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National Roads and Traffic Expo
International Convention Centre, Sydney
Thursday 12th October 2023

Pragmatic Strategies to Legitimise Implementation of Sustainable Transport in Cities

Professor Graham Currie and Dr James Reynolds
Public Transport Research Group
Monash Institute of Transport Studies
Monash University, Australia

PTRG PUBLIC TRANSPORT RESEARCH GROUP

GROUP OF EIGHT AUSTRALIA

MONASH INSTITUTE OF TRANSPORT STUDIES

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Agenda

- **Introduction**
- **Context**
- **Legitimacy**
- **Pragmatic Strategies**
- **Review and close**

This presentation concerns the use of Pragmatic Strategies to Legitimise Implementation

How to get sustainable transport projects done…

…in the real-world (of political, institutional and public opposition)

Dr James Reynolds **Professor Graham Currie**
Public Transport Research Group (PTRG)
Institute of Transport Studies (ITS)
Civil Engineering Monash University

It's the PhD Thesis work of Dr James Reynolds and his supervision team – a joint industry/academic project


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A framework and pragmatic strategies for transit priority implementation

Julian James Reynolds

BEng (Hons), Dip Music, M Traffic, M Transport

A thesis submitted for the degree of Doctor of Philosophy at Monash University in 2020

Part of the Sustainable and Effective Public Transport Graduate Research (SEPT-GRIP) at the Public Transport Research Group (PTRG), Department of Civil Engineering

Dr James Reynolds
PhD Researcher

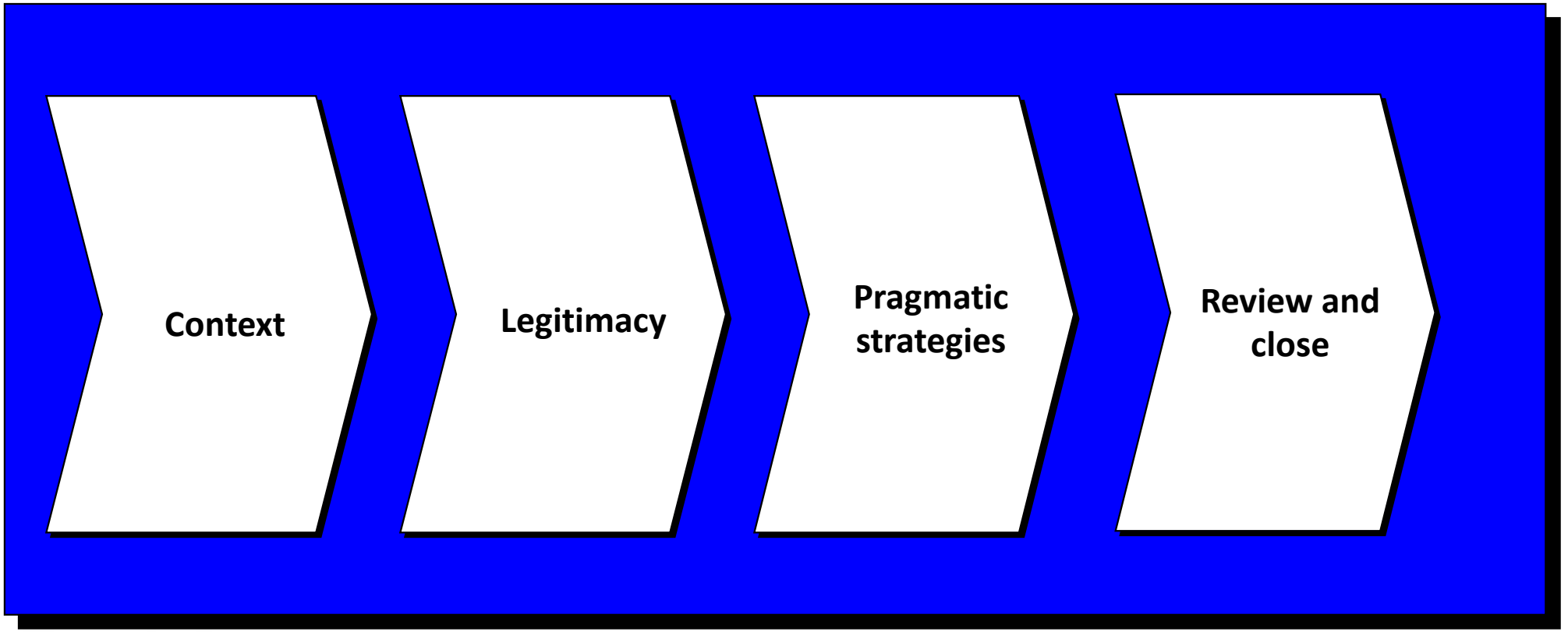
Professor Graham Currie
Main Supervisor

Professor Geoff Rose
Associate Supervisor

Alistair Cumming
Industry Supervisor

PTRG PUBLIC TRANSPORT RESEARCH GROUP

It is structured as follows:



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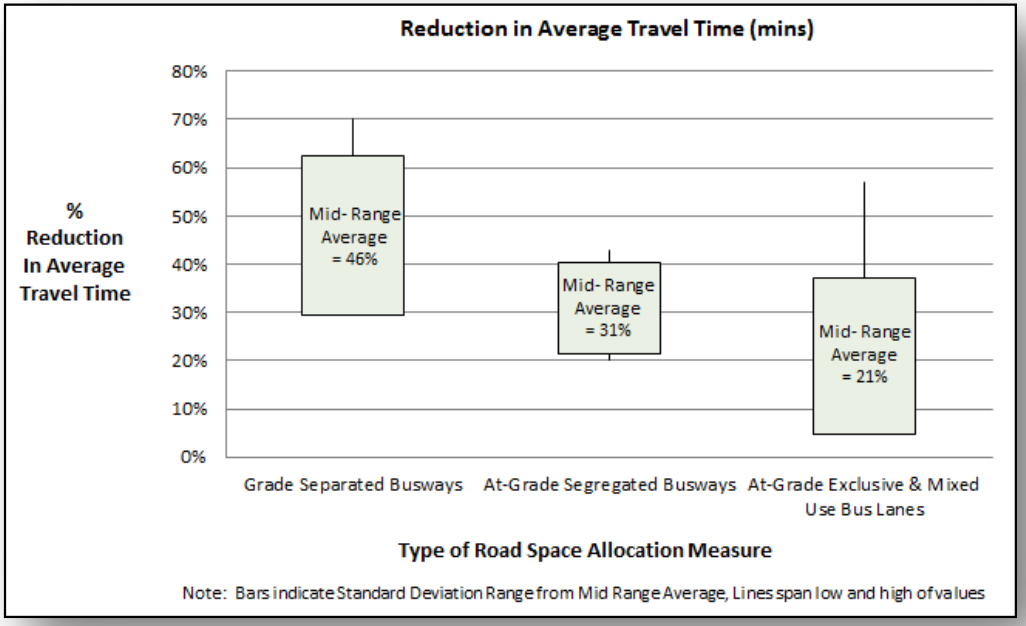
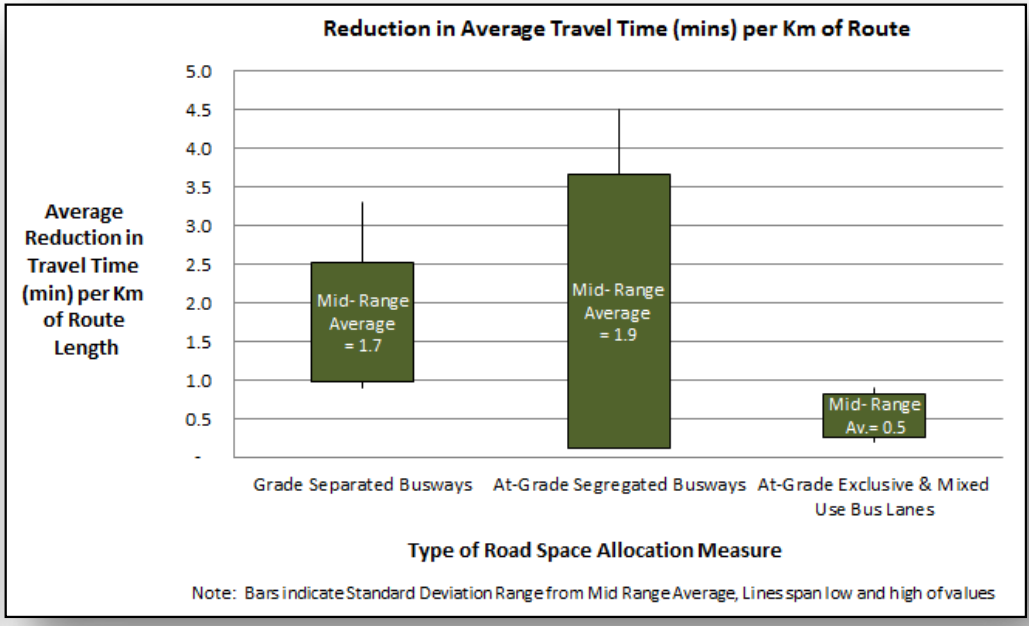
Monash PTRG has published widely on technical solutions to on road public transit priority

Research Publications in On Road Public Transport Priority

- Currie G (2004) 'Planning and Design for On Road Public Transport' in 'Traffic Engineering and Management' Institute of Transport Studies, Monash University ISBM No. 0 7326 1612 3
- Currie G , Sarvi, M. and Young B. (2004) " A New Methodology for Allocating Road Space for Public Transport Priority". In: Brebbia, C.A. & Wadhwa, L.C. (Ed.) Urban Transport X Urban transport and the environment in the 21st century, WITpress, Germany, 375-388
- Truong LT, Currie G, Wallace M and De Gruyter C (2017) 'Does Combining Transit Signal Priority with Dedicated Bus Lanes or Queue Jump Lanes at Multiple Intersections Create Multiplier Effects?' Transportation Research Record: Journal of the Transportation Research Board, No. 2647, 2017, pp. 80–92.
- Truong L Currie G Wallace M De Gruyter C (2017) 'Analytical approach to estimate delay reduction associated with bus priority measures' IEEE Intelligent Transportation Systems Magazine Volume: 9, Issue: 4, winter 2017 pp91-101
- Truong LT, Currie G and Sarvi M (2017) 'Analytical and simulation approaches to understand combined effects of transit signal priority and road-space priority measures' Transportation Research Part C: Emerging Technologies, Volume 74, 1 January 2017, Pages 275-294
- Truong, LT Graham Currie, Majid Sarvi Analytical and simulation approaches to understand combined effects of transit signal priority and road-space priority measures TRANSPORTATION RESEARCH PART C: EMERGING TECHNOLOGIES, Volume 74, January 2017, Pages 275-294
- Pavkova K, Currie G, Delbosc A and Sarvi M (2016) 'Selecting tram links for priority treatments - The Lorenz Curve approach' JOURNAL OF TRANSPORT GEOGRAPHY, Volume 55, July 2016, Pages 101-109
- Naznin F Currie G Sarvi M and Logan D (2016) 'An empirical bayes safety evaluation of tram/streetcar signal and lane priority measures in Melbourne;' TRAFFIC INJURY AND PREVENTION Traffic Injury Prevention , 17 (1) pp. 91 - 97
- Goh K, Currie G, Sarvi M and Logan D (2014) 'Experimental Micro-Simulation Modelling of Road Safety Impacts of Bus Priority' TRANSPORTATION RESEARCH RECORD, Volume 2402 / Truck and Bus Safety; Roundabouts 2014, pp 9-14
- Goh K, Currie G, Sarvi M and Logan D (2013) 'Road Safety Benefits from Bus Priority? – An Empirical Study' TRANSPORTATION RESEARCH RECORD, No. 2352, Washington,D.C., 2013, pp. 41–49
- Goh, K, Currie, G, Sarvi M and Logan, D (2014) 'Bus Accident Analysis of Routes With/Without Bus Priority' ACCIDENT ANALYSIS AND PREVENTION Volume 65, April 2014, Pages 18-27
- Currie G and Sarvi M (2012) 'A New Model for the Secondary Benefits of Transit Priority' TRANSPORTATION RESEARCH RECORD No. 2276, Journal of the Transportation Research Board pp 63–71
- Currie, G. and Shalaby A (2008) 'Active Signal Priority for Streetcars: Experience in Melbourne and Toronto' TRANSPORTATION RESEARCH RECORD: No. 2042, pp. 41–49.
- Mesbah M, Sarvi M and Currie, G. (2008) 'A New methodology for Optimization of Transit Priority in a Transport Network' TRANSPORTATION RESEARCH RECORD No 2089 pp 93-100
- Currie, G. Sarvi M Young W (2007) 'A New Approach to Evaluating On-Road Public Transport Priority Projects: Balancing the Demand for Limited Road Space" TRANSPORTATION Volume 34, Number 4 / July, 2007 pp413-428
- Currie, G., Sarvi, M and Young, W (2004) 'A new methodology for allocating road space for public transport priority ' ADVANCES IN TRANSPORT Vol 16, 2004 pp375-388

We meta studied benefits of transit priority from hundreds of studies

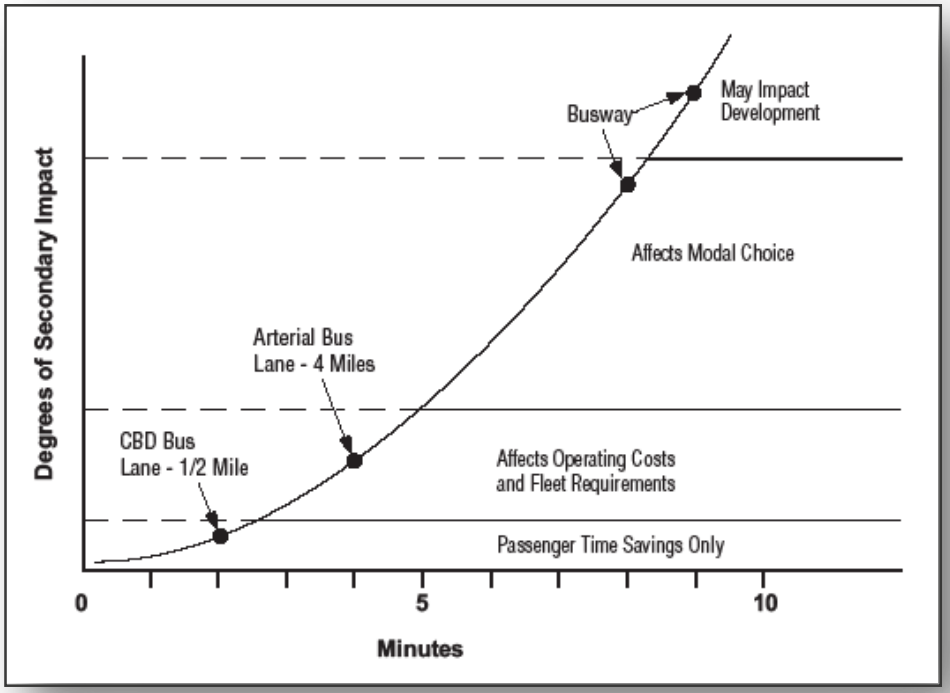




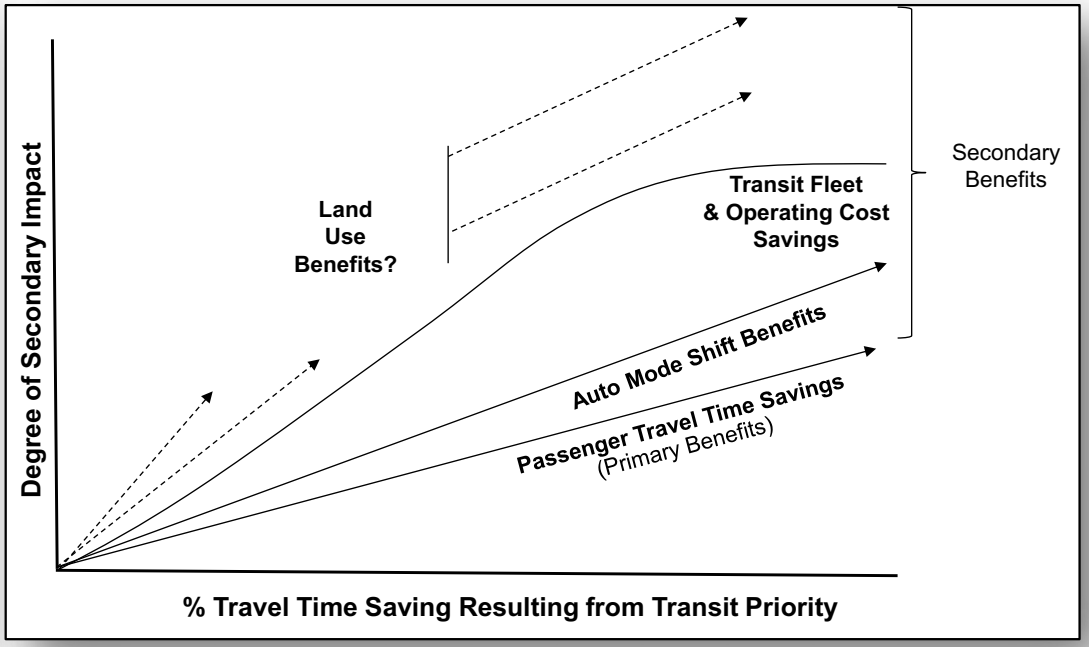
Source: Goh and Currie (2013) Before and After Studies of the Operational Performance of Transit Priority Initiatives ITS Report Feb 2013

We discovered that secondary (wider) benefits of priority are limited and under-estimated

Old Model

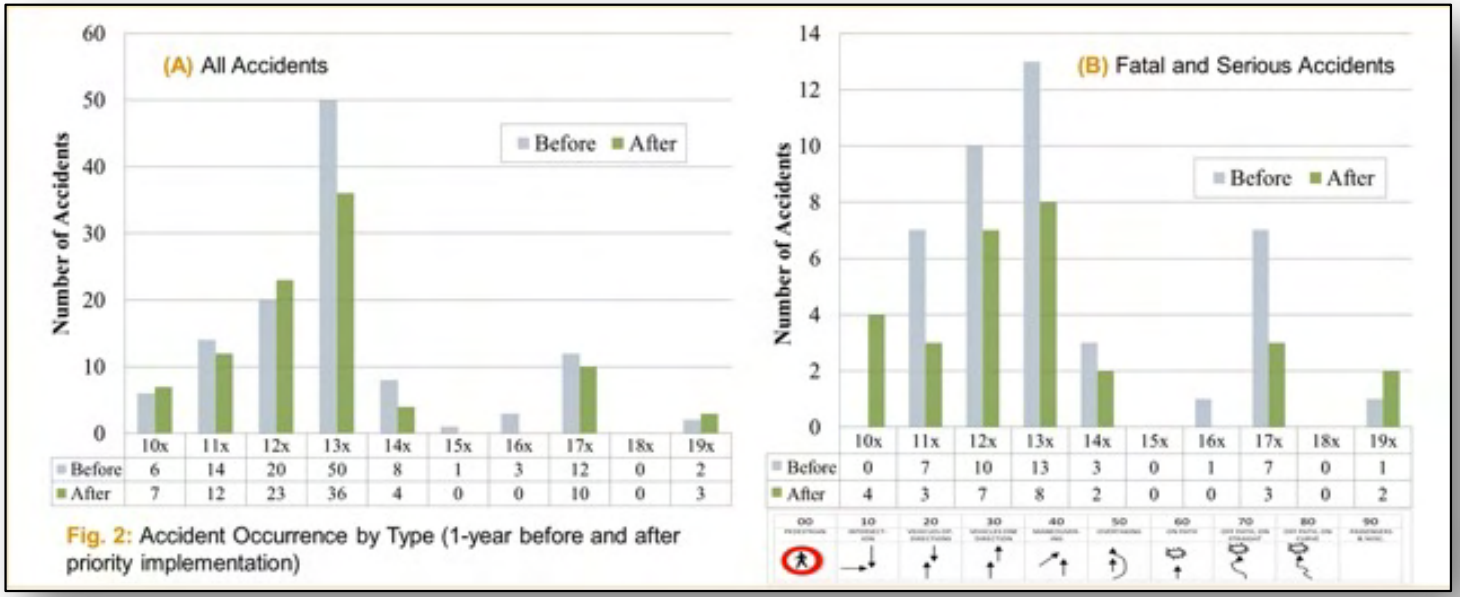


New Model



Source: Currie G and Sarvi M (2012) 'A New Model for the Secondary Benefits of Transit Priority' TRANSPORTATION RESEARCH RECORD No. 2276, Journal of the Transportation Research Board pp 63–71

We discovered that there are significant road safety benefits from transit priority



	10x	11x	12x	13x	14x	15x	16x	17x	18x	19x
Before	6	14	20	50	8	1	3	12	0	2
After	7	12	23	36	4	0	0	10	0	3

	10x	11x	12x	13x	14x	15x	16x	17x	18x	19x
Before	0	7	10	13	3	0	1	7	0	1
After	4	3	7	8	2	0	0	3	0	2

Fig. 2: Accident Occurrence by Type (1-year before and after priority implementation)

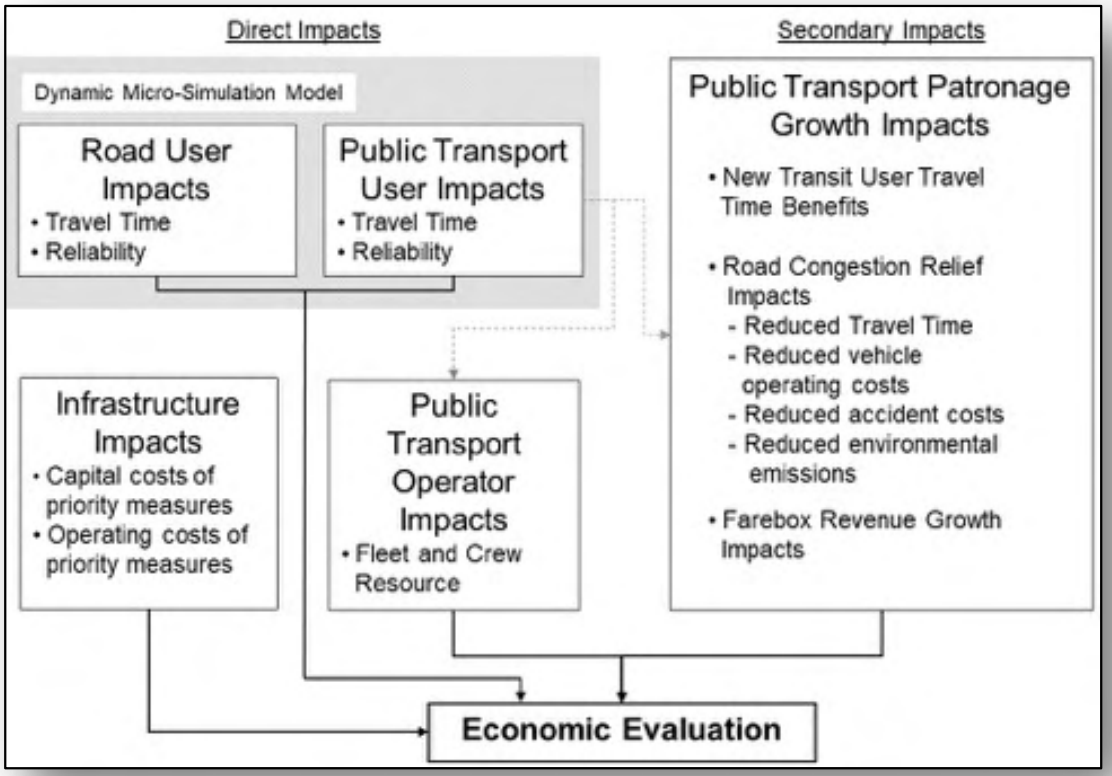
66% drop in on & off-path accidents

28% drop in rear-end accidents

50% drop in side collisions

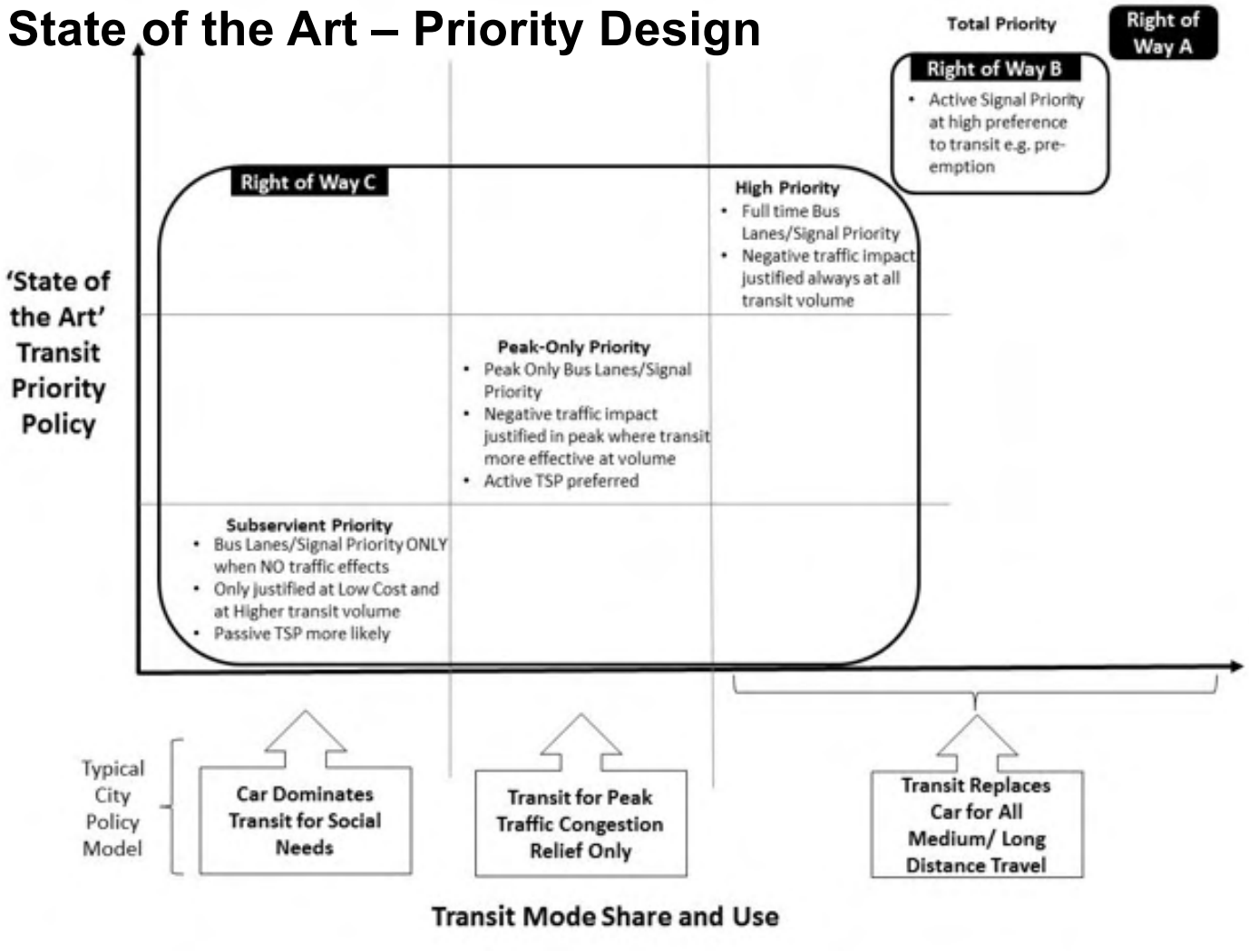
Source: Goh K, Currie G, Sarvi M and Logan D (2013) 'Road Safety Benefits from Bus Priority? – An Empirical Study' TRANSPORTATION RESEARCH RECORD, No. 2352, Washington,D.C., 2013, pp. 41–49

We developed new methods to include mode shift benefits into priority appraisals



Source: Currie, G. Sarvi M Young W (2007) 'A New Approach to Evaluating On-Road Public Transport Priority Projects: Balancing the Demand for Limited Road Space" TRANSPORTATION Volume 34, Number 4 / July, 2007 pp413-428

We developed new ways to conceptualise priority benefits around city context and policy preferences



Source: Currie G (2016) 'Managing On-Road Public Transport in Traffic' in Bliemer M Mulley C and Moutou C Handbook on Transport and Urban Planning in the Developed World, Edward Elgar Publishing Ltd UK

In practice good science and engineering don't matter - technical answers are known, but implementation in the real world is hard; this project sought to address this fundamental problem

Source: Yarra Trams (2014)

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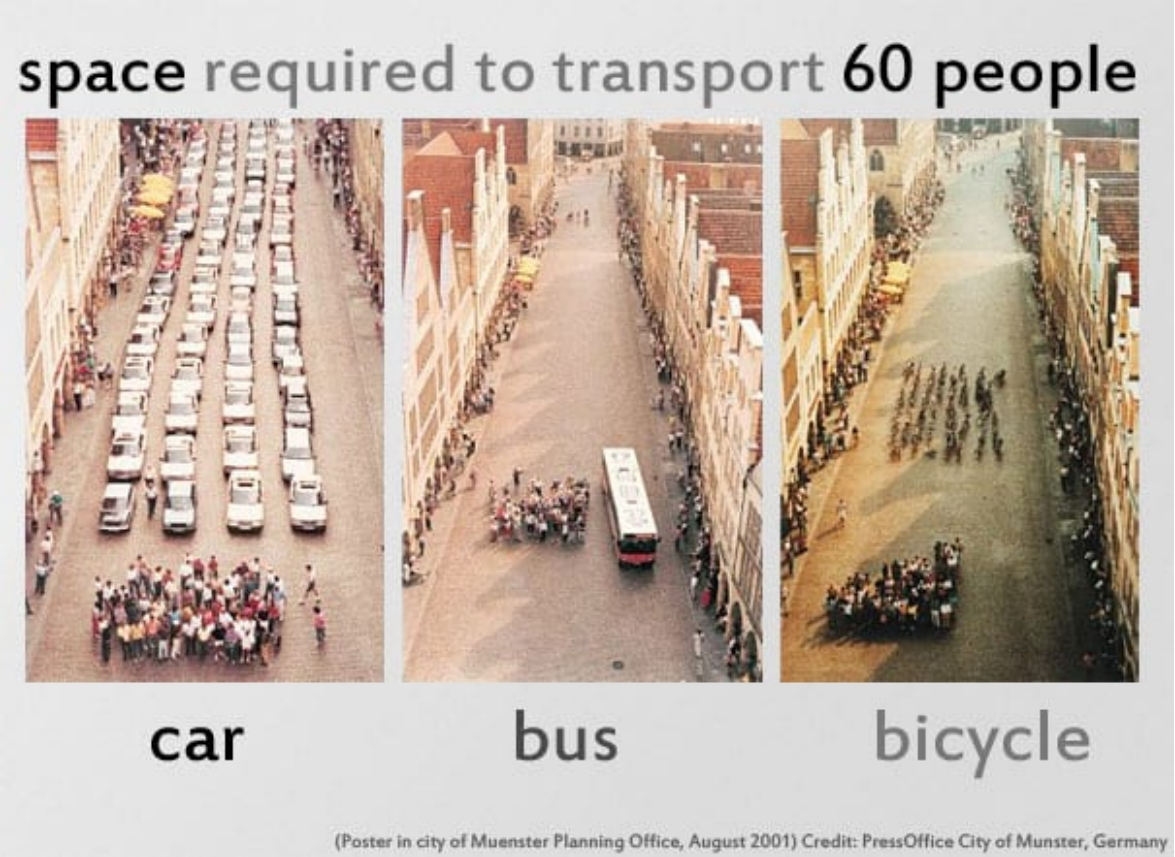
Review and close

There are many good reasons to improve our transport systems…



Source: City of Munster (1991)

…but implementation is difficult

Greens councillors favour cyclists over accessible tram 'super stops' in Melbourne's north

Source: Jacks (2018)

No more new bike lanes for CBD after council cops complaints

THE AGE

Cyclists make their way along a narrow bike lane along Collins Street. JOE ARMAO

Source: Waters (2022)

Many different types of legitimacy

Source: Jacks (2018)

- *normative legitimacy*
  the law requires accessible tram stops
- *legitimacy through reasonableness*
  unreasonable there is no wheelchair access
- *legitimacy as trust*
  engineers recommend a platform stop
- *sociological legitimacy*
  widespread support for DDA compliance
- *legitimacy through consent*
  voted on by our political representatives
- *unconditional duty*
  cyclists must always have a bike lane(?)
- *conditional normative support (NIMBYism)*
  I agree with the idea of DDA compliance,
  but not without a bike lane…
  ….or the loss of on-street parking

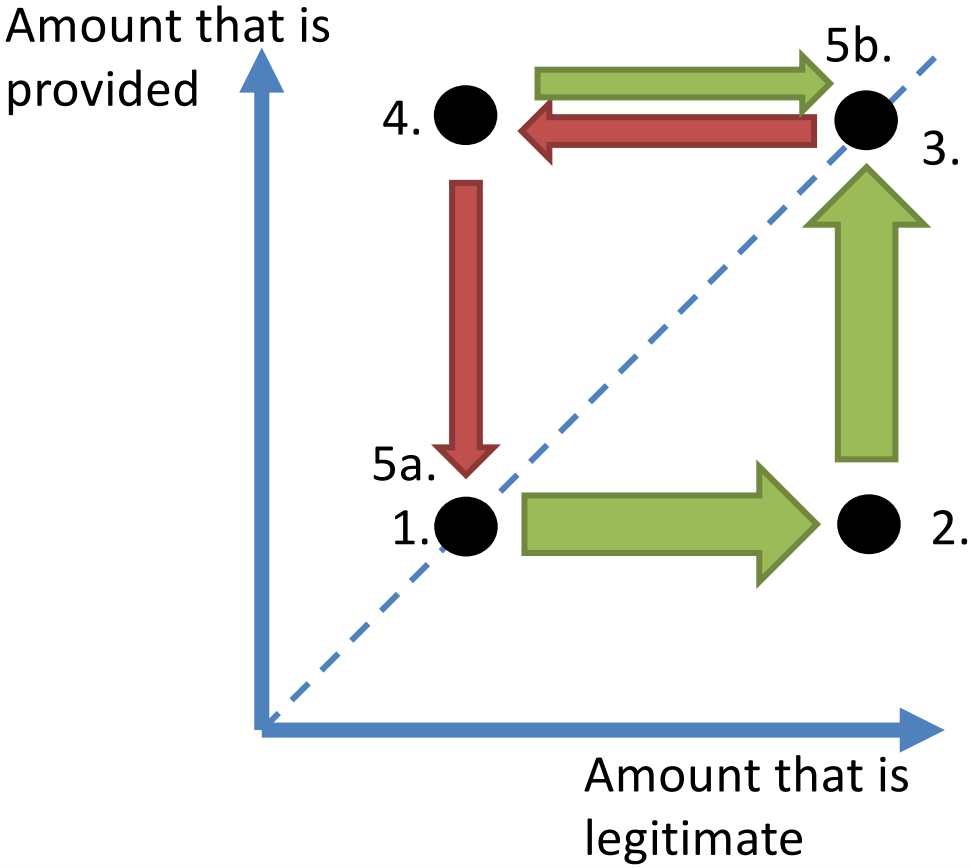
The research created the Legitimacy framework; a mapping of legimacy progress in priority project development

Mapping legitimacy through time:

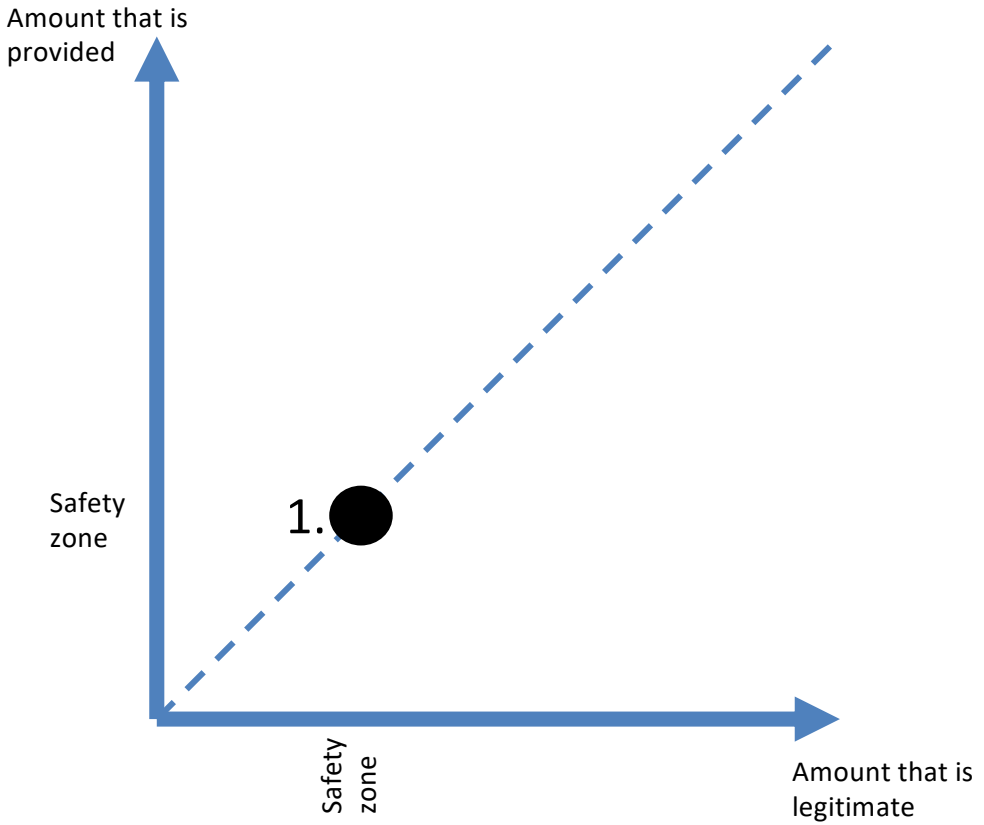
1. Starting point
   What is provided = what is legitimate
2. Proposal to increase amount
   Increases amount that is legitimate
3. Implementation
   What is provided = what is legitimate
4. Complaints, protest
   Decreases amount that is legitimate

5a. Failure, removal

5b. Success, retention
   What is provided = what is legitimate



Legitimacy framework:
Nicholson Street DDA compliance



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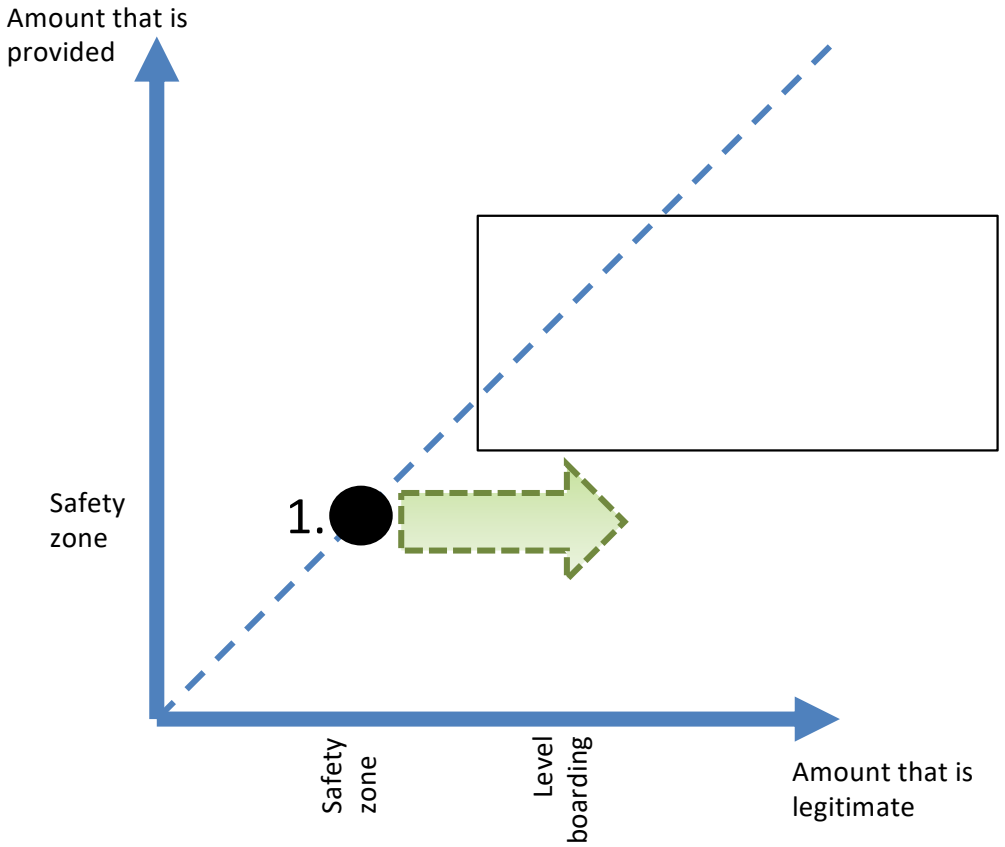

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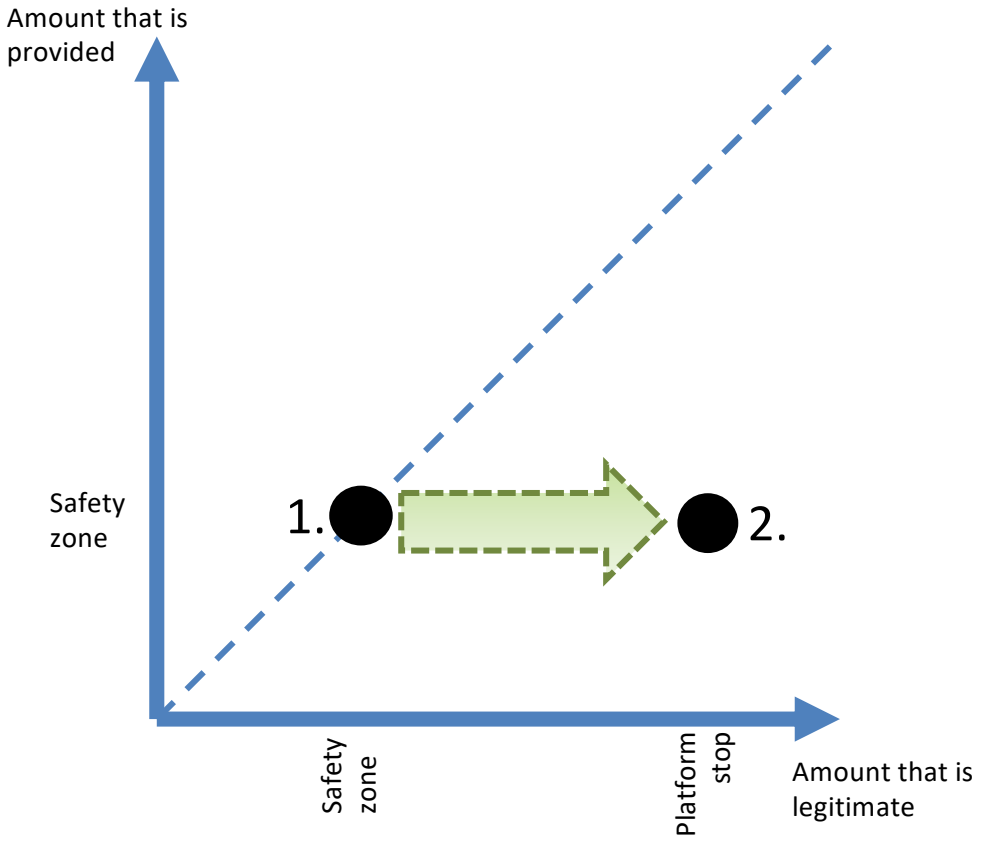

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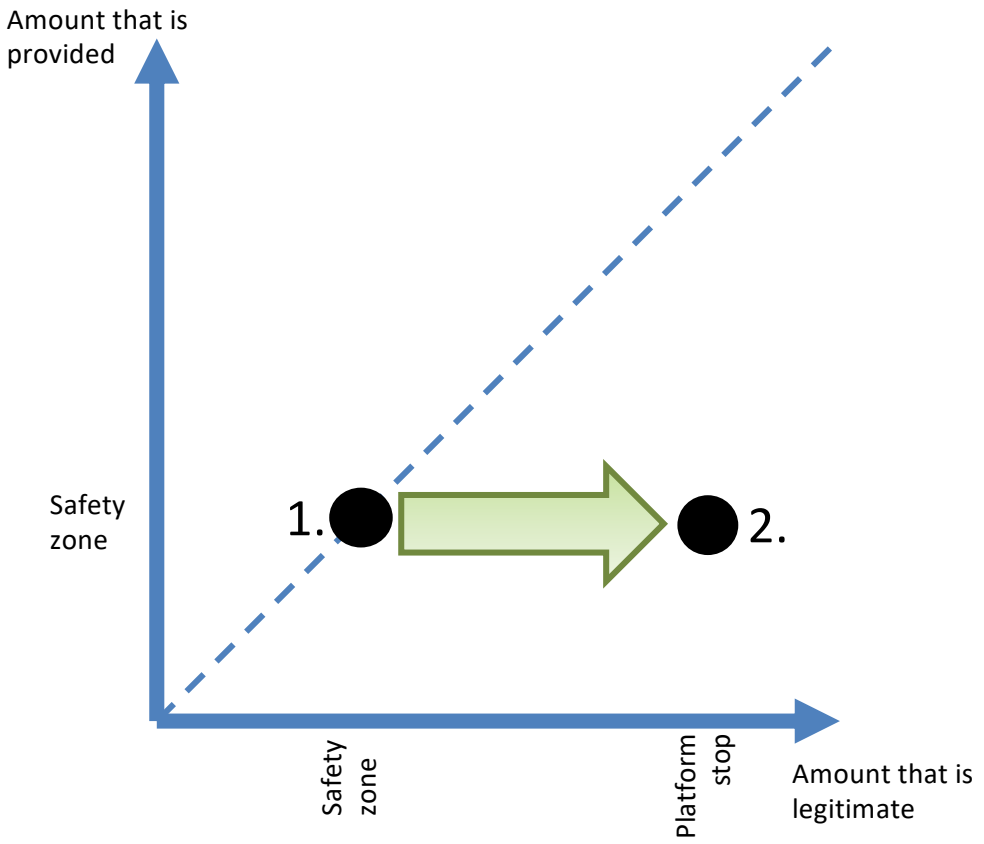

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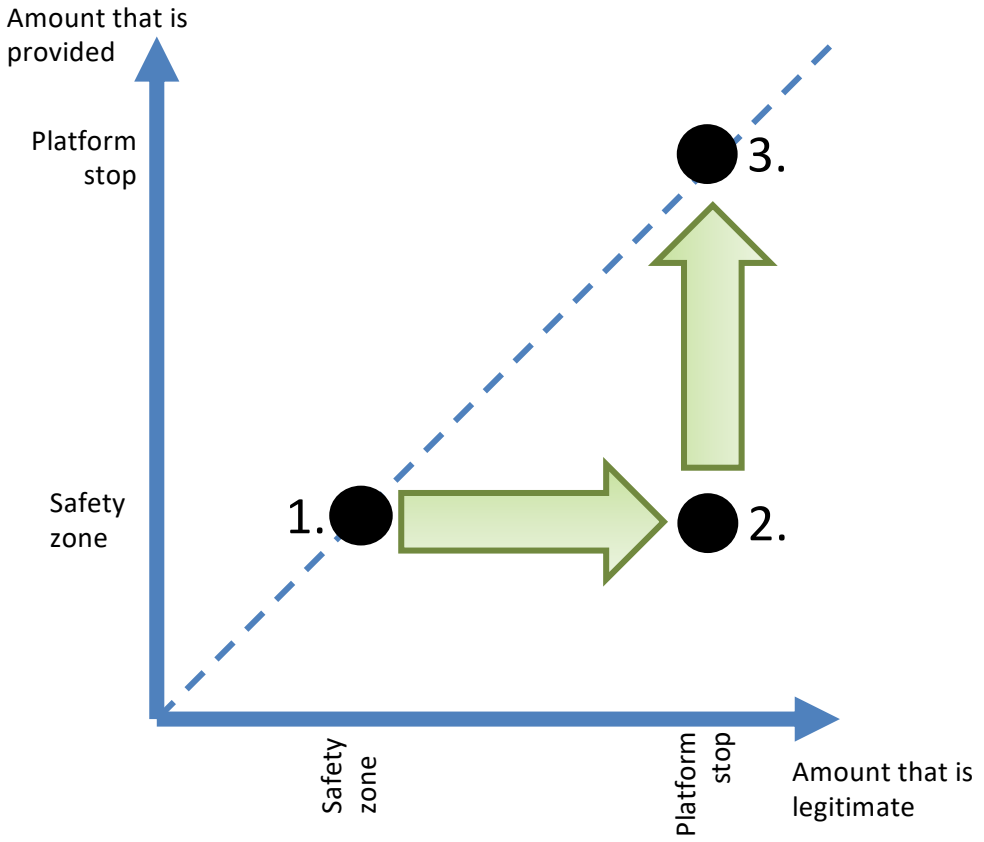
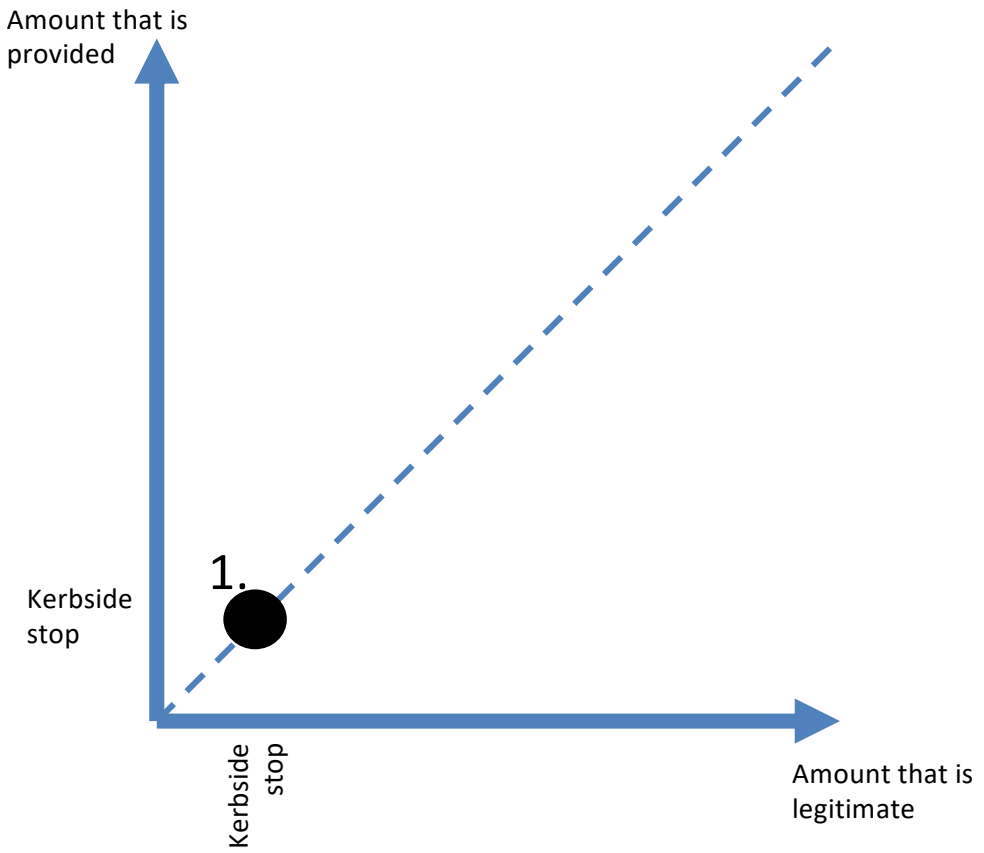


Legitimacy framework:
Nicholson Street DDA compliance …meanwhile… in the north



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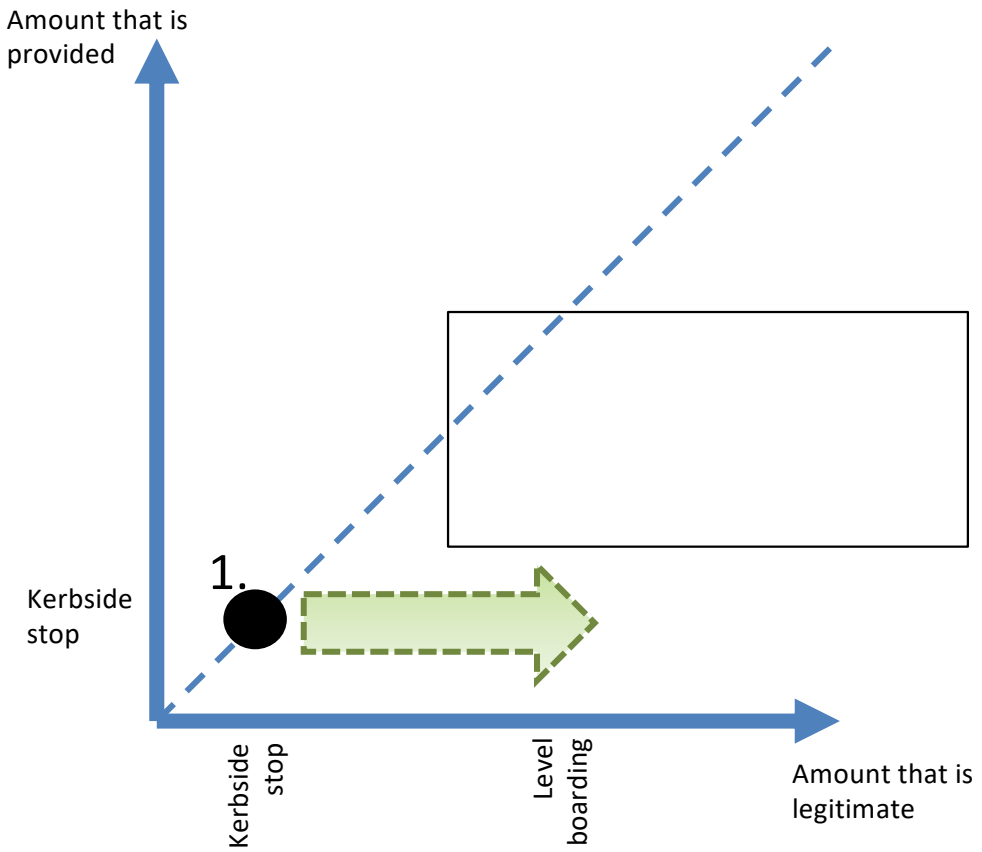
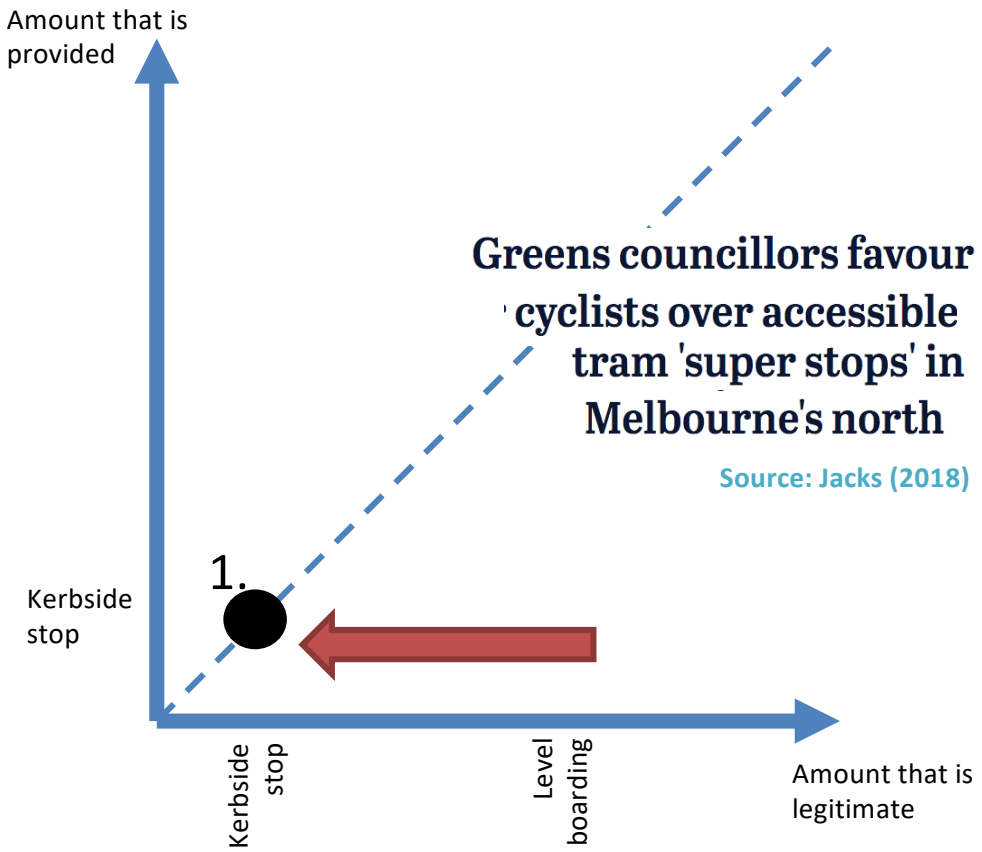


Legitimacy framework:
Nicholson Street DDA compliance

…meanwhile… in the north



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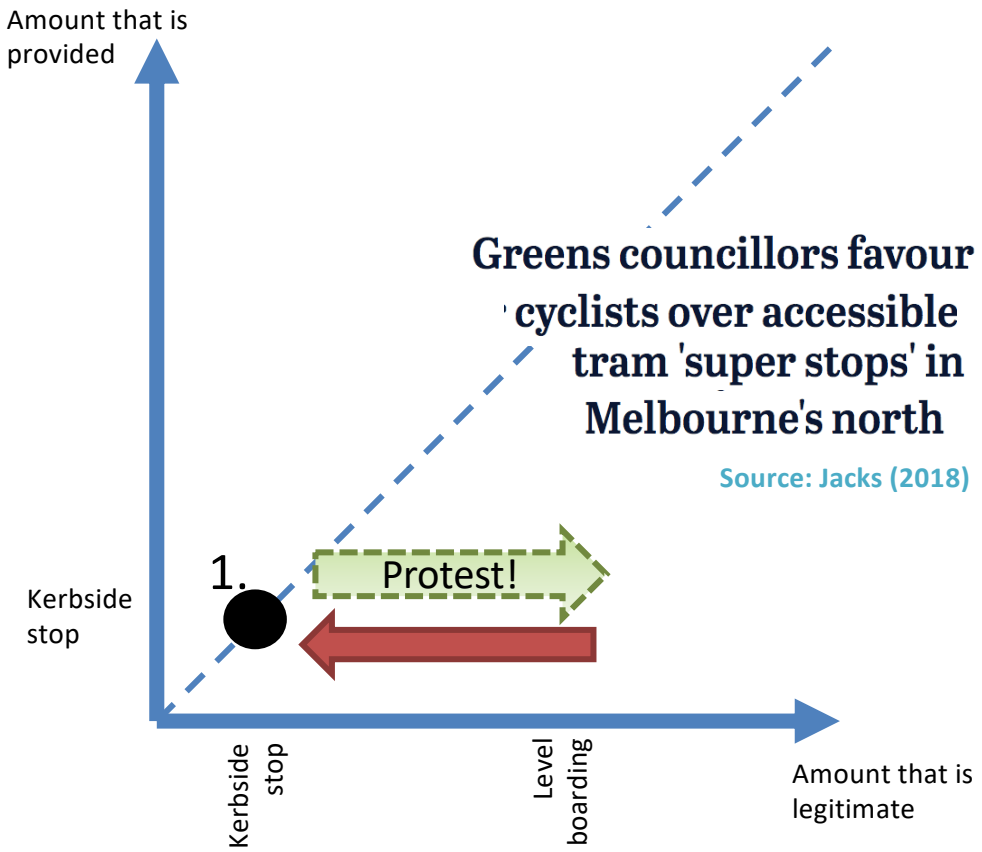

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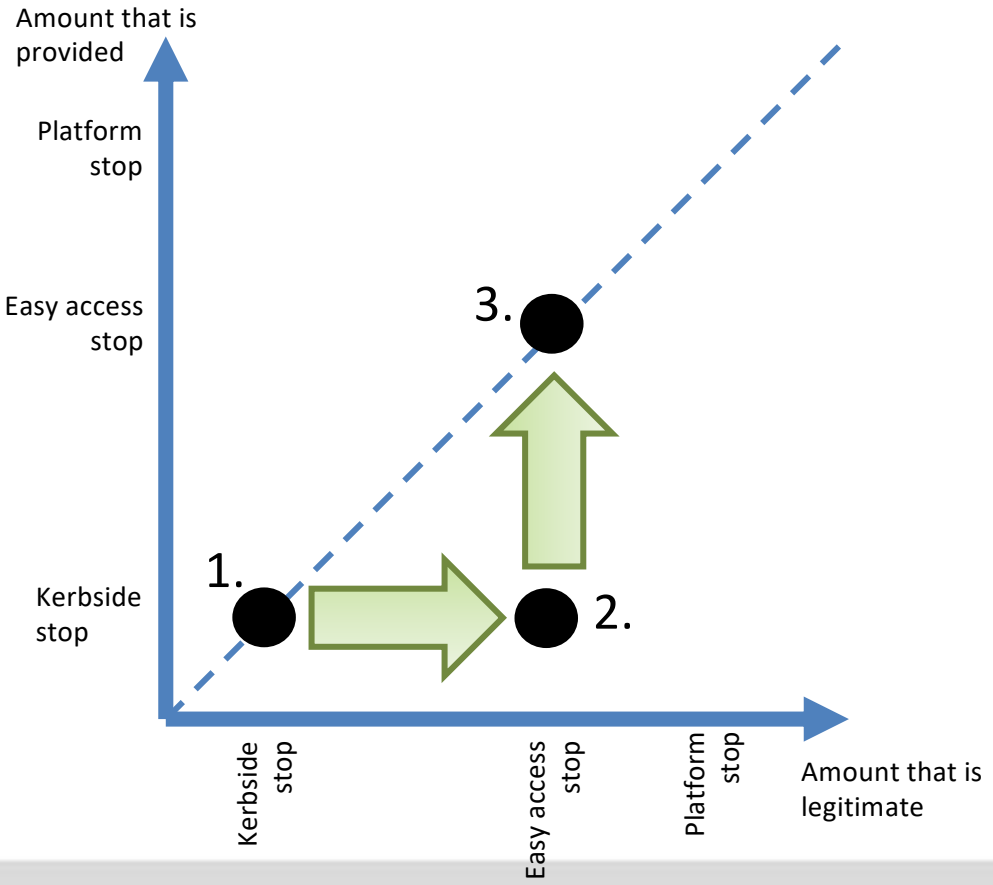
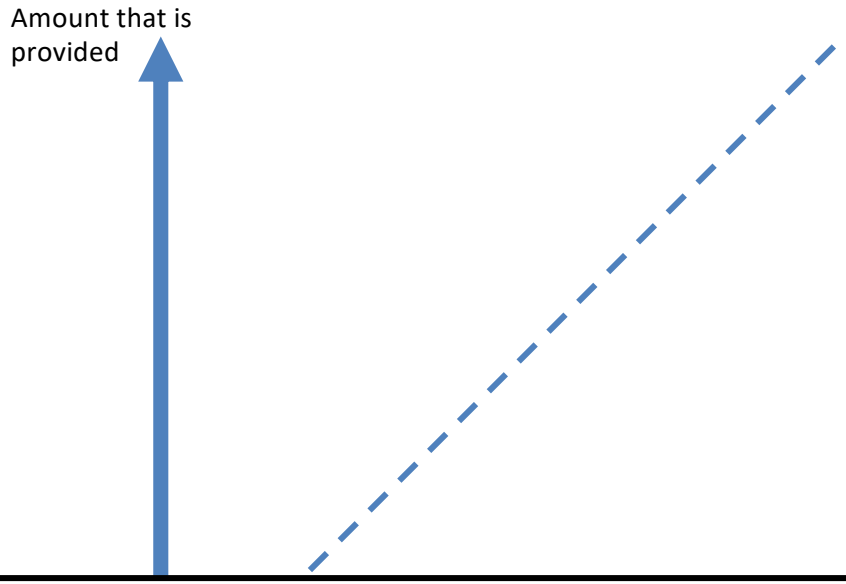


Curitiba Bus Rapid Transit (BRT)

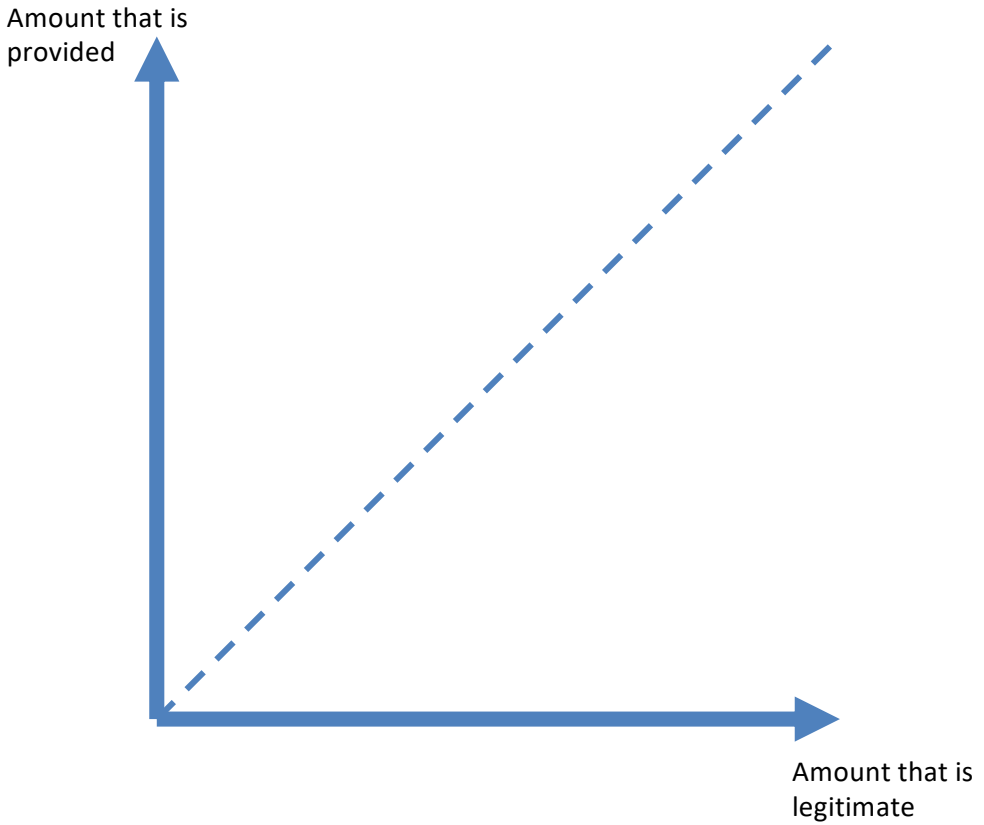


"Power is what matters…certainly much more than "political will" on its own"

Ardila-Gomez (2004, p.424)

Curitiba ~~Bus Rapid Transit (BRT)~~

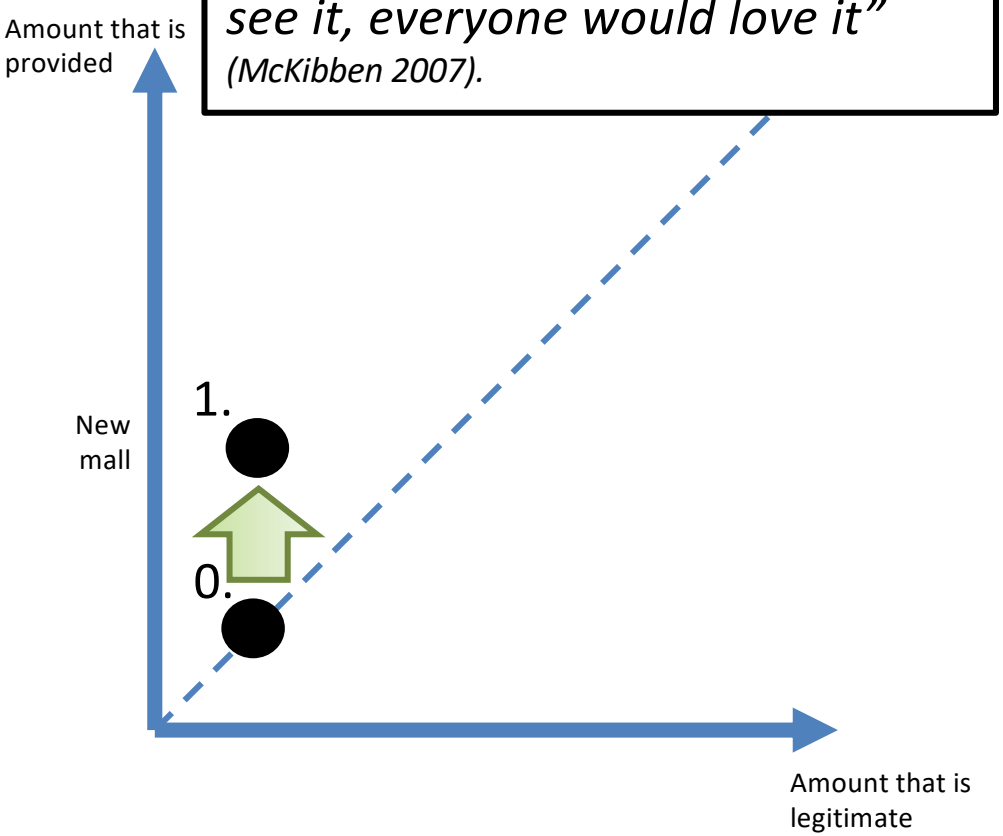
Military dictatorship + pedestrian mall



Curitiba ~~Bus Rapid Transit (BRT)~~
Military dictatorship + pedestrian mall

1. Work starts on a Friday:
    - after the law courts closed,
    - …preventing legal injunctions.
- Roads suddenly closed.
- New mall complete by the following Monday.
- Armed police present (Moore 2007, p. 89),
    - but no use of force required,
    - mayor had backing of state governor.

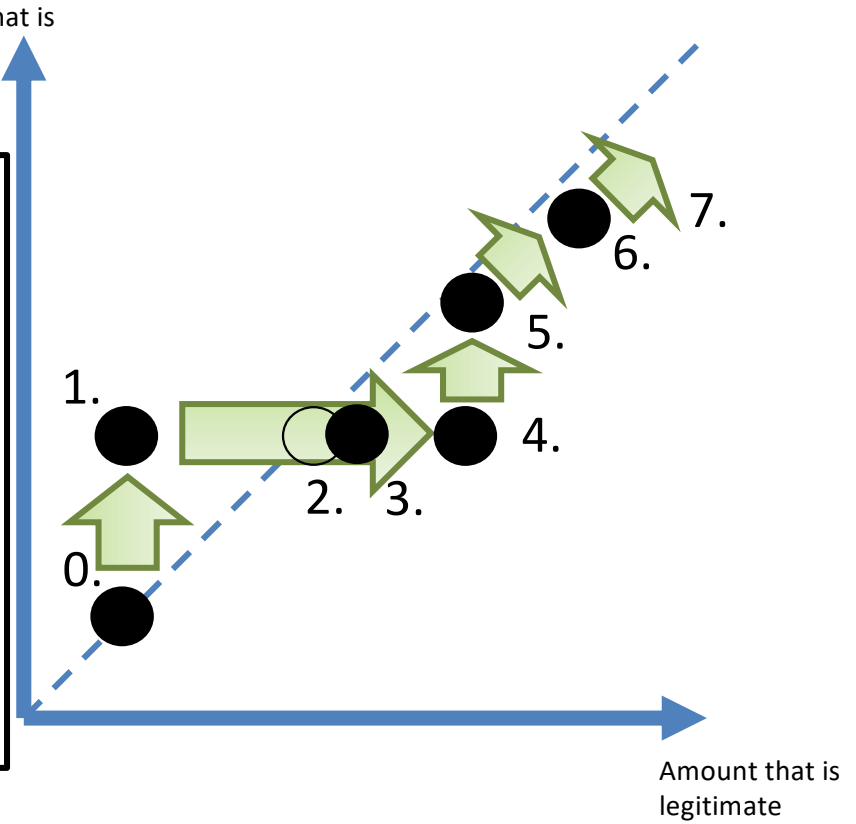
"If they had a chance to actually see it, everyone would love it" *(McKibben 2007).*



Curitiba ~~Bus Rapid Transit (BRT)~~
Military dictatorship + pedestrian mall

1. Work starts on a Friday
   - after the law courts closed

- Retailers ask state governor to sack the mayor:
  - Governor says he will meet them in 30 days.
  2. Mayor suggests a 30-day trial.
3. Mall proves successful:
   - No meeting with governor.
   4. 'Trial' is great success – calls for expansion
5. Mall expands
6. Mall expands again
7. etc.



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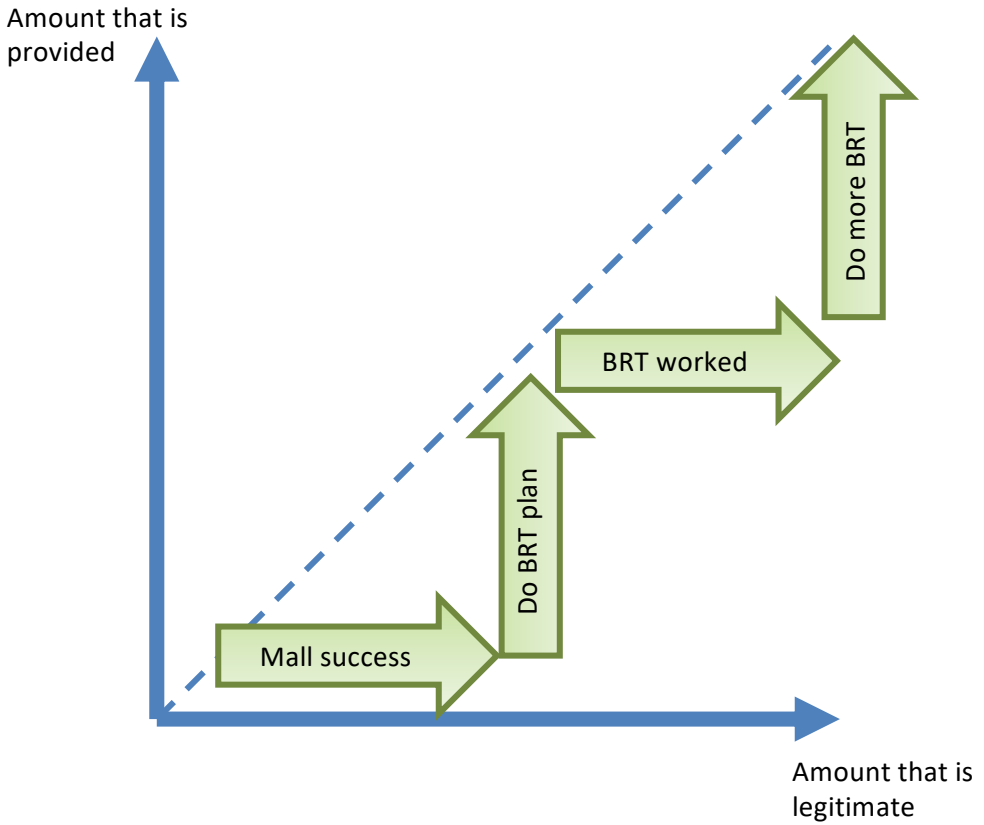


This research: Legitimacy + case studies

Clarendon Street tram stop trial gets the hook

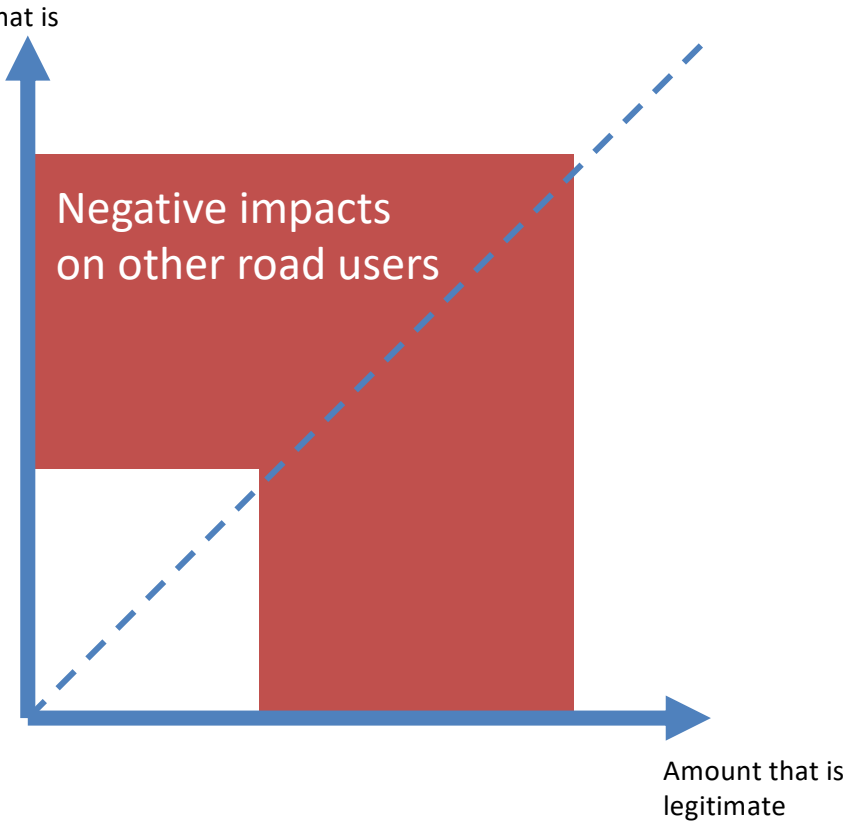
Melbourne

Curitiba

Zurich

Boston

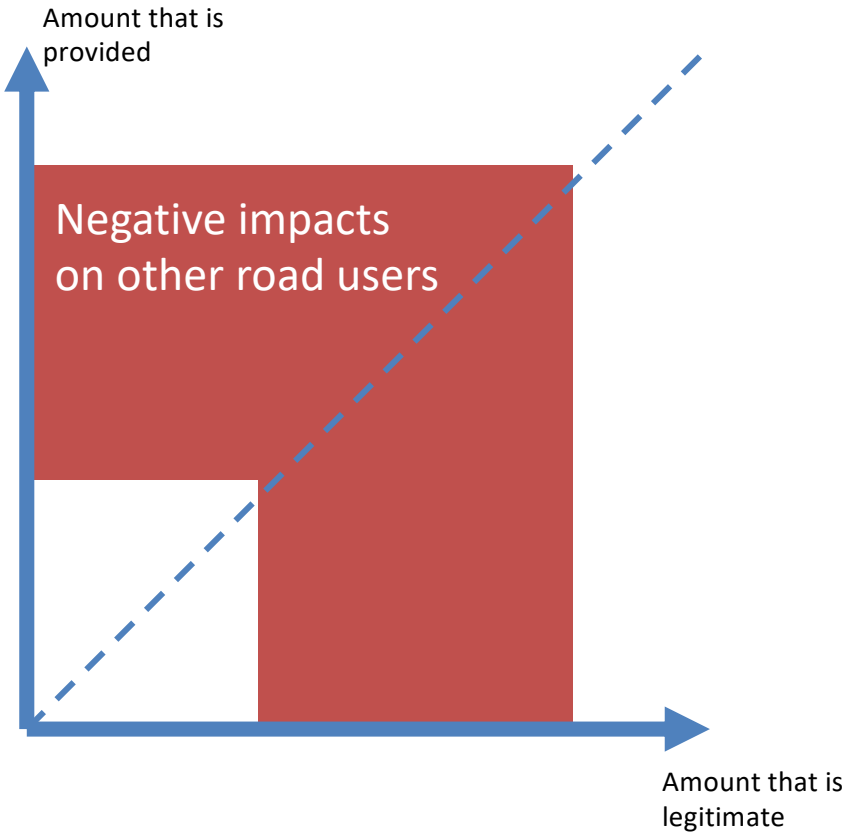
Toronto



This research: Legitimacy + case studies = Pragmatic Strategies

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. **Avoid impacts** on other road users:
  - B1: Grade separation,
  - B2: Build new capacity, and/or
  - B3: Subservience;
- Approach C. Build legitimacy **through** implementation:
  - C1: Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.



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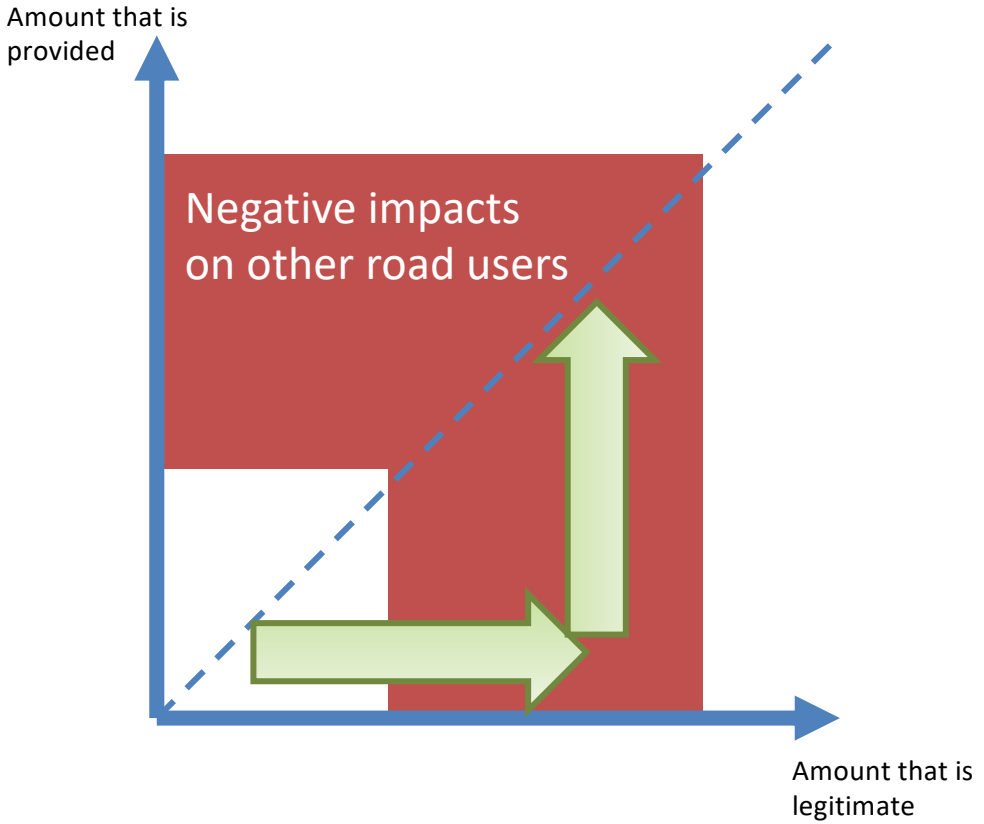

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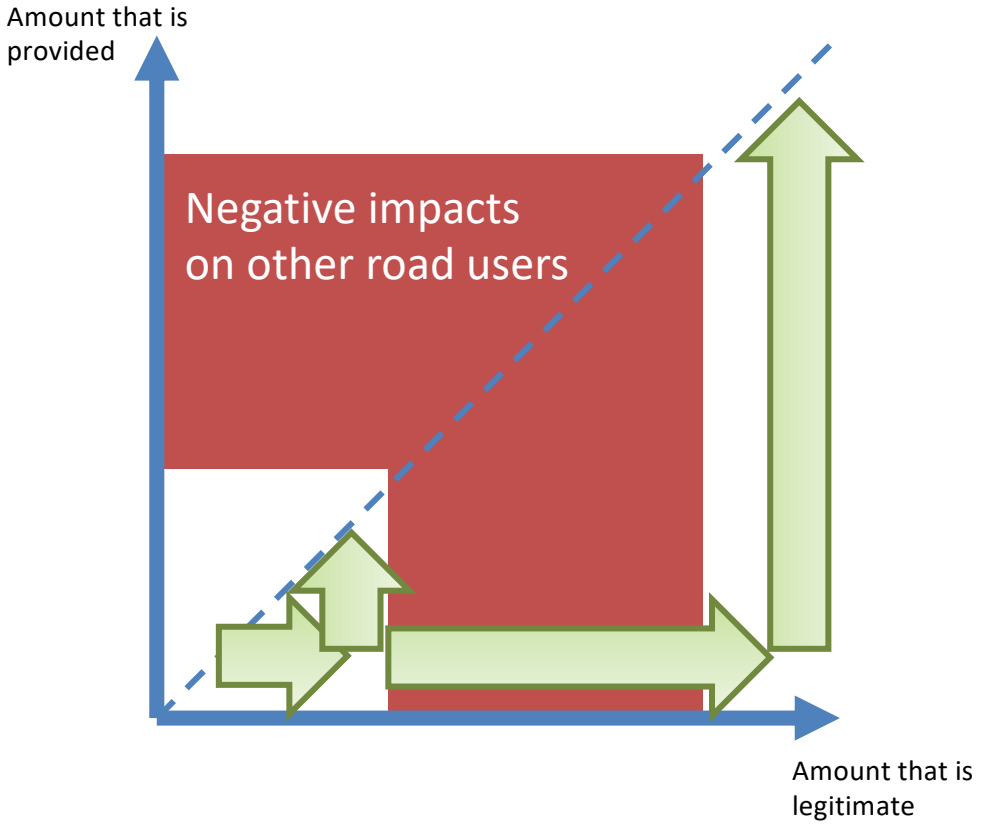

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> *"If they had a chance to actually see it, everyone would love it"* *(McKibben 2007).*

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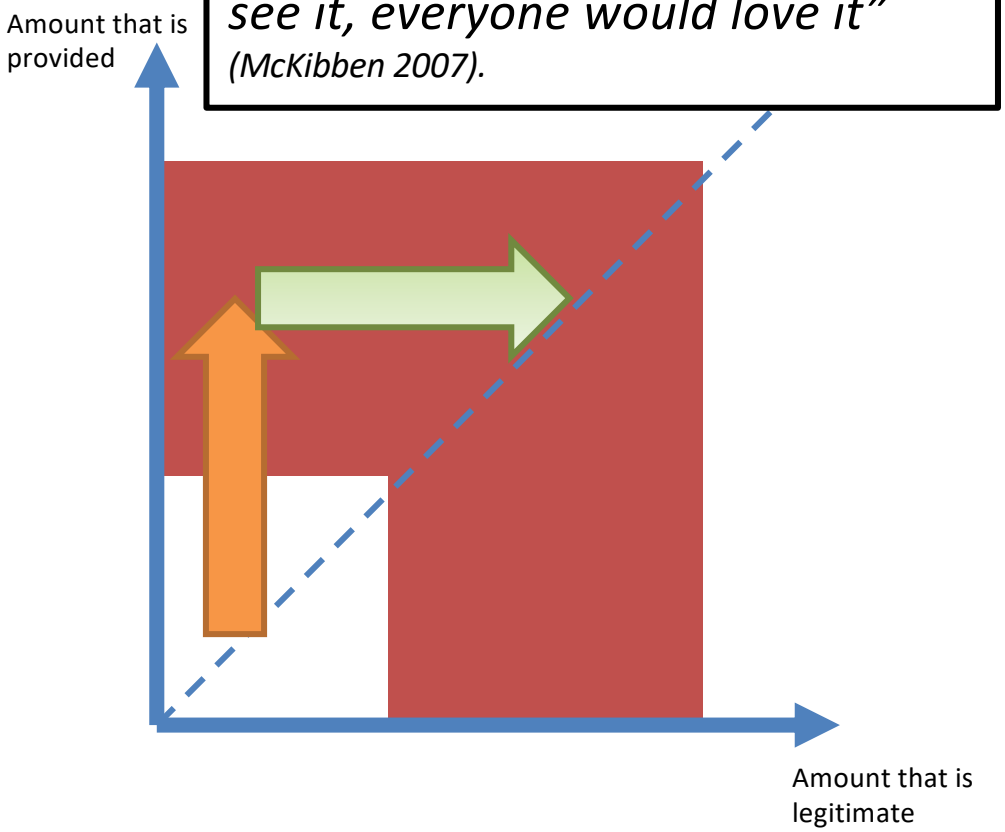

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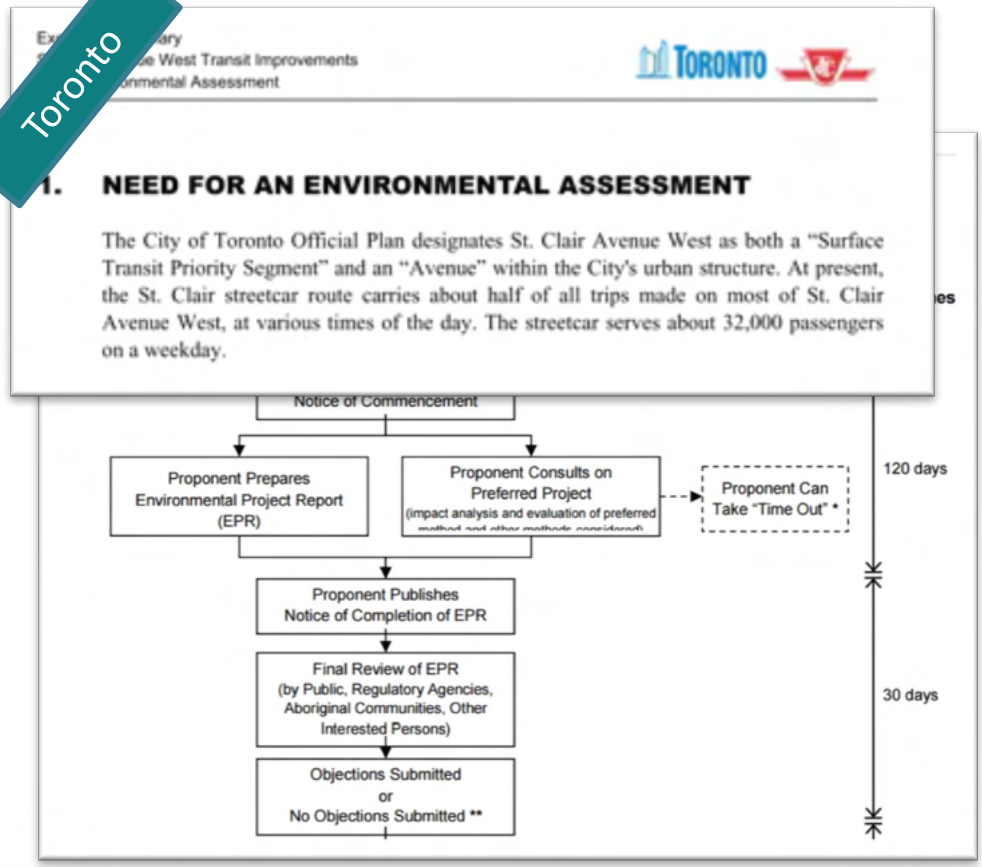
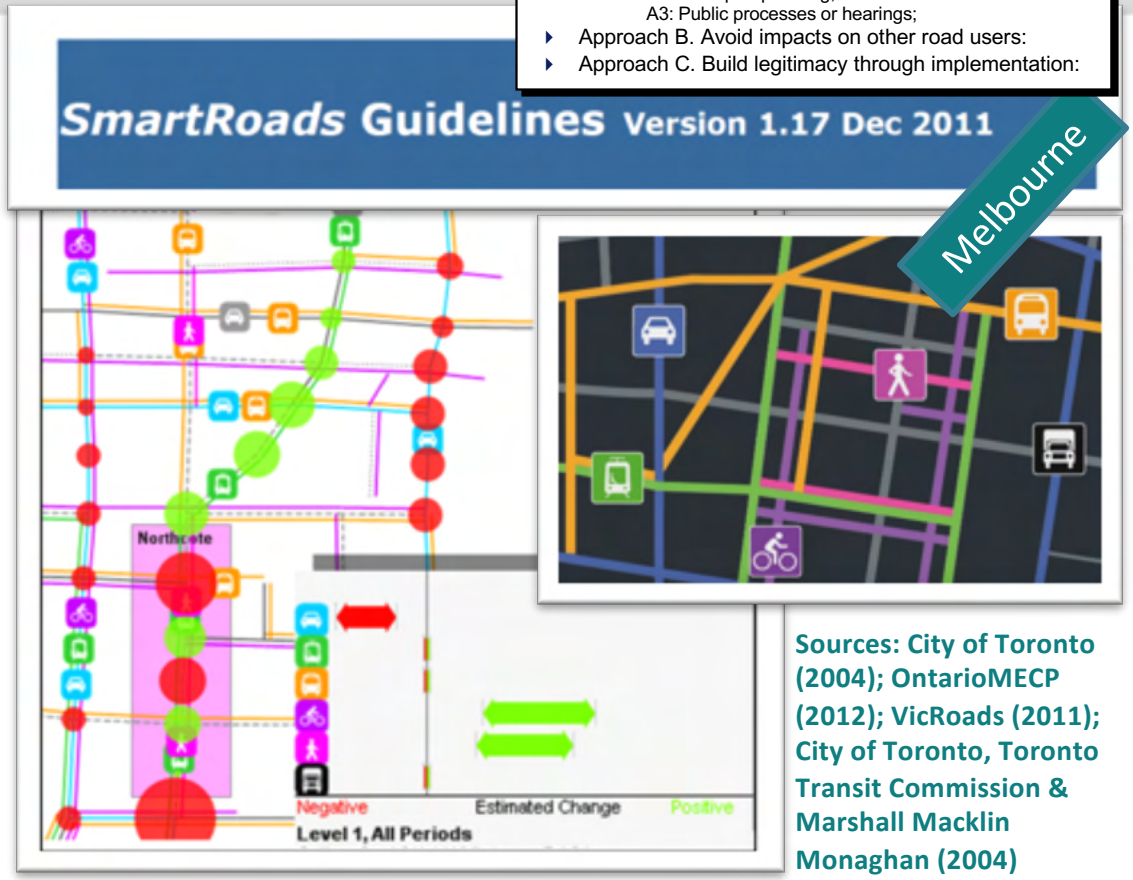
Before: A1. Technical enquiry: legitimise implementation through provision of analysis…

- Approach A. Build legitimacy before implementation:
  - **A1: Technical enquiry**,
  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation:

Toronto



Melbourne



Sources: City of Toronto (2004); OntarioMECP (2012); VicRoads (2011); City of Toronto, Toronto Transit Commission & Marshall Macklin Monaghan (2004)

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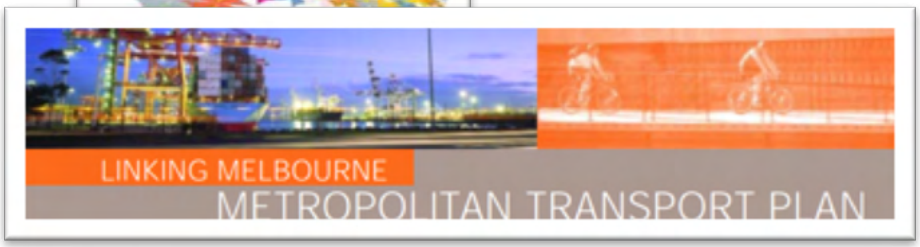
  - B1: Grade separation,
  - B2: Build new capacity, and/or
  - B3: Subservience;
- Approach C. Build legitimacy **through** implementation:
  - C1: Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.

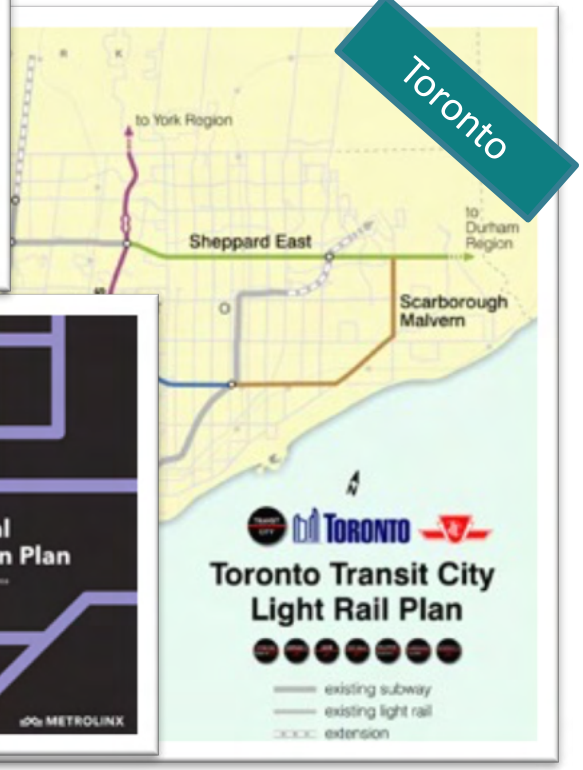
Before: A2. Transport planning: Widely used everywhere…

- Approach A. Build legitimacy before implementation:
  - A1: Technical enquiry,
  - **A2: Transport planning**, and/or
  - A3: Public processes or hearings;
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation:

Melbourne



Toronto

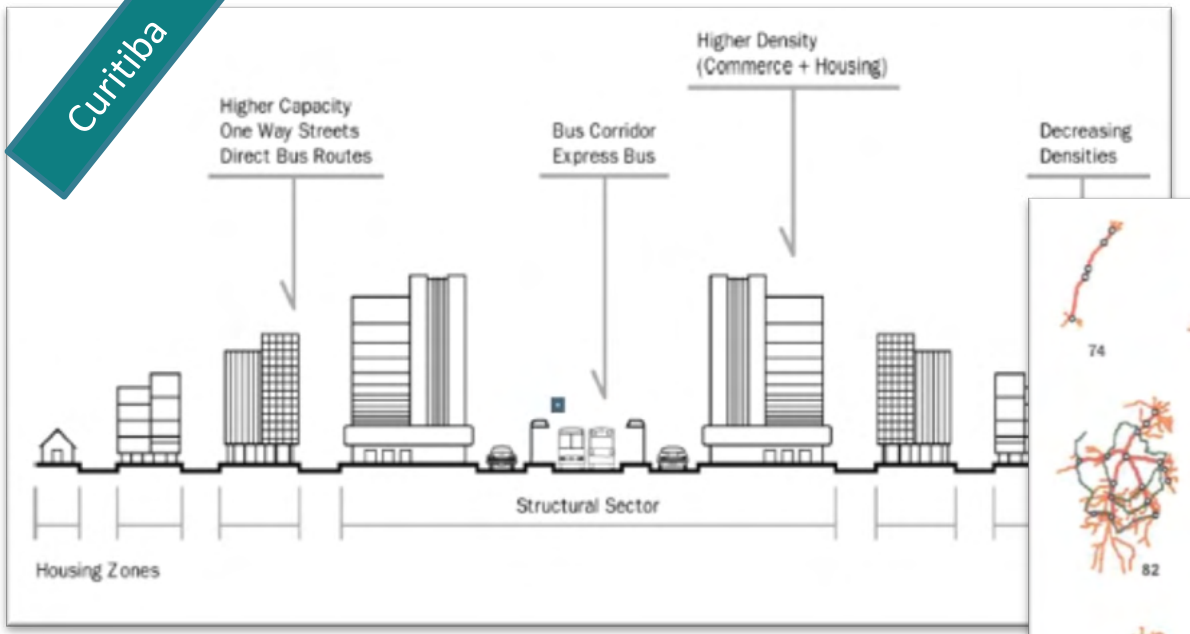


Before: A2 Transport planning: …but might work well with vision-based plans

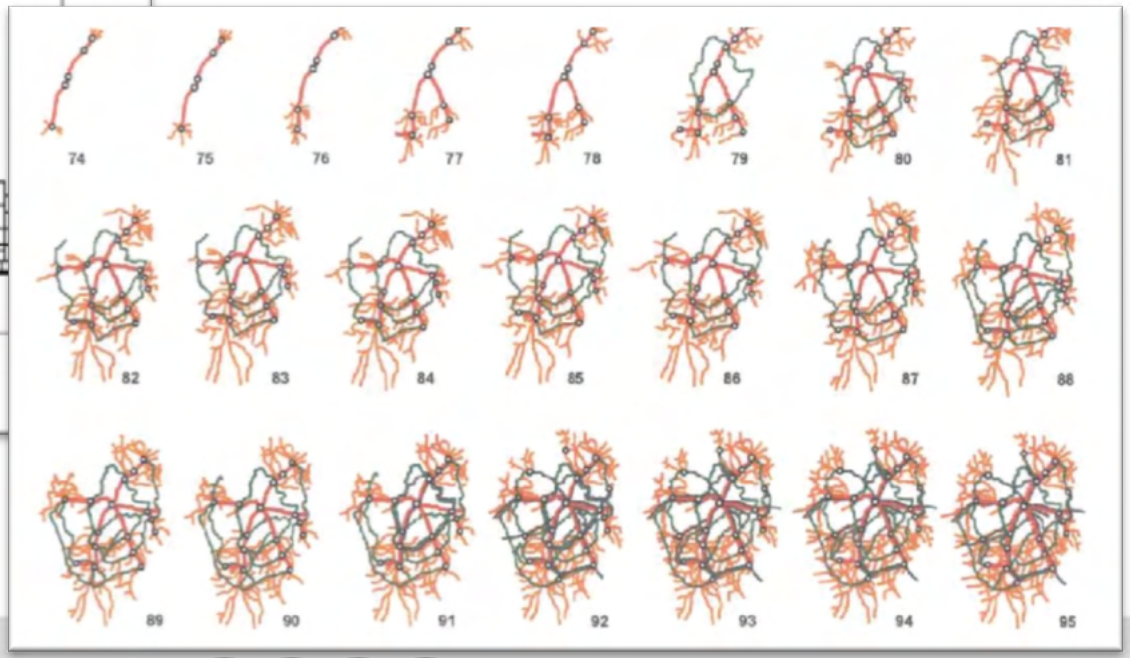
- Approach A. Build legitimacy before implementation:
  - A1: Technical enquiry,
  - **A2: Transport planning**, and/or
  - A3: Public processes or hearings;
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation:

Plano Diretor: Structural Axes system

Curitiba



Evolution of Integrated Bus Network 1974-95



Sources: Levinson, Zimmerman, et al. (2003b, pp. 24-5), Suzuki et al. (2010, p. 172)

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. **Avoid impacts** on other road users:
  - B1: Grade separation,
  - B2: Build new capacity, and/or
  - B3: Subservience;
- Approach C. Build legitimacy **through** implementation:
  - C1: Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.

Before: A3. Public processes and hearings: formal public participation in decision making, citizens' juries, direct voting

- Approach A. Build legitimacy before implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
  - **A3: Public processes or hearings;**
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation:

Zurich

Citizens' Transit Priority Initiative

At the expense of the investments fund, a credit of 200 million francs will be approved to permit, in the course of the ten years following the referendum, at a rate of 15 to at most 25 million francs per year, the financing of structural additions and improvements to the network of the transportation company of the City of Zürich, which will serve exclusively and substantially to eliminate all interference by private traffic and internal problems within the companies, so that the vehicles of the VBZ (Zürich transport company) can travel along their lanes or tracks virtually as fast as is technically possible.

On March 13, 1977, the voters narrowly approved the People's Initiative for the Promotion of Public Transport by a vote of:

- YES - 61,599 - (51.25%)
- NO - 58,588 - (48.75%) [78]

Source: Nash and Sylvia (2001)

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
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  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. **Avoid impacts** on other road users:
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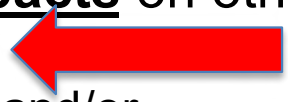


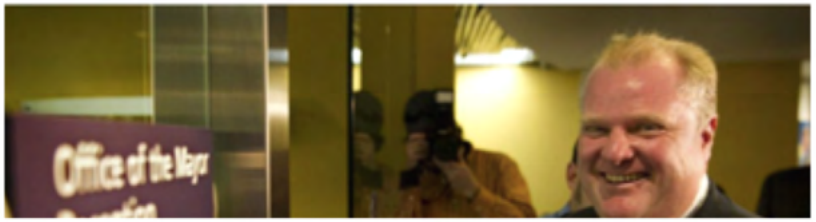
Avoid: B1. Grade separation: Toronto cancelled Transit City, but kept the mostly underground Eglinton Crosstown LRT

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
  - **B1: Grade-separation,**
  - B2: Building new capacity, and/or
  - B3: Subservient priority
- Approach C. Build legitimacy through implementation:

Toronto

'War on the car is over': Ford moves transit underground

On his first day in office, Mayor Rob Ford met with the TTC boss to stress that he wants subways, not light rail. The $8 billion Transit City light rail plan, already under construction, will have to stop.

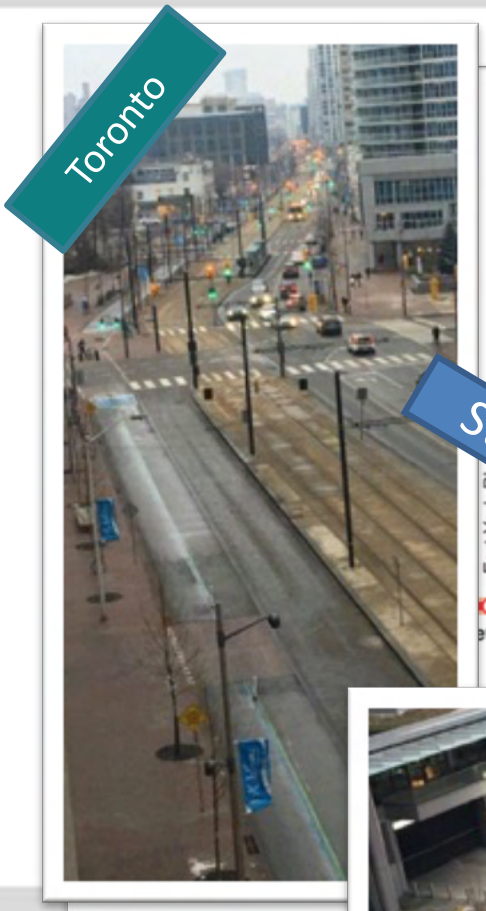


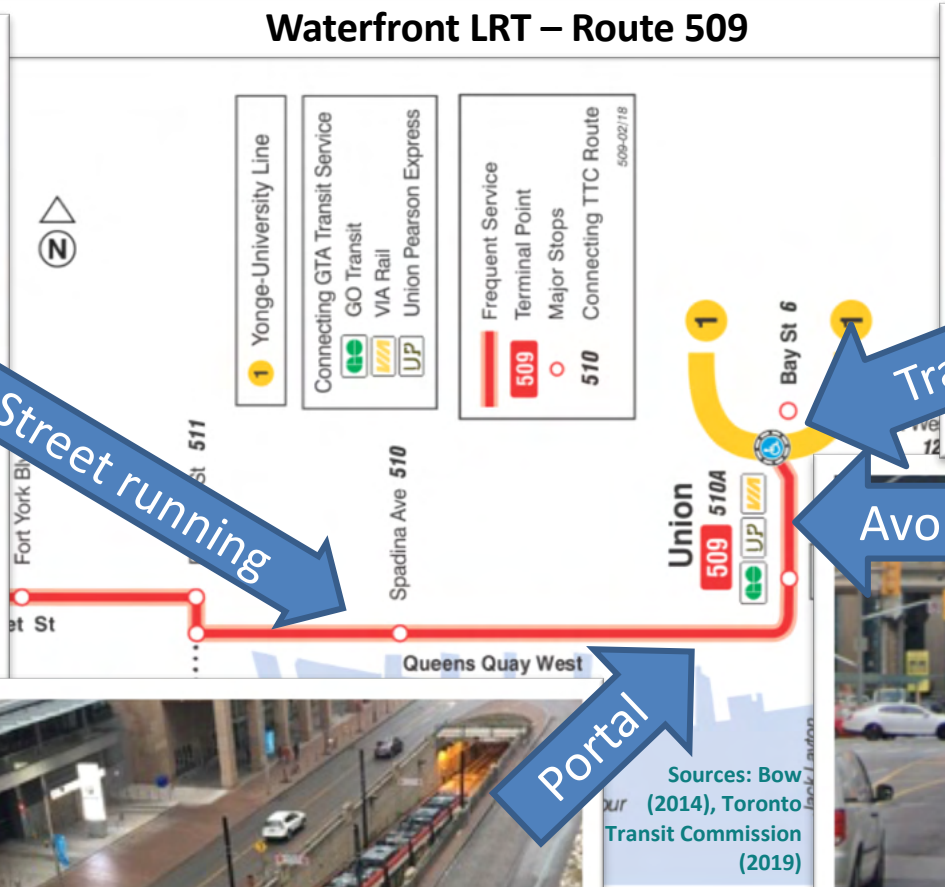
Eglinton Crosstown LRT

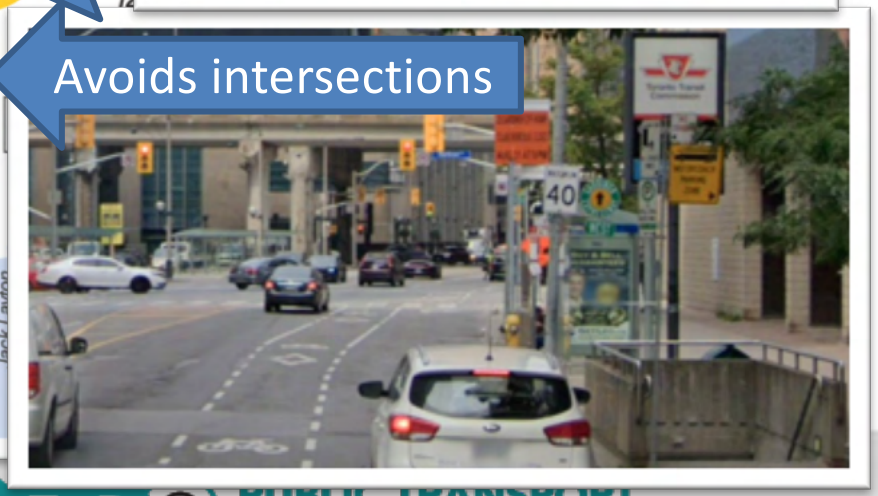
Sources: Kalinowski and Rider (2010); Metrolinx (2018)

Avoid: B1. Grade separation: Underground interchanges with subway common. Allows ticketless transfers, but also avoids intersections

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
  - **B1: Grade-separation,**
  - B2: Building new capacity, and/or
  - B3: Subservience;
- Approach C. Build legitimacy through implementation:







Pragmatic strategies for implementation

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  - C1: Bottom-up and incremental,
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  - C3: Trials.

Avoid B2. Building new capacity: Busways, road widening, shoulder running etc.

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
  - B1: Grade-separation,
  - **B2: Building new capacity,** and/or
  - B3: Subservience;
- Approach C. Build legitimacy through implementation:

Bus lanes returned to cars

Stud Road

Bernecich, Adrian . Knox Leader ; Knox, Vic. [Knox, Vic]05 Apr 2011: 15.

Scoresby MP Kim Wells had previously said the bus lanes between High St and Ferntree Gully Rd, and Kelletts and Wellington roads would stay because they had not replaced existing car lanes. But the future of the Stud Rd lanes between Bor[illegible]ia Rd and Burwood Highway, which have replaced existing car lanes, is still being discussed.

Melbourne

Eastern Freeway

Sources: Bernecich (2011); Google (undated); Reid (2010)

Pragmatic strategies for implementation

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  - A3: Public processes or hearings;
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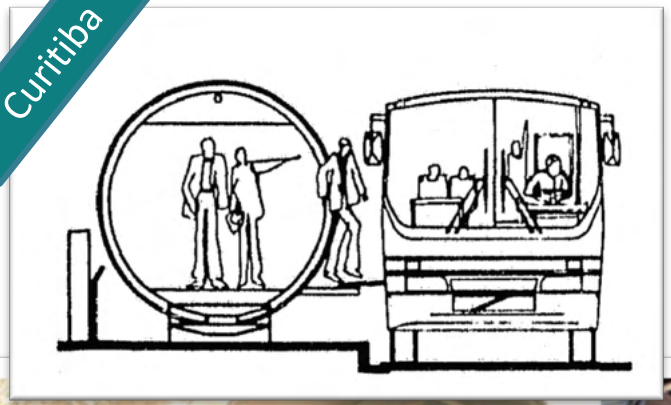
  - B3: Subservience;
- Approach C. Build legitimacy **through** implementation:
  - C1: Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.

Avoid: B3. Subservience: measures that help transit/cyclists/pedestrians etc…
…but have little impact on others

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
  - B1: Grade-separation,
  - B2: Building new capacity, and/or
  - **B3: Subservience;**
- Approach C. Build legitimacy through implementation:

Curitiba

Boarding tubes



Clarendon Street tram stop trial gets the hook

Melbourne

Sources: Dera (1995); Rabinovitch & Leitmann (1996); Google (undated)

Pragmatic strategies for implementation

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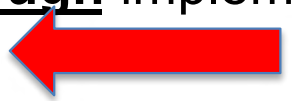

Through: C1. Bottom-up and incremental: small change over time…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - **C1: Bottom-up and incremental**
  - C2: Pop-ups, and/or
  - C3: Trials

Melbourne

Fitzroy Street, St Kilda

Source: Google (undated)

Through: C1. Bottom-up and incremental: … or including priority into other projects

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - **C1: Bottom-up and incremental**
  - C2: Pop-ups, and/or
  - C3: Trials

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
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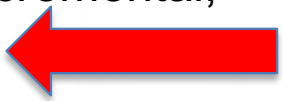

Through: C2. Pop-ups: low risk, and can just pop-down again

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - **C2: Pop-ups**, and/or
  - C3: Trials

Boston Tests Faster Bus Service Simply By Laying Out Orange Cones

The same low-c
improvements.

By Angie Schmitt

Boston set up a bus lane using orange cones. Photo: Jacqueline Goddard

Sources: Schmitt (2017); Gahbauer & Matute (2019)

Through: C2. Pop-ups: … tactical urbanism, ‘guerrilla’ action!

Seattle

Guerrilla road safety group ‘politely’ instal… illegal bike lane protectors on Cherry Street

Posted on April 4, 2013 by Tom Fucoloro

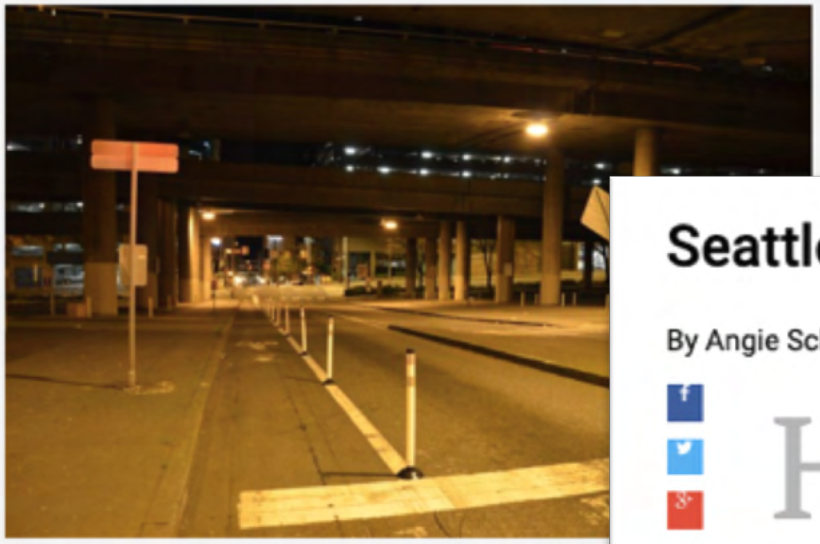

Image from the Reasonably Polite Seattleites

An extremely polite group of anonymous guerrilla road safety activists armed with $350 worth of reflective plastic pylons turned the painted Cherry Street bike lane under I-5 into a protected bike lane Monday morning.

Seattle Makes Guerrilla Bike Lane Permanent

By Angie Schmitt | Jul 16, 2013 | COMMENT HERE

How about a round of applause for Seattle? This spring, a group of activists calling themselves “Reasonably Polite Seattleites” installed a protected bike lane on Cherry Street. How did Seattle officials react? Well, this week the city made it permanent.

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
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  - C1: Bottom-up and incremental,
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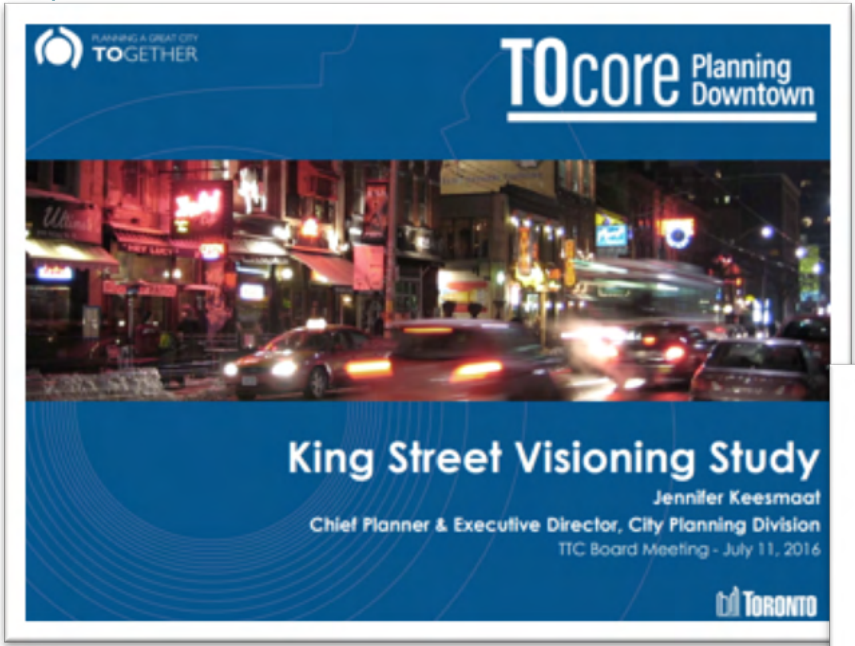
  - C3: Trials.

Through C3. Trials: Using a formal trial to get from a plan…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

Toronto

- Busiest streetcar in Toronto - 65,000 passengers per day.
- "…we want to...move people quick(ly) but also want to make sure we don't impact businesses" (Councillor Pam McConnell in Cheung (2016)).



City needs to solve King Street congestion, councillors say

Council will mull a revamp of busy King Street in December when it looks at downtown plan

King Street plan good for transit, bad for families, Ryerson professor warns

A 'transit priority' King Street is part of comprehensive city planning study for downtown core

Trevor Dunn · CBC News · Posted: Nov 09, 2016 5:00 AM ET | Last Updated: November 13, 2016

Through: C3. Trials: …to having legitimacy for an experiment,…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

Toronto

EX26.1

TORONTO

REPORT FOR ACTION

Proposed King Street Transit Pilot: Bathurst Street to Jarvis Street

Date: June 9, 2017
To: Executive Committee
From: General Manager, Transportation Services and Chief Planner and Executive Director, City Planning
Wards: 20 (Trinity-Spadina), 28 (Toronto Centre-Rosedale)

SUMMARY

This report has been prepared in collaboration with the Chief Executive Officer of the Toronto Transit Commission (TTC).

This report seeks Council authority to proceed with implementation and monitoring of a proposed King Street Transit Pilot between Bathurst Street and Jarvis Street in the Downtown.

King Street is the busiest surface transit route in the entire city, moving more than 65,000 riders on an average weekday, compared to only 20,000 vehicles. Only the Yonge-University and Bloor-Danforth subway lines carry more people on transit.

But King Street is not currently working well for transit. Streetcar service can be slow, unreliable, and erratic, with unpredictable travel times, especially during rush hours, but also during some late evening and weekend times. People end up having to plan for their slowest trip. Along some parts of King Street, walking is sometimes faster, especially between Bathurst Street and Jarvis Street, where we see the most traffic congestion. When streetcars do arrive, they are often overcrowded, especially in rush hours. The TTC estimates that the line is currently about 20% overcapacity.

The King Street Transit Pilot is about moving people more efficiently on transit, improving public space, and supporting business and economic prosperity along King Street. Primarily, the transit pilot is about improving *transit reliability, speed, and capacity* on the busiest surface transit route in the entire city.

Through: C3. Trials: …past protest,…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

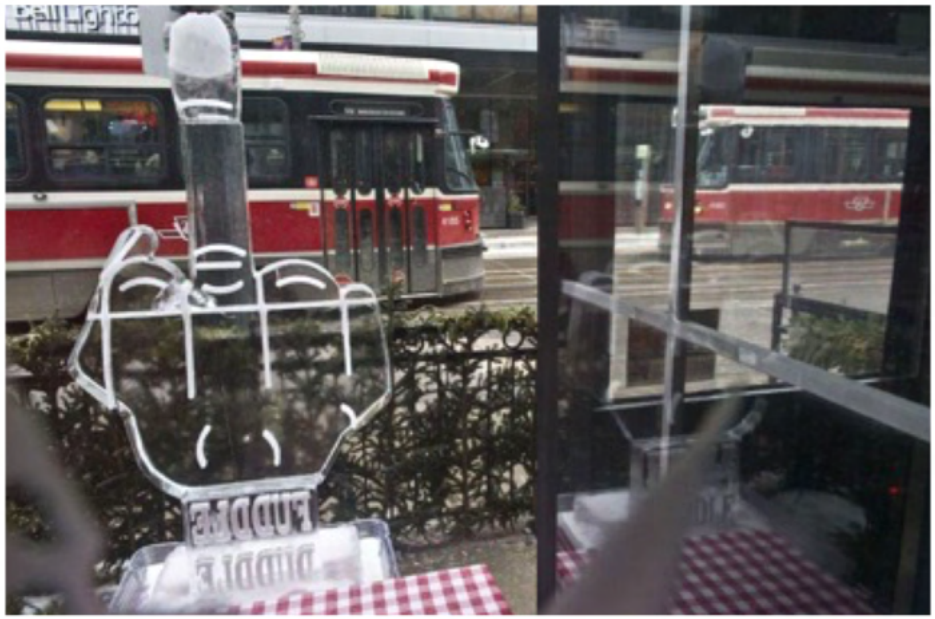
Toronto

Lauren O'Neil Posted on January 30, 2018 Report Inaccuracy

Street hockey the newest form of transit protest on King St.

GTA

Some businesses give an icy middle finger to King St. pilot



Sources: O'Neil (2018); Harris (2018)

Through: C3. Trials: …to improve the trial,…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

Toronto

Chris Selley: Give Toronto's King Street pilot a fair shot

For the love of God, let's not repeat the humiliating spectacle of shutting down King for TIFF — the act of a profoundly unserious city.

"Listen, this is a pilot. Nobody said it was going to be perfect on day one. In fact, it's not supposed to be. But it is the direction our city must go, needs to go and together ... we are going to make sure it's a success for everybody."

Mayor unveils plan to 'animate' King Street amid business complaints about pilot project

Sources: Selley (2018); Draaisma (2018)

Through: C3. Trials: …and to gain and publicise real-world data,…

Toronto

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

May and June 2018 dashboard report for the King Street Transit Pilot

TRANSIT RIDERSHIP

11% increase in all-day weekday ridership.

35% increase in AM commute ridership (eastbound at Spadina Ave.).

27% increase in PM commute ridership (westbound at Spadina Ave.).

TRANSIT RELIABILITY

85% of streetcars arriving within 4 minutes westbound during the morning commute.

TRANSIT TRAVEL TIMES

The reliability of streetcar travel times has improved.

Approx. 4-5 minute improvement (in each direction) during the PM commute for the slowest streetcar travel time.

CAR TRAVEL TIMES & VOLUMES

Over May and June, westbound car travel times increased compared to the period before the pilot. This increase is counter to results from previous months, where variations in car travel time had varied (+/-) less than a minute.

This increase may be partially related to the commencement of "construction season" which began in early May. Specifically, emergency sewer work that was required from May 7th to 16th, which reduced Richmond Street to one lane and utility work from June 26 to 29, which reduced Queen Street to one lane from Jarvis Street to University Avenue.

The downtown traffic network has been largely able to absorb and respond to the changes in routing that drivers have made.

Drivers on King Street continue to access local businesses or residences, conduct loading and deliveries, and pick-up/drop-off passengers. Traffic previously using King Street has generally shifted to alternative east and west routes.

PEDESTRIAN VOLUMES

Changes in the number of pedestrians from November to May and June show similar trends on both King Street and Queen Street. Pedestrian volumes in May and June increased from those in April at some locations, which is consistent with expected seasonal changes.

On King Street...

MIDDAY EARLY EVENING

Weekday all-day pedestrian volumes indicate that mid-day and evening volumes remain relatively high.

CYCLING VOLUMES

Cycling volumes in May and June showed a significant increase from those in April, which is consistent with expected seasonal changes.

Cycling volumes on King Street (PM Peak at Spadina Avenue) increased by +550 trips in May and +520 trips in June compared to the baseline.

ECONOMIC POINT-OF-SALE DATA

Customer spending on King Street since the pilot began has seen slight growth (0.3%) from the average rate of spending over the same months from the year before.

Average year-over-year growth in the same period was 5.7% for the area surrounding the pilot and 3.8% for the City overall.

Generally, the trends in customer spending observed during the first six months of the pilot are in line with trends from the six months before the pilot began.

Source: City of Toronto and Toronto Transit Commission (2018)

Through: C3. Trials: …which build legitimacy for retention

Toronto

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

Staff Posted on June 29, 2018 Report Inaccuracy

Nobody is complaining about King Street anymore

King Street transit pilot working, must continue, Toronto Mayor John Tory says

City Tanya Mok Posted

Future of the King Street Pilot uncertain beyond this year

City council votes to make King Street pilot permanent

Sources: blogTO (2018); CBC (2019); Moore (2019); Mok (2018)

MONASH University

PTRG PUBLIC TRANSPORT RESEARCH GROUP

Through: C3. Trials: However, it has to be believed to be a real trial…

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
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  - C1: Bottom-up and incremental
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  - **C3: Trials**

Melbourne

The Clarendon Street Campaign

MEDIA RELEASE

Embargoed until 11AM, Wednesday 16 March

16 March 2005

Batchelor's Tram Experiment Fails Clarendon Street
www.clarendonstcampaign.org

Don Watson, a South Melbourne newsagent who has run his Clarendon Street business for 22 years, says that the recent traffic and tram stop changes on the street may force hi and others to close down.

The changes – which are part of a trial conducted by VicRoads, Yarra Trams and the Ci of Port Phillip – have eliminated around 35 percent of Clarendon Street's car parks, and introduced hook turns that are confusing motorists and endangering cyclists and pedestrians.

"They haven't thought this through," according to Mr Watson.

A delivery driver who often works on Clarendon Street, Jo Giaccotto, believes that the changes have made the strip dangerous for drivers.

"You nearly get killed every time you go through that intersection. It makes it very hard to do my job," Mr Giaccotto said.

Don Watson is concerned that the initiative which was promoted as a trial is in fact set in concrete.

"We were told that, after the trial period, there would be genuine evaluation and consultation. We are now getting the message loud and clear that this is a done deal. It makes a mockery of the government's so-called commitment to consultation.

"In the interests of traders, motorists, cyclists, shoppers and residents, the government must act now to return Clarendon Street to its original state," Mr Watson said.

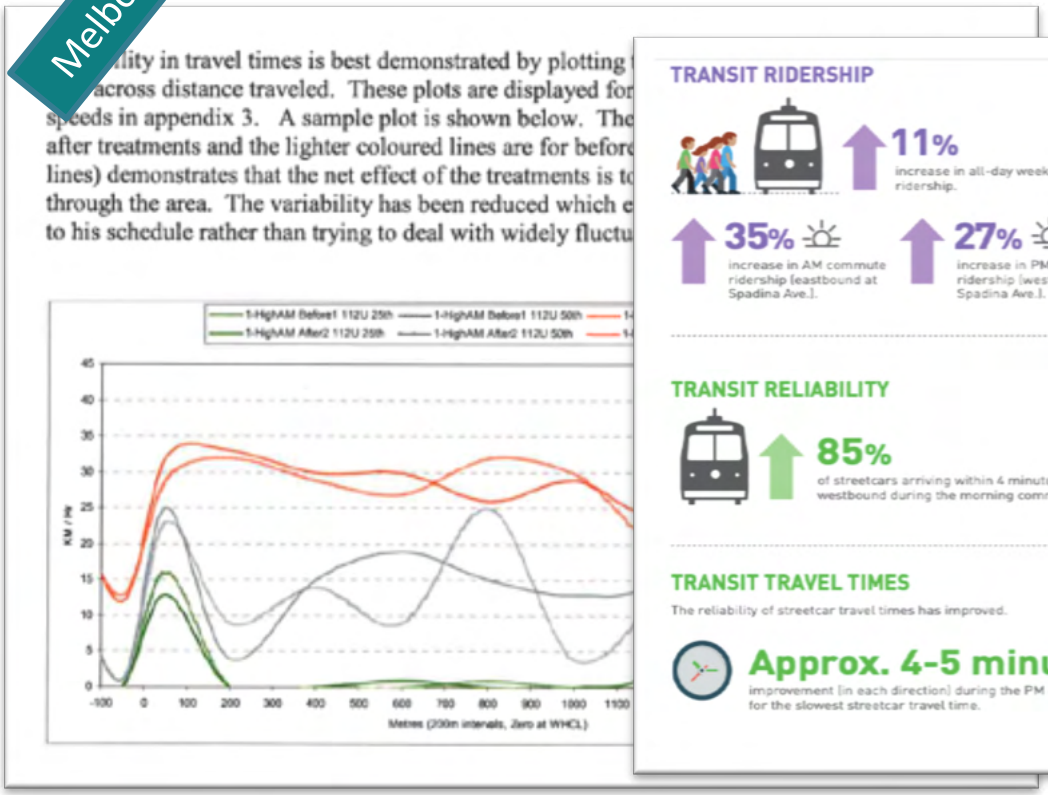
Source: Quin (2005a)

Through: C3. Trials: … and presenting results clearly to the public is critical

- Approach A. Build legitimacy before implementation:
- Approach B. Avoid impacts on other road users:
- Approach C. Build legitimacy through implementation
  - C1: Bottom-up and incremental
  - C2: Pop-ups, and/or
  - **C3: Trials**

Melbourne

Yarra Trams Clarendon Street technical analysis



…lity in travel times is best demonstrated by plotting … across distance traveled. These plots are displayed for … speeds in appendix 3. A sample plot is shown below. The … after treatments and the lighter coloured lines are for before … lines) demonstrates that the net effect of the treatments is to … through the area. The variability has been reduced which e… to his schedule rather than trying to deal with widely fluctu…

Source: Yarra Trams (2005)

King Street monthly dashboard

Toronto

Source: City of Toronto and Toronto Transit Commission (2018)

MONASH University

Agenda

Introduction

Context

Legitimacy

Pragmatic Strategies

Review and close

This seminar has been about pragmatic strategies for making change…

Pragmatic strategies for implementation

- Approach A. Build legitimacy **before** implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. **Avoid impacts** on other road users:
  - B1: Grade separation,
  - B2: Build new capacity, and/or
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- Approach C. Build legitimacy **through** implementation:
  - C1: Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.

…and legitimacy

- *normative legitimacy*
  the law requires accessible tram stops
- *legitimacy through reasonableness*
  unreasonable there is no wheelchair access
- *legitimacy as trust*
  engineers recommend a platform stop
- *sociological legitimacy*
  widespread support for DDA compliance
- *legitimacy through consent*
  voted on by our political representatives
- *unconditional duty*
  cyclists must always have a bike lane(?)
- *conditional normative support* *(NIMBYism)*
  I agree with the idea of DDA compliance,
  but not without a bike lane…
  ….or the loss of on-street parking

Thesis: Detailed literature review, case studies, framework development


MONASH University

A framework and pragmatic strategies for transit priority implementation

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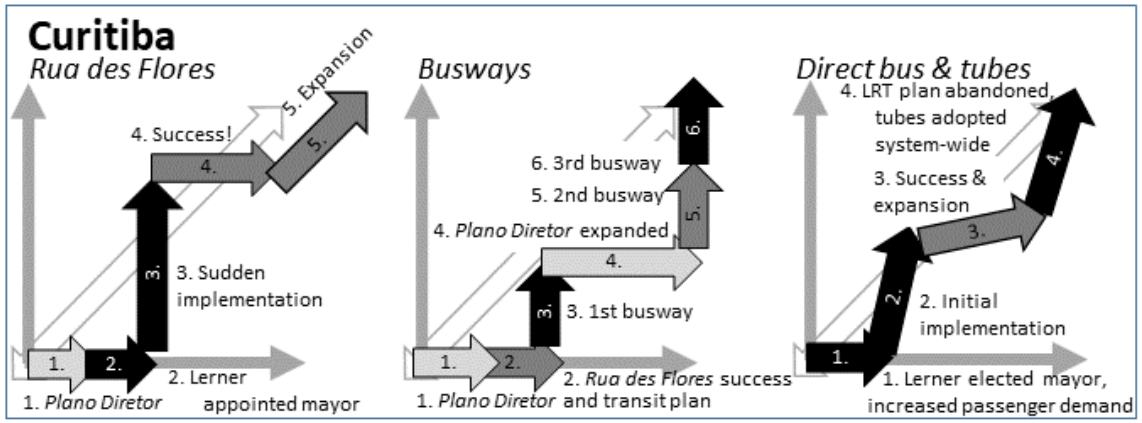
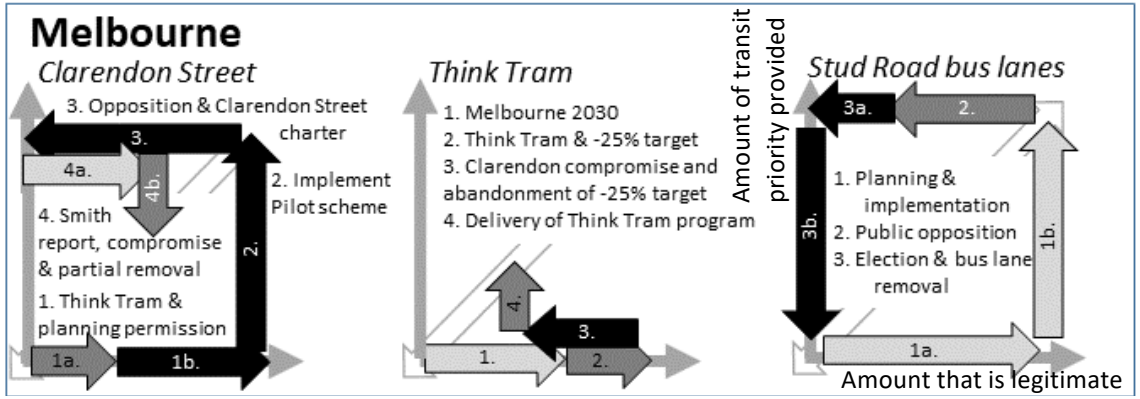
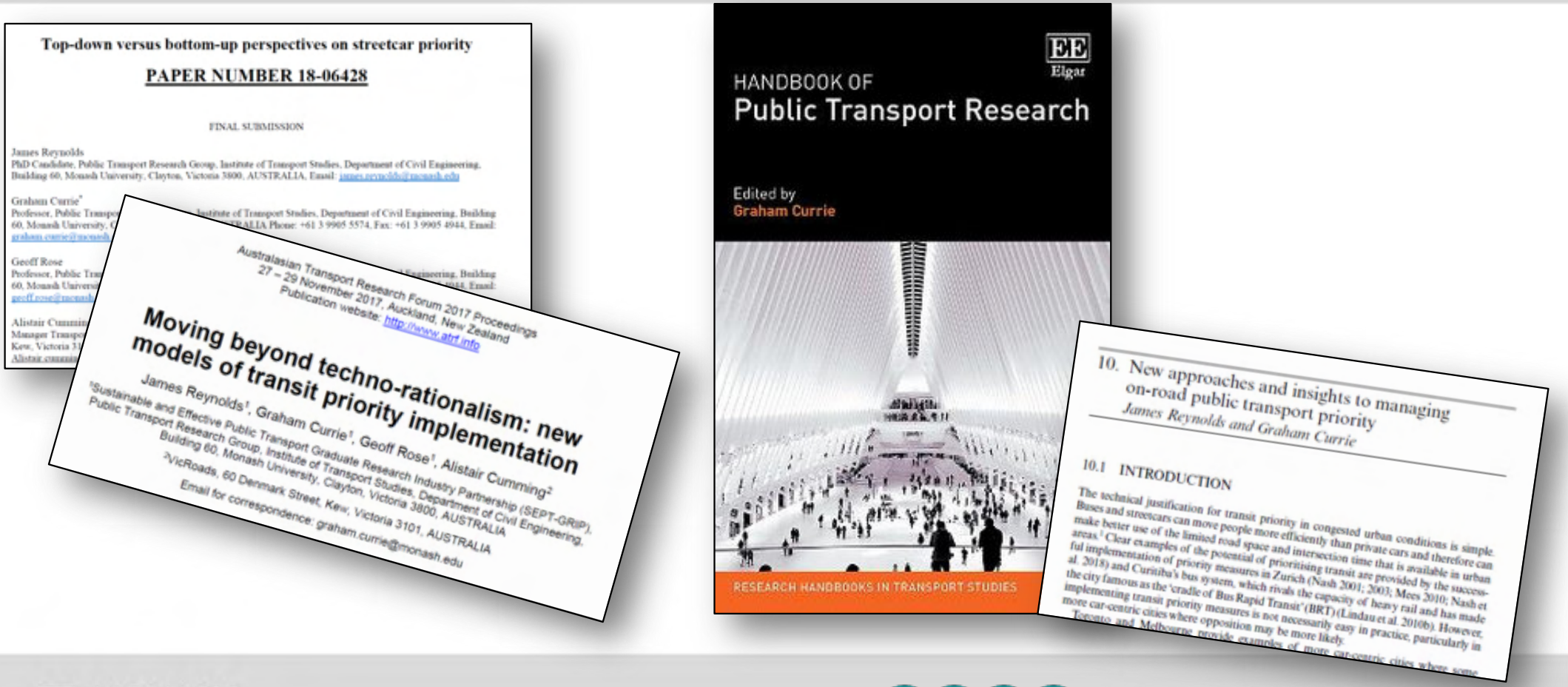
Part of the Sustainable and Effective Public Transport Graduate Research Industry Partnership (SEPT-GRIP) at the Public Transport Research Group (PTRG), Institute of Transport Studies, in the Department of Civil Engineering



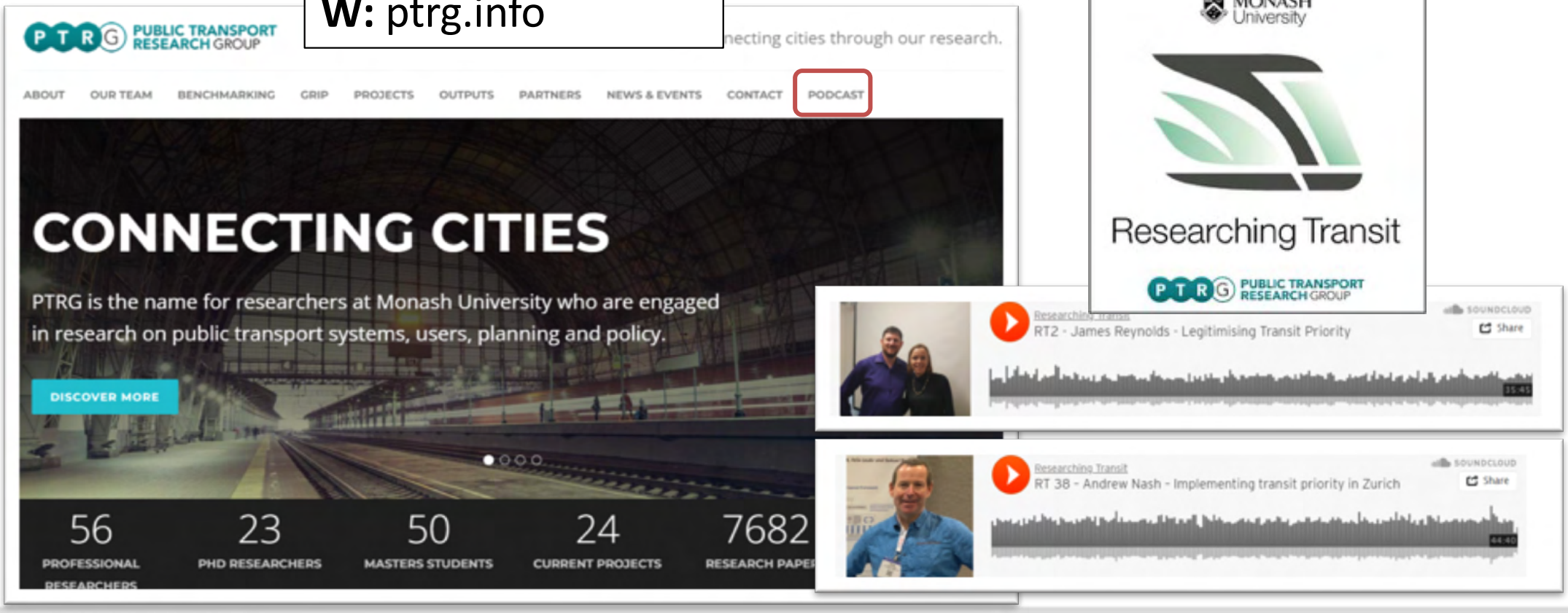


Papers: Bottom-up and incremental, public policy approaches



Two episodes of the Research Transit podcast on transit priority implementation

W: ptrg.info



Questions?

Pragmatic strategies for implementation

- Approach A. Build legitimacy before implementation:
  - A1: Technical enquiry,
  - A2: Transport planning, and/or
  - A3: Public processes or hearings;
- Approach B. Avoid impacts on other road users:
  - B1: Grade separation,
  - B2: Build new capacity, and/or
  - B3: Subservience;
- Approach C. Build legitimacy through implementation:
  - C1 : Bottom-up and incremental,
  - C2: Pop-ups, and/or
  - C3: Trials.

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