



# ākina

Demand Responsive  
Transportation  
in New Zealand  
– Design Toolkit

# PURPOSE

## Purpose:

- This deck is part of a **Toolkit** for **Community Groups** who are designing **Demand-Responsive Transportation** solutions
- The aim is to **compliment existing resources**, which are identified where appropriate

## Components:

- General guidance on identifying transport options for your community
- Introduction to Demand-Responsive Transportation
- Demand-Responsive Transportation Design Elements
- **Lessons Learned** from the Kowhai Connection case study

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# 1. GENERAL GUIDANCE

Identifying transport options for your community



# Process Overview

The general process for designing a transportation solution:

1. Information Gathering
2. Describe the Problem
3. Identify Solutions
4. Funding

The design process starts with **gathering information** to better understand the needs in your community and existing services. It is important to start here even if you have an idea for a service or think you know the needs of the community. Have an **open mind about the process** and be willing to **challenge your assumptions**.

Tools such as the **LEAN business model canvas**, or the Social LEAN canvas, are highly recommended to help structure your thoughts and lay out your assumptions. These can also be useful when communicating your ideas about the problem you see and the proposed solution.

# Information Gathering

Build a **comprehensive picture of what is happening in your community**. Set aside your assumptions and try not to be influenced by what is generally believed to be the problem or solution.

- **Compile data:** objective information can to give a clear picture of your community
  - Census Data (Statistics NZ) to understand age and gender, income, access to vehicles, employment etc.
  - Maps (GIS, Aerial pictures, Google Maps) to capture housing density, principle destinations, and routes
  - Existing transport solutions (schedules, demand, services)
- **Consult widely:** what are people in the community experiencing?
  - Paper or telephone surveys with a number of set questions about specific issues
  - public meetings or hui with local community
  - one to one interviews with local people, eg outside supermarkets or knocking on doors
- **Identify stakeholders:** government, community, and business groups
  - Regional council, territorial authority, and government agencies
  - District health boards, hospitals, medical centres, schools, tertiary and training institutions
  - Local employers, retailers, transport and tourism operators.
  - Marae, RSA clubs, sports clubs, churches, and community, voluntary or advocacy groups

Look for **trends in the information** that indicate the transportation needs in your community.

# Describing the Problem

Describe the transportation problem (or problems) in your community **being specific** about who it affects, when it occurs, where it occurs, and the effect. Is the problem a symptom or a root cause?

Impact may be a difficult question to answer. Consider the **scale of the problem** (how many people are affected) and try to **quantify what would change** of the problem were solved.

## Issue: The problem is ...

Who does this affect?

- Is the problem confined to those living in one specific area?
- Is it a particular age group: the elderly or pre-schoolers?
- Is it low-income families or beneficiaries?
- Is it users of one mode, such as cyclists?

When does it occur?

- Does the problem occur only at certain times of the day, eg when school gets out?
- Does it occur only at certain times of the year, eg in winter?
- Is the problem short term only, eg caused by major building work?

Where does it occur?

- Does the problem occur around certain sites, eg near a major employer?
- Is it widespread?

What is the impact?

- Does the problem have an environmental impact?
- Does it cause hardship (financial, social or other) for members of the community?
- Does it affect people's ability to access basic services such as health care or shopping activities?
- Does it put people in physical danger or affect their health?

# Identifying Solutions

This deck assumes the solution is a form of Demand-Responsive Transportation (DRT), but this should be **critically evaluated against other potential solutions**. The best solutions **address root causes and solve multiple problems at once**.

Creative ideas and other potential solutions

- **Reduce or Replace Travel**
  - Travel inversion: mobile goods or service that can travel to people rather than vice versa
  - Localisation: providing goods or service can be locally or virtually
  - Co-Location: creating multi-function spaces or satellite offices to reduce trips
- **Make better use of existing capacity**
  - Carpooling or Vanpooling: audit local businesses or individuals to find underused vehicles
  - Shared rides: Local taxi or tour operator might be open to a different booking solution (ex. Uber)
  - Peer-to-Peer: Sharing economy solutions such as Relayrides, Getaround, and Liquid
  - Expand or merge existing services: eg. could a school bus pick up students and teachers?
- **Provide Information**
  - Existing services may need better market to make people aware of their existence
- **Better Service Integration/Coordination**
  - Can passenger service also carry freight, or vice versa?
  - Establishing feeder services for existing services



# Funding

New services typically need to **align with national or regional transportation priorities** to be eligible for funding through the national or regional public transportation funds. Contact your regional transportation authority for information on how to access funds for public transportation.

- National Land Transport Fund
  - Administered by the New Zealand Transport Agency (NZTA)
- Regional Land Transport Programmes
  - Administered by regional transportation committees

## Other potential funding sources

- Funding Information Service ([www.fis.org.nz](http://www.fis.org.nz))
  - A comprehensive list of potential funding sources for community groups
- Advertising and Sponsorship
  - Local businesses may be able to provide cash, expertise, or other needed resources
- Local Councils
  - Local government may have funds that are not being used or which can be repurposed
- Other government agencies
  - MSD, MOE, DHB's, and others may be interested in funding services with significant social impact
- Crowd funding
  - Don't overlook raising money from the community; directly or through services like PledgeMe

## 2. DEMAND-RESPONSIVE TRANSPORT

Demand-Responsive Transport (DRT) is a new class of transportation service that fits between traditional fixed-route services and hire taxi or charter services

# Introduction

## What is Demand Response Transportation?

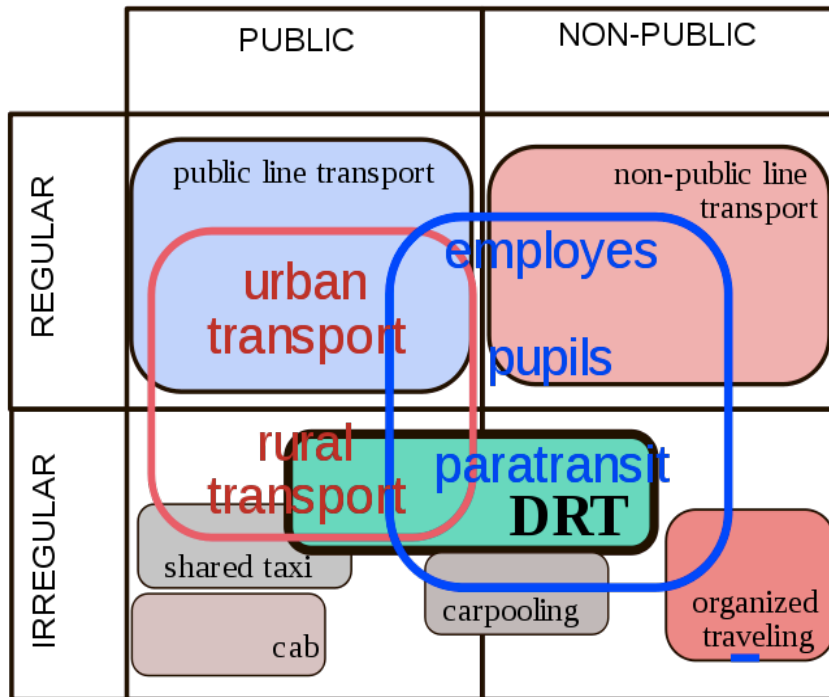
- There are many definitions, but most recognise DRT as a **flexible** (route and/or timetable), **shared ride**, **passenger-responsive** transport service operating somewhere between traditional public bus services and taxis.

## DRT Configurations:

- One origin to one destination:
  - Services that offer trips between two fixed points, such as a hotel/airport shuttle
- One origin to many destinations & many origins to one destination:
  - Serving demand to or from a single terminus. Services often run to/from a key hub, eg train station, bus depot or shopping centre
- Many origins to many destinations:
  - Covers multiple trip origins and destinations. May involve a transfer to a different vehicle during the trip, eg as a feeder to a conventional bus service

# Mapping DRT

## Mass Transport Classes



Source: R. Koblizek, DRT and other kinds of Transport, 2011

## DRT is best suited when...

- Traditional fixed route services would be **prohibitively expensive** such as when employed in rural areas
- Traditional solutions would not provide adequate service for a **target group** such as for Para transit
- There is a need for a service that is **flexible**, but more structured than irregular services like carpooling or hire taxis

## DRT does not have to be a Public Service

- DRT includes **private sector** deployments such as commuters or airport shuttles

# Examples



## Metro Access, Washington, D.C., USA

- Door-to-door, Para transit, shared ride service
- Operates in parallel to existing services in that it only serves customers near defined bus or rail corridors



## Nippy Bus, Somerset, UK

- Private operator with a mix of DRT and Fixed Route busses
- DRT services are many to one (or reverse), scheduling pick-ups in local villages to bring customers into the town centre

The logo for DHD, consisting of the letters 'D', 'H', and 'D' in white, bold, sans-serif font, each inside a black rounded square, which are then arranged horizontally on a larger black rounded rectangle.

**D H D**

## DHD, Prague, Czechoslovakia

- Private company organising personal transport for commuters
- Financially supported by local employers and riders; operated by several different transport companies

Source: [http://en.wikipedia.org/wiki/Demand\\_responsive\\_transport](http://en.wikipedia.org/wiki/Demand_responsive_transport)

# DRT vs Charter or Taxi

## How is DRT different than a charter transport or hire taxi?

1. Taxis and charters are exclusive; demand-response services are **shared rides**
2. Charters provide a service to a group, whereas demand response service is **service to individuals**. The individuals can be part of a target population, but use the service independently.
3. Charter service is more typically for a specific event or function and demand for taxis is ad hoc: demand response service is **regular and continuing**.
4. Demand response service may also include certain trips that are **exclusive**, for a group, from a single origin to a single destination, so long as these trips are arranged and operated under the same terms and conditions as the demand response system for individuals.

# Observations on DRT

## High Level Observations

- Many-to-one DRT service operations are more successful than many-to-many DRT services
- Limited stop services are more successful than hail and ride or door-to-door services
- DRT is **not typically a low cost solution** and higher fares (or subsidy) may be needed to support these often higher quality services
- Careful planning is need to **balance** service flexibility with operating complexity
- Good marketing is important to overcome any resistance to ride sharing and help with customer education around a novel service offering

# 3. DEMAND-RESPONSIVE DESIGN

Discussion of a set of common service characteristics, key questions for each element, and some considerations





# Overview

This deck previously introduced a general process for designing a transportation solution. From that process one should have a strong grasp on the **Context** and have identified a specific set of **Transportation Issues** that need to be addressed.

This section will **discuss common characteristics of DRT solutions** – with the caveat that this is a very broad and varied transport class.

For simplicity, DRT solutions have been divided into the following categories:

- Route Deviation Service
- Flexible Route, Area-based Service
- Flexible Route, Continuous Multi-hire Service



# All Characteristics

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
<b>Typical Application</b>	Low density area and/or low demand Periods	Special needs customers	Affordable, flexible transport
<b>Timetable/Schedule</b>	Usually uses a timetable with specific departure times. Timetable includes an allowance to cover any deviations	Can be operated at particular times (eg every 30 minutes) or as required	No timetable operates purely in response to Demand
<b>Route Origin/Destination</b>	Fixed, but with deviation to allow pickup/set-down off-route	No route, but covers a specific catchment area, usually with one or more fixed points	Anywhere to anywhere within a given zone or service area
<b>Typical Vehicle</b>	Conventional bus or smaller (midi/mini bus)	Small bus or maxi taxi	Maxi taxi or multi-hire taxi
<b>Typical Operator</b>	Bus Company	Bus, taxi or community Transport	Taxi operator, community Transport
<b>Typical Fare Structure</b>	Bus fares, possibly with supplement for door-to-door service option	Zone based fare	% of single-hire fare, or fixed based fare on origin and destination
<b>Booking System</b>	Required for customers wishing to be picked up off the fixed route	Required for all customers except those at key stops	Essential for all customers

# Applications

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
Typical Application	Low density area and/or low demand Periods	Special needs customers	Affordable, flexible transport

## Key Questions

- Who are your customers?
  - Can you profile your target customer? What defines them?
- What is the problem you are trying to solve?
  - What is the current solution? Doing nothing is always a viable alternative
- Where are your customers and where do they want to go?
  - This is both customer population density and understanding if they are going to/from a specific point
- When do your customers need to travel?
  - Is demand structured around a specific time of the day or event?
- How are you going to reach your customers?
  - How does your customer look for information on transportation solutions (marketing channels)
  - How strong an incentive is there for customers to use your service relative to the behaviour change required to try something new?

# Schedule

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
<b>Timetable/ Schedule</b>	Usually uses a timetable with specific departure times. Timetable includes an allowance to cover any deviations	Can be operated at particular times (eg every 30 minutes) or as required	No timetable operates purely in response to Demand

## Key Questions

- How do you expect demand to change over the course of the typical day?
- How often do you expect customers will use the service?
- How many shared rides are possible?
- How patient are your customers – how responsive does the system need to be to meet expectations?

## Considerations

- More complex booking systems are typically required to manage more dynamic schedules and complex operating systems

# Route

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
Route Origin/ Destination	Fixed, but with deviation to allow pickup/set-down off-route	No route, but covers a specific catchment area, usually with one or more fixed points	Anywhere to anywhere within a given zone or service area

## Key Questions

- Are you serving a specific area or is the service structured around a specific destination?
- What is the population density of the target population?
- How far do customers need to travel and how often will the vehicle run empty?
- How will customers get to and from the service – walk, carpool, other services, etc.?

## Considerations

- Typically, kilometres traveled is the largest expense so the total operating cost structure revolves around how far the vehicle travels

# Vehicle

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
<b>Typical Vehicle</b>	Conventional bus or smaller (midi/mini bus)	Small bus or maxi taxi	Maxi taxi or multi-hire taxi

## Key Questions

- How many customers do you expect for any one trip – what is a reasonable maximum?
- How will you react if demand is significantly above or below expectations?
- Do your customers have any special needs, eg, para transit or racks for bicycles?
- Does the route impose any limitations on the vehicle – such as tight spaces?
- Is this a mixed use service – ie freight and passengers?

## Considerations

- There is typically a tradeoff between service flexibility and cost efficiency; smaller vehicles are less expensive to operate and can be more reactive, but larger vehicles cost less per passenger.

# Operator

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
Typical Operator	Bus Company	Bus, taxi or community Transport	Taxi operator, community Transport

## Key Questions

- What level of customer service is required – are customers going to need special assistance?
- What is the feel of the service – efficient transport or something more personal?
- How well positioned are current operators to provide the service – are they competition or partners?
- What is the level of commitment in the community – is there a core group with the right skills to drive this forward?

## Considerations

- Giving a community some level of control over the service and ownership of the outcomes helps to align incentives and validates the service for patrons within the community

# Fare

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
Typical Fare Structure	Bus fares, possibly with supplement for door-to-door service option	Zone based fare	% of single-hire fare, or fixed based fare on origin and destination

## Key Questions

- How much can your passengers afford and what is their price sensitivity?
- What do the available alternatives cost customers – including not making the trip?
- What cost structure do you need to support?
- What level of subsidy, or non-operating revenue, is possible?

## Considerations

- Generally, try to keep the fare structure aligned with the cost structure – so highly variable services will typically have variable pricing
- People are willing to pay for perceived value – don't get stuck in the mindset of cost based pricing



# Booking System

Characteristic	Route Deviation Service	Flexible Route, Area-based Service	Flexible Route, Continuous Multi-hire Service
<b>Booking System</b>	Required for customers wishing to be picked up off the fixed route	Required for all customers except those at key stops	Essential for all customers

## Key Questions

- Will all travel need to be booked, or only some trips?
- How much advance notice will customers typically provide?
- How will the booking system be managed – does this require special IT systems?

## Considerations

- DRT services often require booking and/or routing systems that can **manage the complexity of a flexible service**. This often means the adoption of booking or routing technology. Purchasing and implementing such systems can be costly up-front, but may result in operator cost savings over time
- A key issue for DRT services is how to deal with real-time ('dynamic') booking requests without delaying scheduled pickups. These elements impact both cost and customer service

# 4. OTHER CONSIDERATIONS

Lessons learned and guidance from the Kowhai Connection case study



# Barriers to Adoption

Be aware of common barriers to adoption of public transportation as they are also relevant when considering DRT solutions

- Business owners can be **resistant to losing parking spots** to make space for bus stops
- Other transportation service providers, such as taxi and charter services, are concerned about **losing business** to competing services
- Communities are often **resistant to rates increases** to pay for new services

## Strategies:

- Build a realistic picture of the situation
  - Embrace **data collection**
  - Gather (and document) as many viewpoints as possible
  - Identify and **challenge your own assumptions**
- Create solutions, not problems
  - Local transportation planners often have limited bandwidth for developing new services - try to compliment what they are doing rather than add to their workload
  - Understand that risks as creative solutions often come through risk mitigation

# Transport Agencies

## How to work with your local/regional Transportation Agency

Your local transportation agency will likely be a **critical stakeholder in the process**. Some general guidelines for working with them include:

- Engage with the agency early on in the process
- **Seek out an champion** who will drive your cause internally
- Don't come with the expectation that the agency will necessarily provide the solution or solve all your problems
- Be mindful of the scope and scale of your request as they will need to balance any new projects against existing priorities
- **Try to understand their perspective**, limitations, and problems as you would any other stakeholder
- Seek opportunities to **solve their problems** – this relationship should be a partnership
- Be persistent

# Stakeholders

Work with other stakeholders to gather the insights and the resources you need to develop your proposal

## 1. **Flesh out your concept into a simple one page proposition** (recommend LEAN canvas)

- Stick to high level points and be clear about your assumption
- Identify areas of uncertainty and risks

## 2. **Socialise with other stakeholders**

- Local community board, councillor, etc.
  - Discuss your proposition, but also listen to what they are hearing from the community.
  - Don't be afraid to ask for money as local authorities can fund small projects
- Reach out to local business groups
  - Commercial interest can be a strong ally, or a barrier to progress – get them on-board
- Talk to everyone; schools, sports associations, elderly, tourism office, etc

## 3. **Talk and listen in equal amounts**

- Gathering feedback is just as important as selling your idea
- People respect and listen to those that respect and listen to them

# Technology Adoption

DRT services often require booking and/or routing systems that can **manage the complexity of a flexible service**. This often means the adoption of booking or routing technology. Purchasing and implementing such systems can be costly up-front, but may result in operator cost savings over time.

Some observations regarding technology solutions

- Successful technology implementation requires **an accurate map of existing resources**, an honest assessment of current capabilities, and a clear vision on the desired outcome.
- It is often possible to develop cheap, simple, and more robust solutions using existing tools and applying some **creative thinking**. More advanced technologies can be introduced as services scale and if data management becomes cumbersome.
- Any technology solution needs to **match the technical expertise of the operator** – systems should solve problems not impose a burden on the users.
- **Rural areas often have poor mobile phone and data coverage**. Test this in advance or develop systems and process that can adapt to communications gaps.

# Policy

## Understand the National Policy Landscape

Federal legislation and agencies create and define the landscape for public transportation in New Zealand. The GPS and the NLTP define the priorities for federal transportation funding.

- The [Government Policy Statement on Land Transport Funding](#) (GPS) sets out the government's **priorities for expenditure** from the National Land Transport Fund over the next 10 years. It sets out how funding is allocated between activities such as road safety policing, State highways, local roads and public transport.
- The [NZ Transport Agency](#) (NZTA) is responsible for **maintaining & investing in transport solutions** for a thriving NZ. Its role is principally defined by the [Land Transport Management Act 2003](#) (amended 2008) – although [multiple bills](#) define the legal framework for the agency.
- NZTA then drafts the [National Land Transport Programme](#) (NLTP) which gives effect to the GPS and contains all the land transport activities, such as public transport services, road construction and maintenance that NZ Transport Agency (NZTA) anticipates funding over a three year cycle.

# Policy

## Understand the Regional Policy Landscape

Regional Transport Committees, the Regional Councils, and NZTA all interact to access transport programmes – and ensure continuity between regional strategies and national policy. Be aware of these linkages and the balance between national and regional priorities.

- [Regional Councils](#) **establish and appoint members** of regional transport committees who are responsible for much of the strategy and programme development in a given region. The councils **approve regional land transport strategies** that establish the region's transport objectives, and they approve regional land transport programmes that list and prioritise activities.
- Regional Transport Committees are created by the councils and are **charged with preparing** the [Regional Land Transport Strategies](#). These high-level plans provide a strategic link to national activities and out the transport goals for a given region.
- The Committees then prepare [Regional Land Transport Programmes](#). These programmes are developed every three years to set out a region's **land transport activities and priorities**.



# Patience

Regional Transport Committees are **bureaucratic entities** operating in a complex and often fraught environment, in contrast to community groups who are relatively unencumbered. Each has a vastly different, and arguably justifiable, perspective on process, risk, and timeframes.

Recognise that government agencies and transport planners have detailed processes, will submit ideas with due diligence, and need time to generate buy in from multiple levels of authority. New projects come on top of already full workloads. Be careful not to construe extended timeframes or unintentional delays as incompetence or obstructionism.

Extra effort needs to be made to create mutually recognised and agreed **expectations** around timeframe, processes, and outcomes. Once established, there needs to be **continual effort** to maintain this shared understanding.

Regular updates are encouraged **even when there is no significant progress to report.**

**Regular and open communication is critical.**

# Funding

**Finding funds will be critical.** Understand the landscape for funding transport in NZ. The principal source of funds at a national level is the New Zealand Land Transport Fund (NZLTF)

Advice from NZ Transport Agency (NZTA) when applying for matching funding from the NZLTF

- **State the proposal's strategic fit** – how it fits with the NZTA's interpretation of the government's desired outcomes, including relieving congestion by improving modal choice in congested environments.
- **Demonstrate effectiveness** – improving modal choice in a congested environment and optimising networks (including farebox recovery rates).
- **Demonstrate economic efficiency** – primarily the BCR for changes or new proposals, or performance indicator trends over time for public transport services (as measured by standard indicators, eg total government investment/passenger km, and compared to similar regions).
- The NZTA can provide detailed analysis and summaries of regional public transport performance information, as needed, to enable meaningful comparison with other similar regions (benchmarking). **Contact your regional office for assistance.**

# Pilot

How a service is initially presented during release helps set customer expectations. Analogous to the release of “Beta” software, **framing the service as a “Pilot”** can provide some cover if required operational changes affect the service.

This needs to be balanced against the need for consistency. With any type of public transport solution people expect a degree of stability. Frequent changes can negatively impact adoption.

To find the right balance, **focus on the minimum viable solution** for the pilot. This means start with the fewest set of features and resources required to provide **the core service**. Be diligent in challenging your assumption on what features are critical. Features can always be added back once the service is stable.

Focusing on the minimum viable solution also helps reduce cost and complexity. For example, the Kowhai Connection service did without designated bus stops. Eliminating bus stops did not impact the value of the service as people could simply wave down the bus.

# Empower People

Once Kowhai Connection was provisionally funded, the work rapidly accelerated in the Design process. The principal transportation agency then brought in a **point person** to act as the conduit for communications and drive the project internally.

More than a project manager, this person was also **empowered with sufficient authority to make decisions** about the design and implementation of the project for the Agency. This freed up that person to focus on creative solutions using resources from across the organisation as needed. For example, the legal team was engaged to develop simplified operator contracts which lowered overheads and gave the operator more flexibility.

Likewise, stakeholder groups should **appoint a single point person to act as the prime communications conduit and represent their views**. Empowering this person to make decisions and call on other resources as appropriate can streamline development and accelerate timeframes.

**Empower the people working across organisations with the authority and freedom to develop creative solutions**

# Management

The management structure for the service should be **mutual agreed among the critical stakeholders**. With the Kowhai Connection, the principal transport agency was required to have a direct contract with the operator, which set the bounds for what was possible.

Some **transportation entities are funding agencies**. They allocate funds to projects which are managed independently. Others are operators, who may work through contracts with vendors, but retain a tight hold on services.

In either case it is recommended for the community to take some responsibility for the service. **Giving a community some ownership helps align incentives** and share the workload, but also validates the service for patrons within the community.

For Kowhai, this meant a hybrid structure. The transport agency held the contract with the vendor – per their rules of engagement, but **the community agent was given responsibility for marketing**. In actuality, the vendor, a community business, and the community agent worked in close partnership to deliver the service.

# Revenue

## Suggested strategies for increasing revenues and/or farebox recovery

- **Raising prices:** A simple solution, but one that should not be overlooked. Incremental increases are often possible without negatively impacting demand.
- **Variable or “barrier” pricing:** Take advantage of an individual’s particular price sensitivity. Charge a high list price with discounts if the patron does a simple task – the “barrier.” On the London Tube a single stage is €4.00, but this drops to €1.40 if the patron is willing to get an oyster card. Barrier pricing could be as simple as getting a discount if you show a receipt from a local store.
- **Advertising/Sponsorship:** Kowhai reached an arrangement with a local business who sponsored ads in the local paper. This enabled the service to avoid the cost of printing a schedule. Cash in on the goodwill generate by local services.
- **Special Passes:** The Kowhai service solved a problem for hoteliers who had to provide transport for seasonal workers – however the workers were more price sensitive than the hoteliers. One solution was a “corporate” ticket sold to the hoteliers that their workers or guests could use. Understand what problems a service solves and who will pay for the solution.

# Marketing

A service is a product that requires strong marketing to be successful. Observations from DRT services worldwide stress the need for **effective and consistent marketing**; from the launch of the service to an ongoing campaign. Behavior change is not easy and takes time.

Marketing needs to influence people through the following progression:

- The target population will need to be made aware of the existence of the service
- Potential customers will need to be **educated on how to use the service**
- People will need to be convinced to use the service; why they would benefit and how it compares with alternative forms of transportation
- Once exposed, patrons will then need a reason to re-use the service
- Repeat customers should be encouraged to **recommend** the service to others

Marketing campaigns need not be expensive. **Word of mouth is often the most effective** way to build awareness. Focus on turning repeat customers into enthusiasts, and encourage them to talk about the service with others. Be open to feedback, both positive and negative.

# Distribute Authority

Even within an organisation, groups or individuals can be distributed down the management structure. It should be encouraged to the extent this aligns incentives.

**Drivers for Kowhai Connection were given budgetary authority** to order cabs for customers. This was done because the service had only a small bus and overcapacity was seen as a real risk. If the bus was ever full, drivers were authorised to pay for a local taxi for additional passengers. Incentives were still aligned because drivers knew they needed to keep the bus full, but also had a commitment to providing excellent customer service.

That this authority was given to a driver meant that **little time was wasted seeking approvals**. The driver was clearly the best person to make the decision.





# Smile

A standout for Kowhai was the **customer satisfaction ratings**. A full 100% of surveyed patrons were enthusiastic about the service.

The **public reaction and strong feedback was the result of a conscious effort** to educate the drivers on courtesy and service. They greeted every patron with a smile and made the effort to greet regular customers by name.

This **humanised the service**, which not only made it more enjoyable, but gave the drivers more leeway when dealing with the inevitable disruptions. Simply put, it is harder to be angry or upset at someone who greets you with a smile.

Don't make the assumption that telling someone to be friendly is sufficient. It is worthwhile to investing in **customer service training** for front line employees as goes a long way toward building a friendly service.

# Data

## Data is powerful

But it must be collected and stored in a way that simplifies analysis. Not every service is going to need an advanced database, but thorough and **professional data management should be a requirement** for any size service.

Some general observations on data

- **Data collection must be easy:** Front line employees who bear the burden of data collection should have buy-in to the design of the data collection process.
- **Share data outputs:** Front line employees are more likely to collect data if they are the direct beneficiaries of the results. Be transparent about service data and performance.
- **Use data to drive decisions:** The data from Kowhai shows that use of the Sunday service lagged behind all other days. A delay in a decision to about whether or not to cancel Sunday led to frustration and was potentially wasteful.
- **Quantitative plus Qualitative:** Drivers and other front-line employees have a good feel for what is going on. Their observations often precede data trends.

# Sustained Support

Set expectations around the service being a **“work in progress” during the pilot** and that the pilot service is to be sustained for a period of time. This will signal some degree of permanence – which is important because customers expect an offering to be stable– but also gives operators some leeway when there are disruptions or modifications. The difficulty is in managing the balance.

As a pilot service, the emphasis must remain on **continued and sustained improvement**. This requires a greater degree of ongoing support than an existing service under “business as usual” management. **Pilot services need active management** with creative thinking and attention to detail. This will likely come from local stakeholders who are more in tune with the local community and the day to day operations of the service.

This is to say that stakeholder must be prepared to **see the pilot as just the start of the journey**. Also relevant is the idea of transitional leadership. Those who were best placed to initiate the service may not be in the best position to help the service grow and scale.

**Stakeholders should expect their relationship with the service to evolve over the course of the programme.**

# 5. ADDITIONAL RESOURCES

This report is supplemented by a toolkit intended for Community Groups who are designing DRT solutions



# Recommended Resources

Recommended **reference material** for more detailed information on Demand-Responsive Transportation solutions in Australia, New Zealand, and around the world.

## Components:

- ***Demand responsive passenger transport in low-demand situations***, R. A. Scott, Booz & Company, 2010 (NZ Transport Agency research report 425)  
  
Assesses three case studies from Australia and New Zealand in conjunction with an international literature review. It categorizes DRT solutions and reviews elements critical for success or failure.
- ***Kowhai Connection Pilot***, D. T. Tomlinson, Ākina Foundation  
  
The complete report on the Kowhai Connection pilot after its first full year of operation.
- ***Guidance on transport options for communities with limited or no public transport***, NZTA, 2009  
  
Targeted at Community Groups, this guide sets out a process for identifying community transport options (irrespective of DRT); from assessing the problems to evaluating potential solutions.
- ***Identifying potential market niches for Demand Responsive Transport***, L. Davison et al, Transport Studies Group, Loughborough University, UK  
  
UK meta study which explored the circumstances necessary for developing 'successful' DRT market niches.