Towards better social sector decision making and practice

A social wellbeing approach

The Southern Initiative

The Southern Initiative (TSI) is part of Auckland Council. TSI is a place-based initiative that stimulates, enables and champions social and community innovation in South Auckland. We work with and alongside community change-makers and leaders, staff from other parts of council, government agencies, funders, business owners and others to support community-led aspirations. Through facilitation, brokering, networking, capacity-building, mentoring, design-led thinking and other forms of social innovation, TSI supports communities to achieve social, economic, cultural and environmental outcomes. These outcomes produce change within individuals, rangatahi, whānau, organisations, communities and iwi. Our work also contributes to practice and systems level change.

Social Wellbeing Agency

The Social Wellbeing Agency (the Agency), previously known as the Social Investment Agency, was established on 1 July 2017 as a Departmental Agency hosted within the State Services Commission. Our purpose is to strengthen the use of data, analytics and insights in social sector decision making to improve New Zealanders' wellbeing. We work with the social sector to create insights, tools and practices that are scalable, reusable, and of most use to the social sector. Our views are not tied to any single agency or part of the social system. By working together, we can understand and do more of what works for better lives.

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Foreword

A social wellbeing approach is about 'real people' – tamariki, rangatahi, whānau and communities – contributing to and benefitting from the work we do every day as researchers, data scientists, policy advisors or policy makers. It takes knowledge produced from science and data and makes it useful by melding it with the lived experiences of real people to create new insights for better social sector decision making and practice.

Science (ideas and knowledge) rests on certain established truths. Collected in a scientific way, data plays a very important role in helping to understand peak human stories. But, if you don't have the ability to capture people's lived experiences, science and data exist in a vacuum or off to one side. Meaningful engagement with whānau allows us to better understand lived experiences and share the wisdom of communities so others can benefit.

The 'Having a Baby in South Auckland' project, discussed in this case study, illuminates what makes this kind of social wellbeing approach viable.

First, you need organisational leadership that supports innovation. Leadership is crucial for creating the conditions for people, whether inside organisations, in communities or in government-community partnerships, to see and do things differently.

Second, for a social wellbeing approach to work you need the interest and willingness of communities to play host *and* the right people representing agencies to engage with them. If you go to where people live, with the intention of being who you are, exercising a humble manner, listening carefully, being willing to learn, and responding in a high integrity way, people will usually try to be helpful. Everyone is enriched by that kind of approach.

Third, you need effective partnerships that enable agencies to combine their strengths. The Southern Initiative (TSI) and the Social Wellbeing Agency (the Agency) partnered in this project to enable better social sector decision making. TSI harnesses science in the work it's doing, puts people in the centre, has real relationships with whānau and communities, and creates a way of giving voice to them. The Agency has science and data expertise that can look across the system and identify places where we need to delve deeper. What was achieved in the Project needed this highly effective collaboration.

The social wellbeing approach discussed in this case study should inform standard social sector decision making and practice. Those of us working in Wellington have something crucial to contribute to helping improve lives. We need both – what we can offer *and* the wisdom of communities. Here, TSI and the Agency show us how.

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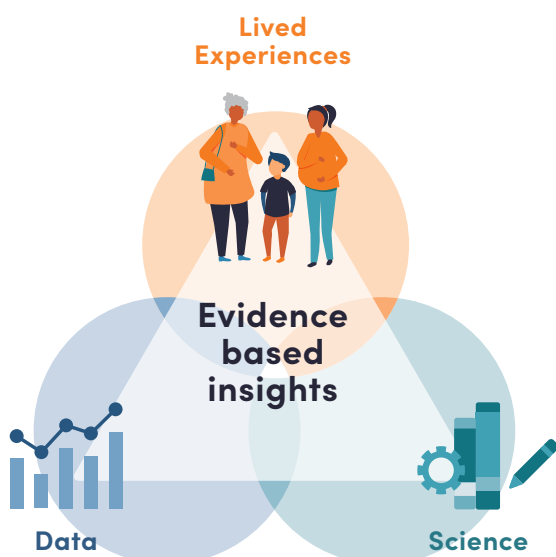
Introduction

What happens when you join-up data and science with lived experiences? Especially, where people are grappling with complex social and economic issues in diverse communities and need good data to help inform action?

This case study tells the story of a unique partnership between Auckland Council's The Southern Initiative and the Social Wellbeing Agency. Together we developed a novel approach for combining science and data *with* lived experiences, to support better social sector decision making and practice.

Recognising a shared interest in improving social wellbeing, TSI fostered a relationship with the Agency to explore a new way of working that could contribute to child, youth and family wellbeing in South Auckland, and elsewhere.

TSI had done previous work on the early years of life. Our curiosity and approach had been significantly influenced by the science of early childhood development produced at Harvard University's Center on the Developing Child and by the Growing Up in New Zealand study.[1] With this work, we wanted to better understand the conditions of prolonged cumulative stress South Auckland whānau were experiencing around the birth of a child. In particular, whether it was possible to identify and learn more about those stressors and what might be helping to keep whānau strong and resilient. Doing so could help enable beneficial policy, service or systems change.

Together, TSI and the Agency agreed on a partnering arrangement that would combine our unique resources, networks and expertise to co-create the 'Having a Baby in South Auckland' project (the Project).

This Project is of special interest because it contributes to the Government's high priority Child and Youth Wellbeing Strategy,[2] which aims to help transform systems, policies and services to ensure good wellbeing outcomes, especially for tamariki, rangatahi and whānau experiencing the greatest need.

This case study shows how to combine science and data with lived whānau and service provider experiences to produce new insights and possible areas of action. Such insights are often not readily visible to social agencies but are crucial for developing better social sector decision making and practice.

We hope policy makers and advisors, data scientists, university researchers, and others interested in data analytics and social wellbeing will find this case study a useful illustration of a social wellbeing approach.

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Improving social wellbeing

An urgent need to better understand and effectively respond to factors impacting child, youth and family wellbeing is stimulating government and community interest in innovative ways of working.

Improving social wellbeing is about enabling people, whānau and communities to live the lives to which they aspire, including material conditions and quality of life. This approach promotes a strengths-based approach that recognises the connections people have to family, iwi, communities and regions. It uses various data (including administrative, survey and lived experiences), employs broad wellbeing measures and offers a range of support services. It is outcome-focussed and seeks to make the best choices among possible interventions.

In the Project, TSI and the Agency sought to innovate an approach aimed at improving social wellbeing. We wanted to weave together, and enrich understanding of, relevant science, particular Integrated Data Infrastructure (IDI) data sets related to South Auckland, and the lived experiences and insights of whānau and service providers. We wanted to find a way to illuminate promising focus areas warranting further investigation and ideas for action to help inform social sector decision making.

In New Zealand, the IDI is a large collection of administrative government data for research purposes. The data has been linked together by Statistics NZ (Stats NZ) and then de-identified – so researchers can see where the same person interacts with different organisations but cannot determine who a person is.

As much of the data in the IDI is administrative, it mostly records people's interaction with the government. This is not necessarily what is important to people in their everyday lives.

By using data alongside people's lived experiences, we get the advantages of both. Large data sets let researchers see possible trends and estimate how many people might be affected. Lived experiences show us how such trends impact on people's journeys and tell us what is important to people so data can look for patterns that matter.

In the Project, TSI and the Agency explored a unique set of questions:

- Can combining IDI data with lived experiences of whānau and community help to address limitations with IDI data?

- Is there any value or interest for whānau in engaging directly with IDI data insights that come from them and their community?

- Do we unlock new ideas for action when whānau and community are key contributors to design and meaning making?

- What do we do differently when we combine the viewpoints/mental models of TSI and the Agency?

Data scientists examine and analyse big data sets, like those contained in the IDI. Their work seeks to compile evidence, draw conclusions and generate insights that can help inform evidence-based research, decision making and practice.

While data analytics can describe what has happened in certain areas of investigation, it does not necessarily explain why it happened.

Whānau, service providers and communities can offer critical knowledge to help contextualise, and offer valuable insights on, data. Grounded in their lived experiences, whānau and community perspectives offer different ways of looking at and thinking about issues that can help government, non-governmental organisations (NGOs), communities and others to better understand complex problems and service delivery challenges.

ABOUT THE IDI

The IDI database includes survey and administrative data drawn from a range of sources (such as education, health, medical, social welfare) and collected by government and NGOs. When integrating new data into the IDI, Statistics NZ links each individual's records across multiple datasets before removing all identifiable features such as names or Inland Revenue Department (IRD) numbers. This allows researchers to view individuals' records and interactions across services and agencies, minimising any risk of an individual being identified.

Stats NZ's "Five Safes" Framework (safe people, safe projects, safe settings, safe data and safe outputs) ensures proper care and protection of an individual's information when researchers access, use and share IDI data. Stats NZ is also developing a Tikanga Framework to run alongside the Five Safes, to ensure that considerations are made to protect communities of interest within the data. The IDI can be accessed from secure environments called Data Labs.[3]

Exploring a social wellbeing approach

Partnering

Collaboration, innovation and learning more about what really works to help whānau and communities thrive are at the heart of what TSI and the Agency are all about.

Building on previous work

Through its previous strengths-based Early Years Challenge,[4] TSI knew high levels of prolonged cumulative stress experienced by parents impacts their ability to parent effectively, has detrimental impacts on whānau wellbeing, and consequences for the child. Data showed levels of stress, especially levels of prolonged cumulative stress, are higher in South Auckland than the average across the country, and certainly much higher than desirable. Also, TSI had engaged with South Auckland whānau who have young children, to better understand their lived experiences of prolonged cumulative stress. So, through that previous work, whānau lived experiences informed and later became a core component of the work that followed with the Agency.

The Early Years work provided impetus to work together on a project that was highly significant not only for government, but also for South Auckland whānau and communities.

Exploring interests, building trust

We (TSI and the Agency) formalised our initial partnership agreement in May 2018. Our intention was to scope potential areas for joint work. In particular to:

- Unlock data, evidence and information related to the early years, to test better ways of supporting whānau who are exposed to prolonged cumulative stress;

- Identify outcome measures that reflect the science of early childhood development and prolonged cumulative stress; and

- Identify points or people of influence across the social system, that could help drive improvements in the early years of childhood development.

Two TSI specialists worked part-time in the Agency's office for part of the study. These specialists brought content knowledge, partnering expertise and extensive cross-sector experience.

Having TSI specialists working in the Agency office allowed us to understand our different agency roles and mandates, the capabilities of our respective teams, what we could each best contribute to a joint piece of work, and what was important to our partner.

The Agency charged a Steering Committee with overseeing the Project and, once onboard, TSI specialists joined these meetings. This committee supported the partnership, tracked progress, and asked critical questions of the newly formed project team doing the work.

The Project would allow an end-to-end process in which the Agency's data scientists would be able to produce insights with TSI specialists in the secure data lab, test how those insights could become digestible and actionable for community stakeholders, and inform small-scale changes within an existing ecosystem.

Importantly, this initial phase allowed the TSI team and Agency staff to get to know one another at a human level, as individuals and as colleagues. Our different perspectives, knowledge and skillsets became more visible, which helped to solidify the partnership. Together, we developed collaborative ways of working to support evolving project objectives and outcomes that earned everyone's interest. A meaningful fit for both agencies, the Project activated agency aspirations and galvanised the partnership into action.

Our partnership approach

The Project required a new method of depicting a 'journey for families' over a period of time, called representative timelines. This challenge played to the Agency's strengths and the IDI data environment. Developing timelines also harnessed TSI's strengths – its prior study of science in the early years and engaging with lived experiences. In addition, the method resonated with what TSI had heard from whānau, who often describe their experiences and their learning as a journey.

Insights drawn from the data would be relevant to social sector decision making and practice as well as supporting whānau and communities to take direct action.

TSI would serve as a 'critical friend', critiquing or testing the evolving ideas or approaches of the Agency's data scientists, while developing a deeper understanding of whānau in South Auckland by working with IDI data.

The next phase of the Project began in September 2018. The partners mapped out a staged approach, with the Agency developing, testing and refining new methodology and TSI testing and iterating those products through stakeholder engagement with South Auckland whānau and service providers.

We each assigned a part-time staffing allocation and estimated a three to four-month timeframe for the Project to be done over the following year.

Our partnering agreement named a set of principles to guide the partnership: high trust, good faith, a constructive way of working, open and fair dealings, being mindful of the kaupapa or vision, a no-surprises approach, respecting the value already created prior to working together, and a commitment to wider knowledge sharing across government agencies and NGOs through the work. The agreement built on the agile approach, open and frank communication, transparency, and willingness to challenge and be challenged, that distinguished the working relationship during the scoping phase.

We needed the right people, with the right skills and knowledge, doing particular pieces of work at particular stages. We also needed people willing to weave together their unique contributions with those of others, through an organic, iterative, and collaborative process.

Instead of typical partnerships that propose, the 'I'll do my bit, you do your bit' arrangement, in this partnership, we agreed: "Let's all work together as a tight unit and see where we get."

Both sides had an adept person responsible for keeping the partnership on track. They looked for promising possibilities, monitored budgets and workloads, attended to changing circumstances or interests, highlighted individual and shared aspirations, clarified roles and responsibilities, and saw challenges as an opportunity to check in with colleagues, be adaptive and confirm next steps.

A critical component of the partnership was a shared commitment to a co-design approach. At every stage, the voices of South Auckland whānau guided what we did – from defining the original concept, what data we looked for, how we grouped the data, how we tested it and what meaning we made of it. Whānau were co-creators – not just participants or recipients. A co-design approach also connected us to our own motivations and fostered a values-driven approach.

A minimum viable product

We agreed to combine resources to deliver a minimum viable product (MVP). MVPs are used for a range of purposes, including for user testing, and sit somewhere between a prototype and a fully developed product.

For the Agency, delivering an MVP would, in this case, demonstrate the viability and usefulness of a particular methodology. It offered the opportunity to develop and refine new tools within project constraints, and provide a level of functionality to enable end-users to apply these tools. An MVP did not require consideration of how to support and develop the product going forward. Our data scientists could engage in open conversations with TSI specialists and share ideas-in-the-making.

For TSI, delivering an MVP enabled the mindset of learning and testing woven into our existing approach. It gave us permission to ask questions, play with ideas, try suggestions, remain open and achieve a timely turn-around. It also enabled us to test new agile, low cost approaches to co-designing with whānau and service providers. We never promised them grand plans – instead, we focussed on whether the approach and tools worked for them, or not.

Taking small agile steps, testing their merits, gaining buy-in, then moving forward together made the partnership work and ultimately delivered a useful product.

ENSURING ETHICAL INTEGRITY

Front of mind for the Agency was an ethical concern about protecting people's personal information in the data. To ensure ethical integrity, we drew on our significant work history in developing a comprehensive Data Protection and Use Policy.[5] The Project adopted the values and guidelines of this policy and, at every turn, our data scientists and TSI specialists ensured their intentions and actions aligned with its written commitments.

To protect people's personal information, the right to enter the secure data lab to work on IDI data is tightly held. We arranged for TSI specialists to gain security clearance and they followed the same strict protocols our data scientists adhere to when working in the lab. Our data scientists exercised great care and precision when working with the data. When presenting the data to whānau, the TSI engagement specialist also highlighted our investment in the Project and named Simon, our data scientist leading the work, to evoke an image of a person – not a computer or a faceless organisation.

Whānau appreciated the integrity of purpose in the Agency's approach. They engaged freely with the data and trusted no-one's privacy would be breached. In their minds, it became 'Simon's data'. Hearing stories of his integrity, expertise and interest in the work, along with the commitments of other staff and the Agency generally, created a human connection that supported whānau confidence in the Project.

TSI specialists invested an equal measure of care and concern when producing ethical protocols to guide good engagement with whānau. Knowledge of scientific literature and years of working in South Auckland communities meant we were acutely aware whānau involved in the Project were already living with significant stress. Generating deeply meaningful conversation could enrich whānau lives but also raise personal issues requiring attention. Engaging with whānau in an ethical manner ensured privacy, confidentiality, safety, mental and social wellbeing, clear expectations, ways to recognise and value whānau, and included peer supervision for our specialists.

For the Agency and for TSI a key aspect of a social wellbeing approach is to view whānau as equal contributors with crucial expertise on their lives. When TSI specialists shared the data with whānau, our key questions were: "Is this accurate? Do you agree? Is this what you have experienced? What are we missing?" Genuinely seeking to co-design the Project with whānau as well as giving them permission to disagree and share their expertise was a key part of ensuring ethical integrity.
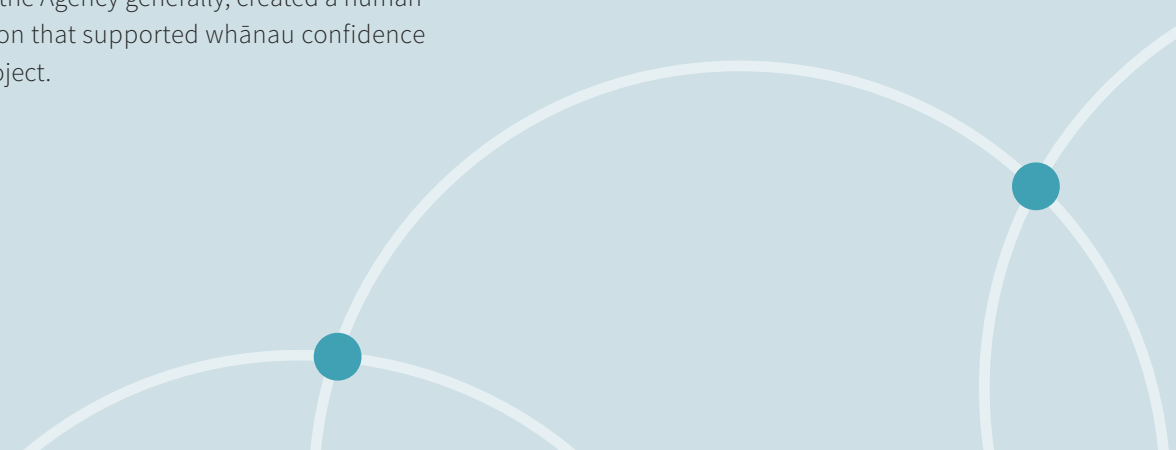
Working with the data

Identifying themes

TSI engagement specialists engaged South Auckland whānau and service providers in the early stages through a theme-making exercise, using storytelling as the main means of collaborative inquiry.

Through multiple engagements, TSI has built up an extraordinary range of networks across South Auckland. Our reach extends into the heart of our communities. We've endeavoured to cultivate a relational approach to build trust-based relationships.[6] So, we could immediately access existing relationships with South Auckland whānau and service providers who were likely to be interested in the Project and, through them, access others.

In November 2018, another TSI specialist hosted a 'pilot' café conversation with four South Auckland mums and met separately with another. TSI specialists then conducted two South Auckland hui in December 2018, involving a total of twelve-front-line service providers and seven whānau members. As well as young mums, TSI encouraged aunties and grandmothers to attend because they often have a different perspective and can see a wider view than those grappling with significant life events or difficult circumstances.

Afterwards, TSI specialists (in discussion with the Agency's data scientists) sorted the topics into the following themes: a hard birth and a hard pregnancy; contraception and antidepressant use; relationship breakdown and the impact of blended families; safe or unsafe experiences; and, connection or isolation. These themes represented what whānau and service providers were most interested in and thought were important to better understand, and were used to guide data selections.

Conducting the analysis

We began the main data analysis part of the project linked to the IDI in November 2018. The analysis ran for around six months. This phase consisted of identifying variables in the IDI data and using them to build representative timelines.

Working in the secure data lab, the Agency's data scientists, with help from two university interns, built timelines of families' journeys from nine months before the birth through to six months after. An individual timeline of events in this time period was constructed for the baby, both parents, and any siblings (half or full), where these events could be inferred from IDI data. This timeline was supplemented with summaries of the years on either side of the timeline, to give an idea of where the family had come from and was heading.

The volume, variety and complexity of the data meant the possibilities went well beyond what we could extract within the scope of the Project. But driving efficiency into the Project was necessary to stay on track and within budget. So, we prioritised the information that would let us investigate the themes identified with whānau and service providers, and set a time limit that would meet MVP requirements.

CONSTRUCTING REPRESENTATIVE TIMELINES

Building representative timelines allows us to focus on the whole journey of mums, dads, brothers, sisters and babies and look at multiple indications of resilience, stress, and unexpected intervention points during the time interval, rather than taking a siloed or unconnected focus on single issues. This also helps us to see with more precision what is happening, when it is happening and for whom.

The challenge was to find a way to construct representative timelines or journey maps. Individual timelines contain information about individuals. To protect their privacy, we had to create representative timelines. Prior to the Project, no technique existed for combining individual timelines into a representative

or average timeline. In conversation with Stats NZ, the Agency's data scientists developed an approach that takes groups of individual timelines and creates a single timeline that best reflects the whole group.

Groups of individuals were created in two ways: First, those with known characteristics of interest such as the mothers' age at the time of birth. Second, with computer clustering to bring together individuals with similar journeys, such as a group of working mothers who then take paid parental leave. The first approach allows us to consider groups of people that are already known to be of interest. The second approach allows us to find common kinds of journeys.

Construction of representative timelines

Who for

Birth parents, the baby and any existing siblings (half or full) where the mother's address at the time of the birth is in South Auckland.

For when

From nine months before the birth until six months after.

The method was designed for repeatability and adaptability, so changes in population, timing, or measures can be accommodated with ease. The method can be used to build timelines for other experiences (such as graduation, hospitalisation, or changing cities).

Individual Timelines

Within a secure environment, a wide range of data sources are combined into a single timeline for an individual.

Representative timelines

Individuals are assigned to groups and an average timeline is made for each like group:

User-defined groups: for known populations (e.g. ethnicity, education level)

Machine-defined clusters: by similarity of timeline, to find the main kinds of experience.

Making meaning

Drawing on experience of TSI's Early Years Challenge and of working across the social sector, communities and NGOs, we (TSI specialists) examined the representative timelines and considered what made sense and what didn't – and what questions we did or didn't need to ask whānau.

To be able to make sense of the IDI data, we had to learn new skills. The Agency's data scientists took the time to explain what we needed to know and were always available to respond to questions. Taking a deep dive, we spent hours trawling through thousands of lines of IDI data, to identify patterns that might connect to the themes identified.

We played with the data to find variables that clicked together in ways we thought might be useful for the sorts of things of interest to South Auckland families and service providers, and our organisations. To support us, the Agency's data scientists developed a visualisation tool to enable the data to be presented in a pictorial way, so it would be more easily understood by users. Rather than producing a static picture or graph, users could slice and dice the data, and choose selections, or change settings to focus on specific experiences.

Preparing for whānau engagement

Having dived deep into the IDI data, we (TSI specialists) came together to share our thinking. "This is something we haven't heard before, but might be very important," we said. Or, "This is something we've all heard before and feel certain it is significant."

We checked our emergent thinking with external colleagues who had content knowledge. We also double-checked our own and our colleagues' data selections. The Agency's data scientists then checked our work and peer reviewed their own.

We eventually drilled down our search to seven key insights about having a baby in South Auckland. Whilst we (TSI specialists) saw these insights in the data, we also needed to be able to share them in a user-friendly way with whānau. Doing so, whānau could then see their own lived experiences in the data (or not) and share meaningful stories with us about what gave rise to the situations the insights show.

The representative timelines produced by the Agency's data scientists allowed us to do this and we also developed other engagement tools. In addition, we created an engagement pack to support consistency and safety when we engaged with whānau — which included a project explanation, ethical protocols, conversation starter questions and a feedback tool.

Whānau engagement

An intensive, five-day stint of whānau engagement in South Auckland followed. Creating the conditions for good engagement requires an attentive, relational, people-centred approach. It's all about being human, being authentic and remembering why we're doing this.

In June 2019, a TSI specialist engaged with 23 parents (19 mums and four dads – who mainly identify as Māori or Pacific Peoples) and two experienced community workers. Though the number of whānau members and community workers was not statistically significant, there were enough participants to test an approach, show it has significant potential, and do what the Project needed to produce an MVP.

Doing what works for whānau

Whānau preferences guided where and how engagement happened. The TSI specialist chose meeting places she knew were familiar to and comfortable for whānau. When hosting conversations, she offered various options: telephone or Facetime calls, home visits, café conversations, pop-up discussions in a church, or community-centred focus groups. She hosted one to two-hour conversations, some one-to-one but mostly small groups of two, four or six people, so everyone could have their say and be heard.

The TSI specialist always arranged food (because sharing kai is a great human leveller and some people might not have eaten before coming) and gave whānau a modest koha (a gesture appreciating their time, effort and investment). She welcomed children and encouraged people to bring a supportive friend or family member. Health and safety plans ensured good controls were in place.

In some cases, participants knew each other well, but in others it was important to take more time for whānaungatanga – relationship building. Enabling everyone to get to know one another supported a meaningful exchange.

The TSI specialist explained the purpose of the conversation upfront, and how whānau ideas would be used and by whom. She emphasised the Project was focussed on learning a better way to use data and scientific knowledge in research, government decision making and service delivery by integrating the voices and insights of whānau. She asked if whānau wanted to stay in touch, how they wanted to receive

feedback, and if they wished to be named in project reports (most did). She also carried a list of agencies that could offer support if needed and, when asked, gave this information to one participant.

Generating insights

Whānau appreciated this respectful approach. They invested huge energy, thoughtfulness, integrity and commitment in their conversations.

"We don't know what's going on here," the TSI specialist said to whānau. "Can you help us understand this data? We think there's something significant here but we're not certain."

Whānau quickly made sense of the data on their own and, in group conversations, teased out their thinking on why certain things happen the way they do for some whānau. Some could see likenesses between the stories told in the representative timelines and their own whānau – "That's my sister," or "That's my aunty," they said. Making personal connections made the conversations real, relatable and valuable for them.

Sharing personal stories touched hearts and minds, generated empathy, highlighted the significance of prolonged cumulative stress on the lives of whānau around the birth of baby, and produced critical insights not previously voiced in TSI–Agency discussions on the data.

Weaving lived experiences with the data, whānau quickly uncovered ideas for possible action that could support change including what whānau and communities can do.

Insights

IDI data insights

Having dived deep into the IDI data, we arrived at seven key insights about having a baby in South Auckland.

What whānau told us

We engaged with whānau so they could see their own lived experiences in the data (or not) and share stories about what gives rise to the situations the data insights show.

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1. **Fathers often stop earning money from paid work around the time baby is born**

   Fathers with lower qualifications display a pattern of being outside of paid employment for the two weeks either side of the birth, in some cases exiting employment and taking a job seeker benefit, whilst fathers with higher qualifications do not display this pattern.
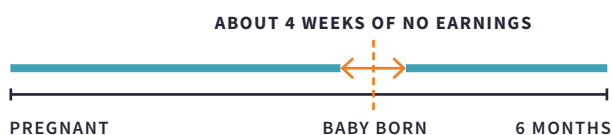
   Whānau say there is a strong cultural norm (particularly for Pacific fathers), and personal desire for fathers to be at home with mother and baby. Often the type of work fathers are employed in (low-paid, casual) makes them feel quitting work is the only option – because engaging with the 'system' is too hard.

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2. **Mothers are changing address while they are pregnant**

   About 19% of mothers in South Auckland register a change of address while they are pregnant or soon after baby is born. This is consistent with 17% of mothers in New Zealand.

   Multiple, temporary moves during this time are common for mothers and siblings. Couch surfing and looking for short term accommodation is common as is planned moving between family members. Landlords don't want to take on single mothers – "They think we are all trouble".

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3. **Mothers have a low rate of getting anti-depressant medicines**

   Mothers in South Auckland access anti-depressants at half the rate of all mothers in New Zealand (4% versus 8% respectively) in the first six months after the birth.

   There are parents who want and need far more support for depression, but don't receive it. Some mothers are concerned about the impact of drugs on the unborn baby.

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4. **Lots of mothers and fathers are enrolled in education while mum is pregnant**

   25% of mothers and 22% of fathers in South Auckland are enrolled in education or training in the nine months before the baby is born. This is consistent with 23% and 26% respectively for New Zealand.

   Whānau say it's easier to be in education than having to look for work. Often they are also trying hard to build strengths and resilience and see education as a way to help them and their children have a better life long-term. But they say understanding the study system is hard and they want help coming back to education when they can – "Keep the door open for me".

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5. **There are worries about the safety of brothers and sisters**

   There are reports of concern for full-siblings in 4.6% of families in South Auckland, compared with 2.6% of families across New Zealand, between nine months before the birth and six months after.

   This is a really messy time for relationships – not just parent relationships. New mothers can suddenly be expected to look after older step-children for the first time. Older kids can be moved around a lot, be seen to get in the way, and have to deal with lots of change and new people. Mothers can take steps to 'hide' from services – not telling the truth about what is happening, avoiding home visits, not asking for help, or moving house.

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6. **Mothers experiencing a hard pregnancy have more tough things going on in their lives**

   Difficult pregnancies seem associated with more events of concern on the timelines than difficult births (a higher proportion of mothers with difficult pregnancies receive job seeker or sole parent benefits, the accommodation supplement, or police concern for family violence – than mothers with difficult births do).

   Pregnancy is emotionally hard for mothers, and fathers too. Sometimes it's too hard to even think about the baby until it comes because there are too many other 'in your face' demands – like having no money and trying to cope with the older kids. Once stress and exhaustion sets in it keeps on coming after baby is born. Whānau and community providers think the rate of difficult pregnancy is much higher than the data indicates.

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7. **Some mothers are much less likely to get help from their midwife after baby is born**

   Māori and Pacific mothers have on average two fewer contacts with a midwife, compared to Asian and European mothers.

   Many whānau identified low contact with midwives as a sign of personal and cultural strength – they see it as "good and normal". Mums think that high usage of midwifery services is a sign of social isolation.

Working with one key insight: The pay gap for some dads

TSI specialists and the Agency's data scientists trawled through oceans of IDI data and came up with seven key insights about what it's like having a baby in South Auckland, including the following insight.

Data insight

Fathers with lower qualifications display a pattern of being outside of paid employment for the two weeks either side of the birth, in some cases exiting employment and taking a job seeker benefit, whilst fathers with higher qualifications do not display this pattern.

How we explained this insight to whānau

Fathers often stop earning money from paid work right around the time that baby is born

Tools for whānau engagement

TSI reworded the insight in a way that would make sense to whānau. They also built charts like the one below to help whānau grasp the data more easily. Engaging with these tools enabled whānau to share their perspectives and experiences, providing a richer understanding of the challenges and complexities surrounding having a baby in South Auckland.

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Details used to engage with whānau

1 Lots of fathers with jobs stop getting paid for about a month – just at the time when baby is born

ABOUT 4 WEEKS OF NO EARNINGS

PREGNANT   BABY BORN   6 MONTHS

2 There is often a bigger gap for fathers with lower weekly pay

ABOUT 6–8 WEEKS OF NO EARNINGS

PREGNANT   BABY BORN   6 MONTHS

3 It doesn't seem to be linked to what is happening with mother. This gap in earning money happens when:

- Mother is not living with father (sole parent benefit)
- Mother is having her first baby
- Mother already has other children
- Mother has tough things going on
- Mother has good things going on
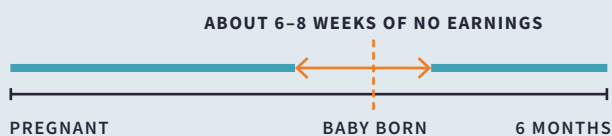
4 This gap in earning money seems to happen more for some fathers than others

- **More** for Māori and Pacific fathers
- **More** for fathers with lower qualifications

What whānau told us

Deep conversations with whānau illuminated ways of seeing and thinking about different lived experiences that helped the Agency's data scientists, TSI specialists and others to better understand the dynamics at play for fathers around the birth of a baby.

- Managing finances, benefits, leave and time off work is a major stressor for families during pregnancy and after baby is born. Families often try to save money during this time but for various reasons use up all their savings.

- There is a strong cultural norm (particularly for Pacific fathers) and a personal desire for fathers to be at home with mother and baby, even if the parents are not married. This expectation is sometimes a resilience and protective factor. But it can backfire when fathers (for a variety of reasons including their own stress, the struggle with competing expectations and perceived lack of choice) add to whānau stress, are violent or suffer a relationship break down.

- Relationship uncertainty or change (as a result of situations like relationship breakups and blended families) make employment leave and the benefit system hard to navigate as family make-up and living arrangements change. Navigating the system (including parental leave and benefits) is complex and confusing. Families don't understand entitlements, and they find the process of engaging with forms and employers stressful.

- Sometimes fathers quit work because it seems like the easiest option. But having no paid work adds to their stress. The type of employer, and the seniority of the father, makes a difference. "Hammer hands don't even ask [for leave]," said a whānau member.

- Even when fathers do not take time off, they may use unhelpful stress management methods (particularly alcohol and avoidance), so then they work fewer hours, get less pay or are at higher risk of being laid-off. Fathers are also aware that others (including employers, Work and Income NZ, or service providers) can read their stress as anger. That interpretation can place them and their kids at risk.

New insights for social sector decision making

The approach produced deeper and new insights that can now be considered when developing policy and designing service delivery changes to better meet the needs and the aspirations of dads, and the opportunities available to them.

- Could the whole whānau benefit from a stronger focus on fathers around pregnancy and the birth of a child? Can systems, services, community and whānau become better at:

  - Supporting, nurturing, and considering fathers?

  - Understanding and exploring the mixed expectations and cultural trade-offs fathers might be trying to navigate?

  - Using the whole time of pregnancy to help mothers and fathers to plan, think about and make changes early – not just when baby is born?

  - Actively supporting fathers during the period of pregnancy with systems, maps and navigation tools to help guide them – especially around work, income, savings, debt, study, and how all the pieces fit together?

- How could Work and Income NZ, IRD and the Department of Internal Affairs work together to simplify or streamline the forms and processes that are needed (such as work, benefits, leave and study)?

  - Can they work together better to collect and share information more simply?

  - Can they help families understand and navigate the system (not just by giving more information), including streamlining or simplifying the processes for and cost of getting a birth certificate – which was regularly mentioned as a stressor and expense for whānau?

- Can employers help by playing a role here? By:

  - Better understanding the stress men feel around the birth of a baby and supporting them to manage that?

  - Supporting employees to know about and navigate leave options for both mothers and fathers?

  - Supporting fathers to keep their jobs even if they take leave?

  - Recognising that lower wage, contract or entry-level employees are much less likely to speak up and ask for entitlements?

Weaving multiple engagements

The TSI specialist debriefed her TSI colleagues on these whānau engagements. Doing so ensured the reflections were authentically represented, accurately recorded and properly understood. We were very conscious of needing to keep the integrity of whānau experiences and ideas. Preserving the words of whānau as they were spoken, we reported back to them in the format they wanted.

"You just wrote MY words on a post-it note!" a whānau participant said.
"You slowed me down and said, 'Say that again.' You've written what I've just said, you didn't rewrite it. Thank you."

WHĀNAU PARTICIPANT

TSI specialists and the Agency's data scientists reviewed the whānau reflections. Sharing relatable whānau stories with the data scientists (and later with senior leaders in the Agency) helped them to engage more directly with the lived experiences uncovered in the Project. We (TSI specialists) compiled a written record of what whānau told us and new insights for social sector decision making. See the example on the pay gap for dads around the birth of a baby in the following pages.

Sharing and embedding the work

This case study is a way to share our story of, and insights from, the Project. The Agency also delivered presentations on the study and its insights to interest groups including the Government Analytics Network and the Auckland Social Wellbeing Board. A guide to representative timelines is now available.[7]

For partnerships to thrive, it's crucial to learn from and build on lessons learned together. To better understand the Project, how the partnership worked, and to embed its lessons in our organisations, project reviews were conducted, and presentations allowed staff to exchange the South Auckland data and insights, for future study.

"There were often times when things would suddenly go quiet on our side or theirs, for whatever reason, and I think that's where trust and respect in the relationship, and just keeping in touch, were so important and a significant learning."

TSI SPECIALIST

Learning for the future

3

What we learned about improving social wellbeing

Working together on the Project taught us valuable lessons about how a social wellbeing approach can support social sector decision making and practice for improved social wellbeing.

The impact of combining multiple sources of knowledge

A social wellbeing approach recognises, values and melds multiple sources of knowledge – science, data, and lived experiences. Science and data exist in a vacuum without lived experiences. Grounded in lived experiences, whānau and community knowledge offer crucial insights to improve their material conditions and quality of life. Such insights produce a richer understanding of gnarly complex problems and highlight possible actions that working with science or data alone, is unlikely to uncover.

Integrating multiple sources of knowledge offers new, often profound, insights for better policy and practice. In this Project combining science and data *with* lived experiences became a powerful way for whānau *and* data scientists to make meaning, check assumptions, surface new ideas and uncover fresh leads.

Whānau insights helped the Agency's data scientists to recognise 'the tears in the data' and see 'real people' ordinarily only represented by percentages. They felt empathy and appreciated insights they hadn't noticed when analysing the data alone. They not only better understood what's at stake for whānau, but also were challenged to look more closely at other aspects of the data or take a second look. Instead of being a link in the social sector decision making chain, this Project became a demonstrable means of valuing the often unseen, but critical contributions of data scientists.

The importance of leadership

Improving social wellbeing requires leadership at all levels across government, service providers and communities. We need to focus on transformational and impactful outcomes for whānau and be willing to trial new ways of working.

The social wellbeing approach developed in this Project required us to put people at the centre of what we do as agencies, harness what we know from science, engage effectively with whānau to make better use and sense of data, and to work collaboratively. We're on the right track; the Project gleaned insights that show how to improve policy, systems and service delivery for South Auckland whānau around the birth of a child.

Researchers, data scientists, policy advisors and makers attending presentations expressed an appetite for new ways of working that can help them to improve social wellbeing in the work they do. Just as we needed the support of one another to develop this Project, there's an opportunity now to share and further develop resources produced in the Project to support other social sector agencies and organisations to adopt and implement this approach.

The value of effective partnering

Effective partnering requires the right people, with the right knowledge, skills, and attitude, operating in a relational way for an agreed purpose and outcome. The Project shows how to grow an effective partnership between organisations wanting to work together to support better social sector decision making. It makes visible the fundamentals of a collaborative approach and the value of melding what each partner can offer. Humility, generosity, respect, trust, reciprocity, flexibility, precision, and integrity of purpose were hallmarks of the TSI–Agency partnership.

Partnering enabled an exchange that produced innovation. Many organisations do not have the infrastructure and know-how to access and use IDI data. Likewise, many agencies do not have the community networks and expertise to engage effectively with whānau. In the Project the Agency provided access, capability, capacity and training to enable TSI to work with IDI data sets that hold important information on having

a baby in South Auckland. Meanwhile TSI offered a place-based, whānau centred approach that gave the Agency access to whānau and service provider insights. We both brought science to the table.

The significance of good whānau engagement

When engaging with whānau and communities, it's crucial to work in ways that work for them, so they feel able to express their ideas and insights.

It is telling that whānau relished the opportunity to work with the data and draw their own insights. They had useful and important things to say about their lives and wanted to be heard.

Good engagement practices created a way for whānau meaning making to influence social sector decision making. Deep conversations produced whānau and service provider insights that not only challenged *and* affirmed interpretations of the data, but also suggest areas to delve deeper.

What's now possible and promising?

What action is now possible and promising because of TSI and the Agency's collaborative approach to melding science, data and lived experiences in a South Auckland context? The reusable resources developed in the Project are now accessible to other organisations, being applied by the Agency in other projects, and offer possibilities for future research and social sector decision making.

Encouraging use of reusable resources

Whānau face multiple challenges. Using these new tools creates the possibility of producing other representative timelines of lived experiences from other data sets to better understand factors that hinder or support other aspects of child, youth and whānau wellbeing.

With data on 75,000 births in South Auckland over a 13-year time period, technology that can process large data sets, data expertise that can programme algorithms to look for certain variables, clusters or patterns, a method for creating representative timelines of lived experiences, and user-friendly tools to engage whānau – it is now possible to generate other early insights that can demonstrate areas warranting exploration.

Researchers can now configure a range of variables depending on their data and interests. The collection of reusable resources developed by the Agency enables good hypothesis testing and are now available for others to take and make their own. Organisations can use the research guidance on representative timelines, the data assembly code,[8] and visualisation tool[9] with their own data sets or, if they have access, with other IDI data.

Delivering to an MVP standard for the Project did not allow for refinements of these resources. As other groups begin to use the tools, opportunities for the Agency to improve these artefacts and enhance user experience will emerge.

Collaborations under way

The Agency has already partnered with other providers and groups to apply the methodology and tools developed in the Project, including NGO The Wise Group and its Housing First service provider The People's Project, which works with people experiencing chronic homelessness in Hamilton and Tauranga.

The Agency is applying the methodology to The People's Project's data, outside the IDI, to map people's support journeys — from walking through the door of the organisation, through to being housed. After being housed, the support journey includes helping people maintain their tenancy, improve their wellbeing and return to social inclusion. Support is for the duration of need.

Work with the Agency will help The People's Project make more informed decisions about service delivery and resourcing. A tool will provide valuable evidence about and insights into the trends of and contributing factors to homelessness. This work will inform sector funders and policy makers about the policies, investments, responses and resources required to both support people's journeys out of homelessness and to prevent homelessness occurring in New Zealand.

The Agency is close to completing the journey approach developed in the Project.

Taking the Project forward

More robust insights on having a baby in South Auckland can now guide further research and focus attention on specific policy areas. For TSI, the Project builds our evidence base of the weight and specific shape of prolonged cumulative stress experienced by South Auckland whānau. It helps us to see, with greater precision, different clusters and population segments within our community.

This Project sheds light on possible actions that whānau, communities, service providers and government agencies can take to reduce prolonged cumulative stress and make life better for families around the birth of a child.

Opportunities to continue this work are important because it contributes to child, youth and family wellbeing — a key Government priority.

Conclusion

Resolving complex social and economic challenges requires the collective effort of government and communities. Working together, our diverse perspectives and skillsets can make smarter inroads into the heart of these challenges.

We make better use of data when we have a breadth of people making sense of it.

The South Auckland context demonstrates the need to better understand the challenges facing whānau, including significant life events, to ensure people have access to services and supports that work for them.

It is possible for agencies and communities to work productively together to enable government to respond to the challenges in people's lives in a more transformational and impactful way.

Deeply meaningful, accessible and cost-effective whānau engagement can produce insights that help deliver better social sector decision making and practice. This case study shows the tangible value of whānau knowledge and wisdom in contributing to complex co-designed projects. It also encourages us, and other agencies, to think of ways of using big data to support and validate small scale, less costly whānau engagement in early prototype development and testing for policy, service delivery or other social innovations.

The partnership approach and methodology developed in this Project make an exciting advance in how to go about delivering better social sector decision making and practice. Increasing investment in this new approach could help New Zealand get to the nub of how to deliver better social support options for families, and improve social wellbeing.

How we made this case study

Research approach

TSI commissioned this case study in partnership with the Agency. An independent researcher well-versed with TSI's work in South Auckland conducted in-depth interviews (one-to-one or small group) with six staff from the Agency and five TSI personnel engaged in this Project. She reviewed various documents produced in the Project and worked collaboratively to create the architecture and contents for this case study. Comments from TSI and the Agency helped to refine the text.

Acknowledgments

We thank Professor Richie Poulton, Social Wellbeing Agency Chief Science Advisor, for contributing the Foreword to this case study. We appreciate personnel from TSI and the Agency who shared their reflections on the work they did together. For TSI: Gael Surgenor, Karen Clifford, Belinda Gorman, Thalia Wright, Luella Linaker. For the Agency: Simon Anastasiadis, Akilesh Chokkanathapuram, Peter Holmes, Kate Kolich, Ivan Tava, Fiona Thomson as well as Dorothy Adams, and Jacinta Syme.

Dr Frances Hancock, an engagement specialist, researcher and former senior policy advisor, worked with the project team to produce this case study. Frances lives in South Auckland and is an Honorary Academic at Te Puna Wānanga The School of Māori and Indigenous Education at the University of Auckland.

Endnotes

1   For Harvard University's Center for the Developing Child, see **developingchild.harvard.edu** and for the 'Growing Up in New Zealand' study, see: **growingup.co.nz**

2   For the Government's Child and Youth Wellbeing Strategy, see: **childyouthwellbeing.govt.nz**

3   Statistics New Zealand. (2013). *Introduction to the Integrated Data Infrastructure.* 2013. Available at: **stats.govt.nz**. See also: Social Investment Agency. (2017). Social Investment Agency's Beginners' Guide to the Integrated Data Infrastructure. Wellington, New Zealand. Available at: **sia.govt.nz**

4   The Southern Initiative. (2017). *Early Years Challenge: Supporting parents to give tamariki a great start in life.* Auckland, New Zealand. Available at: **tsi.nz/our-reports**

5   Social Investment Agency. (2019). Data Protection and Use Policy. Wellington, New Zealand. Available at: **dpup.sia.govt.nz**

6   Hancock, F. (2019). *A relational approach to community and social innovation: Practices that make a difference.* Auckland, New Zealand: Auckland Council. Available at: **tsi.nz/our-reports**

7   The research guidance is available online. Social Investment Agency. (2019). Representative timelines – modelling people's life experiences: Analytic methodology. Wellington, New Zealand. Available at: **sia.govt.nz**

8   The assembly code is available on the Agency's GitHub page: **github.com/nz-social-wellbeing-agency/ representative_timelines**

9   The visualisation tool (but not the data) is also available on the Agency's GitHub page: **github.com/nz-social-wellbeing-agency/timeline_visualisation**

Liability

While all care and diligence has been used in processing, analysing and extracting data and information in this publication, The Southern Initiative and the Social Wellbeing Agency give no warranty it is error free and will not be liable for any loss or damage suffered by the use directly, or indirectly, of the information in this publication.

Photography

The photographs in this case study are stock photos purchased for design purposes. They are posed by models and are not intended to represent people who contributed to the Project.

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