



LAND-USE AND TRANSPORT INTEGRATION IN SCOTLAND

[www.transportscotland.gov.uk/latis](http://www.transportscotland.gov.uk/latis)

## Application for LATIS

Guide for Users

## Introduction

### Background

The Land Use and Transport Integration in Scotland (LATIS) service is offered by Transport Scotland and their supporting consultants to assist decision making across a range of policy areas in land-use and transport planning.

### Structure

LATIS comprises a number of different elements including

- The modelling capability; consisting of TMfS and its integrated land-use model TELMoS.
- Engaging with users.
- Supporting the collection of transport data and Local Authority planning data.

The availability of the LATIS services are communicated to the wider community through the user engagement programme, which provides consultations and user groups as a means of encouraging applications of the LATIS modelling capability and the provision of model support and advice from the LATIS service.

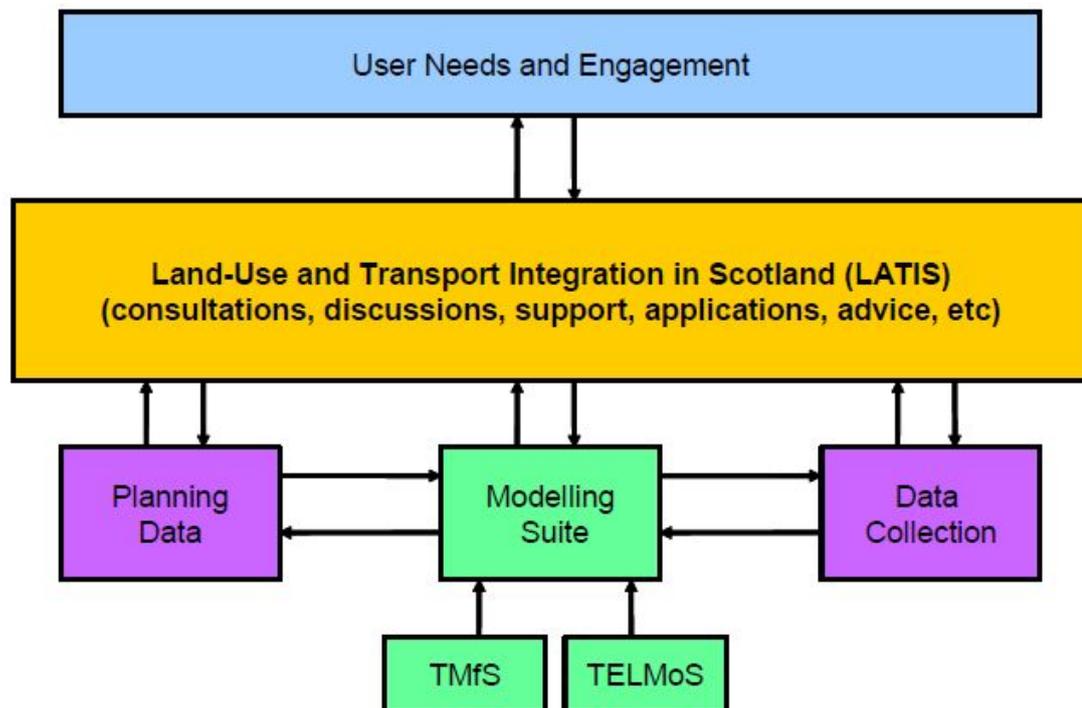


Figure 1 – LATIS Structure and Components

## **Purpose of this guide**

The 'Guide for Users' provides assistance on the processes involved in applying for and using the LATIS service for general applications. Topics covered include:

- Appropriate use.
- Application process and costs.
- Model / data release.
- Training and support.
- User satisfaction and feedback process.

These processes are designed to help ensure widespread, cost-effective and robust use of the LATIS service, whilst informing a programme of ongoing improvements and to protect the integrity of the LATIS service. The process is designed to ensure effective decision making and efficient use of public sector resources when determining investment in a wide range of policies and measures.

Transport Scotland does not operate the LATIS models directly, but contracts this service out through a 'Multiple Framework Agreement'. Thus, there are a number of consultants who operate the models on our behalf.

## **Requirement for User Protocol**

Outputs of the LATIS suite of models are made available, subject to the receipt of a signed 'Terms of Use' agreement and the successful completion of an application process. This release of these outputs creates the potential for a loss of integrity through misuse or poor understanding of the purpose / functionality of the model or meaning of the outputs. This guide therefore aims to provide a set of protocols designed to reduce the risk of any significant loss of integrity of the model.

# Appropriate Use

## Overview

LATIS can assist in facilitating decision making across a range of policy areas, including transport, planning, the environment, demographics, health, education and the utilities.

Its robust database of transport, land-use and demographic data, linked to a large and sophisticated multi-modal transport and land-use modelling suite, makes it a central component of Scotland's planning toolkit. The scale and nature of LATIS provides a consistent approach and robust evidence base to appraise schemes and policies across Scotland.

## When should LATIS be used?

LATIS covers a number of key areas, and depending on the nature and requirements of a particular study, may be appropriate to assist in the following fields:

- Undertaking appraisals of various transport and land-use schemes and policies.
- Undertaking assessment and comparison of impacts of various planning programmes and policies and benchmarking against Government indicators.
- Forecasting and testing future land-use, demographic and travel patterns.
- Undertaking environmental analysis, including projection of transport based emissions.
- Undertaking accessibility analysis.
- Undertaking economic, financial and cost-benefit analysis.

Generally, and with particular emphasis to the modelling component, the size and strategic nature of the land use and transport models are focused towards investigating the effects of high level policies and/or major interventions – rather than more detailed or relatively minor changes to the transport system.

Note that as regional style sub models are developed, these appraisal tools are anticipated to cater for more specific studies and/or more detailed types of interventions.

## Who can use the LATIS service?

LATIS is available to a wide range of existing and potential users, including:

- Transport Scotland; Scottish Government and its partner agencies;
- Regional Transport Partnerships;
- Scottish Local Authorities;
- Consultancies working on behalf of any of the above.
- Other interested parties, including academia and health boards

# Application Process

## Overview

Figure 2 below details the steps involved in an application of the LATIS service and its key components - the modelling suite, data collection and planning data facilities.

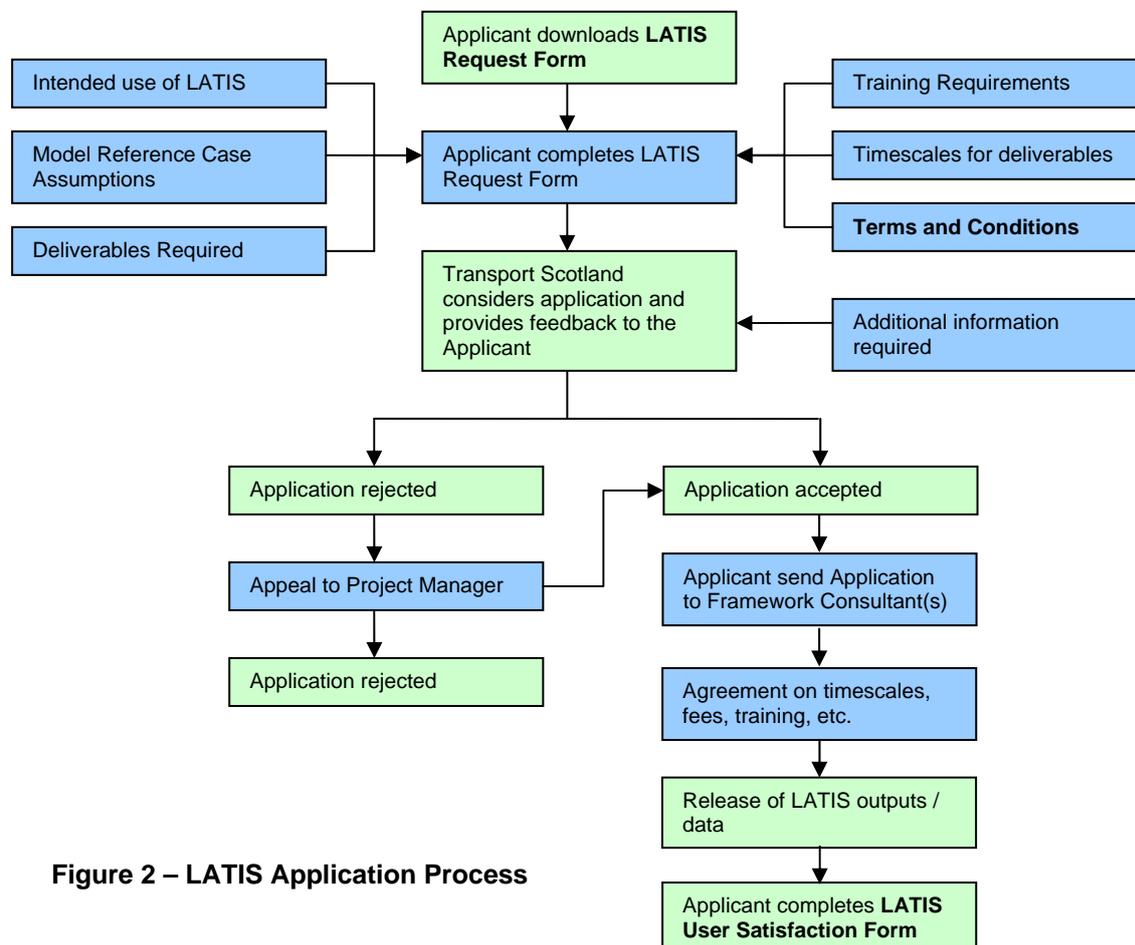


Figure 2 – LATIS Application Process

## LATIS Request Form

Before access to any LATIS outputs is approved, you must fill in a [LATIS Application Form](#).

The form is designed to obtain sufficient information to enable Transport Scotland to assess any application. The form should be completed by a senior member of your project team (preferably the modelling leader or project manager) and returned to [LATIS@transportscotland.gsi.gov.uk](mailto:LATIS@transportscotland.gsi.gov.uk).

You should answer each of the questions in the form, providing (where relevant) details of:

- The aims, objectives and scope of their project and what they plan to use the LATIS service for.
- Training requirements.
- A specification of any required changes to the 'Do Minimum' assumptions and an outline of the base and forecast years required.
- A 'desired' and 'latest acceptable' completion date for the LATIS support.
- Acceptance of the LATIS Terms of Use and the agreement to fill in a [LATIS User Satisfaction Form](#) upon completion of LATIS support.

It is important that you provide as much detail as possible to allow Transport Scotland to establish whether LATIS may be suitable for a specific application. The information provided in a LATIS Request Form allows for an initial consideration of timescales, training and costs.

Upon receipt of the LATIS Request form:

- The request will be reviewed by Transport Scotland.
- You will be provided with feedback and additional information will be requested if required;
- Subject to approval, Transport Scotland will provide contact details for our approved consultants.
- You may then approach whichever consultants you wish to negotiate the delivery of the information requested (i.e. timescale and cost).

Transport Scotland accepts no liability for the use of the LATIS service.

## **LATIS Terms of Use**

It is a necessary precondition for the use of LATIS services that you accept both the conditions of the LATIS Terms of Use Agreement and the stipulations contained within this Guide for Users.

The current LATIS [Terms of Use](#) Agreement is supplemented by this Guide and is also available on the LATIS website.

Any queries relating to the content of either the LATIS Terms of Use Agreement or this Guide for users should be directed [LATIS@transportscotland.gsi.gov.uk](mailto:LATIS@transportscotland.gsi.gov.uk).

## **Costs**

Transport Scotland does not impose any charge for the use of its models or the data it owns. However, the operation of running the models or extracting information from the models is provided by Transport Scotland's Framework Consultants and all their costs must be borne by the applicant.

You will be provided with contact details for all the approved Transport Scotland Framework Consultants. It is your responsibility to negotiate any contractual arrangements, costs, and timescales with one or more of these Framework Consultants.

# Data Release and Support

## Models and Data Available for Use

The information and processes available from the LATIS service range from the supply of collected transport data, to the use of transport models and the outputs obtained from the use of either the land use or transport models.

The 'National Model', is a strategic transport model which has been prepared with a level of detail commensurate with appraising national policy and strategic land-use and transport interventions and providing a key source of transport supply and demand data.

It is anticipated that the LATIS modelling suite will include a range of more detailed regional sub-models, such as the SEStran Regional Model, Moray Firth Transport Model, Aberdeen Sub Area Model, etc... Such models are particularly useful for appraising regional and local development plans, Regional Transport Strategies, corridor scheme appraisal, and more detailed operational appraisal.

The models are built upon a range of data that are also available to users, including:

- Planning data – for example population, households and employment data.
- Transport and travel data – including Road Traffic Counts, Public Transport Passenger surveys, Roadside Interviews, Car and Bus Journey Time Surveys and Park and Ride Surveys. If relevant, additional data can be also collected for users.

## Use of the Models and Data

Upon the successful completion of the application process the use of the LATIS models is permitted in the following ways:

- By Transport Scotland / Scottish Government in the performance of their own functions.
- By Transport Scotland's approved consultants on a 'bureau basis' for Transport Scotland / Scottish Government.
- By Transport Scotland's approved consultants on a 'bureau basis' for an External Party for the purpose stated in the relevant application form.

Transport Scotland is the 'Supervising Agency' in all applications of LATIS, and is supported in the assessment of applications by the LATIS Framework Consultants.

The LATIS models / data should be used solely for the purpose outlined in the Request form and should not be distributed to any third party without the prior consent of Transport Scotland.

**Transport Scotland stress that the release of LATIS data and models does not imply a tacit acceptance of the results and the implications of any test undertaken using the models. To this end, any report or documentation prepared by the model user shall include a disclaimer to this effect, unless the conclusions derived from the model results have been reviewed and approved by Transport Scotland.**

## Model Reporting

A range of Model Development Reports are available that describe the processes undertaken to build the models and illustrate the standard of calibration and validation achieved. The National Model Development Reports include the following documents:

- [TMfS Road Model Development Report;](#)
- [TMfS Road Model Calibration and Validation Report;](#)
- [TMfS Public Transport Model Development Report;](#)

- [TMfS Public Transport Model Calibration and Validation Report](#);
- [TMfS Demand Model Development Report](#);
- [TELMoS Description Report](#); and,
- [TELMoS Model Demonstration Report](#).

These reports should be consulted by the model user as they provide valuable indications as to the relative strengths and weaknesses of the model.

It is the user's responsibility to check that the model is 'fit for purpose' in the areas relevant for their specific study and to collect additional independent validation data to review the models where necessary.

The LATIS models have been independently audited by Transport Scotland's Traffic and Transportation Advisers and Auditors (TTAA). The [Audit Reports](#) associated with TMfS and TELMoS are available on the Transport Scotland Website.

A '[Non-Technical Guide](#)' for the use of the LATIS national modelling suite has been prepared to assist those who are not familiar with transport and land-use modelling. This guide provides an overview of the principles of modelling, as well as the strengths, weaknesses and overall capabilities of the modelling suite.

It is recommended that any potential user who is unfamiliar with the capabilities of LATIS or the principles of modelling generally refer to this guide prior to applying to use the models.

## 'Do Minimum' and 'Reference' Case Scenarios

The 'Do Minimum' and 'Reference' cases provide a list of the most 'likely' future year transport interventions which are not present in the base year network. Schemes within the 'Do Minimum' scenario are those which are seen as fully committed and where funding has been allocated. The Reference Case scenario includes additional schemes and interventions which are included in various plans or strategies but have not been developed to the same stage as those in the Do Minimum Scenario.

The list of '[Do Minimum](#)' schemes will tend to change over time, as additional schemes become committed and / or implemented, or in some cases are abandoned by Government. 'Reference' Cases may vary between applications, depending on the particular transport scheme / policy being appraised.

**It is the user's responsibility to ensure that the Do Minimum and Reference Case assumptions are up-to-date and appropriate for their specific application.**

In order to maintain consistency between scheme testing, it is strongly advised that the details of any required changes to the 'Do Minimum' or 'Reference' case assumptions are discussed with and agreed at the outset with Transport Scotland. A clear audit trail of changes should also be maintained, to ensure consistency of modelling results. This is a critical issue, since the inclusion or exclusion of certain interventions from the future year scenarios may significantly effect the appraisal of other schemes within the study area.

Details of the current Do Minimum and Reference Case assumptions are available on the [LATIS website](#).

## Support and Training

Transport Scotland will endeavour to provide the required levels of support and training to users of the models throughout the duration of the application.

Queries relating to past, present and future applications can be sent to [LATIS@transportscotland.gsi.gov.uk](mailto:LATIS@transportscotland.gsi.gov.uk) or to the [LATIS Project Manager](#).

The level of training that can be provided is based on the user's specified requirements and any subsequent discussions. Each application is likely to have its own unique

requirements for training and support, and therefore tailored rather than generic training courses are provided.

## **LATIS Website**

Support for the LATIS models and data is provided via the [LATIS Website](#), which contains information relating to each of the key components of LATIS, including:

- [Modelling](#);
- [Planning data](#);
- [Data collection](#); and,
- [Library](#).

These sections describe the data, processes, and reports available.

The Modelling and Data collection sections provide a useful insight into the technical data underlying the LATIS models. It is advised that any potential user should review these data prior to applying to use the model(s) / data.

The Library section hosts a number of LATIS documents. The area provides links to Annual reports, LATIS Newsletters, Brochures, non-technical guidance documents, etc.

Users experiencing any difficulties when using the website should contact us at [LATIS@transportscotland.gsi.gov.uk](mailto:LATIS@transportscotland.gsi.gov.uk).

# User Satisfaction and Feedback

## LATIS User Satisfaction Form

While ongoing user monitoring and support occurs throughout any application of LATIS, a specific '[LATIS User Satisfaction Form](#)' has been designed, which must be filled in upon completion of the user's project.

Constructive suggestions for the improvement of the LATIS service are welcome and where practical, relevant and cost-effective, Transport Scotland will endeavour to implement practical improvements based on these suggestions.

Where a LATIS User returns a set of consistently low scores or particularly negative comments, we will follow up these results by contacting you and establishing the reasons for your dissatisfaction. Any comments made will be recorded and Transport Scotland will attempt to rectify any areas of poor performance in future applications of the LATIS service.

For LATIS applications that occur over a long time frame (ie over 1 year) a LATIS User Satisfaction Form will be requested on an annual basis. Similarly, where a project involves a number of different applications of the LATIS service, an individual LATIS Satisfaction Form is required to be completed for each application.

The LATIS user will be expected to provide Transport Scotland with a draft copy of any technical reports describing their use of the LATIS modelling capability and its outputs. This will minimise (and hopefully eliminate) any potential misuse or misunderstanding of the modelling capability.

Transport Scotland will endeavour to respond as quickly as possible to any requests to review the use of the LATIS service and to avoid delaying the production of the final versions of the relevant reports.