

Draft City Centre Transport Proposals

Introduction

This draft position paper provides an overview of the current City Centre transport issues, including concepts of the possible future City Centre transport networks, as a starting point for the development of a City Centre Transport Implementation Strategy.

The paper describes the transport response to City Centre Masterplan aspirations and initiatives, including the eight 'Key Moves' and how those outcomes could be achieved through the development of the city centre transport networks. As such, this position paper sets out a framework within which the Key Moves can be considered, and where possible identifies short term projects to progress them.

It is intended that this position paper broadly captures Auckland Transport's current thinking regarding city centre transport issues and offers a guide for stakeholders as to the approach Auckland Transport intends to undertake to achieve the Mayor's vision for the City Centre – specifically the development of a City Centre Transport Implementation Strategy.

This position paper also identifies those next steps required to develop the Strategy.

Key Issues

Fundamental changes in future city centre travel patterns and demands are inevitable and provide a major opportunity to dramatically enhance the liveability, accessibility and success of the city centre. The existing transport networks, both within the city centre and across the region, will come under increasing pressure. Accessibility is essential to enable the City Centre's business, shopping, educational and cultural activities to grow and flourish.

Over the coming 30 years, the growth expected in trips to and within the city centre during the congested peak periods will be accommodated primarily by public transport and active modes (walking and cycling). There is limited ability to provide additional vehicle capacity on the existing road network, particularly during peak periods. The number of vehicles entering the City Centre during the peak period is expected to remain relatively static, compared with growth in interpeak traffic demand due to increased freight and service deliveries.

A major focus for Auckland Transport is to continue to support the on-going increases in the use of public transport, which currently provides nearly half of all peak period trips. Major improvements are already underway in upgraded bus, ferry and rail infrastructure and accompanying service improvements to support this growth. Over the coming 30 years, it is expected there will be a near-doubling of bus journeys and five times as many rail and active mode trips within the city centre in peak periods.

Equally critical is the off-peak periods during which vehicle trips to and within the City Centre are expected to grow due to increased demand for servicing, commercial, shopping, freight and other non-commuter trips essential for sustained growth and economic productivity. A priority for the transport system is to facilitate the growth in these trips to enable the City Centre to be the engine room for regional economic growth.

Managing these significant changes in travel mode in a manner that supports the city centre liveability and economic growth aspirations presents a substantial challenge to Auckland Transport, New Zealand Transport Agency (NZTA), KiwiRail, the Port of Auckland as well as Auckland Council and the Waterfront Development Agency.

Of highest strategic importance for Auckland is the implementation of the City Rail Link - a key requirement for the ultimate development and attractiveness of the city centre, as well as unlocking the potential of the regional public transport system. The City Rail Link will be supported by greater use of transit orientated developments, park and ride facilities at rail stations across the region and improved feeder bus connections. A new rail station is also planned at Parnell and in the future the improved bus network could be further complemented by the introduction of a higher quality public transport mode (such as light rail or trams), particularly to provide attractive and convenient travel within the city centre, the city fringe area and ultimately connecting to the wider region. Greater public transport and active mode connectivity and accessibility to and from city fringe to the city centre will enable greater travel movements without requiring an increase in vehicle numbers or parking provision.

A second critical need is implementing a simplified and efficient bus network which addresses increasing levels of bus congestion on key corridors which are resulting from current and expected growth in patronage and services. The simplification and splitting of main bus sectors onto separate corridors will, along with an additional bus interchange at Wellesley St to relieve pressure on Britomart, create a more effective and efficient bus network and support a high quality pedestrian environment. This bus network development will require infrastructural changes, such as more bus lanes and better bus stops, as well as the provision of a new off-street bus layover site within or near to the city centre.

A much improved pedestrian network will improve access to shops, businesses, education and cultural activities as well as public transport routes and interchanges and between the waterfront and the rest of the city centre. Pedestrian safety and amenity will be further supported by a lowering of speed limits and greater use of shared space treatments on appropriate city centre streets and improvements to existing or new 'gateways' to the city centre.

Auckland Transport will work with the New Zealand Transport Agency (NZTA) to develop the State Highway network in a strategic manner which supports the overall CCMP, including the long term implementation of an additional harbour crossing. Work will also include supporting the State highways' role in freight movements and intra- and inter-regional traffic, as well as avoiding transference of traffic issues between the city centre and State Highway networks.

Within the city centre, NZTA will focus on managing the existing capacity of the Central Motorway Junction (CMJ) and travel demand management. The exceptions to this are the current Victoria Park Tunnel project, future improvements to the SH16 connection to the Port, the future harbour crossing and improvements to the Northern Busway's efficiency. NZTA will also assist in making it easier and more inviting to pass through and across the CMJ when travelling by cycle or on foot.

Auckland Transport will also work with Auckland Council, the Waterfront Development Agency, the Ports of Auckland, KiwiRail and other key stakeholders in progressing and developing the range of city centre transport initiatives.

As part of managing future vehicle patterns and creating a high quality urban environment, it is vital to provide an appropriate level of parking that supports the residential growth and economic vitality of the city centre. The physical changes to the city centre's transport networks will need to be supported by an appropriate regulatory and policy framework, led by the upcoming Unitary Plan. This will need to outline a supportive approach to parking supply and management, travel demand management tools, a coherent road hierarchy, and land uses and densities which encourage efficient use of the regional public transport network.

Key statistics

- From ARC AM peak city centre cordon survey 2010: 23,536 people enter on bus, 4,918 on train; 3,349 on ferry; 4,476 on foot 836 by bike and 34,273 by car.
- Peak period mode share: Car 48%, PT 44%, active mode 8%
- Public transport use is at its highest levels since 1985.
- Expectations that by 2041 in the peak period there will be over five times as many rail trips and active mode trips, and double the number of bus trips. Car trips are expected to remain relatively static with any increase in person trips by car expected to result from increased car occupancy.

Road hierarchy

The road and motorway network is vital for the economic vitality and growth of the city centre – connecting it to the rest of the city and beyond. There is limited ability to provide additional vehicle capacity on the existing road network and the focus is on improving the effectiveness of the existing network and providing for travel growth through public transport and active modes, freeing up our congested motorways and arterials for freight, commercial travel and other trips essential to the economy that cannot use public transport.

Although vehicle volumes at peak times are expected to remain relatively static, there is expected to be a growth in interpeak vehicle travel as part of the freight and business-related trips needed to support a growing city. The location and nature of car parking is an important factor in influencing vehicle trips, so city centre parking supply and operation will be better managed to support business and retail activity, in support of an increase in public transport use. The priority for parking is on short-stay parking that supports businesses, shoppers and visitors. A comprehensive parking management plan is required to address the complete spectrum of parking matters – employment, residential, visitation, on-street, off-street, public and privately owned.

The State Highway network is a key element of the city centre's transport infrastructure and provides a critical regional and national role for the movement of goods and people, including to key locations such as the port and airport. The efficient functioning of this network therefore must be maintained for the on-going economic health and success of the city centre.

Greater focus will be placed on the transition from the State Highway to the more pedestrian-focused city centre road network, and ensuring a rationalised arterial road network exists which supports necessary vehicle movements in a manner which allows the city to grow.

This means ensuring an effective arterial network across the city centre and connecting to the State Highway network, as well as looking towards the best long term connection to the port. Freight movements in the city centre is primarily associated with the port and best provided for on the motorway and rail network. Freight delivery and commercial trips are essential to economic vitality and will continue to be a core element of city centre roads. Rail freight will continue to grow to at least a third of container movements, requiring a significant reconfiguration of the current port rail access and KiwiRail's landholdings as well as the longer term construction of a third rail line from the Port southwards to Westfield and Papakura. The expected growth in container truck demand will also require an appropriate solution to unlock the land use potential in the Quay Park area. Investigations with NZTA, the Ports of Auckland and KiwiRail have commenced into long term State Highway connections which provide for efficient freight access to the Port, and reduce the impacts of this traffic on surrounding communities.

Public Transport

Expected population and economic growth in the city centre and across the region needs to be supported by a comprehensive, high quality public transport system. Of highest strategic importance is the completion of the City Rail Link - a key requirement for the ultimate development and attractiveness of the city centre, as well as unlocking the potential of the regional public transport system. The City Rail Link will allow considerable reductions in rail travel time across the network to and from the City Centre as shown below.

TRAVEL TIMES TO THE FUTURE CITY CENTRE RAIL LINK STATIONS					
From	To Intended Location	Travel by Train (minutes)			% Improvement in Travel Times
		Before CRL	After CRL	Reduction in Travel Time	
New Lynn	Aotea Station	51	23	28	55%
Morningside	Aotea Station	39	14	25	64%
Onehunga	K' Road Station	47	27	20	43%
Manukau Centre	K' Road Station	61	42	19	31%
Newmarket	Aotea Station	27	10	17	63%
Panmure	Newton Station	40	27	13	33%

Although focused on the city centre, the City Rail Link must be supported by greater use of the regional public transport network, including more transit orientated developments, park and ride facilities and improved feeder bus connections. A new rail station is also planned at Parnell.

Along with the City Rail Link, there is also a critical need for a simplified and efficient bus network which addresses increasing levels of bus congestion on key corridors which are resulting from current and expected growth in patronage and services. The simplification and splitting of main bus sectors onto separate corridors will, along with an additional bus interchange at Wellesley St to relieve pressure on Britomart, create a more effective and efficient bus network and support a high quality pedestrian environment. The bus network development will require infrastructural changes, such as more bus lanes and better bus stops, as well as the provision of a new bus layover site within the city centre.

In the future this improved bus network could be further complemented by the introduction of a higher quality public transport mode (such as light rail or trams), particularly to provide attractive and convenient travel within the city centre, the city fringe area and ultimately connecting to the wider region. This would most likely focus upon the city centre's landmark streets of Queen St and Quay St, with a possible connection with the Waterfront Tram.

Expansion of the ferry network will improve access to the city centre from around the Waitemata Harbour. Integrated ticketing is already being implemented across the region, to better link public transport services. In the longer term, an enhanced regional public transport network will include new connections to the airport and the North Shore (as part of an additional Waitemata Harbour crossing).

Walking – the easiest way to get around

The design of our streets influences people’s perceptions and experiences, so a key element of a thriving city centre is the provision of high quality, safe and efficient walking routes. Whilst the highest pedestrian emphasis is focussed on landmark streets and around the waterfront, high quality pedestrian routes are also vital for circulation around and to the city centre from the surrounding urban villages. Pedestrian access into the city centre via the limited number of available gateways can be improved, and added to, such as along the Wellesley St overbridge where no footpath currently exists. As walking is an essential part of every journey, whether by car, public transport or for commercial purposes, there must also be efficient connections to parking buildings, public transport routes and interchanges.

While vehicle access will always be required, for property access and servicing, pedestrians also need to be a primary consideration on any city centre street, making it safer, more efficient and pleasant for people to get to their destinations - shops, businesses and workplaces. There are a range of potential physical improvements available to improve pedestrian emphasis, including reductions in waiting times at intersections, the removal of pedestrian-unfriendly slip lanes, and changing traffic signal phasing, as well as improving the quality of the built environment itself.

Cycling – safe city

A high quality and connected cycle network will enable cycling to provide a significant proportion of short trips around and to the city centre. More bike parking, lower speed limits and targeted on-road facilities, along with high quality off-road paths on some corridors, will make cycling on city streets safer and more attractive.

There are several key cycling connections which will help unlock the latent demand for city centre cycling, including a Harbour Bridge cycleway and completion of the CMJ cycleway currently under development by NZTA. A central city low speed zone on key streets will allow not just for the safer mixing of cyclists and vehicles, but also assist with pedestrian safety.

Transport elements of City Centre Masterplan

The City Centre Masterplan contains a range of transport-related aspirations and initiatives as part of achieving the Mayor’s vision for the world’s most liveable city. These include broad approaches such as developing a pedestrian-first approach to managing central city streets, an extraordinary built environment of quality streets and spaces befitting a globally competitive city, as well as specific Key Moves as set out below:

Key Move	Transport issues and actions
<p>1. “North-South Stitch” uniting the waterfront with the city centre</p> <p>Giving greater emphasis to pedestrian amenity close to waterfront, as well as a public transport role, with private vehicle use of Quay St (west of Britomart Place) restricted to</p>	<p>ISSUES: In meeting the need to improve pedestrian emphasis along the waterfront and allow for better connectivity between the City Centre and Waterfront, it is vital to ensure that any changes provide for continued public transport reliability, given the proximity and importance of Britomart as well as access to Port activities. Quay St currently has a major vehicle-carrying role and reducing this will primarily place pressure on Customs St. The imminent completion of Victoria Park Tunnel should encourage greater use of CMJ for Quay St through traffic. Vehicle access will always be required, for property access and servicing.</p>

<p>local traffic, service vehicles and cruise ships related activity. Possible removal of Lower Hobson St flyover and conversion of Downtown carpark. Longer term aspiration for Quay St to become waterfront tram route.</p>	<p>ACTIONS: Further traffic modelling of the options and impacts of reducing traffic capacity is required, as initial assessments indicated major congestion would occur with the closure of parts of Quay St, due to a lack of alternatives and continued demand for adjoining parking areas. The staged development of the public transport system to better provide for city centre travel is another trigger factor. Design options to enable lane reductions could include possible one-waying of the Quay/Customs St pair. All options need to maintain public transport reliability, including consideration of the possible longer term role of light rail as part of the regional public transport system.</p>
<p>2. “East-west Stitch” connecting the western edge of the city to the core</p> <p>Giving greater emphasis to pedestrian amenity to Hobson and Nelson Streets, with eventual reduction in the number of vehicle lanes. Consideration of re-introducing two-way operation as part of this.</p>	<p>ISSUES: providing improved pedestrian emphasis on Hobson and Nelson Streets need to be balanced with their vital vehicle-carrying and distribution role as the city centre’s main connections to the State Highway network. There is definite opportunity to reduce capacity and speeds (the motorway ‘feel’) on Hobson and Nelson Streets but this will need to avoid undermining the functionality of CMJ, and may not require two-waying. .</p> <p>ACTIONS: Further traffic modelling is required of the options and impacts of reducing traffic capacity, vehicle speeds, and greater pedestrian provision, including opportunities for two-waying northern portions where feasible. Investigations are also needed into options for a new pedestrian focussed Cook St road layout appropriate for the changing land uses and NZTA’s longer term plans.</p>
<p>3. The Engine Room – CBD Auckland as the country’s international business and retail district</p> <p>Giving greater emphasis to pedestrian amenity and public transport reliability, with the longer term closure of parts of Queen St to private vehicles. Longer term aspiration for Queen St to become iconic tram route</p>	<p>ISSUES: There is support for Queen St being a high quality pedestrian-dominated corridor, whilst still retaining a continued public transport function, which is likely to be a high quality but not necessarily high capacity/speed service. It is recognised that vehicle access will always be required, for property access and servicing. Complete closure to vehicles will increase pressures on parallel and adjoining streets, including key bus routes, so needs to be carefully assessed.</p> <p>ACTIONS: Further traffic modelling of the options and impacts of reducing traffic capacity is required, specifically of impacts upon bus services, with a view to supporting partial or temporary closure to improve the pedestrian environment. All options need to maintain public transport reliability, and could include consideration of the possible longer term role of light rail as part of the regional public transport system.</p>
<p>4. Innovation and learning cradle</p> <p>Creation an innovation and learning centre based around the Learning Quarter</p>	<p>ISSUES: There is support for improving accessibility and pedestrian amenity around the Learning Quarter, particularly by public transport and active modes. There is also support for creating a high quality pedestrian environment within the area.</p> <p>ACTIONS: Investigation is required into opportunities to improve public transport, walking and cycling access to the Learning Quarter, including improvements to the pedestrian environment.</p>

<p>5. Transit Oriented Growth (TOG's)</p> <p>Redevelopment around new/existing public transport stations in Karangahape Road, Newton, Aotea Quarter, Britomart and Parnell</p>	<p>ISSUES: There is support for maximising the development potential around new and existing rail stations and, to a lesser extent, bus corridors. A key focus will be on maximising the potential of the complete regional public transport system through greater modal interchange and high quality pedestrian accessibility to stations.</p> <p>ACTIONS: Investigation is required into opportunities to improve regional public transport network utilisation and integration, including maximising redevelopment potential around new and existing stations. Investigations to also include park and ride opportunities, as well as greater use of bus feeder services to rail network and appropriate parking supply and management.</p>
<p>6. A Green Wave</p> <p>Creation of greater connections between existing city parks, including the use of planting within street network as part of a city park network, notably along a narrowed Victoria St.</p>	<p>ISSUES: There is support for using landscaping as part of improving the pedestrian environment of city streets and better connecting to the park network. Where this would require the removal of traffic lanes or parking, traffic modelling and other investigations would be required. The removal of traffic lanes is proposed along Victoria St, which is a key bus corridor and cross-city East-West traffic route. Improved connections to The Domain would require additional access across Grafton Gully.</p> <p>ACTIONS: Further traffic modelling of the options and impacts of reducing traffic capacity along Victoria St is required, specifically of impacts upon bus services, with a view to supporting greater use of landscaping to improve the pedestrian environment. Further investigations of options for additional access to The Domain across Grafton Gully should be in line with intentions to improve pedestrian access in the Grafton Rd/Wellesley St area.</p>
<p>7. City to the villages connections and gateways</p> <p>Greater public transport and active mode connectivity and accessibility to and from city fringe to city centre, enabling greater travel movements without increase in vehicle numbers or parking supply. Longer term aspiration for connections by tram</p>	<p>ISSUES: There is support for greater inner city accessibility through improved public transport services that reduce demand for private vehicle travel. This is likely to be based initially on an enhanced Link bus service, with consideration of a possible longer term role of light rail as part of the regional public transport system. There is also support for enhanced pedestrian and cyclist accessibility, particularly on 'gateways' to the city centre and around city fringe town centres.</p> <p>ACTIONS: Investigation is required into opportunities to improve public transport network accessibility and connectivity, including progressively higher quality services and longer term consideration of light rail. Investigation is also required into new or enhanced pedestrian and cyclist connections, including improved amenity on motorway overbridges and possible new crossing points, (e.g. on Wellesley St bridge to Grafton Rd). This could also include consideration of slower speed zones to improve pedestrian and cyclist safety.</p>
<p>8. Waterfront revitalisation</p> <p>Redevelopment of the eastern waterfront area (specifically Quay Park), enabled by improvements in transport infrastructure near the port. Aspirations for grade separated motorway connection to port as</p>	<p>ISSUES: There is support for developing a transport network to enable long term strategic land use outcomes in the eastern waterfront area. There is recognition of the constraints upon land uses caused by the existing mix of port-related freight traffic and city centre traffic, as well as by the presence of a range of rail infrastructure. For the foreseeable future, an upgraded The Strand is likely to be the main freight route, with less freight travelling on Beach Road or western Quay St, allowing for improved land use outcomes.</p>

well as new rail station at Quay Park.

ACTIONS: Significant investigations and assessments of options will be required to develop a plan for this complex area. NZTA and Auckland Transport have commenced this investigation into transport network options, with input from Kiwirail. Initial thoughts are that a grade separated State Highway link to port is very long term option, so an upgraded The Strand is likely to remain the main freight route for some time. Major changes to the rail lines and infrastructure, including a new station, as also considered unlikely in the foreseeable future, although there appears to be opportunity to rationalise rail land holdings.

Next Steps

Auckland Transport will scope and prepare a City Centre Transport Strategy by early 2012 to achieve the outcomes for the future development of the city centre set out in the Auckland (Spatial) Plan and the City Centre Masterplan. The Transport Strategy will cover all modes, review alternatives and set out a programme for implementation to be included in the Long Term Plan.

This will identify short term projects, trigger points for longer term projects and how the package of transport projects will work together to achieve the overall outcomes desired. This will enable the development of priorities, cost estimates and timeframes for delivery, and allow for the completion of a clear, integrated, long-term improvement programme.

A critical first step in developing the Strategy will be completing an assessment for the City Rail Link of city centre public transport access alternatives and the identification of the optimal mix of modes to meet demand, including prioritisation and sequencing of projects. This will need to include developing a multimodal programme for city centre transport, including demand management. A large part of this workstream will involve improving bus operations and addressing capacity constraints, but also the identification of land use and infrastructure improvements across the regional public transport network, such as additional residential development or park and ride at rail stations.

A key component of all city centre transport initiatives will be traffic modelling assessments, and tests will be run on the city centre model to better identify impacts and options for each Key Move. The actions identified in relation to the Key Moves above in many cases form the first actions for the delivery of the Masterplan's transport initiatives. Another early component of work will be the scoping of the study with NZTA into transport options to deliver strategic land use outcomes in the eastern waterfront area.