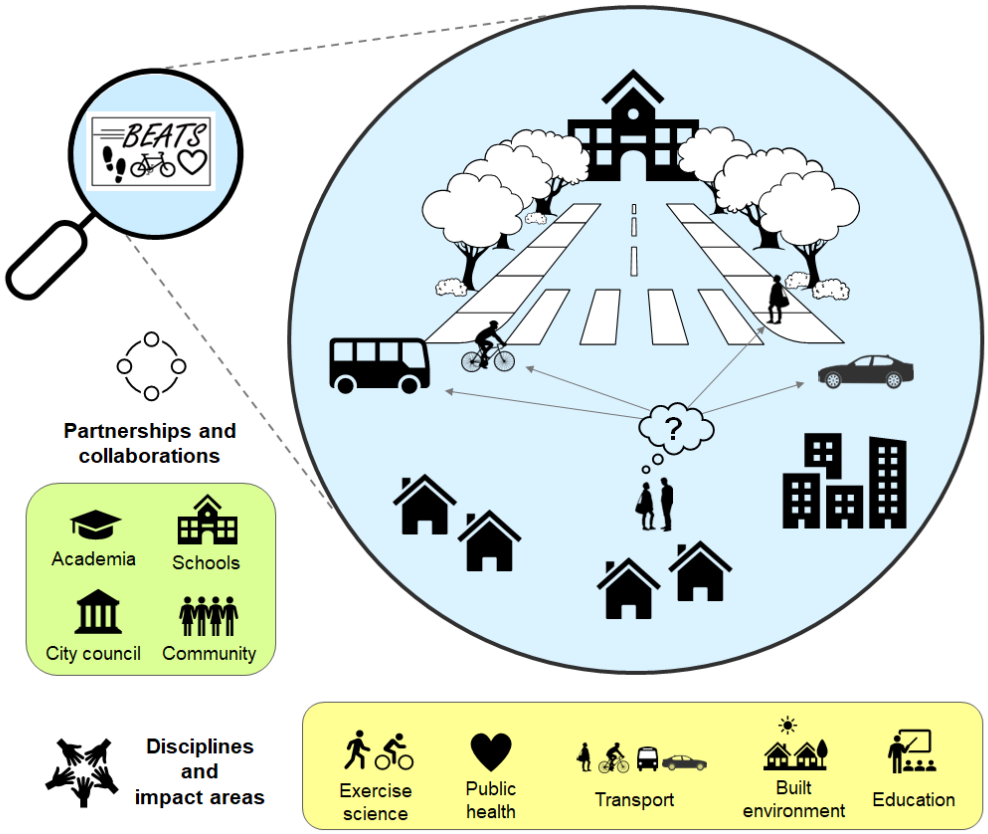
BEATS Research Programme 2013-2023

The Power of Vision, Teamwork, Perseverance and Project Management



Dr Sandra Mandic, PhD, PMP

AGILE Research

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BEATS Research Programme web page:

www.agileresearch.nz/beats

For all queries about BEATS, contact Dr Sandra Mandic, the BEATS Research Programme Founder and Principal Investigator, at agile.research.nz@gmail.com

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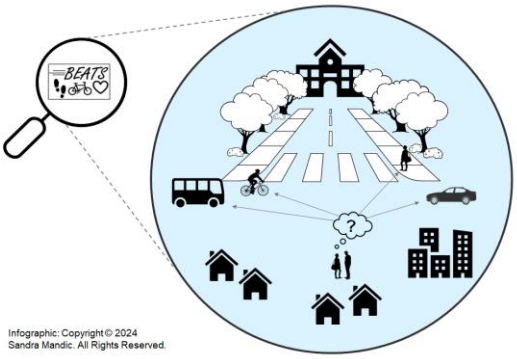
BEATS Research Programme: Context and Significance

Purpose of the BEATS Research

The Built Environment and Active Transport to School (BEATS) Research Programme was designed to examine individual, social, environmental and policy factors that influence how adolescents travel to school.



Reasons for the BEATS Research

Only one in five adolescents worldwide meet recommended levels of physical activity.[1]

If feasible, active transport to school is an effective way to increase and maintain physical activity in youth.[2]

A wide range of individual, family, social, environmental and policy factors has effects on how adolescents travel to school.[3]

Examining multiple levels of influence on travel behaviours requires interdisciplinary and cross-sector approach.[3]

In the city of Dunedin (New Zealand), the BEATS Research Programme was initiated in response to the city needs for addressing safety of walking and cycling around schools in the city centre.[4]

The initial BEATS Study (2014-2015) was designed to collect comprehensive data on adolescents' travel to school to serve as a baseline for future evaluation of the effects of cycling infrastructure improvements in Dunedin, New Zealand.[5]

Significance of the BEATS Research

Generated important information for key stakeholders for planning future school-, neighbourhood- and city / town-wide built environment changes to encourage active transport to school

Helped understand influences of multiple factors to enable the scientific community, policy makers, regional planners, and health promoters to address barriers to active transport to school

Involvement of the key stakeholders facilitated the generation of usable data, relevant to the local context and generalisable to other areas, and the incorporation of new knowledge into policy and future initiatives

[1] Guthold R, Stevens GA, Riley LM, Bull FC. Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1.6 million participants. Lancet Child Adolesc Health. 2020;4(1):23-35. DOI: https://doi.org/10.1016/S2352-4642(19)30323-2

[2] Khan A, Mandic S, Uddin R. Association of active school commuting with physical activity and sedentary behaviour among adolescents: a global perspective from 80 countries. Journal of Science and Medicine in Sport. 2021;24(6):567-572 DOI: https://doi.org/10.1016/j.jsams.2020.12.002

[3] Sallis JF, Cervero RB, Ascher W, Henderson KA, Kraft MK, Kerr J. An ecological approach to creating active living communities. Ann Rev Public Health. 2006;27:297-322, DOI: https://doi.org/10.1146/annurev.publhealth.27.021405.102100

[4] Mandic S, Mountfort A, Hopkins D, Flaherty C, Williams J, Brook E, Wilson G, Moore A. Built Environment and Active Transport to School (BEATS) Study: Multidisciplinary and multi-sector collaboration for physical activity promotion. Retos. 2015: 28:197-202; http://recyt.fecyt.es/index.php/retos/article/view/34955/19222

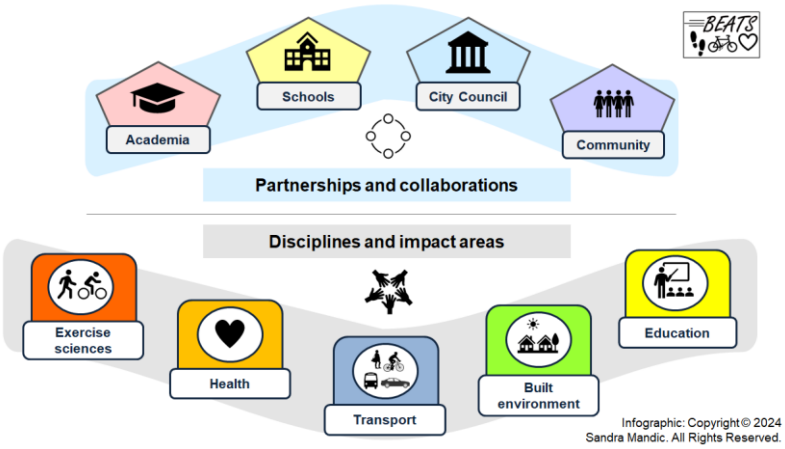
[5] Mandic S, Williams J, Moore A, Hopkins D, Flaherty C, Wilson G, García Bengoechea E, Spence JC. Built Environment and Active Transport to School (BEATS) Study: protocol for a cross-sectional study. BMJ Open. 2016;6:e011196. DOI: https://doi.org/10.1136/bmjopen-2016-011196

BEATS Research Programme Overview

Led by the Heart, Informed by Science and Implemented by the Community

The BEATS Research Programme was an interdisciplinary and multi-sector research programme founded as a partnership between academia, schools, local government and the wider community.[6]

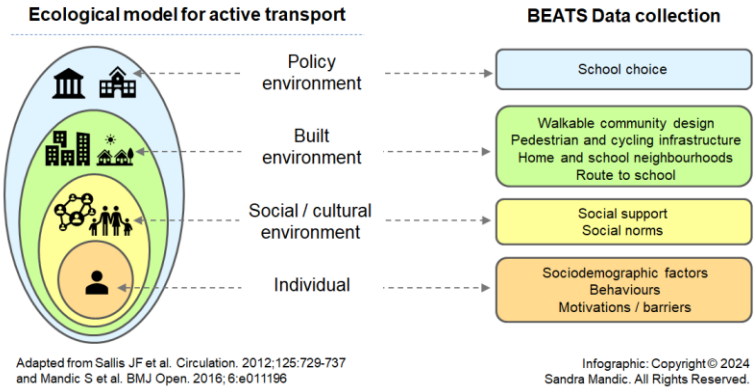
The programme was based in Dunedin, New Zealand and spanned the disciplines of exercise sciences, health, transport, environment and education.



BEATS Research Programme Framework

The BEATS Research Programme was based on contemporary ecological models for active transport (walking or cycling)[7] that identify individual, social, environmental and policy influences on behaviour.

The BEATS research was designed to advance scientific knowledge and provide service to the government, local community and schools.



Community-Based Participatory Approach

The BEATS Research Programme was a collaboration between Dunedin Secondary Schools' Partnership, Dunedin City Council, University of Otago and Auckland University of Technology.

The programme was designed and implemented using a community-based participatory approach with the sustained involvement of key stakeholders. This approach enabled the BEATS Research Team to generate end-user relevant data and facilitate knowledge translation into evidence-based policy and planning.

Founder and Principal Investigator

Dr Sandra Mandic, PhD, PMP

Dr Mandic created the vision for the BEATS Research Programme, established it in 2013 and led it during the entire 10-year period as part of her academic work as Associate Professor at University of Otago and Adjunct Professor at Auckland University of Technology.

[6] Mandic S, Mountfort A, Hopkins D, Flaherty C, Williams J, Brook E, Wilson G, Moore A. Built Environment and Active Transport to School (BEATS) Study: Multidisciplinary and multi-sector collaboration for physical activity promotion. Retos. 2015: 28:197-202; http://recyt.fecyt.es/index.php/retos/article/view/34955/19222

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The 10-Year BEATS Research Journey from a Pilot Project to an Award-Winning Research Programme

BEATS Research Projects

BEATS Pilot Project

BEATS Study

BEATS Rural Study

BEATS Natural Experiment

The 10-Year BEATS Research Journey

2013
- Dr Mandic created a vision, established initial collaborations and partnerships, and secured initial research funding for the BEATS Study
- BEATS Pilot project completed
- Funding secured for the BEATS Student Survey

2014
- BEATS Study data collection
- Funding secured for the BEATS Parental Survey

2015
- BEATS Student Survey data collection completed
- BEATS Parental Survey data collection
- First BEATS scientific journal article published

2016
- BEATS Parental Survey data collection

2017
- BEATS Parental Survey data collection completed
- BEATS Rural Study project design and funding
- BEATS Natural Experiment project design and funding applications

2018
- BEATS Rural Study data collection completed
- BEATS Natural Experiment funding applications
- BEATS Cultural Study pilot project completed

2019
- University of Otago Research Group Award
- BEATS Natural Experiment funding secured (NZD $1.2 million Health Research Council project grant)

2020
- BEATS Natural Experiment data collection began
- Data collection postponed due to the COVID-19 pandemic and lockdowns
- Dr Mandic joined Auckland University of Technology

2021
- BEATS Natural Experiment scope, procedures and timeline revised; data collection continued in between COVID-19 lockdowns

2022
- BEATS Natural Experiment data collection completed in June 2022

2023
- Final (6th) BEATS Symposium held in Wellington
- BEATS Research Programme officially closed on 30 September 2023
- Writing and publishing of remaining BEATS scientific journal articles continues

Landmark BEATS Research Projects

BEATS Study

2014-2017
Dunedin, New Zealand

The original BEATS Study examined individual, social, environmental and policy factors influencing active transport to school in adolescents living in the city of Dunedin, New Zealand.[8,9]

Participants:

12 out of 12 schools

1780 Adolescents
355 Parents
14 Teachers
12 School principals

This study generated timely, unique and valuable data to inform future interventions for built environment change, educational campaigns and policy development in urban areas.

BEATS Rural Study

2018-2019
Otago region, New Zealand

This research project examined individual, social, environmental and policy factors influencing active transport to school in adolescents living in rural areas of the Otago region of New Zealand.

Participants:

11 out of 15 schools

1014 Adolescents
78 Parents
2 School principals

This study generated valuable rural-specific data to inform future interventions for built environment change, educational campaigns and policy development in rural areas.

BEATS Natural Experiment (BEATS-2)

2019-2023
Dunedin, New Zealand

The project was designed to examine the effects of cycling and pedestrian infrastructure changes on adolescents' travel to school, physical activity and perceptions of the school neighbourhoods.[10]

Participants:

12 out of 12 schools

1828 Adolescents

Although infrastructure changes did not happen as planned, this study generated further insights related to adolescents' travel to school, including comparisons of school travel behaviours before versus during the COVID-19 pandemic.

BEATS Research Methodology: Data Collected as Part of BEATS Research Projects

- Online survey (adolescents and parents)
- Height and weight measurements (adolescents)
- Device-measured physical activity (adolescents and parents)
- School bag weight (adolescents)
- Mapping route to school (adolescents)
- Geographic Information Science (GIS) analysis of the built environment
- Focus groups (adolescents, parents and teachers)
- Interviews (school principals)

[8] Mandic S, Williams J, Moore A, Hopkins D, Flaherty C, Wilson G, García Bengoechea E, Spence JC. Built Environment and Active Transport to School (BEATS) Study: protocol for a cross-sectional study. BMJ Open. 2016;6:e011196. DOI: https://doi.org/10.1136/bmjopen-2016-011196

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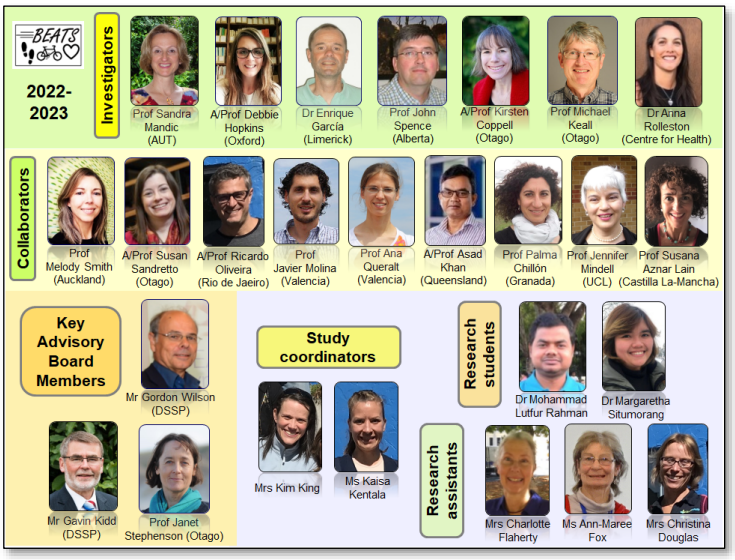
[10] Mandic S, Hopkins D, García Bengoechea E, Moore A, Sandretto S, Coppell K, Ergler C, Keall M, Rolleston A, Kidd G, Wilson G, Spence JC. Built Environment Changes and Active Transport to School among Adolescents: BEATS Natural Experiment Study Protocol. BMJ Open. 2020;10:e034899 DOI: https://doi.org/10.1136/bmjopen-2019-034899

BEATS Research Team

The BEATS Research Team involved investigators from multiple scientific disciplines, sectors and countries, advisory board members from the local community, many research students, research assistants and volunteers, and national and international collaborators.

The team involved individuals from different walks of life ranging from undergraduate students to retired professionals, and with diverse professional and cultural backgrounds. Over the 10-year period, the BEATS Team involved individuals from 15 countries and five continents.



The BEATS Research Team Members 2013-2023

11 BEATS investigators

8 BEATS collaborators

14 Advisory board members

25 Research staff

22 Research students

20 Volunteers

5 Continents

15 Countries

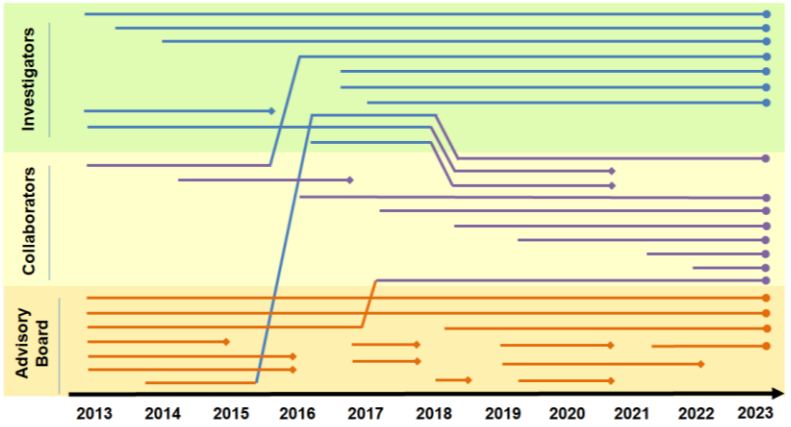
11 Scientific disciplines

4 Sectors

- 3 Doctoral students
- 5 Master's students
- 1 Postgraduate Diploma student
- 4 Honours students
- 6 Summer research students
- 3 International internship students

BEATS Research Team Evolution over a 10-Year Period

The BEATS Research Team evolved over time. The team remained open to welcome new contributors. Continued involvement of the core team members over the 10-year period provided the BEATS Research Pogramme with the continuity. At the same time, an ongoing strategic engagement of new team members refreshed the team and allowed it to grow and expand the quality and impact of the BEATS Research.



Data source: BEATS Research Programme

BEATS Research Funding

BEATS Study
2014-2017

Total funding: **NZD $284,032**

Health Research Council of New Zealand
National Heart Foundation
University of Otago
Lottery Health Research Grant
Dunedin City Council

BEATS Rural Study
2018-2019

Total funding: **NZD $40,409**

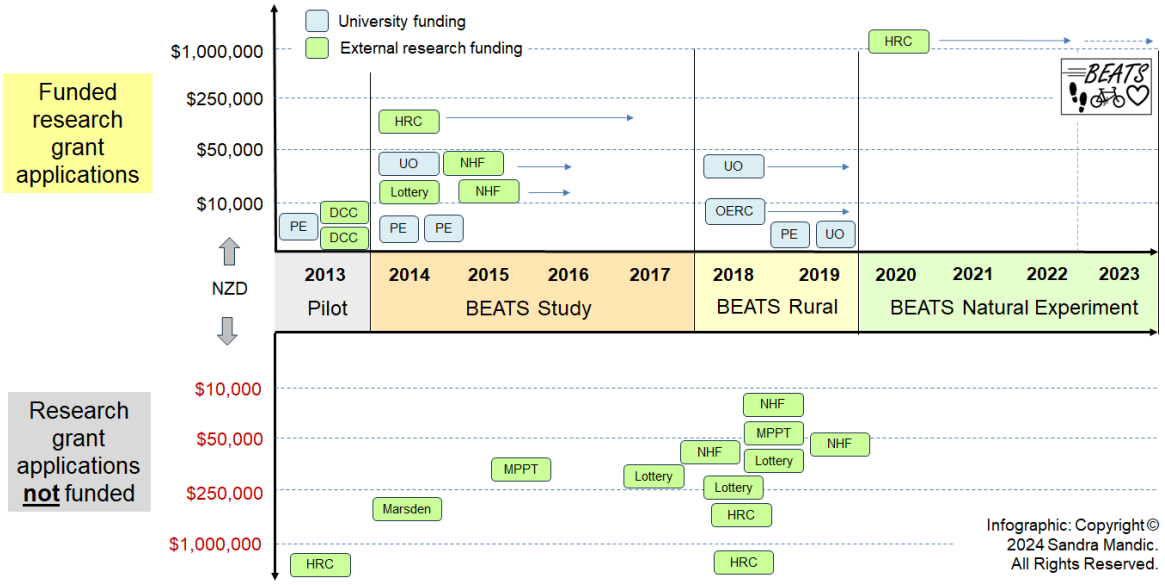
University of Otago
Otago Energy Research Centre

BEATS Natural Experiment (BEATS-2)
2019-2023

Total funding: **NZD $1,209,988**

Health Research Council of New Zealand
University of Otago

BEATS Research Programme Funding Ups and Downs



Funding Applications Success Rate

Grant applications:	**33** Applications submitted	**20** Applications funded	**61%** Success rate
Funding received:	Applied for **NZD $5.3 million**	Received **NZD $1.5 million**	Received **29%** of funding applied for

BEATS Research: Value for Money

Per NZD $1 million in research funding, the BEATS Research Programme delivered:

27 published scientific journal articles,
107 conference abstracts
37 technical reports for stakeholders

10 times higher research productivity than the New Zealand average[11,12] per NZD $1 million in research funding

[11] Research productivity calculated only based on the number of published BEATS scientific journal articles and conference abstracts.
[12] Ministry of Business, Innovation and Employment. (2018) Research, Science and Innovation System Performance Report 2018. New Zealand. Available at https://www.mbie.govt.nz/assets/7693f53535/research-science-and-innovation-system-performance-report-2018.pdf

The BEATS Team in Action: Data Collection

BEATS Study (2014-2017)

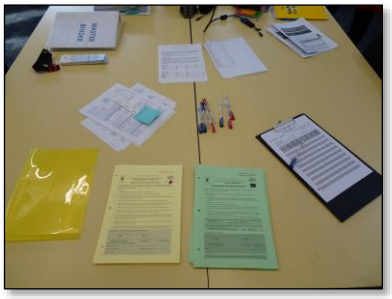
- 100% school recruitment rate (12 schools)
- 43 days of data collection in schools (average: 3.8 days per school)
- 79 data collection sessions for student survey
- 8 research assistants and 19 volunteers
- Student data collected over a 15-month period
- Parental survey data collection took 3 years

BEATS Rural Study (2018)

- 73% school recruitment rate (11 of 15 schools)
- 15 days of data collection in rural schools
- Each school visit was a unique experience
- 17 research staff involved in data collection
- 753 hours of research-person hours at schools
- 4,271 km driven to complete data collection (more than twice the length of New Zealand)
- 350+ hours of research staff travel time

BEATS Natural Experiment (2020-2022)

- 100% school recruitment rate (12 schools)
- Data collection interrupted four times due to COVID-19 related lockdowns
- Project scope, data collection protocol and timeline revised in response to COVID-19
- 95 student survey data collection sessions completed by 10 research assistants, 3 Doctoral students and the principal investigator
- Data collection finished after 2 years and 4 months (15 months later than initially planned)



A Look Behind-the-Scenes

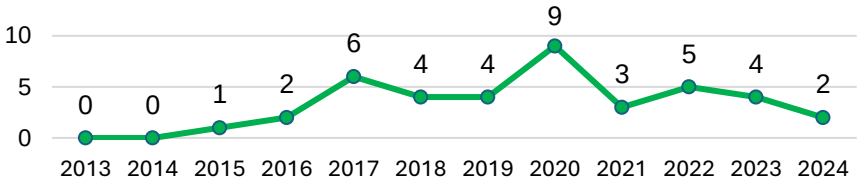
2 awards and 6 scholarships
awarded to BEATS research students

In 2019, the BEATS Research Team won the University of Otago Research Group Award.

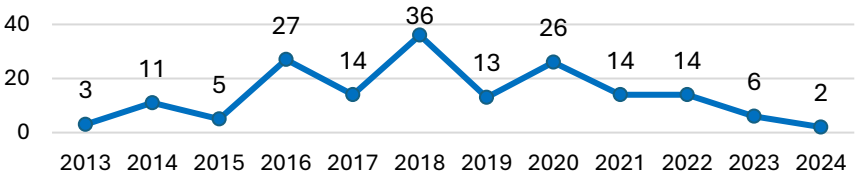
The BEATS Research Programme trained over 60 research students, research staff and volunteers and hosted dozen visiting researchers

BEATS Research Outputs

40 Scientific journal articles



171 Conference abstracts



56 Technical reports

36 Seminar presentations to academics

27 Symposium presentations (no abstract)

4 Conference proceedings (abstract booklets)

A Closer Look at the BEATS Research Outputs*

19 scientific journals where BEATS articles were published

55 co-authors of BEATS scientific journal articles (41 BEATS team members and 14 others)

745 citations of published BEATS journal scientific articles

25 international conferences with presentations of BEATS research findings

20 national conferences with presentations of BEATS research findings

2,363 pages of technical reports prepared for stakeholders

*Last updated: January 2024

Overview of Published BEATS Scientific Journal Articles

Research Methods

- BEATS Study protocol 1
- BEATS Study implementation 2
- BEATS Natural Experiment protocol 3

Adolescents' Health Behaviours

- Health behaviours 4
- Physical activity in urban and rural areas 5
- Physical activity and school travel 6
- Dietary behaviours across diverse settlement types 7
- Physical activity, screen time and dietary patterns before versus during the COVID-19 pandemic 8

School Travel

Before versus during the COVID-19 Pandemic

School travel and perceptions of walking to school N1

Transport to school patterns across settlement types

By home-to-school distance (walkable, cyclable and beyond cyclable) 9 + **By settlement type** (Large, medium and small urban areas and rural settings)

School

← ≤2.25 km (within walking distance) | ← ≤4.0 km (within cycling distance) | ← More than 4.0 km (beyond cycling distance)

Transport to school modes

Walking

→ **Comparison of perceptions of walking versus cycling**
- Urban adolescents 10
- Urban parents 11
- Rural adolescents 12

→ **Walking and cycling perceptions differ by distance to school**
- Urban adolescents 13
- Urban parents 11

Cycling

→ **Perceptions of cycling**
- Urban adolescents and parents 14
- Dunedin vs. Christchurch 15

+ **Attitudes to cycle skills training**
- Urban adolescents 16
- Urban parents 17
- Long-term effects 18

Busing

→ Barriers and facilitators for urban adolescents, parents and schools 19

Driven / Driving

→
- Correlates of driving to school in urban areas (New Zealand data) 20
- Adolescents' aspirations for private car travel 21

Correlates of Active Transport to School

Built Environment

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- Across settlement types 24
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- Implications on adolescents' physical activity and car travel 33
- School choice, distance and school travel 34

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- Cycling helmets 37
- Bike library system 38
- Social capital 39
- Snacking, school travel, deprivation and body weight 40
- Snacking N4
- Food outlets along school routes N5

References for BEATS Scientific Journal Articles

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School Travel

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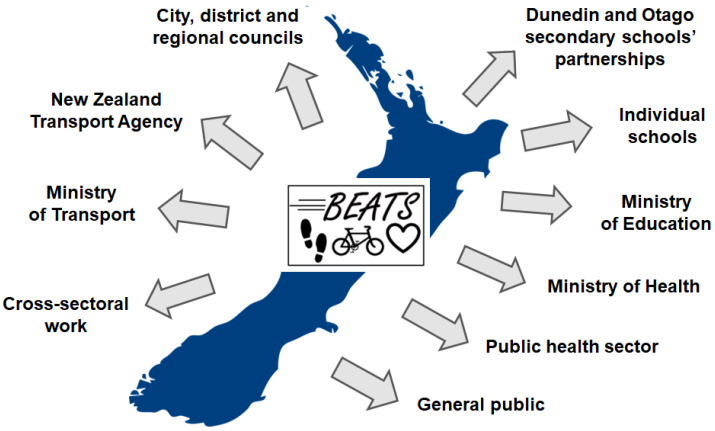
N Articles in review.

Comprehensive Dissemination of BEATS Findings

The BEATS Research findings were widely disseminated in New Zealand as well as internationally – both through standard academic channels as well as beyond academia.

The BEATS Team made extensive efforts to provide timely, relevant and user-friendly dissemination of BEATS findings to stakeholders and the local community as well as the relevant local, regional and national organisations and professionals in the public health, transport and education sectors. This involved sharing BEATS findings through technical reports, presentations, symposia, newsletter and media reports.

Dissemination of BEATS Findings in New Zealand



54 Technical reports for stakeholders

67 Presentations for stakeholders, policy makers and professionals

8 Symposia organised for researchers, stakeholders and the general public

27 Issues of the Active Living Laboratory newsletter

54 Media reports for the general public

Active Living Laboratory Newsletter

Between 2016 to 2023, Dr Mandic and the Active Living Laboratory Team published 27 issues of a quarterly newsletter to provide regular updates about the team's work and the BEATS Research Team activities and publications.

Active Living Laboratory archive web page: https://agileresearch.nz/active-living/

BEATS Symposia

(2014, 2016, 2018, 2020, 2022 and 2023)

BEATS Symposia were used as one of many avenues to communicate the BEATS Research findings to the wider community and to engage with the stakeholders. Findings shared at these symposia were relevant to academia, government, public health, urban design, the transportation and environment sectors.

The Active Living and Environment Symposia (TALES)

The TALES symposia (2017 and 2019) were designed to facilitate and grow an international, interdisciplinary and multi-sector dialogue related to Active Living and Environment. These symposia brought together researchers, policy makers, health promoters, urban designers, transport professionals and interested members of the public to network and exchange ideas.

Research Impact of the BEATS Research Programme in New Zealand

Adoption of BEATS Findings by End-Users and Their Use in Decision Making

The BEATS findings have been adopted by end-users, and used in decision-making for the design of school- and city-wide programmes and initiatives in Dunedin. The BEATS findings have attracted interest of national organisations and Ministries of Health, Transport and Education in New Zealand.

The Dunedin City Council used BEATS findings to inform the design of the cycle skills training for adolescents. As a result, Dr Mandic led the evaluation of Council's cycle skills training programme in 2015-2017.[13,14]

The Dunedin City Council also used the BEATS mapping data to understand road safety issues around Dunedin city centre cluster of schools and inform pedestrian infrastructure improvements in that area.

BEATS school choice-related findings have informed the Dunedin Secondary Schools' Partnership's policy development regarding school choice in the city of Dunedin.

Schools used BEATS school reports to inform the development of the school-specific health promotion initiatives. In one school, BEATS Research had a positive impact on principal's encouragement of healthy lifestyles.

The BEATS Research findings informed a school uniform policy change to offer an option of trousers in one of the Dunedin's girls-only secondary schools to encourage physical activity and enable girls to cycle to school.[15]

In another school, the BEATS Research findings informed a school policy on mobile phone use in one of the Dunedin's boys-only secondary schools which led to ban of mobile phone use by students at that school.[16]

BEATS Spin-off Project: Cycle Skills Training Research (2015-2017)

South Dunedin Cycling Project provided a cycle skills training programme, a series of activities and events, as well as access to bikes, helmets and safety equipment in Dunedin, New Zealand.
In collaboration with the Dunedin City Council, Dr Mandic designed and led research in 2015-2017 to examine and compare the effects of cycle skills training with or without on-road training on cycling-related knowledge, confidence and behaviours in children and youth.[13,14]

[13] Mandic S, Flaherty C, Pocock T, Kek CC, McArthur S, Ergler C, Chillón P, García Bengoechea E. Effects of cycle skills training on children's cycling-related knowledge, confidence and behaviours. Journal of Transport and Health. 2018; 8:271-282 DOI: https://doi.org/10.1016/j.jth.2017.12.010

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BEATS Research Impact Beyond Academia

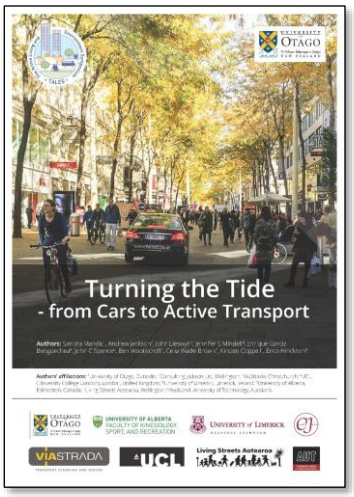
Development of Policy Recommendations for Active Transport in New Zealand

Building on the BEATS Team's work, collaborations and impact, Dr Mandic set up a multidisciplinary and cross-sector working party and led the development of key policy recommendations for increasing active transport in New Zealand[17] in 2019.

The full report "Turning the Tide – from Cars to Active Transport"[18] considered the health and environmental benefits of walking and cycling and defined a clear set of actions to get New Zealanders out of their cars and living healthier lives. This multidisciplinary and cross-sector endeavour[19] was one of the outcomes of The Active Living and Environment Symposium (TALES) 2019.

"Key Policy Recommendations for Active Transport in New Zealand"[17] (brief report)

"Turning the Tide – from Cars to Active Transport"[18] (full report)



Key Policy Recommendations for Increasing Active Transport in New Zealand

(13 recommendations and 39 suggested actions grouped across four broad categories)

A Evaluation, Governance and Funding

- A1. Set and monitor shared targets for the proportion of trips by active modes and public transport
- A2. Ensure that the value of active transport is recognised in policies and investment decisions to allocate the necessary funding for this task
- A3. Continually update the information available on health and economic impacts of specific active transport interventions

B Education and Encouragement/Promotion

- B1. Promote active transport to and from schools
- B2. Promote active transport to and from workplaces
- B3. Make public transport more affordable and accessible
- B4. Improve motorist education

C Engineering (Infrastructure, Built environment)

- C1. Require and fund a universal, interconnected active transport network
- C2. Design and transform towns and cities for people to ensure positive health and environmental outcomes

D Enforcement and Regulation

- D1. Change the decision making framework/planning results (that affect transport options) to enable good health and wellbeing at a population level
- D2. Change regulations to improve road safety for active transport
- D3. Regulate for healthy transport options to and from schools
- D4. Improve and enforce regulations for better air quality

Source: "Turning the Tide – from Cars to Active Transport" Report (2019)[18]

[17] Mandic S, Jackson A, Lieswyn J, Mindell JS, García Bengoechea E, Spence JC, Wooliscroft B, Wade-Brown C, Coppell K, Hinckson E. (2019) Key Policy Recommendations for Active Transport in New Zealand. Dunedin, New Zealand: University of Otago (4 pages) ISBN: 978-0-473-47792-9 (PDF), 978-0-473-47791-2 (softcover) Available online: www.agileresearch.nz/active-living

[18] Mandic S, Jackson A, Lieswyn J, Mindell JS, García Bengoechea E, Spence JC, Wooliscroft B, Wade-Brown C, Coppell K, Hinckson E. (2019) Turning the Tide - from Cars to Active Transport. Dunedin, New Zealand: University of Otago (28 pages) ISBN: 978-0-473-47794-3 (PDF), 978-0-473-47793-6 (softcover) Available online: www.agileresearch.nz/active-living

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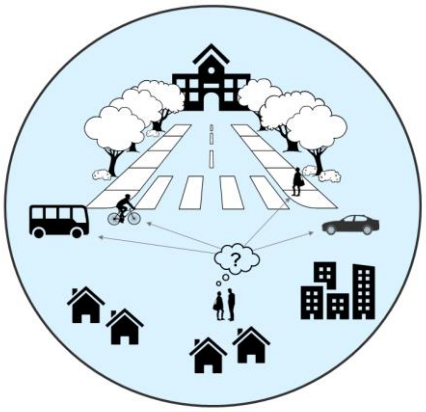
Policy Implications of BEATS Research Findings

Take into account home-to-school distance when designing strategies and evaluating interventions aimed to encourage active transport to school among adolescents.

Minimise adolescents' and their parents' **safety concerns** related to walking and cycling to school.

versus

Use mode-specific approaches. Different interventions and approaches are required for increasing rates of walking versus cycling to school.



versus

Consider the local context. Different interventions are required for supporting active transport to school in various settlement types (e.g., urban versus rural areas).

+

Promote mixed modes of transport to school (i.e., combining walking, riding a bike or riding a scooter with bus or car travel) for adolescents who live beyond walking and cycling distance to their school.

Consider implications of other relevant policies such as **education policies** related to school choice, school uniforms and school bag requirements on how adolescents travel to school.

+

Encourage cross-sector collaborations and **use multi-level intervention** to address barriers and encourage active transport to school.

Encourage and support evaluations of the effectiveness **of active transport-related interventions** in the short-, medium- and long-term.

Support comprehensive health promotion efforts that aim to increase physical activity levels, reduce screen time and improve dietary behaviours for New Zealand adolescents.

Known and Less Known Facts about the BEATS Research Programme

40 published scientific journal articles

NZD $1.5 million in research funding

The BEATS Research Team **won the Research Group Award** for the best research team at the University of Otago in 2019

Achieved **100% school recruitment rate** in the study city – **twice!**

Engaged 4,484 adolescents in research

The programme began with a NZD $5,000 research grant in 2013

Two investigators and three advisory board members were **actively involved from the first to the last day**

Engaged 23 schools

Over the 10-year period, the BEATS Team held **59 meetings of the entire team** with 250 pages of meeting notes

The BEATS Research Team **did <u>not</u> receive 71%** of research funding applied for

The principal investigator Dr Mandic was present in person at **over 90%** of data collection days

BEATS scientific journal articles were **rejected 25 times**

In 2018, **ten** BEATS research grant **applications in a row were unsuccessful** and the team had to let go over dozen trained research assistants and volunteers

The BEATS spin-off project "Catalyst" **never received funding** to proceed

The BEATS Research Programme and the team were restructured in early 2021 in response to COVID-19

For the last three years, Dr Mandic led and managed the BEATS Research Programme remotely (after changing academic institutions and moving from the study city in late 2020)

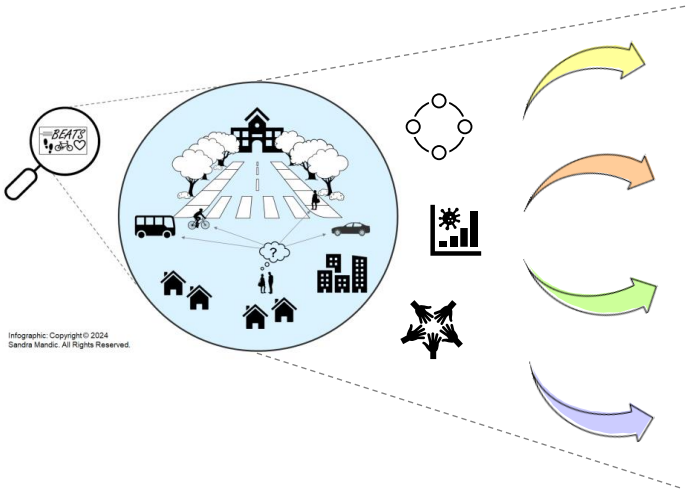
When the BEATS future became uncertain in 2020, Dr Mandic wrote a book "Connecting People, Disciplines and Worlds" for the BEATS Team with BEATS stories and memories from the 2013-2020 period

For the last two years, Dr Mandic led the BEATS Research Programme to completion on top of her full-time work outside academia

What is Next?

BEATS Research Programme
(2013 – 2023)

New relevant initiatives after BEATS
(2021 – present)



AGILE Research Ltd.
Research consultancy
founded by Dr Sandra Mandic

Compass Guide Research Training
Created by Dr Sandra Mandic

New research using BEATS data
"Green Space Equity and Youth Wellbeing in Aotearoa New Zealand" led by Prof Melody Smith (2023-2025)

Dr Mandic joined **the Transport Strategy Team at Wellington City Council** (Wellington, New Zealand)

Compass Guide Research Training Resources

By AGILE Research Ltd. (Created by Dr Sandra Mandic)

Designed to help teams and individuals navigate the research process and to successfully plan and manage their research projects

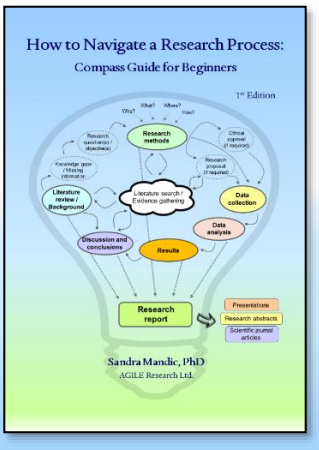
Compass Guide Books

Compass Guide workshops and courses

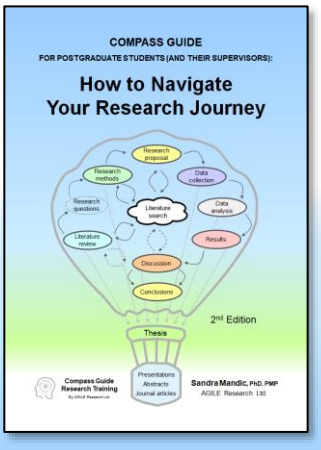
AGILE Research YouTube Channel

How to Navigate the Research Process

Compass Guide for Beginners

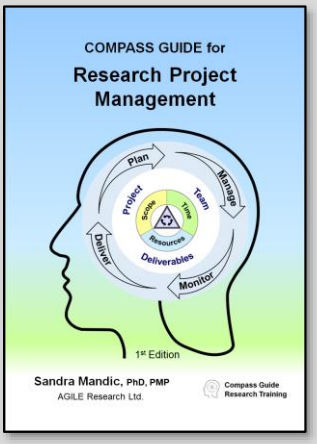


Compass Guide for Postgraduate Students (and Their Supervisors)



How to Plan and Manage Research Projects

Compass Guide for Research Project Management



For details, check out the AGILE Research Ltd. website:
www.agileresearch.nz

Acknowledgments

A massive thank-you to all incredible team members who joined us on the epic 10+ year BEATS Research journey for a phenomenal teamwork, perseverance through multiple challenges, learning together and from each other and all laughter and positive energy shared along the way. The BEATS Team members were part of a unique research experience with extensive knowledge sharing across disciplines, sectors and cultures, impressive teamwork, many lifelong memories and friendships and thousands of photos.

The BEATS Team acknowledges the great support of all research funders and the contribution of all team members: investigators, collaborators, advisory board members, research personnel (research assistants, students and volunteers), all participating schools, adolescents, parents, teachers and school principals and many others who supported us on the 10-year BEATS Research journey. We enjoyed working together to advance the scientific knowledge, and lead the way in interdisciplinary and cross-sector research collaborations.

BEATS Research Programme funding:

Health Research Council of New Zealand
AUT
University of Otago
Heart Foundation
Dunedin City Council
Lottery Grants Board
Otago Energy

A Note from the Founder and the Principal Investigator

"For me personally, the BEATS Research Programme has been by far the most rewarding, exciting and challenging professional endeavour that I have ever been part of – and in this case the one I had a vision for, founded, nurtured, grew, managed and led – from the first to the last day. The Compass Guide books linking research and project management that I have published since 2021 are part of my attempts to share some of many learnings from the BEATS Research journey to help others set up and lead their research endeavours. I am sure the insights from BEATS will continue trickling through my current and future professional activities for many years to come. The BEATS Research Programme and the BEATS Team members will always have a special place in my heart – so many incredible insights, memories and friendships to be cherished for a lifetime!"

Dr Sandra Mandic, PhD, PMP

The BEATS Research Programme officially closed on 30 September 2023

For all queries about the BEATS Research Programme and publications, **contact Dr Sandra Mandic** at agile.research.nz@gmail.com

BEATS Research Programme web page:
www.agileresearch.nz/beats

To receive future updates about BEATS Research publications, subscribe to the **AGILE Research Ltd. newsletter**