



# Value of Transport and Freight

David Shepherd



# David Shepherd

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# NZ context





# Nobody Lives Here

■ Parts of New Zealand with no inhabitants living per one square kilometre

(78.21% of New Zealand's total area)



Map by Andrew Douglas-Clifford  
andrewdc.co.nz



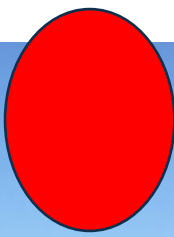


# Wellington – Capital City





**Nobody lives here**





## 30 year challenges

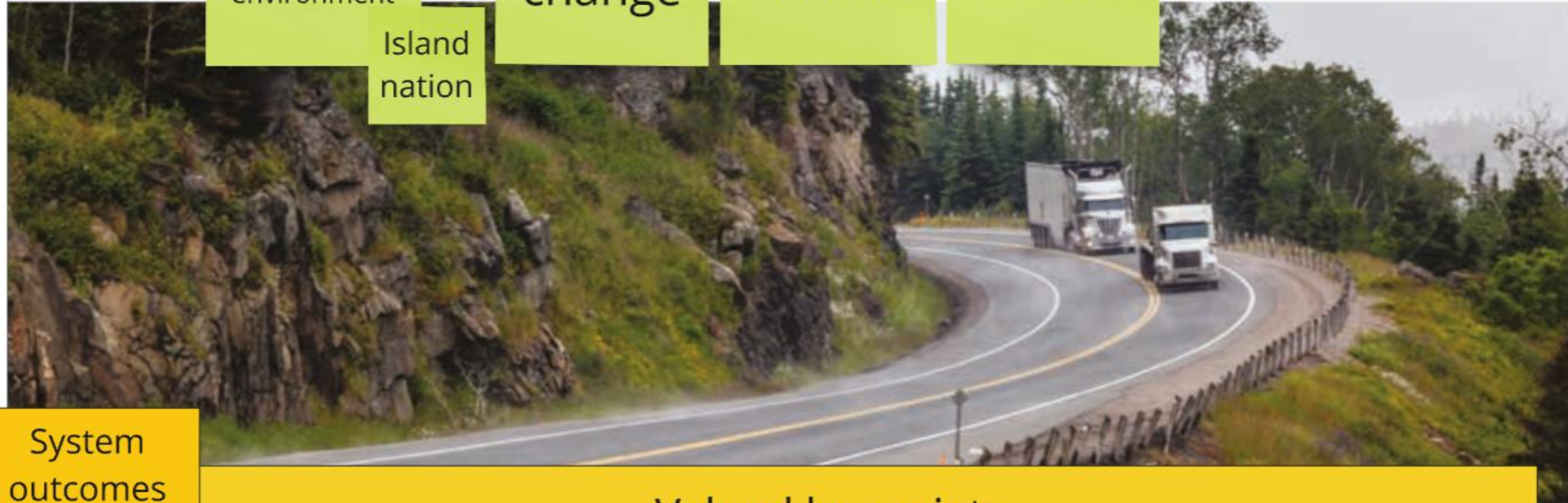
Complex  
geopolitical  
environment

Island  
nation

Climate  
change

large  
distances

Increasing  
urbanisation



System  
outcomes

## Valued by society

productivity  
and  
efficiency

Data

resilience

Safety and  
sustainability

safety

Limited  
Backloads /  
low  
margins

Levels of  
service

Freight  
priority

cost of freight  
on  
infrastructure

Support  
innovation

Urban  
freight



# Value of Transport

Enhancing New Zealand's economy through efficient transport systems

**Objective:** To establish a framework to value the contribution of transport to New Zealand's economy, focusing on the movement of people and goods. This framework will enable investment prioritisation to maximise value given available funds.

# Value of Transport

## Enhancing New Zealand's economy through efficient transport systems

**Objective:** To establish a framework to value the contribution of transport to New Zealand's economy, focusing on the movement of people and goods. This framework will enable investment prioritisation to maximise value given available funds.

The aim is to help enable 'national deliverables' to be assessed/prioritised for investment such as:

- Route protection for strategic freight routes,
- Priority freight lanes,
- Local roads contribution,
- Investment into Public Transport

# Value of Transport – My ask of you

At the end of this presentation, please can I ask that you fill out a quick survey that asks:

A) **your opinions** on how macro-economic impacts might be better used for decision making and in public discourse; and

B) **information or guidance** on the current processes and approach used in your country.

Survey link:

<https://forms.office.com/r/z11zwnBcKE>

## PIARC - TC 2.3 Sustainable Freight - Value of Transport survey

Looking to establish a framework that values the contribution of transport to the macro economy and how this will enable investment decision making to optimise national value.

Please would you fill in this form to help the PIARC TC 2.3 Sustainable Freight coordinator collate: A) **your opinions** on how macro-economic impacts might be better used for decision making and in public discourse; and B) **information or guidance** on the current processes and approach used in your country.

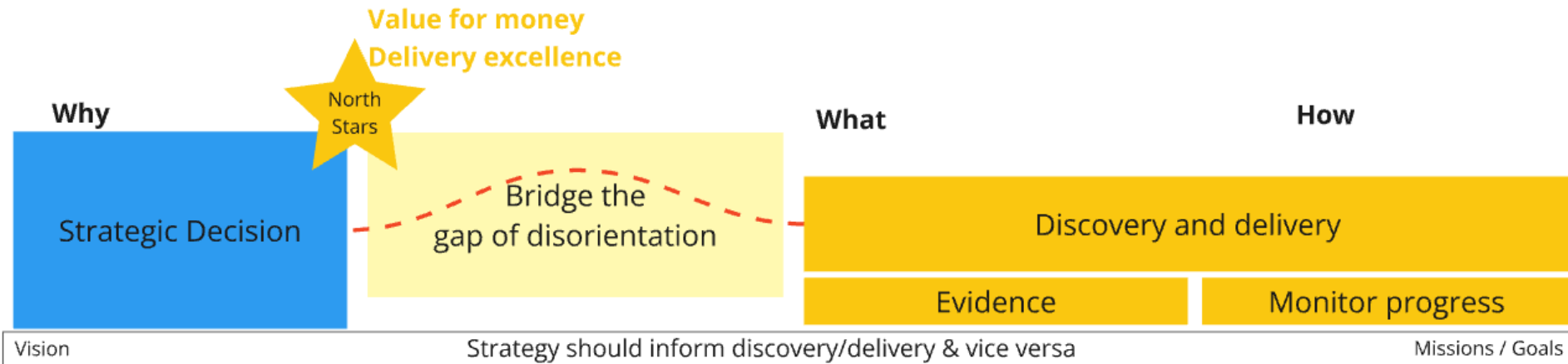
1. Your name:

Enter your answer



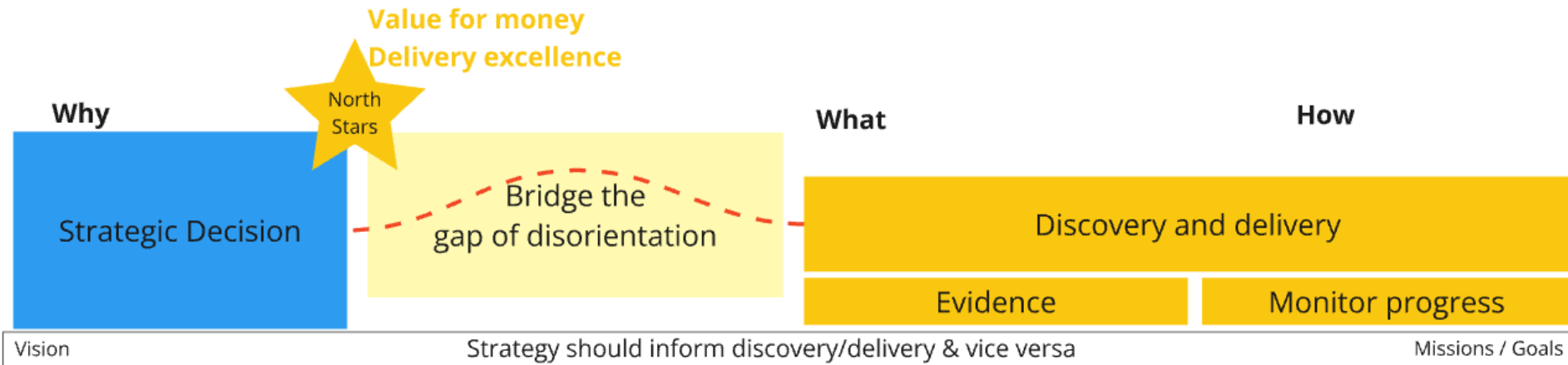
# Value of Transport

Enhancing New Zealand's economy through efficient transport systems



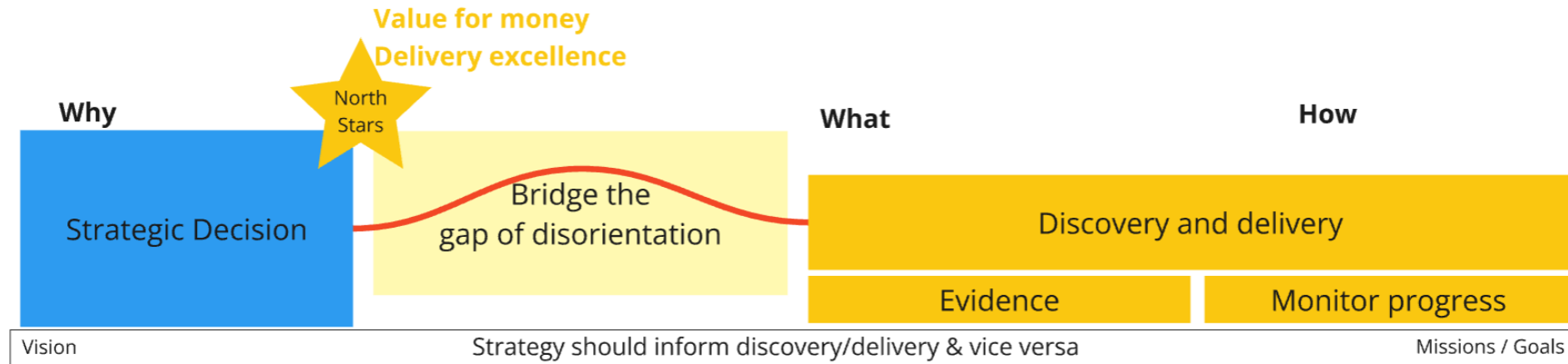
# Value of Transport

Enhancing New Zealand's economy through efficient transport systems



# Value of Transport

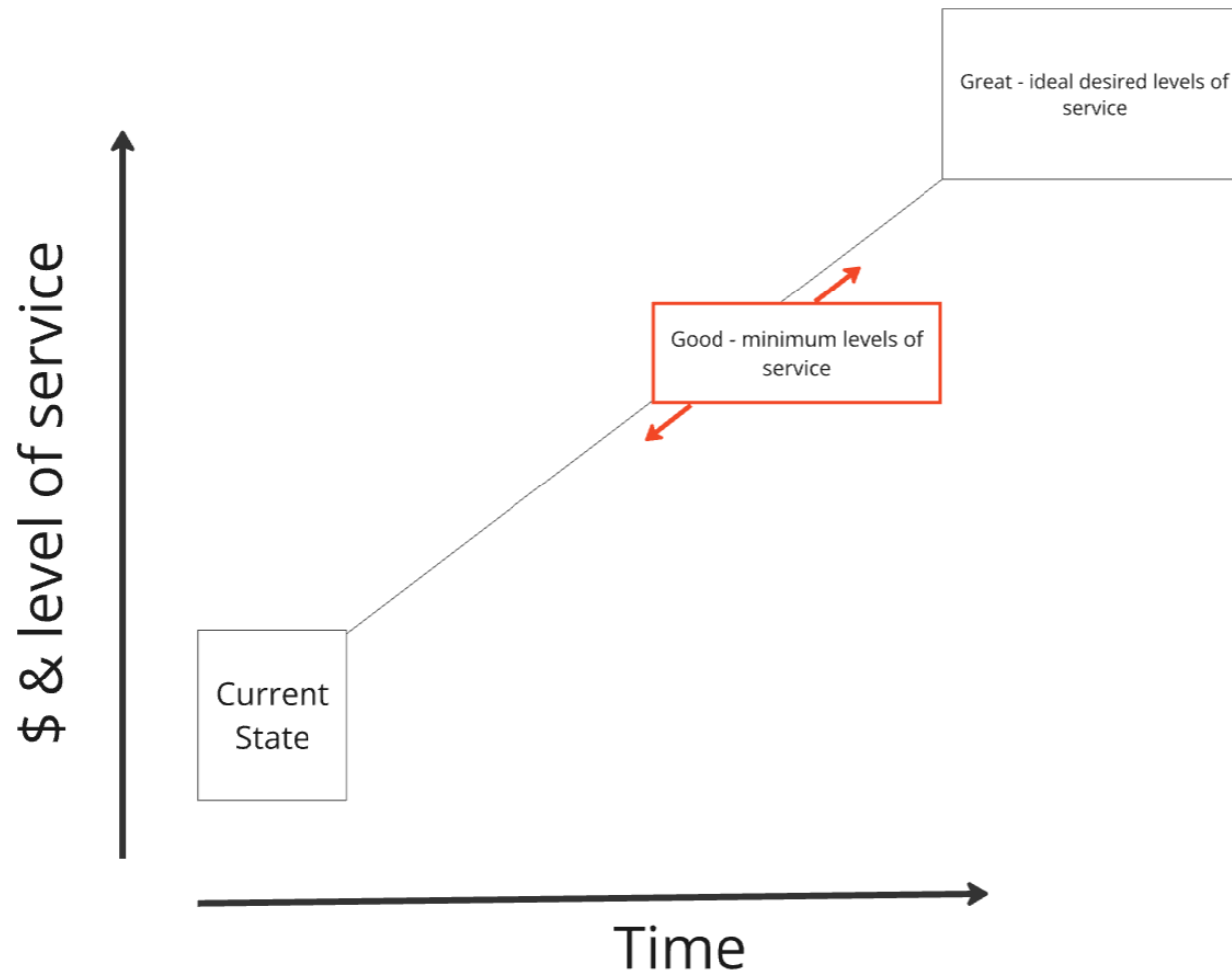
Enhancing New Zealand's economy through efficient transport systems





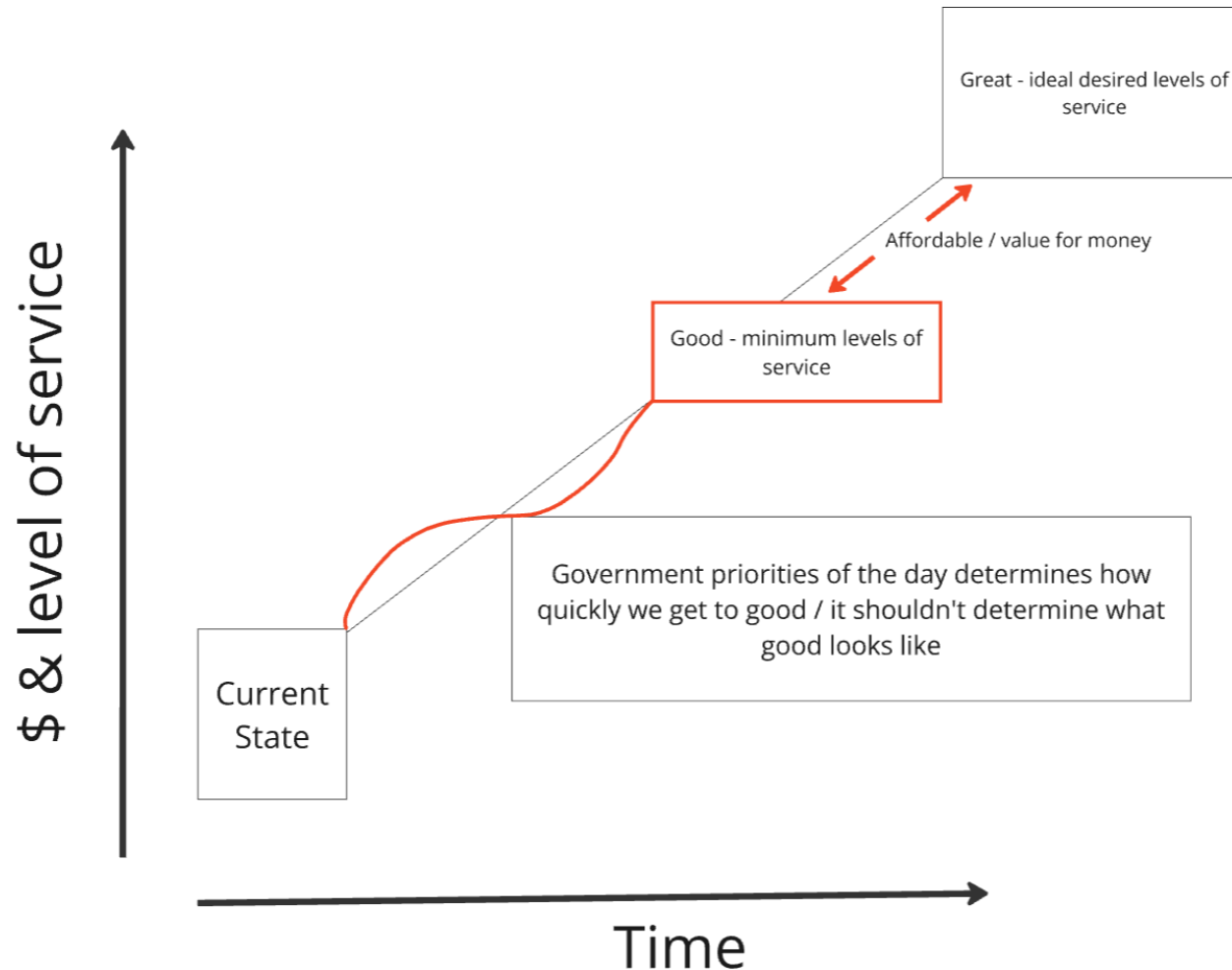
**What value does the current state deliver and what is the benefit/cost to achieve the minimum level of service that NZ Transport Agency is prepared to invest in**

Enhancing New Zealand's economy through efficient transport systems

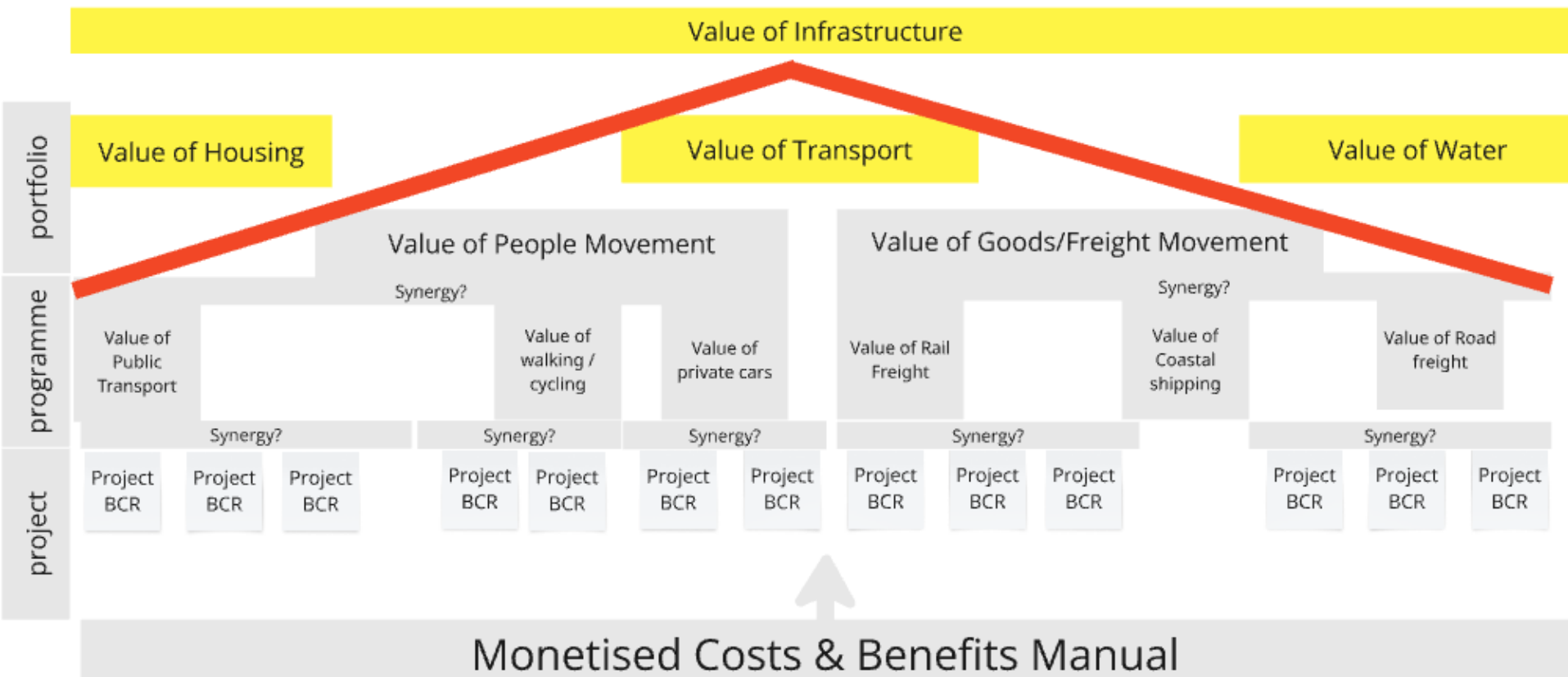


**What value does the current state deliver and what is the benefit/cost to achieve the minimum level of service that NZ Transport Agency is prepared to invest in**

Enhancing New Zealand's economy through efficient transport systems

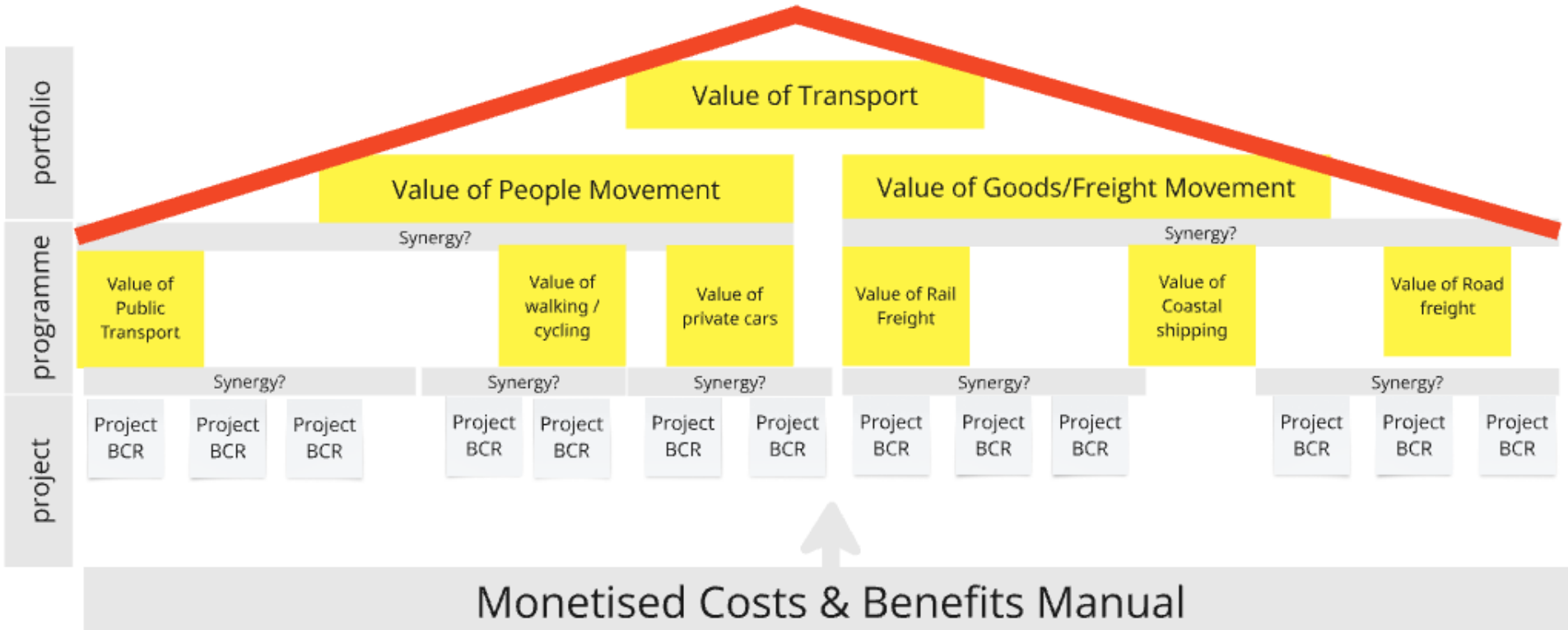


# Value of Transport built on MCBM



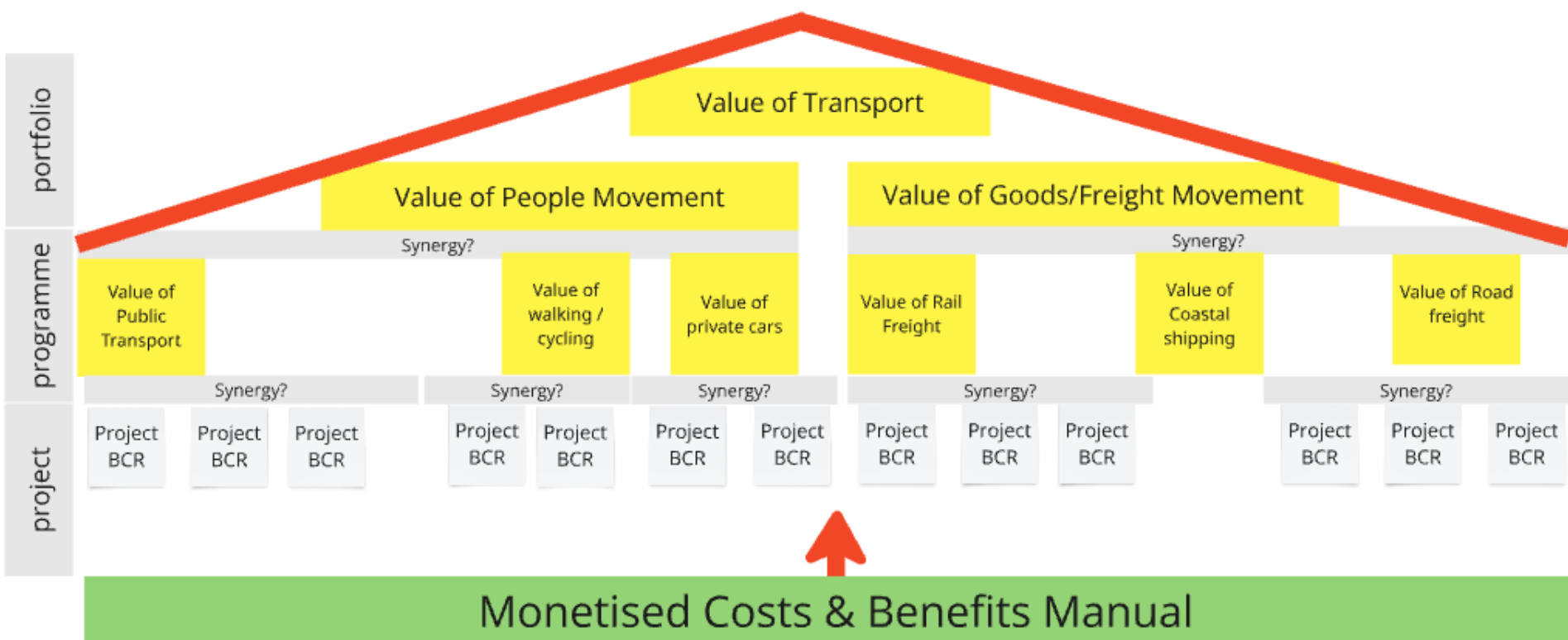


# Value of Transport built on MCBM

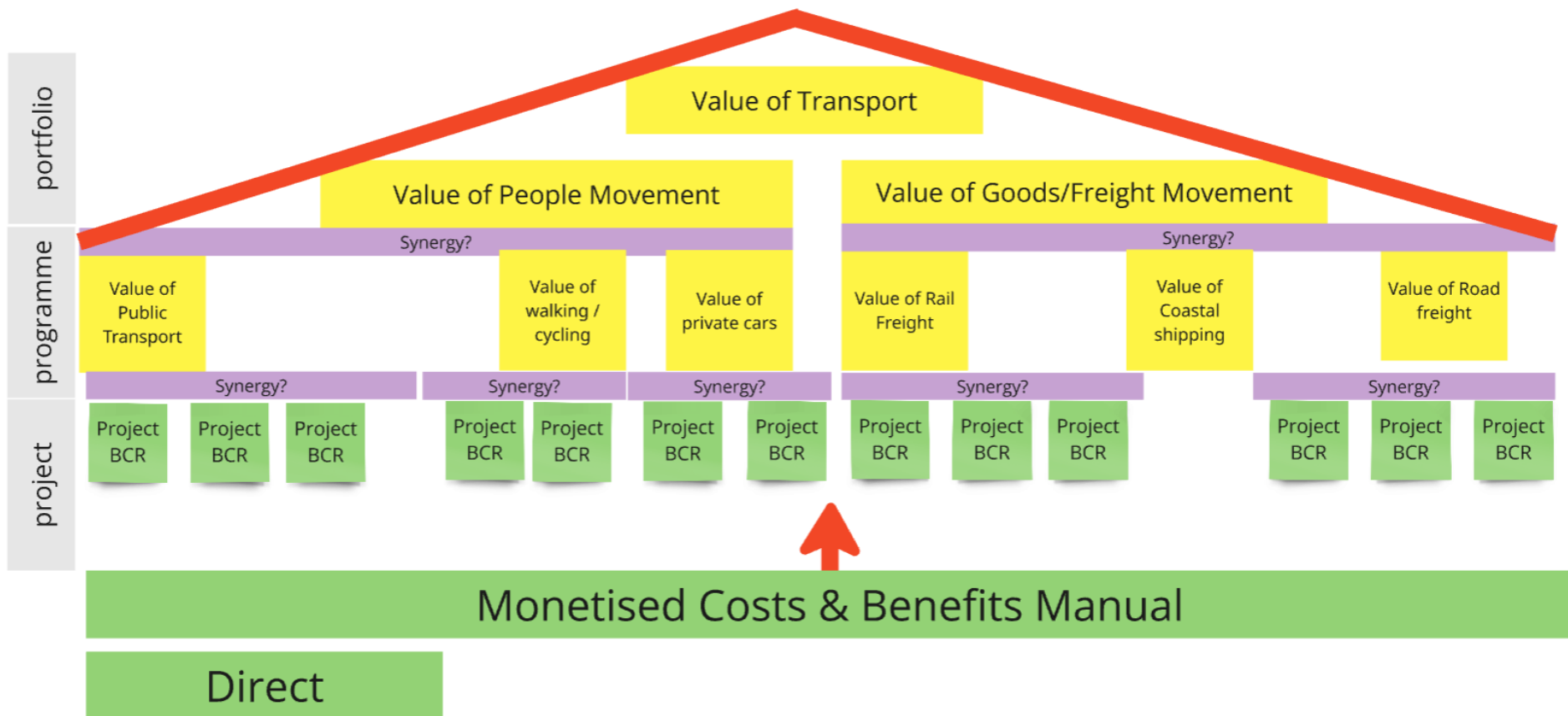


# Value of Transport built on MCBM

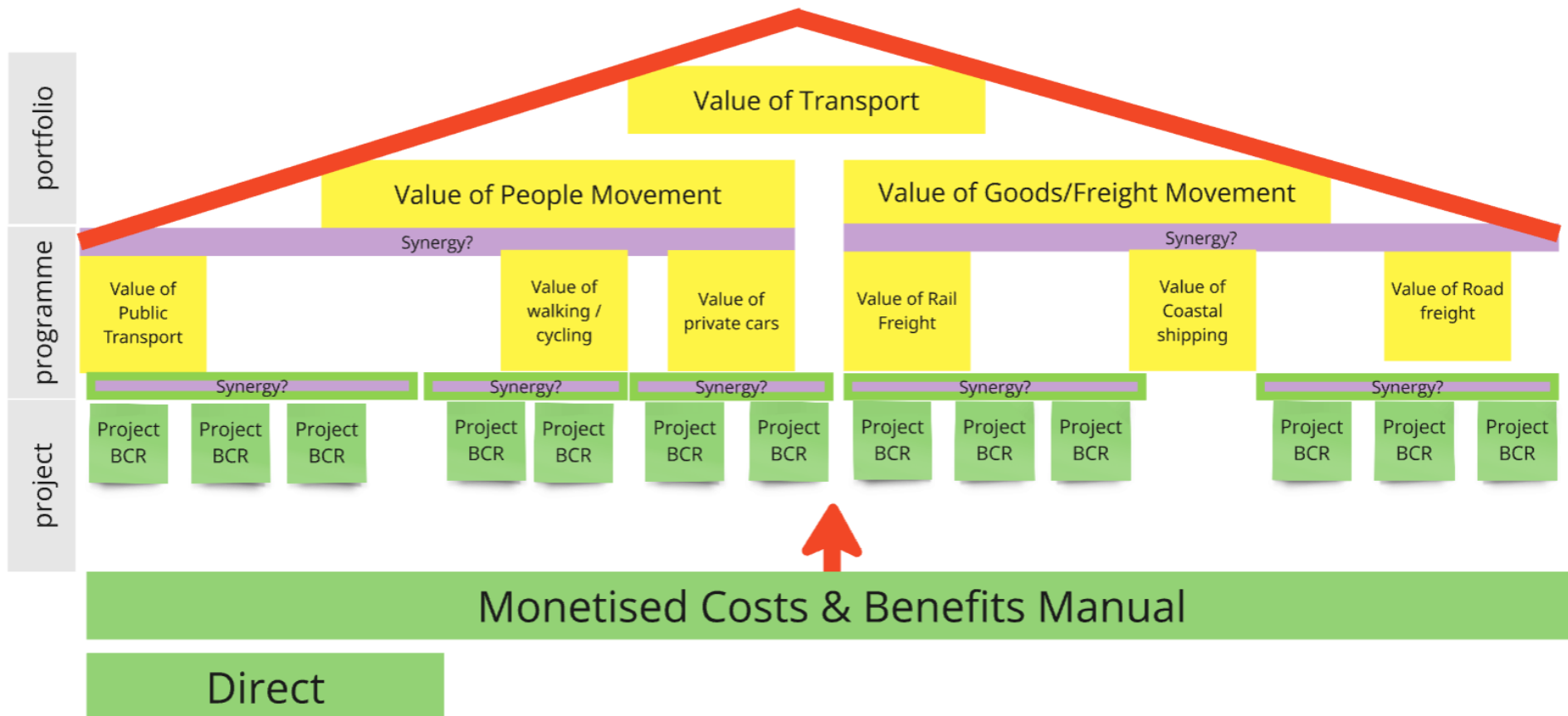
[Monetised benefits and costs manual](#) | NZ Transport Agency Waka Kotahi



# Value of Transport

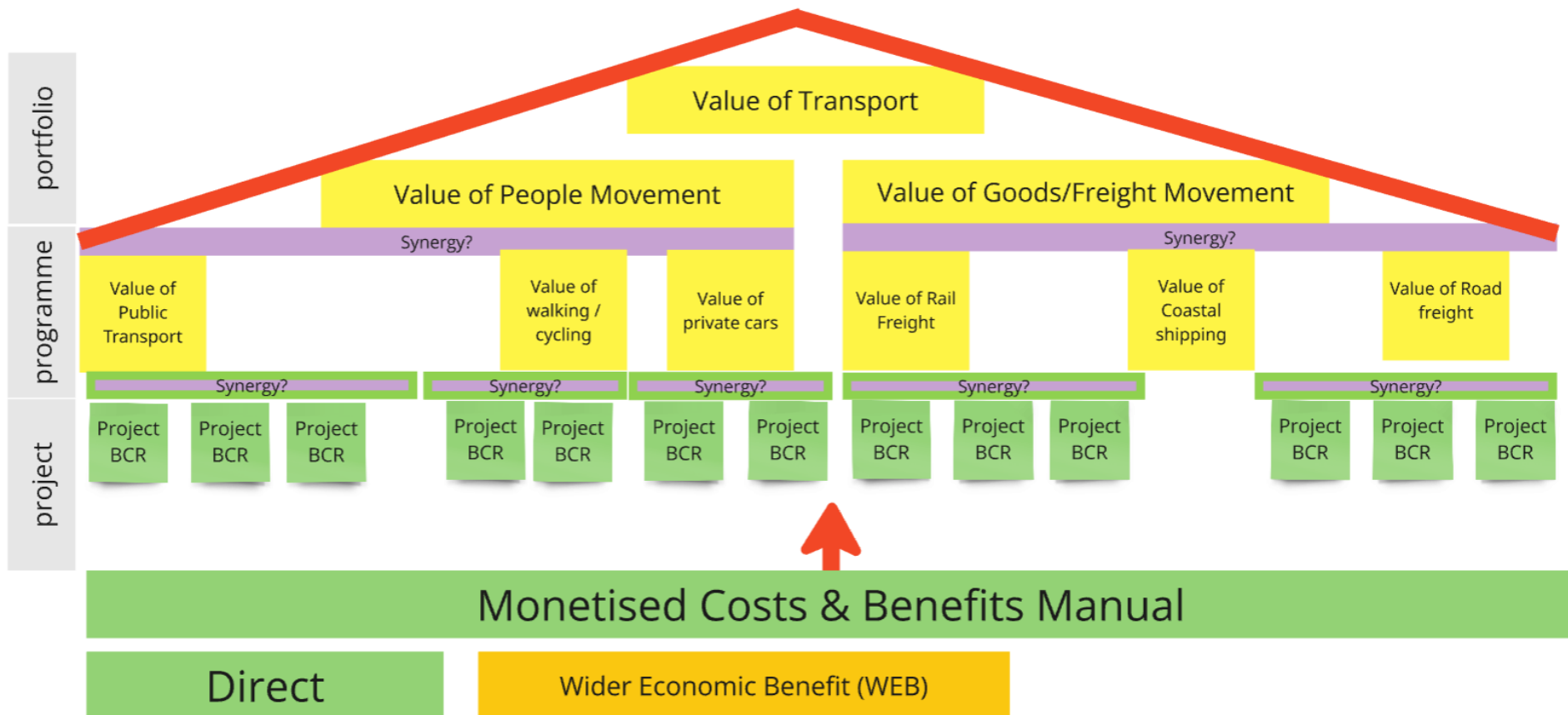


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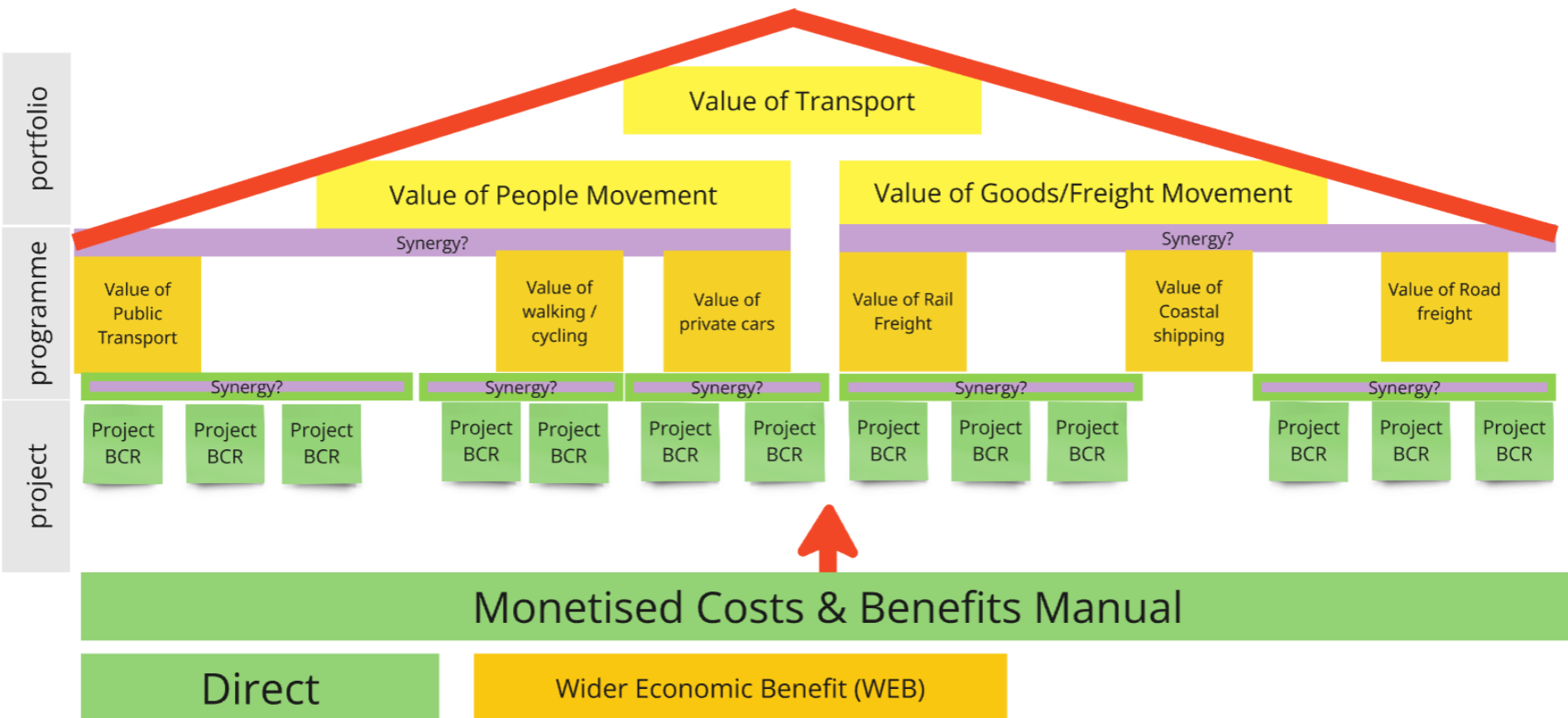




# Value of Transport



# Value of Transport



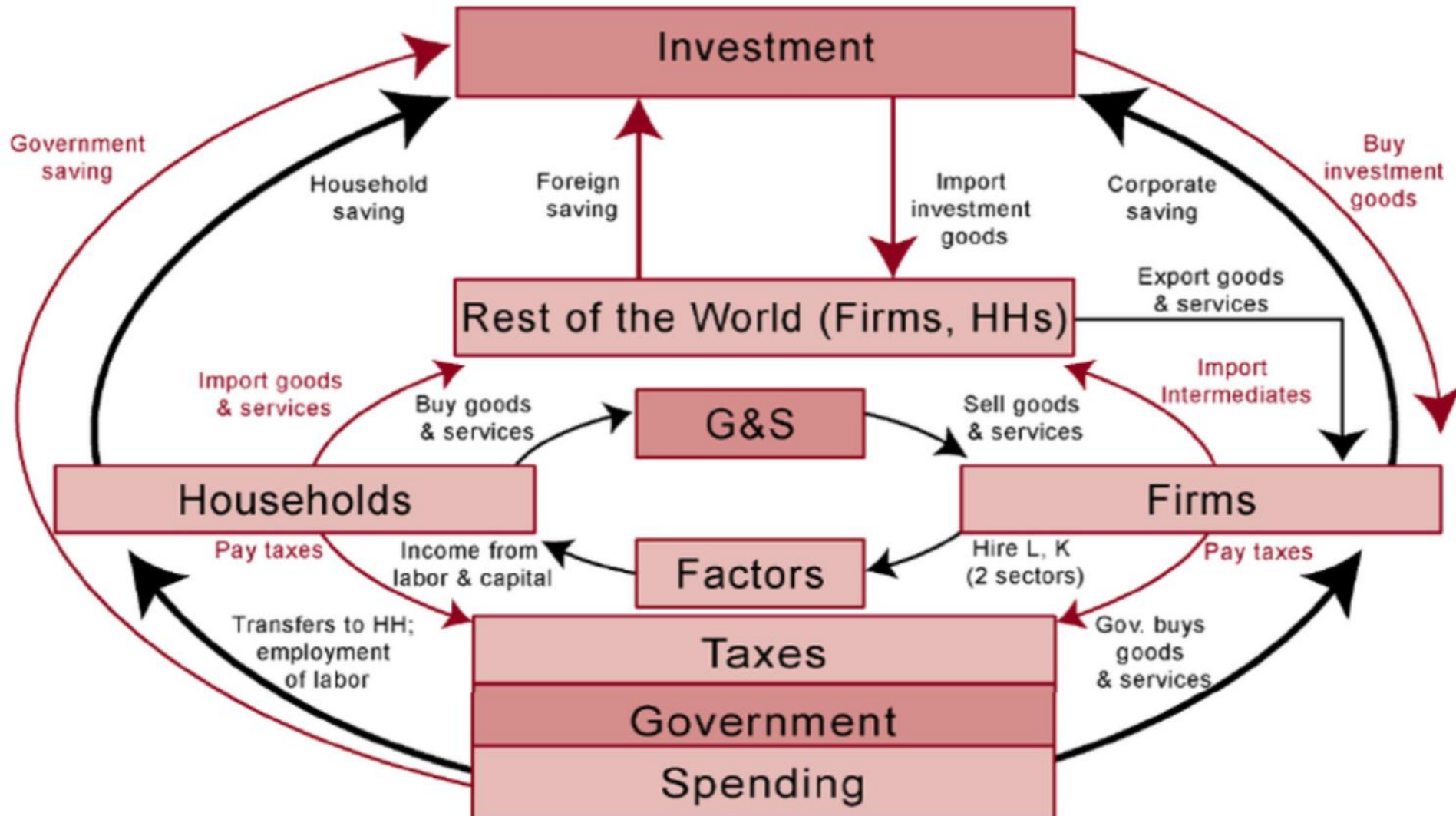
# Australia Value of Rail report

<https://ara.net.au/wp-content/uploads/REPORT-ValueofRail2020-1.pdf>

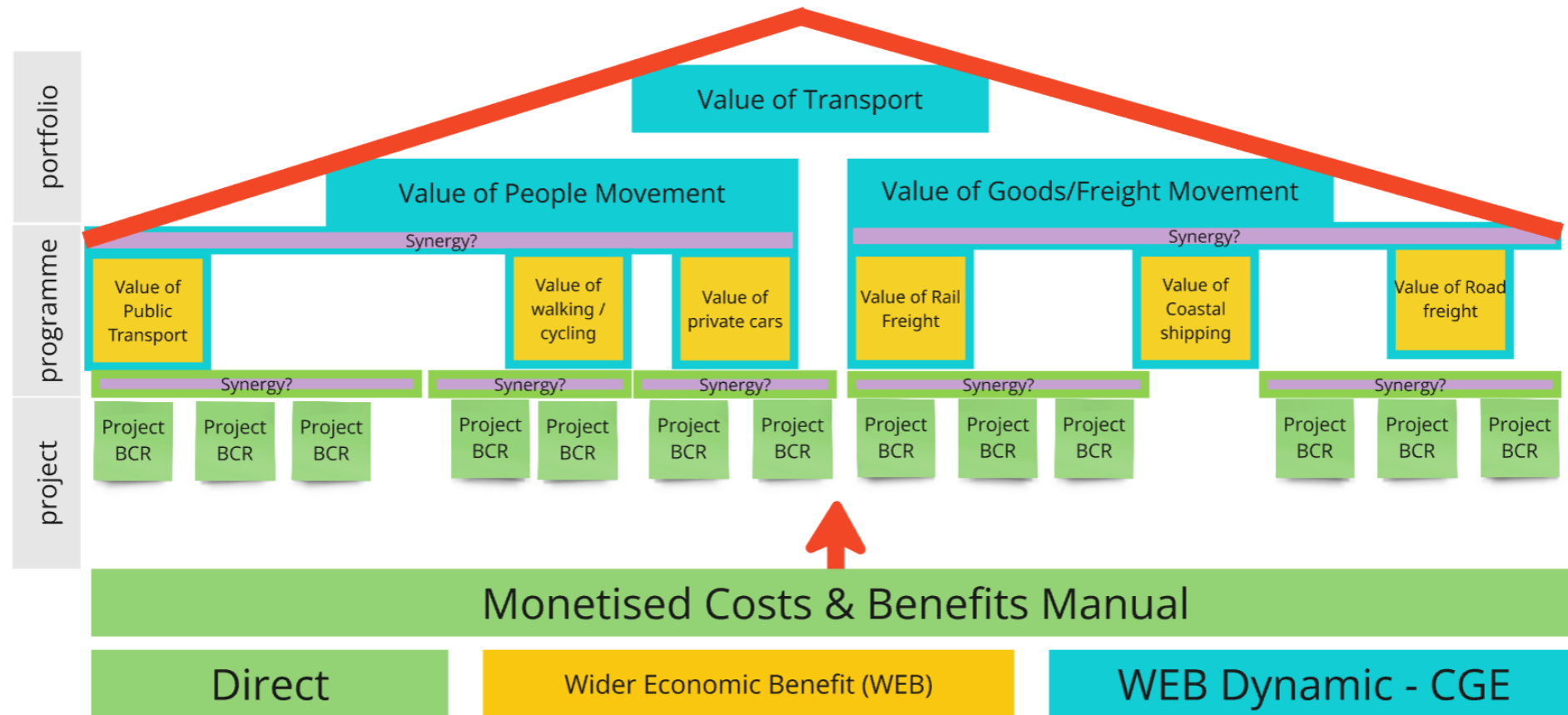
	Wages	Gross Operating Surplus	GDP	Employment
Direct contribution	\$8.4 billion	\$6.8 billion	\$15.1 billion	71,442 FTE
	+	+	+	+
Indirect contribution	\$7.7 billion	\$6.9 billion	\$14.7 billion	93,979 FTE
	↓	↓	↓	↓
Total	\$16.1 billion	\$13.7 billion	<u>\$29.8 billion</u>	<u>165,420 FTE</u>

Source: Deloitte Access Economics IO models based on ABS cat. 5209.0.55.001

# CGE – Computable General Equilibrium

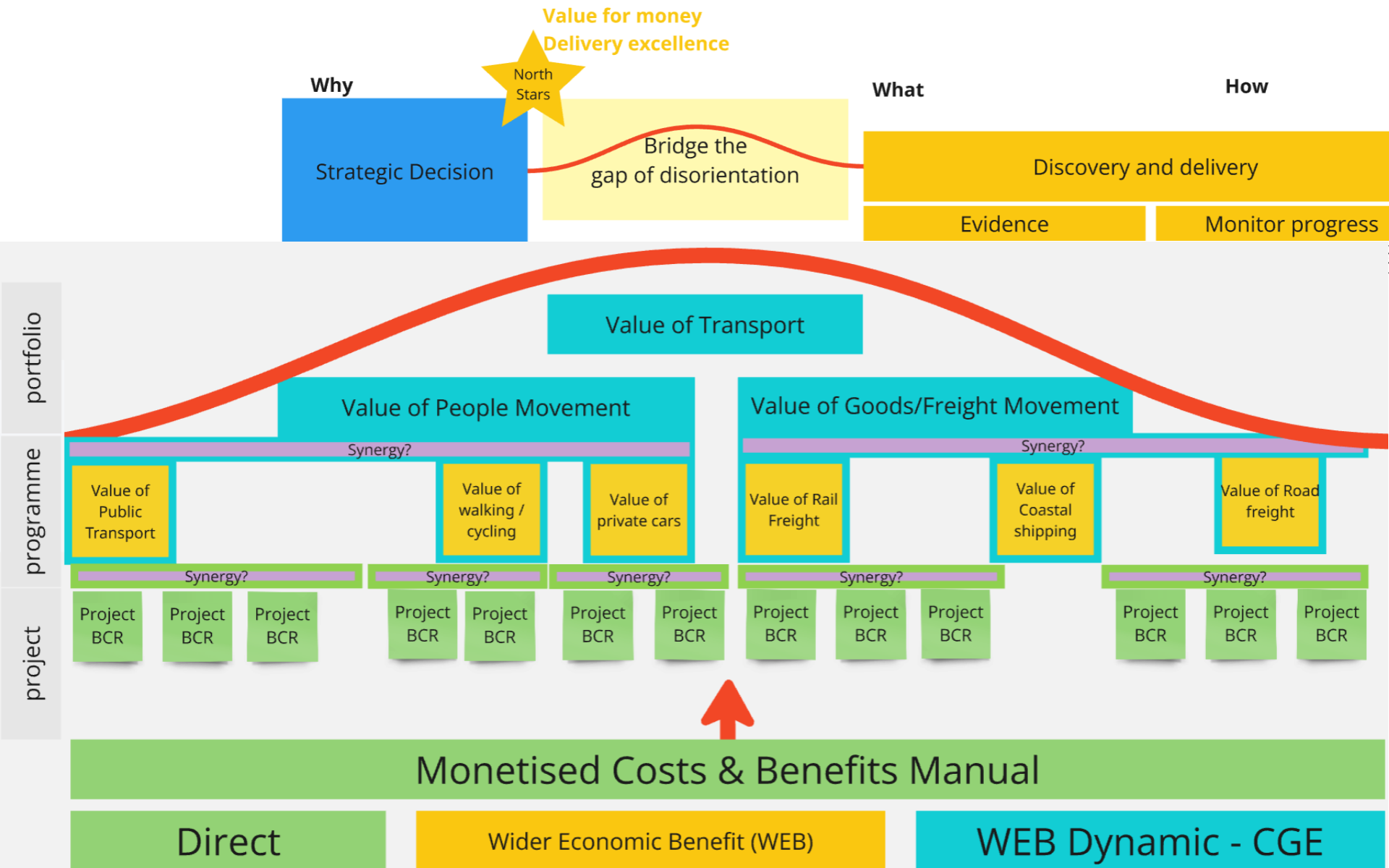


# Value of Transport





# Value of Transport





# Nga mihi nui / Many thanks

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Survey Link:

<https://forms.office.com/r/z11zwnBcKE>



# References:

## NZ Value of Rail

*2016*

<https://www.kiwirail.co.nz/assets/Uploads/documents/70bd71037f/The-Value-of-the-Rail-in-New-Zealand.pdf>

*2021*

<https://www.transport.govt.nz/assets/Uploads/Report/EY-Report-Externality-value-of-rail-2020.pdf>

*2024*

[https://ara.net.au/wp-content/uploads/ARA\\_Benefit\\_of\\_Rail\\_New\\_Zealand\\_REPORT\\_August\\_2024.pdf](https://ara.net.au/wp-content/uploads/ARA_Benefit_of_Rail_New_Zealand_REPORT_August_2024.pdf)

# Other referenced documents:

<https://www.nzta.govt.nz/resources/monetised-benefits-and-costs-manual>

<https://www.transport.govt.nz/assets/Uploads/Report/TheExternalityValueOfCoastalShipping.pdf>

*Australian Value of Rail*

<https://ara.net.au/wp-content/uploads/REPORT-ValueofRail2020-1.pdf>

*TREDIS*

<https://tredis.com/products/tredis-6/how-tredis-works>

# TREDIS: <https://tredis.com/products/tredis-6/how-tredis-works>

*Unlike “black box” methods, each of the key elements of TREDIS is well-defined and clearly documented, using techniques backed by peer-reviewed publications and approved by public agencies*

