

“Policies aim to restore passenger transport to be a viable alternative to the use of the private car.”



Chapter

5

Passenger Transport

- Work with ARTA to improve public transport so it becomes a viable alternative to the car
- Lead the provision of the rail link to Manukau city centre
- Enhance the effectiveness, convenience and safety of passenger transport by providing interchanges, park and rides, shelters and bus priority measures
- Ensure services are integrated with the development of growth centre and expanding business centres.

5.1 Introduction

The Future Role of Passenger Transport

It will be essential to better balance the trip making between roading, passenger transport and other modes in order to achieve the transport objectives described in Chapter 1 and to address the issues described in Chapter 2. It is intended to achieve this in part through the implementation of this strategy's passenger transport policies and actions over the period 2006-2016.

Those policies and actions aim to:

- Restore passenger transport (and the perception of passenger transport) to be a viable alternative to the use of the private car for many trips to work, school and local centres
- Increase the role of passenger transport so that the number of journey to work trips made by passenger transport increases by at least 5 per cent per annum

- Integrate service levels and orientation with the development of the growth centres and expanding business and employment areas of the city so that the land use and transport strategies reinforce each other.

Responsibility and Role of Manukau City Council

A structured approach will be taken to the planning and provision of services and supporting infrastructure in order to reverse the declining passenger transport mode share for journey to work trips, and to restore it to play a useful and significant role in the city's transport system. However the primary responsibility for planning, specifying, funding and implementing passenger transport services rests with ARTA (as portrayed in Figure 1.5) and not with Manukau City Council.



“Ensure services are operated to best meet the travel needs associated with Manukau’s growing residential and employment needs.”

The council will be very actively supporting the implementation the four-layered approach of ARTA’s Regional Passenger Transport Network Plan (described in Figure 5.1) in order to achieve this strategy’s transport objectives. This will be done in two ways:

- Through the provision of supporting infrastructure to ensure that passenger transport services are effective, accessible, convenient and safe for passengers.

This includes: interchanges, park and ride, bus priority measures, stops and shelters.

- Through collaboration with and advocacy to ARTA and other transport agencies. This includes ensuring that services are orientated and operated to best meet the travel needs associated with Manukau’s growing residential and employment areas, and provide access to education and health services.

5.2 Regional Passenger Transport Service

Primary responsibility: ARTA
Manukau City Council role: Collaboration and Advocacy

ARTA’s Passenger Transport Network Plan describes the way it intends to utilise passenger transport to deliver some of the outcomes sought by the Regional Land Transport Strategy. As part of the implementation of that plan ARTA intends to develop a regional passenger transport network comprising four layers of services,

from a top layer of fast, high frequency routes focused on growth centres and the CBD, down to a layer of services which are oriented around local destinations and providing access to the faster routes. The proposed system recognises that different users, trip purposes, geographical locations, and even times of the day, can have differing requirements. The roles and characteristics of each layer of services are described below. The lower layer services support the higher ones.

Rapid Transit Network (RTN)	High quality, fast, high frequency service in its own right-of-way where it is unaffected by traffic congestion. The Rapid Transit Network will connect the major growth centres to the Auckland CBD. It will include the Northern Busway and the western, southern and isthmus rail corridors.
Quality Transit Network (QTN)	Fast, high frequency, and high quality transit services operating between key centres and over major corridors providing extensive transit priority. In conjunction with the Rapid Transit Network the QTN will facilitate high-speed reliable access around the region through the integration of radial and cross-town services.
Local Connector Network (LCN)	Bus, ferry and train services that provide access to local centres and connect with the Rapid Transit Network and/or the Quality Transit Network. Priority measures will be provided at key congestion points to improve service reliability.
Targeted Services	Services that provide mobility for groups whose needs are not met by the regular passenger transport network. They include the Total Mobility service for people with disabilities, fare congestion schemes and school bus service.

The council will be actively supporting ARTA in its implementation of this concept (Figure 5.1). Under this approach passenger transport services and supporting infrastructure will be developed in accord with the following principles in order to build patronage and achieve the transport objectives:

- Improving frequencies and reliability of existing services
- Increasing quality, speed and frequency

- Improving rights of way so that passenger transport services are not impaired by suffering the same congestion and delay as general traffic
- Orienting services to where people want to go
- Creating opportunities for development of complementary land uses (at growth nodes and along major corridors - see Chapter 3).

Figure 5.1 describes the functions, operating and service characteristics of this proposed passenger transport network.

Figure 5.1: Four Layers of Services - Specifications and Descriptions | Source: ARTA Passenger Transport Network Plan

Network Type	Rapid Transit Network	Quality Transit Network	Local Connector Network	Targeted Services
Function	<p>Passenger transport network back-bone.</p> <p>Connects regional centres to the Auckland CBD along high density corridors</p> <p>Influences future development patterns by encouraging more intensive urban development along the corridors and in the key growth centres it serves.</p> <p>Facilitates high speed, reliable access around the region.</p>	<p>Supplementary high-quality network with connections to regional and district centres and employment/activity nodes. Provides coverage to medium-high density corridors in areas not served by the RTN.</p> <p>Implemented in medium-high demand corridors as a forerunner to RTN as patronage increases.</p> <p>Facilitates high speed, reliable access around the region.</p>	<p>Connects residential areas with their local centre.</p> <p>Provides connections to RTN and/or QTN.</p> <p>Emphasises coverage and accessibility from low-density areas.</p>	<p>Provide services for people unable to use the regular passenger transport network because of mobility impairment.</p> <p>School services for areas where the regular network is not suitable.</p>
Operating Characteristics	<p>High speed.</p> <p>High Frequency (timetables do not need to be consulted).</p> <p>High reliability.</p> <p>High capacity.</p> <p>Modern vehicles.</p> <p>Extensive hours of service.</p> <p>Low coverage.</p> <p>High quality service.</p> <p>Integrated ticketing/fares.</p>	<p>Moderate speeds.</p> <p>High frequency (timetables do not need to be consulted).</p> <p>Good reliability.</p> <p>Moderate capacity.</p> <p>Modern "branded" vehicles.</p> <p>Extensive hours of service.</p> <p>Reasonably direct.</p> <p>Moderate coverage.</p> <p>Planned, operated and branded as a superior bus service.</p> <p>Integrated ticketing/fares.</p>	<p>Moderate speeds.</p> <p>Lower frequency (timetables may need to be consulted) with higher frequencies during peak times.</p> <p>Moderate reliability.</p> <p>Low capacity.</p> <p>Standard vehicles.</p> <p>Moderate hours of service.</p> <p>High coverage.</p> <p>Typical bus service.</p> <p>Integrated ticketing/fares</p>	<p>Special services and vehicles for mobility-impaired users, including subsidising taxi fares for Total mobility and Dial a Ride on demand services for wheelchair users.</p> <p>Accessible buses for some scheduled or demand-responsive services to regular locations in areas of low demand or specific demographic requirements.</p> <p>School services operating regular buses.</p>
Right-of-way and infrastructure requirements	<p>Separate right-of-way.</p> <p>High amenity at stops and stations.</p>	<p>On-street running with extensive priority including bus lanes, signal priority in congested areas.</p> <p>Good amenity and information at stops.</p>	<p>On-street running.</p> <p>Moderate amenity and information at stops.</p>	<p>Accessible vehicles, all passenger transport infrastructure accessible.</p>
Frequency	<ul style="list-style-type: none"> • Peak 5-15 minutes • Interpeak 20-30 minutes • Evening + weekend 30 minutes 	<ul style="list-style-type: none"> 10 minutes (15m Ferries) 20 minutes (30m Ferries) 30 minutes (60m Ferries) 	<ul style="list-style-type: none"> 20-30 minutes 40-60 minutes 60 minutes 	As required
Service Period	<ul style="list-style-type: none"> • Monday-Friday 5.30am - Midnight • Saturday 7.00am - Midnight • Sunday 8.00am - 10.00pm 	<ul style="list-style-type: none"> 5.30 am - 12.30am 7.00am - Midnight 8.00am - 10.00pm 	<ul style="list-style-type: none"> 5.30am - 12.30am (feeds to RTN and QTN) 6.30pm - 11.00pm (others) 7.30am - 11.00pm 8.30am - 10.00pm 	As required

5.3 Rapid Transit Network - Corridors and Passenger Services

Primary responsibility: ARTA
 Secondary responsibility: OnTrack NZ
 (new rail infrastructure)
 Manukau City Council role: Collaboration
 and Advocacy

Southern Travel Corridor

The Rapid Transit Network (RTN) will provide the convenient movement of large numbers of passengers along the major travel corridors of the region, and between the sectors of the region. This network will comprise high frequency, high quality services operating independently of road traffic congestion. Therefore, they will provide consistent travel times between any two origin/destination points irrespective of the time of day or road congestion levels.

For the southern travel corridor through Manukau, the RTN will be the southern railway line which runs through the Auckland isthmus to the CBD, provides connections to West Auckland at Newmarket and to the Northern Busway services at Britomart (Figure 5.2). Manukau is supporting ARTA in the development of the southern rail corridor component of the RTN and the associated programme of upgrading the stations and passenger facilities, increasing service frequencies and purchasing modern rolling stock.

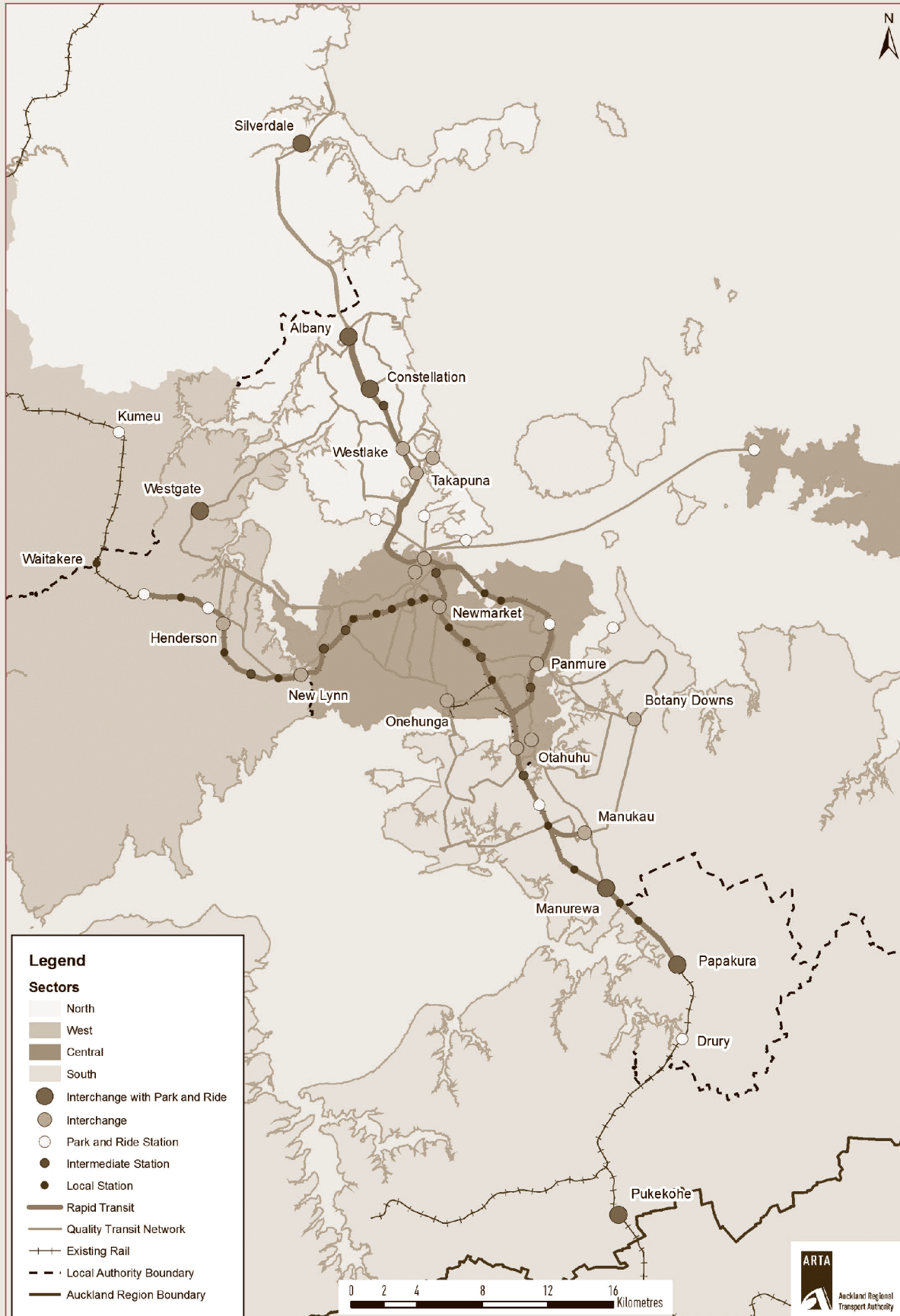
Construction of the Manukau rail link connecting the southern rail line and the Manukau city centre together with provision of high frequency services is an important component of the RTN and this transport strategy. This connection will join the commercial and administrative centre

for the southern sub-region to the other regional centres and provide for a large number of passenger movements to be undertaken conveniently and independently of time delays or variability which would be experienced making the same journeys on the motorway or arterial road network.

Most of the enabling works for the Manukau rail link (the embankment) will be done in conjunction with the Manukau-Puhinui SH20 motorway link as part of the contract managed by Transit NZ. The track and signalling will subsequently be undertaken by OnTrack NZ, and the construction of the rail station and bus interchange at the city centre will be led by Manukau City Council (Figure 5.3). It is important for this link to be completed as soon as possible because of its strategic importance. However, because of the co-ordination required with other major works and its complex interagency nature, its indicative completion date is 2014.

Rail also has the significant advantage of scalability through the addition of carriages and services that enables it to carry increasing passenger volumes within the corridor. Although in order to achieve its ultimate capacity, constraints at Britomart will need to be overcome in the future.

Figure 5.2: Proposed Rapid and Quality Transit Networks | Source: ARTA Passenger Transport Network Plan





“The high frequency and quality features of the rail service will be further capitalised upon.”

Figure 5.3: Proposed Manukau Rail Link



Other Travel Corridors

There is potential and scope for additional future Rapid Transit Network routes to be developed:

- Connecting the Auckland Isthmus to western Manukau via the Mangere Bridge and on to the Auckland International Airport
- Connecting eastern Manukau to the Isthmus across the Tamaki River.

Further work needs to be undertaken to refine these possibilities and determine the nature of the infrastructure and services which would be required in order to provide high frequency services independent of road conditions in these corridors. Investigations will include analysis of potential passenger

volumes that could be attracted from private car travel to RTN services in these corridors and the costs and benefits of such.

Auckland International Airport has made provision for future underground rail access in its airport masterplan so as not to foreclose future options, although it is recognised that this will not eventuate within the lifetime of this strategy.

This work could result in:

- Protection of land in both corridors
- Provision for passenger transport lanes/corridors/facilities in scheme planning and feasibility studies for AMET1 and the additional Mangere Bridge.

Integration with Other Services and Modes

Bus-Rail Interchange	The high frequency and quality features of the rail service will be further capitalised upon by reorienting appropriate existing bus services and putting on new services that feed passengers onto it, rather than run in competition to the same travel destinations. A bus-rail interchange will be built at Manukau city centre in conjunction with the rail connection (in addition to the recently completed one at Manurewa) to provide smooth and convenient interchange. Local bus services in Manurewa will provide feeder connections to rail at both interchanges. Passenger transport services from Flat Bush and suburbs east of Manukau city centre will focus on the city centre interchange to provide for travel to the Auckland isthmus, CBD and other nodes on the RTN. Travel times for these journeys will be faster and more reliable than if made entirely by bus. This feeder strategy will also build patronage on the RTN services in which significant capital expenditure and operational subsidies are being invested.
Park n Ride	Another means of attracting car drivers to passenger transport is the provision of carparking at key stations along the corridor. The existing park and ride facility at Papatoetoe Railway Station is fully utilised and will be progressively expanded with increasing demand. A similar facility will be further developed at Homai Railway Station, and the bus-rail interchange at Manurewa also incorporates commuter parking. The council will explore further opportunities to provide park and ride facilities as dictated by demand. There is the potential for shuttle bus connection between the rail system and the airport via either the Papatoetoe or Puhinui railway stations.

5.4 Quality Transit Network - Services and Rights of Way

Corridors and Routes

Primary responsibility: ARTA

Manukau City Council role:

Collaboration and Advocacy

The Quality Transit Network (QTN) will provide for cross-town travel, and travel to Auckland CBD from areas not served by RTN utilising buses on major arterial roads. The QTN will provide fast, high frequency and quality services (Figure 5.1) in these major travel corridors between key activity centres, including many of Manukau's growth centres (Figure 3.3). In order to achieve fast and consistent travel times, the council will install extensive bus priority measures so services are not adversely affected by on road delays and congestion. QTN services will be strengthened through the provision of high quality shelters, information displays, and branding.

Following the upgrading of RTN service with modern rolling stock, new rail stations, Western Line double tracking, construction of the Northern Busway and the Manukau Rail Link, ARTA intends to curtail use of buses on competing routes. That bus capacity must be reinvested into higher frequency bus services in the QTN. The trade-off which ARTA have indicated will be made between service frequency and service coverage will mean some passengers will have to walk further to access these more frequent and reliable QTN services. The system will also require more transfers between services such as: between QTN/RTN services, and from Local Connector Network services to others.

The council will be working with ARTA to achieve the best possible service delivery. This will include:

- Clarifying the arterial roads on which QTN services will operate, to ensure that they are the most appropriate to meet residents' travel needs and the objectives of this strategy. (The proposals in Figure 5.2 are indicative).
- Minimising avoidable transfers, and designing services and passenger infrastructure so that where transfers are necessary, they can be made with minimal passenger inconvenience (preferably at activity centres)
- Optimising investment in supporting bus priority measures and passenger infrastructure which is not readily transferable to other routes.

Bus Priority Measures

Primary responsibility: Manukau City Council

For buses to be perceived as a viable alternative to travel by car, the inherent disadvantage they have in sharing the same congested roads as other vehicles must be reduced or eliminated. Buses are subjected to the same congestion and delay as other vehicles using the road. Congestion, combined with the need to repeatedly stop to pick up and set down passengers usually disadvantages buses because of their longer travel times and variability. For passenger transport to be regarded as being as good a travel mode as the private car, ideally the whole-of-journey time for passenger transport should be less than or equal to, the car travel time.

Bus priority measures are a means of overcoming this inherent disadvantage and typically include:

Bus Advance	A kerbside lane leading to an intersection that allows buses to move to the head of a stationary traffic queue so they can clear the intersection at the next green phase (rather than joining the tail of the queue and waiting for several green phases).
B Phase	A separate phase of traffic signals during which a white 'B' signal is displayed that allows buses in Bus Advance or Bus Lanes to proceed through the intersection ahead of the other queued traffic.
Bus Lane	A separate traffic lane reserved for buses only that allows them to bypass slow or stationary traffic.
Intersection Improvements	Involve a range of measures including provision of 'Free Left Turn' lanes to eliminate kerbside queues.
Signal Pre-emption	Use of technology to over-ride traffic signals to enable a late-running bus to avoid further delays, for example by extending a green phase until it passes through. Operational protocols are yet to be established to ensure use will not unduly impact traffic flows and/or bus services.

Identification and implementation of bus priority measures will become an even more important component of Manukau's transport programme over the life of this strategy. Measures will be particularly focused on the roads on which the Quality Transit Network services run. By eliminating delays and reducing travel times for bus services through priority measures, Manukau will directly support the establishment of high quality QTN services with reliable and consistent travel times. Priority measures will also be implemented on other routes where warranted. For example, providing access to growth centres, major activity hubs such as the airport and major employment areas.

In the period prior to this strategy, Manukau has identified locations on the city's bus network where services were being adversely impacted by delays and developed bus priority measures with the aims of:

- Achieving savings in travel time
- Improving bus service reliability
- Protecting service performance from the effects of growing traffic congestion.

These measures were then implemented, where benefits exceeded costs and locally affected communities were supportive. Implementation has been managed and funded via three year rolling work programmes.

In the decade ahead the council will implement extensive bus priority measures in order to make bus journey times faster and more reliable, and thereby increase patronage. Because of their effect on street parking, there will be situations where bus priority schemes will need to make provision for off street parking, goods service vehicle lanes, and traffic bylaws to restrict certain vehicle movements during peak periods.



“Most of the passenger transport service in Manukau will continue to be provided by buses.”

5.5 Bus Service Levels and Orientation

Primary responsibility: ARTA
Manukau City Council role:
Collaboration and Advocacy

Most of the passenger transport service in Manukau for the 10 years covered by this strategy will continue to be provided by buses.

Although they have been partially re-orientated over the last decade to meet changing demand patterns, bus service levels and orientation still require much more adjustment. The low percentage of passenger transport usage by Manukau residents can be partly attributed to the inadequacies in the orientation of the current system.

An important thrust of this strategy is the implementation of Manukau's Passenger Transport Strategy, Taking People Places which documents many of the required improvements, including:

Peak Period

- Re-orientation of services to Manukau employment areas. Existing services continue to be strongly focused on the Auckland CBD. Although the CBD still contains the highest regional concentration of jobs/destinations, patterns are changing with significant employment growth at East Tamaki, Manukau Central-Wiri and Ascot-Airport that collectively contained approximately 66,000 jobs in 2005. Only 10 per cent of Manukau's labour force were employed in the Auckland CBD in 2001. Notwithstanding this need for re-orientation it is recognised that it is easier to gain a larger market share of trips to the CBD for passenger transport, due to greater numbers of workers and students and higher employment densities.
- Routes need to be simple and direct, serving clear trip origins and destinations whereas some existing routes are indirect and time consuming. Bus routes typically follow fairly circuitous routes through Manukau suburbs, then more direct routes

on radial arterial roads on the Auckland isthmus to the CBD. As Manukau's residential suburbs have grown, the radial system has been expanded, adding new streets to existing routes. While this has maximised access to potential passengers, the overall network remains inefficient in servicing residents' needs.

- A more extensive network of cross-town services is required to adequately connect residential suburbs with:
 - Employment areas such as Ascot-Airport and East Tamaki-Highbrook
 - Manukau Institute of Technology in Otara
 - Middlemore Hospital and the Manukau Supa Clinic.

Outside Peak Periods

- Continued re-orientation of the network is required to focus on town centres. Out of peak periods, the network is essentially a modified version of the radial peak network but operating at lower frequencies. The decentralisation of retail and business activities from the CBD to the suburbs over the last 30 years means that inter-peak travel demand now focuses on town centres such as Pakuranga, Botany and the Manukau city centre. Most community, government and health facilities are also located at town centres.
- Although service levels at most Manukau town centres are adequate, services often split and diverge in order to maximise suburban coverage, resulting in lower frequencies on individual routes.
- The level of passenger transport demand identified by ARC transport surveys in 2002 appears to be constrained by both lack service of availability, and orientation of the system.
- Some of the existing service levels are so low that they fall short of the minimum standards set in the Regional Passenger Transport Plan.

5.6 Ferry Services

Primary responsibility: ARTA

Manukau City Council role:

Collaboration and Advocacy

Ferries play a small, niche role within the passenger transport system by connecting the harbourside suburbs of Half Moon Bay and Beachlands with the Auckland CBD, and Half Moon Bay with Waiheke Island (weekend service). The effective passenger catchment is extended well beyond Half Moon Bay via feeder bus services and park and ride. Additionally, the vehicular services to Waiheke for the Auckland region depart from Half Moon Bay.

Because they provide direct services and do not suffer the effects of congestion, ferries offer a travel time advantage for travel to the Auckland CBD from both of these suburbs. Ferries could make a more significant contribution towards reduction of peak period congestion in the eastern and southern roading corridors if a larger proportion of car based commuter trips could be attracted onto them instead.

Manukau will work with other agencies in order to increase ferry patronage accordingly.

Half Moon Bay has been identified as the best location in the Pakuranga/Howick area for the ferry terminal and associated park and ride. However, the existing facilities have several limitations such as: site congestion, and conflicts between the needs of the various user groups which must be overcome in order to achieve significant patronage growth and capitalise on their potential. Redevelopment of the Half Moon Bay facility including: vessel berthing; passenger facilities; bus-ferry interchange, and car parking, is required within five years.

The Beachlands population is increasing in conjunction with additional residential development. In order to adequately provide for the growth in commuter traffic, planning and provision of facilities for ferries, passengers and park and ride will be required.

5.7 Servicing Future Growth

Primary responsibility: ARTA

Manukau City Council role:

Collaboration and Advocacy

With the projected continuation of the rapid urban development described in Chapter 2, the growing residential suburbs at Botany and on the fringes of Manurewa (Wattle Downs, Weymouth/Clendon, and Manurewa East) will be completely populated in just a few years beyond the planning horizon of this strategy. Chapter 3 describes how another 80,000 residents will be accommodated in the growth centres throughout Manukau, including 40,000 in the entirely new growth centre at Flat Bush.

The development of Highbrook Business Park will involve the establishment of 12,000 jobs there (currently greenfields), while continued business growth in East Tamaki, Airport-Ascot and Manukau central-Wiri will ultimately bring their total employment to 100,000.

It is imperative that this growth be matched with the concurrent provision of good passenger transport services. Bus services must be provided to these new areas as they are growing and developing in order to successfully accommodate a significant proportion of the additional travel on passenger transport rather than have the additional travel undertaken almost entirely by private vehicle, as has been the pattern of the last two decades.

Manukau City Council will work with and lobby ARTA to provide bus services through these new suburbs and business areas in parallel with development. It is much less effective to provide bus services after much of the roading has been built and the population established, because residents and workers will by then have had to make other private car based travel choices which will have become established and permanent travel habits and patterns.

Heavily subsidised bus services (because of low initial population/employment) are required contemporaneously with development to establish ridership and for the public to consider bus travel as a viable option. This is contrary to the existing ARTA policy under which service improvements will be provided (in accordance with service guidelines) when generated ridership reaches certain targets. Manukau requires the delivery of bus service capacity into the growing residential suburbs in order to generate demand and demonstrate to newly settling residents that passenger transport is a viable alternative to the car. To facilitate this, the council will stage its roading construction and influence land sub-dividers to develop connected roading networks through new areas that provide bus accessibility.

5.8 The Transport Disadvantaged

Primary responsibility: ARTA
 Manukau City Council role:
 Collaboration and Advocacy

The Land Transport Management Act requires that the needs of the 'transport disadvantaged' be taken into account.

'Transport disadvantaged' are those people who rely on some form of passenger transport service for their mobility and access to opportunities because their circumstances do not give them access to independent transport. Various groups of people can be in these circumstances, including: youth and students; people with disabilities, the elderly; and people on low incomes or benefits.

These groups are highly represented in certain geographical areas of Manukau. For example, parts of Mangere and Otara score very highly on the Deprivation Index and likely to be more reliant on passenger transport to access health and community services, and employment opportunities. The city also has a very youthful population that is often reliant on passenger transport for access to education, entertainment and social activities. The highest concentrations of people aged under 25 years are in Otara (51 per cent), Mangere (48 per cent) and Manurewa (45 per cent). Around 12 per cent of the population of Howick and Pakuranga and 10 percent of Papatoetoe are aged over 65 years.

Although the Auckland region has very high levels of vehicle ownership, approximately 6 per cent of Manukau households do not have one available, although this varies across the city and is higher in Otara (11 per cent). Again this is very significant for access to employment, health, community services and affordable shopping. Householders with access to only one vehicle that is used for the journey to work are also reliant on daytime passenger transport for access to these services.

Manukau's strong policy position with respect to building strong educated communities with access to employment, health and community opportunities is based on Tomorrow's Manukau and is set out in Chapter 1 of this strategy. Accordingly, the council will actively engage with ARTA (who are responsible for planning and subsidising passenger transport services) to achieve routes and service frequencies to meet the travel needs of transport disadvantaged groups. This is particularly important for the Mangere and Otara communities.

Fares must be kept to levels that are affordable for the transport disadvantaged. This requires careful management of the subsidy levels paid by ARTA to the companies that provide contracted services.

5.9 Passenger Infrastructure and Service Features

Bus Stops and Bus Shelters

Primary Responsibility: Manukau City Council

Manukau City Council provides on-street infrastructure such as bus stops, shelters, furniture and signage in order to assist both passengers and bus operators. Good design and siting of bus stops and shelters assists to maintain and encourage additional patronage, whereas poorly sited, designed or maintained facilities limits and deters patronage. Passenger infrastructure must be designed, constructed and located so that it is safe, passenger friendly and of high quality.

In order to support bus operation and build patronage the council will continue to provide infrastructure such as stops and shelters both in a planned manner and in response to community requests. Accordingly Manukau City Council has adopted bus stop and shelter policy and guidelines" as a means of achieving safety and convenience for passengers; and speed of access, safety and a positive image generally for buses. Figure 5.4 summarises the purpose and features of this supporting infrastructure.

Figure 5.4: Infrastructure to Support Bus Operations and Passengers

Bus Stops	<p>Located to maximise passenger accessibility without compromising traffic flow or safety:</p> <ul style="list-style-type: none"> • Maximise the number of people within 400m walking distance • Close to intersections and walkways/pedestrian paths • 300-500m spacing • Adjacent to major trip attractors • Visible and well lit to maximise safety • Generally provided in opposite pairs.
Bus Bays	<p>Recessed stops to take buses out of traffic lanes:</p> <ul style="list-style-type: none"> • Avoided unless necessary for traffic safety reasons • Present problems for merging buses back into the traffic stream.
Bus Boarders	<p>The stop is pushed out into the traffic lane where this does not adversely affect traffic safety and flow:</p> <ul style="list-style-type: none"> • Eliminates need to manoeuvre buses in/out of the traffic flow; and • Provides wider pedestrian area.
Bus Shelters	<p>Provided at higher usage boarding stops to provide weather shelter and passenger comfort:</p> <ul style="list-style-type: none"> • Designed using the principles of Crime Prevention Through Environmental Design including: visibility, lighting, and passive surveillance • Accessible for impaired users • Appropriate to surroundings • May be privately funded (and include advertising panels) • Vandal resistant.
Large Shelters/Bus Interchanges	<p>Large shelter structures are provided at shopping centres and bus interchanges (e.g. Manukau City Centre, Otara and Mangere town centres) where a number of routes converge at an activity centre or bus interchange point.</p> <ul style="list-style-type: none"> • May be privately funded (e.g. where located within shopping centres).
Passenger Information	<p>Provision of information to assist passengers</p> <ul style="list-style-type: none"> • Timetable / route map display cases • Real time passenger information signs showing estimated bus arrival times (these will be provided by ARTA as part of a regional programme).



“Frequent and well-patronised passenger transport services support intensification at growth centres.”

Provision and location of signage, seats, and other street furniture is also covered by the policy and guidelines.

Proactive maintenance and annual audits of bus stop infrastructure are undertaken in order to present as attractive, encouraging and safe image as possible for bus transport. There can be community resistance to location of bus shelters and other facilities due to vandalism, and the perception that they are unsightly or attract undesirable behaviour. Regular maintenance and use of the principles of Crime Prevention Through Environmental Design (CPTED) are used to overcome this. Where affected residents object to installation of these facilities, community boards are responsible for the conduct of hearings and decision making based on the bus stop and shelter policy and guidelines.

Other Service Features

Primary responsibility: ARTA
Manukau City Council role:
Collaboration and Advocacy

There are a range of features of passenger transport services that must be carefully designed and implemented in order to make this mode convenient and easy for customers to use. These features are important in attracting mode share given that the primary competition is the private vehicle that usually has significant advantages in the form of convenience and flexibility.

Management of these features is primarily the responsibility of ARTA in its role as specifier of standards and service contracts, although the council will provide input on these matters as requested in order to support its overall transportation policies.

Where appropriate the council will also assist in promoting and raising public awareness of passenger transport services and initiatives.

These features include:

- Simplified fare structures which are integrated between modes/providers/routes in order to make transfers as seamless and convenient as possible
- Vehicles which are appropriate to users' needs, for example: comfortable seating and ride quality; accessible vehicles and barrier free terminals/stops for the disabled; user friendly vehicles for parents and young children
- User information which is easy to access and simple to understand, for example:
 - Provision of timetable/route/fare information by web, call centre and written media
 - Wayfinding and directional information at stops and terminals
 - Real Time Passenger Information at stops.

Passenger Transport - Goals and Objectives

Goal	Passenger transport is regarded as a viable travel alternative to using the car and plays an increasing contribution to a balanced transport system for the city because of its reliable travel times and good service levels.
Objectives	<ol style="list-style-type: none"> 1. The number of Manukau based journeys to work made by passenger transport increases by at least 5 per cent per annum to 2016. 2. The proportion of journeys being made by passenger transport between Manukau and the Auckland isthmus in the morning peak period achieves the Auckland Regional Land Transport Strategy target of 18 per cent. 3. Frequent and well-patronised passenger transport services support residential and employment intensification at the growth centres. 4. Appropriately oriented rail, bus and ferry services are delivered in accordance with this strategy and which meet the transport needs of existing and newly developing areas of the city, including the needs of the transport disadvantaged. 5. Consistent travel times, and user safety, comfort and convenience are achieved through the provision of effective supporting passenger transport infrastructure.

Passenger Transport - Policies and Actions

Policy	Action
Four Service Layers	
P.5.1 Support development and implementation of the "Four Service Layer" structure for passenger transport, comprising: <ul style="list-style-type: none"> - Rapid Transit Network - Quality Transit Network - Local Connector Network - Targeted Services 	A.5.1 Implement the Manukau rail link by 2014, in conjunction with ARTA and OnTrack NZ.
	A.5.2 Undertake transportation studies into possible RTN connections to the International Airport and across the Tamaki River, while preserving options for RTN inclusion in the planning for Auckland Manukau Eastern Transport Initiative and the Mangere Bridge duplication in the meantime.
	A.5.3 Work with ARTA to determine and agree the appropriate QTN routes for Manukau.
	A.5.4 Work with ARTA to minimise avoidable transfers and, where transfers are necessary, design services and passenger infrastructure so they can be undertaken with minimal passenger inconvenience.
	A.5.5 Collaborate with and advocate to ARTA to ensure it funds the provision of appropriate rail, bus and ferry service levels to deliver the four service layers in accordance with this strategy and ARTA's Passenger Transport Network Plan.

Passenger Transport - Policies and Actions

Policy	Action	
Collaboration and Advocacy re Service Delivery		
P.5.2	Actively collaborate and advocate so that ARTA uses its planning, specification and funding roles to provide passenger transport services in Manukau which deliver the aspirations of this transport strategy and the council's passenger transport strategy Taking People Places.	
P.5.3	A.5.6	Provide sufficient resources to actively participate with ARTA through working groups, consultation and submission processes regarding provision of passenger transport service to Manukau including: <ul style="list-style-type: none"> - The ARTA Passenger Transport Network Plan; and - The Auckland Passenger Transport Plan.
	A.5.7	Work with ARTA to achieve delivery of service levels that directly connect Manukau's major residential areas with MIT and the major employment areas (as documented in this strategy).
	A.5.8	Work with ARTA to achieve delivery of service levels that provide adequate levels of accessibility for the transport disadvantaged (particularly in Mangere and Otara) to local health, education and community services and to major employment locations.
	A.5.9	Work with ARTA to achieve delivery of customer oriented service features including: <ul style="list-style-type: none"> - integrated ticketing and simplified fare structures; - accessible vehicles and barrier free facilities; and - freely accessible and readily understandable route/timetable /fare information in paper/ electronic and web based forms.
	A.5.10	Work with ARTA to achieve the timely delivery of passenger transport services to newly developing residential and employment areas including Flat Bush, Botany and Highbrook as development proceeds.
Infrastructure to Support Passenger Transport		
P.5.4	Increase the attractiveness of using passenger transport through provision of well located and designed infrastructure for users that is barrier free, safe, convenient and user friendly.	
P.5.5	A.5.11	Provide bus stops and shelters in accordance with the annual expenditure programme of the LTCCP and the bus stop and bus shelter policy and guidelines.
	A.5.12	Provide a bus-rail interchange at Manukau city centre (in conjunction with the completion of the Manukau rail link - by 2014).
	A.5.13	Provide and progressively expand the capacity of park and ride stations at Papatoetoe, Homai and elsewhere as required to meet demand.

Passenger Transport - Policies and Actions

Policy		Action	
Infrastructure to Support Passenger Transport (cont.)			
P.5.6	Increase rail and bus patronage by encouraging inter-modal transfers through provision of well located and designed bus-rail interchanges and park and ride stations.	A.5.14	Investigate viability of shuttle bus connection between rail and airport with ARTA and OnTrack NZ.
		A.5.15	Work with ARTA to redevelop facilities at Half Moon Bay for ferry berthing, passengers, bus interchange and car parking, and investigate the feasibility of relocating vehicular ferry operations.
		A.5.16	Work with ARTA to achieve effective feeder bus services to/from ferry termini.
		A.5.17	Work with ARTA to review facilities at Beachlands for ferries, passengers and park and ride.
Newly Developing Areas			
P.5.7	Provide roading and supporting passenger infrastructure in conjunction with development in order to facilitate the timely provision of bus services into newly developing residential and employment areas (including Flat Bush, Highbrook and Botany).	A.5.18	Provide sufficient resources to actively participate with ARTA through working groups, consultation and submission processes regarding provision of passenger transport service to Manukau including: <ul style="list-style-type: none"> - The ARTA Passenger Transport Network Plan; and - The Auckland Passenger Transport Plan.
		A.5.19	Plan and construct council and developer funded roading in new areas in a manner that provides connected street networks which can accommodate bus routes in a timely manner.
		A.5.20	Influence developers to stage construction of sub-divisional roading so that connected street networks that can accommodate bus routes are provided early in the land development process.
Bus Priority Measures			
P.5.8	Enhance the effectiveness of bus services by implementing priority measures which enable buses to bypass traffic delays and achieve consistent travel times for users.	A.5.21	Develop criteria and evaluation methodology for selection and prioritisation of bus priority measures by 30 June 2007, in conjunction with ARTA.
		A.5.22	Develop and Implement three year rolling work plans of bus priority measures.
		A.5.23	Co-ordinate implementation of bus priority measures with QTN routes.