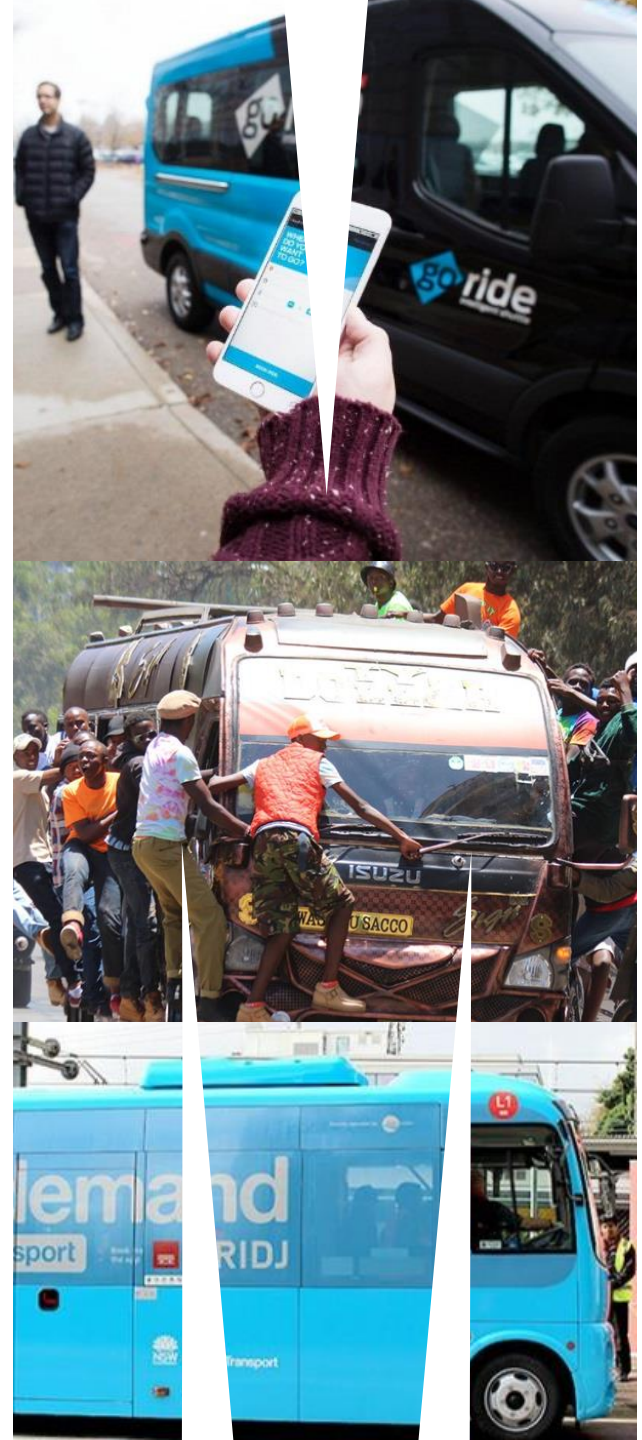


**Technical Session – Unchartered Territory: Regulating Micro-mobility**

# Demand Responsive (Micro)Transit

Prof Graham Currie FTSE



# ROLE: Prof of Public Transit (PTRG) – Chair Thredbo 16 Workshop on DRT – Author DRT studies including ‘Why most DRT/Micro-Transits fail..’



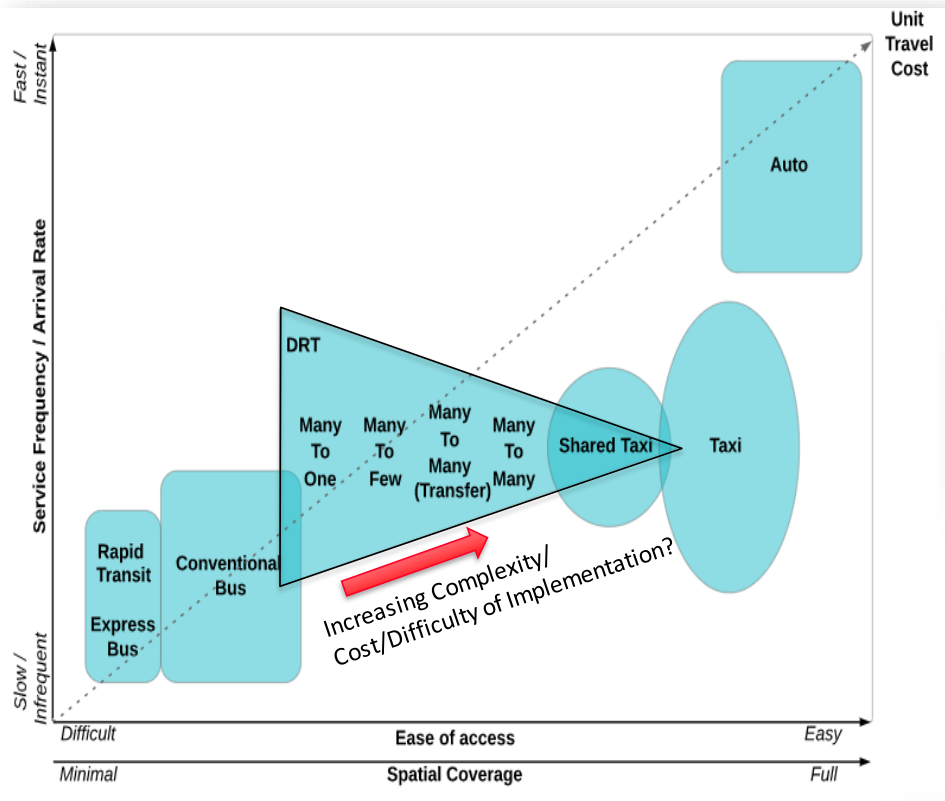
## WORKSHOP 4 : Realising the Potential Benefits of Demand Responsive Travel



16<sup>th</sup> International Conference Series on  
Competition and Ownership in Land Passenger  
Transport - Singapore - August 2019



# DRT CONTEXT – typology, microtransit, paratransit and developing world models



Typology

**How the Microtransit Movement Is Changing Urban Mobility**  
ERIC JAFFE APR 27, 2015



Microtransit



Paratransit  
(Community Transport)



Developing World  
DRT

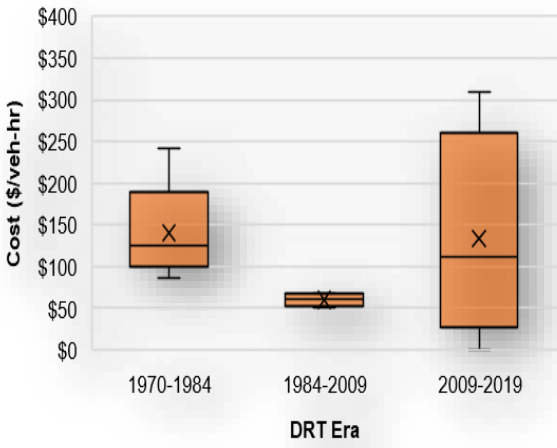
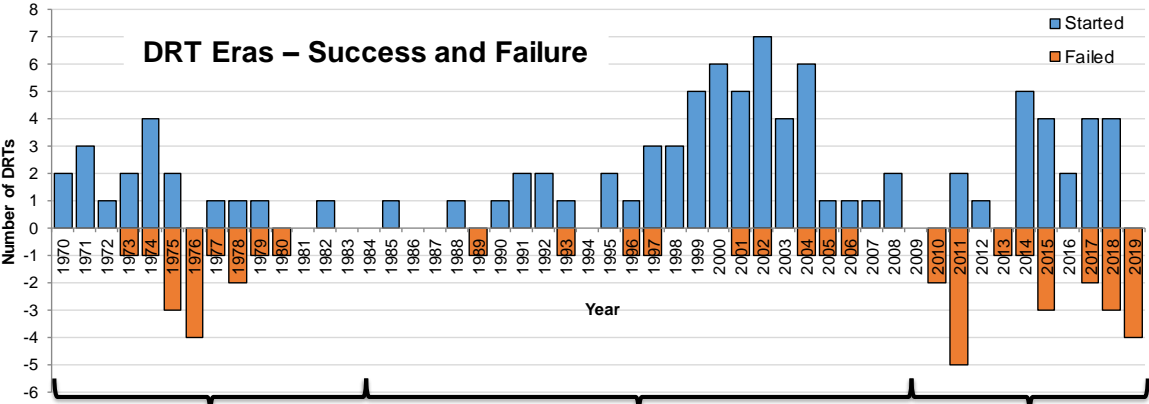


# [Developed world] DRT Review results ; Most DRT's fail ; 3 Eras – Microtransit biggest failure rate – high cost the key driver

30% of all DRT's withdrawn in 2 years

50% of microtransit DRT withdrawn in 2 years

Para/Community Transit highest retention rate



	Early 'dial-a-bus'	Para/Community Transport	Tech Based Micro-Transit
Av. Cost \$/veh-hr	150.37	63.07	123.18
Av. Cost \$/pax	21.26	13.8	42.72

**1970 – 1984**

**Early Dial-a-Bus services**

First attempts to run demand responsive services

**1985 – 2009**

**Paratransit/Community Transport era**

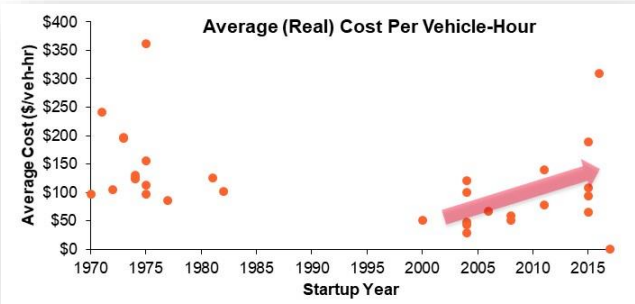
US paratransit services developed in response to Americans with Disability Act (ADA)

UK bus deregulation outside London resulted in investment in special need style services to fill gaps in withdrawn social bus services

**2010 – 2019**

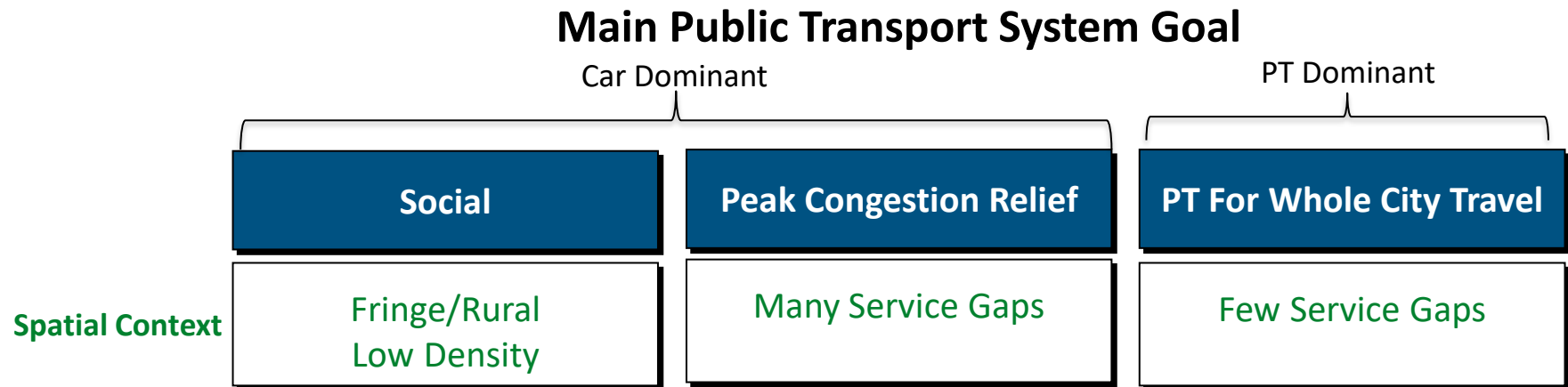
**Tech-based Micro-Transit DRTs**

New technologies are being deployed for modern 'micro-transit' based DRTs



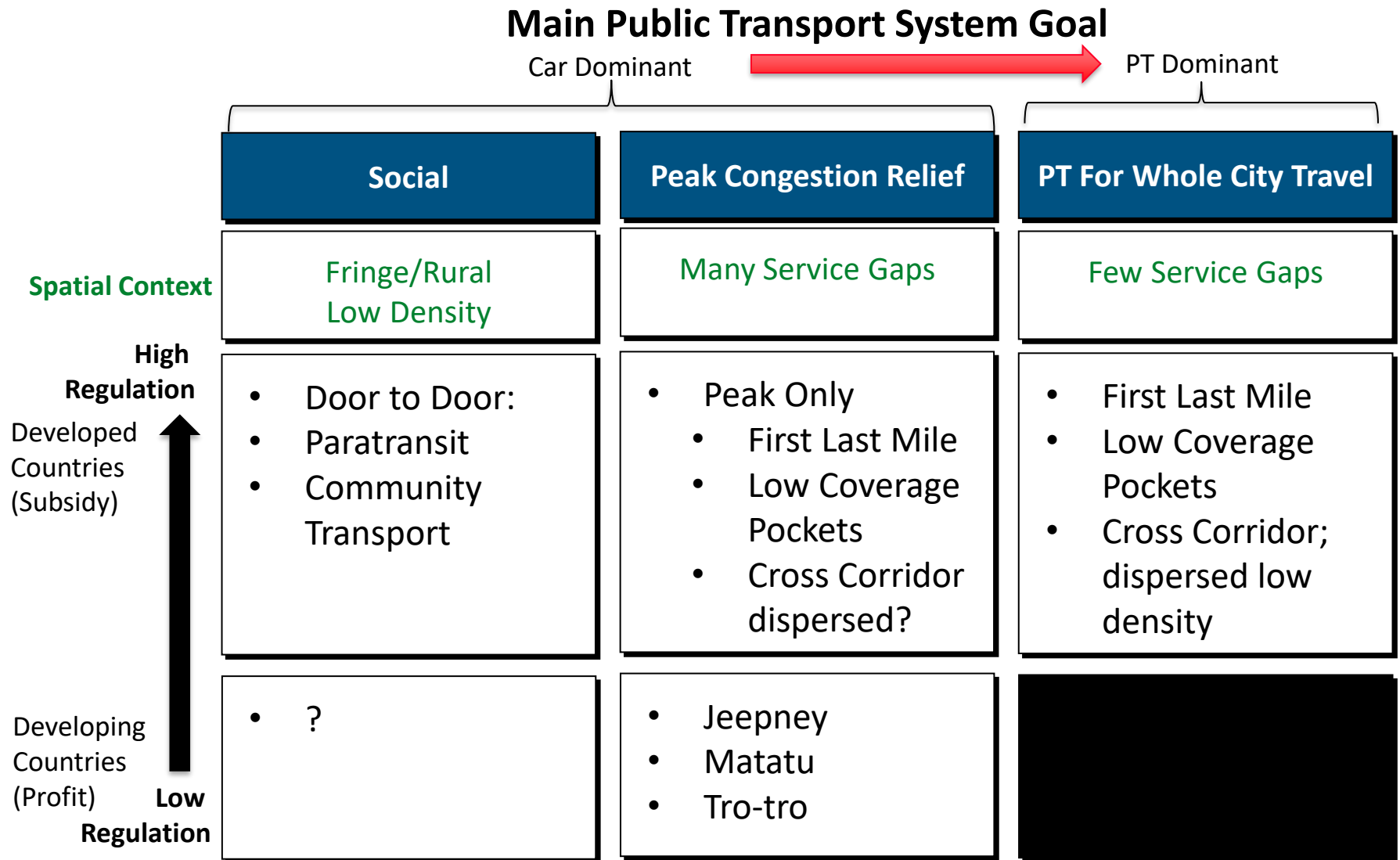
Source: Currie G and Fournier N (2019) 'Why most DRT/Micro-Transits fail – what the survivors tell us about progress' 16<sup>th</sup> International Conference Series on Competition and Ownership in Land Passenger Transport Singapore Aug 2019

# Thredbo workshop developed a new DRT global Framework to help understand policy context, aims and models



Source: Currie G and Wong T (Under Review) 'Workshop 4 Report: Realising the Potential Benefits of Demand-Responsive Travel.' Research in Transport Economics

# High/Low Regulation DRT's fit into this framework explaining objectives, types within their context



Source: Currie G and Wong T (Under Review) 'Workshop 4 Report: Realising the Potential Benefits of Demand-Responsive Travel.' Research in Transport Economics

# Thredbo Workshop 4 - Opportunities, Challenges and Policy Recommendations

- Opportunities
  - Multi-service passenger info - MaaS
  - [Scalable cost effective focussed] tech
  - Learning from the lessons and history
  - Shift away from the private single occupancy vehicle
  - More and growing attention to objectives behind DRT
  - Moving RIGHT (on our graphic)
- Challenges
  - Protectionist attitudes from many
  - Telecommuting
  - Mindless TECH HYPE promotions
  - Competition from new tech modes
  - Aligning DRT and Transit policy
- Policy Recommendations
  - Flexible AGENCY FOR Intermediate Mobility Services (FAMS); MaaS
  - Review, share, focus existing knowledge (smarter website, MAMBA knowledge base repository)
  - Policy – clearer objectives and resource support to solve it, allocation of responsibility to implement
  - Clarity relative roles and public and market
  - Beaurocracy – need to be proactive not reactive
  - Occupancy targets minimum occupancy minimum, employ VMT caps
  - Developing; coordination, regulation, public from informal and informal sector

Source: Currie G and Wong T (Under Review) 'Workshop 4 Report: Realising the Potential Benefits of Demand-Responsive Travel.' Research in Transport Economics