The ARTA Years 2004 – 2010

Auckland Regional Transport Authority (ARTA):
1 December 2004 – 31 October 2010

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In 2004, ARTA was formed as the country's first stand alone regional transport authority, with a mandate to solve Auckland's transport challenges. We were given the lead role in planning, funding and developing the region's public transport system of rail, buses and ferries in order to decongest our roads and deliver the maximum economic and social benefits.

This booklet demonstrates the step change we have achieved over the past six years in patronage of public transport. A better rail network, more frequent services, simpler routes on buses, infrastructure improvements that are up to international standards, and community education programmes are all part of the ARTA story.

How ARTA came into existence

In 2003, 18 different bodies were involved with planning, financing and implementing transport in Auckland. They included the Auckland Regional Council (devising strategy), Infrastructure Auckland (allocating grants for projects), Transfund (funding assistance for passenger transport) and Auckland Regional Transport Network Limited (rail infrastructure).

Transport governance had been the subject of continual review for three years, with all parties accepting the need for urgent action but not able to reach a consensus on a preferred model. In December 2003, the Government made a rare move to intervene in the city's affairs, offering Auckland additional funding of $1.62 billion over ten years for transport in exchange for changes to the way transport was governed and funded. These changes were accepted in general by the region's territorial authorities and enacted in the Local Government (Auckland) Amendment Act 2004.

The Act introduced a balance of political oversight by the ARC and stand-alone operational governance. Two new bodies were set up as separate legal entities: the Auckland Regional Transport Authority (ARTA) and Auckland Regional Holdings (ARH), governed by their own board of directors while also being subsidiary organisations of the ARC. The ARH would own and manage transport and other assets. Over half the regional rates collected by the ARC and revenue from the ARH would go towards funding Auckland's network of rail, bus and ferry services. ARTA's role was to take a region-wide approach to planning, funding and developing the land transport system in Auckland and contributing to the overall vision for the country's largest city, as outlined in the Regional Growth Strategy. The ARC would act as both a funding and strategic body for ARTA, with constrained powers of control, working in a partnership of mutual reliance to achieve significant improvements to Auckland's transport system and traffic congestion problems.

ARTA gets moving

ARTA was established on 1 July 2004 as a council-controlled organisation, a subsidiary of the ARC, and began operating on 1 December 2004. It was launched by Prime Minister Helen Clark in February 2005. Staff transferred from the ARC to ARTA and the initial team of 40 has grown to 115.

The ARC has committed bulk funding to ARTA on a year-by-year basis. ARTA's responsibilities to the ARC were to provide an annual statement of intent; half yearly and annual reports; and allow the ARC to regularly undertake performance monitoring.

Auckland ferries have been an integral part of public transport since the Devonport ferry service was established in 1860. The SuperGold Card, offering free travel for seniors at off-peak times, has played a key role in reviving ferry patronage since it was introduced in 2008.

Dedicated busways carry 12,000 people an hour while a single lane of motorway carries only 2,400 people. The Northern Busway's capacity and reliability is playing a key role in addressing traffic congestion over the Harbour Bridge by taking 5,100 cars off the road in morning peak times.

ARTA's vision

One of the first tasks for the new Board of Directors was to develop a vision and regional strategies for achieving that vision.

Vision: A world-class transport system that makes Auckland an even better place to live, work and play.

Strategies:

Growing Auckland

The transport system will support regional growth and economic development strategies by linking Auckland's main urban centres with a fast, frequent and reliable Rapid Transit Network, comprising an electrified rail system and the Northern Busway.

Moving Aucklanders

One ticket will take you anywhere in Auckland, on a seamless network of bus, train and ferry services. Aucklanders will be in the habit of quickly checking the options for their trip before leaving home, and will be able to choose between a quality public transport service, safe walking and cycling routes, and predictable car journey times.

Sustaining Communities

Aucklanders will make safe, healthy and sustainable travel choices. People who do not have access to a car will still have access to employment, education, health, commercial and recreational opportunities.

The first comprehensive 10-year plan

In 2005[1], the ARC published the Regional Land Transport Strategy (RLTS), which set the expected transport outcomes for 2016 and required ARTA to prepare an Auckland Passenger Transport Network Plan (PTNP). The plan, published in 2006, identified the strengths and weaknesses of the transport system, the lessons Auckland could learn from other cities internationally, and set a 10-year plan of action to 2016 to get the region moving.

Analysis of Auckland's transport network

An analysis of the public transport network showed that it had world-class elements but had suffered from chronic under-investment and lack of an overarching planning framework. Auckland had been growing rapidly in a sprawling fashion. By 2004, the city was absorbing an extra 50 people each day and hence potentially an extra 35 cars. By 2040, the region's population is predicted to reach two million. While roads will remain important for moving freight, it had become impossible to build our way out of congestion by providing more road capacity. The region was coming to a congested standstill, as a recurring consequence of growth, impacting on the economy, the environment and public health. It was estimated in 2006 that congestion in Auckland was costing the country $1 billion a year, just under 1% of the GDP.

Wellington was moving proportionately 75% more people by public transport than Auckland, where 25,000 homes had more private vehicles than people. Already, Auckland had outgrown the structure of the public transport system, which could be broadly described as multiple private operators operating peak-time-only services to and from the CBD. Metropolitan centres such as Manukau had grown considerably. The populations of peripheries such as Flatbush (near Manukau) had shot up and rising inner city property values was one driving factor in the development of non-CBD employment areas such as Westgate, Albany and the airport. People were no longer travelling from the suburbs into one central location for work and play. They had needs to travel within and between these mushrooming centres at all times of the day and night.

1. Dates refer to calendar rather than financial years unless otherwise stated.

Some marked improvements were under way: the opening of Britomart in 2003 and investment in rail infrastructure and services, upgrading ferry services and terminals, the early stages of the Northern Busway project and increased frequencies of bus services. These had led to an increase of 15% in the use of public transport between 2001 and 2005.

The main limitations of the transport network were:

- Lack of integration between the three modes of transport, bus, rail and ferry, resulting in duplicated services
- While bus coverage appeared extensive it was focused on travel to the CBD and services were infrequent, with 75% operating fewer than three buses per hour. There were over 450 routes but around 90% of them were peak-time only. The emphasis on direct services resulted in long, inefficient bus routes rather than efficient transfers. Bus services didn't match the public's needs and often they were in direct competition with train services
- While the rail network had improved with refurbished trains and higher frequency, rail had limited coverage with less than 15% of Auckland's population living within 800m of a train station
- Too many competing fares. Users of the transport system had over 100 fare products to choose from, with different fares for bus and train journeys and fare stages every three to five kms. Services and timetables were generally planned separately, with competition between private operators discouraging integrated services.
- The development of unsustainable features such as diesel powered trains
- Lack of supporting facilities such as transport interchanges, high-quality stations, information and bus priority measures.

Less than 15% of Auckland's population lived within 800m of a train station in 2006. The new Grafton Station was moved to a more convenient location and since it opened earlier this year has already attracted 45% more patronage than the Boston Road Station that it replaced.

Lessons learned from other cities

The key success factors in the transport networks of five international cities were identified. The cities were Brisbane, Perth, Ottawa, Vancouver and Portland. They were chosen for their similarities in population size and land use density.

The core factors were:

- Strong institutional structures supporting integrated land use and transport planning
- A layered arrangement of transport services with an RTN forming the backbone; a high-frequency branded express bus and a network of support/feeder services giving good geographic coverage
- Targeted services to fill particular market niches
- High-quality transport systems on a dedicated right of way to ensure high reliability
- High frequency and reliability of transport services — the greatest patronage gains can come from transforming existing networks rather than introducing new services
- Investing in transport interchange and Park-and-Ride facilities, enhancing customer information; improving comfort, safety and security; and providing integrated ticketing systems.

Moving forward in Auckland

In short, lessons from overseas showed that people wanted services that ran on time, services they didn't have to travel too far to get to or wait too long for. The dispersed nature of both population and employment centres in Auckland meant it wasn't an efficient use of scarce resources to provide direct services for all trips to all destinations. A trade-off between service coverage and frequency would have to be made, targeting funding to where it would give best results. People would get more frequent, faster and reliable services but perhaps have to walk a little further to access them or make an easy transfer between services. Planning to double the amount of trips that required a transfer (from 15% to 30%) made it even more imperative to provide an integrated ticket and fare system that was simple and easy to understand. A seamless system was integral to achieving the RLTS goal of 100 million passenger boardings by 2016.

ARTA's gap analysis in Auckland's transport network and research into overseas experience identified three essential components of a world-class system: rapid, quality and integrated. All three needed further development in order for the transport system to meet both the present and future needs of the region.

The Rapid Transit Network (RTN) was planned as a number of spines running through the region, along which high-quality (direct, fast, reliable), high-frequency services would run. The aim was to get people to their destinations quicker, ensuring the services didn't get held up in road traffic congestion. The RTN should be able to compete with the convenience and speed of car travel. Its two main components were a modern electrified rail system and an expanded busway system. The RTN supports Auckland's growth strategy of intensified land use and is likely to carry around 40% of all public transport trips, around 80 million a year by 2050. The RTN also makes the biggest contribution to decongesting Auckland's roads, with an annual benefit of $25,000 for each additional user. On a cost/benefit ratio, investing in the RTN makes good economic sense (see the graph on page 8).

The Quality Transit Network (QTN) would become the veins and arteries of the city's transport system. The QTN was designed to transport people cross-town, linking key population and employment centres mainly on bus corridors where the buses had priority. The QTN delivers only roughly half the benefit of the investment in the RTN, i.e. $12,000 annually for each additional user.

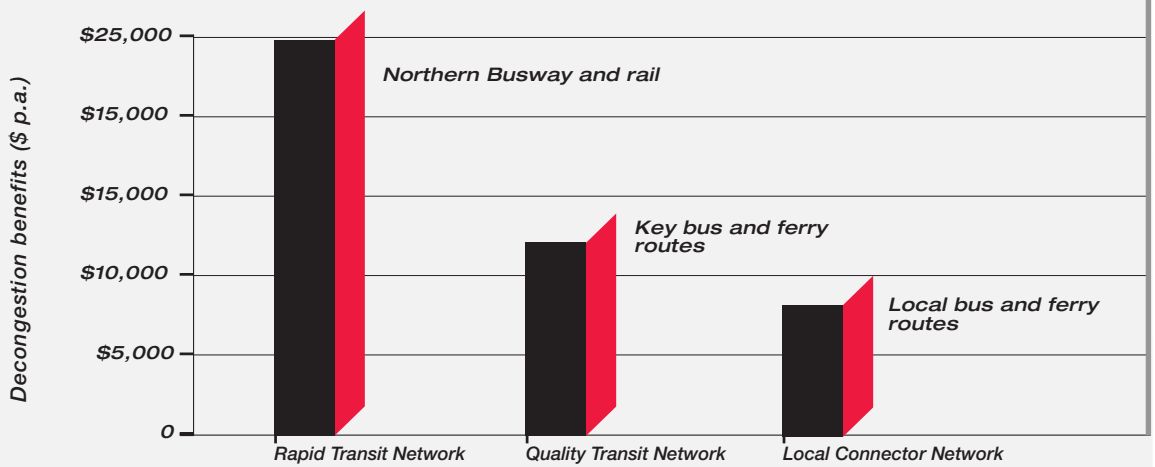
An integrated network would deliver:

- Interconnecting train, bus and ferry services at transport interchanges such as Britomart
- Integrated ticketing and a simplified fare structure
- Local Connector services into the RTN and QTN networks
- Targeted services for groups whose needs were not met by regular services, such as Total Mobility for people with disabilities and fare concession schemes.

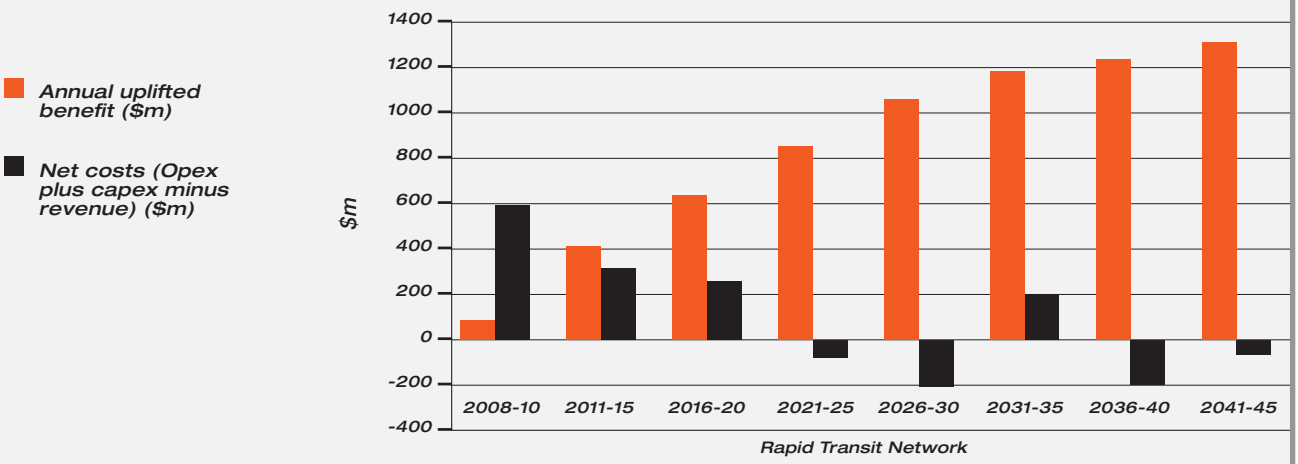
The other key elements in a shift towards increased use of public transport were:

- Changing attitudes and behaviours through education such as travel plans
- Developing more sustainable forms of travel such as walking and cycling
- Integrating land use and urban design with transport.

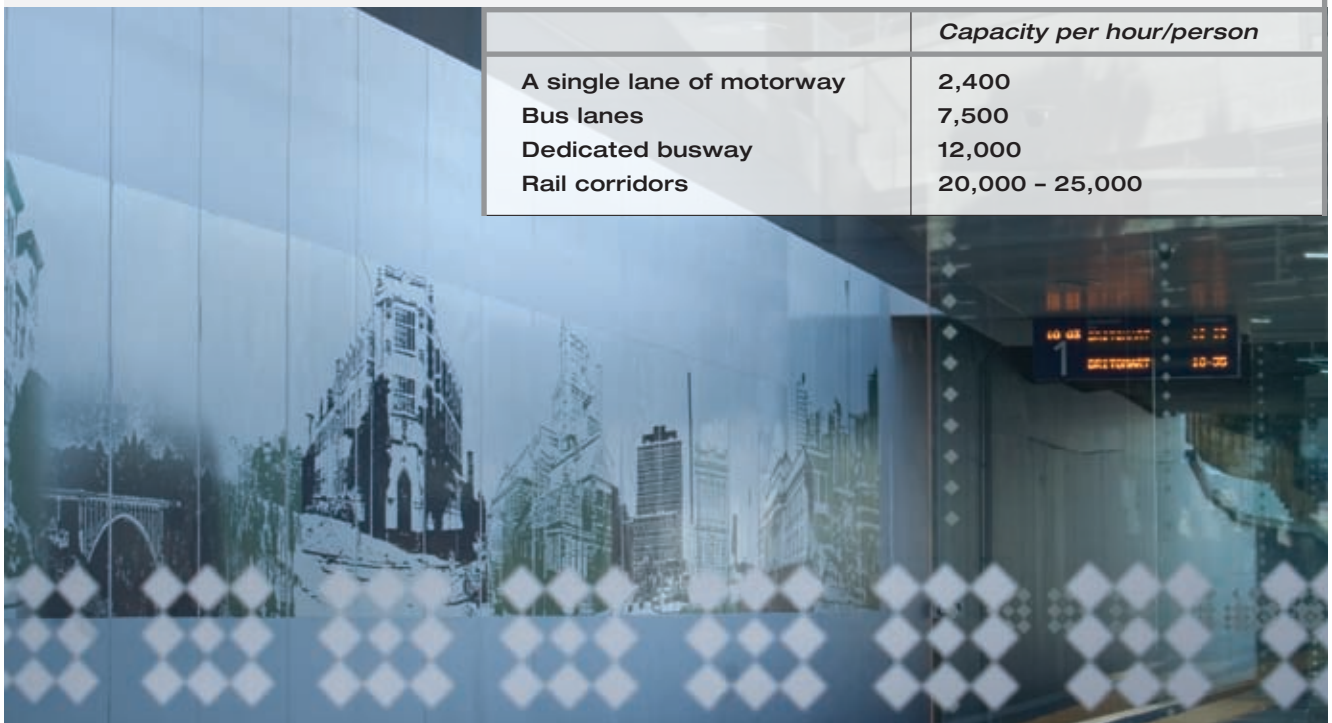
Annual decongestion benefit of each additional user of the RTN, QTN, and LCN networks



Benefits and net cost of 10 minutes electric compared to the status quo



	Capacity per hour/person
A single lane of motorway	2,400
Bus lanes	7,500
Dedicated busway	12,000
Rail corridors	20,000 – 25,000



Growing supply and demand

Comparing progress

The Auckland Passenger Transport Network Plan 2006–2016 predicted more progress in 10 years than in the past 50 years The table below summarises progress from 1954 to 2004, against achievements of the past six years.

	Transport in Auckland 1954 – 2004 (50 years)
1955	Master Transportation Plan concludes: "motorways should be constructed in priority to the underground (CBD) railway project".
1959	Auckland Harbour Bridge opened
1960	Car ownership had reduced public transport patronage by 42%
1966	First section of Western Line double tracked
1993	19 second-hand diesel trains purchased
1996	Link bus service introduced in CBD
1998	First dedicated bus lanes in Sandringham and New North roads
2000	Suburban rail to Pukekohe was first extension of coverage in more than 70 years
2001	New Zealand cities had one of the lowest rates of public transport use in the world
2002	Government and ARC buy back Auckland rail assets from private operator Tranz Rail, which had underinvested since taking ownership in 1993
2003	Britomart Station opens, first refurbished trains in service
2004	North-western cycleway opened
2005	Use of public transport increased 15% between 2001-2005

	Progress on transport 2005 – 2010 (5 years)
2005	Northern Express bus services launched and North Shore bus services redesigned
2006	ARTA launches first comprehensive plans for Auckland's public transport network
2006	Central Motorway Junction completed
2007	First integrated Auckland Transport Plan launched
2007	Planning for electrification gets under way
2008	Northern Busway opens and Northern Express service takes 5,100 cars off morning peak-time roads
2008	Real time passenger info (VPIDs) installed at all high-priority bus stops, and more bus lanes
2008	40% tertiary discount fares and SuperGold Card for free senior travel introduced
2008	Free public transport integrated into sports events and concert tickets
2009	Contract for integrated ticketing system signed
2009	Central Connector completed
2009	SH20 extension through Mt Roskill completed
2009	Downtown Ferry Terminal improvements completed and substantial rebuilding of piers 1-4 started
2010	New rail stations at Newmarket, New Lynn and Grafton completed, and Onehunga Branch Line reopens
2010	New rail link to Manukau City Centre well under way (complete mid 2011) and Western Line fully double tracked
2010	20 existing rail stations upgraded and 10 new stations built since 2003. VPIDs at three rail stations
2010	CBD Rail Loop preferred route chosen and protected
2010	Extra Manukau Harbour Crossing completed
2010	TravelWise programme is taking 9,619 car trips off the road each morning peak
2010	60.6m trips taken on public transport. Use of public transport increased 13.9% from March 2005 to March 2010

Record numbers of Aucklanders are getting on board public transport. Patronage is higher than in any year since 1984 and rail usage has risen by 97% over the past five years. In 2010, with completion of some major rail infrastructure projects, customer satisfaction with public transport has risen to 87%.

Traffic congestion is costing the economy an estimated $1 billion a year. Revitalising Auckland's rail assets to provide high-quality, high-frequency services has been the only way to achieve the objective of freeing up motorways and intensifying urban development.

Priority projects

These projects were identified in the 10-year Auckland Passenger Transport Network Plan 2006-2016 as the major components. The table below gives the background work undertaken to achieve the results listed in the comparison table on page 10.

Project	Work undertaken
Rail	
Electrifying the rail network	Detailed planning began in 2005 with an in-depth electric traction technical evaluation study and cost/benefit analysis of electric vs diesel trains. Further planning, and funding go-ahead in 2007, led to a call for EOIs. Funding shifted to KiwiRail in March 2009 (following cancellation of regional fuel tax). In November 2009, $500m was approved for electrical multiple units. In January 2010, a contract was signed for the infrastructure required. A supplier for the electric trains is expected to be contracted early 2011. See the case study on page 34 for details.
Complete double tracking the Western Line	2004/05 Swanson to Waitakere 2005 Boston Rd to Morningside 2007 New Lynn to Henderson 2008 Henderson to Swanson 2010 last sections completed from Britomart through Newmarket Viaduct to Boston Road, and Morningside to New Lynn.
New rail station for Newmarket	New Remuera Link Road bridge constructed to access Remuera Road station entrance. Station concourse with floating roof canopy built above four platforms. Opened January 2010.
New rail station for New Lynn	Integrated into double tracking from Avondale to Titirangi Road and with a bus transport interchange. Trench work complete, station opened in September 2010.
New rail connection to Manukau City Centre	2km of new rail line is being constructed linking Manukau City Centre with the Southern Line at Puhinui. New rail station and platforms, plus bus transport interchange are being constructed, to open mid-2011.
Reopening Onehunga Branch Line	Work on three new stations began August 2009 — at Onehunga Town, Penrose and Te Papapa. Opened in September 2010.
Upgraded train stations	Upgrading work began in 2005 to accommodate longer trains and greater passenger numbers, improve security and information, and to meet disability access standards. All existing stations are expected to be upgraded by 2013.
New rolling stock (trains)	There are now 135 trains in services, as opposed to 46 in 2003/04. These trains were integral to delivering 10-minute frequencies on the three branch lines.
Buses	
Completing the Northern Busway and expanding the service to Orewa	Albany and Constellation stations and Park-and-Ride facilities were commissioned in November 2005 and three further stations the following year. The 8.4km Northern Busway opened in February 2008, allowing buses to travel at high frequencies both north and south unaffected by traffic congestion. See case study on page 37 for more details. Plans to extend the busway through Silverdale and on to Orewa are under way.

Project cont...	*Work undertaken cont...*
Completing the Central Connector	Work began in 2008 on the 4km bus priority project connecting Britomart with Newmarket. Includes 24-hour bus lanes, new bus stops and shelters, improved traffic signals, safety, walking and cycling amenities.
Improved feeder services to the RTN	In 2005, there was a 28% increase in overall bus services across the North Shore. Albany and Constellation feeder bus services grew by 41% to June 2008.
	In 2007, routes in the Panmure to Botany corridor and in Manurewa were changed to coincide with the opening of the rail/bus transport interchanges, resulting in 19% growth.
New QTN services between key destinations including Botany, Manukau and Auckland Airport	In 2007, more frequent peak-time services were added between Botany and downtown Auckland, growing patronage by 30% in one year.
	In June 2008, the Airbus Express to the Airport was relaunched with an increased frequency and more direct route. A new service from Manukau to the Airport was also launched, together increasing patronage by 13.5% to June 2009.
New bus services to growth areas	New bus services to Sylvia Park led to patronage increase of 31%. New services for Flatbush and Mission Heights were designed in 2008.
New cross-town QTN bus services serving major movements, e.g. Auckland isthmus to Tamaki fringe	Botany, Manukau and Howick services were redesigned and introduced in February 2009. Simplified routes within these areas and to the CBD resulted in a 65% increase to March 2010 for just 1.4% higher subsidy.
Ferries	
Upgrade terminals at Bayswater, Beach Haven and Half Moon Bay	Bayswater and Beachhaven upgrades planned 2007 but deferred.
	Half Moon Bay upgraded 2008. Birkenhead upgraded 2010.
Investigate new ferry terminals at Browns Bay, Takapuna, Te Atatu, Hobsonville and Island Bay and introduce services	The success of the Northern Busway, fare increases and parking charges at ferry terminals are impacting on efforts to increase ferry patronage. ARTA's focus is on building a new terminal at Hobsonville, a high population growth area. Detailed design work has begun, with construction to be complete by July 2011.
Improve services at new and upgraded terminals	More frequent services from Pine Harbour and West Harbour have been enabled by subsidies to operators to purchase new vessels. In 2009, patronage on these services increased by 20% and 24% respectively.
Transport system improvements	
Continue to implement real time information	In 2009, 146 variable passenger information displays (VPIDs) were installed at high-use bus stops. 173 solar powered information displays were installed at lower-use bus stops.
	In 2010, VPIDs were installed at three major rail stations and three ferry terminals. New Lynn and Manukau interchanges will incorporate VPIDs, and 20 other upgraded stations will get VPIDs in advance of the RWC 2011.
Single integrated ticket system	A contract to develop and implement a smartcard integrated ticket system was signed in November 2009.
A simpler, integrated fare structure	A fully contracted system of bus services was introduced in 2008 through legislative changes advocated by ARTA. A new fares policy to form the basis for integrated ticketing was developed in 2006 to create uniformity across all operators and clarity for customers.

Rebuilding the rail network

In 2005, the Government allocated $600 million to rebuild Auckland's rail assets. Project DART (Developing Auckland's Rail Transport) as it became known was assigned to KiwiRail, with responsibility for all the below ground works. This included double tracking the Western Line, Newmarket redevelopment and the Manukau Rail Link. All the above ground upgrades to rail stations and rolling stock were to be funded and managed by ARTA, paid for by regional rates and from the Land Transport New Zealand (later NZ Transport Agency) budget.

Upgrading and building new rail stations

30 out of the 40 rail stations on the four branch lines in the region are either new or have been upgraded in the past six years. The remaining 10 are planned for upgrade by 2013 and a new branch line to Manukau City Centre is due to open in 2011. The stations accommodate longer trains and greater passenger numbers, improve security and information, and meet modern disability access standards. They all have modern shelters and seating, CCTV security monitoring, emergency help points, improved lighting, safety markings including yellow tactile strips strategically placed on platform for the visually impaired, public address systems, information display boards showing timetable information and way-finding signage/maps. A programme is under way for real time information displays to be installed at stations.

Upgraded stations, in the same location:

2004: Glen Innes
2005: Papatoetoe, Ranui
2006: Henderson, Homai, Meadowbank, Orakei, Puhinui
2007: Glen Eden, Fruitvale, Manurewa, Middlemore, Sunnyvale
2008: Ellerslie, Mt Eden, Papakura, Ranui (stage 2), Sturges Road, Swanson
2009: Morningside
2010: Kingsland.

New stations, including new location:

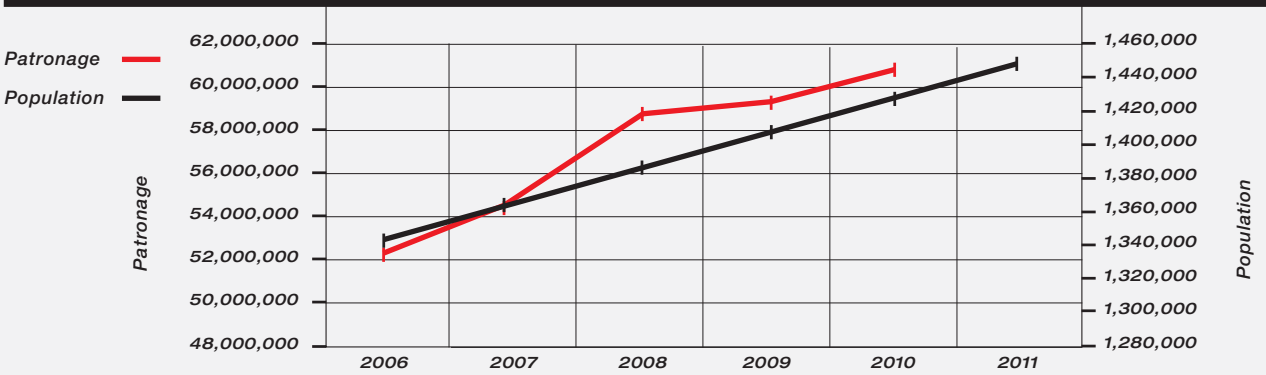
2003: Britomart
2007: Panmure, Sylvia Park
2010: Avondale, Grafton, New Lynn, Newmarket, Onehunga, Penrose, Te Papapa
2011: Manukau.

Stations yet to be upgraded, renewed or built:

Baldwin Ave, Mt Albert, Remuera, Greenlane, Penrose Main Line, Westfield, Otahuhu, Te Mahia, Takinini, Pukekohe, Waitakere and Strand Emergency Station. There is also potential for two new stations at Parnell and Drury.

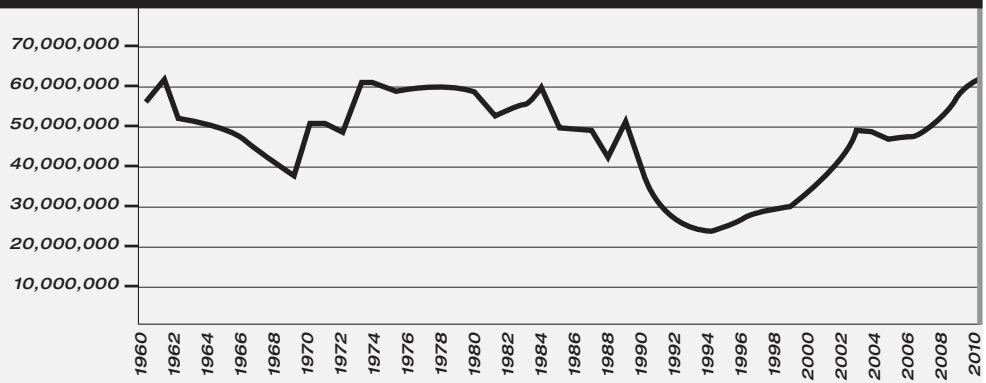
With major infrastructure works completed this year and the reopening of the Onehunga Branch Line, 400 extra train trips are now running Auckland-wide each week, which is a 25% increase in services.

Auckland patronage growth versus population growth



In 30 years' time, Auckland's population is predicted to reach two million. A world-class transport system will need to carry at least 200 million public transport trips a year if we are to improve journey times across the region. ARTA's strategic goal has been to double the number of public transport journeys by 2016, in order to keep pace with population growth. The graph above shows that the consistent increase in patronage levels since 2006 is tracking with our expanding population.

Patronage on Auckland's public transport 1960 - 2010



Increase in rail services

	June 2007	June 2008	June 2009	June 2010	September 2010
Services (per week)	1,301	1,382	1,475	1,529	1,951
% Increase from previous year	9.1%	6.2%	6.7%	3.7%	25%

2005: *Double tracking the Western Line (Project DART)*

Auckland has had four rail lines, built between 1873 and 1930. By 1939, both the Eastern and Southern rail lines were fully double tracked. The first section of the Western Line to be double tracked was Morningside to Avondale in 1966. No further progress was made until 2005, when ONTRACK (later KiwiRail) began works for stage one of what was then known as Project Boston and is now Project DART. The section of track from Boston Road to Morningside was completed in 2005 and integrated with construction that same year of a new station at Kingsland. Double tracking of the entire line from Britomart through to Waitakere was completed mid-2010.

Double tracking work and extra carriages allowed the services in peak times to run every 15 minutes from July 2008, which contributed over half of the 12.6% patronage growth on trains in the following year. Peak time services on the Western Line now run every ten minutes.

Partners: ***KiwiRail, ARTA***

A crew of more than 600 worked around the clock over Christmas 2008/9 on rail infrastructure projects. They laid 7km of new track and excavated over 50,000m^3 of dirt in less than a week.

Increasing rolling stock and refurbishing trains

Over half of Auckland's train fleet was more than 25 years old at the time ARTA launched the first Rail Development Plan for Auckland in 2006. The oldest had been in service nearly 40 years. The plan was to have 28 new trains in service by 2009 and 35 trains in service by 2011, in order to deliver 10-minute frequency of services. Peak period trains would have four to six carriages. That level of expansion has been exceeded with a total additional 89 trains in service across all classes.

The first high-frequency bus corridors

In June 2010, the first QTN high-frequency bus corridors started operating along Mt Eden Road and Dominion Road. The b.line buses run every one to 15 minutes from 7am to 7pm on weekdays. Like the Northern Express on the RTN, the service is designed to be 'turn-up-and-go'. No timetables needed. As part of the process of developing b.line, ARTA asked its online consumer panel to rate the service's potential to move Auckland forward. Along with integrated ticketing, b.line scored highly on a range of factors, including being world-class, vibrant, simple and easy and meeting customers' needs.

Downtown Ferry Terminal repairs

The Downtown Ferry Terminal is the hub of Auckland region's passenger ferry services. The terminal was built on top of wharves that are over 100 years old. The undersides of these historic piers have become corroded by a combination of environmental toxins such as chlorides and sewage leaks, structural overloads and through design and construction flaws. The piers required substantial repairs to their structural fabric. ARTA took over responsibility for the Downtown Ferry Terminal infrastructure in October 2007, when it absorbed ARTNL, and funded substantial partial rebuilds. Work on piers 1 and 2 was completed in mid 2010. Investigation and design is complete for piers 3 and 4 but the physical works programme is yet to be confirmed.

Several improvements to passenger facilities at the Downtown Ferry Terminal were also completed in 2008, including a glass wall enclosure and ports operations office on pier 1, a canopy on pier 2 and construction of a link bridge between the two piers.

Encouraging more sustainable travel

A key conclusion of the RLTS, and of transport studies and strategies worldwide, is that building roads cannot, on its own, reduce traffic congestion or provide a transport system that meets wider environmental and social goals. Public transport, walking and cycling have vital roles to play in the shift towards lowering the cost of transport on the environment and human health.

In 2006, ARTA launched the Sustainable Transport Plan, which defined sustainable transport as working with people and their communities to improve travel opportunities and to encourage people to make fewer car journeys. ARTA took the lead role in ensuring the plan remained on track and had three mains tools for influencing this: land use planning, funding and activities it delivered directly.

Achievements in three main elements of the plan are reported on in this section:

- TravelWise programme in schools, workplaces and tertiary institutes
- Accessible public transport
- Walking and cycling action plans.

TravelWise programme

The TravelWise programme was launched in 2005 with the goal of achieving voluntary reductions in car travel to Auckland schools, workplaces and tertiary institutes of 20,000 trips each morning by 2016. For context, 20,000 is the maximum number of trips that could cross the Auckland Harbour Bridge — eight lanes of motorway — in an hour.

ARTA has employed teams of plan advisers and the TravelWise partnership is on track to achieving the above RLTS goal. It is making an important contribution to the Government's objectives for road safety and the reduction of traffic congestion in major urban areas.

Overall, results of TravelWise include:

- Taking 9,619 car trips off the road each morning peak
- Halving child pedestrian injury crashes around TravelWise schools
- Reducing car travel by 135,000 km, giving a congestion benefit of $20.35 million each year
- Long-term safety benefits of infrastructure installed to date of $132 million
- An established reputation with schools, and a growing reputation with NZ's top companies and major institutions.

The 2010 TravelWise Week was the most successful ever, with 133 schools registered across Auckland and 54,000 students participating.

There are now over 300 Walking School Buses operating at 130 schools throughout Auckland (up from 159 in 2005).

A travel plan for the two CBD university campuses has achieved a reduction of 1,626 car trips to the CBD universities each peak morning.

Partners: ***TravelWise has been managed in partnership by ARTA, the councils of Auckland City, Franklin District, Manukau City, North Shore City, Papakura District, Rodney District and Waitakere City, and the NZ Transport Agency.***

Cost/benefit ratio: ***9.5, making this one of the most cost-effective transport programmes in New Zealand.***

"I believe we are reaching a tipping point with public transport use, through a shift in some key drivers. Aucklanders are now genuinely motivated by its environmental benefits; 25% of the crowds at special events travel by public transport and more dense inner city living has made it acceptable not to own a car. There's been a slow groundswell, with use of public transport becoming normalised for high earners as well as those on tighter budgets."

Shelley Watson, ARTA general manager, Marketing and Communications

There are 34 organisations in Auckland that have a workplace travel plan. A 2008 review found that there were 355 fewer car trips to work each day at the five workplaces with the most advanced travel plans.

Workplace travel plans

Vodafone NZ and Auckland Airport are two examples of the success of workplace travel plans in promoting more sustainable travel. Vodafone NZ was one of the first organisations to begin a plan, early in 2004. Needing to relocate their 1,100 staff, they worked closely with ARTA on an i-commute programme to promote the use of public transport, walking and cycling. While the company has benefited from a reduced need for car parking, the major benefits to the wider community by 2006 were:

- Reduced congestion, saving other road users $64,000
- Fewer road crashes, valued at $21,000 per year
- Environmental and health benefits, valued at $45,000.

In 2006, Auckland Airport developed its Lift programme with input from ARTA. Promoting car pooling and use of public transport to over 12,000 staff, the programme now has 23 companies in the airport vicinity as members. In just two years it had taken 840 cars off the road each month, reducing CO_2 emissions by at least 68 tonnes per year.

Results: ***Ten workplaces have now completed and evaluated travel plans, and collectively have achieved a reduction of 788 car trips to work each morning peak. This reduction in car trips corresponds to 4.5 million fewer kilometres travelled, and a CO_2 reduction of 1,469 tonnes.***

Progress on accessible public transport

Both national and regional transport strategies require local authorities to consider the needs of transport disadvantaged people and to provide services to meet those needs. ARTA has been proactively working to improve accessibility for communities and groups whose needs are not met by the regular public transport system. These groups are primarily children, senior citizens and disabled people.

ARTA has established a Transport Disability Advisory Group (TDAG) that provides guidance, advice and clear direction to ARTA, councils and key stakeholders with the aim of increasing access to transport services for disabled people. We work closely with bus, train and ferry operators and with KiwiRail and local councils to achieve improvements to existing and new infrastructure, services, information about services and staff training. We also administer the Total Mobility (TM) scheme for taxi and hoist vehicle transport. The Auckland Regional Public Transport Plan 2010 contains new policies and actions for transport disadvantaged Aucklanders that build on the progress to date, and a number of improvements to the Total Mobility scheme are due to be implemented in October this year.

The old Grafton Bridge (right) has become a key element of the Central Connector route that links to the new Grafton Station.

Disability access

By the end of June 2010:

- 27 of the 38 operational rail stations were fully accessible, including 10 stations with ifts All stations will meet modern design criteria for accessibility by the time the upgrade programme is completed in 2013
- All trains were accessible via a portable ramp
- 60% of Auckland's urban bus fleet was wheelchair accessible and a further 12% had 'SuperLow Floor' (single step access) without wheelchair ramps. The remaining 28% had multiple step access but operation of these buses was mainly confined to peak periods
- ARTA's "Vessel Standards for Ferries" had been issued for initial consultation by the industry and the TDAG. The intention of the new standards is to provide more consistent accessibility as new and refurbished vessels are introduced into service.

9,500 people are registered with Total Mobility in the Auckland region, up from 8,000 in 2005.

Total Mobility

ARTA has implemented two phases of recommendations for national improvements to the Total Mobility Scheme. TM working group member Mary Schnackenberg says the biggest reason behind increases in registration for the scheme in Auckland is ARTA's commitment to these improvements. "ARTA's placed considerable energy into training assessors and raising awareness of the scheme. They've led the country in signing on to the Phase 2 improvements."

From October 2010:

- More disabled people will be able to get concessionary fares on public transport as the Total Mobility ID card will be accepted as valid ID on selected services
- The TM maximum fare subsidy per trip will increase to reflect increasing costs of taxis and hoist vehicles fares
- Auckland's and Wellington's TM ID cards will be interoperable so clients can use their card to claim discounted fares when travelling in the other region, instead of using 'out of town' TM vouchers.

Cycling and walking action plans

ARTA has convened the Regional Cycling and Walking Group, along with developing and monitoring walking and cycling action plans. Walking is an essential link between transport networks and destinations and accounted for 13% of all journeys in our region in 2006, yet Auckland has a reputation as one of the worst cities in the world for walking. Goals of the Sustainability Plan 2006 were for the Auckland region to be walk-friendly, and in particular for the walkability of 18 town centres to be improved. There are no specific means for measuring walking but all new town centre plans, such as Botany's, take pedestrian needs into account, and the move towards more dense urban living is also supporting walking. The RLTS set a goal for 2016 of 15% of morning peak trips made by walking or cycling, particularly to schools and town centres. This goal is being measured through the TravelWise goal of 20,000 fewer car trips being taken each peak morning.

Only 1% of all morning peak trips were being made by cycling in 2006. The key is providing space to cycle and minimising conflicts between cyclists and other road users. Hence, the Regional Cycle Network was created in 2007. Cycle parking also needed improving, along with the ability to take cycles on trains and ferries.

Main goals of the Cycling Action Plan were:	**Achieved**
Half of the 938km Regional Cycle Network completed by 2016 (cost $100m)	**32.6% or 306.2km scheduled for completion by 2012**
Develop and distribute cycle maps	**5 regional cycle maps produced showing dedicated cycleways 47,000 maps distributed. Google cycle maps available on MAXX website**
Contribute to the marketing and promotion of cycling	**BikeWise Week extended to one month in 2009**

Result: ***The RLTS target for 2016 was to increase cycling by 1%. There was no overall change from 2006-2009 but significant increases at sites where cycle routes are continuous and connected. In 2010, there has been an annual increase in cycling of 27%, with the North Western Cycleway rising by 70%.***

Increasing customer satisfaction and loyalty to public transport

ARTA's customer focus has built like a wave over the past six years, working hand-in-hand with delivery of major projects and development of services. In the first years, while comprehensive plans were being made, marketing had a twin focus — the need to better understand our customer base and the desire for customers to better understand their travel choices.

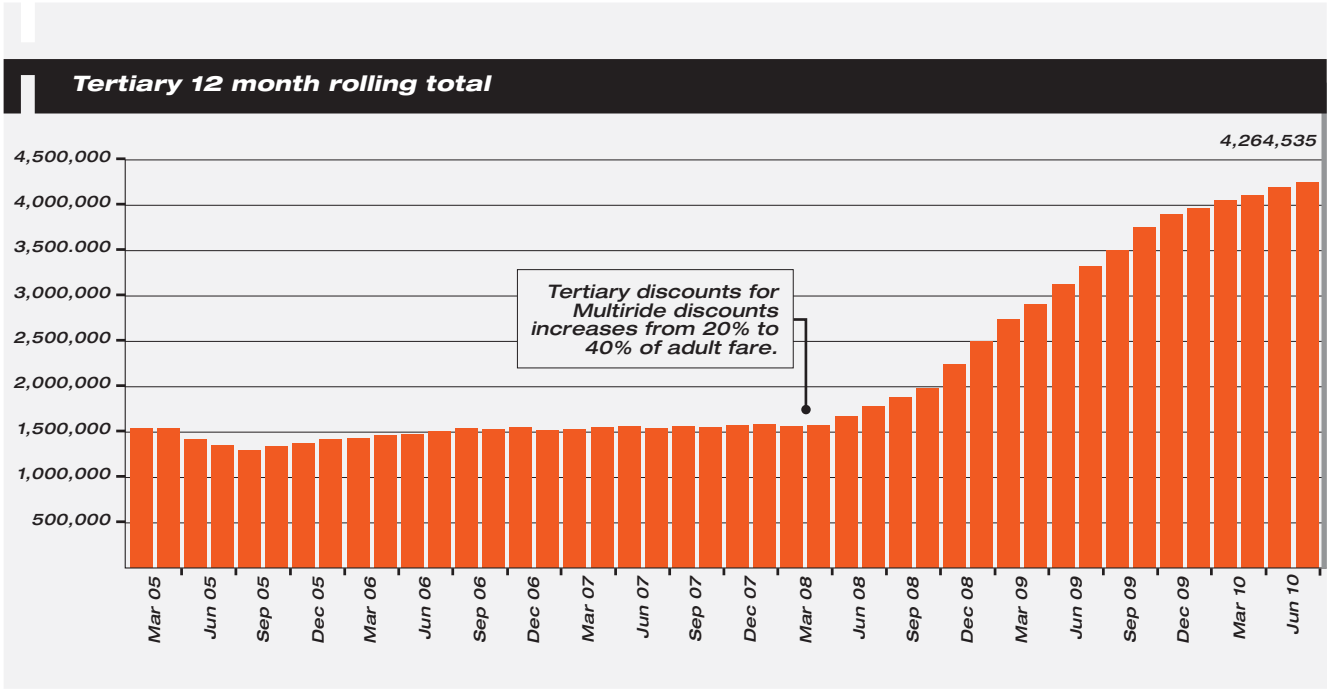
In 2006, ARTA printed and distributed over 1.5 million timetable brochures and regional guides, along with increasing information on the ground at Britomart, bus stops, train stations and ferry terminals. Permanent information units were installed at 10 locations. The Contact Centre, run by the ARC, and the MAXX Journey Planner website were also central to creating a perception shift that public transport could be easy to use, safe and reliable.

These three qualities were discovered to be high on the list of barriers to use of public transport. In 2006 and again in 2009, ARTA carried out segmentation studies of the public transport customer base, firstly to identify particular barriers and opportunities for each segment of the population and then to assess the shift in perception over three years. Six target customer segments were identified in 2009. There are opportunities to retain and grow patronage by tertiary students, retirees, 'empty nesters' (50-69 age) and public transport lovers (30-59 environmentally aware). New customers could be attained from 'flat out families' who need to transport kids and 'anxious parents' with additional concerns about safety on public transport.

Key managers from both Veolia and ARTA headed out to train stations in October 2008 and April 2009 to hear exactly what mattered most to customers. 'Meet the Managers' was designed to give rail customers the experience of giving feedback directly to decision-makers who had authority to act on complaints and suggestions. Customer feedback resulted in a number of improvements, such as customer service ambassadors available at Britomart and key interchange locations during times of service disruption and special events; new Star Mart ticket agencies in the central city; and improved safety signage for all trains.

Tertiary fare concessions

The Universities' Travel Plan was introduced in 2007. At the start of the 2008 academic year, ARTA began an ongoing campaign, particularly via social media, to raise students' awareness about their travel choices and launched it by introducing a 40% discount off the one-way single adult fare, doubling the discount students had previously received.



The campaign was an instant success.

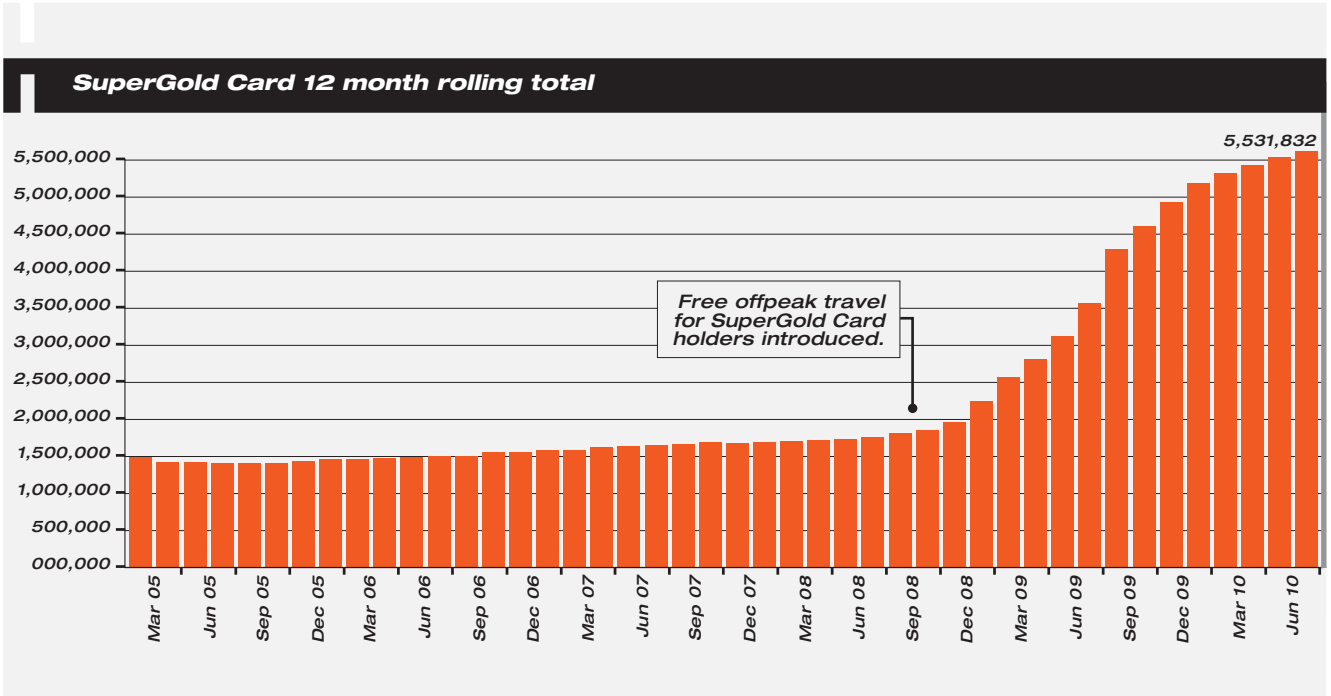
Results: ***Tertiary student patronage of buses, trains and ferries was flat at around 1.5 million from March 2005 to March 2008. Since then the 40% discount has boosted tertiary patronage to June 2010 by 186%, with an additional 2.78 million trips on public transport being taken by students in the 12 months to June 2010.***

SuperGold Card success

From 1 October 2008 Senior Citizen card holders became entitled to free public transport on all buses, trains and ferries after 9am on weekdays and all day on weekends and public holidays. Getting senior citizens out of their cars and onto public transport during commercial hours helps free up our roads for business activity, and makes good use of off-peak public transport services. Equally, it gives those who can no longer drive greater access to their local communities, reducing social isolation.

While central government funded the off-peak SuperGold Card initiative through the Ministry of Social Development, ARTA and the ARC worked with the NZTA to get an even better deal exclusively for Auckland's senior citizens, to include free travel during afternoon peak services.

Results: ***SuperGold Card trips on public transport have risen from 1.7 million in the 12 months to September 2008 to 5.5 million for the 12 months to June 2010. This is an increase of 277%.***



Newmarket Station, nestled amidst apartment living and a vibrant retail area, is a great example of transport working hand in hand with more intensified land use.

Planning and funding – a coordinated regional approach

Until ARTA's inception, the planning and funding of transport activities in the region was devolved to the ARC and each of the seven territorial authorities. This piecemeal approach and the lack of an objective framework for prioritising projects with a regional impact were seen as delaying action on the urgent need to address Auckland's increasing traffic congestion and its associated challenges. ARTA was tasked with planning and prioritising funding for high-priority projects on a regional basis.

A central focus in the initial 18 months was to:

- Develop a set of prioritisation principles and assessment criteria for allocating scarce funding – the right projects at the right time
- Prepare a set of plans for the region's transport system, based on these principles and on wide consultation with stakeholders.

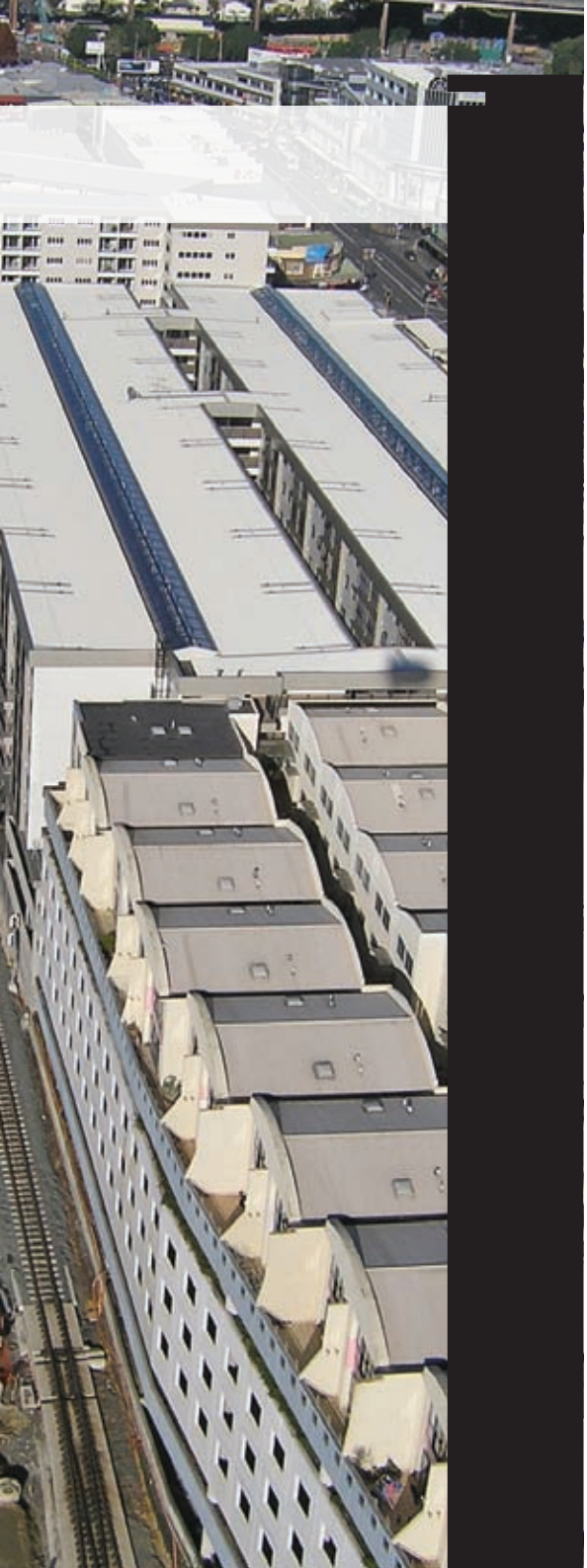
While the PTNP published in April 2006 was required by the RLTS, other plans such as Auckland Transport Plan, the Sustainable Transport Plan and the Rail Development Plan were innovative and represented a first for Auckland as comprehensive planning documents to move Auckland forward in an integrated and sustainable way.

Aspects of the PTNP research are discussed on pages 5 to 7 and the table on page 13-14 shows the priority projects within the 2006-2016 planning period, along with substantial progress to 2010. The Sustainable Transport Plan has been discussed in the section on encouraging more sustainable travel on pages 18 to 23. The other plans are discussed below.

The first Rail Development Plan

Revitalising Auckland's rail assets was pivotal to the PTNP. Long neglected, the rail system had huge strategic importance for its potential to address traffic congestion and its revitalisation represented the possibility of a real step change in the shift towards increased patronage of public transport. The opening of Britomart, and a modest investment in upgraded trains, tracks and stations, had doubled patronage on the trains in three years, from 2.5 million in 2003 to 5 million in June 2006.

At the same time, the underlying tensions in Auckland's complex local body structures were nowhere more apparent than in the development of the region's rail assets. The Government and the ARC bought the rail assets back from TranzRail and granted access rights to a private operator Connex (now Veolia) to run services, while the territorial authorities set up the Auckland Regional Transport Network Ltd (ARTNL)



to own and maintain the stations. This was the situation ARTA stepped into in 2004. Launching the Rail Development Plan in August 2006 was a step in the direction of changing both Auckland's transport development and the shape of the region's urban development. The plan presented a strong business case for electrifying the network.

Implementing the plan required buy-in at both regional and national levels, particularly as it incorporated a business case for electrifying Auckland's rail network (see page 34 for more). The number of stakeholders involved has meant persistence and dedicated effort being required to give effect to an extensive programme of work — from rolling stock, signalling, train carriage refurbishment, station upgrades, new stations and electrification of the network. The significant results of that work are detailed on pages 15 to 18.

ARTNL's assets were transferred to ARTA in October 2007, by an Order In Council.

The innovative Auckland Transport Plan 2007/2009

The 2007 Auckland Transport Plan (ATP) became a landmark for forward planning in Auckland transport. As the region's 10-year planning document, applied within a longer-term context, it set out — for the first time — one cohesive programme of work. It unified the strategies, plans and projects of every stakeholder agency and all the modes of travel, harnessing the role that transport can play in delivering a broad set of economic, social and environmental outcomes for the region.

The ATP has encouraged cooperative action between all the agencies involved and priorisiting of funding. It is the main mechanism for transforming the policies and strategies in the RLTS into action. The ATP 2009 replaced this flagship document and requires funding in excess of $22 billion to achieve both the 10-year and key long-term projects such as the CBD Rail Loop and rail to the airport. It aims to raise awareness of the major funding challenges faced by the region.

Prioritising funding and projects

Auckland has had to make trade-offs, given that funding for transport has consistently fallen short of and delayed projects required to meet both national and regional targets. In order to ensure that best use was made of scarce funds, ARTA was legally required to make a statement about its view of the land transport priorities in the region, including the priorities of other organisations. We have then recommended which projects should receive a subsidy from the National Land Transport Programme.

To ensure that view was objective and backed by sound reasoning, ARTA developed a set of prioritisation principles that took account of other regional planning document objectives and goals as well as its own, and NZTA and Ministry of Transport objectives for the land transport network.

Three main assessment criteria were derived from the principles:

- Seriousness and urgency of the issues being addressed
- Effectiveness of the proposed solution
- Efficiency.

Components of the PTNP 2006-2016 were rated as high, medium or low against each of the three criteria. The top priority was clear: making progress in developing the RTN, followed by the QTN.

Funding would also be prioritised by taking into account:

- Investments already committed to, such as double tracking the Western Line
- Geographic priorities, namely those areas poorly served by public transport
- Projects that contributed to the preferred long-term development of the network.

The ATP has informed ARTA's Regional Land Transport Programme of activities. Released in June 2009, the latest programme prioritises over 950 projects worth $4.36 billion over the next three years, compared to only around 300 projects in previous three-year programmes.

An inherited model for bus and ferry operation that had proved unsuccessful in other international cities

Cities across the world outsource the operations of bus services to reduce subsidies and improve quality. Bus and ferry services have always been privately operated in Auckland, some services with government subsidies and others on a fully commercial basis. Restraints imposed by the Commerce Commission have prevented any one company from fully monopolising the Auckland bus or ferry market but deregulation had similar effects to those in the UK — a dramatic rise in public subsidies following a host of commercial service deregistrations, and stagnant bus and ferry patronage.

The Transport Services Licensing Act 1989 had created a service delivery framework that had not kept pace with growth. The procurement system allowed private operators to establish commercial services that did not have to meet quality, performance or customer standards. They could walk away from those services at short notice. New legislation was needed to reverse this trend. ARTA proposed a fully contracted system, specifying how transport services were to be delivered, to the Ministry of Transport's Public Transport Procurement Legislation Review in 2006.

The resulting Public Transport Management Act 2008, has three purposes:

- To prevent commercial services from being registered strategically at break even or loss levels
- To introduce a model of full contracting with incentives
- To facilitate the introduction of an integrated fare system.

The Act allows ARTA to integrate all the routes, timetables and fares. All the revenue from contracted services comes to ARTA and each operator is paid a fixed rate, along with an incentive payment for each additional passenger they generate. This model rewards operators for innovation but insulates them from risk. It gives ARTA accurate information about revenues, on which to allocate subsidies. Longer contracts and larger clusters of contracts increase the interest of potential bidders. The Act also acknowledges that ARTA is better placed to leverage patronage growth than private operators because most of the levers, such as fuel pricing and tertiary education policies, are not within operators' controls. Operators still work with ARTA to define the most efficient routes and streamline their operations but ARTA has been able to enforce universal reliability standards.

The Integrated Transport Assessment Guidelines

Another significant change introduced by the LG(A)AA 2004, was related to integrated land use. Land use and urban design in Auckland has been influenced by cars since the 1950s when car travel started to dominate and Auckland began to sprawl. Our inherited housing density, street layout and mix of activities continued to influence travel choices, leading to a public perception of walking and cycling as unattractive options. By 2001, the average travel pattern across Auckland was for most trips, even very short ones, to be made by car.

The Act required the ARC and the seven territorial authorities to prepare and publicly notify amendments to their district plans to specifically provide for integrated land use and transport. It gave ARTA an influencing role in ensuring land use decisions support a more integrated and sustainable transport system. ARTA led a process to develop Integrated Transport Assessment Guidelines as a framework for gathering and assessing all the appropriate transport information required to assist developers, councils and the NZTA in better aligning land use and transport in Auckland. Developed in consultation with the ARC and stakeholders and published in 2006, the assessment tools were already in use internationally but ARTA reshaped these tools for the Auckland context.

Results: ***The guidelines were adopted by all seven territorial authorities. "ARTA's Integrated Transport Assessment Guidelines are an example of a framework that can be applied at a local/regional level." Quality Planning, The RMA Planning Resource website.***

Special events planning

ARTA has created two full-time positions to lead planning of special events. Given the specialised nature of the positions and their novelty in New Zealand, both positions were recruited internationally.

Rugby World Cup

A team of planners is being led by super event expert, Bruce Barnard. Bruce came fresh from similar jobs in Melbourne during both the 2006 Commonwealth Games and the 2007 World Swimming Championships. The team's task has been to develop and deliver the detailed transport and traffic plan for the region during RWC 2011. With up to 70,000 international visitors coming to Auckland for the Rugby World Cup in 2011, and four billion television viewers, this event is the city's greatest opportunity to shine. $5 million is being spent on Kingsland Station to widen and lengthen both platforms, and improve access to the northern platform by building a pedestrian underpass and extra stairs over the railway tracks.

Eden Park transport arrangements:

When the ref's final whistle blows at the Rugby World Cup, 60,000 fans will be on the move. ARTA's goal is to get at least 75% of ticket-holders to the nine matches at Eden Park by means other than private cars, freeing up our roads for other economic activity.

- **Trains:** Kingsland-Britomart nine trains clearing 15,000 people in 70 minutes; two trains clearing 1400 people to the western suburbs
- **Buses:** 7,400 customers moved by special event bus services to and from Eden Park
- **Coaches:** 15,000 customers moved by coach
- **Taxi:** 3,000 people
- **Walking:** 3,000 people

Special events

Since 2008, a range of tickets for events at North Shore Stadium, Eden Park, Mt Smart and Vector Arena have been integrated with 'free' public transport services provided specifically for the event, and have proved a great incentive in getting more people out of their cars. ARTA's special events planner is an integral member of a wider decision-making team environment for regional events — from other event planners to councils, traffic management teams and the Police — which has also helped to broaden the understanding regionally of the range of ARTA's specialised activities.

Result: ***In 2007, only 2% of fans used public transport, taxis or walked. In the winter of 2008, 36% left their cars at home for the Bledisloe Cup match. In March 2010, 15% of fans at the Blues Super 14 used public transport.***

2006: *Northern Express service*

The Northern Express began service in November 2005. Linking the new Constellation and Albany stations on the North Shore with the CBD, the Northern Express had a massive 200% growth in patronage in its first five months and a survey showed that 39% of customers had previously driven into the city. By the end of its first year in service, the express bus, with its 7,000 daily customers, had taken 5,100 cars off New Zealand's busiest stretch of road each morning peak and made a significant contribution to the region's environmental, economic and social goals:

- Reduced petrol and diesel use by 408,000 litres
- Reduced greenhouse gas emissions by 1,000 tonnes of CO_2, toxic carbon monoxide by 13.6 tonnes and fine particulates by 140kg
- Reduced car travel by 3.9 million kms, generating time savings to other drivers valued at $5.5 million
- Provided wheelchair and pushchair accessible stations and buses
- Encouraged walking. Northern Express customers walked 600m more each day than previously
- Linked the key employment and growth areas of the North Shore with the CBD.

In June 2010, the Northern Express carried its five millionth passenger across the Waitemata Harbour. From just over 14,000 in its first month of 2005, the service now averages 170,000 passengers each month and peaked at 210,000 in March 2010.

Growth, roads and economic challenges

Population growth is one of two key drivers underlying the need for an integrated approach to transport planning in the region — one that encompasses state highways, arterial and local roads as well as public transport solutions.

The second key driver is economic. We need to support and strengthen the transport links between Auckland and neighbouring regions with which we have close economic ties. By 2036 the gross domestic products (GDP) of Auckland, Northland, Waikato and the Bay of Plenty are expected to generate 60% of the country's GDP.

Three of the four major challenges identified in the ATP 2009 are roading related:

- Complete the work under way to deliver a properly connected strategic and arterial roading network
- Manage the use of this roading network as the primary mover of freight, commercially important trips and other trips that cannot be made by public transport
- Maintain and improve Auckland's inter-regional road and rail connections with its neighbouring regional economies.

For the first time, the 2009-2012 Regional Land Transport Programme includes state highways, as a result of legislative changes. ARTA has been involved with state highway projects but does not manage them. Planning for, and prioritising, regional arterial road maintenance has formed an important part of ARTA's role since the Land Transport Management Amendment Act was passed in 2008.

The Regional Arterial Road Plan, released by ARTA in February 2009, defines the role of regional arterial roads, provides a framework for the integrated management of these roads and a robust basis for prioritising projects. Our regional arterials are stretches of: Great North and Great South roads, Ti Rakau Drive, Lincoln Road, Neilson/Church streets, South Eastern, Ellerslie Panmure and Albany highways; and Redoubt/Mill roads.

The regional arterial road network plays an important role in distributing goods and services within the region. While comprising only 4% of the length of the total roading network it carries 18% of all freight and commercial journeys, and almost half of all bus trips and 15% of all peak-hour travel.

The projected cost of upgrading the regional arterial network is around $4 billion. This reflects the high cost of road widening.

Managing use of the road network

The benefits of optimising traffic signals on one single major arterial, such as Dominion Road:

- Fuel savings: 10%, or 215,000L
- $C0_2$ reduction: 10% or 550 tonnes
- Time savings: 64,000 hours
- Benefit/cost ratio: 30

Urban sprawl and reliance on private vehicles are being gradually reversed in Auckland, partly by integrating land use with development of public transport.

2007: *Electrification of the rail network*

Around the world, cities with high-frequency metropolitan rail services use electric trains. In 2005, ARTA undertook a technical evaluation of possible electrification systems and compared the preferred option to diesel trains. While the start-up costs of electrifying the network were higher than sustaining the diesel system — around $180 million for infrastructure — the long-term performance and environmental benefits outweighed the status quo. Electric trains would improve local air quality, reduce noise and vibration, reduce greenhouse gas emissions and futureproof the rail system from fossil fuel price shocks. Electric trains are more reliable and cheaper to purchase, operate and maintain. They have better acceleration between stations and enable high-frequency services through tunnels.

This technical study formed a significant part of the first comprehensive Rail Development Plan for Auckland, published in 2006. It set out the business case for electrifying the region's rail network. This business case was provided to the Government for funding approval. Persistent lobbying was required by both ARTA and the ARC to convince the Government to shift direction from its support for diesel trains, with ARC Chair Mike Lee giving an undertaking that the ARC would back the introduction of a regional fuel tax to pay for the electrification project. The Government considered the issue for eight months, and in May 2007 Cabinet gave its approval for ARTA to begin the process. In December 2008, expressions of interest were called for the supply of 140 electric trains. In March 2009, with the cancellation of the regional fuel tax, the project was reassigned to KiwiRail, and the completion date moved forward to 2013. In January 2010, a contract was signed for the construction of 3,500 masts to support 80km of overhead wires. A supplier for the 38 electric multiple units (EMUs) is expected to be contracted early 2011, out of a shortlist of four bidders.

Electric trains make it possible for the first time for Auckland to have an underground CBD Loop, as diesel trains cannot operate in long, confined tunnels. Similar metro rail projects in other cities such as Melbourne have resulted in more jobs being created and significant urban development and renewal around the stations. And with Britomart as a through station rather than a terminal, the total capacity of the rail network would also increase.

Partners: ***KiwiRail, ARTA, ARC***

Cost: ***$500 million for train fleet and $180m for civil engineering, overhead wiring and signalling***

A step change to a world-class transport system

In 2003, when Britomart opened, the new station was New Zealand's first underground railway station. ARTA's mission has been to deliver a world-class transport system — one that compares with other major cities around the globe. To achieve this required a step change and innovations in the way transport infrastructure and services were funded and delivered. ARTA's concerted focus on moving ahead with its partners on long-delayed projects, has led to a number of other 'firsts' for New Zealand over the past six years.

- The Northern Busway is the first purpose-built road for buses.
- Park-and-ride facilities at Albany and Constellation stations are a first.
- The new Sylvia Park rail station is the first privately funded rail station.
- Auckland's single integrated ticket will be the first, true multi-modal transport ticket.
- Special event ticketing for sports and cultural events was well established internationally but unknown in New Zealand until introduced by ARTA.
- ARTA published the country's first ever Sustainable Transport Plan in 2006, which was comprehensive and ambitious even by world standards.
- The Botany Town Centre Plan is the first town centre plan of its kind.

Awards for projects

- The TravelWise school travel plan programme won a prestigious International Walk to School (IWalk) Award in 2006, and was co-winner in the Outstanding Community Safety and/or Injury Prevention Initiative category of the 2008 Community Safety and Injury Prevention Awards.
- The Botany Town Centre travel plan won the 2010 New Zealand Planning Institute's Best Practice Award.
- ARTA won the 2006 Energy Efficiency and Conservation Authority (EECA) national award for the most energy efficient project in the transport category, for its role in coordinating Auckland's Walking School Bus network, which topped 300 buses by 2009.
- Auckland Airport won the 2009 EECA Shell NZ Transport Award for its 'Lift' staff travel plan that, in its first two years, took 840 cars off the road each month. ARTA supported Auckland Airport in developing the plan.
- The first stage of the Northern Busway won the Shell Bitumen Excellence Award for a Major Roading Project and the Roading New Zealand Supreme Award. The completed busway won the Construction Projects over $2 million at the Ingenium Excellence Awards.
- The MAXX Contact Centre, run by the ARC to provide customer information on public transport, won three prizes at the Contact Centre World Asia Pacific finals in 2009: second in the Best Contact Centre category, first in the Contact Centre Recruitment Campaigns, and runner-up for the Best Contact Centre Leader. The Contact Centre was the only finalist from New Zealand.

Challenges and opportunities

Industrial action and fare increases

Patronage of Auckland's buses had been steadily growing since the mid 1990s, peaking in 2003 at over 46 million boardings. In May 2005, Stagecoach drivers went out on strike for a week in demand of better pay and working conditions. Stagecoach was receiving $35 million a year in subsidies to run its bus services in Auckland. While most Aucklanders were sympathetic towards the drivers, patronage on the buses fell quite dramatically in the second half of 2005, down almost two million on the previous year. It took until March 2006 before patronage levels regained their 2003 level, doubly hit by a 10% increase in bus fares in October 2005.

Again in September and October 2009, a lock-out by NZ bus of 900 drivers and cleaners in its employment meant a week of disruption to 80,000 commuters and 10,000 school children. Bus patronage fell by 12.9% compared to October 2008 but recovered faster than in 2005. By March 2010, patronage was up 5% over the March 2009 figures and continued to climb, reaching 5.8% by May. In June 2010, fares again increased by 2-3%.

Service punctuality during major infrastructure works

Reliable services underpin growth in public transport patronage. Service punctuality is measured using on-time running figures and has been a particular challenge for bus and rail services. Rail has suffered primarily from extensive construction work to tracks and stations, ageing track, signalling and rolling stock, increased patronage slowing boarding times, and inevitable incidents and accidents during construction. Road congestion has been the key difficulty for bus service punctuality. A standard measure used in similar cities around the world is five minutes, but Auckland was operating on a 'within 20 minutes' measure in 2004. The new July 2005 North Shore bus service upped the ante, with a measure of arriving within five minutes of scheduled times and ARTA sought to have at least 80% of all services arriving within the same measure.

Punctuality of the rail network dipped sharply from May 2005, due to the bus strike and increased passenger numbers, but rose again to 90% by November, as bus patronage recovered. In 2008, a lower target of 75% was set for the Western Line to account for double tracking work, yet 80.8% of services arrived within five minutes of their scheduled time, close to that of the Southern and Eastern Lines, at 82.8%. A wide range of mainly one-off events led to delays, primarily caused by signals and points failures. In 2009, delays due to infrastructure faults fell to their lowest level in three years, with Western Line punctuality rising to 87.8% and the other two lines averaging 84.2%. In 2010, the Western Line performance was again affected by major infrastructure works at Newmarket and New Lynn, but has recovered with the completion of these works.

On the Northern Busway, given dedicated road space, up to 99% of services were reported by their operator to run within five minutes of schedule.

2008: *Northern Busway opens*

When the Northern Busway opened in February 2008 it became New Zealand's first purpose-built road dedicated to buses. Following SH1 from Constellation Drive to the Harbour Bridge, the busway was a key element of the Rapid Transit Network, allowing buses to travel at high frequencies (every three minutes now in peak times) unaffected by traffic congestion.

Within weeks of the busway opening, passengers stopped checking the timetable because it was as simple as turn-up-and-go. In its first year, the Northern Express service on the busway took around 5,100 cars off the road (the equivalent of two motorway lanes both inbound and outbound).

This service was largely responsible for a 6% drop in traffic on the Harbour Bridge in 2008.

The busway has also supported the first public transport service linking the North Shore with Auckland Airport, with the Northern Flyer. From 2009, Super Shuttles and Shore Shuttles were also permitted to use the busway, taking 20 to 30 minutes off travel times in peak hours.

ARTA's role has been to programme bus services and the agency added $10 million to the construction of stations. Stage 2 of the busway is planned to extend north to Silverdale and Orewa.

Partners: ***Transit New Zealand (now the New Zealand Transport Agency), North Shore City Council, Auckland City Council and ARTA***

Cost: ***$300 million***

Dedicated busways carry 12,000 people an hour while a single lane of motorway carries only 2,400 people. The Northern Busway's capacity and reliability is playing a key role in addressing traffic congestion over the Harbour Bridge by taking 5,100 cars off the road in morning peak times.

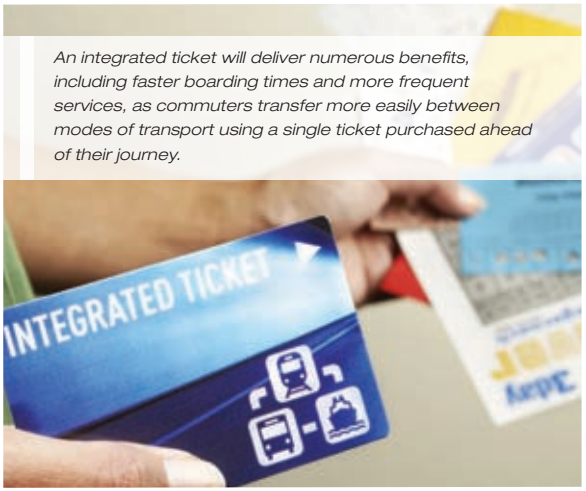
2009: *A single integrated ticket for Auckland*

In December 2009, ARTA signed a contract with Thales to supply the country's first truly multi-modal transport ticket, similar to London's Oyster and Hong Kong's Octopus systems. The swipe-on, swipe-off, smartcard payment system will include automated gates, smartcard readers on board buses and ferries, smartcard reload devices at selected rail and bus stations and ferry wharves, and the supply of all computer hardware, software, networks and communications. The contract is a critical next step in the delivery of an integrated ticket that will mean faster boarding times (speeding up bus journeys by 4%), dispensing with a wallet full of different tickets or change, fare reductions and potentially more frequent services.

ARTA began exploring options to deliver affordable integrated ticketing in 2005 by developing a draft concept design and a tender evaluation process. The Passenger Transport Network Plan 2006-2016 included a fares policy to create uniform fare products across all operators of all modes of transport. The project since then has focused on identifying a best value for money, proven, risk-minimised solution. Thales has over 40 years' experience in delivering integrated fare systems in more than 100 cities around the world.

Planning and initial implementation activities are now under way for a limited functionality pilot of the system to take place in August 2011.

This year, a key agreement has been developed between the New Zealand Transport Agency and ticketing system providers. The agreement paves the way for a set of national standards for a single, integrated public transport ticket that other regions can cost-effectively tap into after they've been adopted in Auckland. The standards define how the central core of a national system will function as well as how on-board operator equipment will interact with that system. By making transport usage data easier to collect in a common format, the national integrated ticket system will also enable better long-term planning and funding of public transport.



An integrated ticket will deliver numerous benefits, including faster boarding times and more frequent services, as commuters transfer more easily between modes of transport using a single ticket purchased ahead of their journey.

Partners: The French company Thales' winning bid was placed as a consortium in partnership with the Bank of New Zealand and Transfield Services. Other project partners with ARTA are funders NZTA and the ARC. The national standards process is being assisted by Dutch specialists, Collis.

"This is history in the making for Auckland and New Zealand. After a long and often challenging process, ARTA is at the gate and very happy to be signing the contract for the supply of a superior, multi-modal transport ticket for Auckland, which forms the basis of a core central ticketing system for New Zealand. This is about winning the big game." ARTA Chair, Rabin Rabindran.

Rising fuel prices in 2008 supports shift to public transport use

In mid-2008, fuel prices reached unprecedented levels, peaking in July with regular petrol reaching $2.18 a litre. While the link between fuel prices and total public transport boardings over the past six years seems weak, uptake of public transport is influenced by a number of factors, including convenience, capacity, reliability and the relative cost of public versus private transport.

In Auckland, in the 12 months to July 2008 train passenger numbers were 32% higher and average boardings for Auckland buses increased by 3.5%. Between July and November 2008, transport fuel prices dropped significantly. An immediate upswing in traffic volumes was observed throughout New Zealand but customers in Auckland have remained loyal to public transport. From surveys ARTA has carried out, there is a growing commitment to use of public transport, with its environmental benefits being a significant driver.

Sustaining funding for major projects

Experience has shown there is no single solution to lifting Auckland's transport funding constraints. A significant funding gap has long been identified in both the RLTS and ARTA's ten-year planning documents. Even with adequate funding, the programme of action may be too little and too late to make acceptable progress towards Auckland's, and the Government's, objectives and targets.

There have been three major challenges in respect of funding:

Allocation by mode

The 2009 ATP has been limited by government funding arrangements that allocated funding by mode rather than across modes and based on merit.

Changes to the way funding and projects are delivered

For example, in 2005/06 the Government changed funding for the core network upgrade of rail. For the Western Line double tracking, Newmarket remodelling and Manukau Rail Link Treasury, through KiwiRail, would fund all below track upgrades (track, track signalling and platforms) while the region will totally fund above track capital improvements (trains and station facilities).

In 2009, cancellation of the regional fuel tax affected a number of big ticket projects, including completion of Newmarket rail station and the electrification project, which was subsequently transferred to KiwiRail.

The complexities of fragmented transport governance

Transport funding has been complex. State highways are funded 100% through the National Land Transport Programme, local roads from local rates and the NLTP, KiwiRail directly by Treasury, ARTA's rail infrastructure activities by the ARC, public transport services from regional rates and the NLTP; and ferry wharves by local councils, the ARC and the NLTP.

2010: *Newmarket Station opens*

Newmarket's rail station is the city's second busiest after Britomart and a key junction in Auckland's rail network. The new station opened in January 2010, after the old station closed in January 2008 to allow for both track realignment and construction of a large, modern station.

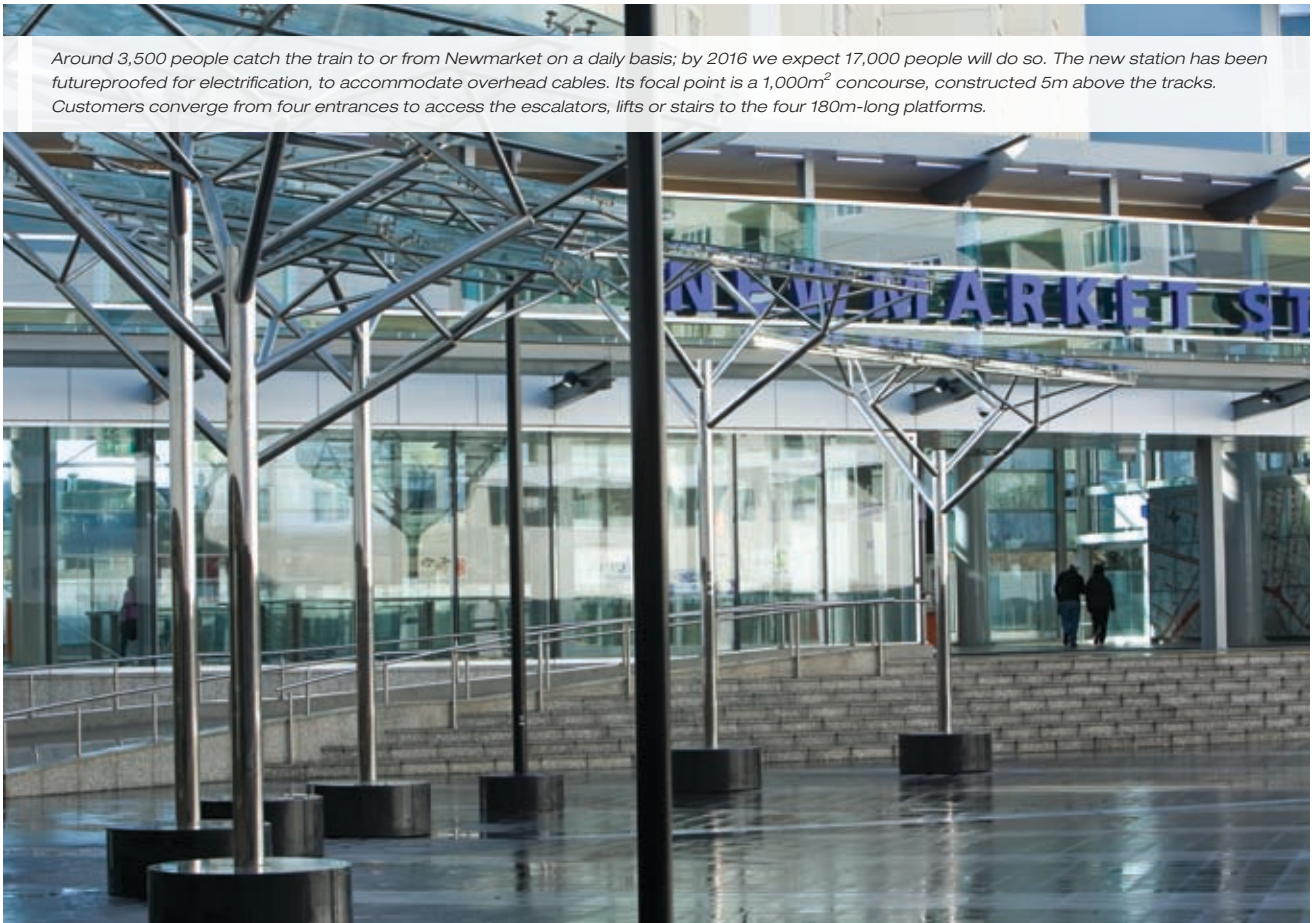
The station is a self-ventilating, light and airy environment. A high-roofed atrium-like main station concourse is covered by a floating roof canopy, supported on elegant columns. Lower level canopies create shelter over the platforms. Commuters access the platforms by lifts, stairs or escalators and there is shelter, seating, lighting and signage along the entire 180m length of platform. A ticket office where customers can purchase multiple tickets or monthly passes is housed on the concourse and CCTV cameras and help points are situated throughout for the safety of customers. The redevelopment has also improved connections between the station and its surrounding commercial and residential areas, with entrances from a new square off Broadway, the Remuera Road Link Bridge and a bridge from Joseph Banks Terrace.

In addition to the new station, KiwiRail completed a complex new track layout at Newmarket Junction, where the key Southern and Western lines intersect. The new station has twin island platforms with three tracks. Direct connections

between Newmarket, the Western Line and Britomart provide flexible services in every direction. Brand new, insulated rail signals have been installed, which are fully enabled for electrification and provide a greater level of reliability.

The two-year rebuild required major works in a tightly confined and busy space. Work began in earnest in August 2008. By Christmas, the first milestone was reached. Crews worked night and day for three weeks, relaying tracks and the foundations for the new 65-metre long Remuera Road Link Bridge. The bridge now connects the Remuera Road Entrance to the station concourse. Dramatic steel portals frame the bridge creating a sense of enclosure. Vertical glazed screens to both sides provide security and weather screening, while a full width solid roof provides additional shelter.

Partners: ***KiwiRail, Auckland City Council, ARTA, ARC, Newmarket Business Association***
Design: ***Opus International Consultants***
Construction: ***Hawkins Construction***
Length of the building: ***37 metres***



Around 3,500 people catch the train to or from Newmarket on a daily basis; by 2016 we expect 17,000 people will do so. The new station has been futureproofed for electrification, to accommodate overhead cables. Its focal point is a 1,000m^2 concourse, constructed 5m above the tracks. Customers converge from four entrances to access the escalators, lifts or stairs to the four 180m-long platforms.

Our people

ARTA has had a very diverse workforce. Beginning in 2004 with around 40 staff transferring from the ARC, the number of employees has grown to around 115, with representation from many parts of the world. The people employed by ARTA are primarily at a professional level including rolling stock engineers, planners and account managers. The rest of the organisation has been made up of skilled staff across all other areas such as finance, organisational development, administration, marketing, communications and media.

The ARTA Board was appointed in July 2004. The directors were selected by a 15-member appointments panel, which included five ARC councillors, a representative from each of the local councils and three external representatives. A firm of external recruitment consultants assisted in selecting candidates for the appointment process.

Directors	Dates	*Directors*	Dates
Brian Roche	2004 – 2007 Chair	**Adrienne Young-Cooper**	2004 – 2010
Tony Parsons	2004 – 2007	**Mark Benjamin**	2007 – 1 July 2010
Ted van Arkel	2004 – 2007	**Andrew Buxton**	2007 – 1 July 2010
Richard Waddel	2004 – 2007	**Mark Ford**	2007 – 2009 Chair
Professor Peter Brothers	2004 – 2010	**Tony Marks**	2007 – 1 July 2010
Gary Taylor	2004 – 2010	**Rabin Rabindran**	2004 – 2010 2009 – 2010 Chair
Mike Williams	2004 – 2010		

Board profiles

Rabin Rabindran
BOARD CHAIR

Rabin Rabindran is a commercial barrister and international legal consultant specialising in infrastructure development, construction and energy. He has worked on major projects in more than 25 countries acting for governments, local authorities and major corporates. He is a director of Manukau Water Limited, Tomorrow's Manukau Properties Limited, TMPL (Flat Bush) Limited and a company with interests in China. Rabin is also chairman of the Rugby World Cup Regional Trust Forum, Singapore Chapter of the ASEAN New Zealand Combined Business Council and a trustee of the Chinese Language Foundation. He was previously a partner at Simpson Grierson and a director of an Australian public company. Rabin has been appointed as a director of Auckland Transport.

Adrienne Young-Cooper
DEPUTY CHAIR

Adrienne Young-Cooper is a professional planning consultancy director. She was a founding shareholder of Hill Young Cooper Limited. She was an inaugural director of Auckland Regional Transport Networks Limited, and took special responsibility for the commissioning of the Britomart Transport Centre. She sits on the boards of Solid Energy New Zealand Limited, Maritime New Zealand, Housing New Zealand Corporation, Hobsonville Land Company and the Auckland City Property Enterprise Board. Adrienne is also a trustee of several charitable organisations. Adrienne has been appointed deputy chair of the new Auckland Waterfront Development Agency Limited.

Gary Taylor

Gary Taylor is an experienced company director and environmental policy analyst. He is currently chairman of the Environmental Defence Society, the Climate Change and Business Centre and is also a director of the Hobsonville Land Company.

Professor Peter Brothers

Peter Brothers is chief executive of Manukau Institute of Technology. He was previously Dean of Engineering at the University of Auckland, holding that position for nine years. His career began with what was then the DSIR (Department of Scientific and Industrial Research), later spending 20 years in the United States in both public and private sector infrastructure roles. Peter was formerly a director of Auckland Regional Transport Network Limited (ARTNL) and of UniServices Limited, the University of Auckland's intellectual property company, and is a director of Metrowater.

Mike Williams

Mike Williams is a director of Sustainable Power Technologies Limited, the CEO of Stellar Trust and a trustee of Waitakere Enterprise.

Previous directors

Mark Benjamin

Mark Benjamin is the chief financial officer of the Contract Resources group of companies. He has previously held senior financial and operational management roles within the agricultural and infrastructure industries, and prior to that worked at Price Waterhouse internationally. In addition he provides consulting and director services to small businesses, start-up businesses and not-for-profit entities.

Tony Marks

Tony Marks worked in marketing for major food companies in England, the United States and Venezuela before coming to New Zealand in 1978. Over the next 30 years, he has held senior management positions at Carter Holt Harvey, was general manager Sales and Marketing at Air New Zealand for 10 years, CEO of Zespri International for four years. Prior to retiring from corporate life in 2006, he was the inaugural CEO of Pacific Blue Airlines, the international arm of Virgin Blue Airlines. He now holds a number of directorships in food, aviation, travel and engineering companies.

Andrew Buxton

Andrew Buxton is general manager Systems, Logistics and Strategy Deployment for The Warehouse Stationery. He has previously held senior executive roles in retail and consulting in NZ, Asia and the UK, and has led successful start-up companies. Currently he is a director of a category management business (Complete Entertainment Services Ltd), a small consulting company (MH Group Ltd), a global standards organisation (GS1 NZ) and a global charity (UNICEF NZ).

Mark Ford

Mark Ford was CEO of Watercare Services, a position he took up in 1994. Prior to that he was chief executive of the New Zealand Forestry Corporation and the Auckland Regional Services Trust, and managing director of New Zealand Timberlands Ltd. These positions followed a career in Europe and the USA in the petroleum industry. A former chair of the Energy Efficiency and Conservation Authority and deputy chair of the New Zealand Business Council for Sustainable Development, Mark was also a commissioner with the Gambling Commission during his term as an ARTA director. He is now chair of the Auckland Transition Agency, and will chair Auckland Transport's directors.

Brian Roche

Brian Roche was a partner in PriceWaterhouse Coopers when he took up his role as first chair of ARTA. He was a former chief executive of Housing New Zealand Corporation, chief executive of the Crown company Monitoring and Advisory Unit in Treasury, and a chief negotiator for the Crown in the Ngai Tahu treaty settlement. He is now chief executive of New Zealand Post Group.

Ted van Arkel

Ted van Arkel had retired from his position as managing director of Progressive Enterprises when he joined ARTA, as part of a shift to becoming a full-time independent director. Other directorships included the Auckland Chamber of Commerce and Auckland Retailers Association. He was a council member, and now chair of Unitec Council.

Richard Waddel

Richard Waddel was a partner with Ernst & Young when he joined ARTA, and was the company's CEO for 11 years. He was chairman of Pharmac, Auckland Festival Trust and a director of Aotea Centre Board of Management. Also a past member of Infrastructure Auckland, director of Auckland City's The Edge® and chair of the Auckland District Health Board.

Tony Parsons

Tony Parsons was a civil engineer with more than 40 years' experience in the construction industry, including major railway and roading projects. A former director of ARTNL, he was an advisor to Transit NZ on project viability and was project manager for Watercare's Mangere treatment plant upgrade.

Chief executives

Alan Thompson was appointed CEO November 2004. He had been CE of the Department of Urban Services for the Australian Capital Territory for the previous six years. When he left to take up the role of Secretary of Transport at the Ministry of Transport in 2006, he was replaced by Fergus Gammie, who has remained in the role through to the establishment of Auckland Transport.

ARTA's executive team *(from left)*

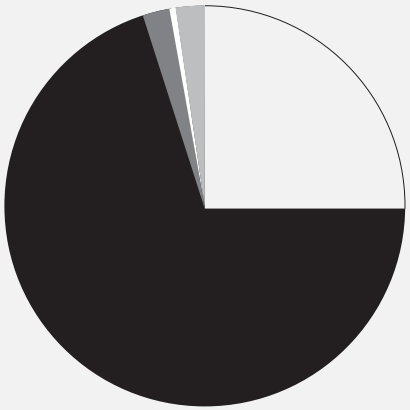
Fergus Gammie	*Chief executive*
Stephen Smith	*General manager, Corporate Services*
Mark Lambert	*General manager, Customer Services*
Allen Bufton	*Acting general manager, Project Delivery*
Shelley Watson	*General manager, Marketing and Communications*
Peter Clark	*General manager, Strategy and Planning*

Walking the talk

Over two-thirds of ARTA employees walk, cycle or take public transport to work, compared with only 12% of Aucklanders as a whole. Many also walk to and from meetings in the city. This outcome has been driven primarily by the organisational culture and a strong sense of social responsibility. ARTA has provided lockers and showers, plus a pool of bicycles for traveling to local meetings.

In 2010, as part of a calendar of sustainable transport events, ARTA employees have taken to wearing a pedometer and committing to 10,000 steps a day. The results have been posted daily on the staff noticeboard.

Walking the talk



69% **ARTA Staff travelling sustainably**
Cycling 4%, ***Walking*** 11%, ***Public Transport*** 38%, ***Carpooling*** 16%, this includes being a passenger or sharing a ride with a member of your household

24% **Drove alone**

3% **Came by motorcycle or scooter**

1% **Worked from home on these days**

3% **Other**

Ninety staff participated in the July 2009 survey on travel to work, an 80% response rate. Results show that 69% travel to work by a sustainable means (cycling, walking, public transport or carpooling). That's a five percent increase from 2007. In 2007 only 12% of Aucklanders as a whole used sustainable means of travel.

The journey ahead for transport

The Auckland Council

In October 2007, a Royal Commission was established to report to the Government on restructuring the way Auckland is governed. Concerns were growing that local government arrangements in Auckland were not meeting the challenges of urban growth. How Auckland's transport needs are best delivered has been widely debated as part of the new Auckland Council structure. ARTA's submission to the Royal Commission noted a lack of coordination and ongoing capacity in Auckland's transport system. It proposed a model that enabled coordinated delivery of regional transport services without superseding individual agencies' statutory responsibilities.

When the Commission released its report in March 2009, it proposed to replace ARTA with a new regional transport authority, a council-controlled organisation reporting to the Auckland Council. It would work in partnership with the NZ Transport Agency and KiwiRail and be responsible for regional transport and arterial roads.

By 23 May 2009, the Local Government (Tamaki Makaurau Reorganisation) Act 2009 was passed. The Act made some controversial changes to the Commission's recommendations. An Auckland Transition Authority (ATA) was formed to effect the changes required in time for the 2010 local government elections.

Auckland Transport

The new structure for transport planning, funding and delivery was confirmed in May 2010. Auckland Transport amalgamates the transport roles of ARTA, the ARC and the region's seven local authorities. The CCO will be responsible for spending more than half of Auckland's $1.3 billion rates income to manage every aspect from major infrastructure projects such as the CBD Rail Loop to parking and fixing broken footpaths and potholes.

Auckland Transport will deliver a more cohesive governance model for transport funding, reducing the number of agencies involved in funding decisions from eight to one and the time taken to evaluate and process funding applications. It will increase the efficiency of delivering on community needs. This model for transport offers possibilities to further investigate alternative sources of funding.

These might include:

- Tolls on individual parts of the roading network
- Public private partnerships to finance infrastructure investments, including the competitive tensions of the PPP procurement process
- Land use value capture, which captures the increase in land values around fixed-route public transport systems, e.g. the underground CBD rail loop, benefiting both transport sponsors and contributing developers
- Making better use of Auckland's accumulated public income-earning assets by polling them
- Financial instruments such as infrastructure bonds or other forms of debt.

A more consolidated budget may provide the opportunity to establish a small risk fund to effectively trial a few of the innovative ideas ARTA has received for growing patronage of public transport.

The primary strategy and planning documents Auckland Transport will inherit are the Regional Land Transport Strategy 2010 and the Auckland Transport Plan 2009. These guiding documents form the backbone for continuing to move

Auckland forward, with planning aligned to broader land use, and economic, social and environmental objectives. At just over halfway through the 10 years of the RLTS 2005 and ARTA's first substantial planning documents, this legacy document demonstrates the substantial progress, and in many cases completion, of the major projects ARTA set out to achieve. Over the past six years, Auckland has gained a more resilient backbone in its Rapid Transit Network of the Northern Busway and rail connections, and the beginnings of more sustainable choices of transport. Satisfaction with, and use of public transport, has reached record levels.

There is still crucial work to be done in integrating the region's transport network, both within the region and inter-regionally from Northland through to Waikato. Auckland Transport will continue to have challenges in meeting regional goals and objectives but it inherits milestone successes which we, as a team, have been committed to achieving.

Auckland Transport will begin operating on 1 November 2010, almost six years exactly after ARTA was formed to plan, fund and develop Auckland's transport system of roads, rail, buses and ferries into one that is world-class, safe, responsive and sustainable.

Appendices

Appendix A: Summary of capital works expenditure/assets and sources of funding

ARTA's operating and capital expenditure has been jointly funded by the ARC (from rates and regional investment funds held by Auckland Regional Holdings) and by the New Zealand Transport Agency through the Land Transport New Zealand fund.

Capital project/assets	Cost to 30 April 2010 ($m)	Original forecast [revised] ($m)	Funding source split
Rolling stock, train sets SA15-23	91.8	104	ARC
Rolling stock ADK refurbishment	13.56	15.5	ARC
Rolling stock 2005-07	94.35	-	ARC
Rolling stock renewals 2007-10	8.8	13.27	ARC
Western Line duplication stages 2-5	10.82	12.6	stages 2&4 ARC stages 3&5 first $462k 100% ARC then balance 60% NZTA; 40% ARC
Newmarket remodelling	35.6	35.6	$20m ARC funded Final $15.6m 60% NZTA; 40% ARC
Manukau Rail Link	1.14	15.2	First $400k ARC, balance 60% NZTA; 40% ARC
Onehunga (DART 19)	.83	4.1	60% NZTA; 40% ARC
New Lynn Station	9.04	15.97	60% NZTA; 40% ARC
Kingsland enhancement (RWC)	3.22	6.02	60% NZTA; 40% ARC
Rail station upgrades	9.66	10.5	ARC
Electrification of trains[1]	-	496.3	Crown
Real time information – total across modes	9.27	15.64	53% NZTA; 47% ARC
Single integrated ticket	13.92	58.25	$20m for central system NZTA Remaining $38.25m 60% NZTA; 40% ARTA
Downtown Ferry Terminal upgrade – stage 1	5.52	6.0	53% NZTA; 47% ARC
Birkenhead ferry terminal upgrade	1.91	2.73	60% NZTA; 40% ARC
Northern Busway	10.0	10.0	ARC

Note

1. Project moved to KiwiRail

Appendix B: Indicative capital expenditure to 2019

Indicative expenditure 2008/09 to 2018/19 ($b)	2009 - 2011	2012 - 2014	2015 - 2019
Transport planning	33,516,772	29,894,251	39,369,060
Walking and cycling	187,646,972	210,689,391	156,178,763
Demand management	49,557,252	50,969,361	61,292,599
Passenger transport infrastructure	709,974,587	297,025,780	87,452,616
Local road renewal and maintenance	764,730,964	811,323,264	1,159,938,708
New and improved local roads	902,726,830	479,892,413	800,778,823
Public transport services	788,873,031	862,193,772	1,145,565,485
State highway renewals and maintenance	290,283,606	347,916,667	550,000,000
New and improved state highways	952,118,132	900,000,000	900,000,000
Rail infrastructure	888,235,993	668,568,109	60,000,000
TOTALS:	5,567,664,139	4,658,473,008	4,960,576,054
GRAND TOTAL: 15,186,713,201			

Appendix C: ARTA's stakeholders and project partners

Stakeholder	Relationship
Customers	On a day-to-day basis, ARTA has planned and funded public transport, promoted alternative ways to get around Auckland, and coordinated and integrated transport across the region on behalf of Aucklanders
Shareholder (ARC)	The ARC has been ARTA's sole shareholder. It has provided bulk funding on an annual basis for ARTA's activities, and for the region's new train stations and ferry wharves.
Territorial authorities	The seven territorial authorities (to October 2010) have been responsible for maintaining the roads in their areas. ARTA has provided advice on how their plans fit with regional objectives.
Central government	The Ministry of Transport has undertaken reviews of Auckland's transport capabilities and guides the development of futuren strategies nationwide. The ministries of Economic Development, Education, Environment, Treasury and Health, NZ Police and the Accident Compensation Corporation are also involved. Central government also directly funds KiwiRail.

Stakeholder	Relationship
New Zealand Transport Agency (NZTA)	NZTA was established in August 2008 by merging Land Transport New Zealand with Transit New Zealand. NZTA is responsible for allocating transport funding on behalf of the Government. NZTA also owns and manages the state national highway network. In the Auckland region, ARTA has worked closely with NZTA to establish regional priorities for funding.
KiwiRail	In July 2008, the Government took over the assets of former private operator Toll Rail and created KiwiRail. KiwiRail also incorporated ONTRACK, which had maintained and improved the rail network in Auckland and controlled the operation of trains on the network. ONTRACK became KiwiRail Network. KiwiRail is also responsible for the mechanical maintenance of Auckland's rolling stock and for purchasing new electric trains. KiwiRail reports to the New Zealand Railways Corporation Board.
Service operators	A wide range of transport operators supply bus, train and ferry services. While relationships with ARTA have been defined by tendered contracts, ARTA has also worked collaboratively with operators to improve customers' experiences of using the network.
Employees	ARTA's staff have been key to achieving the organisation's goals.
Auckland Regional Transport Network Limited (ARTNL)	Set up by Auckland's territorial authorities to own and maintain the rail stations and maintain ferry infrastructure, ARTNL's assets were transferred to ARTA in October 2007, by an Order In Council.
Community	ARTA has played an important role in maintaining and improving the quality of life in our community by having an overall, multi-modal regional view of transport priorities that is unconstrained by territorial boundaries. A number of voluntary organisations within the community, e.g. Campaign for Better Transport, act as public watchdogs for transport issues in Auckland. Brian Rudman of the *New Zealand Herald* has been a long-time commentator.

New Lynn Station, will become a landmark for Waitakere City and the western region, symbolising the large investment in infrastructure which has transformed Auckland's public transport.

Vision for transport in Auckland

2011

- *Rugby World Cup sees 75% of ticket-holders get to matches using public transport, taxis or on foot*

2012 onwards (projects within the Regional Land Transport Strategy 2010-2040)

- *Purchase electric trains and electrify rail lines (KiwiRail 2015)*
- *Integrated smartcard ticket (supplier contracted December 2009, in place by 2012)*
- *Construct rail to the airport (2031-2040)*
- *Improve airport road access (2021-2030)*
- *Construct the Avondale-Southdown rail connection (2031-2040)*
- *Complete the Western Ring Route connecting State Highway 1 from Manukau through Waterview and Hobsonville to Albany, as a complete alternative route from south to north (construction under way, completion by 2016)*
- *Complete the regional cycle network (50% completed by 2016)*
- *Build an additional Waitemata Harbour Crossing*
- *Complete the multi-modal Auckland-Manukau Eastern Transport Initiative (AMETI) (2021-2030)*
- *Construct the CBD Loop Tunnel (preferred route chosen March 2010, construction by 2021)*
- *Extend the Northern Busway to Redvale (2021-2030) and Redvale to Orewa (2031-2040)*
- *Construct a northbound tunnel beneath Victoria Park to increase the capacity of the Northern Motorway between the Auckland Harbour Bridge and Wellington Street (construction began November 09. Expected completion by April 2012)*
- *Replace Newmarket Viaduct with a new structure that will add a fourth southbound lane on the motorway between Gillies Avenue and Greenlane (construction under way)*
- *Develop the Panmure-Botany-Manukau bus connection as a QTN, with upgrade to RTN in 2021-2030*
- *Develop the Henderson-Westgate-Albany bus connection as a QTN*

In 2009, Pine Harbour and West Harbour ferry trips increased over 2008 by 20% and 24% respectively. ARTA subsidises these services, which enabled both ferry operators to purchase an additional vessel and increase the number of weekday trips.