



Government of Tamil Nadu and Chennai Metro Rail Limited (CMRL), India
Friday 10th March, 2023

Using Pragmatic Strategies to Legitimise Implementation

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



Agenda

Introduction

Context

Legitimacy

Pragmatic Strategies

Conclusions



Using Pragmatic Strategies to Legitimise Implementation

How to get (possibly controversial) transport projects done...

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



Dr James Reynolds



Professor Graham Currie

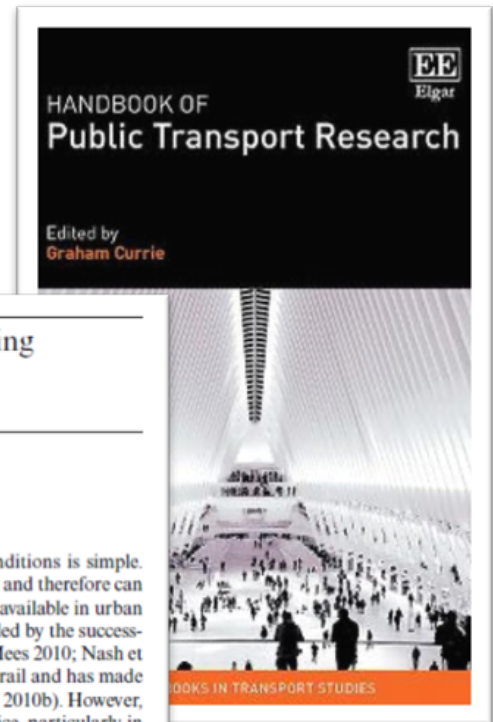
Public Transport Research Group (PTRG)
Institute of Transport Studies (ITS)
Civil Engineering Monash University

10. New approaches and insights to managing on-road public transport priority

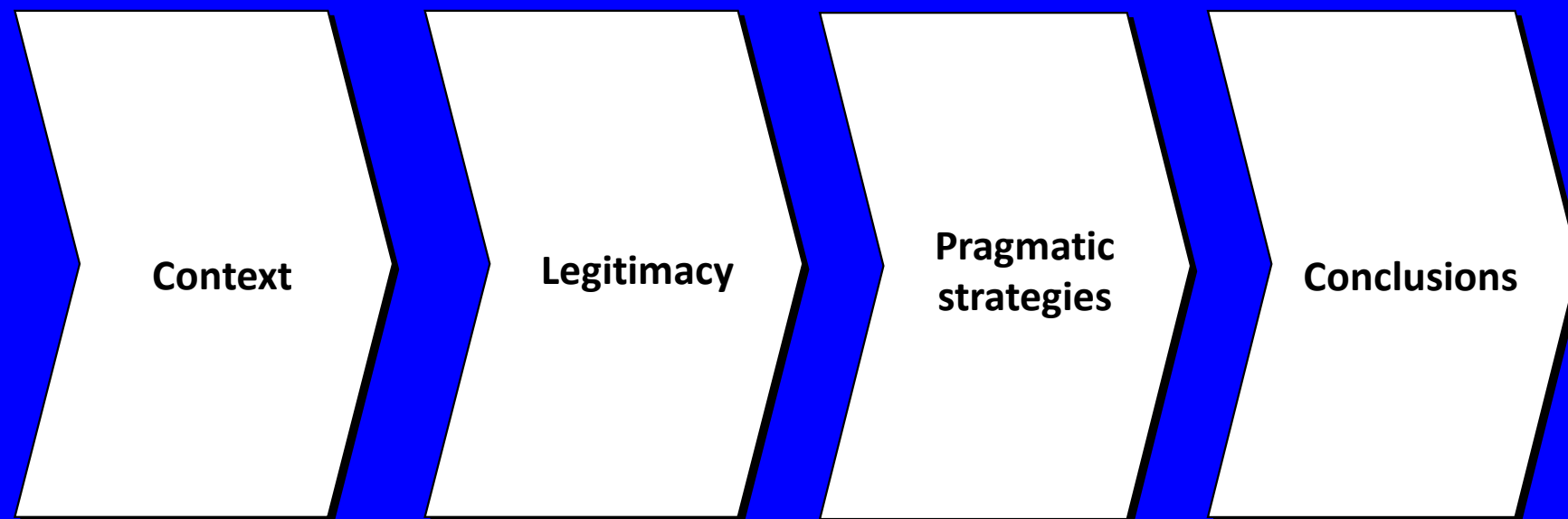
James Reynolds and Graham Currie

10.1 INTRODUCTION

The technical justification for transit priority in congested urban conditions is simple. Buses and streetcars can move people more efficiently than private cars and therefore can make better use of the limited road space and intersection time that is available in urban areas.¹ Clear examples of the potential of prioritising transit are provided by the successful implementation of priority measures in Zurich (Nash 2001; 2003; Mees 2010; Nash et al. 2018) and Curitiba's bus system, which rivals the capacity of heavy rail and has made the city famous as the 'cradle of Bus Rapid Transit' (BRT) (Lindau et al. 2010b). However, implementing transit priority measures is not necessarily easy in practice, particularly in more car-centric cities where opposition may be more likely.



The rest of this presentation is structured as follows:



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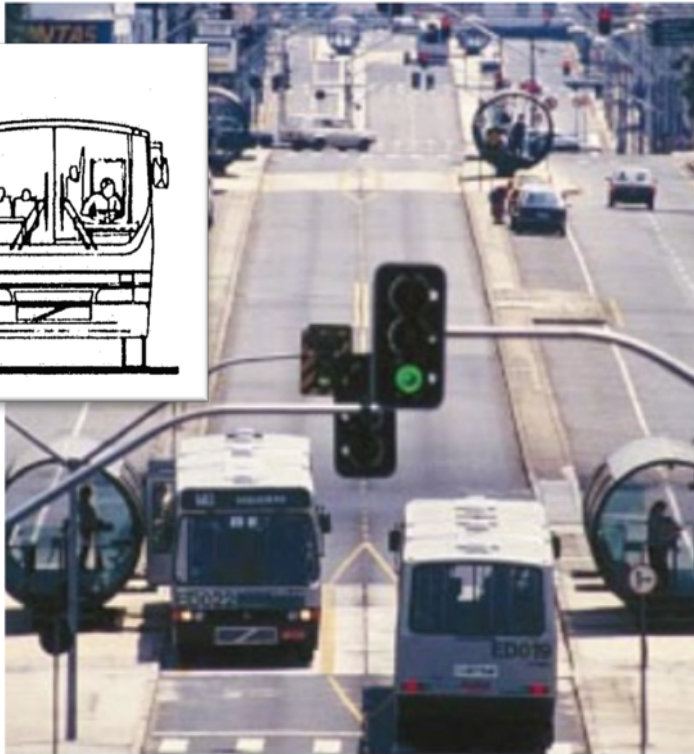
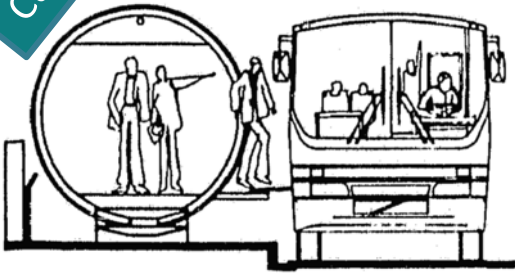


Technical answers are known...

Curitiba, the Cradle of Bus Rapid Transit

LUIS ANTONIO LINDAU, DARIO HIDALGO and DANIELA FACCHINI

Curitiba



Zurich



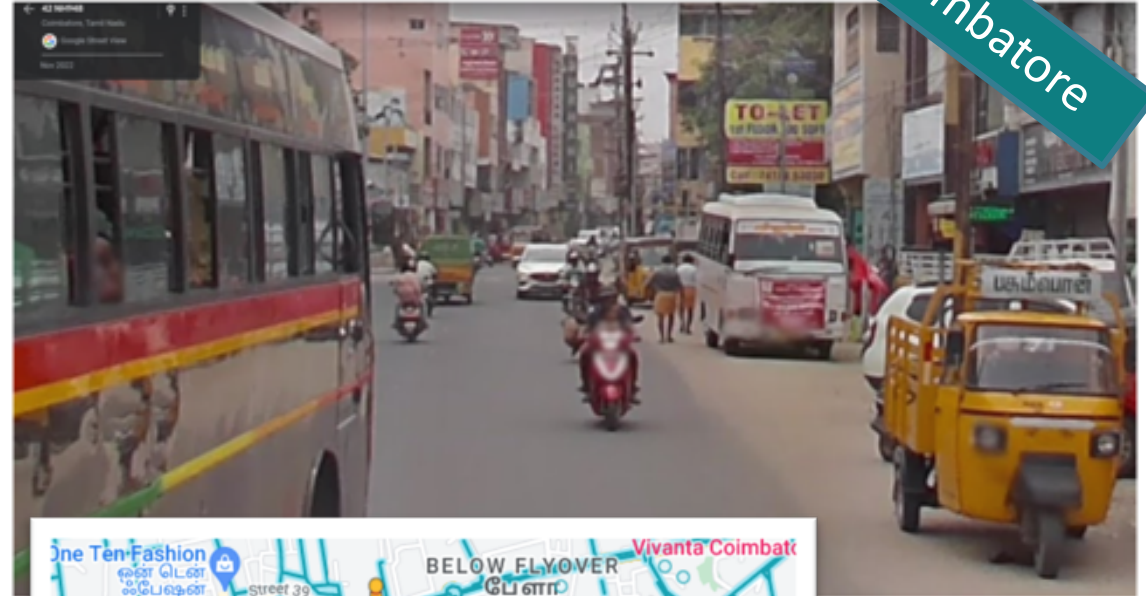
Technical answers are known, but implementation is hard

Melbourne



Source: Yarra Trams (2014)

Coimbatore



Source: Google Maps (2022)

Agenda

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Many good reasons to improve our transport systems...



Source: City of Munster (1991)

...but implementation is difficult

No more new bike lanes for CBD after council cops complaints

THE  AGE

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



Source: Jacks (2018)



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

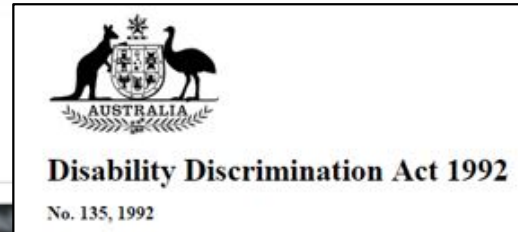
Source: Waters (2022)

Many different types of legitimacy

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



Source: Jacks (2018)

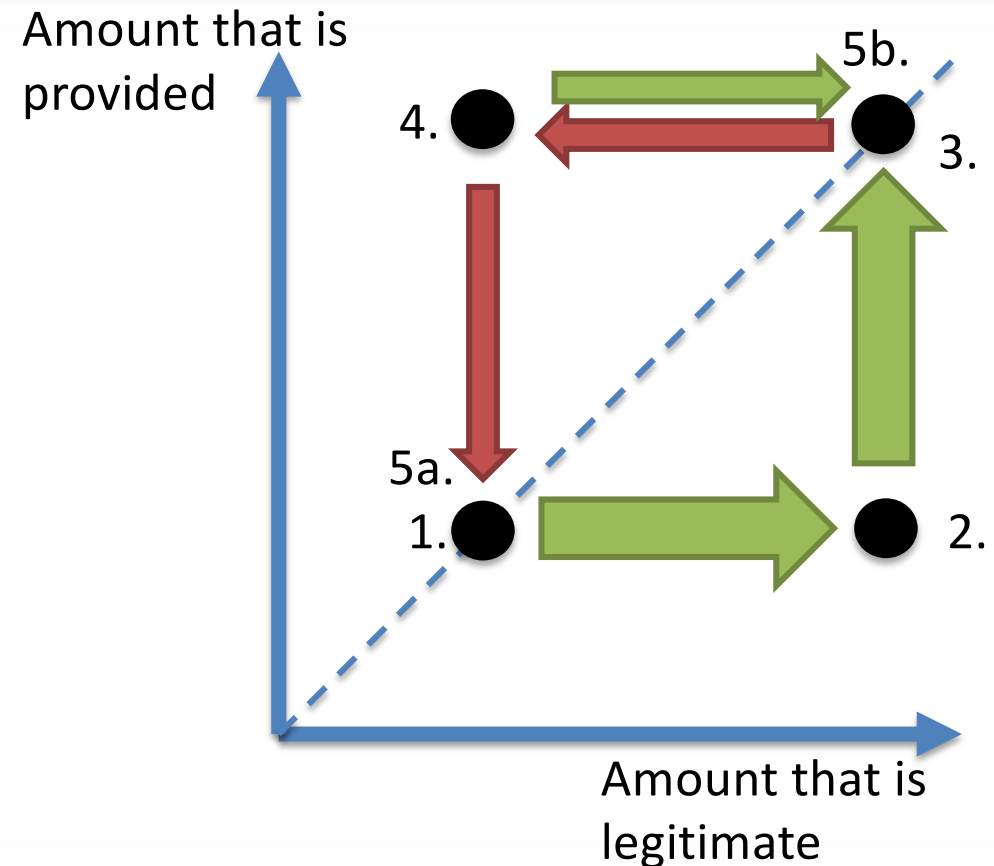


- *normative legitimacy*
the law requires accessible tram stops
- *legitimacy through reasonableness*
unreasonable there is no wheelchair access
- *legitimacy as trust*
engineers recommend a platform stop
- *sociological legitimacy*
widespread support for DDA compliance
- *legitimacy through consent*
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

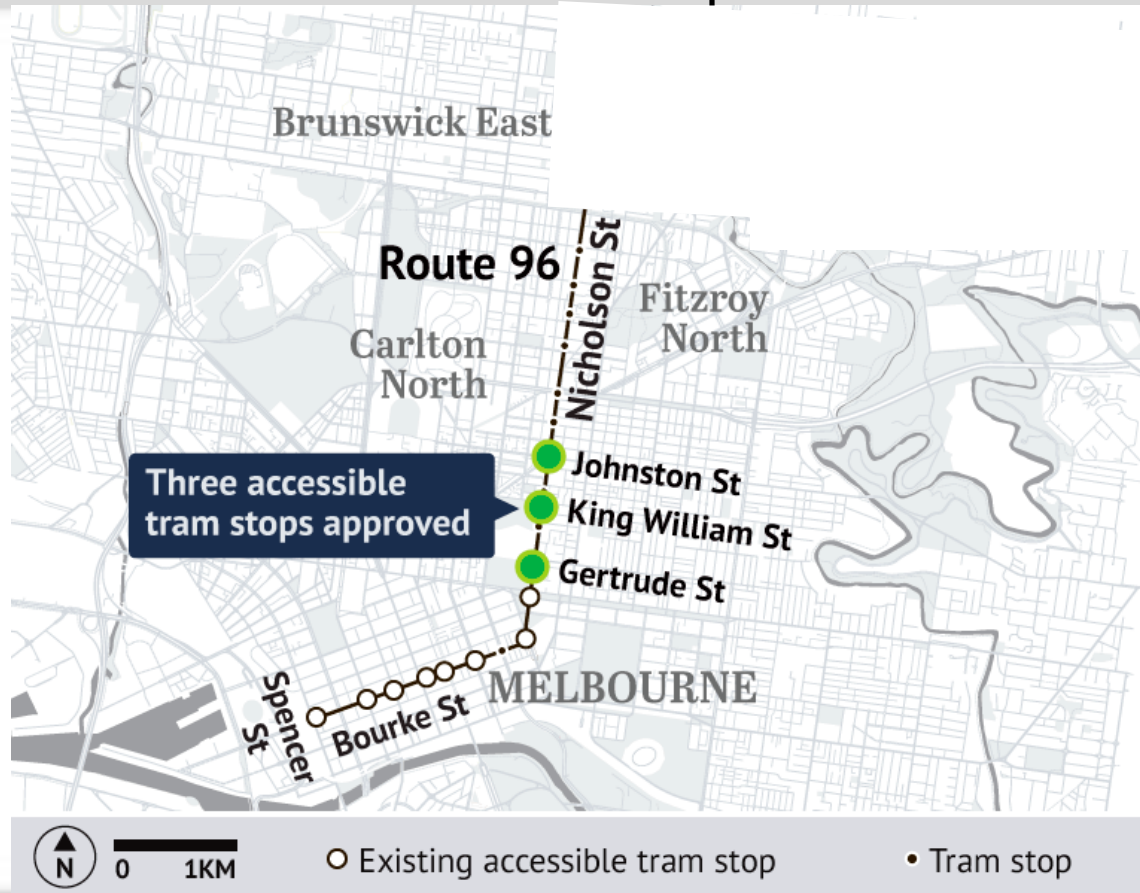
Legitimacy framework:

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



Amount that is provided

Safety zone

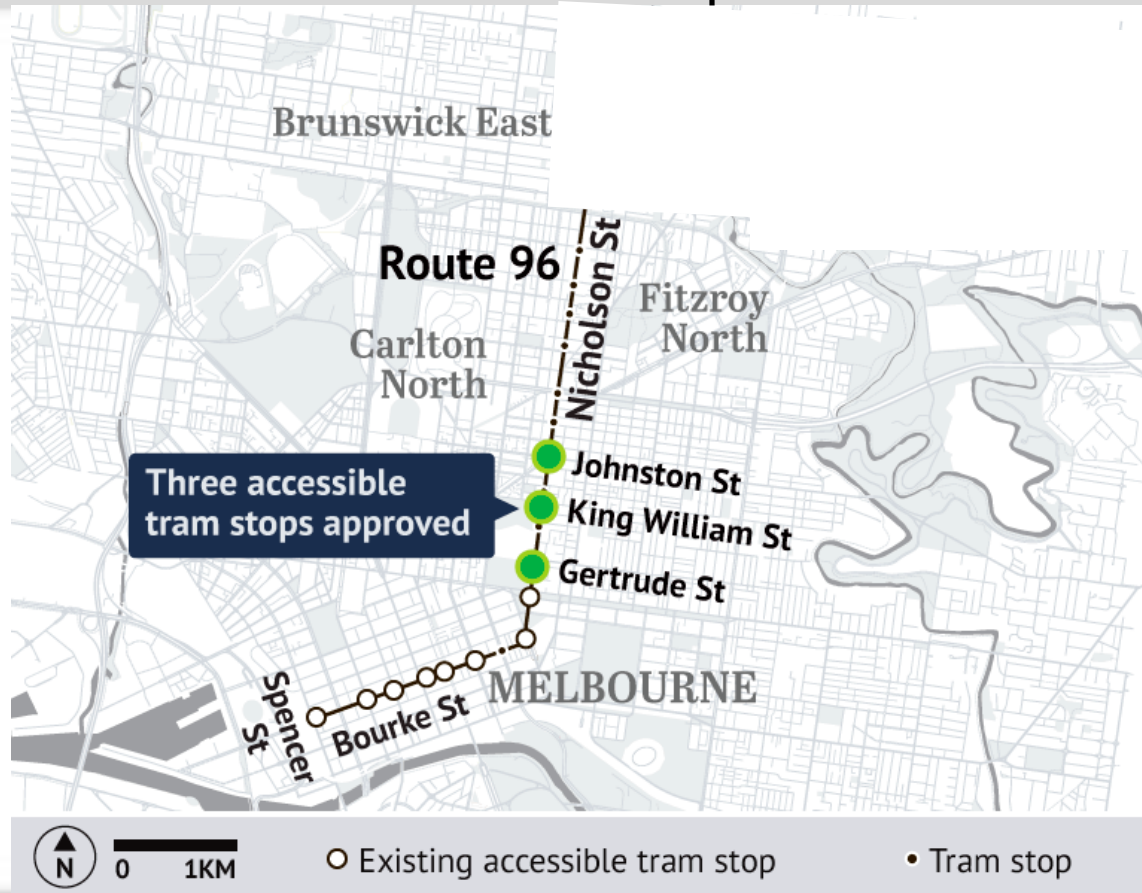


1.

Safety zone

Amount that is legitimate

Legitimacy framework: Nicholson Street DDA compliance



Amount that is provided

Safety zone



Disability Discrimination Act 1992

No. 135, 1992

1.

Safety zone

Level boarding

Amount that is legitimate

Legitimacy framework: Nicholson Street DDA compliance

Consultation Report Route 96 Nicholson Street Tram Stop Upgrades Project

Nicholson Street tram stop upgrades feedback form

We'd like your feedback so we can make improvements to your journey.

1. Do you (select one)

- ☐ Live in the area
- ☐ Regularly use the tram

2. How often do you use the tram?

- ☐ Every day
- ☐ Once or twice a week
- ☐ Less than once a week

6. As part of the Nicholson Street tram stop upgrades, tram stops 11 - 15 and 23 - 25 will become fully accessible to passengers using wheelchairs, prams and other mobility aids. Improvements also include the installation of passenger information displays, shelter, seating and lighting.

In thinking about these improvements to your local tram stop, do you agree or disagree with the following?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I would feel safer waiting for trams in the upgraded tram stop.					
I would feel safer boarding and alighting trams from the upgraded tram stop.					
The tram stop upgrade would improve the quality of my travel experience.					
The tram stop upgrade would make it easier for me to travel to and from where I need to go.					

Amount that is provided

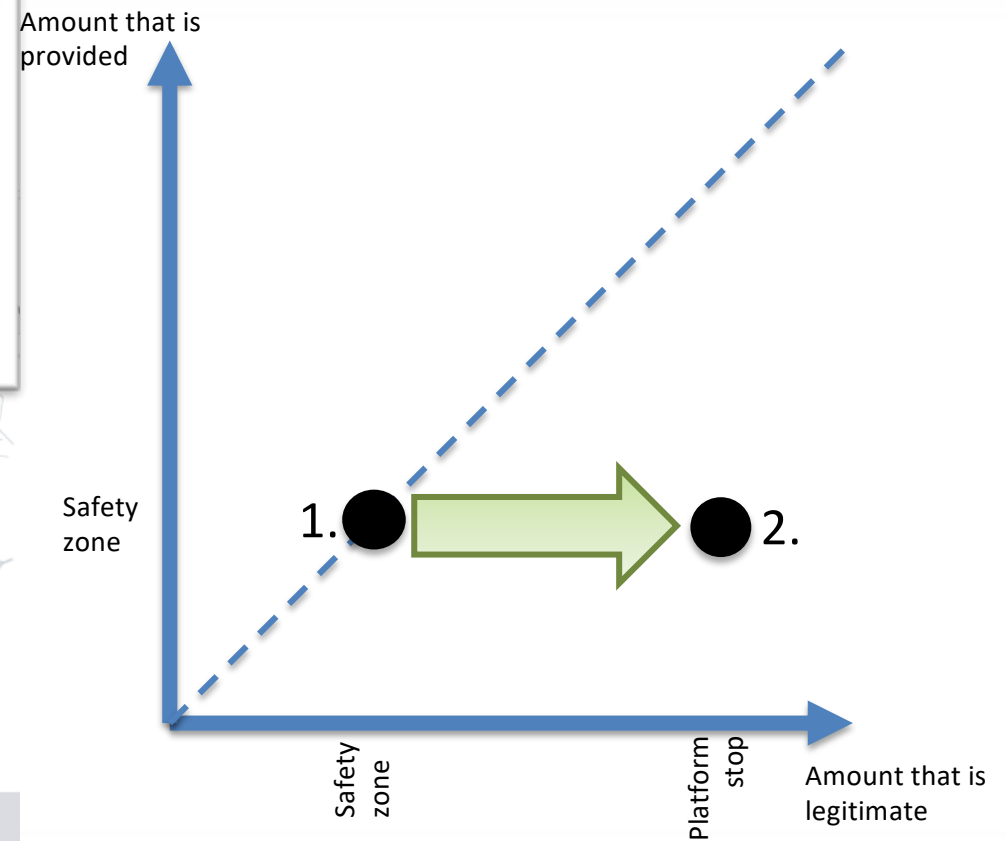
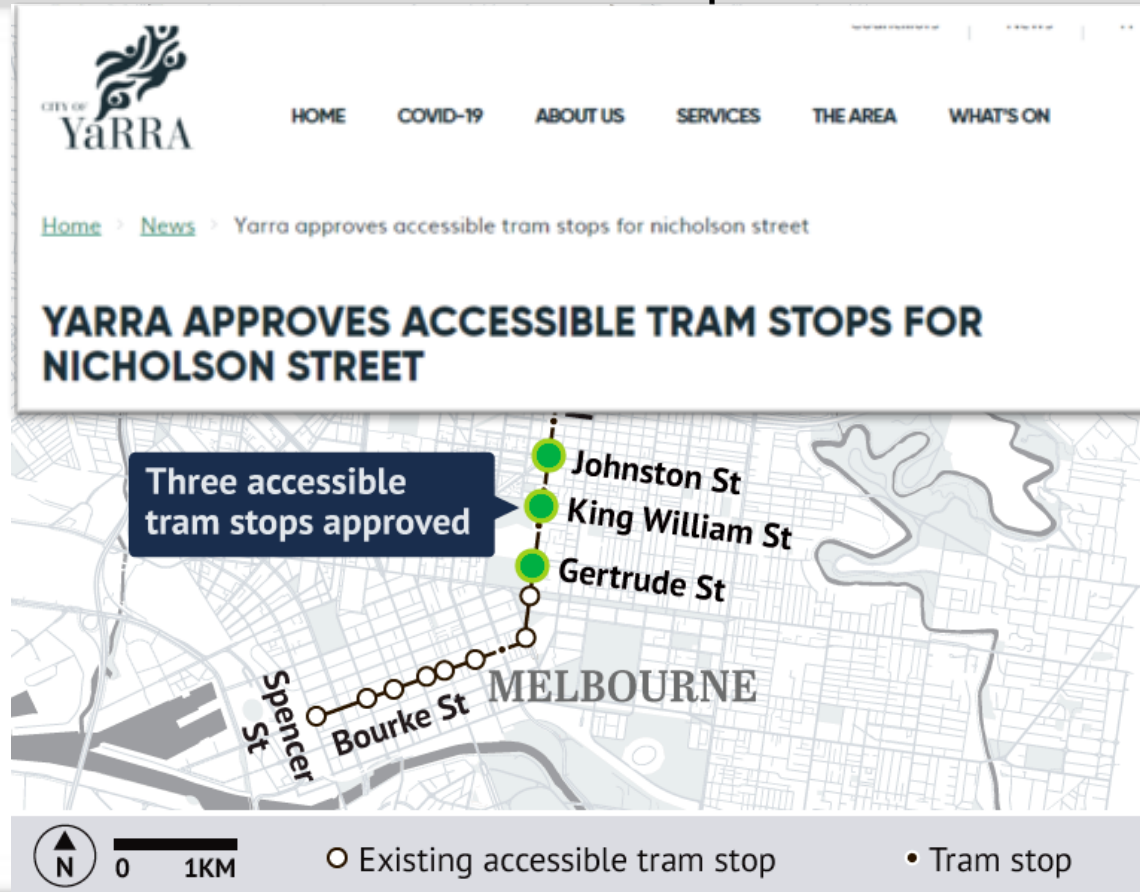
1. ● → ● 2.

Safety zone

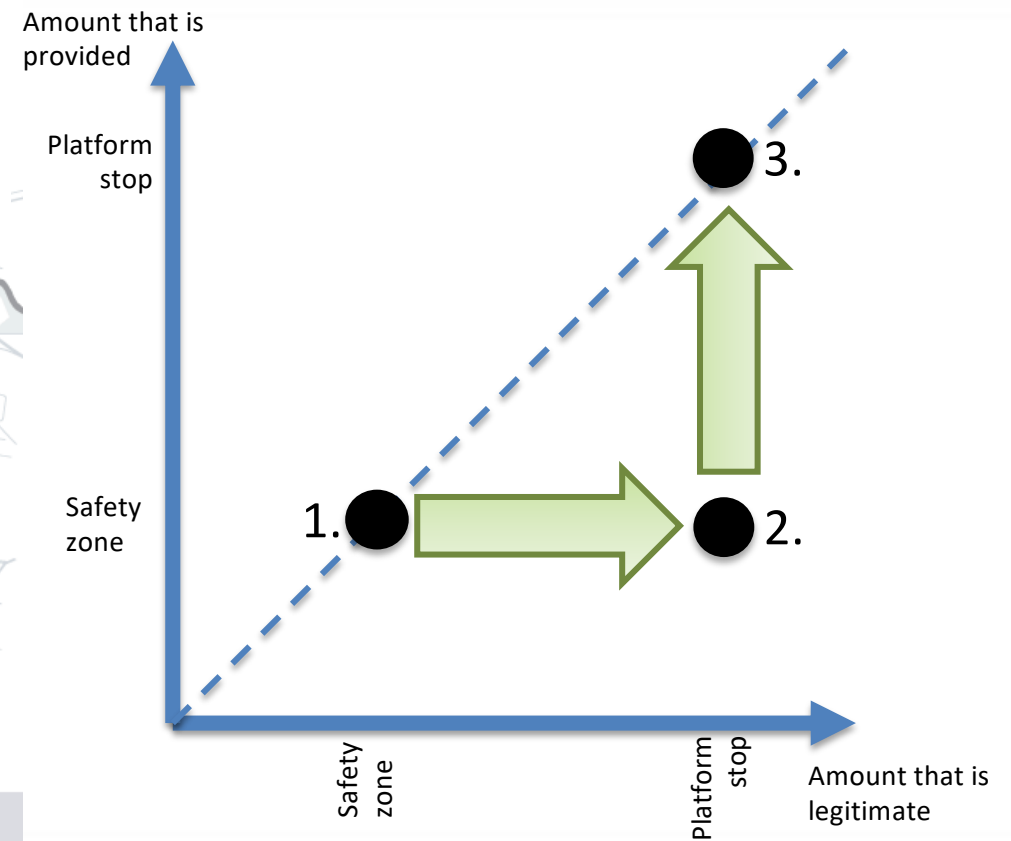
Platform stop

Amount that is legitimate

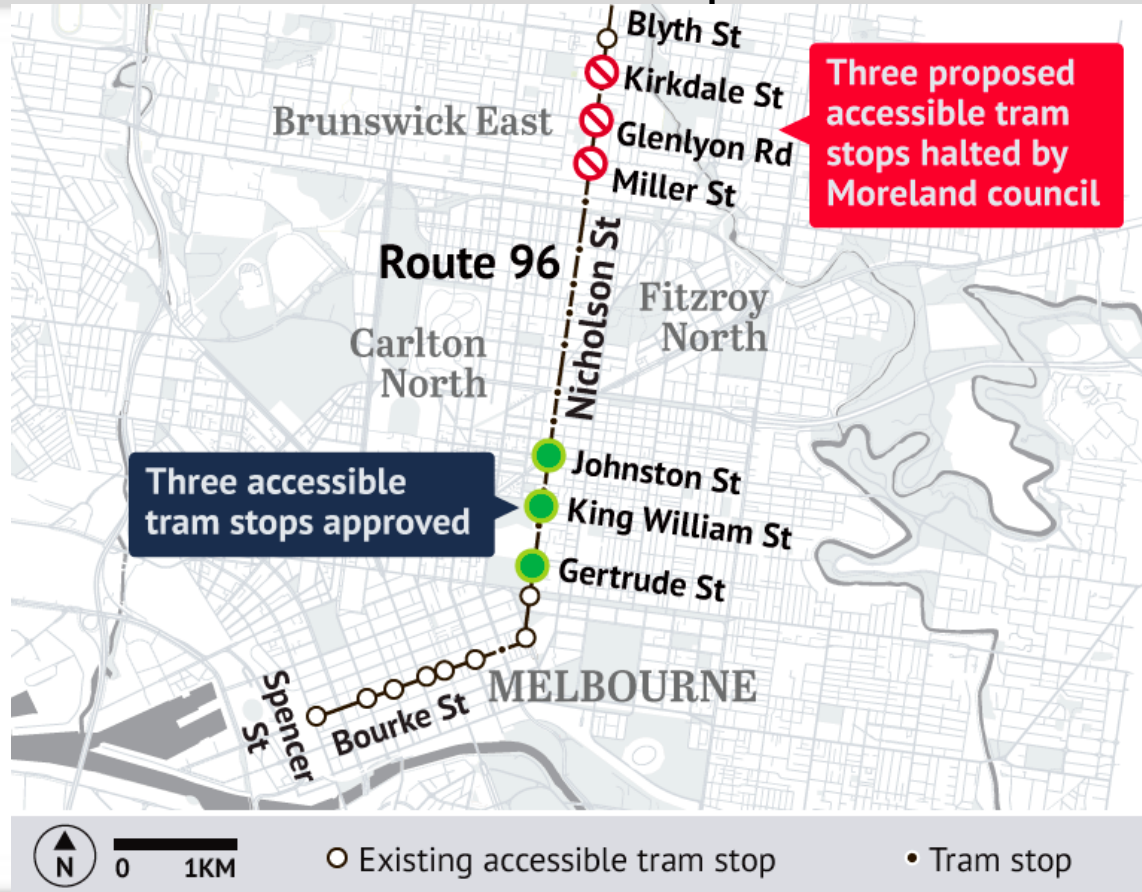
Legitimacy framework: Nicholson Street DDA compliance



Legitimacy framework



Legitimacy framework: Nicholson Street DDA compliance



...meanwhile... in the north

Amount that is provided



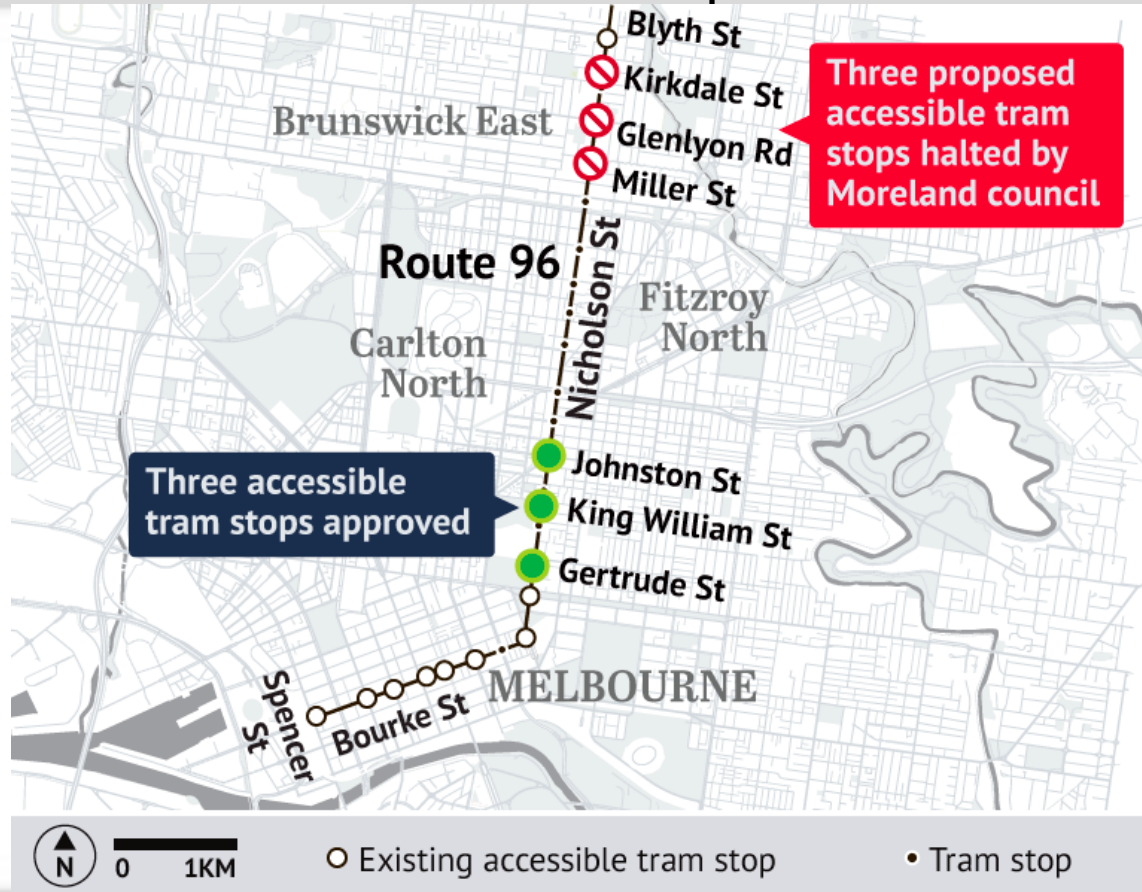
Kerbside stop

1.

Kerbside stop

Amount that is legitimate

Legitimacy framework: Nicholson Street DDA compliance



...meanwhile... in the north

Amount that is provided



Kerbside stop

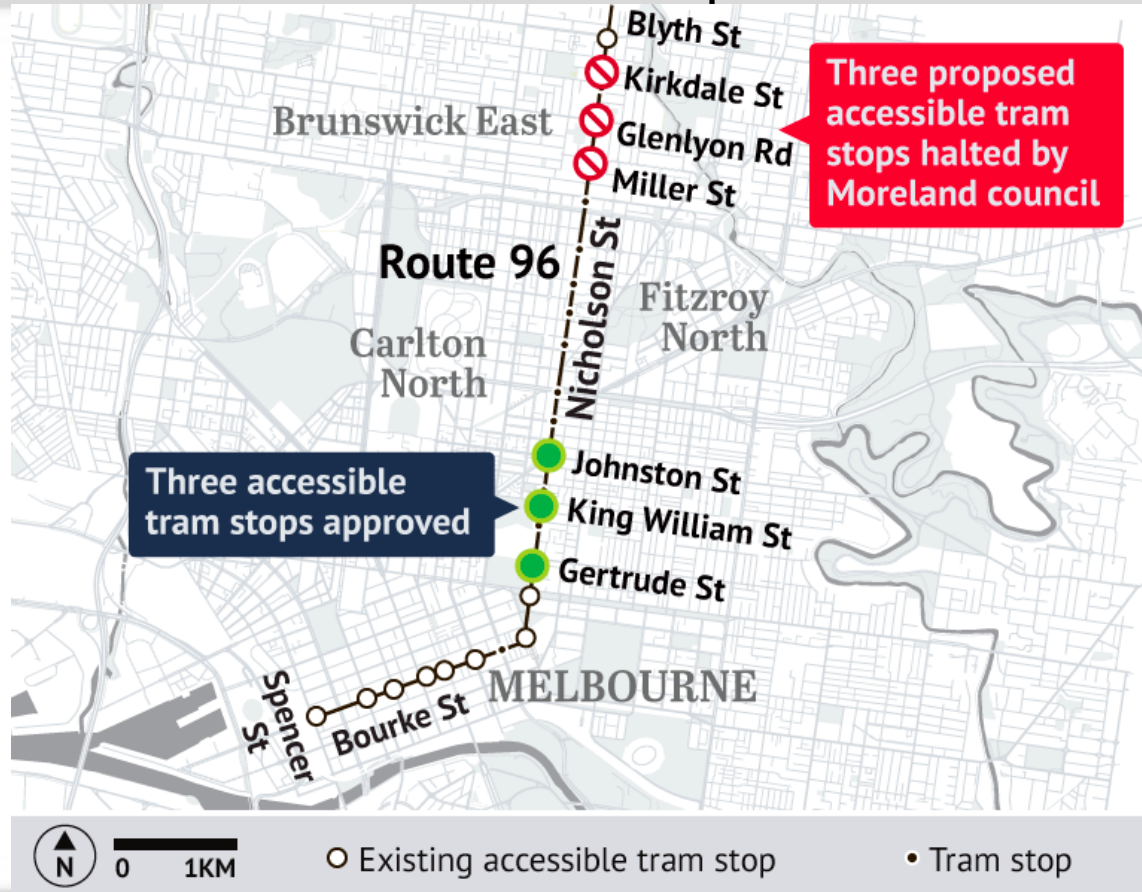
1.

Kerbside stop

Level boarding

Amount that is legitimate

Legitimacy framework: Nicholson Street DDA compliance



...meanwhile... in the north

Amount that is provided



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

Source: Jacks (2018)

Kerbside stop

1.

Kerbside stop

Level boarding

Amount that is legitimate

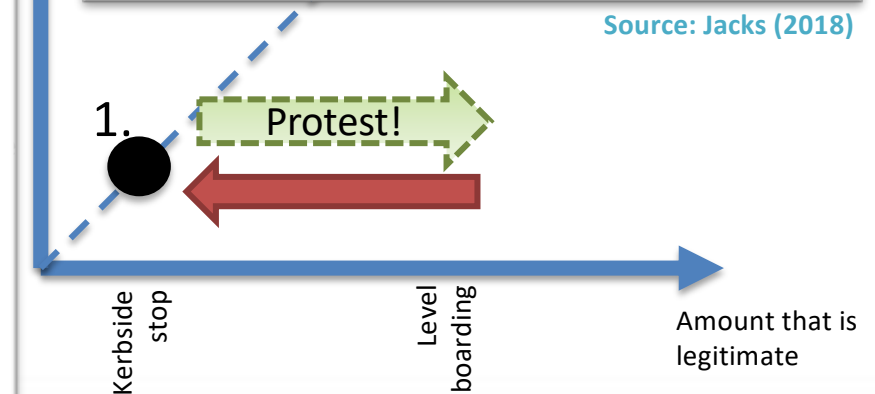
Legitimacy framework: Nicholson Street DDA compliance



...meanwhile... in the north



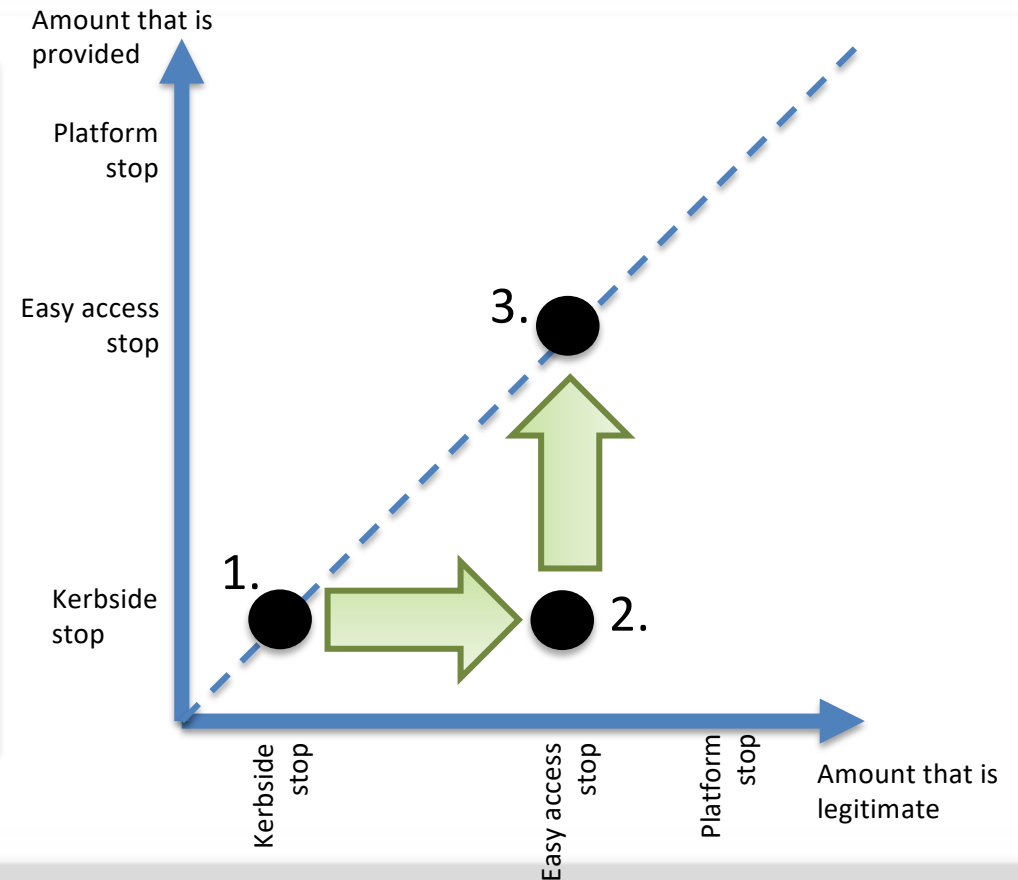
Source: Jacks (2018)



Legitimacy framework: Nicholson Street DDA compliance



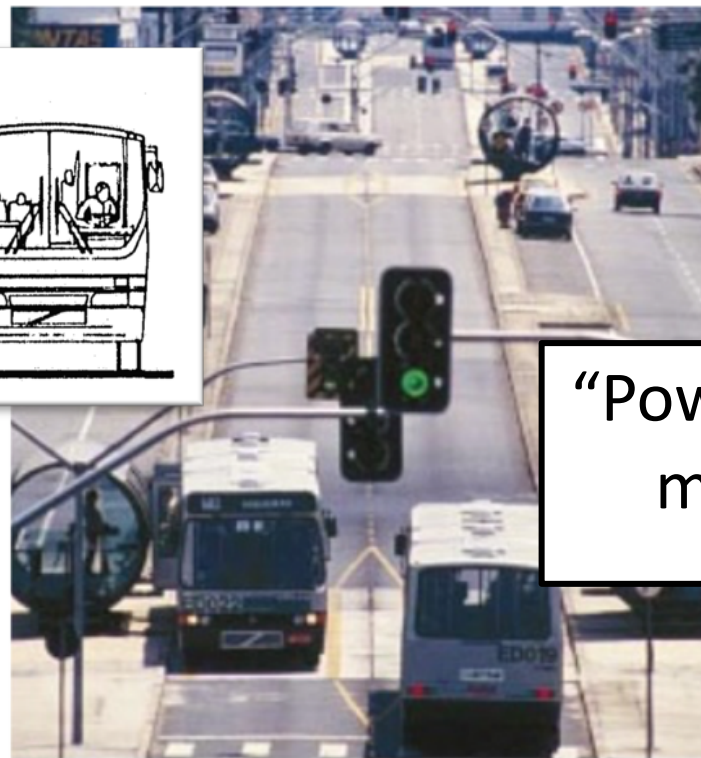
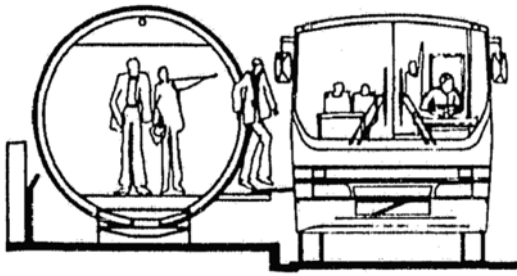
...meanwhile... in the north



Curitiba Bus Rapid Transit (BRT)

Curitiba, the Cradle of Bus Rapid Transit

LUIS ANTONIO LINDAU, DARIO HIDALGO and DANIELA FACCHINI



Transit Planning

BY MICHAEL J. MAJOR

Brazil's busways: A "subway" that runs above the ground

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

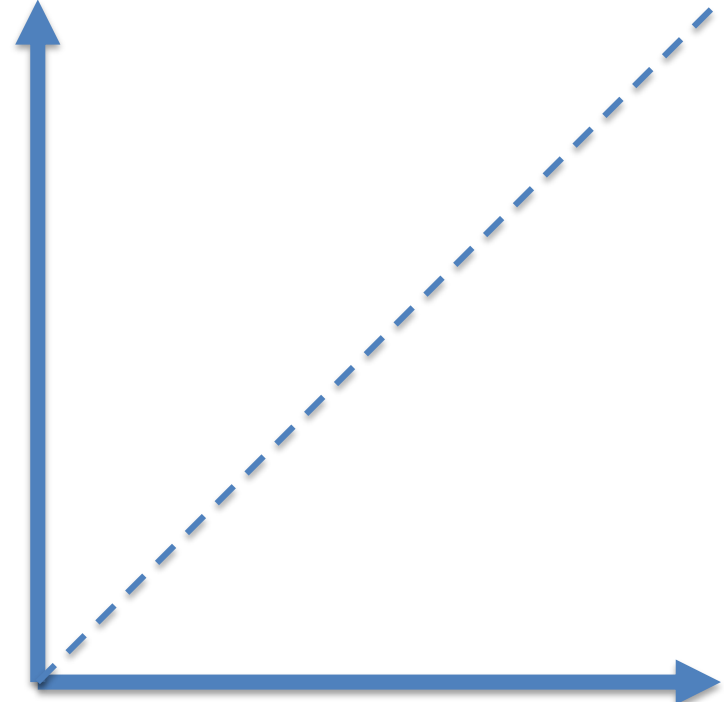
Ardila-Gomez (2004, p.424)

Curitiba Bus Rapid Transit (BRT)

Military dictatorship + pedestrian mall



Amount that is
provided



Amount that is
legitimate

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.



Amount that is provided

New mall



Amount that is legitimate

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

Curitiba Bus Rapid Transit (BRT)

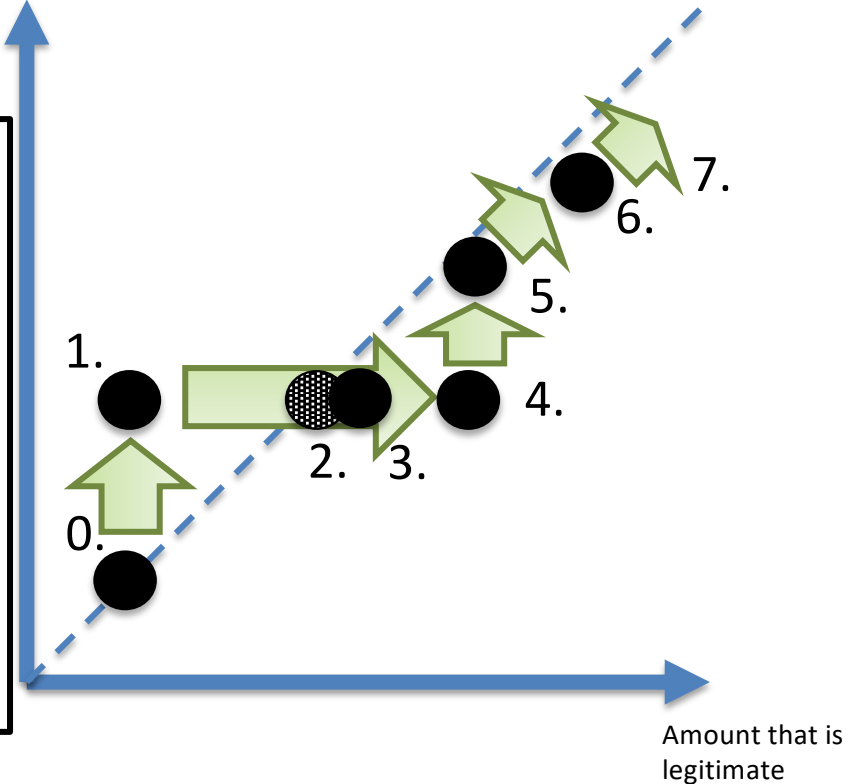
Military dictatorship + pedestrian mall

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.

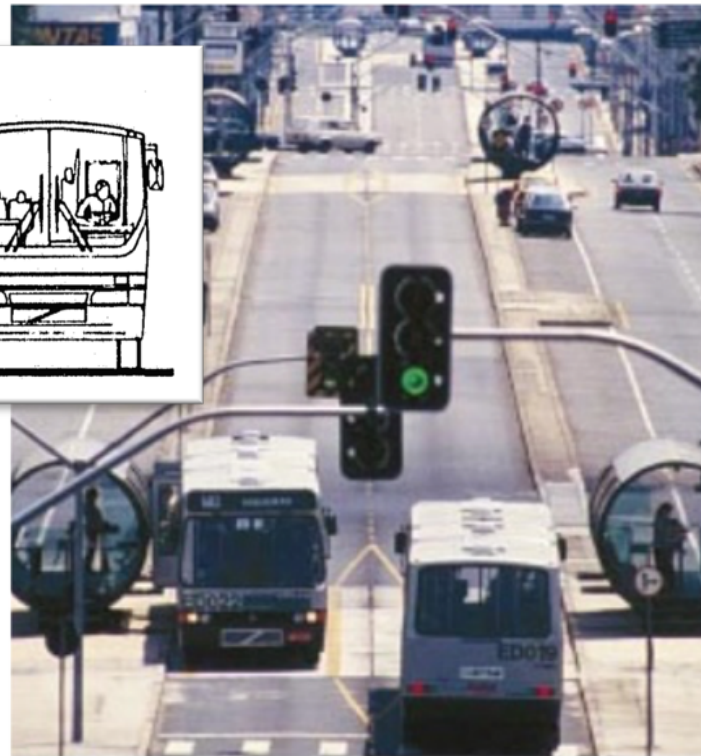
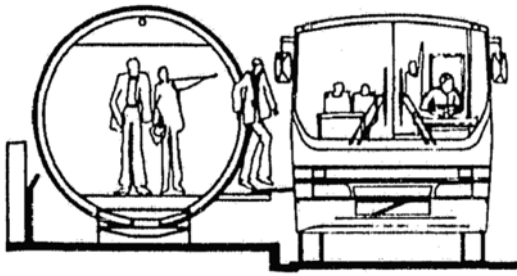
Amount that is provided



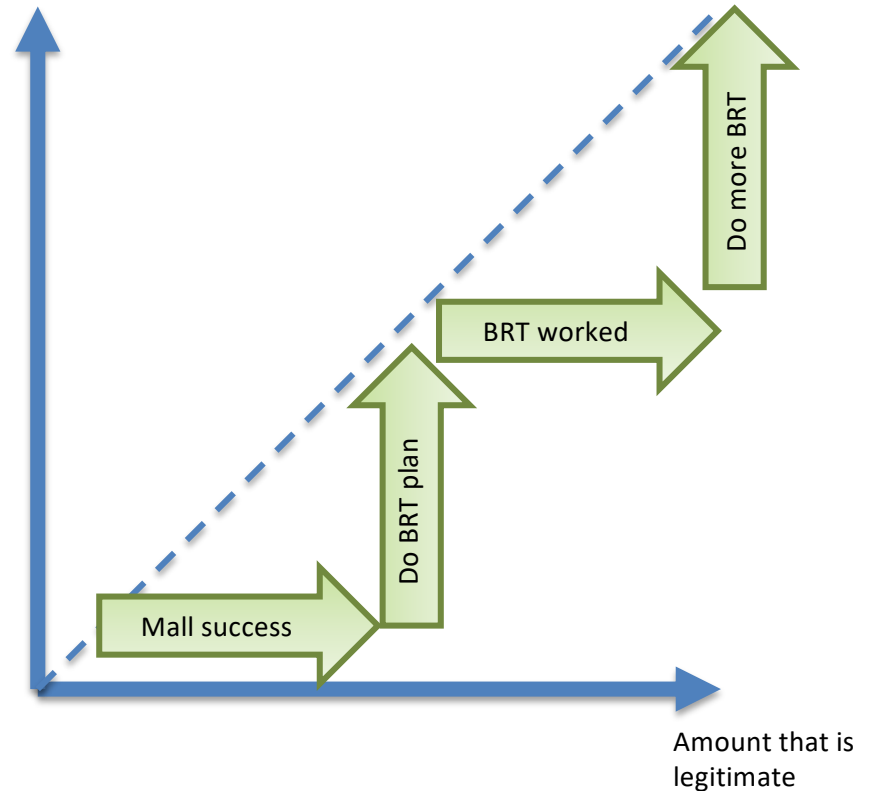
Curitiba Bus Rapid Transit (BRT)

Curitiba, the Cradle of Bus Rapid Transit

LUIS ANTONIO LINDAU, DARIO HIDALGO and DANIELA FACCHINI



Amount that is provided



This research: Legitimacy + case studies

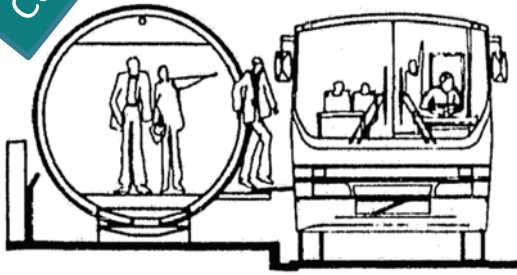
Clarendon Street tram stop trial gets the hook

Bus lanes returned to cars

Bernechich, Adrian . Knox Leader ;

the future of the Stud Rd lanes
is still being discussed.

Curtiba



Zurich

Boston Tests Faster Bus Service Simply By Laying Out Orange Cones

Boston

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

Toronto

Melbourne

Amount that is
provided

Negative impacts
on other road users

Amount that is
legitimate

This research: Legitimacy + case studies = Pragmatic Strategies

Pragmatic strategies for implementation

Amount that is provided

Negative impacts
on other road users

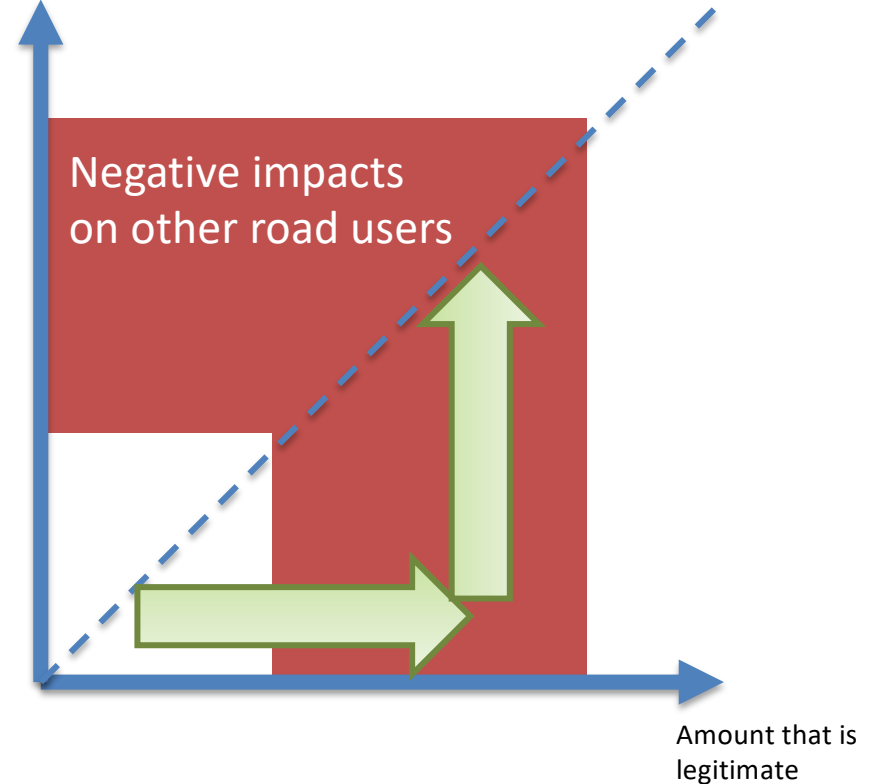
Amount that is
legitimate

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;

Amount that is
provided

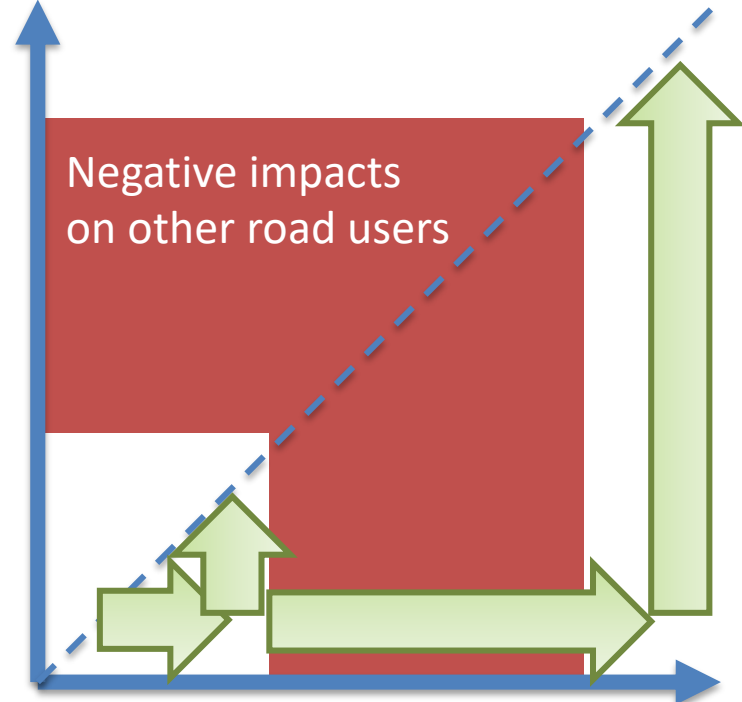


This research: Legitimacy + case studies = Pragmatic Strategies

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;

Amount that is provided



Amount that is legitimate

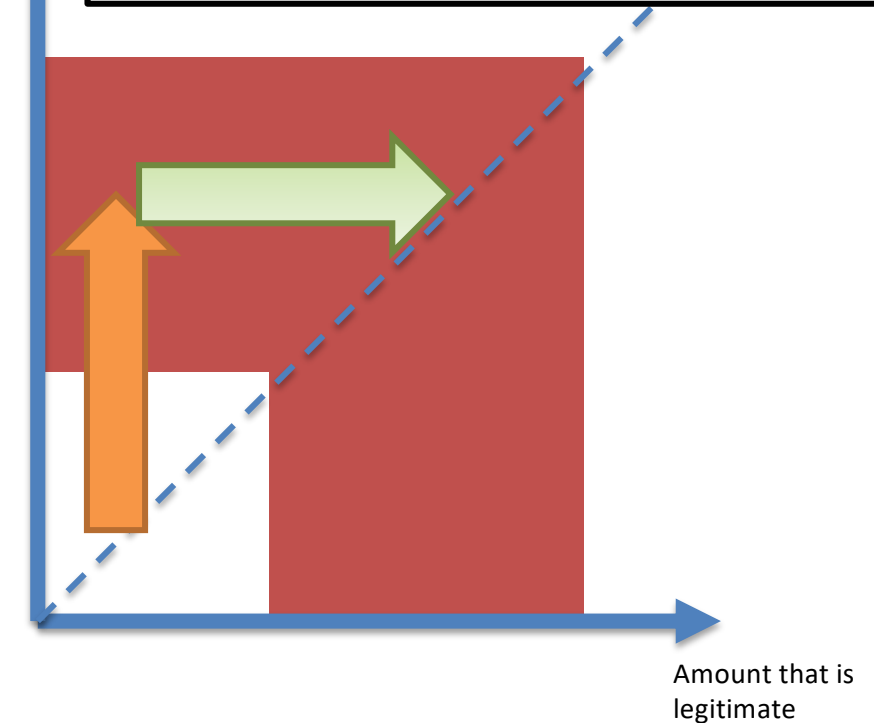
This research: Legitimacy + case studies = Pragmatic Strategies

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.

Amount that is
provided

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



Agenda

Introduction

Context

Legitimacy

Pragmatic Strategies

Workshop

Review and close



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

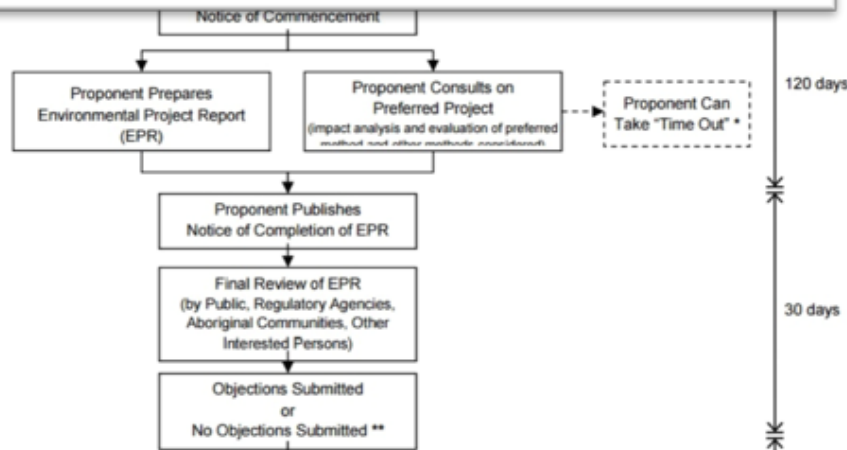
Toronto

Explanatory
St. Clair Avenue West Transit Improvements
Environmental Assessment



1. NEED FOR AN ENVIRONMENTAL ASSESSMENT

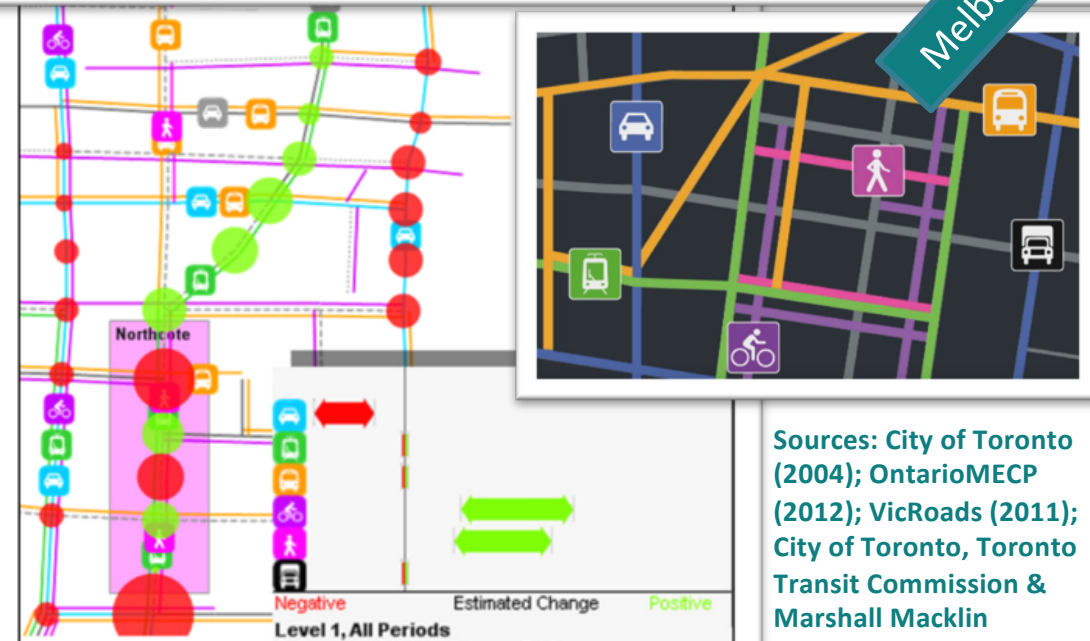
The City of Toronto Official Plan designates St. Clair Avenue West as both a "Surface Transit Priority Segment" and an "Avenue" within the City's urban structure. At present, the St. Clair streetcar route carries about half of all trips made on most of St. Clair Avenue West, at various times of the day. The streetcar serves about 32,000 passengers on a weekday.



SmartRoads Guidelines Version 1.17 Dec 2011

Melbourne

- 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:



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

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

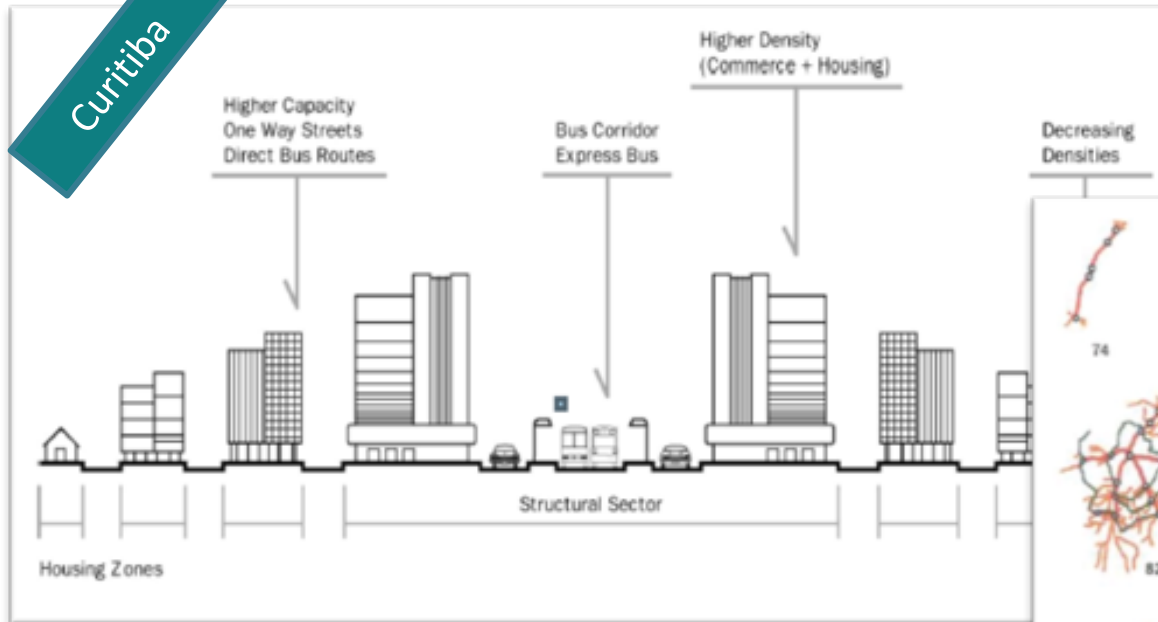


Toronto

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

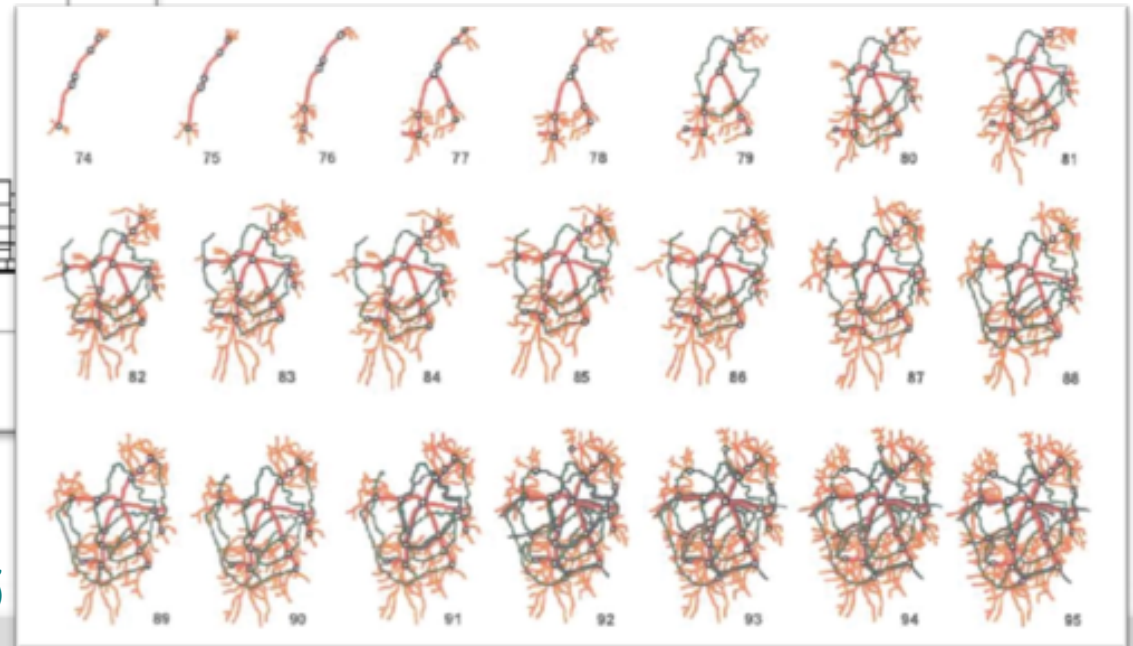
- ▶ Approach A. Build legitimacy before implementation:
 - A1: Technical enquiry,
 - A2: Transport planning**, and/or
 - A3: Public processes or hearings;
- ▶ Approach B. Avoid impacts on other road users:
- ▶ Approach C. Build legitimacy through implementation:

Plano Diretor: Structural Axes system



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

Evolution of Integrated Bus Network 1974-95



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

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

- ▶ 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:

Source: Nash and Sylvia (2001)

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

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.



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

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:

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:

Waterfront LRT – Route 509

Toronto

Street running

Transfer

Avoids intersections

Portal

Sources: Bow (2014), Toronto Transit Commission (2019)

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 Boroonia Rd and Burwood Highway, which have replaced existing car lanes, is still being discussed.

Melbourne

Eastern Freeway



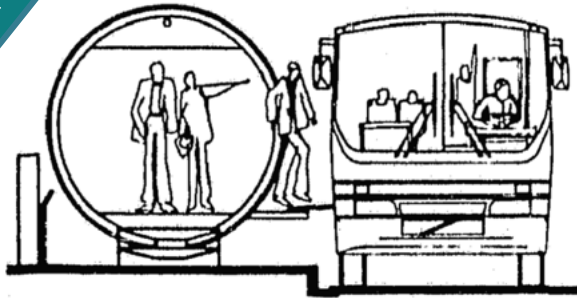
Sources: Bernecich (2011); Google (undated); Reid (2010)

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:

Boarding tubes

Curitiba



Clarendon Street tram stop trial gets the hook



Turn bans retained



Hook turns retained



Melbourne

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

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

Melbourne

Fitzroy Street, St Kilda

- ▶ 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



Source: Google (undated)



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

Melbourne

- ▶ 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

Bottom-up



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

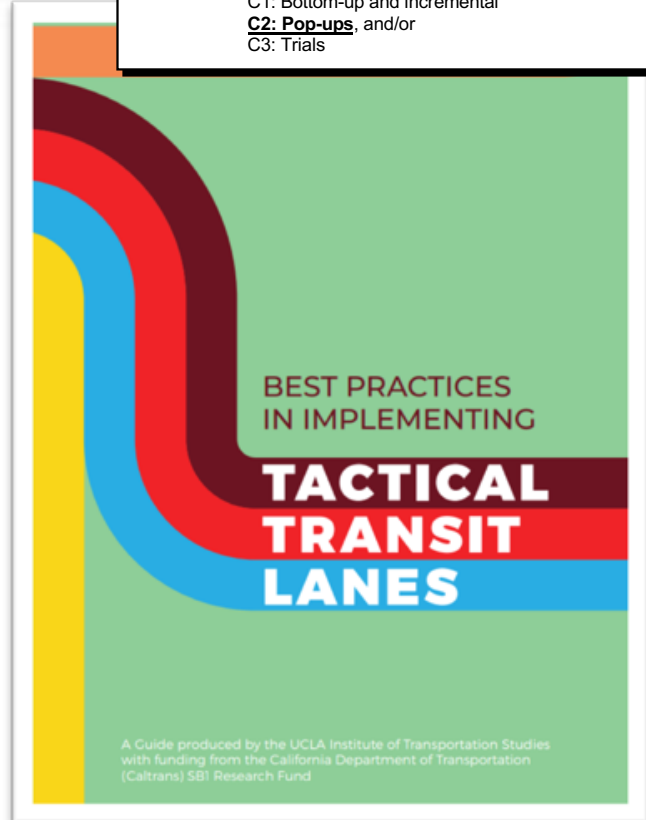
Boston Tests Faster Bus Service Simply By Laying Out Orange Cones

The same low-cost 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' install 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?

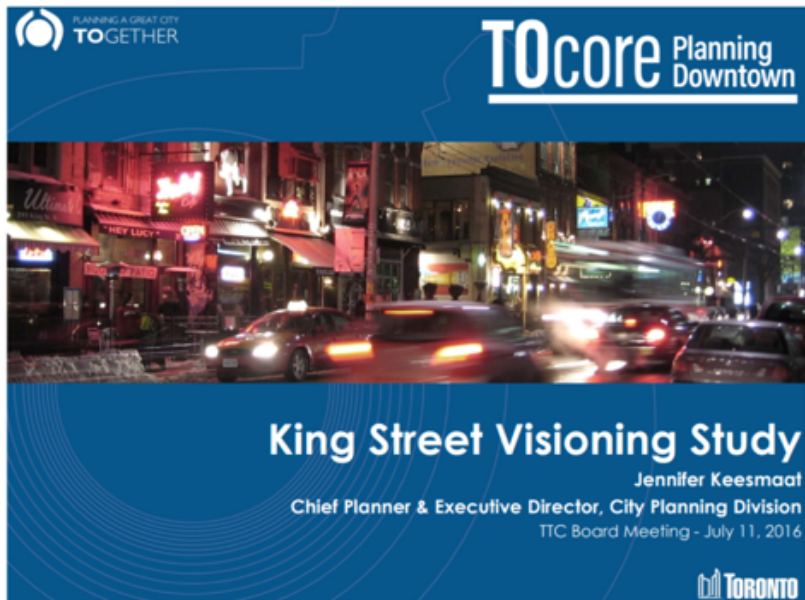
Well, this week the city made it permanent.

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

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)).

- ▶ 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**



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

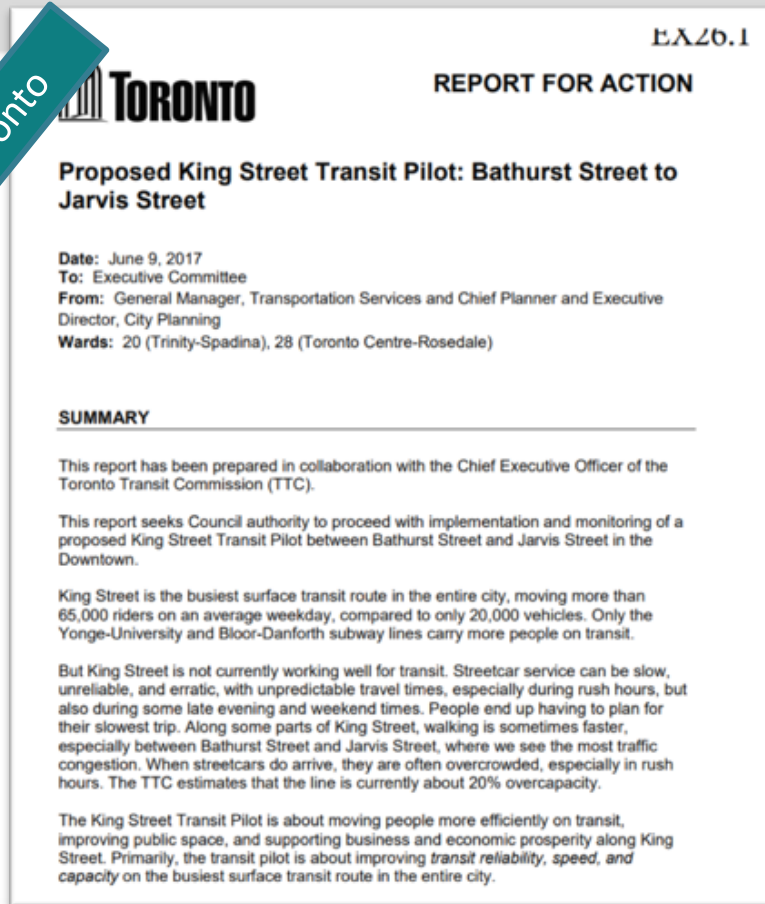
King Street plan good for transit, bad for families, Ryerson professor warns

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,...

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**



Through: C3. Trials: ...past protest,...

Toronto

Lauren O'Neil Posted on January 30, 2018

Report Inaccuracy

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



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

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



- ▶ 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**

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

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."

Sources: Selley (2018); Draaisma (2018)

- ▶ 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**



John Tory
@JohnTory

Talking to residents this morning about the King Street Transit Pilot. So far the streetcar pilot has improved transit service dramatically with increased reliability & ridership.



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

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

Toronto

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

- ▶ 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**



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

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

Toronto

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 council votes to make King Street pilot permanent

- ▶ 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**

City Tanya Mok Posted

Future of the King Street Pilot uncertain beyond this year



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

Melbourne

The Clarendon Street Campaign

- ▶ 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**

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 him and others to close down.

The changes – which are part of a trial conducted by VicRoads, Yarra Trams and the City 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.

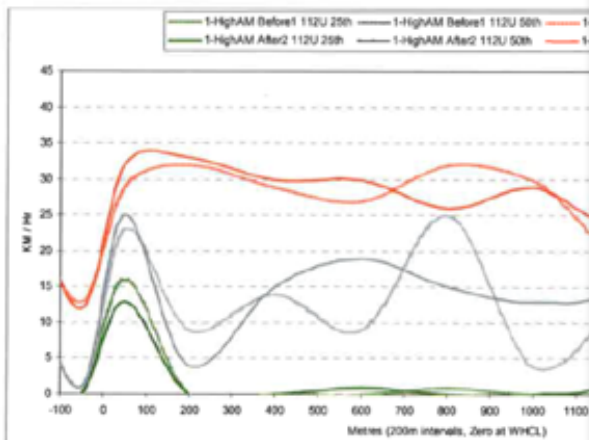
Source: Quin (2005a)

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

Melbourne

Yarra Trams Clarendon Street technical analysis

...ity 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



TRANSIT RIDERSHIP



TRANSIT RELIABILITY



TRANSIT TRAVEL TIMES



Source: Yarra Trams (2005)

King Street monthly dashboard

CAR TRAVEL TIMES & VOLUMES



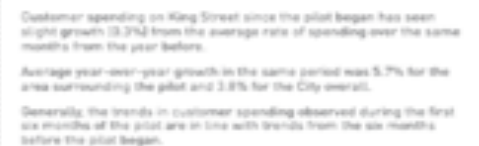
PEDESTRIAN VOLUMES



CYCLING VOLUMES



ECONOMIC POINT-OF-SALE DATA



Toronto

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

Agenda

Introduction

Context

Legitimacy

Pragmatic Strategies

Conclusions



This presentation has been about pragmatic strategies for making change...

...and legitimacy

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.

- *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



A framework and pragmatic strategies for transit priority implementation

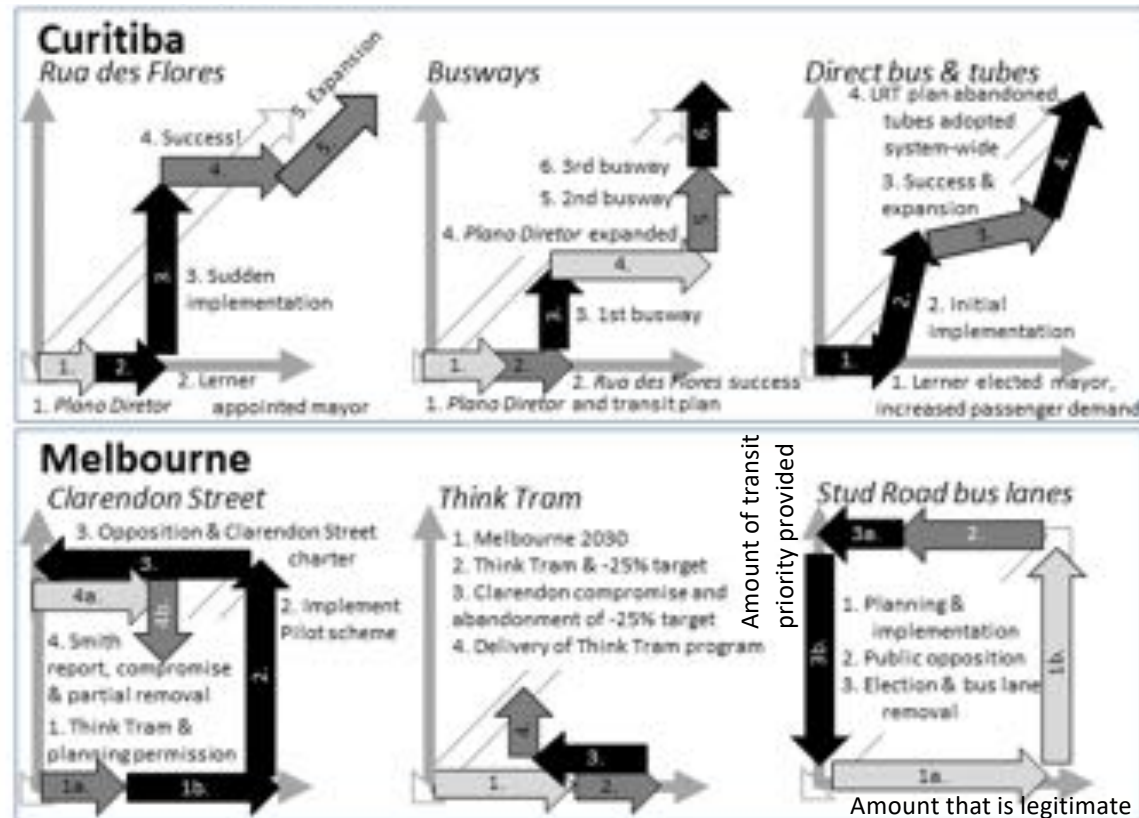
Julian James Reynolds

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 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

Book chapter

Top-down versus bottom-up perspectives on streetcar priority

PAPER NUMBER 18-06428

FINAL SUBMISSION

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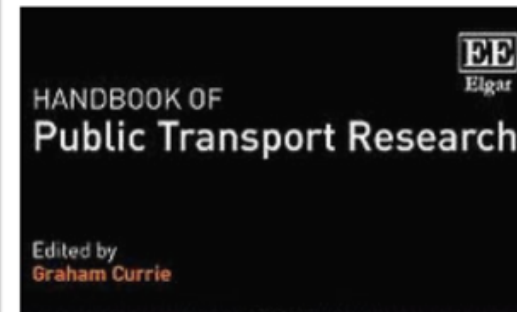
Moving beyond techno-rationalism: new models of transit priority implementation

James Reynolds¹, Graham Currie¹, Geoff Rose¹, Alistair Cumming²

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10. New approaches and insights to managing on-road public transport priority *James Reynolds and Graham Currie*

10.1 INTRODUCTION

The technical justification for transit priority in congested urban conditions is simple. Buses and streetcars can move people more efficiently than private cars and therefore can make better use of the limited road space and intersection time that is available in urban areas.¹ Clear examples of the potential of prioritising transit are provided by the successful implementation of priority measures in Zurich (Nash 2001; 2003; Mees 2010; Nash et al. 2018) and Curitiba's bus system, which rivals the capacity of heavy rail and has made the city famous as the 'cradle of Bus Rapid Transit' (BRT) (Lindau et al. 2010b). However, implementing transit priority measures is not necessarily easy in practice, particularly in more car-centric cities where opposition may be more likely.

Two episodes of the Research Transit podcast on transit priority implementation

W: ptrg.info

The image shows a screenshot of the Public Transport Research Group (PTRG) website and a SoundCloud podcast player. The website header includes the PTRG logo and navigation links: ABOUT, OUR TEAM, BENCHMARKING, GRIP, PROJECTS, OUTPUTS, PARTNERS, NEWS & EVENTS, CONTACT, and PODCAST (highlighted with a red box). The main banner features the text "CONNECTING CITIES" and a description of PTRG's research focus. A "DISCOVER MORE" button is present. Below the banner, statistics are listed: 56 PROFESSIONAL RESEARCHERS, 23 PHD RESEARCHERS, 50 MASTERS STUDENTS, 24 CURRENT PROJECTS, and 7682 RESEARCH PAPERS. To the right, a SoundCloud player displays two podcast episodes: "RT2 - James Reynolds - Legitimising Transit Priority" and "RT 38 - Andrew Nash - Implementing transit priority in Zurich".

PTRG PUBLIC TRANSPORT RESEARCH GROUP

ABOUT OUR TEAM BENCHMARKING GRIP PROJECTS OUTPUTS PARTNERS NEWS & EVENTS CONTACT **PODCAST**

CONNECTING CITIES

PTRG is the name for researchers at Monash University who are engaged in research on public transport systems, users, planning and policy.

[DISCOVER MORE](#)

56 PROFESSIONAL RESEARCHERS 23 PHD RESEARCHERS 50 MASTERS STUDENTS 24 CURRENT PROJECTS 7682 RESEARCH PAPERS

Researching Transit
RT2 - James Reynolds - Legitimising Transit Priority

Researching Transit
RT 38 - Andrew Nash - Implementing transit priority in Zurich

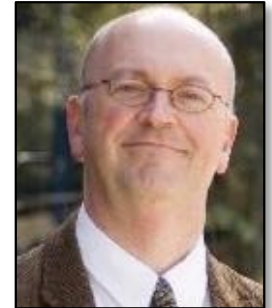
Questions?

Pragmatic strategies for implementation

- ▶ Approach A. Build legitimacy before implementation:
 - A1: Technical enquiry,
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- ▶ Approach B. Avoid impacts on other road users:
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 - C1 : Bottom-up and incremental,
 - C2: Pop-ups, and/or
 - C3: Trials.



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PhD Researcher



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...Sydney Road as an example

