

Likely Benefits of Bilingual Traffic Signs in Aotearoa/New Zealand

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Summary

“Ko te reo te mauri o te mana Māori” – Tā Hemi Henare.

The language is the life force of the mana Māori – Sir James Henare.

Waka Kotahi is committed to its obligations under Te Ture mō Te Reo Māori 2016 (Māori Language Act 2016)—as part of this commitment to Kia māhorahora te reo, design and implementation options for bilingual traffic signage (BTS) are being explored by a multidisciplinary team.

A variety of concerns are commonly raised when the prospect of BTS becomes known, namely cost and safety. Both can be managed, the latter successfully managed with good sign design practices. Ultimately, in jurisdictions where BTS have been implemented post hoc assessment found no evidence of worsening deaths or serious injuries. Instead, there is evidence of a variety of benefits which are likely to accrue from BTS.

Benefits likely to accrue from bilingual traffic signs are:

- Safety enhancement
- Tourism promotion
- Language protection
- Cultural enhancement
- Enhanced social/societal cohesion.

Additionally, benefits can be anticipated for te reo Māori uptake, the experiences of Māori—in particular Māori who have been alienated from their heritage—and for wider society and commerce. The (non-exhaustive) evidence base for these benefits is briefly discussed below.

Introduction

Bilingual traffic signage (BTS) is commonplace internationally, in some cases implemented to improve safety outcomes, due to commercial or trade drivers, or to either protect or enhance indigenous languages. Waka Kotahi is committed to its obligations under Te Ture mō Te Reo Māori 2016 (Māori Language Act 2016), which created a partnership for the revitalisation of Te Reo Māori between the Crown and Iwi/ Māori. Te Reo Rangatira contributes to Maihi Karauna, the Crown's strategy for Māori language revitalisation for 2018–2023. This envisions Kia māhorahora te reo—*everywhere, every way, for everyone, every day*—a strong, healthy, and thriving Māori language. Indeed, according to Te Ture mō Te Reo Māori 2016 (Māori Language Act 2016) both te reo Māori and English are of equal authority. As part of Waka Kotahi's commitment to Kia māhorahora te reo, design and implementation options for BTS are being explored by a multidisciplinary team.

Notwithstanding the widespread use of BTS internationally (described as 'standard' in the European Union¹), a variety of concerns are commonly raised when their prospect becomes common knowledge. These are commonly safety, then cost concerns. Although some complainants are ideologically driven, for the majority these concerns are likely to be legitimate. However, as was reported in O'Donnell and Trotter (2021)², cost can be managed through variety of means (e.g., phased implementation in line with existing maintenance requirements), and safety issues can be successfully managed with good sign design practices. BTS can be safe, as evidenced in international cases where BTS resulted in no worsening of deaths or serious injuries (e.g., Scotland³).

While the safety or cost case against BTS can be successfully resolved through budgeting and good design, in support of BTS a range of benefits accrue where BTS are implemented. The evidence for these benefits is outlined below.

Benefits

Safety enhancement

There have in the past been fears that implementation of BTS would reduce safety for road users. However, post hoc evidence from Scotland revealed no worsening of DSIs as a result⁴. Expert opinion given to Waka Kotahi during consultation with the Welsh Government likewise revealed no worsening of DSIs in that jurisdiction. Per O'Donnell and Trotter (2021)³, the defining factors are good design (e.g., managed complexity, consistent signage grammar, adequate language differentiation, accurate language translation).

In contrast, BTS have been implemented to improve safety on transport networks. In parts of Britain, bilingual signage has been used to improve safety outcomes at specific locations for groups at risk of injury. For example, railway station *warning signs* in West London have used English–Punjabi text; in Cheshire County, highway engineers advocated for English–Polish text on *warning signage* around road construction works⁴. In Japan, English-language text was incorporated into *warning* and *regulatory signage*, including *stop-signs* and *give-way signs*, in response to the high and increasing number of traffic accidents involving people from foreign countries⁵. Outside the

¹ EFHR. (2014). Bilingual signboards are standard in the European Union. European Foundation of Human Rights. Retrieved from <https://en.efhr.eu/2014/05/29/bilingual-signboards-standard-european-union/>

² O'Donnell & Trotter, 2021: <https://www.nzta.govt.nz/resources/research/notes/005>

³ Kinnear, N., Helman, S., Buttress, S., Smith, L., Walter, L., & Sexton, B. (2012). Analyses of the effects of bilingual signs on road safety in Scotland (No. PPR589). Retrieved from <https://trl.co.uk/uploads/trl/documents/PPR589.pdf>

⁴ Merriman, P., & Jones, R. (2009). 'Symbols of Justice': the Welsh Language Society's campaign for bilingual road signs in Wales, 1967–1980. *Journal of Historical Geography*, 35, 350–375.

⁵ Butler, N. (2016, 22 December). Japan considering bilingual road signs to improve traffic safety ahead of Tokyo 2020. *Inside the Games*. Retrieved from <https://www.insidethegames.biz/articles/1045106/japan-considering-bilingual-road-signs-to-improve-traffic-safety-ahead-of-tokyo-2020>

transport space, the use of indigenous languages on health communication has resulted in greater interest or attention to said messaging among indigenous people⁶, with consequent health benefits.

In regions of Aotearoa/New Zealand where people of Māori descent are overrepresented in vehicle crash statistics, or where they represent a large proportion of the local population, BTS may impart benefits in terms of reducing harm on our road network. This additional safety factor may arise due to cultural relevance. Warnings given in an indigenous language are likely to garner greater attention and subsequently impart greater influence on behaviour among indigenous people for whom messages carry more meaning.

Tourism promotion

Generally, the use of te reo Māori language during tourism service delivery enhances tourist experiences and has the potential to assist language revitalisation⁷. Bilingual signs that feature an indigenous language are viewed as beneficial for the purpose of tourist experience enhancement^{8,9,10}. In Wales, in the lead up to normalising Cymraeg or y Gymraeg (commonly called Welsh) in public spaces, local tourism authorities were apolitical, but vocal in their support due to the perceived benefits for tourist experiences¹¹. (e.g., *'When visitors come to Caernarfon and come here [to Wales] they feel like they are really on holiday in Wales'*⁸. The visible presence of te reo Māori therefore becomes a point of differentiation for Aotearoa/New Zealand which imparts additional value for visitors who seek out a 'local experience'.

Language protection

See cultural enhancement.

Cultural enhancement

In the case of Aotearoa/New Zealand, language protection and cultural enhancement are closely interrelated. Te Ture mō Te Reo Māori 2016 (Māori Language Act 2016) affirmed te reo Māori as an official language and a taonga of iwi. Revitalisation of te reo Māori is enshrined in law, in recognition of its national value. Likewise, the Treaty of Waitangi enjoins the Crown and its entities to afford all the ordinary people of Aotearoa/New Zealand protection, as well as the same rights and duties. Historically, in the realm of culture, Māori have not received the same protections as all ordinary people of Aotearoa/New Zealand, with the Māori language suppressed in the past¹². The United Nations Educational, Scientific and Cultural Organization (UNESCO) now officially classifies te reo Māori as 'vulnerable'¹³ and a report from Te Puni Kōkiri, the Ministry of Māori Development, said Māori language rates were declining¹⁴. The Social Report 2016: Te pūrongo ora tangata

⁶ Haimovich, G. & Mora, H. M. (June 9, 2020). Why it's important to use indigenous languages in health communication. Language on the Move. Retrieved from <https://www.languageonthemove.com/why-its-important-to-use-indigenous-languages-in-health-communication/>

⁷ Fang, Y. (2019). Kia Ora': Cultural Tourism, Language Revitalisation & 'Te Reo Māori (Doctoral dissertation, Auckland University of Technology). Retrieved from <https://openrepository.aut.ac.nz/bitstream/handle/10292/12586/FangY2.pdf?sequence=3&isAllowed=y>

⁸ Hughes, O. (2017, April 12). Using Welsh language makes business sense and cash for North Wales firms. North Wales Live. Retrieved from <https://www.dailypost.co.uk/business/business-news/using-welsh-language-makes-business-12882412>

⁹ Kendrick, S. (2021, December 9). Brown tourist signage on the A55 to promote Vale of Clwyd. Rhyl, Prestatyn & Abergele Journal. Retrieved from <https://www.rhyljournal.co.uk/news/19770582.brown-tourist-signage-a55-promote-vale-clwyd/>

¹⁰ Yan, L., & Lee, M. Y. (2014). Tourist perceptions of the multi-linguistic landscape in Macau. Journal of China Tourism Research, 10(4), 432-447.

¹¹ Derived during consultation on O'Donnell & Trotter, 2021: <https://www.nzta.govt.nz/resources/research/notes/005>

¹² De Bres, J. (2011). Promoting the Māori language to non-Māori: Evaluating the New Zealand government's approach. Language Policy, 10(4), 361-376.

Keegan, T. T. A. G., & Cunliffe, D. (2014). Young people, technology and the future of te reo Māori. In R. Higgins, P. Rewi, & V. Olsen-Reeder (Eds.), The value of the Māori language: Te hua o te reo Māori (vol. 2, pp. 385-398). Huia.

¹³ Moseley, C. (ed.). (2010). Atlas of the world's languages in danger. Retrieved from <http://www.unesco.org/languages-atlas/index.php>

¹⁴ Te Puni Kōkiri. (2006). The health of the Māori language in Te Tairāwhiti and Takitimu 2006: Māori language knowledge and proficiency in Te Tairāwhiti and Takitimu. Retrieved from <https://www.tpk.govt.nz/en/a-matou-mohiotanga/language/the-health-of-the-maori-language-in-te-tairawhiti2/online/5>

observed a continuing decline from 2006 in spoken te reo Māori¹⁵. Accordingly, Manatū Taonga, the Ministry for Culture and Heritage, has identified te reo Māori capability as one of three key measures of whether Māori cultural aspirations are being achieved¹⁶.

In this context, the impetus behind the call for bilingual Māori–English traffic signage can be considered both cultural protection for a vulnerable language and cultural aspiration, or a desire to foster a vibrant and connected culture. BTS has the potential to expose a broad spectrum of New Zealanders to te reo Māori. Further, BTS is likely to promote cultural awareness among indigenous Māori youth who otherwise may not be deeply exposed to their heritage¹⁷. A seminal piece of research on the impact of public visibility on speakers' perceptions of a minority language's status and usage was conducted by Landry and Bourhis (1997), finding that the presence of indigenous languages in media including signage has a 'carryover effect' such that exposure tends to increase language uptake. In a public survey in Scotland, respondents believed that more widespread use of Scottish Gaelic on traffic signs would encourage greater usage of Gaelic¹⁸. Language revitalisation is a complex process, impacted by the prevalence of English-language media. Nonetheless, BTS offer a substantial means for assisting language revitalisation.

Enhanced social/societal cohesion

A consequence of more bilingual signage featuring te reo Māori is enhanced visibility, firstly among people who witness the signage first-hand, and then secondary contact, through a socialisation process. Increasing normalisation facilitated by BTS is likely to have significant, ongoing benefits in terms of reducing social conflict, as the culture of the 'other' becomes familiar and therefore less threatening. Research in cross-cultural psychology (among people located in New Zealand, the United Kingdom, and the United States) has provided evidence of reduced perceived threat, increased intergroup trust, and greater sense of national attachment where initiatives like BTS (i.e., multicultural policies and practices) are present^{19,20,21}. Notably, a national survey conducted in New Zealand found that among the majority of Pakeha, multicultural policies and practices in the workplace resulted in reduced perceived threat and increased intergroup trust despite respondents not directly benefiting from such policies and practices. Although there may be concerns regarding BTS which can be addressed, the majority of people in Aotearoa/New Zealand are likely to support BTS if designed and implemented well. Further, initiatives like BTS are likely to improve intergroup trust, and enhance national attachment among people in Aotearoa/New Zealand.

¹⁵ NZ Ministry of Social Development (2016). The Social Report 2016: Te pūrongo oranga tangata. Retrieved from <https://socialreport.msd.govt.nz/documents/2016/msd-the-social-report-2016.pdf>

¹⁶ Manatū Taonga. (2017). Supporting Māori cultural aspirations – Te tautoko o ngā hiahia ahurea a Māori. Retrieved from <https://mch.govt.nz/annual-report-2016/supporting-maori-cultural-aspirations>

¹⁷ Johnson, W. (2013, 11 January). Bilingual signage project promotes cultural awareness. *Pine Journal*. Retrieved from <https://www.pinejournal.com/news/bilingual-signage-project-promotes-cultural-awareness>

¹⁸ West, C., & Graham, A. (2011). Attitudes towards the Gaelic language. Scottish Government. Retrieved from <https://www.gaidhlig.scot/wp-content/uploads/2016/12/West-Graham-2011-Beachd-a-phobail-CR11-01-Public-attitudes.pdf>

¹⁹ O'Donnell, K. (2022). Normative Multiculturalism in Organisations: Scale Development, Validation, and Organisational Outcomes [Unpublished masters thesis]. Victoria University of Wellington.

²⁰ Stuart, J., & Ward, C. (2019). Exploring everyday experiences of cultural diversity: The construction, validation, and application of the normative multiculturalism scale. *European Journal of Social Psychology*, 49(2), 313-332.

²¹ Watters, S. M., Ward, C., & Stuart, J. (2020). Does normative multiculturalism foster or threaten social cohesion?. *International Journal of Intercultural Relations*, 75, 82-94.