



THIRD PARTY MODEL ACCESS PROTOCOL

Gloucestershire County Council Highways Modelling
Suite

Version	4.0
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Category	Transport Planning
Owner	Strategic Planning – Gloucestershire County Council
Target Audience	<p>Anyone wanting to use Gloucestershire’s Highways Modelling Suite in order to:</p> <ul style="list-style-type: none"> • Assess planning applications and test mitigation measures. • Assist in the development of Local Plans and site allocations. • Inform the development of the Local Transport Plan (LTP) and other funding bids. • Develop, appraise and assess potential major scheme submissions

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Signed
1.0		Consultation document	13/02/15	BW
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4.0		Updated document	16/06/20	DS

Third Party Access Protocol for Use of GCC's Suite of Highways Traffic Models

1. Introduction

- 1.1 Gloucestershire County Council (GCC) in partnership with Highways England (HE), as the Highway Authorities within Gloucestershire, has developed a suite of highways traffic models in order to:
 - Assess the impact of individual planning applications;
 - Assist in the development of Local Plans and emerging land use allocations;
 - Inform the development of GCC's Local Transport Plan (LTP) and capital programme; and
 - Assist in the assessment and appraisal of potential major scheme submissions.
- 1.2 The choice of models currently available comprise the following:
 - The Central Severn Vale (CSV) SATURN highways traffic model.
 - The A46 / Tewkesbury S-Paramics Model, and.
 - The Gloucestershire Countywide SATURN Model (GCTM).
- 1.3 The purpose of this Access Protocol is to provide guidance to external third party consultants on the use of and access to these transport models managed directly by GCC who, in association with HE, will retain ownership and intellectual rights of the models. Information on the charging mechanism for model access is also provided.
- 1.4 Any external third party requesting use of such models will therefore be required to confirm that the models themselves and any resultant output data from associated traffic modelling work will not be used for any purpose other than for a specific site and/or planning application.

2. Requirements for the use of Transport Models

- 2.1 National Planning Policy Framework (NPPF) July 2018, Section 9 – Promoting Sustainable Transport, Paragraph 111, states that...*"all developments that will generate significant amounts of movements"*, and therefore have an impact on the transport network (in terms of capacity and congestion),...*"should be supported by a Transport Statement (TS) or Transport Assessment (TA) so that the likely impacts of the proposal can be assessed."*
- 2.2 Planning legislation requires GCC and HE, where appropriate, as Highway Authorities to be consulted in certain circumstances before the Local Planning Authority determines a planning application.
- 2.3 Judgement on whether a development proposal would generate a significant amount of vehicle traffic movements and therefore require a TA or TS is at the discretion of the Highway Authority and will be decided on a case by case basis.
- 2.4 To allow a consistent approach in the assessment of development applications, submissions for proposals requiring traffic modelling work to support their TA or TS are recommended to make use of the GCC suite of models, where appropriate, or data outputs from those models.
- 2.5 For third party requests for use of the GCC suite of models, the expectations of the Highway Authorities regarding the appropriateness of such highway models shall be

confirmed during pre-application discussions, and will be determined on an individual development site basis.

- 2.6 The size, nature and location of any development will be a prime determinant in deciding on the use of the models, and early contact with the Highway Authorities should be made to 'Scope' the extent of any modelling, if deemed required, in support of a proposal to be submitted as a planning application.
- 2.7 Whilst accepting that developers will be under no obligation to use the currently available GCC models in the development of their supporting evidence base, it should be recognised that the opportunity to make use of such models will benefit promoters in assessing the impact (Local and Strategic) of any given land use proposal or scheme, subject to the reasonable costs of carrying out the required processes and procedures, as outlined in *Section 4 – Model Access Charging Mechanism* of this protocol.

3. GCC Traffic Models

3.1 GCC's highways modelling suite includes the following currently available models*:

- Central Severn Vale (CSV) SATURN highways traffic model (version 11.3.12u)
- A46 / Tewkesbury S-Paramics Model, (version 2014.1)
- Gloucestershire Countywide SATURN Model (GCTM), (version.11.4.07H)

*In cases where it has been agreed that third party transport consultants undertake their own traffic modelling work using GCC's models, please ensure that the appropriate software version is available in order to operate and run the models.

Central Severn Vale (CSV) SATURN Model

- 3.2 GCC in partnership with HE, own the CSV SATURN highways traffic model. Although it is primarily a strategic model, the key urban centres of Gloucester, Cheltenham and the Tewkesbury/Ashchurch area are modelled in relative detail in simulation format, the outputs from which can be used to help inform and facilitate the development of third party micro-simulation and/or stand alone junction models for more localised assessment purposes.
- 3.3 The CSV SATURN highway model's detailed network coding extends from the M5 Junction 9 in the north to M5 Junction 13 in the south, from west of Tewkesbury eastwards to the A46/A435 Teddington Hands junction, and from A40 west of Highnam roundabout eastwards as far as the A417 corridor between the Air Balloon roundabout at Crickley Hill and Cirencester. Geographically, the CSV modelled area therefore includes the whole of the Gloucester, Cheltenham and Tewkesbury urban areas and their surrounding environs.
- 3.4 The model covers a weekday AM peak hour period (08:00-09:00) and a PM peak hour period (17:00-18:00). The CSV SATURN model has been developed in accordance with Department for Transport (DfT) guidelines and advice set out in the Design Manual for Roads and Bridges (DMRB) and WebTAG acceptability criteria, with the aim of achieving relevant validation standards, ensuring high levels of confidence associated with the development of the demand (trip matrix) data.
- 3.5 The CSV SATURN highways model, using the SATURN Software suite (version 11.3.12U), has already been successfully validated to a 2013 base year and represents an average weekday during a neutral travel month. A Local Modal Validation Report (LMVR), dated March 2017, can be provided upon request, free of charge.

- 3.6 As part of a traffic modelling exercise undertaken to assist in the development of the transport evidence base supporting the Gloucester/Cheltenham/Tewkesbury – Joint Core Strategy (GCT-JCS) - adopted in December 2017, a set of future year ‘Do Nothing’ (DN), ‘Do Minimum’ (DM) and ‘Do Something’ (DS) peak hour models were developed from the validated 2013 CSV SATURN Model, culminating in the ‘Do Something - DS7’ model scenario - comprising a package of mitigation schemes considered appropriate to counter the impact on the highway network of the full JCS allocations. Such traffic models are available for a 2031 future forecast year, covering the same weekday peak hour time periods as the 2013 Base Year Model.
- 3.7 To ensure that all traffic models remain fit for purpose and accurate (in terms of calibration and validation requirements); it is standard practice that they be regularly updated – on a five / six yearly cycle. Therefore, the continued use of the CSV SATURN model for the assessment of development applications will require careful consideration on an individual site basis, with a recommendation that it be best suited for initial high level studies to determine indicative area-wide traffic impacts. Going forward, in the medium to longer term it is GCC’s intention that use of the CSV model for development assessment purposes be superseded by the recently developed Gloucestershire Countywide Traffic Model (GCTM).

A46 / Tewkesbury S-Paramics Model

- 3.8 GCC, on behalf of Tewkesbury Borough Council (TBC), commissioned Highways England’s in-house transport consultants in 2017 to develop a base year Paramics Model, using the S-Paramics version 2014.1 software. The primary purpose of the validated model is to assess future year land-use development scenarios for the A46 corridor through Ashchurch, with the aim of examining the individual and cumulative impacts on the highway network to inform TBC’s local planning process.
- 3.9 The A46 in this area is part of the Strategic Road Network (SRN), with the potential for large-scale future development sites to be located in the vicinity of this route over the longer term period, requiring the capacity of the route to be significantly increased.
- 3.10 The A46 / Tewkesbury Paramics Model is a micro-simulation model comprising of network coding which includes the A46/A438 corridor, extending from the A38 and Tewkesbury Town Centre in the west, eastwards through Newtown to M5 Junction 9 and Ashchurch, and then as far as the A46 / A435 ‘Teddington Hands’ roundabout.
- 3.11 The model has been developed in accordance with DfT guidelines and has been shown to achieve relevant calibration and validation acceptability criteria, with a base year of 2017 covering a three-hour AM peak period (07:00-10:00) and a three-hour PM peak period (16:00-19:00). A Local Modal Validation Report (LMVR), dated November 2019, is available for review free of charge.
- 3.12 Two forecast models for 2022 and 2031 ‘Do Minimum’ future year base reference scenarios have been developed on behalf of GCC in support of the Ashchurch Bridge Study.

Gloucestershire Countywide SATURN Model

- 3.13 In 2018/2019 GCC, in consultation with HE, developed a countywide Traffic Model for the Gloucestershire area utilising the previously developed HE owned A417 ‘Missing Link’ – Stage 2 SATURN Model (A417 MLM Stage 2) - a strategic highway assignment model derived (cordoned off) from HE’s pre-existing 2015 base year South West Regional Traffic Model (SWRTM), specifically built to support a Road Investment Strategy (RIS) scheme to increase capacity of the existing single-carriageway section of the A417 Trunk Road between the Brockworth Bypass ‘Air Balloon’ roundabout and Cowley roundabout.

- 3.14 While HE will retain the ownership and intellectual rights of the 'A417 MLM Stage 2' model, in the case of any derivative model versions produced on behalf of/under instruction from GCC, responsibility and liability for the future use of such models and how they are adopted or shared with any Third Party will reside with GCC.
- 3.15 The Gloucestershire Countywide Traffic Model (GCTM) retains 2015 from the A417 MLM Stage 2 model as the model base year, which has been 'cordoned off' to cover the major urban areas of Gloucestershire and beyond; extending from the M5 Junction 9 in the north to the M5 Junction 15 to the south, and extending to the county boundary from the west to the east. The purpose of developing the new GCTM is to provide an enhanced model by improving the simulation network coding (providing additional nodes and links), and refining the zoning system in/around Cheltenham, Gloucester and Tewkesbury, as well as in the Stroud Local Plan area.
- 3.16 The GCTM 2015 base year model, which was completed in June 2019, has been developed in accordance with DfT guidelines and advice set out in the DMRB and WebTAG acceptability criteria, and has achieved relevant validation standards. A Local Modal Validation Report (LMVR), dated July 2019, details the enhancements made during the development of the initial version of the GCTM and is available for review.
- 3.17 The assignment model represents an 'average hour' for each of the three time periods modelled, based on an average March weekday. These time periods, which remain consistent with those used in the SWRTM and the A417 MLM Stage 2 model are: - AM Average Hour (07:00 to 10:00); Inter-Peak (IP) Average Hour (10:00 to 16:00); and PM Average Hour (16:00 to 19:00).
- 3.18 While the model represents an 'average hour' in each of the modelled time periods, to determine the potential impact of development proposals at a peak hour level, the approach will be to apply an 'uplift' to the peak period trip matrices to produce operational assignments which assign a peak hour level of traffic on to the network. GCC's transport modelling term consultants will use local traffic count data to derive the 'uplift' factors to be applied to the peak period trip matrices, which will then be assigned in the SATURN models to make allowance for any traffic reassignment effects and to give a better understanding of peak hour network issues. In this way, traffic assessment will be determined on operational assessments for the 08:00 to 09:00 AM peak hour and 17:00 to 18:00 PM peak hour.
- 3.19 On a countywide basis, the aim of developing the GCTM has been to provide a model sufficiently detailed to allow a strategic understanding of the potential individual and cumulative impacts from predicted future growth within the county, including interactions between the SRN and the Local Road Network (LRN).
- 3.20 A series of 2040 future year forecast models have been developed using the initial version of the GCTM – the purpose of which has been to help inform the assessment of proposed development site allocations as part of the emerging Stroud District Local Plan (2040), as well as in support of the M5 Junction 10 Improvement Scheme Business Case.
- 3.21 Since then, the GCTM detailed model area has been extended northwards beyond Tewkesbury to ensure a core study area to provide a DfT TAG compliant modelling tool suitable for undertaking options assessment for the proposed M5 Junction 9/A46 Ashchurch improvement scheme Outline Business Case.
- 3.22 Model calibration and validation of this extended version of the GCTM (Version 2) was undertaken in late 2019 and, following further minor network enhancements made in early 2020 (GCTM Version 2.1), models for each time period have been shown to calibrate and validate well against observed data sources, with a particular focus on the M5 Junction 9/A46 Ashchurch study area. A Local Modal Validation Report (LMVR,

Rev4.0), dated May 2020, provides details of this extended and enhanced GCTM (Version 2.1) and is available free of charge for review.

- 3.23 Initial 'Do-Minimum' (DM) reference case future year 'fixed assignment' forecast peak period models - developed initially for the purpose of informing the M5 Junction 9/A46 (Ashchurch) scheme option assessment, have been developed. This includes the production of GCTM (Version 2.1) DM scenarios for three forecast years (2025, 2031, and 2041). These models will also be used in the GCT-JCS Review.
- 3.24 The appropriateness of such GCTM highways models for use by third party developers will be determined on an individual site basis as part of pre-application discussions.
- 3.25 As noted in the summary description for GCC's CSV SATURN Model (Section 3.2), the traffic assignment outputs from the GCTM can be used to help inform and facilitate the development of third party micro-simulation and/or stand alone junction models for more localised assessment purposes.

4 Model Access – Charging Mechanism

- 4.1 In advance of the Local Planning Authority determining a planning application, the pre-application stage offers an opportunity for all parties involved to review and discuss any transport and access issues which may occur, thereby speeding up determination through the planning process.
- 4.2 Regardless as to whether or not previous dialogue has taken place, formal pre-application discussions provide an opportunity to consider the use and appropriateness of the relevant GCC suite of models to support any planning application, as well as to discuss the scope of any traffic modelling work required to assess the potential impact of a development proposal.
- 4.3 Once use of the GCC models has been agreed, an initial 'one off' **Model Access Fee** shall be paid by the third party to GCC to cover the associated administrative costs of managing and maintaining the range of highway models, including model upgrading and rebasing when necessary, to ensure that adequate model provision for the assessment of development proposals is preserved.
- 4.4 While taking account of the increased number of models now available and the cost of maintaining these models, the **Model Access Fee** will be individually priced on a site by site basis, with a variable charge dependent on the quantum and scale of development proposed. This fee will be reviewed every 12 months to ensure it fully reflects the costs of managing and maintaining the range of models available in the GCC modelling suite.
- 4.5 The model access fee will only be applicable to private sector 'third party' requests for use of GCC's models. Traffic modelling work requested directly on behalf of local authorities will incur a zero 'access' charge because they have contributed to model development through the provision of required inputs (both land use and traffic data). However, the staff time charges incurred by GCC's term consultants in undertaking agreed work for specific model testing requests, together with any GCC administrative costs for commissioning and overseeing the work, will be the same for all customers because exactly the same processes will be required to be carried out. This will ensure that GCC is not liable to incurring any costs associated with such third party use of the models.
- 4.6 Notwithstanding the above, the use of GCC models will be deemed 'free of charge' to local authorities (and their appointed consultants) for any agreed traffic modelling work undertaken in support of the development of transport and mitigation strategies in relation to the plan making process for emerging Local Plans, and for Local Transport Plan and Joint Core Strategic assessment purposes.

- 4.7 In addition to a variable **Model Access Fee**, the overall scale of charging to be applied to use of GCC's highways modelling suite will also depend on the specific modelling tasks requested and, following agreement between GCC and the third party, a schedule of charges will cover the following aspects:
- A variable Model Access Charge;
 - Charges for Specific Model Testing; and
 - Fixed Item Charges.
- 4.8 The following sub-sections provide details on each of these separate charging components

Variable Model Access Charge

- 4.9 To reflect the variation in individual development proposals, a **Model Access Fee** for third party use of GCC models will be priced individually, dependent on the scale of the development under review - adjudged by the number of dwellings proposed, with the charging mechanism based on the following thresholds:-
- Up to 1,000 dwellings = £4,000 access charge;
 - Between 1,001 and 4,999 dwellings = £7,000 access charge; and
 - 5,000+ dwellings = £10,000 access charge.
- 4.10 To take account of non-residential development proposals comprising primarily B1, B2 and B8 Employment uses, or a combination thereof, the level of Model Access fees to be charged will be at the discretion of the Highway Authority and decided on a site by site basis.
- 4.11 However, a similar scale of increasing access fees for Employment uses would be expected in-line with the threshold values set out above for residential developments. These will be based on a comparison of vehicle trip generation between residential and employment development uses. In such cases, the Highway Authority will engage with the third party development representatives when determining the scale of access fee to ensure transparency.
- 4.12 The **Model Access Fee** will cover access to the model for a specific site or / individual planning application only and is not transferable to other applications or assessment work. In effect, each development application will be required to pay the **Model Access Fee**. It cannot be reimbursed, should the application be withdrawn.

Charges for Specific Model Testing

- 4.13 In addition to the **Model Access Fee**, all estimated time charges to be incurred by GCC's term consultant either in undertaking or auditing of the agreed modelling work (where the work is to be undertaken directly by a third party or their sub-consultant) will be agreed in principle for reimbursement by the third party, prior to the work commencing.
- 4.14 Should the third party agree that GCC and their term consultant undertake the required modelling work, they will be required to pay the full consultants' fees, together with a standard 15% uplift to cover the GCC administrative costs for commissioning and overseeing the modelling work. This approach ensures that GCC is not liable to incurring any costs associated with third party access to and use of the models.
- 4.15 In the event that GCC's term consultants are unable to commit to / program the modelling requirements within an acceptable timeframe, or where it has been agreed that the third party or their transport consultant undertake their own modelling exercise using GCC's models, the appropriate model input files required to undertake the assessment shall be made available to the third party / their appointed transport

consultant. In such a case, the third party will be subject to a charge rate of £500 per model file for supply of the relevant input network and trip matrix model files.

- 4.16 Also, all modelling work undertaken directly by the third party / their appointed transport consultant will need to be audited either by GCC's term consultant or by an appropriate independent organisation appointed by GCC or the third party (under mutual agreement). The third party will therefore need to confirm agreement that the audit fee incurred by GCC's term consultant together with a 15% uplift to cover GCC's administrative costs, will be reimbursed by them.
- 4.17 The scale of charging applied in the use of the models will therefore be dependent on the tasks requested, following pre-agreement between GCC and the third party.

Fixed Item Charges

- 4.18 For development proposals where it has been agreed during pre-application discussions that, due to the small scale of development, the resultant impact is expected to be relatively minor and that no specific additional traffic modelling work using GCC's modelling suite is required, data extracted from existing models may be used to help inform the assessment process.
- 4.19 In such instances, whilst no **Model Access Fee** will apply, the third party will be required to pay for the agreed outputs from the existing models as well as GCC's term consultants' fees for supplying such model outputs, with the inclusion of a 15% additional uplift charge to cover GCC administrative costs for commissioning this work.
- 4.20 In all cases, GCC must be in receipt of a written 'agreement to pay' for the model outputs and associated fees before releasing such information.
- 4.21 The 'fixed' charges applied for the provision of data outputs from GCC's existing models are provided below:-
- **Individual Junction Information**, such as traffic turning flows and/or operational performance statistics, to be charged at a standard rate of **£150** per junction, up to a maximum of 50 junctions, above which an additional daily staff time charge will be applied (to be agreed with the third party).
 - **SATURN Model Select Link Information**, to show indicative origin – destination movements of traffic on a specific network link e.g. Zone distribution patterns, extracted as model outputs, to be charged at **£300** per directional network link requested.
- 4.22 Information on the extent of the model networks can be obtained by reviewing the respective Local Model Validation Reports (LMVR) as well as any future year Traffic Forecasting Reports (TFR) where available. These documents can be provided at request free of charge. Specific junction/link information may be provided if requested during Pre-application discussions
- 4.23 Notwithstanding the above, in specific circumstances where small scale development proposals are identified on already congested parts of the highway network, the resultant traffic impact of such developments may still be considered as significant, and agreement on appropriate modelling assessment tools will be sought by GCC and HE during pre-application discussions, which may require a local area linked junction modelling approach.

5 Modelling Assessment Approach

- 5.1 Where it has been agreed with GCC (and HE where necessary) that a third party submission for a specific development proposal requires traffic modelling work in support of their transport assessment, details concerning the appropriate modelling

methodology, processes and procedures will be agreed during pre-application discussions.

- 5.2 It should be noted that agreement on the modelling approach/assessment methodology will be required at the pre-application stage irrespective of whether the third party applicant agrees to the use of the GCC highways traffic models as appropriate modelling tools, or alternatively where they decide to develop their own purpose built models for such assessment purposes.
- 5.3 Given the choice of GCC models available for use, it is expected that the agreed modelling methodology to be adopted for individual third party development applications will adhere to a standard assessment 'Three Stage' approach identified as follows:
 - Stage 1: Base Year testing - Define the Area of Influence (AOI);
 - Stage 2: Future year scenario testing – With / Without Development - No Mitigation; and
 - Stage 3: Future year scenario testing – With Development + Mitigation
- 5.4 This is the preferred approach of the Highway Authorities and should be followed regardless of whether GCC's appointed consultants or third party consultants undertake the modelling assessment.
- 5.5 Dependant on the scale and quantum of development proposed, a third party Developer may be required to assess the potential impact and investigate network mitigation for a series of development phases as part of the Stage 2 and Stage 3 future year traffic modelling exercise, based on an agreed set of interim and final years for forecasting and assessment purposes.
- 5.6 A summary of the model findings for each assessment stage, e.g. Technical Note(s), should be submitted for discussion and agreement, as part of the planning application for the proposed development. Further details on this modelling assessment 'Three Stage' standard approach are provided in the following sections.

Stage 1: Base Year Testing - Define the Area of Influence (AOI)

- 5.7 This initial stage is designed to give a broad indication of the area-wide potential traffic impacts of the development proposal on the existing highway network. The vehicle trip distribution for the development site should be based either on the traffic distribution and assignment patterns for appropriate adjacent zones within the base year traffic models, or derived from 2011 census output data – as agreed during pre-application discussions.
- 5.8 The development's AOI will be defined by comparing the outputs from the Base 'with' and 'without the proposed development' scenarios. The degree of significance will be measured by the existing network operating conditions and reference to Gloucestershire's Local Transport Plan (2015-2031) Link and Place highway classification.
- 5.9 Depending on which GCC model is agreed as appropriate for use in the modelling assessment, the 'base year' for AOI purposes will be assumed as 2013 for the CSV SATURN Model, 2017 for the A46 / Tewkesbury S-Paramics Model, and 2015 for the Gloucestershire (Countywide) Strategic SATURN Model.
- 5.10 No detailed model outputs for specific junctions are required at this stage. The resultant output will be a Technical Note that indicates:
 - Geographic extent of the AOI of the development proposal in the form of a GIS (map) plot;

- Model flow change (flow difference) plots showing the distribution of the development trips and the overall level of change in demand flows on the existing highway network.

Stage 2: Future Year Scenario Testing – With/Without Development and No Mitigation:

- 5.11 The purpose of the Stage 2 work is to examine traffic conditions in a future forecast year (to be agreed with GCC and HE) with/without the proposed development, but without mitigation, assuming that only committed infrastructure schemes are in place on the future year transport network.
- 5.12 Stage 2a Future Year assessment - Without Development and no Mitigation. For the Stage 2a assessment, a future forecast year scenario without the proposed development is required, which should include all completed development built out since the model base year, as well as all background and committed growth and infrastructure schemes deemed appropriate to test by GCC and HE.
- 5.13 Stage 2b Future Year assessment - With Development and no Mitigation. Using the 'Without Development' scenario developed for the Stage 2a assessment, Stage 2b involves creating a new scenario that includes the development land use proposals, where the associated traffic demand includes all agreed vehicle flows for the proposed development site (with trip generation, distribution and internalisation assumptions agreed with GCC and HE), and the modelled network incorporates any proposed on-site arrangements such as access junctions onto the adjacent highway network as well as any internal roads within the site which could operate potentially as through routes. No local or wider area external network mitigation will be included at this stage.
- 5.14 The expected outputs of this stage of the process will be a Technical Note that includes:
- The modelling approach/methodology
 - GIS based outputs showing the reassignment effects of the development traffic – based on a comparison of 'with' and 'without development' traffic movements;
 - GIS based outputs showing the congestion levels and changes in congestion at junctions – based on volume / capacity ratios;
 - Graphics showing modelled turning flows at specific local junctions;
 - Network statistics on congestion, speeds and vehicle journey times across the AOI;
 - Commentary on the impacts of the development proposal on the highway network.

Stage 3: Future Year Scenario Testing – With Development + Mitigation

- 5.15 The aim of this Stage 3 work is to test mitigation measures associated with the development proposal in order to address any traffic impacts identified during Stage 2b.
- 5.16 Development of these transport mitigation improvements may need to be undertaken as an iterative process, with an overall objective of achieving a functioning highway network within the defined AOI. As well as highway network improvements, such mitigation should take account of sustainable travel enhancements and public transport improvements based on a vehicle trip reduction mode shift strategy.
- 5.17 It should be noted that in accordance with Circular 02/2013, HE may require a future year scenario test based on 'year of opening plus full development build out' to assess the impact of the proposed development on the strategic road network and whether mitigation on the SRN (as well as on the LRN) would be required.

5.18 The required model outputs from the Stage 3 assessment will be similar to those reported for Stage 2, but with a description of the proposed mitigation measures and details of their impact in terms of the levels of traffic relief on the highway network.

6 Further Information

6.1 All third parties should note that where proposals are likely to impact upon the SRN, separate discussions may also be required with HE. If there is any doubt regarding this it is advisable to seek clarification from HE to avoid potential delays.

6.2 All enquiries for agreement on the use of and access to the GCC models and to arrange a pre-application discussion with GCC highways officers, should be made directly through GCC's Highway Development Management 'Planning and Development' team, initially via the following email address: devcoord@gloucestershire.gov.uk