

AREA BASED
TRANSPORT
ASSESSMENT

December 2018

ABTA

ADVICE NOTE



Area Based Transport Assessment (ABTA)

Advice Note

Notes

It is intended that this Advice Note will be updated as necessary, in light of evolving policy and best practices.

This document has also been published as *Area Based Transport Assessment (ABTA) Guidance Notes* under reference number PE-PDV-02046, in TII Publications.

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Foreword

The achievement of accessibility for all is of critical importance, through the most effective and inclusive mix of mobility opportunities, and by association, the most appropriate provision for walking, cycling, public transport, commercial traffic and the private car. The effective integration of land use and transport planning through the planning process can play a central role in providing for more sustainable and equitable forms of development. This ranges from the challenges of climate change, the lowering of the carbon footprint, to addressing the quality of life for our communities, both existing and future, including the way we work, live and in terms of recreation.

Transport and land use policy has consistently had a stated aim of promoting modal shift away from the car, with the objectives of limiting urban congestion, reducing the environmental impact of transport, and avoiding the high cost of providing additional road capacity. However, there is an ever increasing dependency on car-based travel which needs to be addressed in land use plans.

The National Planning Framework (NPF) and the Regional Spatial and Economic Strategies (RSES) will provide further impetus to ensure that transport planning is integrated at all levels in the making of plans and the application of their policies and objectives.

Both TII and the NTA have identified a need to assist land use and transport planners in the identification of access and mobility requirements at the earliest stages of local-level planning, to support the cross sectoral delivery of environmental, employment, education, recreation, health and housing objectives.

The Area Based Transport Assessment (ABTA) process, described in this advice note is intended to establish and give expression at the local level, to integrated land use and transport planning policies and objectives, at the national and regional levels.

The challenge is to ensure that sustainable transport is considered and planned for at the earliest stage, at every level in the hierarchy of plans and investment programmes and ultimately in the assessment of the developments' transport requirements and impacts at the local level.

1.0 Introduction

What is an 'Area Based Transport Assessment' (ABTA)?

Area Based Transport Assessment (ABTA) is one of a number of complementary assessment processes, used in the preparation of local area plans, planning schemes (such as SDZs) and Masterplans (hereafter referred to as the *Plan*). The intended effect of ABTA is to ensure that the assessment of transport demand and its associated impact plays a central role in informing the development proposals. This should include consideration of the overall scale of the development as well as the mix of land uses, location, density, phasing and design / delivery of supporting transport infrastructure and services (across all modes of transport). Essentially, its function is to place the integration of land use and transport planning at the centre of the Plan preparation process.

In terms of policy integration from national to local level, ABTA can address the need to incorporate national and regional transport policies and objectives into local level land use plans and significant development areas. The ABTA will allow for, at the earliest stages of local level planning, the identification of requirements, primarily in relation to movement and accessibility, to address cross-sectoral issues relating to the environment, employment, education, recreation, health and housing. In doing so, it is intended that ABTA will establish and give expression, at the local level, to national and regional land use and transport planning policies.

This Advice Note aims to present a process methodology to local authorities and developers on how best to ensure that transport planning is integrated into the development planning process at a local level, using ABTA. While the ABTA process is designed to ensure that transport planning is integral to, and interlinked with, the preparation of statutory local plans, the methodology as presented can still be considered as a standalone process for development areas.

Policy Context for ABTA

The integration of land use and transport planning has evolved significantly in Ireland, and is now recognised as a central element of the development planning and development management processes.

National transport planning policy established by the Department of Transport (DoT) in *Smarter Travel* (2009) and *Strategic Framework for Investment in Land Transport* (SFILT) (2014) provides a strong framework for land use planning.

The *National Planning Framework (NPF)*, (2018) by the Department of Housing, Planning, Community and Local Government (DHPCLG), sets the strategic planning policy at a national level and has been acknowledged as an enabler of transport policy.

In line with these overarching national policy documents, the Regional Assemblies have produced 'Regional Spatial and Economic Strategies' (RSES). The RSES set out planning and policy guidance, including regional transport planning guidance, which provides policy direction at a regional level in accordance with the NPF. Based on the proposals set out in the SFILT, each RSES contains a transport element which outlines the strategic transport infrastructure requirements, transport policy objectives and transport targets for the region. This will result in the production of regional

transport strategies which are similar in function to that of the current transport strategy for the Greater Dublin Area (GDA), the *NTA Transport Strategy for the Greater Dublin Area*¹.

This hierarchy of plans and the interaction with transport planning is set out in Figure 1.1 below.

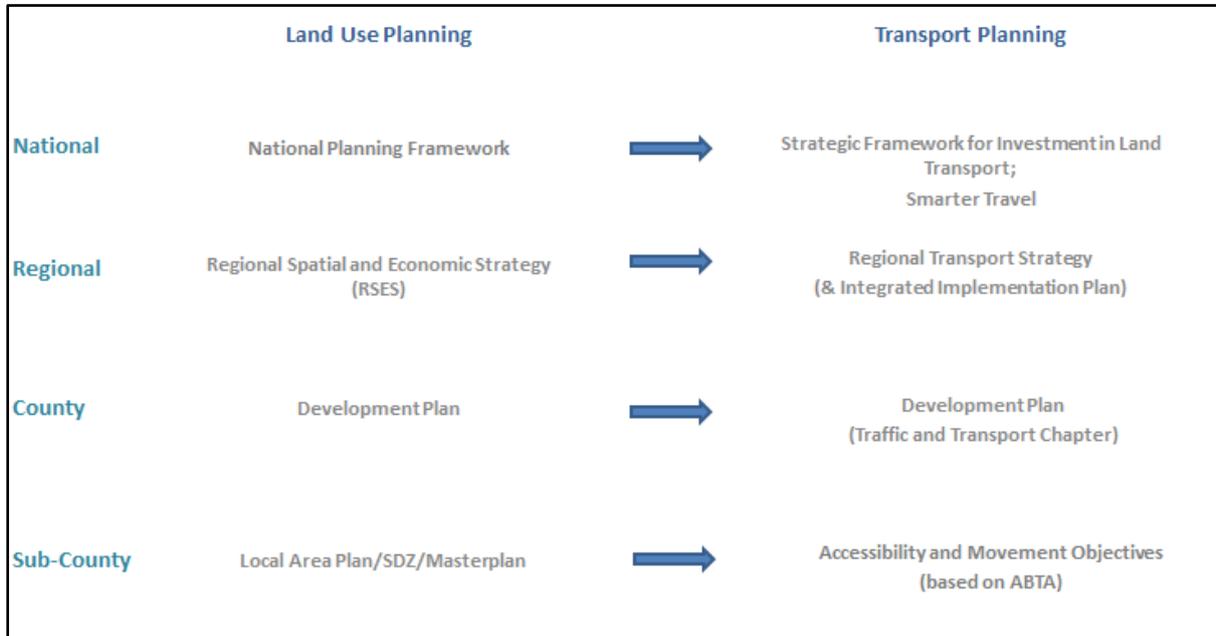


Figure 1.1: Hierarchy of Land Use and Transport Planning

Other Policy Considerations

Under current legislation, namely the provisions of Section 31J of the *Planning and Development Act 2000* (as amended) each planning authority in the GDA must demonstrate consistency with the NTA Transport Strategy in relation to new Development Plans and Local Area Plans. In a similar manner, under Section 27 (1) of the *Planning and Development Act 2000 (as amended)*, local authorities across the country will be required to demonstrate consistency with the policies and proposals set out in the RSES, including transport policies and proposals

There are a number of policy guidance documents which also need to be fully integrated into the planning and design of new development lands at a local level, and should be considered as part of the ABTA process.

- *Local Area Plans Guidelines for Planning Authorities* and associated *Manual for Local Area Plans*, whose purpose is to disseminate best practice on the preparation of local area plans. <http://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Planning/FileDownload%2C33557%2Cen.pdf>

¹ The *NTA Transport Strategy for the Greater Dublin Area* sets out a strategy for transport investment over a 20 year period. Under the provisions of Section 31J of the *Planning and Development Act 2000* (as amended) each planning authority in the Greater Dublin Area must demonstrate consistency with it. For all planning and development matters in the GDA, the Transport Strategy is therefore a material consideration.

- The *Design Manual for Urban Roads and Streets* (Department of Transport, Tourism & Sport and Department of Environment, Community & Local Government, 2013) provides guidance for the design of urban roads and streets. This should inform the development of the road hierarchy and road design at the local level.
<http://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Planning/FileDownload%2C32669%2Cen.pdf>
- The *Spatial Planning and National Roads Guidelines for Planning Authorities* (Department of Environment, Community and Local Government, 2012) sets out planning policy considerations relating to development affecting national primary and secondary roads. This is complemented at site-specific level by the *Traffic and Transport Assessment Guidelines* TTA (NRA, 2014).
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Planning/FileDownload%2C29322%2Cen.pdf>
<https://www.tiipublications.ie/library/PE-PDV-02045-01.pdf>
- The *National Cycle Manual* (NTA, 2011), was produced to advise on best practice in design for cycling facilities. This should inform the design process and requirements for cyclists, as well as providing a template for the implementation of cycle facilities both on and off road.
<https://www.cyclemanual.ie/>

This list is not exhaustive. Other planning and transport guidance should be considered in the development of an ABTA, including:

- Sustainable Residential Development in Urban Areas (DECLG, 2009)
<https://www.housingagency.ie/Our-Publications/Regeneration/Sustainable-Residential-Development-Guidelines-200.aspx>
- Retail Planning Guidelines (DECLG, April 2012)
<http://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/Planning/FileDownload%2C30026%2Cen.pdf>
- Permeability Best Practice Guide (NTA, 2013)
<https://www.nationaltransport.ie/news/permeability-in-existing-urban-areas-best-practice-guide/>
- Planning and Development of Large Scale, Rail Focussed Residential Areas in Dublin (NTA/DECLG, 2013)
https://www.nationaltransport.ie/wp-content/uploads/2011/12/Planning_and_Development_of_Large-Scale_Rail_Focussed_Areas_in_Dublin21.pdf
- Achieving Effective Workplace Travel Plans, Guidance for local Authorities (NTA, 2013)
<https://www.nationaltransport.ie/wp-content/uploads/2012/03/Achieving-Effective-Workplace-Travel-Plans-Guidance-for-Local-Authorities11.pdf>

As appropriate, other sectoral policies should also be taken into consideration, in areas relating to climate change, public health and wellbeing, social inclusion / access to opportunity and quality of life.

2.0 Why is an ABTA Required?

Although guidance already exists with regard to the development of Local Area Plans, namely the *Manual for Local Area Plans* (DOECLG 2014), there is little specific advice relating to the implementation of strategic transport planning policy and the assessment of accessibility and movement options / requirements for development at a local level.

The primary objective of an ABTA is to make sure that movement and accessibility of all forms, across all modes of transport, is considered as a key component in the development of areas at a local level.

Key aims in the development of an ABTA are to:

- Maximise the opportunities for the integration of land use and transport planning by including the ABTA process as integral to the preparation of the Plan;
- Assess the existing traffic, transport and movement conditions within the Plan area and in its wider context;
- Plan for the efficient movement of people, goods and services within, to and from the Plan area;
- Identify the extent to which estimated transport demand associated with the emerging local development objectives can be supported and managed on the basis of existing transport assets;
- Identify the transport interventions required within the Plan area and in the wider context, to effectively accommodate the anticipated increase in demand; and,
- Inform *Site Specific Transport Assessments* for new planning applications.

It is critical that the development of an ABTA is not carried out in isolation from the respective land use plan. An iterative approach is recommended, with early discussions between the relevant agencies, the planning authority (and in the case of masterplans – developers), taking place at an early stage. This is required in order to determine the scale, density, mix of uses and phasing of development, and to assess the transport impacts / identify the associated transport requirements.

In this regard, an ABTA can form an integral part of the Local Area Plan, SDZ Planning Scheme or Masterplan preparation process, ensuring that the policies and objectives contained in the relevant Regional and City/County Development Plan are applied at the local level.

3.0 Who undertakes an ABTA?

An ABTA will be undertaken by, or on behalf of a Planning Authority, in conjunction with the relevant transport agencies, namely the National Transport Authority (NTA) and Transport Infrastructure Ireland (TII). In the case of Planning Schemes under the provisions of an SDZ designation, the designated Development Agency will be responsible for the ABTA. In the case of a Masterplan, an ABTA will be undertaken by the Developer, in conjunction with the relevant Planning Authority, in consultation with the relevant transport agencies.

4.0 Development of an ABTA

As set out above, the premise of an ABTA is to ensure that transport planning is integral to the forward planning process. This process should seek to devise the most appropriate strategy for the development of the subject area, taking into account land use and environmental considerations, and through the ABTA, by identifying a viable and appropriate solution to the subject area's anticipated transport impacts and requirements.

It is critical that the development of an ABTA is understood in the context of local area planning. In this regard, the ABTA process has been devised to fit within the framework of the existing LAP preparation methodology as set out in the *Manual for Local Area Plans, 2014*, DOECLG. It is envisaged that an ABTA will inform the preparation of a Plan in a similar manner to the SEA/AA process. This is set out in Figure 4.1, below.

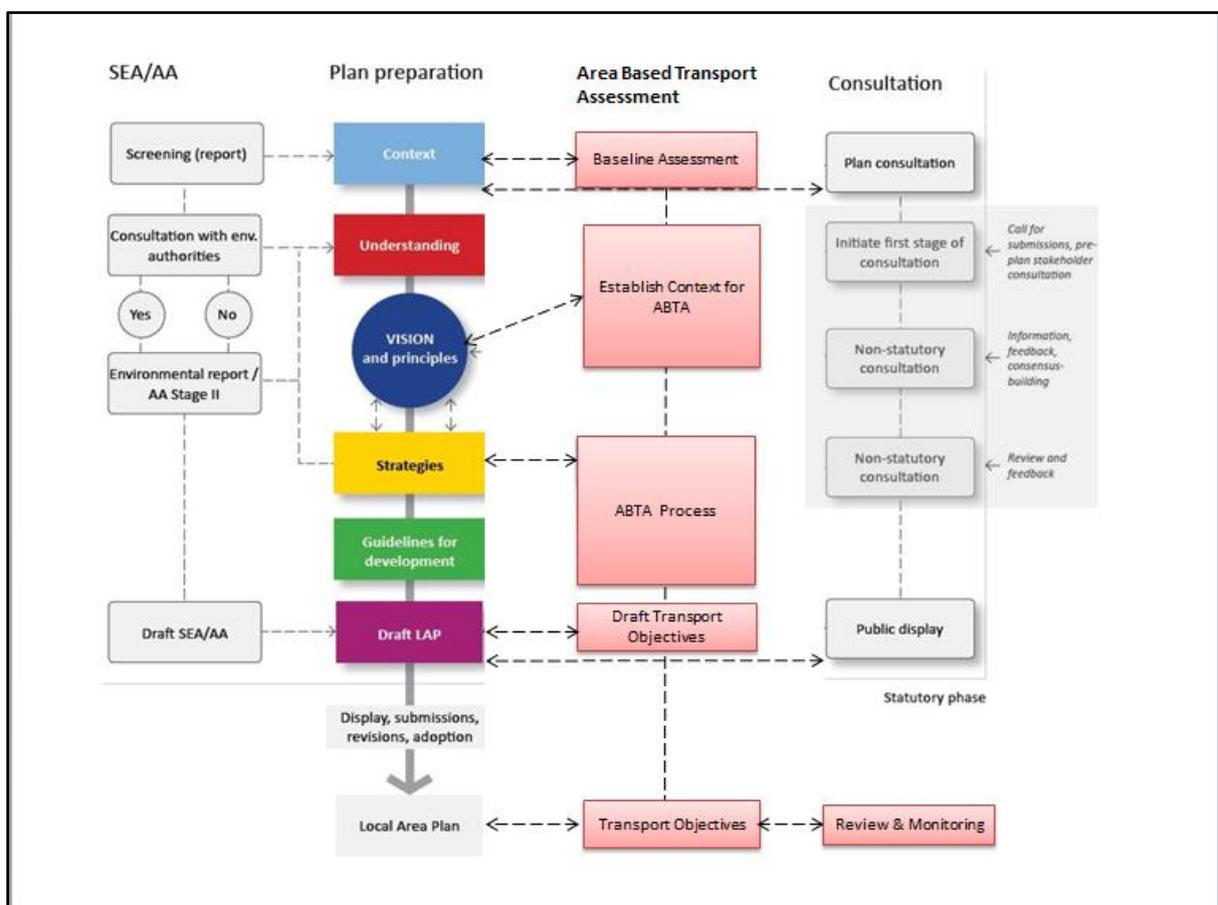


Figure 4.1: ABTA informing the LAP Process (adapted from the *Manual for Local Area Plans, 2014*, Department of Environment, Community & Local Government)

5.0 Outline of ABTA Process

Overview

The process set out in this Advice Note is presented as an outline, which can be adapted or developed as necessary to suit the specific requirements of a Plan area. It is not the intention of this note to present the various methodological approaches, such as transport modelling, which can be used to assess the impact of transport proposals, but rather to give an overview of the key stages of the process to develop an ABTA.

The principle parts of the ABTA process are set out in Figure 5.1 below:

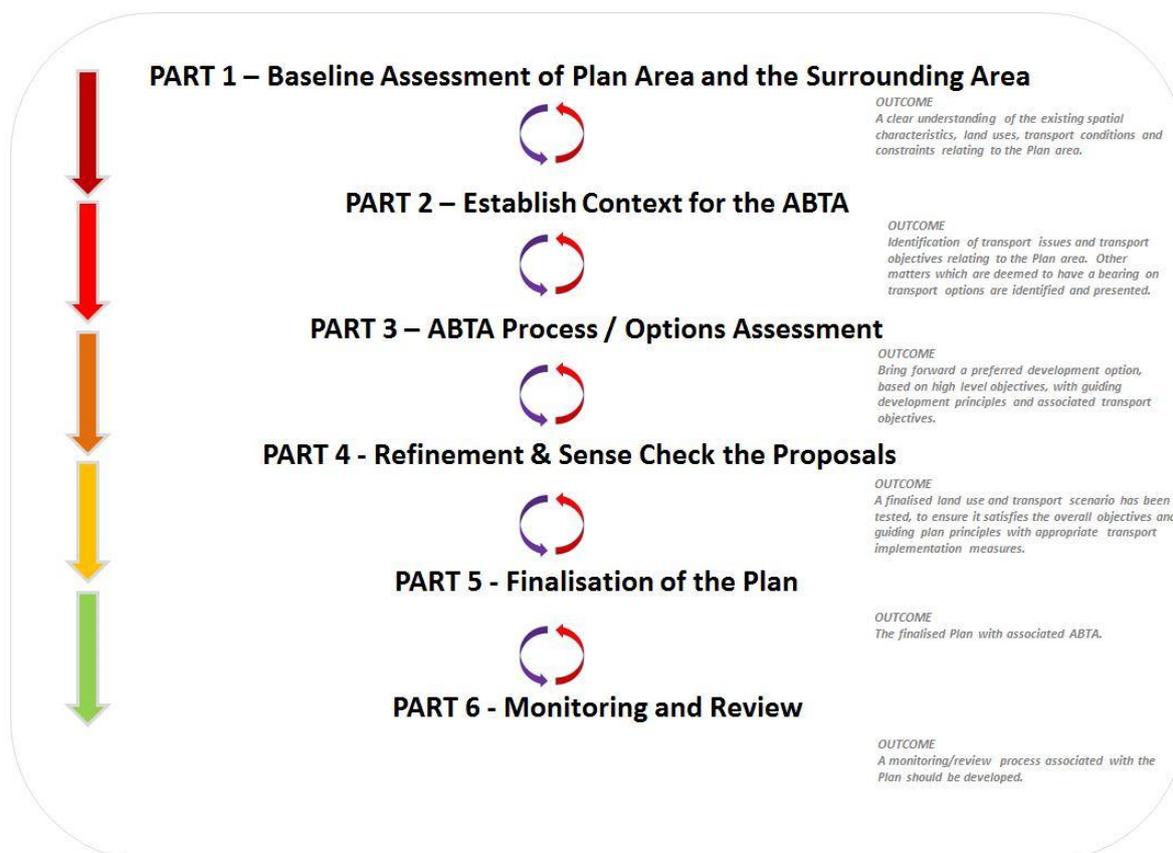


Figure 5.1 Principle Parts of the ABTA Process

PART 1 – Baseline Assessment of Plan Area and the Surrounding Area

A baseline assessment should first be undertaken to identify existing opportunities and constraints. This process coincides with, and complements, the background data exercise (evidence) assembled for the preparation of a Plan.

Policy Context

- Examine existing plans, policies and objectives for transport, of relevance to the development area;

Plan Area Characteristics

- Review existing land uses in the immediate area – particularly the location and relative dispersal/concentration of land uses, categorised by trip generators (residential) and trip attractors (destinations);
- Understand the topography and physical characteristics of the area;

Existing Travel Patterns

- Utilise Census POWSCAR, data from other transport assessments / EIAs previously undertaken that are of relevance to the Plan area;
- Assess the type and scale of trip attractions outside of the subject area - employment areas, recreation, retail, etc.;

- Establish the existing transport assets and usage patterns – public transport networks (bus, rail, tram, taxi, rural transport), public transport usage patterns, road traffic counts, pedestrian and cycle counts;

Transport Infrastructure and Services

- Set out, and understand, the characteristics of existing and proposed infrastructure/services, including:
 - Public transport services – operational capacity, service pattern, service frequency, destinations served;
 - Service infrastructure – broadband, electricity, gas, mains water and foul sewers;
 - The road network; and,
 - The walking and cycling environment;

Environmental Conditions

- Establish the environmental, heritage and archaeological considerations.

OUTCOME

A clear understanding of the existing spatial characteristics, land uses, transport conditions and constraints relating to the Plan area.

PART 2 – Establish Context for the ABTA

It is important at an early stage to establish and inform the development objectives and development constraints for the Plan, as they relate to transport demand and transport impact.

These should include the following:

Establish Transport Planning Principles and Objectives to inform the preparation of the Plan

- This should be informed by the Baseline Assessment undertaken under PART 1.

Determine Travel Demand, Travel Patterns and Mode Split Assumptions

This can be based on:

- Existing and projected population levels;
- Existing and projected employment levels;
- Existing and projected education places;
- Existing and projected travel demand / travel patterns; and
- Existing and future mode split objectives.

Identify Transport Development Options - Opportunities and Constraints

- Provision for walking, cycling, public transport and car;
- Provision for integration between modes;
- Parking provision / parking controls; and
- Transport infrastructure funding arrangements, including Development Contribution Schemes.



Confirm assumptions as part of the Plan preparation process

OUTCOME

Identification of transport issues and transport objectives relating to the Plan area. Other matters which are deemed to have a bearing on transport options are identified and presented.

PART 3 – ABTA Process / Options Assessment

A transport assessment process can now be undertaken. This can be carried out in three stages, and developed on the basis of the context of the transport issues and objectives, identified in PART 1 and PART 2.

Stage 1 (Macro) – ESTABLISH A ‘BIG PICTURE’ UNDERSTAND OF THE ANTICIPATED OUTCOME

- Likely travel demand and travel patterns, identified in PART 2;
- Capacity of the existing transport infrastructure / services and proposed transport interventions to service anticipated travel demand;
- Key accessibility factors which should influence the pattern and scale of development within the Plan area;
- Key connections to transport networks within the surrounding area;
- Potential desire lines and trip attractors; and
- Initial scale and location of development by land use (initial land use assumptions) within the Plan area.

Stage 2 (Micro) - IDENTIFY AND DEVELOP SPECIFIC MEASURE BASED ON THE ‘BIG PICTURE’ OUTCOME

- For the Initial land use assumptions relating to the Plan area:
 - Develop initial internal transport networks to serve the proposed land uses,
 - Identify the likely travel patterns from the initial land use assumptions relating to the Plan area and their associated impact on external transport networks;
- Identify measures which can significantly influence the demand for travel and mode choice. These can include behavioural change measures, such as:
 - Personalised/school/employment travel plans, and
 - Other demand management measures such as parking provision/parking management;
- Identify potential funding sources/ funding mechanisms.

Stage 3 – Decision Making – ASSESSMENT AND REVISION OF PROPOSED MEASURES

- Develop a range of development scenarios (as required) for the Plan area for assessment purposes, and identify associated transport interventions and transport impact;
- Identify optimal development scenario, with associated transport interventions.



Feed-back into Plan preparation

OUTCOME

Bring forward a preferred development option, based on high level objectives, with guiding development principles and associated transport objectives.

PART 4 - Refinement & Sense Check the Proposals

Check that the transport elements associated with preferred development scenario clearly demonstrate that:

- Connectivity and accessibility to public transport services, walking and cycling networks are safeguarded and provided for;
- Development phasing and the mechanism for transport infrastructure / services delivery, including the financial requirements, are fully considered;
- Road proposals and associated junctions can meet the anticipated level of trip demand pertaining to each mode;
- Where applicable, the strategic national road network will be protected from local car trip generation;
- DMURS (Design Manual for Urban Roads & Streets) is reflected in the design process;
- National Cycle Manual is reflected in the design process;

In addition, the ABTA should consider whether:

- The land use planning process, and transport planning, has been integrated in identifying the most appropriate land use and transport solutions.
- The proposed transportation options will ultimately ensure that appropriate levels of service will be provided across all modes of transport;
- An appropriate level of contingency has been considered for each mode to allow for development-related growth in transport demand external to the Plan area; and,
- Due to the proposed transportation options, excess capacity in relation to road and public transport networks will arise, notwithstanding the development objectives relating to the wider area.

A check list of information, against which the Plan's transport proposals can be assessed, is presented in Appendix 1.



Feed-back into Plan preparation

OUTCOME

A finalised land use and transport scenario has been tested, to ensure it satisfies the overall objectives and guiding plan principles with appropriate transport implementation measures.

PART 5 - Finalisation of the Plan

The finalised ABTA will present the proposed transport interventions across all modes, along with an associated implementation plan, corresponding to the Plan's development objectives and (where applicable) development phasing strategy. The ABTA should present the anticipated travel patterns relating to each mode of transport and the associated assumed mode share.

Ideally the ABTA will be completed concurrent with the finalisation of the Plan, directly imputing into the land use proposals and objectives. In this regard, the ABTA report becomes a supporting document to the Plan.



Finalise the ABTA as part of the Plan's preparation

OUTCOME

The completed ABTA report is a support document of the finalised Plan.

PART 6 - Monitoring and Review

To ensure that the transport objectives and measures set out in the ABTA are implemented in line with the build out of the land use Plan, a monitoring process should be established which examines:

- Observed travel patterns and associated transport impacts against the ABTA's transport objectives, development assumptions and intended outcome;
- The delivery of transport infrastructure and services, as envisaged.

This should inform any review process related to the Plan, and any transport infrastructure or public transport service changes were deemed necessary and feasible.



Provide feedback to reflect ABTA's function, in informing the preparation and review of the Plan.

OUTCOME

A monitoring / review process associated with the Plan is established.

Section 6 – next steps / conclusions

Not seen as a definitive document, a guidance document on how to approach the development of a transport planning framework for a local area.

Flexible and evolve over time, as plans of different scales, and in different spatial contexts developed, this will feed into future revisions /guidance.

Appendix 1

Check List of Transport-related Information to be presented in the ABTA

- Strategic Road Network – motorways, national and regional classified roads
- Local Road Network within and outside of the Plan area (district distributor, local distributor, collector, access)
- Public transport routes, service schedules and public transport nodes within the Plan area and the wider area
- Cycle network provision and connectivity to key destinations within the Plan area and in the wider urban area
- Walking and cycling routes to key trip attractors external to the Plan lands (e.g. existing local neighbourhood centres, schools, public transport nodes (bus stops, rail stations, LRT stops)
- Location of key Pedestrian crossing points
- Public Transport travel time isochrones – key destinations - Plan area and wider urban area
- Walk time and distance isochrones – key destinations within and in the vicinity of the Plan area
- Cycle time and distance isochrones (key destinations) - Plan area and wider urban area



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