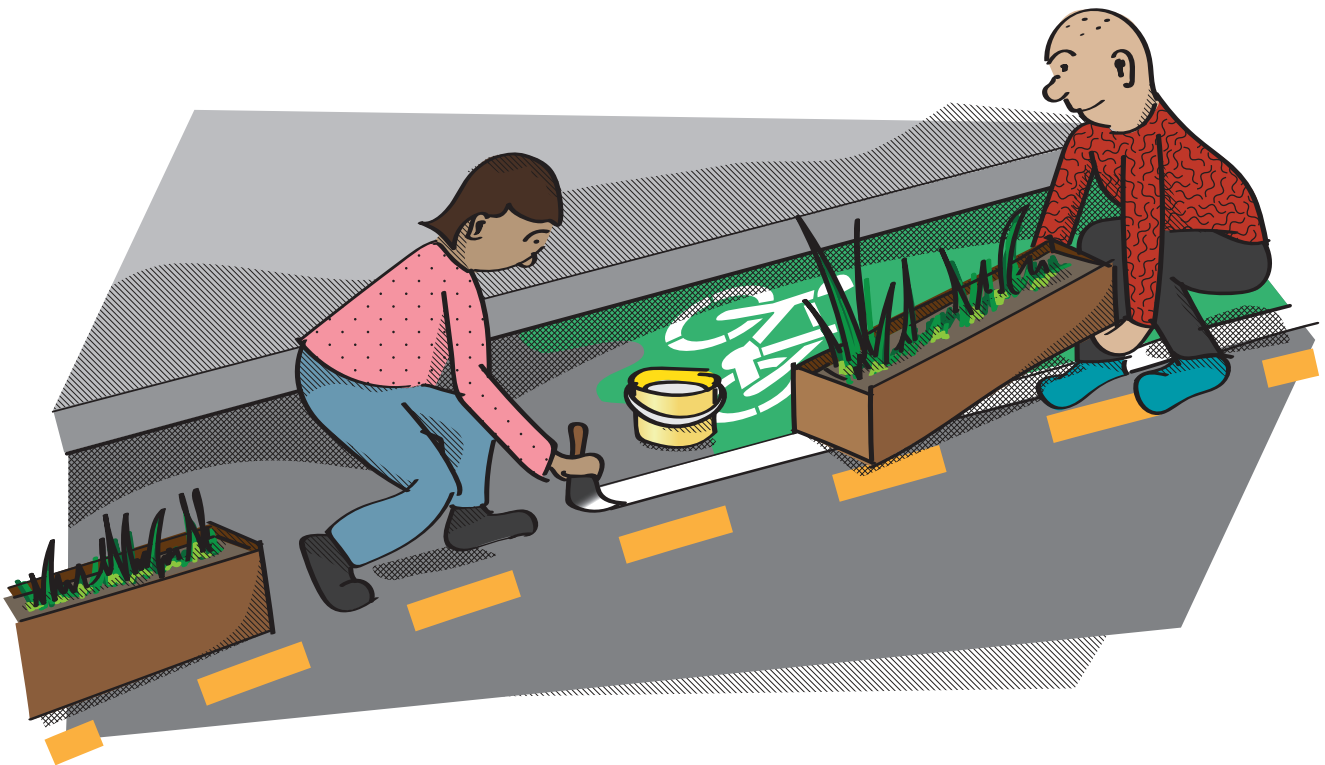
KEQ2: What transferrable learning from the Signature Programme can help inform road safety strategy and the Safe System approach?

This section looks at some of the key issues that drove success or created challenges for the Signature Projects, and the Signature Programme overall, and which may offer directions for road safety strategy and innovation in the future. We explore the experiences of the projects, and reflect on these in the light of the innovation literature. Two breakout sections were commissioned for this report, written by Kathy Chinn from Behind the Wheel, and Hamish Mackie from the Future Streets project; these respectively reflect on activating communities on road safety and building innovation capacity.

Key areas of focus in this section are:

- Collaboration and partnerships
- Learning systems
- People-centred approaches
- Reframing risks
- The influence of systems in innovation
- Taking projects to scale
- Lessons for the Safe System approach

Collaboration and partnerships



Building successful partnerships

A common feature of the Behind the Wheel, Future Streets and Visiting Drivers partnerships was the willingness to take new approaches, with determination from all partners to contribute in ways that achieved their collective needs and visions. Learning from the Eastern Bay of Plenty project demonstrates how essential these features are to project success. In the three operational projects, there was a high degree of agreement among project stakeholders with the following statements:

- The project feels like a safe environment to have frank conversations
- Partners (local and national) have developed relationships, trust, communications and information sharing conducive to cross-agency, cross-sectoral collaboration
- Partners are committed to a shared vision, shared sense of direction, co-investment of time/ resources, and shared problem solving
- Partners recognize different perspectives, agendas and areas of expertise within the project team
- Partners are demonstrating successful collaboration between agencies, working toward shared goals (Field et al 2017a)

Partnerships within each project developed as the projects unfolded. Initially, Future Streets struggled with building alliances, but with a policy shift within Auckland Transport, continual support from the Local Board and perseverance from the project team, strong alliances and collaborative partnerships with local stakeholders became strongly evident. Behind the Wheel developed through building active community networks and identifying opportunities for different elements of the system to work differently. Visiting Drivers was driven by a collective sense of ownership of the issue, and the leadership of NZTA in connecting partners and driving activity.

There was a common view that none could succeed through the efforts of one organisation alone. The following appear to be core elements for success

- Common purpose and shared ownership, where each sees the role they bring.
- Leadership to drive change and hold the course across partners; with supportive governance structures for collaboration, and flexibility when multiple agencies are involved.
- Clear structures, processes, and coordination roles; each project had project leads/managers who could bring together partners, engage stakeholders, coordinate/negotiate activity and provide central points of contact. In some cases, these roles were distributed across partners.
- Resourcing for activities/infrastructure to occur or be built, along with the investment in project management/leadership capacity.
- Building respect and trust, which often occurred over time, and was enabled by a willingness of all partners to come together, bring something to the table, and adapt delivery.
- Creating a learning environment that enabled information sharing, reflection and adaptation as the project proceeded. This included establishing tangible/measurable successes, not just in the end goals or outcomes, but in intermediate indicators to show progress towards the goal.
- Working in multi-disciplinary and intersectoral ways, including between public and private sectors

Collaborative partnerships were seen to bring a range of benefits, most importantly the tangible successes that resulted. They brought in new ways of thinking and approaches, and reduced a range of risks for partners by sharing ownership of issues and solutions.

Different cultures and expectations challenged partnerships at times. For example, the vision for Future Streets was generally shared across the wider project team, but there were different views about how that vision should be achieved or delivered. The more linear and established project management structures often lacked the flexibility to accommodate the innovative and iterative plans and designs of the research team. Partners in Visiting Drivers' inevitably had varying levels of willingness to undertake some strategies, but ultimately had determination to take new approaches consistent with the vision of the project.

Reflecting on Collective Impact approaches

Collective Impact has gained substantial attention in recent years as a key success factor for cross-organisational collaboration and systems change. The success to date of three of the Signature Projects to some extent aligns with the core principles of Collective Impact (Kania & Kramer 2011). Key elements of Collective Impact are:

- Common agenda with shared problem definition and agreed goals
- Shared evaluation and measurement approaches that enable understanding of both progress and the outcomes achieved
- Mutually reinforcing activities directed at shared goals
- Continuous communication between partners and a commitment to surfacing and addressing challenging issues
- Backbone organisation to mobilise funding and serve the collaboration.

However, the framework has also been criticised for its shortcomings in some critical areas, particularly “insufficient attention to the role of community in the change effort; an excessive focus on short-term data; an understatement of the role of policy and systems change; and an over-investment in backbone support” (Cabaj & Weaver 2016). Certainly, while all four projects had elements of the five core elements of collective impact, there were also some key differences:

- Building community capacity was a key focus of one project (Behind the Wheel), and broader community engagement in priority-setting was a focus of two (Behind the Wheel and Future Streets)
- Measurement systems varied, and for all three successful projects, the most meaningful long-term data is still to be collected and analysed; the focus was more on the shared outcomes than the data available in the short-term
- National policy and systems have proved significant barriers, and emerging enablers, for the wider scaling and systems change that the projects have sought (discussed later)
- Visiting Drivers and Behind the Wheel had a single ‘backbone organisation’; but what emerged across all three was a shared capability with various organisations and individuals taking leadership on sustaining the projects.

More recent thinking on Collective Impact (Cabaj & Weaver 2016) proposes shifts in the five fundamentals which would drive more substantial systems change. In many respects, the Signature Projects align more closely to these new elements, and these may offer stronger directions for innovative approaches to road safety in the future:

- Authentic community engagement: authentic and inclusive engagement of a broad spectrum of system stakeholders
- Shared aspiration: Moving beyond short-term metrics to a shared vision for change, and the pathways and strategies to drive change
- Strategic learning: Placing measurement within an environment of shared learning and evaluation (an approach which has in fact driven the evaluation of the Signature Programme)
- High-leverage and tight-loose-tight working relationships: Strategically working on the key points that will drive change, and enable working as closely or flexibly as is needed
- Container for change: Mobilisation of a diverse group of funders and sponsors; fostering new ways of thinking and working; and processes to cultivate trust and empathy.

Activating communities on road safety

Katherine Chinn, Project Manager, Behind the Wheel

This section offers reflections on how communities can be active partners in designing and implementing road safety initiatives, building from the lessons of the Behind the Wheel project.

Building the foundations

Before working with a community on road safety issues, it is important to lay solid foundations for addressing the perceived problem. In the first instance, it needs to be seen if the problem exists in the eyes of the community.

Through a range of engagement approaches, the communities of Māngere had already identified that driving unlicensed was a problem. There were several schools and community organisations who were trying to address this problem within their own settings.

Building effective relationships within the community, across community sectors and with agencies was a key enabler to working effectively together. Road safety agencies may have to broker these relationships in the first instance. Focusing on strengths rather than just problems or issues was important for community buy-in

Engaging community champions

Following issue identification, it is important to identify if there are people within the community or community champions that are wanting to address the problem.

Identifying, engaging and collaborating with community leaders was critical to the success of Behind the Wheel. Community leaders were engaged as early as the procurement phase of the Social Marketing provider. They were engaged in a co-design approach, utilised for insights, became advocates of project and promotion of activities.

The project needed buy-in from the community and a willingness to change. The community leaders were essential for this as they provided validation that the community was willing and wanting to engage. They acted as connectors to other people of influence and utilised their wider networks to influence as well. They became ambassadors of the project and identified other passionate individuals in the community who could also act as ambassadors.

Active co-design

A co-design or joint project approach was employed to empower the community to be involved in creating solutions and addressing the problem. This allows greater buy-in, and ensures the initiatives and solutions are designed and refined with the community. This brings meaningful relationships and fosters true collaboration.

The co-design approach was one of the key factors that ensured the success of Behind the Wheel. This approach meant that the community and target audiences were heavily involved in developing and refining the ideas and initiatives in the project. These were integral for developing buy-in, getting community involved in the solutions, developing community ownership, and refining and iterating based on target audience feedback and input. Co-design was used in developing and implementing the social marketing, bringing the project team into alignment, bringing about a collective implementation plan as well as

developing and designing initiatives in the local working group. This took the project beyond consultation to a true and very rich form of collaboration.

Clarity and transparency

For community buy-in to be achieved and sustained, being open about the opportunities and constraints is essential. Uncertainty or lack of clarity creates unease within local working groups and community organisations. It is important to be clear around expectations for the project, especially with regard to any plans to transition or reduce road safety partner involvement, and the roles people play.

Behind the Wheel went through a transition period of the community taking greater ownership, this was not clear at the outset of the project. It is important to have a plan and communicate this (and any strategies and approaches) to the community. There needs to be flexibility to adapt to community needs and feedback and adjust the plan as necessary, and to have a plan for when the initial investment prototyping ends.

Resourcing appropriately

Few community initiatives can be resourced solely from the efforts of volunteers. Road safety is no exception.

Behind the Wheel had a dedicated local programme/project manager that led the development and implementation of the project. This became a strong driving force for moving the project forward. This was especially important since the project was new and there was a lot of uncertainty. The project lead was instrumental in bringing together the community, getting input, driving initiatives forward as well as being a central person for the project.

For other communities this could be more than one person but there would need to be very strong coordination and role allocation. Due to the workload and commitment required on Behind the Wheel, this needed to be a paid position but could be a salaried worker who is able to take on the lead as part of their role.

Once the commitment of funding and investment from partners was confirmed, initiatives were able to be resourced and implemented giving the community confidence in the project. The project would not have been able to reach its level of success without this funding. To enable success, funding should be made available for at least a three-year period. There may be scope to utilise community partnerships where they are dealing with the target audience and work with other agencies, local authorities and other funders to share resourcing.

Build capacity

Capacity building gives community members an opportunity to be trained to deliver certain aspects of the project themselves, often resulting in lower costs for the project and them. This also means additional skills such as professional instructors can be more accessible to the community. Building local capacity provides a more sustainable way of working with the community to address local issues. It builds and leaves skills in the community.

Capacity building also provides some added benefits; for the community, it provides a more tangible benefit in engaging and collaborating on the project. For funders, it provides a method of increasing and enhancing the quality of delivery.

It is important to identify areas where community will still need ongoing support. It is risky to rely too heavily on the community unless resourced appropriately. This is especially relevant for BAU transitions. If community delivery is part of a goal, it is important that the community are given the support to take the project on themselves. There is a risk that BAU may mean stopping, so it is essential that the community is supported adequately throughout.

Provide guidance, advice and support where needed

Communities will not always be aware of the latest research or best practice road safety information. Agencies need to provide this support and guidance. It is also important that any change is undertaken slowly and advice is given on a strengths-based approach. Fostering an ongoing sense of improvement through feedback will support this approach.

Effective evaluation and measuring is key to understanding the impacts of a project. It is important to identify ways that success can be measured and who is going to be responsible for this. Reporting can be tedious for community organisations and can take away from their strengths. This may need to be delegated to others or designed differently, or in an easy-to-use way.

Learning systems

Knowledge translation

Knowledge translation is a term used to describe efforts to bridge the gap between what is more formally and explicitly known about improving the effectiveness of programmes, policies, and services in community contexts, and individuals working within communities (Levesque 2008). Knowledge translation is also situated within a much wider evidence-based movement (Culyer & Lomas 2006) that aims to increase the uptake of research-based evidence into policy development and the delivery of services (Walter et al 2005).

The central promise of knowledge translation is that if the wealth of research information is suitably tailored for audiences then it will contribute meaningfully to the decisions made and the actions taken about policies, programs, projects, and operations (Landry et al 2006). This will result in learning, insight, and subsequently practitioner behaviour change. In turn, knowledge translation is expected to lead to improvements in the lives of the people in communities.

Key factors that contribute to more successful and more effective knowledge translation include opportunities for communities to own, participate in, and lead research processes; collaborative exchanges between researchers and communities where relationships of trust are built over time; and the connections that are made with wider community and research networks (Hemsley-Brown, 2004). In other words, knowledge mobilisation and transfer are enhanced through participation, action, and human exchange.

All three operative Signature Projects highlight concrete efforts to translate evidence and knowledge into practice through a range of efforts:

- Behind the Wheel focused on the evidence from communities themselves of local norms and system gaps and touchpoints to build processes for driver knowledge and expertise development
- Future Streets drew on community knowledge and leading practice in street design to make safety intrinsic in people's behaviour

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- Visiting Drivers actively sought to equip people with knowledge of driving in New Zealand throughout the journey of travel with simple and clear advice, and also to work proactively to influence media stories and present more accurate depictions of driving by visitors.

The lesson from the Signature Programme is that translating knowledge and evidence into action for roads safety, requires approaches that engage with the user journey and equip people with the knowledge, and environment, that allows safe interaction with their surroundings.

Communities of practice

Communities of practice are proposed by Etienne Wenger as the basic building blocks of a social learning system (Wenger 2000). He frames his work on communities of practice within a social definition of learning where knowing involves two components – competence or what it takes to act and be recognised as a member, and our ongoing and mutual experience of membership of the community. Learning takes place in the interplay of these two components; it is dynamic and relational. Wenger suggests that belonging in a community of practice can be characterised by three modes:

- Engagement, such as the doing of things together such as talking, participating in meetings, creating products
- Imagination, which is about the identity that people construct of themselves, as members of a community, to reflect and act on situations as they unfold
- Alignment, which relates to making sure the activities of the community are sufficiently linked or aligned to other processes so that they can be effective beyond engagement in a particular community of practice (Wenger 2000).

Wenger's more recent work describes a community of practice as a "learning partnership among people who find it useful to learn from and with each other about a particular domain. They use each other's experience of practice as a learning resource. And they join forces in making sense of and addressing challenges they face individually or collectively" (Wenger et al 2011). Learning and knowledge transfer, translation or mobilisation takes place within human processes of interaction, dialogue and participation, such as in a community of practice.

Communities of practice and networks are very often not defined by, nor necessarily align with traditional organisational or management practices, and that they very often are not able to fully control them (Wenger 2000). The sustenance for a community of practice is collegiality, reciprocity, expertise, contributions to the practice and ongoing negotiation of the learning agenda – it is not affiliation to an organisation, assigned authority or a commitment to a predefined deliverable. The implications of this, Wenger argues, especially for learning and knowledge transfer in and across complex policy environments, is that organisations need to consider how they might support and enable communities of practice and networks as key sites of knowledge production and value.

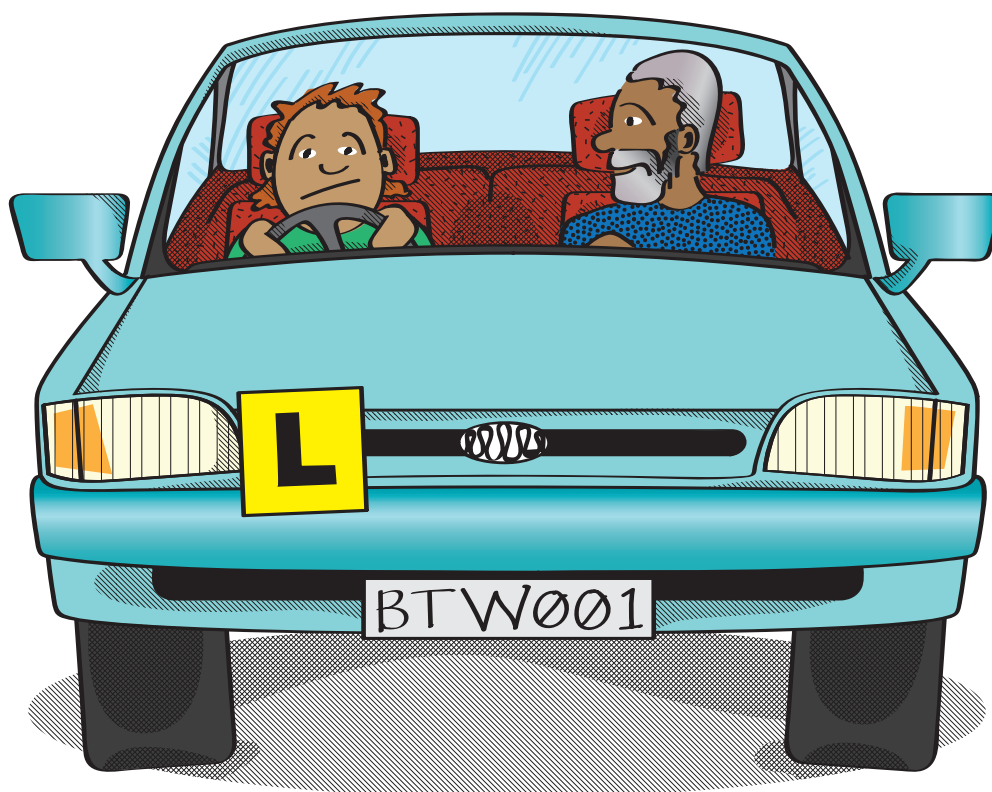
All three operative Signature Projects showed features that aligned with communities of practice, which in turn supported project outcomes. Governance and working groups of all three projects came to operate very much as communities of practice, creating a shared identity for those participating in the group, and a range of value across the continuum from immediate to transformative value. This value was enabled by the funding of secretariat or project management functions in two projects, and the committed resources from Auckland Transport and the research team in Future Streets.

However, business as usual transitions appear particularly difficult for sustaining communities of practice. The loss of the Visiting Drivers working group – the community of practice – is likely to be significant for the ongoing traction and spread of learning from the project. The strategic value of the project was high in the early days, given the political context and interest. This strategic value has clearly waned over time to a point where Visiting Drivers is struggling to maintain clarity around its identity and purpose; this has been further exacerbated with the restructuring within NZTA. Behind the Wheel similarly built a very strong community of practice locally, but the spread nationally of the model was uneven.

Future Streets, in contrast, shows considerable ongoing energy in the community of practice emerging between the research team, Auckland Transport and NZTA, beyond the initial project. The Future Streets model appears to be gathering ministerial interest and momentum nationally.

Finding other ‘communities’ or networks through which the learning from the Signature Programme about road safety innovation might be distributed, may be a strategic action that is important and needed if this work is to have value.

People-centred approaches



People-centred approaches seek to understand an issue from the perspectives of those using the system. Such approaches involve and value citizens' participation and input, and provide a greater understanding of the various needs and factors influencing people's behaviours and decisions. They compel organisations to take a much broader, collaborative, and inclusive view of who needs to be part of the process of co-creating initiatives that will actually work in the real world (Bason 2013).

All three operative Signature Projects made extensive use of people-centred approaches, which contributed to their success in multiple ways. Behind the Wheel extensively engaged with the Māngere community in its design and development. Young people and community leaders were engaged in the co-design process

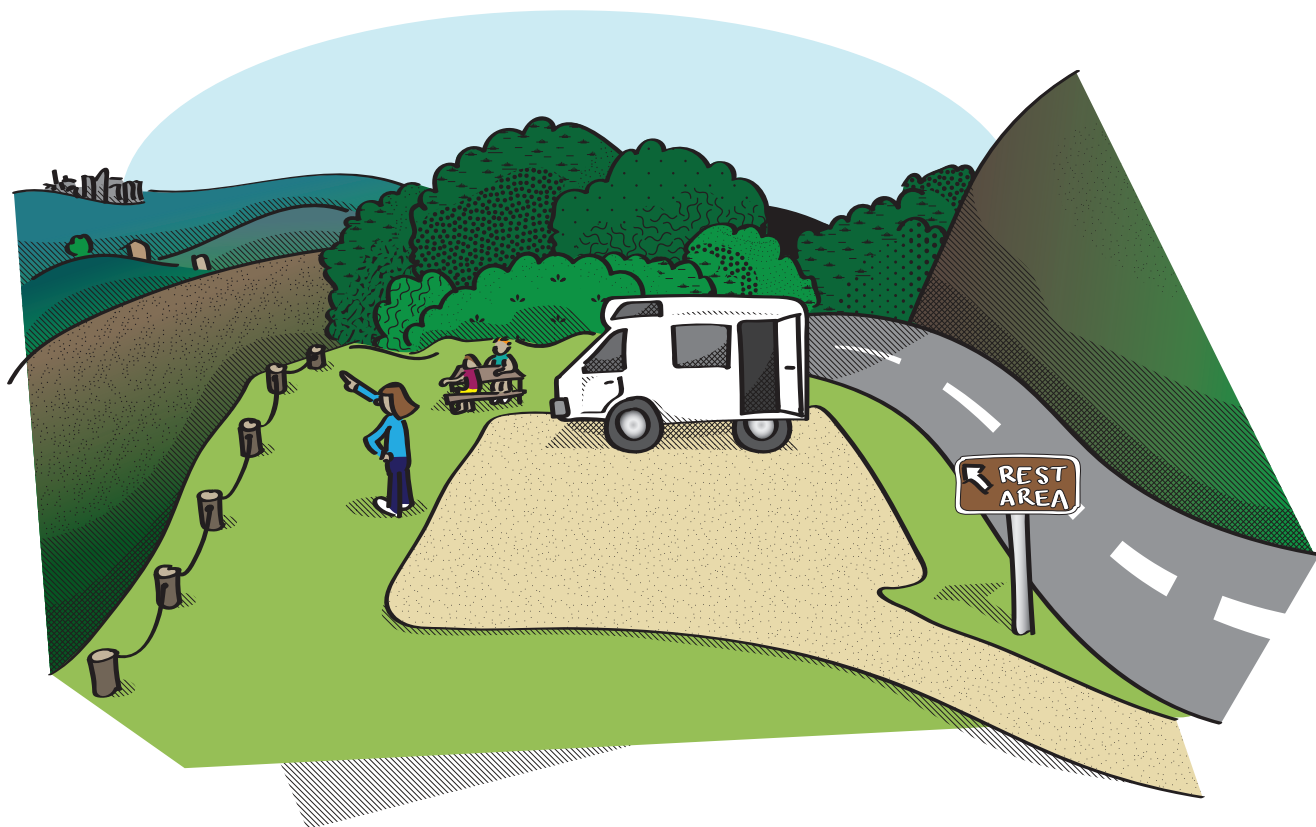
and provided advocacy and connection to the wider community. Several co-design solutions and approaches were adopted throughout to ensure ongoing input from the community. The involvement of the target audiences within the development and refinement of ideas, helped to ensure buy-in to the project and aided its implementation within the community. Through this approach, the project gained traction in areas where more traditional methods had previously failed to do so, including increased community capacity, and a wider acceptance and buy-in of the licensing system, and significant local changes in the system of driver licensing.

A community participatory design process was adopted by Future Streets to better understand local concerns and aspirations and to inform design solutions. Active engagement with the Local Board and a community reference group, and direct engagement with people in the Māngere community, yielded a greater understanding of how travelling around Māngere was experienced by local people. A process of engagement with mana whenua was undertaken to understand perspectives, areas of importance, identify issues and design cultural references within the intervention. These sources of knowledge directly informed Future Streets and gave strong guidance for design solutions. The people-centred approach has resulted in better outcomes for road users through the delivery of improved infrastructure, more inviting public spaces and safer crossings within the area. Intermediate data suggests it is on track to achieving improved safety outcomes, although walking and cycling uptake is mixed at this early stage.

Visiting Drivers considered key elements of the visitor experience covering phases of planning and booking, in-flight, arrival and travel within New Zealand to identify points where key messages could be communicated. Through working collaboratively and understanding the challenges visitors face on New Zealand roads, project partners adapted their service delivery within New Zealand to support a safe and enjoyable visitor experience. Available data from Visiting Drivers indicates that the visitor journey remains positive and that safety appears to have been at least maintained. This has also benefited the rental car industry through fewer vehicle crashes.

The ability to adopt a people-centric approach, which encourages co-design and co-production, is well-established as an identified challenge for the public sector. Within the literature, this is frequently attributed to the traditional attitudes, hierarchal structures and organisational silos that still populate the public sector. These features are understood to be barriers to innovation because they reinforce a particular way of thinking or culture within the public sector which prevents or limits changes to existing systems and processes (Bason 2013, Davies et al 2019, Mulgan & Albury 2003, Sørensen & Torfing 2012).

Reframing risks



Innovative methods and processes frequently rely on changes or modifications to previous approaches and ways of thinking. Making it more likely that innovation can occur within an organisation is dependent upon the systems and processes in place, the opportunities for ‘out-of-the-box’ thinking, and a supportive environment that fosters innovative approaches and enables learning from both the achievements and challenges (or successes and failures). The public sector’s aversion to risk and risk-taking (associated with adopting new approaches and ways of thinking) is repeatedly cited as a barrier to innovation within this sector – for if an organisation (employees to management) is not receptive to change, then new or innovative practices will fail to gain and maintain traction in the long term (Yee & White 2016).

In a literature review prepared for the Signature Programme (Davies et al 2019), we identified three key mechanisms for reducing perceptions of risk:

- Reframing or redefining the ‘problem’, by looking at issues in different ways so that new approaches can be fostered; the Vision Zero policy is an exemplar of this approach (Belin et al 2012)
- Prototyping, to allow ideas and designs for an ‘imagined future’ to be tested at relatively low cost and at lower risk (Donovan & Gunn 2012, Yee & White 2016)
- Embracing failure, recognising that a system that learns and innovates requires a willingness to tolerate failure, and the ability to deal with failure quickly (New Zealand Productivity Commission 2015).

All three operative Signature Projects reframed the nature of the issue each were dealing with, which enabled new responses to be developed. Future Streets established changes in systems, reframing the issue from the perspectives of all road users. In reframing how suburban/local streets are used, with a focus on people first (as opposed to vehicles), Future Streets brought a multidisciplinary perspective that focused design in different ways to vehicle-oriented planning.

Future Streets also required both design and research partners to shift their understanding and expectations of the planning, design and delivery processes. There was initial tension between Auckland Transport's traditional, linear movement through the planning process towards delivery, and the researchers' more iterative and engaging process that supported innovation and revision. This was resolved through a shared vision of all partners, and a policy shift within Auckland Transport around active travel modes.

Behind the Wheel reframed the driver licensing approach through considering the issue in light of the user journey for driver licensing, and the role of key influencers in the community, particularly family members in supporting norms and behaviours around licensing. The active collaboration and buy-in of community members, and local organisations and agencies, enabled a reorientation of many services to support improved uptake of licensing processes.

For Visiting Drivers, a key shift in understanding and practice was in acknowledging that different partners could bring their varying expertise and resources together to make a viable and sustainable change occur. Key to this was recognition that although different partners had different motivations, all ultimately wanted the same solution of a safe and enjoyable visitor experience. So instead of the issue being limited to a 'road safety problem' it was reframed to be a wider New Zealand tourism issue. This enabled shifts in practice across all partners. Reframing was a mechanism that opened the door for new collaborative partnerships which helped to adapt previously siloed activity, and allow for road safety messages to be dispersed more widely.

The influence of systems in innovation

This evaluation intentionally focused not just on the learning and outcomes of the four Signature Projects, but also on how the wider system or regime has supported or hindered innovation. Through this lens, it is clear that local niche innovations are as important for the systemic barriers and enablers that they reveal, as they are for the impacts that they have on a local community. If we simply treat innovations as local level pilots, we lose sight of the system issues that can constrain or enable successful outcomes, and the broader system levers and changes that we need to scale local innovation.

The findings point to a range of systemic barriers that include:

- Rules and systems that constrain infrastructure design innovation (Future Streets)
- Regulations that constrain developing new processes to improve user experience (Behind the Wheel)
- Policy or investment priorities that shift resources (Visiting Drivers).

The research suggests that institutions, power dynamics, incentives and politics – factors that contribute to the complexity of systems – all matter for bringing about change; all of these can be analysed and understood, and by doing so, the impact of niche innovations can be extended, and not doing so can make the most innovative solutions irrelevant. Policymakers should therefore explore where a system needs a nudge as much as whether or not a prototype should be continued or expanded.

Yet despite system barriers, there is evidence from all four niche innovation sites of some system change, including the following:

- Greater openness to rapid trials and investment for infrastructure expansion (Future Streets)
- National level resources (BTW's community toolkit)
- Industry practice (Visiting Drivers)
- National high risk road curve mapping (Eastern Bay of Plenty)

These successes show that expertise and insight from communities and stakeholders can be successfully applied to complex problems, rather than limited to academic or policy experts. They also give support to working in a nimble, responsive and adaptive way, supported by rapid cycles of developmental evaluation, instead of working programmatically through a rigid plan.

These projects have also shown that deviating from existing practice, even when the niche is sanctioned by the system owners, takes substantial effort. And scaling the effort to wider practice and impact takes more than just doing more of the intervention; scaling requires a wider mandate to deviate from rules/normative practice. This is discussed further in the following section.

System barriers to innovation

Hamish Mackie, Project lead, Future Streets

Although challenges remain, many technical barriers to achieving road safety improvements have been overcome in the past decade or so. Roundabouts, barrier systems on rural roads and more user-friendly urban streets for all road users are proven examples. Increasingly, road safety challenges are socio-technical in nature, that is, there are inter-related technical and social/organisational components to the road safety system, all of which must be addressed (Rasmussen 1997, Trist & Bamforth 1951). Certainly, New Zealand's Safe System approach reflects this with the principles 'Shared Responsibility' and 'whole of system approach', and the four pillars of roads and roadsides, speed, vehicles and users.

However, modern road safety strategies are less specific about the organisational, social and political factors that ultimately shape road safety, and yet when professionals are asked what the greatest challenges are, almost always, various organisational, political or social factors are given as most important. Lack of political will, following society's lack of acceptance of lower speed limits is a common example.

At an organisational level, when scrutinised, there are many examples of how current planning systems prevent good practices from happening. For example, we generally know what a well-designed and safe road looks like, but a lack of shared understanding around the country, variable design guidance and institutionalised practices (such as replacing like for like in road maintenance activities) prevent good design from being consistently applied. See NZ Transport Agency Research Report 606 for more detail about this within a cycling safety context (Mackie et al 2017).

Organisational system factors (sometimes called 'Org-ware') that prevent and enable innovation in better street design were explored formally in a workshop called Making Trials Easy as part of the follow-up research for Future Streets. Key factors that were seen as barriers to innovative practice in many street improvement projects were:

- Unclear project governance, management and decision-making procedures
- Different cultures and expectations
- Unrealistic timelines
- Funding uncertainties
- Different approaches to design
- Regulatory barriers
- A lack of sector capacity and capability.

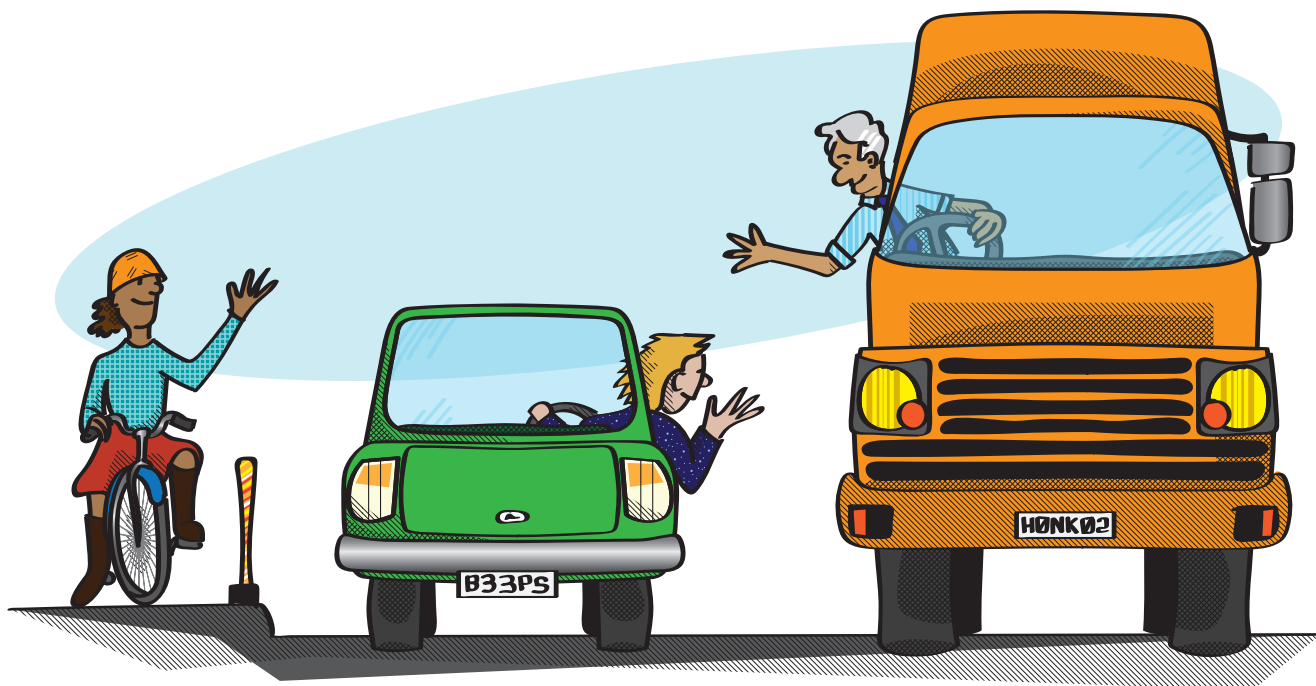
It was also agreed that there needs to be an ‘innovation function’ embedded within delivery agencies so that new ideas, with potential to deliver superior outcomes, can be dealt with effectively. Mixed with clear strategic direction and strong leadership, a culture of innovation and improvement could then flourish, allowing ideas to be developed and evaluated in a way that is not seen as overly risky to organisations. There is an increasing concern that risk is only seen in the short-term, and yet the risk of not progressing with a transport system that evolves to meet the needs of a changing world could be much greater if medium to long-term outcomes are considered. In short, the status quo is not working and so built-in system innovation is needed if improvements to road safety are expected.

Initiatives to facilitate innovation might include:

- A step by step and more comprehensive trials process (perhaps building on the existing NZTA TCD trials process)
- ‘Design thinking’ capability development within the sector
- Changes to the typical design process to allow innovation from communities and stakeholders to influence it
- A re-designed research and development programme within transport authorities, focussing on strategic issues and translation activities that emerge as normal practice (‘whole of life research’). A good example is the Rural Intersection Active Warning System project. An idea from Sweden emerged from a senior road safety advisor and literature review, the feasibility of it was tested, it was then developed and trialled and successfully evaluated. Guidance material was then produced and various activities help the sector with buy-in. Today RIAWS are being rolled out around New Zealand as a trusted road safety countermeasure.

In summary, taking a socio-technical approach, organisational, political and social system influences must be systematically addressed along with technical road safety challenges, if progress is to be expected. Built-in innovation functions are also needed to progress new ideas and implement successful road safety initiatives around the country.

Advancing innovation and taking pilot projects to scale



Moving from innovation spaces to wider scalability

The innovation literature highlights a clear need to foster an environment for innovation, and to provide support mechanisms that enable the public sector to capitalise on the experience and knowledge of others (Davies et al 2019). Future Streets, Behind the Wheel and Visiting Drivers have to some extent created the conditions for innovation spaces; and there was a widespread view among stakeholders that the projects offered fertile environments for innovation and adaptation.

These projects can be compared to a 'concept' product, that include a range of innovations, from which more workable solutions can be developed for taking to scale and wider implementation. The ability to apply temporary interventions or trialling new or innovative ideas proved a major constraint for Future Streets due to safety rules, although the project is nevertheless gaining influence. Visiting Drivers and Behind the Wheel however were able to quickly trial changes and build new processes and systems at local (Behind the Wheel) and regional (Visiting Drivers) levels.

In many instances, these project partnerships influenced, or 'nudged' wider organisational and systems changes. Generally agreed benefits of the projects among stakeholders included:

- Stakeholders understanding the benefit of taking a whole-of-system approach to road safety
- Some changes in road safety cultures locally
- Systems in place to identify and disseminate lessons learned along the way
- Organisational and system changes that are expected to lead to a reduction in risk of serious injuries or deaths (Field et al 2017a)

However, these projects also show that there can be a mismatch between the innovation itself and the capacity of the system to respond in a way that enables scale. If the system is not configured to enable scaling to full potential, the risk is of discontinued projects, or myriad local projects with limited impact.

Looking ahead, there are many factors that are necessary to support successful scaling of pilot initiatives to wider implementation. These are discussed below, drawing on the literature and previous work undertaken in this space by the evaluation team.

Elements of successful scaling

All Signature Projects were test beds for wider implementation. To be taken further requires a **vision and goal** for impact would look like in the communities or sectors they are focused on (Gillespie et al 2015). Scaling is not simply about the spread of a programme more widely than its pilot; it can include strengthening the depth of practice, challenging norms and beliefs in behaviours and practice, the sustainability of its impacts, the spread of impacts as well as activity, and changes in ownership of an issue (Coburn 2003). These point to different dimensions of scaling, any of which could be a possible aim:

- Scaling out (beneficiaries): Expanding to a wider range of beneficiaries
- Scaling up (systems): Influencing and changing systems, rules, policies and practices
- Scaling deep (culture): Shifting organisational or system cultures so that the underlying idea of the innovation becomes embedded in thinking
- Scaling scree (new innovation): Encouraging and legitimising other ideas and innovations that seek similar outcomes
- Scaling infrastructure (capacity): Improving the capacity of a system or community to scale (Cabaj 2018).

There needs to be a **clear sense of what is being scaled**, including the focus of the programme/intervention, and the elements that are being carried into wider implementation (Gillespie et al 2015, Klingner et al 2013). All three Signature Projects have built to varying degrees evidence of their effectiveness through different monitoring and evaluation activities. This is important because there needs to be some level of certainty that the programme will have a positive impact and should therefore be scaled; the issue is not that bigger (i.e. spread) is better, but that better (i.e. delivery and outcomes) is better (McLean 2016, Milat et al 2014).

For pilots such as these, a **clear pathway is needed** for the scaling that is envisaged. This can include the planned extent or size of the programme; the range of activities being scaled and their links with other programmes; and the changes in organisational capacity that is needed (Fixsen et al 2005).

Consistent with socio-technical systems theory, the strength of the intervention design needs to be accompanied by an understanding of the **broader system and environment** that the scaling is being directed to (Geels 2011, Gillespie et al 2015, Klingner et al 2013, Milat et al 2014, Westley & Antadze 2010), which may be quite different to the initial 'test beds', or areas where the initial prototypes were developed. If the settings within which the intervention is being scaled is complex or not conducive to scaling, this will ultimately affect the success of its implementation and outcomes. Elements of broader system include the political and policy context; the organisational context; the systems, rules and regimes that the programme will be integrating within; and the community readiness for the intervention.

People who can act as **enablers or champions** for wider scaling should be identified and recruited. They can include stakeholders who can build support and/or assist with implementation; and key programme

champions who can build support, momentum, and system-wide ownership of the programme (Gillespie et al 2015). These were critical to the three operative projects at both governance and implementation levels.

Operational and adaptive capacity to scale ensure the workforce, system and leadership foundations are in place. **Operational capacity** refers to organisations having the systems and personnel in place to achieve successful scaling. There are a range of elements that should be considered to achieve operational capacity:

- Skills, capacities and dispositions needed to manage and facilitate the programme
- Staff that are well trained in the implementation of the model
- Administrative structures and systems
- Programme resources and guidelines
- Collaborative relationships between the original programme and those at the new delivery sites/contexts (Gillespie et al 2015, Klingner et al 2013, Milat et al 2015, Milat et al 2014)

Alongside operational capacity, there is also likely to be a need to build **adaptive capacity**, in the sense of being able to work flexibly within complex systems, rather than to demand that all obstacles be resolved in advance of scaling. Working adaptively was required of leadership in all three Signature Projects, and wider implementation of these and similar projects will require similar capacity for adaptation. This includes building commitment and partnerships, responding to challenges and opportunities, building relationships, undertaking communications, and strengthening operational capacity for implementation (Gillespie et al 2015, Routledge & Porter 2008, Westley & Antadze 2010, Heifetz, Grashow and Linsky 2009).

Funding for wider scaling has three dimensions (Gillespie et al 2015):

- Adequate funding that will support ongoing delivery of programmes in their original areas of delivery, as well as support for expansion activity.
- Stability of funding that allows for building the capacity, evidence, and experience required within the scaling-up process.
- Alignment with funding systems (and particularly in the case of the Signature Programme, the NLTP)
- Flexibility to allow for adaptive devolved decisions on specific local or operational issues.

A clear underlying risk is that a transition to business as usual, or community-led activity, is not accompanied by ongoing resourcing to support this; with the outcome that the partnerships and momentum established can stall or cease. As one stakeholder noted, long-term funding is essential and volunteer time will have limited impact. In communities where there is longstanding distrust of government, for an initiative to arrive and conclude without sustained investment builds further distrust.

Robust governance structures and systems are needed to provide oversight and strategic support to the programme in its new settings, sites and scale of development; and to be able to consider issues of the trade-offs that may be required with scale (for example, from very local settings to a more national implementation) (Gillespie et al 2015).

Evaluation and monitoring systems are needed to understand success in terms of the processes and outcomes of scaled up programmes, together with building a system of learning within the programme. Evaluation should therefore be seen as part of a process of continual learning; in which learning fast, adapting and refining is a key strategy for effective scaling (McLean 2016).

Reflections on the Safe System approach

The Safe System approach was a pivotal backdrop to the Signature Programme, with the intention that the four goals - safe speeds, safe road use, safe vehicles and safe roads and roadsides – would be delivered through each of the four Signature Projects.

Certainly, in the three operative projects, the goals of the Safe System approach are reflected in the design of each project. However, only in Visiting Drivers was the Safe System front and centre of activity; the approach was incorporated in all aspects of programme design, and capacity building among stakeholders in Safe Systems was part of their development in the project. In Future Streets and Behind the Wheel, aspects of the Safe System approach were evident in design, and there was a strong awareness of the approach in the project leadership. Their incorporation in project design was more as underpinning principles of good practice in these areas, than an intentionality to actively build a Safe System approach.

For Future Streets in particular, there was a hope that learning from the project will contribute to an evolution of the safe system approach. Such an evolution would adopt a broader view of road and transport safety, which incorporates areas such as public health benefits, environment, community development and engagement, and urban design, as opposed to focusing just on safety.

It is also worth noting that while a ‘Safe System’ approach had mixed levels of recognition and explicit application, stakeholders across all three operative projects agreed that many aspects of Safe System were evident in how each project operated, including that people make mistakes and crashes can be reduced or prevented; that the project demonstrates how partners can share responsibility for strengthening the safety of the road system; and that all elements of the road system need to be strengthened (Field et al 2017a).

This could suggest that participants (and the wider public) need not have an explicit intrinsic awareness of safe system approaches. Rather, as long as there is a conscious effort by programme leadership to involve a safe system approach, an awareness of safe system approaches across a programme and in participating communities is not of itself necessary to achieve system changes and road safety outcomes. A ‘safe system by stealth’ may be a viable approach in some settings.

A particular issue for the Safe System approach, identified by some project participants, was the acceptance of the “inevitability” of crashes (one of the principles of the approach). Reflections from some stakeholders show a questioning of whether it is necessary to accept that mistakes are inevitable. This may suggest that a Vision Zero approach, as opposed to a strictly Safe System approach to road safety, may offer more resonance for approaching road safety programmes in the future.

5. Conclusions

The Signature Programme has been notable in that it was not a formally constituted programme with structures, staffing, timelines and a reference/steering group. Instead, it functioned as an umbrella to link the four Signature Projects, and give focus and status to the Safe System approach across the projects.

Accordingly, the Signature Programme evaluation has been less focused on the delivery of the programme per se, but on creating a learning environment where lessons from individual projects can be shared and taken forward, as well as to explore the outcomes that each project achieved in the context of the Signature Programme's goals.

This report has substantially focused on the progress and learning that has developed through the three Signature Projects. However, at a programme level, there is some evidence to suggest that the aims and intentions of the programme created some system shifts:

- There is broad evidence of successful collaboration in place, and that in two projects, their influence expanded.
- All projects have created resources, where their use and application has extended beyond the original sites.
- Each project took innovative approaches to changing systems that impact on road safety, and are challenging existing models. However, the spread of system changes beyond the areas where projects are placed is mixed.
- The projects displayed how different elements of the safe system approach can be applied locally.
- All three operative projects showed evidence of some local and regional-level system change, and in some projects, there are national-level changes also emerging. The approaches have at this stage not extended into regulatory or design guidance changes.

Overall, generally very strong cultures of collaboration and trust developed with all committed to work through challenges. Projects generally made progress in influencing action within the road safety system, and innovative approaches were tested and disseminated. There was a strong sense of collective responsibility for road safety across all three operative projects. Evidence-based foundations were in place to support road safety outcomes.

All projects were intended to show innovative approaches, and stakeholders are generally of the view that this occurred; however, some encountered challenges with this, and the responsiveness of organisational processes and broader systems to support innovation was a noted barrier.

It is important to acknowledge that because of the relatively short timeframes, the overarching outcomes of each project – reductions in deaths and serious injuries – cannot be assessed meaningfully. It has however been possible to explore progress towards intermediate project goals.

The evidence from this evaluation indicates that the Signature Programme delivered on its intent, to enable and facilitate the implementation of projects that are ambitious, innovative, and apply the Safe System principles and approach with the aim of reducing deaths, serious injuries, or the risks of these occurring.

Taken together, all four Signature Projects, to varying degrees, demonstrated value by prototyping new approaches that offer transferable learning to other projects and wider scaling; challenge entrenched practices and systems; and in their own right made positive changes to road safety delivery in New Zealand communities. The value therefore of these niche innovations is not just for their intended or realised outcomes, but for providing locations for learning to take place for wider system scaling.




Our exploration of the Signature Programme, together with the related literature, reveals a range of learning that can support future innovative demonstration projects. Successful elements of these projects include the following:

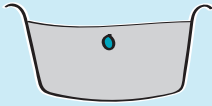

- Forging collaborative practice through inclusive engagement of a broad spectrum of system stakeholders, based around a shared vision for change and clear strategies to achieve them
- A strategic focus on key leverage points that drive change, and working that is as prescribed or as flexible as is required
- A platform of knowledge sharing through opportunities for communities to own, participate in, and lead research processes; collaborative exchanges between researchers and communities; and connections across community and research networks
- Using people-centred approaches that engage with key aspects of the user journey in a way that involves and values citizens' participation and input, and explores the needs and factors influencing people's behaviours and decisions
- Fostering communities of practice, where there a shared identity for those participating that offers all an opportunity to contribute, and they are supported by secretariat or project management functions
- Building innovation capacity, including resourced innovation functions; reframing or redefining the 'problem', by looking at issues in different ways so that new approaches can be fostered; rapid prototyping new ways of working; and learning rapidly from failure
- Monitoring intermediate and long-term outcomes, as part of shared learning and evaluation
- Managing business as usual transitions with stakeholders and communities so that project strengths and capacities are maintained; this is a key risk for two Signature Projects.

The projects provide useful learning through lens of socio-technical systems theory; in particular the value of niche innovations to provide learning for wider implementation; and for uncovering the inherent challenges for innovation within systems themselves. The findings show that scaling impact from innovation sites requires a system-wide response.

The evidence from this evaluation is that these can be both evidence-based and offer opportunities for exploring new approaches. We see innovation as a function that is both centrally and locally driven. National strategy and agencies are able to fund, support and implement road safety innovation projects such as the Signature Programme, and there is a role for local government to work in the same way and to embed innovation functions within their own systems.

Appendix 1: Signature Programme evaluation rubric

	Collaborative practice	System change	Culture change	Life and limb
<p>Te Puāwai (the flower): Achieving long-term outcomes</p> 	<p>The Signature Programme fosters collaborative practice at an inter-agency level, above and beyond the individual projects. Relevant organizations are collaborating deeply, systematically, and effectively, on safe system enhancements</p>	<p>Signature Programme has contributed to national partners adopting and embedding safe system principles as part of business-as-usual (e.g., understand value of investing in a safe system; changing funding criteria and processes to enable this investment).</p>	<p>Signature Programme has contributed to demonstrating the benefit of a safe road system to the public, reframing the road safety conversation, and sector acceptance that deaths do not have to be inevitable.</p>	<p>Attributable reduction in very serious injuries and/or deaths to a sufficient extent that a positive ROI can be confidently projected for the Programme overall.</p>
<p>Te Puanga (the bud): Achieving medium-term outcomes</p> 	<p>Through the Signature Programme, partners (local and/or national) are expanding their field of influence and/or seeking new partners.</p>	<p>Significant uptake and/or adaptation of successful interventions; and/or Agencies are working to embed learnings from successes and failures; and/or Innovative aspects pioneered through the Signature Programme are adopted more widely as part of business as usual (including but not limited to 'just-do-its').</p>	<p>The Signature Programme is demonstrating the benefit of a safe road system to programme stakeholders and contributing to re-framing the road safety conversation with those stakeholders; and reprioritising safety-oriented investments.</p>	<p>Identifiable reduction in absolute or relative risk of serious injuries, traumatic injuries and/or deaths (and/or relevant markers, such as crashes or changes in systemic, organisational or individual behaviours).</p>
<p>Te Pihanga (the shoot): Achieving short-term outcomes</p> 	<p>Through the Signature Programme, partners (local and national) demonstrate successful cross-agency, cross-sectoral collaboration in different contexts to address a range of issues (e.g., working effectively with shared objectives, mutually reinforcing activities, recognizing different perspectives, agendas and areas of expertise, leveraging resources and participation)</p>	<p>The projects are a fertile environment for innovation and adaptation, and lessons learned are challenging inconsistencies within the system and/or influencing action within the system. Actions not requiring regulatory change, appropriations ('just-do-its') are being implemented more widely.</p>	<p>The Signature Programme is demonstrating how partners can successfully apply the safe system approach to addressing road safety issues (note that while some elements of the safe system approach can be applied locally, others would involve national-level policy changes).</p>	<p>Identifiable systemic changes have been implemented which, on the basis of existing evidence, are expected to lead to a reduction in absolute or relative risk of serious injuries, traumatic injuries and/or deaths.</p>

	Collaborative practice	System change	Culture change	Life and limb
<p>Te Kākano (the seed): Application of knowledge and understanding</p> 	<p>Commitment to a common agenda including a shared understanding of the problem, a joint approach to solving it, co-investment of time and/or resources, shared problem solving. Shared measurement of results to ensure efforts remain aligned and providers hold each other accountable.</p>	<p>Projects are applying safe system principles (note that while individual projects might not reflect every pillar, collectively these are reflected for the Signature Programme as a whole). Learnings are identified and disseminated.</p>	<p>The projects understand what they are doing and why. They are implementing the Safe System approach and principles and beginning to re-frame the road safety conversation at project level. The projects are demonstrating a culture of continuous improvement.</p>	
<p>Te Tāpapa (seed bed): Building knowledge, understanding, acceptance</p> 	<p>Partners (local and national) agree on who the willing leaders are; understand the different capabilities and capacities of different partners and how they can contribute to projects in mutually reinforcing ways. Dedicated staff and skills provide backbone support to coordinate the project.</p>	<p>Projects are building knowledge, understanding and acceptance of safe system principles.</p>	<p>The Signature Programme is helping the projects to understand what they are doing and why - i.e., the programme is guiding implementation of the Safe System approach and principles with a view to re-framing the road safety conversation. The Signature Programme is supporting a culture of continuous improvement (e.g., a safe environment to try new things and new processes, opportunity to succeed or fail, testing and learning what we should and shouldn't do again).</p>	

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