

Valuing public transport

The role of walkability and social and demographic composition



**Insightful solutions.
Empowering advice.**

Assessing the value of public transport as a network
May 2017

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NZ Transport Agency research report 616
Contracted research organisation – Abley Transportation Consultants Limited,
Christchurch

Assessing the value of public transport as a network

NZ Transport Agency Research Report 616
Robyn Hyde and Dave Smith

<https://www.nzta.govt.nz/assets/resources/616/RR-616-Assessing-the-value-of-public-transport-as-a-network.pdf>

Presentation overview

- Research context
- First-mile, last-mile
- Socio-demographics
- Summary/ Enhancements

The diagram features two large, stylized arrows. On the left, a large blue arrow points to the left and contains the text 'Farebox recovery'. On the right, a large green arrow points to the right and contains the text 'Meeting community needs'. A white line connects the two arrows, starting from the right side of the blue arrow and ending at the left side of the green arrow. This line has a small, rounded rectangular tab that overlaps the green arrow, suggesting a connection or flow between the two concepts.

Farebox
recovery

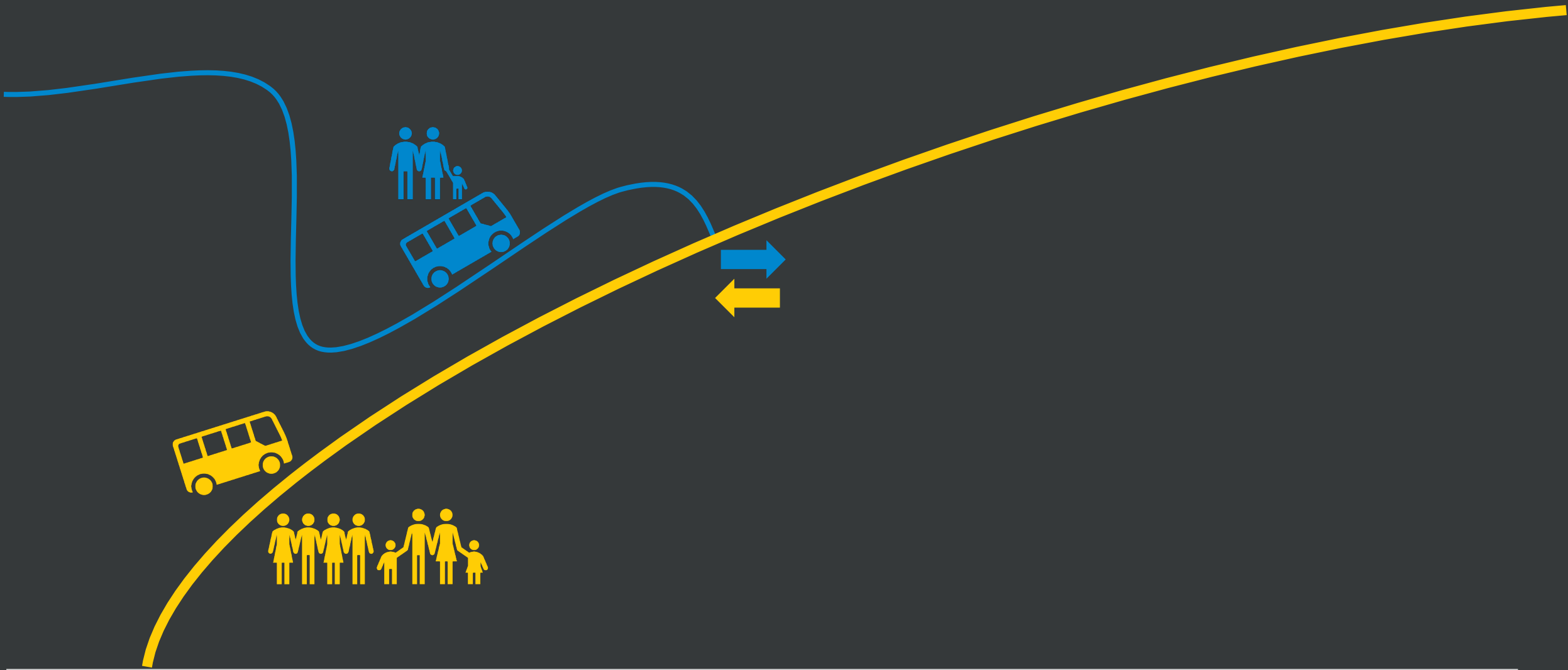
Meeting
community needs

Context

First-mile

Demographics

Enhancements



PT, even on low volume routes, is important ...



Option values (choice, resilience)



Environment



Health



Mobility and access to services/ employment

- **What impact would removing your local bus service have on you personally?**
- **What current issues do you have?**

Canberra Number 3 Bus Route Removal

BRIEFING NOTE: NUMBER 3 BUS ROUTE

- Students rely on PT for running basic errands
- Access to medical care, especially for those with disability or chronic illness
- Sexual assault and harassment concerns
- 30min walk required for people connecting from other town centres



PARSA
ANU postgraduate &
research students'
association

<https://parsa.anu.edu.au/pageassets/advocacy/campaigns/transport/number3/PARSA-Number-3-Bus-Briefing-Note.pdf>

Sydney Route 389 Bus Stop Removal

- 2x major roads to be crossed
- “I suffer from emphysema so I get puffed out really easily”
- Wendy would find it difficult to use the bus, which she uses to transport heavy bags of pottery

<https://www.dailytelegraph.com.au/newslocal/wentworth-courier/concerns-over-flagged-removal-of-bus-stops-flagged-on-sydneys-most-complained-about-route/news-story/475542984df5adf7da2ad3f3d2e1d7e3>



**Assessment
framework
developed that
considers
wider value**

Context

First mile

Demographics

Enhancements



**Accessibility
Evaluation**



**Social/ Demographic
Evaluation**



Walking and PT
go hand-in-hand

 **able**

The unavailability of transport for the first-mile/ last-mile is a key deterrent to public transport, in particular, for the group known as the ‘transport disadvantaged’.

Accessibility Evaluation



- # households not within 800m
- gradient
- pedestrian environment

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Social/Demographic Evaluation



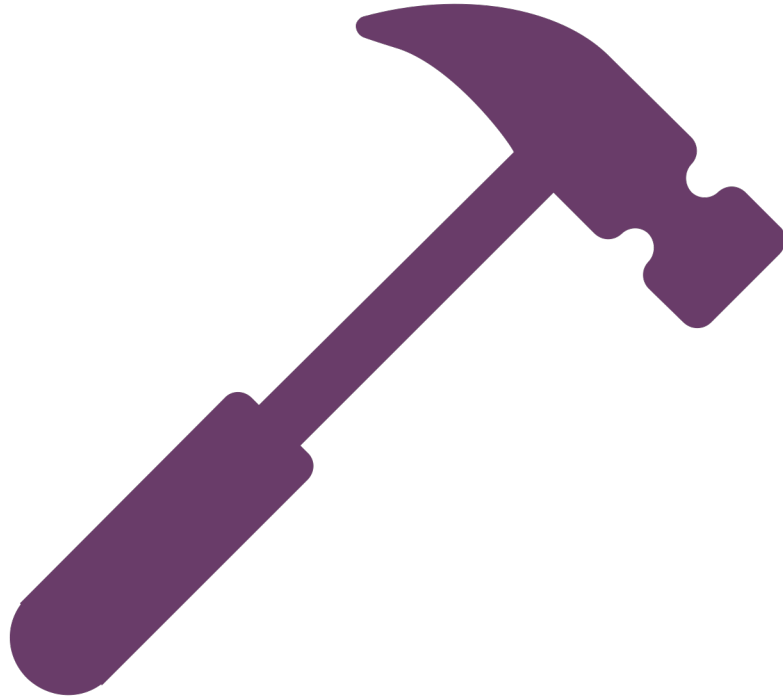
- # households in catchment
- deprivation score
- household income
- vehicles per HH
- % less than 20yrs or 65+

Assessment framework developed that considers wider value

Context	First mile	Demographics	Enhancements
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		Level of Impact		
Social/Demographic Evaluation		Low	Medium	High
	# Households in 10 min walk catchment			
	Median Deprivation Score	1-3	4-7	8-10
	Median Household Income	\$90,001 +	\$60 - \$90,000	\$0 - \$59,999
	Average number of Vehicles per HH	2+	1-2	0-1
	Age profiles of affected (% of Less than 20 yrs and 65+)	< 25%	26-49%	50% +
		Level of Impact		
Accessibility Evaluation		Low	Medium	High
	# of households > 800m from similar PT service	< 50 HH	< 200 HH	200+ HH
	Gradient	<7%	7-8%	>8%
	Pedestrian Environment	Above average	Average	Below average

Enhancements



- Pedestrian LOS measures
- Mobility/visual/cognitive impairment data
- Richer local datasets

Kia ora!

And for any more questions...

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