Integrated Transport

Assessment Guidelines

JANUARY 2015

PREFACE

This guideline updates and builds on the work of the previous Integrated Transport Assessment (ITA) Guidelines that were prepared in 2007 by the Auckland Regional Transport Authority (ARTA). This document acknowledges the broader scope and functions of Auckland Transport (AT) as a statutory entity pursuant to the Local Government (Auckland Council) Act 2009, which includes management and control of the local transport system in Auckland rather than purely a public transport focus. This guideline also includes an update to reflect the key roles that the New Zealand Transport Agency (NZTA) and KiwiRail play in the Auckland transport system.

The draft Unitary Plan for Auckland was notified on 30 September 2013 and includes a number of "triggers" for when an ITA will be required and recommends that such ITAs be prepared in accordance with these guidelines.

All parties contemplating significant development (which fall within the triggers identified within the Unitary Plan) should prepare an ITA in accordance with this document in the interests of improving consistency across the region.

Preparing an ITA in accordance with this guideline will ensure that matters of interest to AT as the Auckland Road Controlling Authority (RCA) and our transport partners at the NZTA and KiwiRail are appropriately addressed. In our view this should ultimately lead to a smoother planning process for development proposals and better environmental outcomes when a proposal is advanced with the relevant regulatory authority, Auckland Council.

ITAs are a key document to achieve integration between the planning and funding decisions that are made by the Auckland Council and relevant transport agencies. This is a priority outcome of the Auckland Plan.

AT anticipates that these guidelines will be of assistance to all transport and planning professionals involved in urban and transport planning in Auckland. AT welcomes feedback on how the guidelines are working in practice, as they will be updated on an ongoing basis to reflect best practice.

CONTENTS

1 WHEN DO THESE GUIDELINES APPLY?

1.1 Integrated Transport Assessments

These guidelines provide information on how an ITA should be prepared in the Auckland Region. The guidelines will ensure that the relevant transport effects of a development proposal are assessed, that appropriate mitigation is offered, and that information required by both Auckland Council (as the Regulatory Authority) and AT (as a RCA and infrastructure provider) is provided.

The requirement to prepare an ITA sits within the rules of the Proposed Auckland Unitary Plan (PAUP). As notified, Rule 2.7.9.1 (Chapter G) requires than an ITA be prepared where an application is:

- A plan change
- A notice of requirement
- A structure plan
- A resource consent application for a land use or subdivision which is not specifically provided for as a controlled, restricted discretionary, or discretionary activity in the relevant zone (e.g. non-complying).
- A framework plan

AND

Where the application exceeds one of the following traffic thresholds:

Table 1: Thresholds for an ITA

LAND USE TYPE	THRESHOLD
Residential:	120 dwellings
Retail	1,000 m2 Gross Floor Area (GFA)
Office	5,000 m2 GFA
Industrial	10,000 m2 GFA
Warehousing	10,000 m2 GFA
Educational Uses	100 students
General Trip Generation	100 vehicles in the peak hour

The rule is a two-step process which requires an application to meet one or more of the requirements in each part of the rule. For example, if an applicant was proposing a plan change or non-complying resource consent but the application did not meet the traffic thresholds specified (e.g. only 80 residential dwellings are proposed, or 5000m2 of industrial floor space, or the plan change is only about scheduling protected trees), then an ITA would not be required.

Rule 2.7.9.1.3 (Chapter G) states that when the thresholds are met, an ITA should be prepared in accordance with any ITA guidelines adopted by Auckland Transport. An ITA prepared in accordance with these guidelines will meet the information requirements as set out in Rule 2.7.9.2 (Chapter G).

The Unitary Plan is subject to change through the hearings process, and if any of the rules or triggers relating to ITAs are changed as part of that process, this guideline will be updated accordingly.

1.2 Transport Assessments

ITA's have been consciously targeted at large scale developments under the PAUP. The rationale for this approach is that it is more efficient for comprehensive and detailed assessment to occur at the early stages of the planning process when new areas are being planned for growth. This will allow a "worst case" transport assessment to be undertaken based on the proposed zonings and land use planned within a given area. Providing that any subsequent development is within the limits assumed under the structure plan or plan change, there will be no need to reassess its transport effects, particularly as it relates to trip generation.

However, there will still be a need to assess more detailed aspects of a development at the resource consent stage. This could relate to parking numbers or layout, access to and from a site, cycle parking, loading and other related matters. These assessments are referred to as "Transport Assessments" in the PAUP.

Chapter H, Rule 1.2.3.1 states that any activity which exceeds the following thresholds will be a restricted discretionary activity:

Table 2: Thresholds for a Transport Assessment

ACTIVITY	TYPE	THRESHOLD
Residential	Dwellings	30 dwellings
	Retirement Village	30 units/apartments
	Visitor Accommodation	30 units
Education	All	100 students
Office	All	1250m2 GFA
Retail	All	500m2 GFA
Industrial	Warehousing/Storage	5000m2 GFA
	Other	2500m2 GFA

It is important to note that these thresholds apply only in outlying zones, and do not apply to the City Centre, Metropolitan, Town Centre or Terrace Housing and Apartment zones.

Transport professionals will likely be requested to provide advice where traffic generation exceeds the thresholds stipulated in the above rule; and in instances where other transport-related rules in the PAUP are not met, such as where a parking shortfall is proposed. However these assessments will be much narrower in scope, being tailored to the particular breach of the PAUP rules in each case, and would NOT be expected to be prepared in accordance with these guidelines.

2 BACKGROUND INFORMATION

2.1 Overview

ITA Guidelines were originally prepared by the ARTA in 2007 in response to requirements set out in Proposed Change 6 to the Auckland Regional Policy Statement (RPS). That change was the Regional Council's response to the Local Government Act (Auckland) Amendment Act 2004 (LGAAA)[1] which required better integration between landuse and transport planning in the Auckland Region.

The key amendment of Proposed Change 6 was the addition of a method in the RPS requiring that ITAs be submitted whenever a new plan change or major trip generating activity was proposed. Given that this was a new requirement, it was considered that further guidance was needed regarding:

- what an ITA was
- when an ITA should generally be prepared; and
- what content to include in an ITA

The guidelines were prepared to provide assistance to transport professionals and other practitioners when preparing ITA assessments. The ITA Guidelines are considered to be a live document that will be regularly updated in response to changes in legislation, planning and traffic engineering practices, and as a result of feedback from transport and planning professionals using the guidelines.

AT has reviewed the original ARTA guidelines giving consideration to feedback received on the current ITA guidelines and the changes that have occurred to Auckland's governance in recent times. There have been significant changes in Auckland with the adoption of the Auckland Plan under the Local Government (Auckland Council) Act 2009 (LGACA) and the quality, compact city model that the Auckland Plan seeks to achieve as a long term vision. ITAs, along with other assessments of land use; should be consistent with and assist in achieving the vision outlined in the Auckland Plan. The Auckland Council has also prepared its first Unitary Plan for the region that will drive and give direction to land use planning to achieve these outcomes.

The ITA Guidelines have been prepared to assist transport professionals to draft ITAs that robustly analyse proposals, whether they are promoted by private developers, the Auckland Council or Requiring Authorities [2]. The guidelines have a particular focus on ensuring that infrastructure provision, and the funding of that infrastructure, is considered as a key part of analysing landuse proposals. This is because the planning and funding of transport infrastructure have long lead in times and in Auckland there is a history of misaligned landuse and transport funding decisions. Developments which are not aligned with planned and funded infrastructure should identify what methods will be used to achieve delivery of the necessary infrastructure via private means, or changes should be made to the proposal to reduce the scale of investment needed. Other approaches could be to provide clear staging of development so that development and funding timeframes are aligned.

The key to successful ITAs is that they are prepared at the beginning of the planning process, to ensure that the relevant transport agencies are involved early and that the ITA covers the appropriate matters. This ensures that time is spent on an appropriate level of analysis and that sufficient information is included to avoid time delays and unnecessary costs as a proposal proceeds through the consenting process. It also recognises that the preparation of quality ITAs is an iterative process with changes made along the way following the results of modelling, feedback from relevant transport agencies or the Council.

These guidelines set out what AT, and its key transport partners KiwiRail and the NZTA consider to be best practice concerning the preparation of an ITA, and the content that should be included within an ITA. The guidelines place a strong emphasis on the scoping of the ITA as early as possible, consideration

[1] *This has now been superseded by the Local Government (Auckland Council) Act 2009*

[2] *These organisations are collectively referred to as "applicants" from here on.*

of the likely transport mode splits for a given area, and assessing a proposal's consistency with the future planned transport network.

Whilst these guidelines provide emphasis on best practice from an Auckland perspective, reference has been made to the NZTA Research Report 422, which also provides detailed guidance on ITAs. AT considers this guideline as being consistent with the approaches outlined in that research report.

2.2 Statutory and Policy Framework

There has been significant change in the legislative framework relating to the Auckland region in recent years, which is important in considering the context for ITAs. The key legislation is briefly outlined and described below.

Local Government (Auckland Council) Act 2009 & Local Government Act 2002

The LGACA established Auckland Council as a Unitary Authority, replacing the previous Regional Council and seven territorial authorities that existed prior to its enactment.

The LGACA required the new Council to prepare a spatial plan, setting out the 20 – 30 year vision for the region. This document, the 'Auckland Plan' has now been prepared and was adopted by the Council on 29 March 2012.

The Local Government Act 2002 (LGA) continues to apply to the Auckland Council and sets out requirements such as the need to prepare a Long Term Plan (LTP) covering a period of at least 10 years into the future. An LTP outlines Council's intended spending proposals and how these will be funded. Recent amendments to the Local Government Act also require Council to have a 30 year Infrastructure Strategy setting out the investment requirements for that 30 year period, how such investment will be funded and a list of applicable key projects.

Combined, the LGA and LGACA require the Council to have a forward vision of at least 30 years and to demonstrate what infrastructure (among other things) will be needed to support that vision, and the way in which such measures will be funded.

Resource Management Act 1991

A key legislation related to landuse development is the Resource Management Act 1991 (RMA). All of the existing planning documents in the Auckland Region are still in force under this Act, and these will continue to apply until such time as the Council's Unitary Plan is operative. These include:

- The RPS
- A number of Regional Plans
- The District Plans for Auckland City, Waitakere, Manukau, Rodney, North Shore, Papakura and Franklin.

The RPS and Regional Plans set out the regional objectives for Auckland and include current concepts such as the Metropolitan Urban Limit (MUL), which is proposed to be replaced by the Rural Urban Boundary (RUB) under the Unitary Plan, and rules to protect air and water quality. The District Plans set out objectives and policies for urban and rural development and associated rules that apply whenever new development is proposed.

On 30 September 2013 the Council notified the draft Auckland Unitary Plan. The Unitary Plan seeks to give effect to the "quality, compact" growth model outlined in the Auckland Plan. The Unitary Plan sets out the triggers for when the preparation of an ITA is required and directs that ITAs should be prepared in accordance with this guideline (refer Section 1.1).

Land Transport Management Act 2003

The Land Transport Management Act 2003 (LTMA) was recently amended. The Act now requires that a Regional Land Transport Plan (RLTP) be prepared by AT showing the transport objective, policies and priorities for Auckland over a 10 year horizon. Detailed information about the actual projects, their costs and predicted funding sources must be prepared for the first 3 years of the programme, however more general information over a 10 year period is usually also provided to align with the Council's LTP. The RLTP must be reviewed every 3 years to ensure that it is kept up to date, but can be varied at any time by following the prescribed process.

The RLTP sets out the expected funding for projects and relies in many cases on a subsidy being provided by the NZTA. At the time of writing, the funding available through current sources will not be sufficient to enable the full programme of works planned by AT and as such projects have been allocated a priority based on criteria in the Integrated Transport Programme (ITP).

This is relevant to ITAs as any new projects proposed in response to development must be cognisant of whether such a project is already funded, and where this is not the case, applicants will need to consider the appropriate staging and timing of such projects or whether developers will need to fund, or contribute towards, the funding of such projects.

As part of the amendments to the LTMA, the Public Transport Management Act 2008 was repealed and the various public transport system provisions (as amended) have been included in the LTMA. The LTMA provisions also include the mechanism for adopting the new Public Transport Operating Model. As under the LTMA, the new provisions require AT to prepare a Regional Public Transport Plan (RPTP) for a period of at least 3 years in advance, and up to 10 years into the future. The new RPTPs have a slightly different purpose and required contents to those under the PTMA and focus on identifying and listing the bus, rail and ferry services that are integral to the public transport network in the region. AT has released its RPTP showing the services proposed through to 2022 and this can be found on our website.

Housing Accords Special Housing Areas Act 2013

This recent legislation sets up a number of new processes to allow housing to be built more quickly in the Auckland Region.

The Act allows the Minister of Housing to enter into housing accords with territorial authorities which set benchmarks for the provision of housing over certain timeframes. An accord has been signed between the Minister and Auckland Council committing to the construction of 39,000 houses over a 3 year period.

The Act allows the Minister to declare development areas "Special Housing Areas" (SHA) on the recommendation of the territorial authority. Where a SHA has been declared then developers may apply for "qualifying developments" which will be assessed under the Act, which has shorter processing timeframes and more limited notification to affected parties and appeals than the RMA.

SHAs allow developers to apply under the rules of the PAUP as if that plan were operative, or to apply for a change to the Unitary Plan (for example where a Future Urban zone applies) to permit housing to be built. All provisions of the PAUP are therefore deemed to apply, including the requirements to provide an ITA in the circumstances summarised in Section 1.1.

2.3 What role do ITAs play in the Legislative Context?

The need for integration of transport and land use has been reinforced by the legislative changes described above and the recently notified Unitary Plan.

The Unitary Plan is a key tool in giving effect to the Auckland Plan vision, a key part of which is to accommodate at least 60% of expected growth within existing urban boundaries. Other strong themes in both the Auckland Plan and Unitary Plan and which are reflected in the RPS are[3]:

- Ensuring a transport system that is integrated with landuse and that provides travel choices
- That future state highway, arterial roads, railway lines and airport noise zones are protected
- That transport infrastructure is planned, funded and staged in accordance with development
- That development supports the planned Rapid and Frequent public transit network (RTN/FTN)
- Where development is out of centres, that it integrates with the transport network and provides appropriate mitigation, and;
- That public transport, walking and cycling are made more attractive by incorporating walking and cycling connections within private developments and encouraging an urban form that is supportive of public transport.

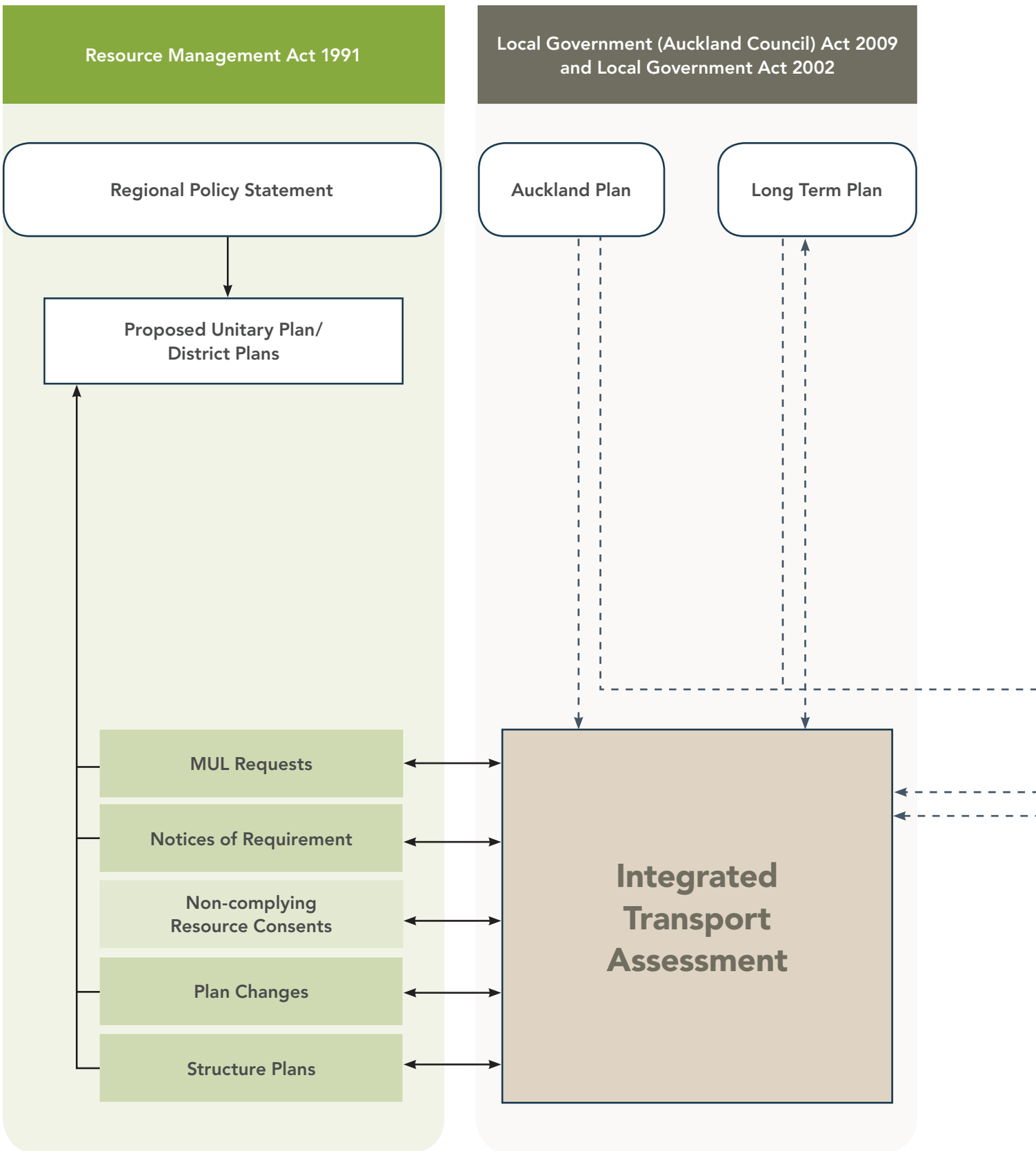
ITAs are an important document to ensure that any development proposal is assessed and shown to be meeting the objectives as specified above, that transport related effects are avoided, remedied or mitigated and that where mitigation is needed that this is appropriately identified and tied to when the development is occurring. A well prepared ITA provides the information that is needed by RMA decision makers in determining whether a particular development meets the objectives and policies of the Unitary Plan, the RMA, and whether such a proposal is worthy of consent being granted.

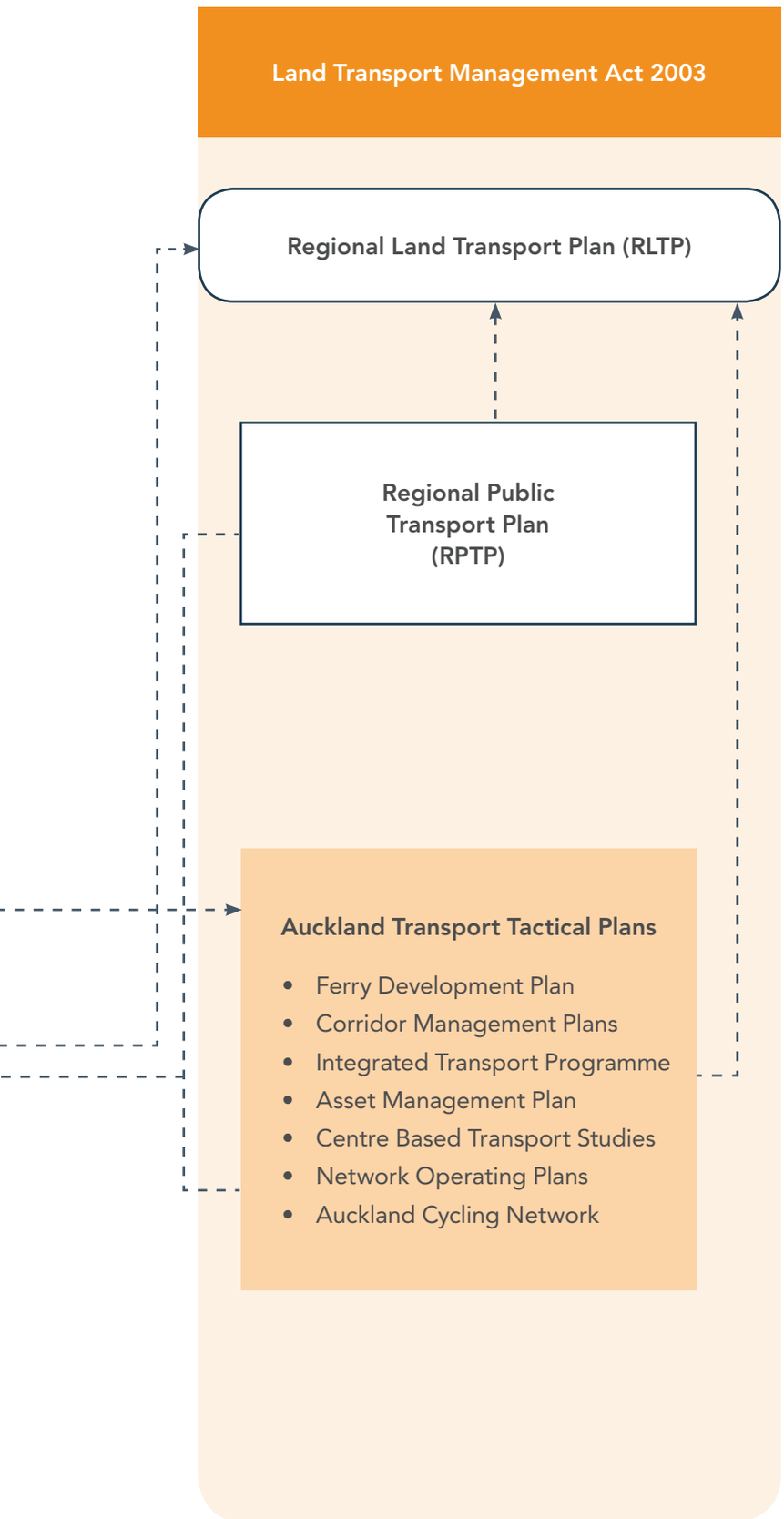
While ITAs are primarily prepared in support of RMA applications, they play a very important role in bridging the legislative gap that occurs between land use planning under the RMA and transport planning and funding which occurs under the LGA and LTMA. An ITA that appropriately identifies the transport projects that are necessary to support a development, and when such projects are necessary, will assist AT and other transport agencies with forward planning.

The following diagram (see page 10-11) outlines the numerous interactions that occur between an ITA and decision making under the relevant legislation and demonstrate why well prepared and accurate ITAs are of such importance:

[3] *Sections 2.3 and 3.3 of the RPS*

Figure 1: ITAs – Key Statutory Framework





KEY

statutory link/requirement

non-statutory influence

3 PREPARING AN ITA

3.1 What is an ITA?

An ITA is a report, usually prepared by a transport planner, transport engineer or other suitably qualified professional, which assesses the transport effects of a development proposal. A 'development proposal' when referred to in these Guidelines means any form of RMA application. An ITA will usually be required by Auckland Council at the time of lodging a planning application made under the Resource Management Act 1991 (RMA). However, ITAs also have a useful function simply as "information" to inform and guide decisions made at the early stages of a development proposal.

When involved in a planning application, ITAs form part of a range of reports which are prepared as part of the application to provide factual information and professional opinions on the environmental effects and related merits of a development proposal. The ITA focuses on the transport related aspects of a proposal and will be considered by the decision maker, along with the other reports, in making a final decision about whether a development should or should not be approved. ITAs consider the relationship between landuse and transport and make recommendations to ensure better integration between the two. This can include recommendations to reduce or amend the proposed landuse, or conversely changes to the transport network to respond to the landuse proposal.

ITAs are more comprehensive than traditional Traffic Impact Assessment (TIA) which tended to consider only the traffic impacts of a proposal on the surrounding road network, with the underlying assumption that all people would be travelling to and from a site or area by private motor vehicle only. Such an assessment ignores other users of the transport system, namely pedestrians, cyclists and public transport users. Transport and planning policy in the Auckland Region has moved towards a more holistic view of transport that considers access by a range of modes. The Auckland Plan puts strong emphasis on increasing the mode share of public transport and supporting walking and cycling initiatives[4]. An ITA provides an assessment of the accessibility of a proposal by walking, cycling, public transport and private motor vehicles. It also assesses the potential effects a proposal could have on the transport network and any mitigation measures needed to ensure that any adverse effects of a proposal are avoided, remedied or mitigated. These guidelines place a particular emphasis on using the policy and strategy context in Auckland as a tool within the ITA process to encourage applicants and their practitioners to consider the full range of transport modes when planning their development proposal.

Consideration of the traffic impacts of a proposal is still an important part of an ITA assessment; however the response to those effects is expected to be different. Rather than proposing the provision of more roading capacity as an automatic solution, an applicant and their advisors, through the preparation of an ITA would be expected to look first at measures to reduce travel demand, followed by measures to utilise existing transport networks more efficiently, encouragement of other modes, and finally adding more road capacity if no other alternatives exist. This approach is termed the "four stage intervention process" and is a key driver of the AT / NZTA Integrated Transport Programme 2012 to 2041 (ITP).

An ITA is also a useful tool for determining what measures are needed to support new development and the preparation of an implementation (and sequencing) plan in an ITA is therefore an important initial step in bridging the gap between regulatory and funding processes, which is a key aspect of integrating land use and transport.

It is recommended that any person considering a development proposal that is likely to result in high trip generation engage the services of a transport planner or other suitably qualified professional early in the process to assist in the preparation of their ITA. These people are the best qualified to assist in the development of an ITA, particularly in the critical step of scoping the ITA. Engaging such a person

[4] *Paragraph 737 & 742, Auckland Plan*

early will ensure a high quality document that will result in good decisions being made early on in the process, and that can be relied on by decision makers as part of later consenting processes. This in turn will smooth the planning process for the proposal.

3.2 What is the purpose of an ITA?

Transport and accessibility are significant issues facing the Auckland region today. Many of the transport issues in Auckland are the direct result of incremental land use and transport decisions, often made in isolation from each other. These decisions have not always addressed all modes of transport, or adequately assessed the wider and long-term implications of transport and land use decisions. This has meant that the predominant choice of travel within the Auckland region has become by private motor vehicle, with associated issues of traffic congestion during peak times, air pollution, urban sprawl, poor pedestrian and cycling environments and ultimately a lack of transport choices for those living in Auckland. This reliance on travel by private vehicle has significant impacts on the natural environment of Auckland beyond air pollution. Increases in traffic volumes also increase the heavy metal burden on our waterways and a sprawling urban form places pressure on, and in many cases degrades existing bushland areas and other areas of ecological value. Transport assessments which promote or assume high car usage also place a large financial burden on ratepayers as the transport network, which must be renewed and maintained, extends further into rural areas.

Historically transport assessments have focussed on the road network and the effects that are likely to occur from private vehicles accessing a development and have sought to increase capacity to accommodate this demand. Given that Auckland is now reaching the viable capacity of transport infrastructure in a number of areas during peak times, it is necessary to explore measures to reduce travel demand by private vehicle. The purpose of an ITA is to thoroughly explore the range of transport options available to a new development area and look to place greater emphasis on travel by walking, cycling and public transport wherever possible in line with regional guidance[5].

[5] *For example the Unitary Plan objectives and policies*

ITAs are useful in their own right as information sources to be used at the earliest stages of planning for a new development proposal. They can ensure that fundamental decisions are made having given due consideration to the principles of transport and land use integration, and proper thought to alternative modes; thereby improve decision making and design processes.

The main objective of an ITA is to ensure that the transportation effects of a new development proposal are well considered, that there is an emphasis on efficiency, safety and accessibility to and from the development by all transport modes where practical; and that the adverse transport effects of the development have been effectively avoided, remedied or mitigated. The preparation of an ITA seeks to ensure that appropriate thought is given to the zoning or land use proposed so that integrated transport and landuse outcomes occur.

A proposal that is achieving this integration will ensure consistency with the "four R's" being the right type of activity, in the right place, at the right intensity, and occurring at the right time".

Some examples of integrated transport and landuse include:

- Industry and freight based activities should be located near or adjacent to existing or proposed motorway or arterial road networks identified for this purpose[6] or accessible to rail corridors. This will ensure opportunities exist to move goods and freight by either rail or road, will minimise the impact on the amenity of surrounding land uses such as residential neighbourhoods, and will ensure that goods can be transported in an efficient and direct way.
- Activities which attract large numbers of people, such as schools, retail activities and offices, should be located in areas that are close to and accessible by a range of high frequency bus and/or rail services (the planned "Rapid and Frequent Network"). This will ensure that travel via public transport is a viable alternative to private vehicles during commuter peak times and off-peak times where appropriate (e.g. visitors to retail activities and students of educational facilities).
- Structure Plans should consider how multimodal trips can be undertaken and should position landuses to encourage greater trips by walking, cycling and public transport. For example, facilities such as schools, local centres and parks should be located centrally to encourage a large walking and cycling catchment and should provide proper facilities to allow safe and pleasant travel to and from these destinations by active modes.
- Developments in greenfield areas should provide a range and intensity of development that can be supported by the existing or planned transport infrastructure in the area. Density should be focussed around existing or planned public transport routes or nodes rather than being dispersed across large areas.

[6] *Refer to the Regional Freight Network*

Another key purpose of ITAs is to enable the collection of appropriate information to ensure co-ordination between regulatory decisions made under the RMA which determine where land use is permitted to go, and funding decisions that are made under the LGA and LTMA.

ITAs which are consistent with these guidelines will identify matters such as infrastructure upgrades to the transport network that may be required to support the proposed land use, and the timing of these within an implementation and sequencing plan. Another key outcome could be the identification of the need for new or more frequent bus services and the proposed way in which these services are to be funded to encourage greater mode share by public transport.

3.3 Scoping of an ITA

Scoping the ITA is one of the most important steps in the process of preparing an ITA. Early discussion with the Council and appropriate transport agencies will ensure that agreement can be reached on the level of assessment that will be required, implementation issues that may arise from the development and whether there are any fundamental differences of opinion.

The Council is a key party to consult during the scoping process. Auckland Council is the unitary authority in the Auckland Region and has a number of objectives, particularly regarding land use policies, that will need to be considered in preparing an ITA.

It is the responsibility of applicants proposing the development and their advisors, whether on a localised site or over a whole new urban area, to lead the development of an ITA in support of their proposal. Similarly, where the Council itself is promoting a new plan change it is expected that such a process would be informed by an ITA.

Where the ITA triggers identified in the Unitary Plan are met, AT is a key party that should be consulted early in the process. AT is the body with statutory obligations to manage and control Auckland's transport network, including the pedestrian and cycle network, public transport services and the local roading network. Most urban developments within Auckland will have an impact on the local cycle and roading network or place demands on the public transport network. Ongoing liaison throughout the iterative process of preparing an ITA is recommended to allow AT to assess the proposal and to provide feedback on whether the infrastructure proposed is planned, or where new infrastructure is needed, that provision of such infrastructure is supported. Similarly if new or improved bus services are needed or proposed, it is imperative that such discussions occur with AT as early as possible.

Other key transport agencies that need to be consulted are the NZTA and KiwiRail. The NZTA has a wide remit which includes contributing to an effective, efficient and safe land transport system in the public interest, managing the State highway system, including planning, funding and maintenance, and managing funding of the land transport system including administration of land transport revenue. KiwiRail is the Auckland rail network access provider and owns and maintains the Auckland rail network (rail tracks, overhead power supply systems and signalling).[7]

Given the number of agencies involved, ideally one transport agency would take the lead in responding to a development proposal to ensure that a combined and consistent response is provided. AT is currently working through this process with the NZTA and KiwiRail and further information will be provided on our website in due course. In the interim, applicants should continue to contact each transport agency based on the nature of effects predicted from the development.

[7] *Auckland Transport owns and maintains stations and procures passenger rail services*

Engagement with the relevant transport agencies will identify any major opportunities or issues with a proposal and will therefore avoid unnecessary costs and delays associated with having to address these concerns, including through redesign of a proposal, at a later date.

The iterative stages should be worked through with the relevant transport agencies and Council with the ITA reporting on the final proposal that has been agreed through this process. Applications (and associated ITAs) that are lodged with Council without discussion with the relevant transport agencies will not be meeting best practice and are likely to encounter significant issues during their processing.

3.4 Trip Generation

These guidelines recommend that an ITA should consider the person trips generated by the proposed development and not just those trips made by private vehicles. The share of these trips anticipated to be made by each transport mode ("mode share") should then be assessed in the context of the specific land use and transport environment within which the development is located, including any future planned or applicant-proposed infrastructure and public transport service improvements. The intention is to ensure that the resulting vehicle trip generation used for further detailed traffic analysis is context-specific and that it is considered as a subset of the overall demand for travel and not in isolation. As such, potential improvements to all modes of transport should be considered within the ITA, including those that would be expected to lower the mode share of private vehicle and resulting traffic generation.

Transport professionals will be expected to use Auckland Regional Transport (ART3) model predictions as a starting point for the person trip generation assessment. Where an existing ART3 run is available including the relevant type and scale of land uses, this information can be extracted easily. However, it may be necessary to request an ART3 run be undertaken by the model owner incorporating the proposed land use where this has not previously been anticipated. ART3 will provide information on predicted private vehicle and public transport trips during the peak, and where these trips originate from or are destined to (trip distribution). Transport professionals are encouraged to make adjustments to this information, in consultation with the relevant transport agencies, based on localised knowledge, detailed land use characteristics, survey information or any other relevant factors not considered to be well represented within the ART3 model. Further guidance on what adjustments may be appropriate are outlined in the ITA template (refer section 4.0).

It is considered that greater use of the ART3 model will ensure trip generation is associated to the particular transport and landuse environment of a development site. This is particularly important given the public transport improvements planned by AT, which are reflected in the ART3 model. This is in contrast to the more traditional approach of deriving traffic generation using standard industry data sources that do not have such context.

Where a landuse is proposed that is likely to have a high proportion of freight/service trips, in addition to the above methodology, it would be expected that freight/service vehicle trips are estimated separately using standard industry trip rates, and reported in the ITA. Auckland Transport and NZTA should be consulted on the trip rates that are proposed to be used as part of the scoping exercise.

3.5 Traffic and Transport Modelling

The above section referred to the recommended use of the ART3 model, to establish, at a broad level, the likely trip generation and trip distribution for all transport modes. Undertaking more detailed modelling of vehicle traffic movements is likely to be a key component of an ITA, where there are concerns about the potential traffic effects of a proposal. This is particularly the case given the scale of development anticipated by the new ITA triggers in the Unitary Plan.

More detailed modelling could include wider traffic network modelling, micro-simulation modelling of a road corridor or localised area of the road network or isolated intersection modelling, in software packages such as SATURN, PARAMICS, SIDRA, or other similarly accepted tools. The detailed modelling requirements for a development proposal will vary greatly depending on the particular circumstances involved. As discussed in section 3.3, it is recommended that any such traffic modelling is discussed with the relevant transport agencies, including the purpose of the modelling and the geographic extent of the model, such that the appropriate modelling tool(s) are used to undertake the assessment of transport / traffic effects.

If this is agreed at the outset, it can save the applicant time and money.

3.6 How will Mitigation be Implemented?

The RMA sets out a hierarchy which directs development to avoid; remedy or mitigate effects. ITAs should therefore look to avoid or remedy transport effects wherever possible, with mitigation seen as a final measure. Where mitigation is identified it is important that certainty is achieved around the delivery of that transport infrastructure.

Given that both the Council and AT work in a financially constrained environment, ITAs which rely on particular mitigation should provide information on whether such projects form part of existing planned expenditure in the RLTP/LTP or whether such projects are completely new.

Current practice over the last 5 – 6 years in which the 2007 ARTA guidelines have been in use has resulted in mitigation measures often being identified in ITAs, but with little details on when such mitigation is required to be implemented and by whom. The danger of this approach is that mitigation relied upon in approving a proposal may not be implemented. This may result in unanticipated adverse (and cumulative effects) on the transport system and undermines the integrity of planning decisions made under the RMA.

Applicants should refer to the Regional Land Transport Programme (RLTP) to determine the transport works planned by AT and the NZTA in any given period. This document is prepared and reviewed every 3 years. Projects listed in the RLTP may be funded by Council or NZTA or a mix of funding from both sources.

Applicants should not assume that development contributions collected will be used to directly fund mitigation of their particular proposal. Development contributions are collected by the Council and are based on the Council's (including AT) total spending proposals over the next 10 year period[8] as set out in the LTP. In reality, development contributions only fund a certain portion of the Council's costs over that period. The remainder of the money has to be sourced from rates, loans and other funding mechanisms. Accordingly, there is a limit to the extent of new development can be accommodated under current revenue sources.

If the mitigation measures identified by an ITA are not a listed project in the LTP, then no development contributions will have been collected for the project, nor will any other funding mechanisms (such as rates) have been considered, and AT is unlikely to have any funding which can be applied to the project.

[8] *The LTP also includes Auckland Transport's proposed expenditure*

In situations where a project does fall outside the RTLP/LTP, there will generally be three options available where the project is directly required to mitigate the effects of development:

- Payment of a financial contribution by the applicant if provided for by the relevant District or Unitary Plan provisions
- A direct payment by the applicant to the relevant Transport Agency amounting to the value of the proposed works (i.e. total project cost including investigation, design, property acquisition and construction costs)
- Construction of the physical works by the applicant, subject to all works being to the satisfaction of the relevant transport agency (AT/ NZTA/ KiwiRail).

AT's expectation is that ITA's will clearly outline:

- What mitigation is proposed;
- An estimated cost of such mitigation; and
- When such mitigation is needed.

This will allow the ITA and planning application to focus on the appropriate triggers, rules, conditions and assessment criteria that should be included in any decision, but it will also provide information that will allow AT to program future works into its budget.

Discussions as to who will be responsible for building and funding infrastructure should be advanced separately with Auckland Transport/Auckland Council, although early engagement on these issues is strongly encouraged given the lead in times necessary to change funding priorities and to design and construct transport projects. AT is developing a policy that will enable applicants to work collaboratively with us and other agencies to determine the funding process for implementing new transport infrastructure that is identified in ITAs in support of private development proposals.

The policy will be available on our website once finalised[9].

[9] *Currently titled "Transport Funding Agreements Policy".*

4 STANDARD TEMPLATE FOR ITA'S

An applicant should prepare an ITA as early as possible in any development proposal process. An ITA will guide decision making and ensure that fundamental decisions about land use and transport integration are made at all stages of the proposal.

However, ultimately most ITAs will be used to support a planning application under the RMA and the structure and content of an ITA should be consistent with, and always bear in mind, that planning framework. This will ensure that time and effort is best used to address relevant matters, and avoid duplication.

This section provides a standard template that should be used in preparing an ITA. An ITA prepared in accordance with this template will be streamlined and will focus on the key matters relevant to the Auckland Council and AT. It will also ensure that the relevant information is provided to key transport agencies, particularly around the type and costs of infrastructure that will be likely to support a development. It is acknowledged that every development is different and as such transport professionals should add or delete headings as appropriate to suit the development being assessed.

A key point to remember is that an ITA will always form part of a range of documents submitted in support of a planning application. It is not necessary to have the strategic assessment of a proposal, such as whether it is consistent with a range of policy documents like the RPS, the Auckland Plan and National Policy Statement in both the Assessment of Environmental Effects (AEE) and the ITA. However, in relation to specific transport policy and strategy matters, it is considered that the author of the ITA should assess these matters and provide a summary of the key points from this assessment in the ITA report to inform the relevant section of the AEE. A key criticism of ITAs in the past is that the policy/statutory assessment have resulted in long winded documents that do not focus on the key issues at hand. Accordingly, this policy assessment should be made an appendix of the ITA so that the document is focussed on the proposal, the key outcomes that have been arrived at through the scoping exercise, and key mitigation and implementation matters.

It is important to consider the context of the proposal and this will inform the scoping process for the ITA, as discussed in section 3.3. If the proposal is a plan change to intensify a town centre as identified in the Auckland Plan, then public transport, walking and cycling are likely to be key transport aspects to be assessed in preference to travel by private vehicle. Conversely, if the proposal is a residential subdivision in an outlying rural village, it will be appropriate to acknowledge that travel by private vehicle will be the predominant mode, with consideration of public transport, walking and cycling tailored to what can be reasonably achieved in those circumstances.

The recommended template for the preparation of an ITA is provided on the following pages. The template discusses the key matters of importance to AT and other transport agencies which should be addressed in each section of the ITA.

Further guidance can be found by referring to:

- The Auckland Transport Example ITA prepared in accordance with this template;
- NZTA Research Report 422, which provides detailed technical guidance

STANDARD TEMPLATE FOR ITAS (with guidance)

EXECUTIVE SUMMARY

Prepare a short synopsis of the proposal, its effects and the planned mitigation and implementation measures identified through the ITA process. The Executive Summary should be short and concise – but detailed enough to be read as a standalone section and provide a reader with enough information to be familiar with the development and the recommended outcomes without needing to read the full report.

INTRODUCTION

Outline why consent is being sought.

Describe the general location of the proposal.

Provide an overview of the content of the following sections of the ITA to explain to the reader the overall framework of the document.

For Plan Changes and Structure Plans

Describe what type of zoning is proposed, the key transport matters such as the walking and cycling facilities proposed, the roading layout proposed, the type of landuse activities proposed and their intensity (e.g. 750 dwellings are planned). Outline any particular transport issues that are peculiar or unique to the proposal and that the reader should be alerted to.

For Site Specific Proposals

Describe the site characteristics, the land use proposed and its intensity, and relevant transport matters such as the proximity to public transport, supply of on-site parking for bicycles and vehicles proposed, access arrangements and hours of operation (if known). Outline the layout of the site that is proposed.

Keep the description brief for both, bearing in mind that a fuller description will be provided in a later section under "Proposal" and that a description will also be provided in the AEE when the ITA is associated with a planning application.

DESCRIPTION OF LAND USE AND FUTURE TRANSPORT ENVIRONMENT

Set the scene and introduce the location in more detail than in the introduction.

Provide a map identifying the existing and any future transport infrastructure surrounding or within the vicinity of the site or development area. Show any places of interest, particularly surrounding activities relevant to the development proposals which will be referred to within the body of the ITA. For example, for a residential development this would include surrounding land use activities that provide future residents with access to employment, education, retail and leisure opportunities. Provide photos and aerial photographs that are particularly helpful in familiarising the reader with the area.

Identify the features of the existing transport network, and any future changes proposed by the relevant transport agencies. Include the following items as relevant to the proposal:

- existing and proposed walking routes
- existing and proposed cycling routes, directly referencing the proposed Auckland Cycle Network (ACN)
- existing or proposed off-road cycling routes endorsed in any Local Board greenway networks;
- existing and proposed bus and rail service routes and frequencies with reference to the RPTP;
- existing and proposed bus stops, bus lanes, high occupancy vehicle (HOV) lanes or public transport infrastructure;
- on street and off-street parking facilities for vehicles and bicycles;
- Existing or proposed park and ride facilities with reference to the Parking Strategy;
- the roading classification of adjoining roads and those within the vicinity of the proposal ;
- traffic volumes on main routes (which could include turning volumes, level of service (LOS) information, and comparisons between peak and inter-peak time) including pedestrian and cycle traffic;
- crash records;
- truck and service vehicle access and facilities; and
- existing and proposed end-of-trip facilities and bike parking

Mapping this information where possible will present a clearer picture to the reader.

Any planned upgrades arising out of any previously approved development in the area, such as upgraded intersections or new public transport, pedestrian or cycle facilities should be outlined in this section.

THE PROPOSAL

Provide a full description of the proposed development, supporting infrastructure and anticipated land uses to ensure the reader fully understands the development proposal.

For Plan Changes and Structure Plans

For proposals covering a wide geographical area the ITA will need to demonstrate how the proposal integrates with and supports the future transport network surrounding the development area. With respect to the internal layout of the structure plan or plan change it should demonstrate that decisions made about the type of land use, and the intensity of land use, have been made to support the street network that is planned, that the area can be efficiently served by public transport, that the layout provides a connected network for all modes of transport, and that all transport modes have been considered in determining street widths and cross sections.

It should also demonstrate the transport function proposed for each road, for example those roads planned for public transport routes, those which will provide cycle metros or connectors, and traditional local, collector and arterial notations for general traffic.

Examples of matters that should be addressed include:

- Has industrial zoning been located so that it has the most appropriate access to the state highway, Regional Freight Network or rail corridors? Consideration should be given to safety and efficiency.
- Have retail and town centre zonings been centred around local roads, collector roads or proposed Frequent Network bus routes, rather than along main arterials whose function is expected to be movement of regional trips? This is to avoid immediate conflict between motorists and pedestrians (place vs. movement).

- Have zonings which accommodate high trip attracting activities (e.g. schools, retail, offices) been placed along existing or planned Frequent Network lines or clustered around public transport nodes such as railway stations? Similarly are such facilities located on the planned or future Auckland Cycle Network. This will achieve mode shift away from private vehicles in line with regional guidance.
- Is density proposed in places where it can be efficiently served by existing or planned public transport? For example is density centred around public transport nodes or along public transport corridors, rather than dispersed throughout the development area?
- What measures are being proposed to integrate the plan change or structure plan into the surrounding walking, cycling, public transport and roading networks? This will include suggested locations for new pedestrian and cyclist crossing points or intersections and extensions or footpaths or cycling facilities where necessary to connect the proposal to existing urban areas or destinations such as local shopping centres or schools.
- What will the roading classification within the development area be and what are the proposed cross sections or road reserve widths proposed for each road in the hierarchy[10]? Structure Plans and plan changes should set out the proposed traffic, bus and cycling networks within the development area and how cross sections respond to the function of each road. Control of vehicle driveways on key cycling routes is a paramount consideration.
- Are the measures proposed on the perimeter of a plan change or structure plan area consistent with the vision of a Corridor Management Plan (CMP), Centre Based Transport Study (CBTS) or any other currently planned transport project that might apply in the location?
- If a greenfield development, what upgrades to rural formed roads surrounding the development area are proposed? Are they consistent with ATCOP and the proposed function of the road?
- What is the approach that will be taken to parking provision (for cars, motorcycles and cycling), as well as loading provision within the plan change area? Are standard Unitary Plan rates appropriate or should a more context specific approach be taken?
- Is the structure of the plan change set out so that pedestrians and cyclists can safely and directly access bus stops?
- Does the design of the road network and cross sections provide sufficient width for buses to move through the area and for bus stops to be provided?
- If mass transit stops are proposed as part of the structure plan/plan change (e.g. a train station), are there appropriate cycle parking facilities provided?
- Do the cross sections provide for dedicated cycling facilities linked to the cycling hierarchy that has been identified both within and external to the development area?
- How will networks within the structure plan or plan change area link into the surrounding road network and dedicated cycling/pedestrian networks to enable pedestrians and cyclists to travel along desire lines?
- Are there intersections in the locality with a poor crash record? Does the proposal resolve or not exacerbate current safety issues?

For Site Specific Proposals

For proposals on a single site or covering a limited geographical area, the ITA should demonstrate that the proposed intensity and type of land use is appropriate with respect to the surrounding

[10] *Reference should be made to the Auckland Transport Code of Practice minimum standards*

transport network, or sufficiently mitigated so as to not reduce the resilience or function of that transport network.

The focus of the analysis should also be on how the site achieves adequate integration with the surrounding transport network and also how the proposed design within the site provides for all transport modes adequately. Matters that should be addressed include:

- Is the site located adjacent to an existing or planned Frequent Network line or station?
- If not, is the site within a reasonable walking distance of a Frequent Network line or station (1km)? If so, how easily can pedestrians access the site in terms of directness and the quality of pedestrian facilities along that route? What interventions are proposed?
- Is the site within a reasonable cycling distance of a Frequent Network line or station (3km)? If so, how easily can cyclists access the site in terms of directness and the quality of cyclist facilities along that route? What interventions are proposed?
- What impact will the proposal have on existing businesses or freight movements if residential intensification is proposed in a business zone?
- Does the site locality have adequate levels of walking and cycling infrastructure?
- How has the development been designed to interact with the transport network so as to facilitate pedestrian and cyclists movements, to encourage public transport use and to manage traffic congestion?
- Is a travel plan proposed? If the site has an existing travel plan, how will this be amended to respond to the proposal?
- What level of car parking is being provided and how is this being managed?
- What level of bike parking and other end-of-trip facilities are being provided?
- Is safe and functional vehicle access to the site/s provided?

Staging

If the development is proposed to occur in stages, outline those stages and the timeframes involved. More detail is often available and would be expected for site specific proposals.

A particularly important component of integration is ensuring that the staging of the development is proposed in line with the predicted completion dates for any particular infrastructure or service upgrade as published by transport agencies. Realistic development timeframe are critical to ensure that necessary infrastructure can be programmed at the right time, rather than on optimistic predictions.

Reference should be made to the current RLTP, National Land Transport Programme (NLTP) and LTP to ascertain the indicative timing of proposed transport projects. The NLTP lists activities that NZTA is likely to co-invest in as they meet its criteria and priority for funding, while the RLTP/LTP includes additional activities that AT may proceed with based on Auckland Council funding.

Other reference sources that may be of relevance are the State Highway Asset Management Plan (SHAMP) for State highways and Auckland Transport's Asset Management Plan (AMP). The SHAMP describes the services that the State Highway system provides now and in the future, how NZTA intends to manage the assets and how it intends to fund the work that is needed. Auckland Transport's Asset Management Plans (AMPs) provide the framework for

managing the asset portfolio in the most cost-effective and sustainable manner to meet the levels of service (LOS) required from the network. The impact of any development proposal on these LOS targets should be considered and mitigation offered where necessary.

PREDICT TRIP GENERATION AND EXPECTED MODE SHARE

Outline the results from the ART3 zone including the proposed development, either from a relevant existing model run or from a new ART3 model run including the proposed development. These results will include predicted private vehicle and public transport trips during the peak two hour period, and where these trips originate from or are destined to (trip distribution). Consider whether the results are sensible given the location and type of development proposed or whether manual adjustments are necessary based on professional judgement.

The following should be considered in determining whether manual adjustments are required:

Industry Data

In relation to determining the person trip generation characteristics of a development proposal, guidance can be taken from the following types sources:

- travel to work surveys as recorded during the census (Statistics New Zealand);
- the New Zealand Household Travel Survey (Ministry of Transport);
- where available, actual survey data from similar land uses with similar transport characteristics; and
- United Kingdom National Travel Survey (Department of Transport), given the many similarities between UK and NZ travel behaviour and trip-making.

ART3 provides trip estimates for generic landuse types based on the forecast regional growth pattern and planned roading and public transport networks. Standard industry sources of vehicle trip rates will still be useful in cross checking the forecast private vehicle trips from the ART model runs (and other sources). These sources include the Trips Database Bureau (TDB), RTA and ITE guidance as well as other sources noted directly above. Differences between the ART3 trip estimates and industry data should be logically explained by either the landuse or locational context.

Land use characteristics

With respect to land use the following factors may be relevant:

- Will the land use be serving a local catchment or will it draw people from a wider area?
- Will the land use attract single or multi-purpose trips, or will people be undertaking other activities in the vicinity, and will these be within walking distance of the development?[11]
- Are the landuses proposed 'dependant' on car use (for example bulky goods) or can a significant proportion travel by public transport (for example well located offices)?
- Is the generic landuse type defined within the ART model broadly consistent with the proposed development? There may be factors relevant to this specific development that the ART model does not or cannot represent, and therefore manual adjustment may be appropriate.

[11] *This should generally be no more than 400m.*

Public Transport Accessibility

With respect to the trips predicted to use public transport, the following may be of relevance:

- If the ART model zone is large, and the development in question is relatively closer or further away from the nearest public transport stop than that assumed for the whole zone.
- Is the development proposing measures that would increase public transport use further? For example are new services proposed or upgrades to existing infrastructure? The ART3 model will be sensitive to reductions in average walking distances to public transport stops, the locations served by public transport routes and frequencies. Proposed changes to these will directly impact the predicted trips.
- Are currently planned services capable of handling predicted demand? This may result in the need to transfer trips away from public transport or agreement may be reached with AT to increase planned services.

Walking and Cycling Accessibility

Given the particular limitations of the ART3 model with respect to predicting active modes a qualitative assessment of the quality of the cycling and pedestrian network should be undertaken.

As a general rule pedestrians can be expected to walk within a 1km radius of their destination (this being an upper limit), while cyclists' range can be extended to 3km[12]. Questions to consider would be:

- What is the state of the footpath and cycling network?
- Is the network complete or piecemeal?
- Are high levels of service achieved for each mode for e.g. wider footpath than usual or separated facilities for cyclists?
- How easy it is to cross at main crossing points?
- Are any of these measures proposed within the development area or are upgrades proposed on the perimeter of the development area?

Having undertaken this assessment it may be appropriate to amend the predicted active modes share in the ART3 model either up or down. Any adjustments should be explained and agreed with the relevant transport agencies.

Accessibility of the Site by Private Transport

Having undertaken ART3 modelling, and making adjustments where appropriate, an assessment should be made of the impact of private vehicle generation on the transport network.

Information should be provided showing the existing and future private vehicle generation of the development, including consideration of the number of people in each car. It will be necessary to consider the distribution of trips onto the wider road network in order to understand any effects on the operation of the surrounding road network. This requires an understanding of existing areas of congestion and the access arrangements to the plan change area or development site.

[12] *An average based on ARTA Pedestrian Studies (2010), the New Zealand Travel Survey 1997/1998 and the Economic Evaluation Manual*

The accessibility of the development by private vehicles also needs to give consideration to the level of parking to be provided within the development area or site, as this will influence the number of vehicle trips generated. Consideration of private vehicle carparking and trip generation together is important. Where carparking is identified as a constraint to private vehicle travel, an assessment of how these trips will be made by other modes and any further improvements required to support this should be undertaken.

AT and the NZTA have a number of traffic models which may be of assistance. Where an appropriate traffic model is available, it is preferred that this model is used as the basis of any detailed traffic modelling. It is not desirable for there to be multiple models for a single area unless they are serving different purposes (such as different levels of detail). This can lead to unnecessary time and resource spent scrutinising new traffic models rather than focussing on the transport issues to be resolved.

All traffic models (such as SATURN, PARAMICS, SIDRA, or other accepted tools) should take into account changes in traffic demands on the wider network, as predicted by the ART model and adjusted where necessary, unless it can be demonstrated in advance that an alternative approach is more appropriate.

Person Trip Generation

Ultimately, it is expected that the resulting trips predicted for each travel mode should be consistent with all relevant factors, such as traffic generation rates of the expected landuse type; parking provisions; public transport routes, frequencies and capacity; and walking and cycling facilities. This information should be reported as both numbers of trips and resultant % mode share at the end of this section.

ASSESSMENT OF EFFECTS

At this stage, the number of trips predicted to travel to or from the development by each travel mode and where these trips are likely to originate from or are destined for will have been established.

Using these estimates the effects of the development on the surrounding transport network should be evaluated. In addition to the traditional assessment of traffic effects on the road network, this should include consideration of the operation of the public transport system, any vehicle and pedestrian/cyclist conflicts arising from vehicle movements to and from the development, and should consider positive, as well as negative, effects.

To understand the implications on the road network it is likely that detailed traffic modelling will be required. This could include wider traffic network modelling, micro-simulation modelling of a road corridor or localised area of the road network or isolated intersection modelling, in software packages such as SATURN, PARAMICS, SIDRA, or other similarly accepted tools. Any such detailed modelling should be consistent with the regional ART model where appropriate, in terms of predicted changes in demands on the wider network and general assumptions. It is noted again that the extent of modelling analysis will depend on the size and significance of the development and its location.

Consideration of the transport effects of the proposal should include the interim years while development is occurring as well as the final build out. There may be critical stages during the development where local transport improvements or future planned improvements beyond the control of the applicant are required to support ongoing development. It is expected that these matters be investigated with detailed traffic modelling to ensure appropriate staging provisions are identified, or alternatively to demonstrate that the development is not reliant on these improvements.

In practice the above assessment will likely be an iterative process that considers further transport mitigation, or changes to the form or scale of the proposed development, in response to the level of traffic effects based on the current set of assumptions. The results reported in this section will summarise the final proposal that has been developed during that process, including the final set of assumptions, and the magnitude of effects.

MITIGATION OF ADVERSE IMPACTS/IMPROVEMENTS TO INFLUENCE TRAVEL CHOICE

Having assessed the anticipated transport effects of the development through an iterative process, the ITA should identify how effects have been avoided or remediated and where necessary what mitigation measures are required to address any impacts on the transport network. Measures may also be proposed as a positive way of increasing the number of trips made by public transport, walking and cycling.

Any mitigation must have regard to the proposed function of the adjoining roads. For example if an existing CMP exists for a corridor, it would not be acceptable to propose mitigation that undermined the strategy set out in that CMP.

Mitigation measures may be needed both within a development area or site, as well as within the transport network surrounding the development site or area.

If there are stages during the development where specific improvements are required then these should be identified. Similarly, if the full development proposal is reliant on future planned infrastructure beyond the control of the applicant then this should also be identified, along with appropriate staging provisions.

Outline which of the following mitigation measures are proposed (as relevant):

- Changes that have been made to the location, use, design and intensity of land use, so that the site or development area is more supportive of the transport networks in the area.
- Are new bus services proposed over and above those planned by AT?
- Are different parking rates proposed to those stipulated in the Unitary Plan to encourage fewer trips by private vehicle?
- Are wider and/or new footpaths or upgraded crossing points for pedestrian and cyclists at key points proposed both within and external to the development area?
- End of trip cycle facilities for both visitor and staff which are secure, weather sheltered and include facilities such as lockers and changing rooms. If offered as mitigation these should exceed rates specified in the Unitary Plan.

- Are dedicated cycle facilities or shared path facilities proposed?
- Are bus priority measures, bus lanes or HOV lanes required?
- Will public transport stops and real time signage be upgraded?
- Providing for shared or remote parking and car-pooling.
- Do existing intersections need to be upgraded to ensure adequate capacity (ensuring that provision is made for all travel modes)?
- Do existing public roads surrounding the development area need to be upgraded to provide satisfactory LOS for pedestrians, cyclists and general traffic?
- Will the development create impacts and greater operation and maintenance costs (consequential opex cost) on existing transport assets in the vicinity and should the applicant provide mitigation for such impacts?

CONSULTATION SUMMARY & IMPLEMENTATION PLAN

Scoping

Provide information on the scoping exercise undertaken with AT, the NZTA and KiwiRail and outline the changes that have been made to the proposal through that iterative process.

This section should detail the discussions that have been had with relevant agencies and the agreements that have been reached.

Implementation

One of the most important aspects of a complete ITA is outlining how necessary infrastructure upgrades or mitigation will be implemented in a sequence that aligns with the staging of the development.

Where mitigation projects are identified, the following type of information should be provided in the ITA:

- The mitigation measure;
- The timing or sequencing of this measure;
- Whether this measure is currently included in the LTP or RLTP; and
- Estimated cost.

This information should be shown in a table such as that shown below:

MITIGATION MEASURE	REQUIRED BY	ESTIMATED COST	LTP/RLTP STATUS
Upgrade existing roundabout to traffic signals	2015	$750,000	Listed in RLTP in 2015
New pedestrian crossing facilities at two locations	2018	$50,000	Unfunded
New bus lane	2020	$1,000,000	Unfunded

An important area that must be considered in any ITA is what staging is planned to ensure any infrastructure upgrades or other measures proposed in the ITA are in place prior to development occurring.

Appropriate trigger points should be identified, and this section should record how these triggers have been captured in rules of the plan change, or conditions on any notice of requirement or resource consent application. These will be further considered and assessed by the planner in the AEE supporting the application.

It is recommended that the above information is also demonstrated on a map so that the spatial sequencing of all measures can be easily understood.

CONSISTENCY WITH RELEVANT TRANSPORT STRATEGIES

The main focus of this section should be on how the proposal will fit with specific transport policies and strategies, including the existing and future transport networks when considered together as one system. It is considered that this assessment can be undertaken by the transport expert and then used to appropriately inform the AEE. Provide a short statement referring to wider planning strategies such as the Auckland Plan or the RPS to outline the strategic direction sought for land use and transport in the relevant part of the Auckland Region to which the proposal relates. This should remain brief recognising that this analysis will be available in the AEE prepared for the development. Where the ITA is a standalone document prepared for "information only" this section should be expanded upon.

It should outline the relevant objectives and policies of AT's strategic plans and how these are of relevance to, and met by the development proposal. The key strategies and documents at present include:

- The Integrated Transport Programme;
- The Regional Public Transport Plan;
- The Regional Freight Network
- The Auckland Cycle Network;
- The Regional Arterial Road Plan (Roading Hierarchy and Function[13]);
- The Ferry Development Plan;
- Corridor Management Plans; and
- Centre Based Transport Studies
- Comprehensive Parking Management Plans
- AT's Asset Management Plan

If there are implications for the State Highway or rail network, reference should also be made to relevant NZTA and Kiwirail strategies.

In undertaking this assessment, the practitioner needs to consider the alignment of the development proposals with the direction of key transport policy / strategy and future network considerations for the Auckland Region.

A summary of the key transport policies / strategies and future network integration assessment should be provided with any further detailed assessment included in an appendix to the ITA.

It is suggested that in the summary, the practitioner will provide opinion on the alignment of the development proposal (for example, in a range from very low to very high) with the key transport policy / strategy and network integration considerations. In reviewing the overall level of compliance across all these considerations, the practitioner will be able to form a view on appropriateness of the development proposals in a land use / transport planning context and whether sufficient consideration has been given to all modes of transport.

Given the iterative process in developing ITAs it is expected that this summary will justify the proposal that is being reported, on the basis that any major issues will have already been identified earlier.

CONCLUSION

This section should summarise the development, the assessment that has been undertaken and any changes or mitigation that are recommended to ensure an acceptable outcome from a transportation perspective.

It should describe:

- The nature of the land use proposed, the overall structure plan for the area (where appropriate), and how the development has been designed to integrate with existing and future transport networks.
- The modal shares being targeted by the development and the measures that will be implemented to meet those targets.

[13] *This plan is supported by technical documents (e.g. deficiency analysis) which should also be referred to.*

- Any mitigation measures that are proposed, the implementation and sequencing of these mitigation measures, and estimated costs (where appropriate).
- How the mitigation measures proposed in the ITA have been captured in the layout and the rules of a structure plan or plan change, or the conditions of a notice of requirement or 'out of zone' resource consent. In particular, the monitoring or staging triggers that have been inserted to ensure that mitigation is actually provided.
- A conclusion relating to whether the development proposal is supported by the practitioner in the context of the assessment and associated mitigation measures identified within the ITA.

APPENDIX A –

LIST OF ACRONYMS, ABBREVIATIONS & TERMS USED

AMP	Asset Management Plan
ARTA	Auckland Regional Transport Authority
ART3	Auckland Regional Transport Model
AT	Auckland Transport
AEE	Assessment of Environmental Effects
ACN	Auckland Cycling Network
CMP	Corridor Management Plan
CBTS	Centre Based Transport Study
FTN	Frequent Transit Network
ITA	Integrated Transport Assessment
ITP	Integrated Transport Programme 2012-2041
LGA	Local Government Act 2002
LGAAA	Local Government (Auckland) Amendment Act 2004
LGACA	Local Government (Auckland Council) Act 2009
LOS	Level of Service
LTP	Long Term Plan
LTMA	Land Transport Management Act 2003
MUL	Metropolitan Urban Limits
NLTP	National Land Transport Programme
NZTA	New Zealand Transport Agency
PTMA	Public Transport Management Act 2008
PAUP	Proposed Auckland Unitary Plan
RLTP	Regional Land Transport Plan
RPTP	Regional Public Transport Plan
RCA	Road Controlling Authority
RMA	Resource Management Act 1991
RPS	Regional Policy Statement
RTN	Rapid Transit Network
RUB	Rural Urban Boundary
TDB	Trips Database Bureau
TIA	Traffic Impact Assessment

APPENDIX B –

GLOSSARY

Connector Network

The network of bus services which Auckland Transport proposes to run at 30 – 60 minute frequencies.

Development Proposal

Any landuse development proposed under the RMA and which triggers one of the ITA triggers in the Proposed Auckland Unitary Plan.

Frequent Transit Network

The core network of bus or rail services which Auckland Transport proposes to run at a frequency of at least 15 minutes or less from 7am – 7pm and which can be relied upon without reference to a timetable. Such services are not necessarily on their own right of way.

Future Transport Network

The transport network representing the existing roading, public transport and walking and cycling network plus any proposed improvements to those networks by the relevant transport agencies.

Greenfield

Development of currently rural land on the outskirts of the existing urban area

Metropolitan Urban Limit

The current boundary for urban development in Auckland. This is stipulated in the Regional Policy Statement and can only be adjusted by Council. This will be replaced by the Rural Urban Boundary under the Unitary Plan

Rapid Transport Network

The highest layer in the public transport network comprising all rail services and those bus services which run at a FTN level of service, but which are provided on their own separated right of way.

Requiring Authority

Any organisation empowered by legislation to require land for a public work, including the ability to designate land under District Plans. Refer s166 of the RMA.

Rural Urban Boundary

This is a line identified on the Unitary Plan maps that sets the boundaries for greenfield development within the Auckland Region over the next 30 years. The Rural Urban Boundary may only be extended by the Council.

Site Specific Proposals

Any RMA application requiring an ITA based on the identified trigger points, excluding plan changes or structure plans

Trigger Points

Certain timing points at which certain transport mitigation measures are required, based on gross floor area, traffic counts or other appropriate factors.