# Transport Assessments and Travel Plans

A Transport Assessment (TA) is required when there is a need to quantify through analyses the quality, capacity and therefore acceptability of the local area to accommodate and successfully provide for the movements generated by a new development.

Traditionally, the primary outputs and findings of a TA have been derived from specialist modelling software which forecasts traffic routing, queuing, congestion, delays and the operational capacity of road junctions. This mathematical and predominantly quantitative approach has inevitably prioritised the movements and needs of traffic over individuals and has led in some cases to the overlooking of the *qualitative* aspects of our environment and how infrastructure (good and bad) can affect the human experience.

TA requirements in recent years have extended their remit to include public transport surveys, parking accumulation studies and pedestrian modelling,

with the latter becoming increasingly common. In each case, we expect a TA to provide a robust quantitative and qualitative assessment of how the local movement network will operate pre and post-development for all users. It is therefore not acceptable to simply provide a description of the local movement network as we do not consider this to be an assessment.

Having analysed these matters, we expect a TA to formulate and offer solutions for innovative and high quality infrastructure that will either mitigate the development impact and / or offer enhancements to active travel modes to safely accommodate the change in movement patterns and characteristics when compared to the existing or vacant use.

In Bristol, experience has shown that the benefits of developers delivering highway capacity improvements in the built-up area are extremely limited due to being: undeliverable (due to space



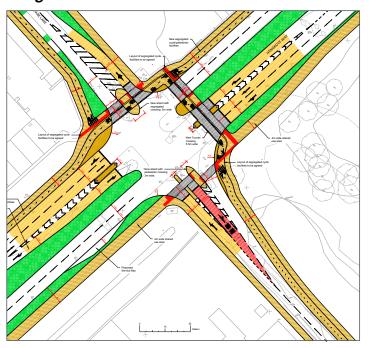
Fig 1: Census data - Travel to Work by Car or Van (2011), Bristol region



constraints); or undesirable (i.e. causing capacity issues in other locations). As a result, and in locations where people live, work, study and spend their leisure time, we must prioritise the most vulnerable highway users through seeking enhancements to walking, cycling and public transport infrastructure that will aim to address the cause of congestion (modal choice) and prioritise active travel rather than attempting to accommodate further congestion.

In an urban context, these are the choices we must make in order to minimise harm to our environment in the interests of current and future generations, and therefore we consider it necessary as part of TAs to consider outcomes-based solutions – i.e. what type of environment we want to see around the development – in favour of the traditional predict / provide traffic-based approach. Whilst there will still be a requirement to monitor the efficiency and performance of road junctions as part of a TA on some occasions, the level to which this is necessary will arise out of pre-application scoping discussions and will depend on the size of development and its location.

Fig 2: Proposed Access Junction Design, Hengrove Park



## **Two Stage Process**

An agreed Stage 1 TA, submitted at the preapplication stage will significantly reduce the potential for misunderstandings about the form and content of further assessment work and will serve as an established and agreed template moving forwards. Following receipt of the Stage 1 TA, it will be discussed whether or not a Stage 2 TA is necessary (depending upon the impacts demonstrated in stage 1) and if so, what the Stage 2 TA needs to include. In this respect and for larger developments, a Stage 1 TA fulfils the remit of a TA scoping study. For smaller developments a Stage 1 TA will be sufficient, for instance where the impacts of the development are minor in nature or where there are fewer requirements for interventions (infrastructure or financially) to support the development. In these instances, a Stage 1 TA holds a similar status to a Transport Statement.

The Stage 2 TA will build upon the work carried out in stage 1, confirming a package of deliverable transport improvements, travel planning measures and suggested financial contributions and will be accompanied by any supporting modelling work as appropriate and agreed as necessary at Stage 1.

## **Typical Scope**

The following is provided as a typical example of what we would expect, although in specific locations and scenarios, we may require additional information. The Stage 2 TA should incorporate (and update where necessary) the Stage 1 TA given that much of the initial / preparatory work for Stage 2 will have been completed in Stage 1. The typical scope of each document shown below is by no means exhaustive but provides an example of the type of analyses we expect to accompany development proposals, in accordance with *TDMG 2.1.2 Assessment Thresholds Table*.

Further detail on the scoping and requirements for Transport Assessments are provided in *TDMG 2.1.4 Transport Assessment Content*.

## Stage 1 TA

- Summary of Development Proposals
- Policy Background
- Existing Transport Conditions, including:
- Qualitative Walking, Cycling and Public Transport Audit
- Movement volumes and observed behaviour
- Historic Collision Data
- Proposed Site Constraints, Access and Indicative Layout
- Current Site and Trip Generation
- Committed Transport Schemes and Developments
- Proposed Development Multi-Modal Trip Generation
- Proposed Development Multi Modal Trip Distribution and Assignment
- Potential Transport Interventions and Improvements
- Transport for New Homes (TfNH) Assessment
- Travel Planning Proposals

### Stage 2 TA

- Further Survey Work (as agreed following Stage 1), i.e.
  - Pedestrian Crossing and Volume Surveys
  - Cycle Surveys
  - Public Transport Patronage and Reliability Surveys
  - Parking Surveys
  - Traffic Volume, Turning Count, Queue Length and Speed Surveys

- Modelling Assessments and forecast reports for baseline and future years (as agreed following Stage 1), i.e.
  - Pedestrian and Cycle Modelling
  - Subregional Modelling (i.e. SATURN)
  - Microsimulation Modelling (i.e. VISSIM / S-Paramics)
  - Individual Junction Models (i.e. PICADY / ARCADY / LINSIG)

### Confirmation of Package of Transport Interventions, for example:

- On-site infrastructure
  - Proposed layout, incorporating access, parking, EV charging, swept paths, widths, gradients and areas offered for adoption
  - Site specific infrastructure, including cycle parking, servicing and waste collection arrangements
- Stopping up and / or dedication as highway
- Footway widening or segregated cycling provision
- New or relocated crossing facilities
- Public Transport interventions ie: stop / shelter upgrades / new bus lanes
- Junction Improvements ie: signalisation / narrowing / remodelling
- Road Safety / Traffic calming measures
- Road Closures and / or adjustments to traffic flow (i.e. one-way orders)
- Parking interventions and changes to Traffic Regulation Orders (TROs)
- Stage 1 / 2 Road Safety Audit associated with physical changes to the highway.

#### Framework Travel Plan

- Measures to be delivered prior to occupation
  ie: car clubs, marketing and incentives
- Appointment of Travel Plan Co-ordinator
- Implementation, Targets and Monitoring
- Suggested Penalties for not meeting targets
- Transport for New Homes (TfNH) Assessment

## Travel Plans (TP)

Travel Plans comprise both a developer and employer's commitment to minimising the harmful impacts upon communities in Bristol of further continued and unmitigated reliance on the private car. We take this responsibility very seriously and will reject Travel Plans that we feel will be ineffectual, and/or have been submitted to simply tick a box.

Travel plans that do not provide a detailed scope of measures and responsibilities, or those that are not underpinned by a robust and credible regime of targets, monitoring, and 'failsafe' interventions will not be effective, and therefore not be recommended for approval.

For further detail on Travel Plans please refer to TDMG section 2.1.5 and the Travel Plan Guide for New Developments.