Auckland Transport
An Auckland Council Organisation

Strategic Case

Strategic Assessment to proceed to Programme Development

[Multi Modal East West Solution - MMEWS]

NZ TRANSPORT AGENCY
WAKA KOTAHI

Auckland Council
Te Kaunihera o Tāmaki Makaurau

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Glossary of Terms

Abbreviation	Term
AC	Auckland Council
AMA	Auckland Motorway Alliance
AMETI	Auckland Manukau Eastern Transport Initiative
AP	Auckland Plan
AT	Auckland Transport
CBD	Central Business District
CCO	Council Controlled Organisation
EMA	Employers and Manufacturers Association
FTN	Frequent Transit Network
GDP	Gross Domestic Product
GPS	Government's Policy Statement on Land Transport Funding 2012/13–2021/22 July 2011
HCV	Heavy Commercial Vehicles
IRS	Investment Revenue Strategy
IEG	Implementation Executive Group
ITP	Integrated Transport Programme (Draft)
JTOC	Joint Transport Operations Centre
KPI	Key Performance Indicator
LB	Local Board
LTMA	Land Transport Management Act
MMEWS	Multi Modal East West Solution
NRC	National Road Carriers
NZTA	New Zealand Transport Agency
NZTS	New Zealand Transport Strategy
OBL	Onehunga Branch Line
PBC	Programme Business Case
PT	Public Transport
RLTP	Regional Land Transport Programme
RLTS	Regional Land Transport Strategy
RTN	Rapid Transit Network
SH(#)	State Highway (#)
SMART	South Western Muiltimodal Airport Transit project
TEU	Twenty-Foot Equivalent Unit
Vpd	Vehicles per day

Executive Summary

This strategic assessment outlines the context and case for change in relation to a proposed investment programme to improve east west connectivity through Auckland's industrial belt (Onehunga/Penrose/Mt Wellington/East Tamaki).

The purpose of this document (strategic assessment) is to provide the senior management with a high degree of confidence that investing in Multi Model East West Solution (MMEWS) project aligns with strategic priorities and will respond to a true need. It also provides the senior management with early opportunity to determine if the proposal warrants the on-going development of a programme business case.

The programme business case will be co-sponsored by Auckland Transport (AT) and the New Zealand Transport Agency (NZTA) in partnership with Auckland Council (AC). It will be developed under the overarching strategic direction of the Auckland Plan (2012) with strong linkages to Central Government's Government Policy Statement on Land Transport Funding 2012/13 - 2021/22 (GPS2012).

A number of key stakeholders external to AT, NZTA and AC also have influence on the project outcomes. These include: Kiwi Rail; Port of Auckland; Port of Tauranga; Auckland Business Forum; National Road Carriers and Iwi.

A facilitated Investment Logic Mapping workshop was held with the project partners (AT/NZTA/AC) and key stakeholders to gain a better understanding of the transport problems affecting the study area, as well as the potential benefits to be realised in successfully responding to these problems. The stakeholder panel, which included senior management from NZTA, AT, AC, KiwiRail, Port of Tauranga, Employers & Manufacturers Association identified and agreed the following key problems.

- **Problem one**: Inefficient transport connections increase travel times and constrain the productive potential of Auckland and the upper north island (45%).
- **Problem two**: A lack of response to changes in industry's supply chain strategies contributes to greater network congestion, unpredictable travel times and increased costs (30%).
- **Problem three**: The quality of transport choices is inadequate and hinders the development of liveable communities (25%).

The potential benefits that could be realised through successful investing to address the identified problems were then identified through a second facilitated Benefit Mapping workshop. The stakeholder panel identified and agreed the following potential benefits for the proposal, including the relative weighting in brackets which indicates the relative importance of fully realising the benefit:

Benefit 1: Greater business connectivity (25%).

Benefit 2: Greater economic throughput in and out of the area (20%).

Benefit 3: Greater control over congestion (20%).

Benefit 4: More predictable travel times and lower average travel times (15%).

Benefit 5: Improved safety (10%).

Benefit 6: Improved accessibility (10%).

MMEWS has been assessed to achieve a HH(M) ranking against NZTA's Investment and Revenue Strategy (IRS).

The project team now requests approval from the senior management to progress with the development of a programme business case. The primary purpose of the programme business case will be to:

- Confirm the case for change and the need for investment through the collection and analysis of demonstrable evidence;
- Recommend a preferred programme and a preferred way forward;
- Identify the key asset and non-asset based projects that will support the programme outcomes; and
- Seek early approval of the governance boards to develop subsequent project based business cases.

PART A – THE STRATEGIC CASE

1 Introduction

This strategic assessment outlines the context and case for change in relation to a proposed investment programme to improve east west connectivity through Auckland's industrial belt (Onehunga/Penrose/Mt Wellington/East Tamaki). An investment programme known as the Multi Modal East West Solution (MMEWS) is being considered collaboratively through a cross-agency project by representatives from Auckland Transport, Auckland Council, and NZ Transport Agency.

The study area for the MMEWS project is shown in Figure 1 below.

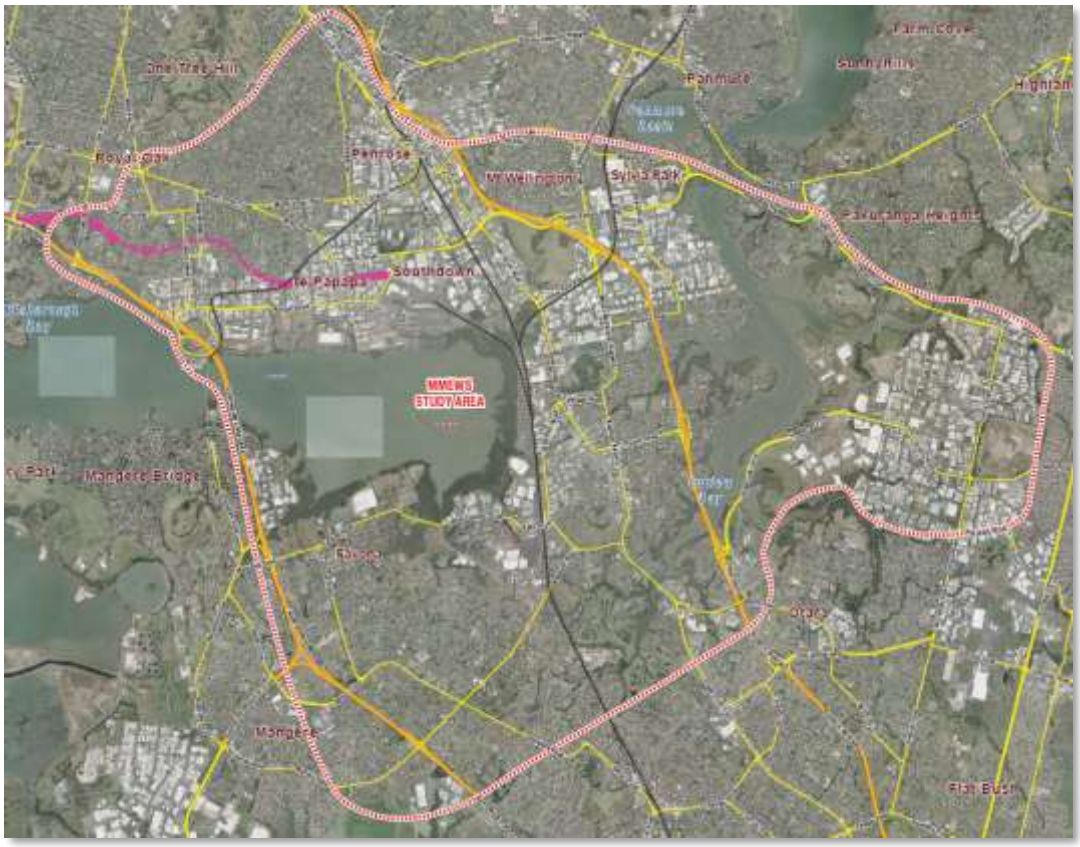


Figure 1: MMEWS Project Area

The purpose of this strategic assessment is to seek approval to progress the programme business case for investment in the MMEWS area in accordance with Treasury and NZTA guidance on Better Business Cases. To do so, this document:

1. Outlines the strategic context and fit for the proposed investment;
2. Identifies the key problem or rationale for investing; and
3. Identifies the potential benefits of investing.

The next deliverable will be the programme business case, that will collect evidence to confirm (or otherwise) the case for change and also identify the preferred programme / project mix.

Once the programme business case is approved by the governing body, separate more detailed business cases for each project within the programme will be developed in the future as the programme is progressively developed and implemented by the agencies concerned in the years ahead. The process is illustrated in the diagram below.

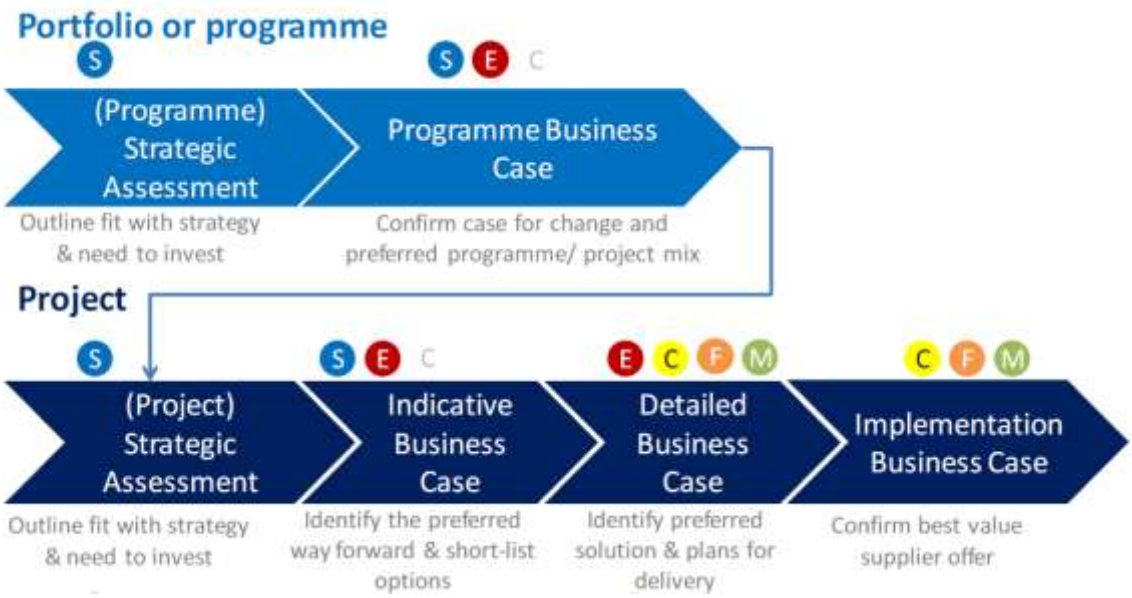


Figure 2: Overview of Better Business Case Process.

S — Strategic Case -Is the proposed investment supported by a compelling case for change?

E — Economic Case -Does the preferred investment option optimise value for money?

C — Commercial Case -Is the proposed deal commercially viable?

F — Financial Case -Is the proposed spend affordable?

M — Management Case - How can the proposal be delivered successfully?

2 Strategic Context

The programme business case is co-sponsored by Auckland Transport and the New Zealand Transport Agency and has been developed in partnership with Auckland Council. It will be developed under the overarching strategic direction of the Auckland Plan (2012) with strong linkages to Central Government's Government Policy Statement on Land Transport Funding 2012/13 - 2021/22 (GPS2012).

A brief overview of the priorities and operating environment for each of the project partners and the outcomes they seek to achieve are discussed below.

2.1 Organisational Overview

The New Zealand Transport Agency and Auckland Transport are together responsible for the planning, development, operation, and maintenance of the road transport network throughout Auckland. On 03 March 2011, the governing boards of each agency signed on to a Partnership Charter for Transport Operations which commits the agencies to working together as "One Team". This is a commitment to ensuring a coordinated approach is taken to investment in and operation of Auckland's transport network – a "One Network" approach.

2.1.1 Auckland Transport

Auckland Transport is a council-controlled organisation of Auckland Council. It has the responsibility for all of the region's transport services (excluding state highways) – from roads and footpaths, to cycling, parking and public transport.

The organisation is responsible to give effect to the strategic direction for transport in the Auckland Plan. It has developed an integrated transport programme that identifies the following overarching outcome: **Auckland's transport system is effective, efficient and provides for the region's social, economic, environmental and cultural wellbeing.**

It further identifies the following six impacts through which the organisation aims to achieve this outcome:

1. Better use of transport resources to maximise return on existing assets;
2. Auckland's transport network moves people and goods efficiently;
3. Increased access to a wider range of transport choices;
4. Improved safety of Auckland's transport system;
5. Auckland's transport system effectively connects communities and provides for Auckland's compact urban form; and
6. Reduced adverse environmental effects from Auckland's transport system

2.1.2 New Zealand Transport Agency (NZTA)

The NZTA is responsible for giving effect to the Government Policy Statement (GPS2012), which sets out the government's strategic direction for investment in the land transport network. This role extends from planning and funding activities, supporting public transport,

building the networks that connect communities, to ensuring the people and vehicles that use the system are safe to do so.

One of the key responsibilities for the NZTA in Auckland is the effective operation of the city's motorway network.

The Land Transport Management Act (LTMA) 2003 requires the NZTA to assess all potential projects against the GPS, the relevant Regional Land Transport Strategy and the New Zealand Transport Strategy's five (5) current key strategic priorities listed below:

1. Improving customer service and reduce compliance costs.
2. Planning for and delivering Roads of National Significance.
3. Improving the road safety system.
4. Improving the efficiency of freight movement.
5. Improving the effectiveness of public transport.

2.1.3 Auckland Council

The Auckland Council is a new model of local government for New Zealand, designed to strengthen regional leadership while providing effective local and community democracy.

Auckland Council has two complementary and non-hierarchical decision-making parts:

- The governing body, consisting of a mayor elected by all Aucklanders and 20 councillors elected on a ward basis
- 21 local boards, with members elected by local board area.

The governing body and the local boards will share the decision-making responsibilities of Auckland Council:

- The governing body will focus on the big picture and on region-wide strategic decisions
- Local boards will represent their local communities and make decisions on local issues, activities and facilities.

Auckland Council will deliver services through the council organisation and council-controlled organisations. Transport functions are delivered through Auckland Transport.

2.2 Alignment to Existing Strategies

As mentioned above – MMEWS will be developed under the overarching strategic direction of the Auckland Plan (2012). The Auckland Council has developed the Auckland Plan – a spatial plan which sets the strategic direction for Auckland and its communities. The plan integrates social, economic, environmental, and cultural objectives and outlines a high-level development strategy to give direction and enable coherent, coordinated decision-making by Auckland Council and other parties.

The Auckland Plan recognises a large part of the study area of MMEWS as a major employment area which is regionally significant, particularly with the inland port and location of large numbers of transport and manufacturing businesses.

In the Auckland Plan, Onehunga is identified as a town centre - medium density with medium to low rise (Engagement Draft Unitary Plan proposes a height limit of 8 stories), balance of residential and employment 0.8:1. The surrounding residential area in the suburbs is identified for intensification (moderate change). It is important to note that residential is not planned for the northern coastal edge. Growth in economic activity in this area will result in increased movement of vehicles. This creates a significant challenge given the current high levels of movement and congestion.

The Auckland Plan recognises the importance of a "one network" approach to planning and implementation of transport solutions, which need to be multi-modal. This is in the context of a transformational shift in Auckland to improved public transport.

From a transport perspective, the Auckland Plan enables transport infrastructure decisions to be integrated with land use planning decisions so as to minimise the negative impacts of transport on communities while allowing for optimum efficiencies to be achieved for the operation of the transport network. Chapter 13 of the Auckland Plan provide strategic direction on how investment in transport should be directed to create better connections and accessibility within Auckland, across New Zealand and to the world. It includes among a set of 5 transport related targets, a specific target to reduce congestion levels on the strategic freight network to at or below the average of 2006-2009 levels by 2021 (average daily speed of 45 km/h).

The AMETI and East West Link (now MMEWS) is a combined project that is ranked 2nd priority in the Auckland Plan because of their transformative effects on productivity and economic development. The Auckland Plan further includes Directive 13.5 that requires the progression of the planning for the East-West Link with implementation by 2021, subject to funding.

The AMETI and East-West Link components are closely related because of their geographic location and interdependencies, particularly in relation to freight and east-west traffic movements. The Auckland Plan proposes to integrate AMETI and the East-West Link to build on the synergies between them, to maximise funding opportunities and to align investment in transport and land use development.

The Auckland Plan identifies a range of principles for integrated land use and transport planning as set out in Box 13.1, which includes ensuring that long-term land use and activities drive long-term transport functionality, (taking into account the existing and proposed transport network) and that transport investment aligns with growth as envisaged in the Auckland Plan. One final consideration is that the Auckland Plan requires that major projects are evaluated in terms of their cost effectiveness, taking into account wide benefits and costs.

From a central government perspective the Government's Policy Statement on Land Transport Funding 2012/13–2021/22 July 2011(GPS 2012) requires the transport programme to prioritise activities that advance economic growth and productivity, value for money and road safety. It includes specific impacts sought through transport investment.

3 Identifying Key Stakeholders

Stakeholders who will have a major interest in or influence on the project at a sub-regional level have been identified and the initial project drivers have been discussed with these stakeholders. The stakeholder group may change as the project progresses through investigation, design and construction phases.

3.1 Project Partners

Auckland Transport and NZTA are jointly leading the development of the MMEWS study and as such are primary partners in this endeavour. Auckland Council is also a partner in the development of the programme business case in order to ensure that land use and planning is properly accounted for in the development of the strategic response to the identified problems in the MMEWS study area. Each project partner is responsible for ensuring their own internal business units and teams are kept informed and provided opportunities for input and feedback as appropriate.

An **Implementation Executive Group** (IEG) has been established to coordinate strategic direction for the project as well as it's integration with other large projects in the area (AMETI and SMART). The IEG is comprised of senior officials from each of the project partners who ensure the strategic direction of this project remains align with the overall organisational direction.

Auckland Transport: Auckland Transport is the primary project partner charged with leading the development of the business case. Internal teams which are key to ensure a robust business case process are: Major Projects, Strategy and Planning, Investigation and Design, Community Transport, and Public Transport Operations.

NZ Transport Agency: NZ Transport Agency is a project partner. The NZ Transport Agency is currently working with Treasury to develop a transport specific business case approach, which is proposed to be employed for the MMEWS project. Internal teams which are key to ensuring proper buy-in to the business case process are: Transport Planning, Network Operations and Safety, Planning and Investment, Access and Use, Joint Transport Operations Centre (JTOC), and Auckland Motorway Alliance (AMA).

Auckland Council: Auckland Council will be preparing / updating the various Area Plans to consider appropriate land use and associated policies which will give effect to the strategic direction set in the Auckland Plan. Auckland Council input will provide strong integration between the land use and transport solutions proposed. Internal teams which are key to ensuring proper buy-in to the business case process are: Built Environment, Economic Development, Transport Strategy, and Regional and Local Planning.

Local Boards (Howick, Maungakiekie-Tamaki, Mangere-Otahuhu and Otara – Papatoetoe): The Local Boards are part of Auckland Council and will be crucial in providing early input into how any proposals may impact on the local communities directly affected by the MMEWS study.

3.2 Key Stakeholders

A number of key stakeholders external to AT, NZTA and AC also have influence on the project outcomes. These organisations and their anticipated role and interest in the project are summarised below:

Kiwi Rail: Issues such as the current and future operations of the Southdown freight terminal, alignment options to connect the Onehunga branch line with the proposed Airport link, the future of the proposed Avondale-Southdown rail link, and the balance between freight and commuter rail requirements require extensive involvement from KiwiRail.

Port of Auckland: The Port of Auckland is a key trip generator in the area through the amount of freight that is shifted between the Port and the businesses located within the study area. Port of Auckland also owns property in the study area.

Port of Tauranga: Port of Tauranga is a key trip generator in the area as owners of the MetroPort inland port, which is centrally located in the study area.

Auckland Business Forum: The business community has identified the improvement of east west connectivity in the study area as one of their highest priority issues and would be a valuable contributor in understanding the nature and scale of the problem, and the potential benefits of investment in the area.

National Road Carriers (NRC): Like the Auckland Business Forum, the NRC has long advocated for improvements to the transport network in the MMEWS study area, including the provision of a new link between SH1 and SH20. The working knowledge of the day-to-day operation of the transport network, as understood through their collective membership of operators, will be highly valuable in understanding the nature and scale of the transport problem, and the potential benefits of investment in the area.

Transpower: A number of Transpower corridors run through the area and future Transpower expansions to their network may impact significantly on transport and land use solutions.

Iwi: The investment programme may require new alignment options, and these could be located within areas of cultural and environmental importance to Iwi (for example Manukau Harbour, Tamaki Basin and Volcanic Cones) and as such, their early involvement and input to the project will be key.

A number of key stakeholder (except Transpower) workshops were held with the above organisations to understand their transport issues in the area.

4 Outlining the Need for Investment

4.1 Operating environment

Growth in Population and Employment

Auckland's population has grown steadily for many decades. Recent projections in the Auckland Plan 2012 suggest that by 2040, Auckland could reach a population of between 2.2 and 2.5 million. In addition, employment projections suggest that the total number of employees in Auckland could range between 870,000 and 1.04 million by 2041. These anticipated growth rates in population and employment are expected to increase road freight by at least 60% over the next 30 years.

It is further projected that 40 percent of the forecasted growth in employment in New Zealand between 2006 and 2041 will be from Auckland, where Auckland is defined as the four former cities of North Shore, Auckland, Waitakere, and Manukau.

The growth in population and employment will put increasing pressure on the strategic transport network in the Auckland region. For highway users the backbone of this is provided by the State Highway (SH) network – SH1 running on a north-south axis through the region and SH20/SH16/SH18 provides the Western Ring Route. There is currently limited high quality strategic connections between these two routes in particular between the airport and airport business area to the south west and the key business areas of Mount Wellington, East Tamaki and Otahuhu to the east which is putting pressure on the road network in the vicinity of the Manukau Harbour.

At a more local level the latest data indicated approximately 66,450 people lived in the MMEWS area (2012). Between 2006-2012 the population in the MMEWS area increased by 16.1% as compared to 8.6% for the Auckland region. The work places in the area have maintained their economic share in Auckland over the past decade and contribute 11.3% of Auckland's GDP. Looking at the MMEWS area specifically, there is a significant difference between workplace GDP and residence based GDP, which suggest that the MMEWS area relies heavily on inbound commuting employees. The key sectors have also remained the same over the last decade, with manufacturing / construction, wholesale / storage / transport and business service / finance / government constituting 79% of the total GDP for the MMEWS area.

The MMEWS study area, specifically the area to the north of the Mangere Inlet, has grown into the industrial heartland of Auckland's economy. This area is home to NZ's third largest container port, some of NZ's largest freight operators, and a host of growing logistics firms. The business generated within this industrial belt is key to sustaining and driving Auckland's economy and as such, business groups such as the Auckland Business Forum and National Road Carriers have lobbied local and central government for improvements to the strategic network in the area.

Although the Neilson Street area is seen as an attractive location for logistics type operations as it provides good access to both rail and the SH network to east and west, the connections to neighbouring industrial areas are constrained, both by conditions on the road networks at the ends of the routes, conditions on the wider transport network within the Auckland region and the rather circuitous connections especially for many movements to the east of the corridor. These affect movements to areas to the west and south such as Rosebank and the rapidly growing airport industrial area, and to the west to areas like Highbrook. The problems

with the network also affect the longer distance movements between areas such as the airport and Mount Wellington and Highbrook, where no high quality through route exists. No direct connections for instance exist that connect the Neilson Street Corridor with SH1 via south facing ramps. The existing connectivity between Onehunga and East Tamaki currently entails a 13.8km route on congested arterials, through 17 signalised intersections. Previous routes identified for the East-West Link could reduce this to 10.3km and 4 signalised intersections.

East-West movements north of Mangere Inlet

The main east-west route through the employment belt for both local and longer distance traffic is currently provided along Church Street/Neilson Street. As a result, this regional arterial carries high traffic volumes ranging from 30,000 vpd near Onehunga Mall to the west to 48,000 vpd in Church Street to the east. These flows include a high proportion of heavy commercial vehicles with approximately 11-13% of all traffic in the peak classified as HCV, and up to 22% during the inter peak.

The route serves a combination of through traffic and local traffic serving the activities located in the area. It is estimated that about 20 per cent represents through movements with the balance serving the locations along the Neilson Street/Church Street route or accessed via the roads leading off it.

Operating conditions in the interpeak period when the majority of freight traffic travels are averaging about 37 km/h for the complete route westbound and 31 km/h in the eastbound direction. These would give total travel times between Great South Road and Onehunga Mall of between 6 and 7 minutes.

At the peak, congestion occurs at the two ends of the corridor where this connects with SH20 and SH1. Delays at Onehunga Mall can reach 10 minutes for westbound traffic with congestion starting in the mid afternoon and remaining until about 6pm. To the east the delays at individual locations are not so large although in total particularly for traffic accessing SH1 to the south which involves a circuitous route with 6 sets of traffic lights the cumulative delays would increase journey times by 4-5 minutes in the evening peak.

Freight traffic patterns are such that heavy commercial vehicle flows start falling from about 4 pm, reflecting the requirements of customers and also the desire to avoid congested conditions across the Auckland road network. In the interpeak these heavy vehicle flows would typically account for 20-25 per cent of total flows but in the evening peak this falls to 9 to 12 per cent of the total traffic flow. Although smaller than in the middle of the day, these flows are still substantial with up to 350 heavy vehicles travelling east along Church Street between 4 and 6:30 pm and facing the high levels of congestion.

East-West movements south of Mangere Inlet

Previous studies have identified that PM congestion along Great South Road and surrounding networks restricts the accessibility to the Airport from East Tamaki. This causes re-routing of the majority of traffic to the SH1/20 connection to the south as well as to SH20B.

The local board has also expressed concern with the operating conditions on Massey Road which is used as a connecting route between East Tamaki and the general area of the airport. The route has not been designed with movement function in mind and has similar movement vs. accessibility issues as experienced north of the Mangere Inlet.

Concerns were also raised with the high amount of heavy vehicle movements on this route, which run predominantly through a residential area, with direct access to residential properties of the road.

Safety

The performance of the road network is also affected by the relatively large number of vehicles using the rights of way south of Neilson Street particularly in the east, the location of many of the major logistics activities including the Metroport inland port, the KiwiRail Southdown Freight terminal and a number of major transport and logistics companies including Toll and Tappers. The volumes using these rights of way which have relatively poor access onto Neilson Street are substantial with over 2000 heavy vehicles per day using the Metroport access and 1000 per day using The Gate access. These movements which include a high proportion turning across the opposing traffic stream are considered to be particularly hazardous and are seen as a serious problem by firms in the area.

A total of 2,877 crashes were recorded over the last 5 years. Of these 7 were fatal and 80 serious injuries.

There are also a large number of at-grade level crossings on the Onehunga Brach line. These have been associated with 1 fatal and 1 serious injury crash over the last 5 years. The number of incidents recoded at the level crossings has however more than doubled after more frequent services has been introduces on the OBL.

Passenger Transport

The area is services by a mixture of bus and rail public transport services. The Rapid Transit Network (Onehunga Branch line) reopened in 2010 and extends into the study area and currently attracts about 700,000 passengers per year or an average of 60,000 per month. From the Census results for 2006 before the line was reopened, about 6 per cent of all journeys to work by residents of the Onehunga Penrose area were undertaken by public transport, mainly by bus. This compares with an average of about 9 per cent of journey to work trips being undertaken by public transport for the Auckland City area as a whole. The new Census will provide an opportunity to update these figures.

The rail line is only single track and has numerous level crossings along this stretch. The SMART study proposes extending this branch line over the Manukau Harbour to connect the existing rail network with the airport and surrounding business land. By this stage the line will be double tracked providing a more frequent and robust service than is currently operated and so will be able to play a greater role in providing for residents and workers in the area. The work on upgrading the track will need to be supported by measures to improve the perceived accessibility of the stations.

4.2 Defining the Problem

With competing interests between industrial and residential growth in an already developed area, there is a real need to understand the key constraints on the transport network in order to more fully comprehend the strategic solution that will improve connections in the area while accommodating and enabling the continued growth envisioned by the Auckland Plan. It is vital for the region's economy that reliable and resilient transport infrastructure is in place to support the ongoing growth and expansion of industry and related activities now and into the future.

A facilitated Investment Logic Mapping workshop was held with key stakeholders on 8 November 2012 to gain a better understanding of the nature and scale of transport problems affecting the study area. The stakeholder panel, which included senior management from

each of the Project Partners (NZTA, AT, Auckland Council, KiwiRail, Port of Tauranga, Employers & Manufacturers Association) had participated in these workshops identified and agreed the following key problems. In brackets are the relative weighting assigned to the problems in terms of the importance of addressing the problem.

Problem 1	Inefficient transport connections increase travel times and constrain the productive potential of Auckland and the upper north island (45%).
Problem 2	A lack of response to changes in industry's supply chain strategies contributes to greater network congestion, unpredictable travel times and increased costs (30%).
Problem 3	The quality of transport choices is inadequate and hinders the development of liveable communities (25%).

Focus of each problem is indicated in the table below;

Problem 1	Focuses on *strategic issues* and the role of an east-west connection in the transport network serving the whole of the Auckland region and upper North Island.
Problem 2	Focuses on the *local issues* affecting economic activities in the area with a particular focus on the transport and logistics activities for which the area offers particular benefits and which form a key part of economic activity.
Problem 3	Focuses on *local issues* of the residents of the area.

Problem 1 Problem 2 Problem 3

The Investment Logic Map, produced as part of the workshop, is attached as **Appendix A**

4.3 The Benefits of Investment

The potential benefits that could be realised through successful investing to address the identified problems were also identified through a facilitated Benefit Mapping workshop held on 26 November 2012. The stakeholder panel identified and agreed the following potential benefits for the proposal, including the relative weighting in brackets which indicates the relative importance of fully realising the benefit:

Problem 1	Benefit 1: Greater business connectivity (25%). Benefit 2: Greater economic throughput in and out of the area (20%).
Problem 2	Benefit 3: Greater control over congestion (20%). Benefit 4: More predictable travel times and lower average travel times (15%).

Problem 3	Benefit 4: More predictable travel times and lower average travel times (15%). Benefit 5: Improved safety (10%). Benefit 6: Improved accessibility (10%).

Further work has been done since the workshop to expand on the problem and benefit statements and to identify potential investment KPI's, as well as establishing a base line and expected target against each KPI. These are summarised in the Benefit Management Plan attached as **Appendix B**

5 Strategic Assessment

The MMEWS programme has been created to give effect to strategic responses identified in a number of already approved strategies. The following section demonstrate how the MMEWS programme align to these relevant national, regional, sector and organisational strategies of the Auckland Council, Auckland Transport and NZTA.

The table below illustrates how the MMEWS programme aligns with strategic direction of the Auckland Plan and the GPS as well as further alignment with local and regional plans like AT's draft Integrated Transport Programme and Statement of Intent; the Onehunga Precinct Plan; Church-Neilson Street Precinct Plan; East Tamaki Business Precinct Plan; Tamaki Maungakiekie Local Board Plan; and the draft Otahuhu Mangere Area Plan.

	Objectives and wider strategic context in which AT/NZTA operate		The problem or business need that is causing AT/NZTA to consider a new investment
	Strategic document	**Targets / directives /impacts and priorities**	
Road network improvements	Auckland Plan	Reduce congestion levels on the strategic freight network to at or below the average of 2006-2009 levels by 2021 (average daily speed of 45 km/h)	The Onehunga Mall/ Gloucester Park interchange is currently a significant bottleneck on the strategic freight network. The traffic in the Onehunga / Penrose area has a very convoluted route to gain southbound access onto the southern motorway. East Tamaki has no direct route to connect this industrial area with the Airport / business area at the airport. The Southdown Freight terminal, located in this area, including Metroport is handling approximately 270,000 Twenty-foot Equivalent Unit (TEU), making it the third busiest freight terminal in New Zealand after Ports of Auckland and Port of Tauranga. The programme is therefore targeted at finding optimum investment requirements aimed at reducing the travel time and improving journey time reliability for freight in the study area to optimise the overall operation and utilisation of the freight supply chain both for movements into and out of the area and longer distance strategic movements. It targets improved connections to and from the inland port and freight terminal at both a local level (access onto Neilson Street) and a more strategic level. It also aims to improve east west connectivity through Auckland's industrial belt (Onehunga/Penrose/Mt Wellington/East Tamaki), and improve connectivity between East Tamaki and the Auckland Airport. Unforeseen events on the state highway (especially crashes in peak hour) can significantly delay journey times for commuters and freight. Improving the linkages between SH20 and SH1 would strengthen the ability for SH20 and SG20 to support each as a network to accommodate unforeseen events.
	Auckland Transport (AT) – Statement of Intent AT - Integrated Transport Plan	Transport network moves people and goods efficiently	
	Government's Policy Statement on Transport.	Improvements in journey time reliability	
		Easing of severe congestion	
		More efficient freight supply chains	
		Better access to markets, employment and areas that contribute to economic growth	
		A secure and resilient transport network	
	Onehunga Precinct Plan (Key Outcome by 2050)	Work with NZTA to achieve an upgrade of the interchange to SH20.	
		Work with NZTA regarding a state highway connection between SH20 and SH1 to ensure positive outcome for Onehunga community.	
	Otahuhu – Mangere Area Plan	Put in place transport initiatives to make the existing transport network and freight movements more effective, particularly on local arterial roads.	
		Provide a strategic 'east-west' dedicated road link for freight that links East Tamaki and southwestern motorway to the airport.	
	East Tamaki Business Precinct Plan (Outcomes)	Connections are provided that promote business to business activities and land uses both within the precinct and beyond.	
		The efficient movement of both goods and people is facilitated.	

	Objectives and wider strategic context in which AT/NZTA operate		The problem or business need that is causing AT/NZTA to consider a new investment
	Strategic document	**Targets / directives /impacts and priorities**	
Public Transport Improvements	Auckland Plan	Double public transport trips by 2022 and increase PT's share of trips into the CBD to 70% by 2041.	The MMEWS area currently has very low uptake of public transport, especially in an east-west direction. The AP proposes a metropolitan centre at Sylvia Park, and also significant growth in the town centres of Onehunga and Mangere. This will increase a demand for travel between these nodes and the new public transport network plan proposes two FTN routes to connect these centres. (one route to the north of the Mangere Inlet and one to the south). These routes currently have a low level to non-existent infrastructure to support FTN type routes, and also have very limited facilities to support integration between the FTN and rail stations. Investment is required to ensure the reliability of bus travel times along these routes, as well as to enhance the attractiveness and ease of use. For example, congestion at the Gloucester Park interchange provide a reliability issues to bus schedules whilst a large number of bus stops on these routes have no bus shelters or seating. Integration between bus and rail is also difficult due to placement of bus stops relative to rail stations, and the quality / type of infrastructure to support transfers between these modes. The SMART project is also considering the expansion of RTN services from the airport to Onehunga, and these would have an impact on the operations along the Onehunga Branch Line.
	Auckland Transport (AT) – Statement of Intent AT - Integrated Transport Plan	Increase access to wider range of transport choices	
	Government's Policy Statement on Transport	More transport choices, particularly for those with limited access to a car	
	Onehunga Precinct Plan (Key Outcome by 2050)	Advocate to KiwiRail to designate land to protect future rail routes to the Airport and Avondale, including provision for double tracking.	
		Short term - Improve pedestrian facilities between existing Onehunga bus station and Onehunga Rail station. In long term – co-locate bus and rail interchange facilities.	
		Provide an appropriate park and ride facility for passenger transport users	
	Onehunga Precinct Plan (Key Outcome by 2050)	Provide a new rail network link from Onehunga to the Airport	
		Provide frequent bus services from Onehunga, Mangere Bridge, Mangere Town Centre and Otahuhu to the Airport	
	East Tamaki Business Precinct Plan (Outcomes)	Identify amenity improvements to walking and cycling connections to support the provision of public transport services.	
		Undertake a service review to ensure public transport provision maximises opportunities to serve demand and reflect work patterns	

	Objectives and wider strategic context in which AT/NZTA operate		The problem or business need that is causing AT/NZTA to consider a new investment
	Strategic document	**Targets / directives /impacts and priorities**	
Safety Improvements	Auckland Plan	Reduce road crash fatalities and serious injuries to no more than 410 by 2020.	The key east-west corridors in the study area has no clear hierarchy and as a result has a combined function of providing local accessibility to individual land uses, as well as mobility for through traffic. These movements which include a high proportion turning across the opposing traffic stream are considered to be particularly hazardous and are seen as a serious problem by firms as well as the local community in the area. The MMEWS project area has a total of 2,877 crashes recorded over the last 5 years. Of these 7 were fatal and 80 serious injuries. There are also a large number of at-grade level crossings on the Onehunga Brach line. These have been associated with 1 fatal and 1 serious injury crash over the last 5 years. The number of incidents recoded at the level crossings has however more than doubled after more frequent services has been introduces on the OBL.
	Auckland Transport (AT) – Statement of Intent AT - Integrated Transport Plan	Improve safety on Auckland's transport system	
	Government's Policy Statement on Transport	Reductions in deaths and serious injuries as a result of road crashes	
	Onehunga Precinct Plan (Key Outcome by 2050)	Improve pedestrian safety at intersections of Onehunga mall with Arthur Street, Church Street and princess Street	
		Improve traffic safety at the intersections of Selwyn Street with Arthur Street and of Church Street with Neilson Street.	

NZTA's Investment and Revenue Strategy (IRS)

The NZTA's IRS is a tool which guides investment decisions in giving effect to the GPS 2012. It enables smarter decisions by ensuring investment is directed to the activities which will be most effective in delivering on national priorities and long term outcomes. In short, it helps to invest in the right things, at the right time, delivered in the right way and for the best possible price.

It is anticipated that the MMEWS project will address or respond to the IRS in the following ways:

	IRS Assessment Criteria	**MMEWS alignment**
Strategic Fit (High)	New and improved infrastructure for state highways/local roads; potential for a nationally significant contribution to economic growth and productivity through significant improvements to (one or more): • Journey time reliability • Easing of severe congestion in major urban areas • Relieving capacity constraints • More efficient freight supply chains • A secure and resilient transport network	The MMEWS study is largely intended to deliver improvements to known areas of congestion along high volume strategic urban routes. The study is targeted first and foremost at providing greater journey time reliability for freight, and providing improved connectivity especially along strategic freight routes and for strategic freight movements. Improvements to the linkages in the transport network will provide for greater network resilience
Effectiveness (High)	• Is a key component of an NZTA supported strategy, endorsed package, programme or plan • Is part of a whole of network approach • Improves integration between transport modes • Provides a solution that successfully integrates land transport, land use, other infrastructure and activities • Supports networks from a national perspective • Provides a solution that significantly contributes to multiple GPS impacts • Is optimised against multiple transport outcomes and objectives	The project takes a one-system approach; is a joint AT/NZTA project considering potential state highway and local road solutions; considers better utilisation of the RTN; and considers cycle connectivity and pedestrian safety and amenity. The project seeks to address the poor quality of transport choices to/from and within the study area, which is potentially hindering the development of liveable communities.

	IRS Assessment Criteria	MMEWS alignment
Efficiency **(Medium)**	**High:** BCR greater than or equal to 4 Benchmarking shows above-average efficiency (of cost-effectiveness) **Medium:** BCR greater than or equal to 2 and below 4 Benchmarking shows average efficiency (of cost-effectiveness) **Low:** BCR greater than or equal to 1 and below 2 Benchmarking shows below-average efficiency (of cost-effectiveness)	BCR ratios have not been considered as part of the strategic case assessment. This is likely something that will be covered in the development of the Programme Business Case, with some rough order ranges of BCRs assigned to the various programmes. It is assumed that given the current state of congestion along some of the key routes in the study area that a moderate BCR could be generated by the better performing programmes. Given the strategic importance of the study area to the economic well-being of the region and NZ as a whole and the likelihood for fairly significant benefits to the wider economy from any investment, the assessment of wider economic impacts (that would be derived if the project investment objective outcomes are met) are considered to be an appropriate approach to be used in the assessment of the proposed programmes.

PART B – READINESS TO PROCEED

6 Programme Business Case Scoping

Sponsor	**Auckland Transport**

Anticipated size of the investment (high level only):	
Programme Capital Cost	The Auckland Plan shows timing of the initial expenditure ($250 Million) prior to 2015, with the remaining $1 Billion between 2021 and 2030

6.1 Right Sizing the Capacity/Capability of the Team

6.1.1 Programme Business Case Dates

Start Date for developing the Programme Business Case (PBC):	June 2012
Start Date for the PBC Review:	August 2013
Date for Final Approval Decision:	Last quarter of 2013

6.1.2 Estimated Cost to Develop the Programme Business Case

A total amount of $1.5 Million has been budgeted for the development of the programme business case.

6.1.3 Project Team

The programme business case will be developed through an in-house project team, made up of representatives from the three partner organisations. Consultants will be employed to assist the team with data collection, traffic modelling, economic benefits assessments, and any other areas deemed necessary and appropriate by the project team. The diagram below illustrates the governance structure and makeup of the project team.

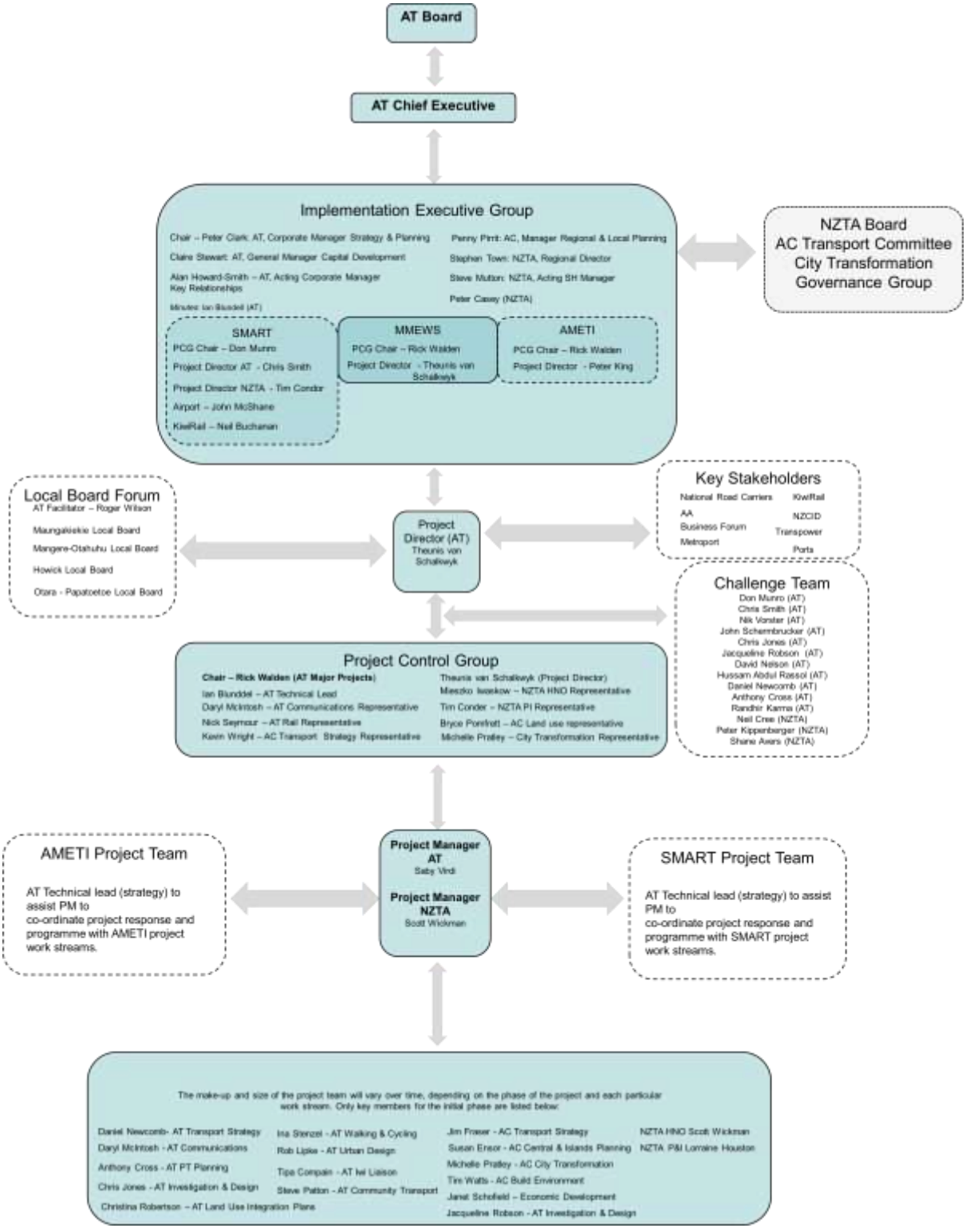


Figure 3: Project Governance Structure

6.2 Right Sizing the Effort

6.2.1 Strategic Case

The Strategic Assessment has articulated the problem and benefit statements as described in this document. The effort moving forward is now in confirming this through demonstrable evidence To do this requires the following work streams:

Origin Designation Traffic Survey: To provide a robust foundation for the basis for the analysis and problem definition. The information captured would provide a comprehensive framework for the identification of transport issues and problems within the area, identifying the patterns of movements and the problems which these potentially face at the current time.

Economic Assessment: The rationale for this project is strongly driven by the need to meet existing and future needs of business within the project area. Therefore, an important part of the investigation phase will be to develop a good understanding of how congestion and/or the poor connectivity is constraining the ability of the area to maintain or increase its contribution to the economy (through employment and output). The economic assessment investigation will look to provide evidence on questions like:

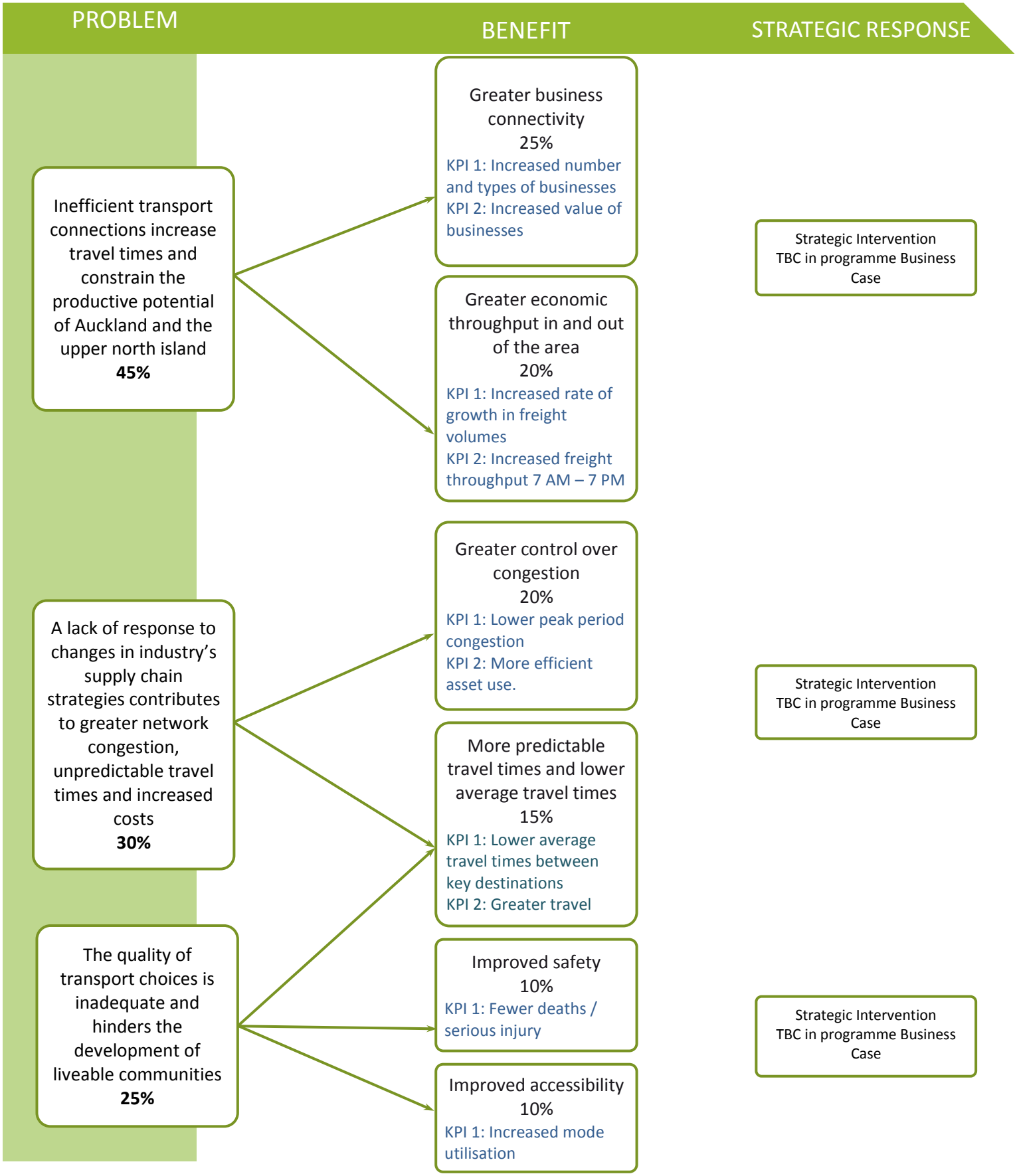
- What is the potential of this area to further contribute to GDP growth of Auckland / New Zealand?
- How is the economic function of the project area influenced by the transport system? How might this change with changes to the transport system and growth in Auckland?
- How will improving travel times for freight help businesses to lower their cost of business, or to achieve higher productivity or to increase their output or to enable business growth in this area?
- How important is improved connectivity between specific locations e.g. Onehunga and East Tamaki to business productivity?

Traffic Modelling: High level traffic modelling will be undertaken to understand the predicted operating environment on some of the key routes into and out-off the study area. It will provide enough evidence on a high level to understand the impact of the Auckland Plan's projected changes in land use on the transport network over the next 3 decades.

6.2.2 The Recommended Preferred Way Forward

The programme business case will develop a range of potential programmes (mix of projects), and develop high level cost estimates and BCR's for these. Each programme will then be evaluated against the investment objectives and critical success factors before the presentation of a recommended programme to the various governing bodies (AT Board, NZTA Board and AC Transport Committee.

Appendix A - Investment Logic Map



Appendix B – Benefits Map