



Department
for Transport

Understanding and Valuing Impacts of Transport Investment

Wider Economic Impacts Consultation Response

Moving Britain Ahead

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Foreword

In September 2016 we consulted on our proposals to update and restructure the wider economic impacts guidance in our appraisal framework.

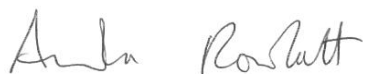
The consultation ran for three months, during which time we received a wide range of responses from a variety of stakeholders. We have taken on board this feedback in developing our final set of updates to our appraisal guidance. This document summarises the responses received, the Department's response to the key issues raised and the rationale underpinning the definitive set of guidance changes.

A number of areas were identified by consultees for the future development of the guidance; they are discussed below. We will consider them when we develop our future research priorities on appraisal and modelling: the Department intends to produce an update of the Understanding and Valuing the Impacts of Transport Investment research strategy in 2018.

This conclusion of the consultation on wider economic impacts represents a critical milestone in the development of the Department's framework for appraising the impacts of transport investment.

The guidance allows for a broader range of impacts, assessed using innovative modelling techniques, to be reported within business cases and the value for money assessment.

We are pleased to be in a position to implement these changes to guidance. We will continue to work collaboratively with experts and stakeholders in order to keep the guidance under review and ensure it remains fit for purpose.



Amanda Rowlatt, Chief Analyst and Science Director

December 2017

Executive summary

Introduction

The Department's current guidance on capturing the wider economic impacts of transport investment is included in WebTAG¹. The evidence base underpinning the guidance has been developed over many years and is internationally respected as best practice. In October 2013 we launched the 'Understanding and Valuing the Impacts of Transport Investment' (UVITI) Analytical Strategy which set out our approach to maintaining and enhancing this evidence base through open, transparent and collaborative working with academics, experts and stakeholders.

In 2014 the Department commissioned three eminent academics to review evidence on the economic impacts of transport investment, the results of which were published in the Transport Investment and Economic Performance report². The report contained a series of recommendations for the development of the wider economic impacts guidance, which the Department committed to implement. With advice from experts and stakeholders, the Department undertook a major overhaul of the guidance and consulted upon the proposed changes in late 2016³. The Department received over 40 responses which contained helpful feedback on how the proposals could be further improved prior to becoming definitive guidance, as well as future research topics.

This document accompanies the new guidance, which has been released as a forthcoming change in accordance with the Department's Orderly Release Process⁴: the new guidance will become definitive in the May 2018 WebTAG update. The document summarises the responses received, the Department's response to the key issues raised and the rationale underpinning the definitive set of guidance changes. Furthermore, it highlights suggested research topics which the Department will consider when developing its future research strategy.

Summary of key issues

Overall, the consultation responses welcomed the proposed changes, in particular the emphasis placed on context, in terms of understanding broader policy objectives and the role transport interventions may play in achieving these. In addition, respondents welcomed the potential to supplement WebTAG methods with innovative modelling approaches, which attempt to model complex economic interactions, such as how the location of jobs may change in response to a transport investment. A number of concerns were raised, mostly centred on clarifying specific points within the guidance. We have implemented changes to address these concerns.

¹ <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/386126/TIEP_Report.pdf

³ <https://www.gov.uk/government/consultations/transport-investment-understanding-and-valuing-impacts>

⁴ <https://www.gov.uk/government/publications/change-management-in-webtag-the-orderly-release-process>

The most commonly raised issue was around the use of supplementary economic models to assess economic impacts. Respondents were concerned about whether supplementary analysis would be mandatory for all appraisals, given constraints on resource and capabilities for some promoters. In addition, respondents were concerned that business cases which do not include supplementary analysis would be disadvantaged in funding decisions. To address these concerns, we have clarified throughout the guidance that, in most cases, these models are not needed to build robust business cases. However, for those schemes which are expected to have transformational impacts, in other words significant changes to the spatial distribution and structure of a local economy, this type of modelling provides a way of capturing those wider impacts.

Respondents also raised concerns about the reporting of supplementary analysis as sensitivity tests in value for money assessments. Some felt that 'relegating' supplementary analysis to a sensitivity test would give it insufficient weight when drawing value for money conclusions, such that the costs of investing in these tools would not be justified. In line with the Department's recently published Value for Money Framework⁵, we have updated the guidance to state that estimates of additional welfare estimated using supplementary analysis should be reported as an indicative monetised impact, alongside the initial and adjusted benefit cost ratios, and is taken into account in deciding the value for money category. The weight attached to this evidence in deciding on the value for money category should reflect the underlying confidence in this analysis, including the level of assurance undertaken.

Finally, some respondents suggested changes to our proposal regarding the reporting of welfare and non-welfare metrics within the business case, in particular that the economic case is the preserve of welfare analysis and non-welfare metrics, such as GDP, should be reported in the strategic case. Respondents were concerned this approach could create confusion with GDP and welfare estimates inadvertently being construed as additional, rather than as alternative measures of economic impacts. In response, we have changed the guidance to state both welfare and non-welfare measures should be reported in the economic case and, where necessary, cross-referenced in the strategic case.

Future research priorities

As part of the consultation, we identified several priorities for future research and invited feedback from stakeholders. Respondents welcomed these and proposed further areas for the Department to consider, such as providing guidance for how to convert GDP into welfare measures for inclusion in the value for money assessment. Over the course of the next year we will develop a new analytical strategy and will engage with stakeholders to define the scope of the strategy and research priorities. We plan to finalise the new analytical strategy in late 2018.

⁵ <https://www.gov.uk/government/publications/dft-value-for-money-framework>

Next Steps

The release of the new guidance as a forthcoming change, in accordance with the Department's Orderly Release Process, marks a significant milestone in the development of the wider economic impacts guidance. The guidance will become definitive in the May 2018 WebTAG update.

The key objective of the new guidance is to ensure that users are able to better communicate and robustly appraise economic impacts in transport business cases. To this end we are developing an external engagement strategy to publicise the guidance and support users, both in terms of its technical application and role in decision making. Key elements of the strategy will involve a series of engagement events in spring 2018, the publication of case studies and the development of an expert panel to advise on Supplementary Economic Modelling.

1. Approach

- 1.1 At the core of the updated wider economic impacts guidance is the principle that the analysis should be context specific. The purpose of the context specific approach is for the analysis to scrutinise the case for intervention, as set out in the strategic case. This has the following implications:
- (i) The analytical scope should be defined by the economic objectives and take account of the circumstances in the target area; and
 - (ii) Analytical techniques should be selected which can test the reasoning as to how the transport intervention is expected to achieve the stated economic objectives.
- 1.2 As part of the context specific approach, scheme promoters will be able to supplement WebTAG based analysis with innovative modelling approaches, which attempt to model complex economic interactions, such as how the location of jobs may change in response to a transport investment. This provides scheme promoters with a broader range of techniques to test the economic objectives. Section 2 discusses the circumstances in which supplementary economic modelling may be used.

Consultation Questions

1.3 The following consultation questions covered the new approach:

1. Does the proposed approach sufficiently balance the trade-off between the transparency associated with a consistent appraisal approach and the potential for more accurate understanding of impacts associated with a context specific approach?
2. Does the proposed use of "levels of analysis" balance the opportunity of a more detailed understanding of impacts with the risks arising from increased uncertainty associated with trying to model and value changes in land use?

The trade-off between a consistent appraisal approach and a context specific approach

- 1.4 A consistent appraisal approach, in which the analytical scope and techniques are pre-determined, differs from a context specific approach. The context specific approach provides scheme promoters with greater flexibility to tailor the analytical scope and techniques to the particular scheme of interest. To balance this flexibility with the need to maintain confidence in the quality of the analysis and comparability of business cases, context specific appraisals will be implemented within a clear and consistent framework and any deviations from best practice will need to be justified. Key elements to balance these competing demands include:
- Economic Narrative – the principle communication tool through which scheme promoters define and justify the scope of the analysis on the basis of economic objectives and local circumstances – discussed further in question 3.
 - Levels of Analysis – this distinguishes impacts according to land use assumptions to highlight differences in the maturity of the evidence base, and complexity and uncertainty of the analysis – discussed further in question 2.
 - Economic Impacts Report – this is a technical report in which all of the detail of the analysis should be presented – discussed further in question 6.
- 1.5 Overall, respondents welcomed the emphasis on context specific analysis, as this would allow them to demonstrate the links between transport and broader policy objectives. In particular, many were supportive of the economic narrative as a means to bridge the objectives and the analysis in the strategic and economic cases respectively.
- 1.6 However, some respondents were concerned that this new approach would result in “cherry picking” impacts, with negative impacts omitted from the appraisal. The Department agrees that this must be avoided and the introduction of the economic narrative will enable closer scrutiny of the analytical scope, which should help to reduce the potential to cherry pick impacts. We have amended the guidance to emphasise that all relevant impacts, both positive and **negative**, should be captured within appraisals.
- 1.7 Respondents suggested that the purpose of the economic narrative should be clearly stated as forming the basis for the development of the economic objectives that place the transport problem in the context of the broader economic problem. They also suggested that the economic narrative should be iteratively developed in line with the development of the Business Case. The Department agrees with these responses and have changed TAG unit A2.1 accordingly to reflect this. Section 5 in A2.1 gives a clear explanation of the purpose of and details to be included in the economic narrative, and is

referenced throughout the other units to maintain consistency of approaches.

Proposed use of “Levels of analysis”

- 1.8 In keeping with the principle of context specific analysis, the new guidance provides a framework for scheme promoters to use new and innovative techniques, which supplement analysis based on WebTAG methodologies. This creates an opportunity to capture a broader range of impacts within value for money assessments, in particular impacts associated with land use change, as well as assess subnational impacts. The use of new and innovative techniques is not without risk (see Table 1) and the Department has introduced the concept of levels of analysis to balance the associated risks and opportunities.

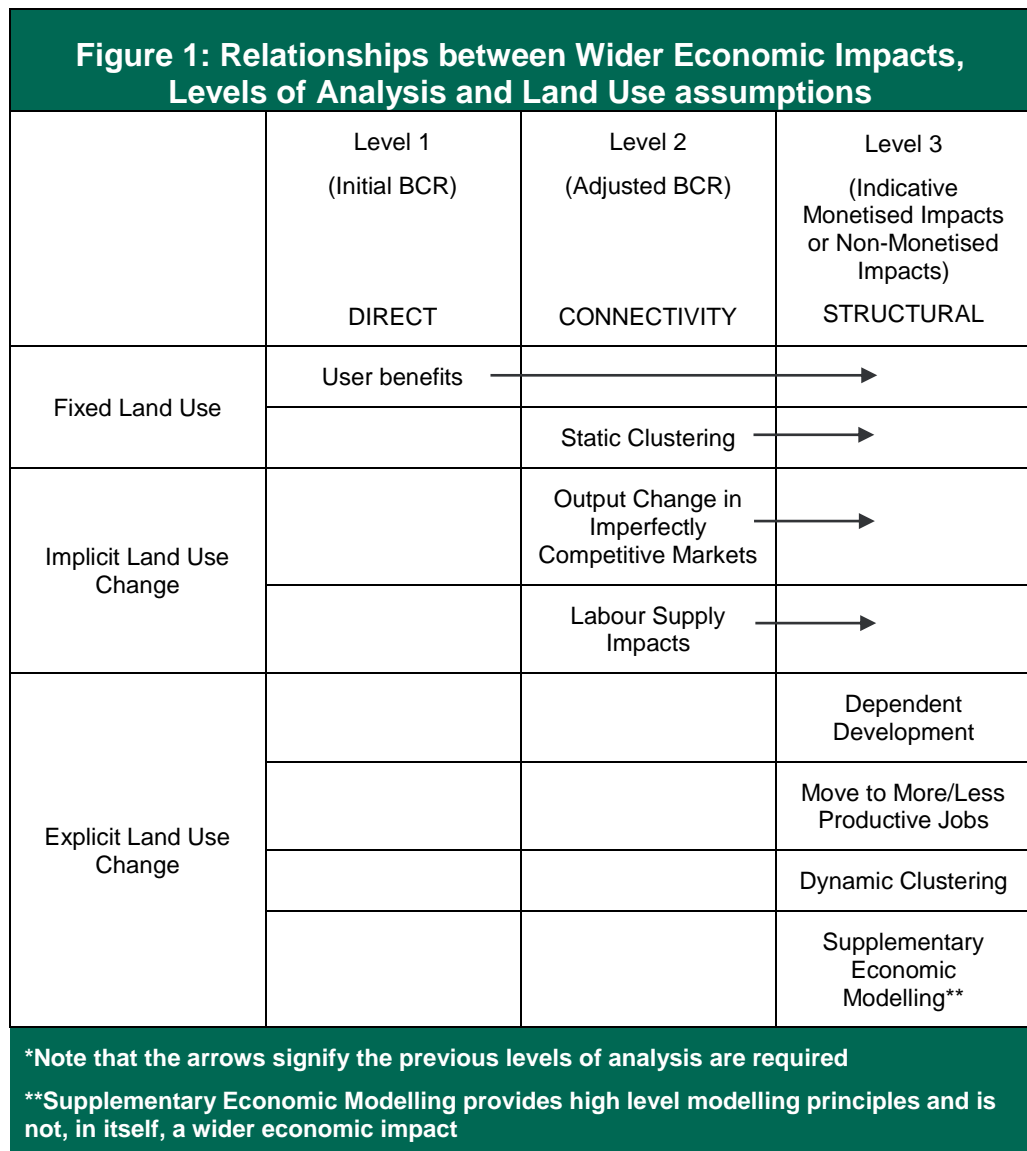
Table 1: Risks associated with supplementary economic models

Type of risk	Description of risk	Impact of risk
Complexity	Supplementary economic models can be complex. As a result it can be difficult to understand the factors driving model outputs and quality assure the analysis.	Business cases include poor quality analysis, reducing confidence in decision making process.
Variety of Models	There are a plethora of models, differentiated by their particular technical capabilities, such as ability to model capacity constraints. This has the potential to create confusion about the appropriateness of a model for appraisal of a particular scheme.	Inefficient use of analytical resources, as choose model which is not appropriate for scope of required analysis.
Limited Data	There is a limited number of local and regional data sets to inform the relationships within supplementary economic models. As a result, models can be heavily reliant on a few empirical studies and assumptions.	Lack of available data prevents future improvements to models.
Model Validation	It is standard practice to validate transport models	Decisions are made on the basis of

	to gauge their accuracy prior to deployment. Due to limited data, it can be particularly difficult to validate supplementary economic models. Thus, the accuracy of the model outputs are likely to be subject to greater uncertainty.	unrealistic forecasts, reducing confidence in analytical advice.
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- 1.9 The levels of analysis are broadly aligned with the recently published value for money framework, so that impacts are differentiated on the basis of the maturity of the evidence base and methodology (see Figure 1). They are broken down into direct economic impacts (level 1), connectivity economic impacts (level 2) and structural economic impacts (level 3). As a result, it will be possible to identify which impacts, and hence analytical approaches, are driving a value for money conclusion.
- 1.10 Some respondents argued that analysis of variable land use change (level 3) was no less certain than analysis of fixed land use (level 1). The Department does not share this view. The evidence base and methodology underpinning level 1 impacts has been subject to significant research and external review over a sustained period of time. In contrast to this, there is a paucity of evidence underpinning the analytical techniques included in level 3 analysis. For example, it is standard industry practice for the transport models underpinning level 1 impacts to be validated, but we are not aware of this ever having been done for the level 3 economic models. As a result, the forecast accuracy of level 3 models is subject to a higher level of uncertainty.
- 1.11 Nevertheless, the Department acknowledges that these models have the potential to provide important insights. For this reason we have provided high level principles for the purpose of quality assuring these models (see TAG unit M5.3 – Supplementary Economic Modelling) and the levels of analysis provide a means to include their outputs within value for money assessments.
- 1.12 A few respondents suggested using supplementary economic modelling (a subset of level 3 analysis) at a strategic level to identify the location of a scheme, which maximises the potential for land use change, with the benefits of the schemes valued using level 1 and 2 analysis. This would provide a simpler approach than applying complex level 3 analysis to value the benefits of land use change and would help emphasise the importance of spatial economic impacts, resulting from transport schemes, to decision makers. The Department agrees with this view and has reflected this in the guidance as one of the possible reasons to undertake supplementary economic modelling.

1.13 Concerns were raised about the proposal in the consultation guidance for level 3 analysis to be reported as sensitivity tests within the value for money assessment. Some respondents felt that ‘relegating’ supplementary analysis to a sensitivity test would give it insufficient weight when drawing value for money conclusions, such that the costs of investing in these tools would not be justified. The Department agrees that all relevant welfare impacts should be included in the value for money assessment. Nevertheless, the weight we attach to impacts should reflect the confidence we have in the underlying evidence base. Given the uncertainty regarding the quality of level 3 analysis, these are not included in either the initial and adjusted benefit cost ratios (BCRs). We have updated the guidance to bring it into line with the Department’s recently published Value for Money Framework⁶: level 3 analysis should be reported as indicative monetised impacts alongside the initial and adjusted BCRs.



⁶ <https://www.gov.uk/government/publications/dft-value-for-money-framework>

2. Applying the new approach

2.1 The guidance sets out a framework for applying the approach set out above. The framework is designed to balance the demands for greater flexibility, in terms of selecting an analytical approach tailored to the particular scheme, with the need to retain confidence in the quality of the analysis. To this end the framework includes a number of elements for the assessment of wider economic impacts:

- An economic narrative in which scheme promoters define and justify the scope of the analysis on the basis of economic objectives and local circumstances;
- Proportionality guidance to inform the scope of the analysis and the selection of appropriate analytical tools, in particular the need for and choice of supplementary economic models;
- Principles to quality assure supplementary economic models;
- An economic impacts reports to present the technical detail of the analysis; and
- Guidance on reporting impacts within business cases and the relationship to the value for money assessment.

Consultation Questions

2.2 The following consultation questions covered the applications of the new approach:

3. What further advice – if any – should the guidance provide on identifying whether wider economic impacts need to be assessed and identifying the most proportionate approach?
4. Does the guidance accompanying this report provide clear, proportionate and relevant criteria with which to inform assessments of the robustness of supplementary economic modelling?
5. What further advice – if any – should be provided on assessing displacement and what evidence is available to inform this?
6. Are there any changes you think need to be made to the reporting requirements to ensure that these are clear, proportionate and effective in promoting transparency of modelling and analysis?

Advice for identifying the most proportionate approach

- 2.3 A key element of the new framework is the economic narrative, the purpose of which is to define the scope of the analysis. To this end, within the economic narrative, scheme promoters should identify and justify the following: (1) the expected economic impacts; (2) the change in welfare associated with the expected impacts; and (3) an appropriate analytical approach.
- 2.4 Whilst respondents welcomed the introduction of the economic narrative, concerns were raised regarding a lack of guidance as to how to identify and justify economic impacts and an appropriate analytical approach. With respect to the analytical approach, respondents were particularly concerned that the lack of guidance risked scheme promoters unnecessarily undertaking supplementary economic modelling, which can be expensive and complex.
- 2.5 Furthermore, some respondents felt the approach to demonstrating the dependency of a development on a transport investment within the dependent development guidance (TAG unit A2.2) was at odds with the principle of context specific analysis. In particular, the need to use transport modelling to demonstrate dependency, even when a development has planning permission conditional on a transport scheme.
- 2.6 In response to these concerns, we have updated the new guidance to provide further clarity. With respect to identifying and justifying economic impacts, we have included information on the types of evidence sources scheme promoters could draw upon, such as surveys of local businesses or the Annual Business Inquiry – annex B and C in TAG unit A2.1. Regarding the use of supplementary economic modelling, we provide additional guidance on what constitutes a proportionate analytical approach in section 3.2 Levels of Analysis, TAG unit A2.1.
- 2.7 Decisions regarding what constitutes a proportionate analytical approach are context specific: the scheme promoter must weigh the potential for the inclusion of impacts to change a scheme's value for money conclusions against the complexity, time and financial cost of modelling. Furthermore, we have emphasised supplementary economic modelling is not mandatory and its inclusion in appraisal should be justified.
- 2.8 Within the dependent development guidance, we have clarified that the principal requirement is to justify the extent to which the development is dependent on a transport investment. This could be done through the use of the 'dependency test', set out in the guidance, or alternative sources of evidence, such as the existence of a conditional planning permission.

Criteria for assessing supplementary economic modelling

- 2.9 A key innovation of the guidance is the potential to include outputs from economic models to supplement WebTAG analysis within appraisals. There is a great variety of such models, each with their own unique capabilities. In addition, their use in appraisal is still in its infancy. As these models are still relatively untested, the Department does not have a preferred model type. Instead, the new guidance outlines the criteria the Department will use to quality assure supplementary economic models.
- 2.10 Respondents did not specifically answer whether guidance provided clear, proportionate and relevant criteria with which to inform assessments of the robustness of supplementary economic modelling. However, a number of respondents requested more practical and prescriptive guidance for supplementary economic modelling. In particular, respondents requested that the guidance set out which criteria are most pertinent for specific model types. Respondents also requested examples of supplementary economic modelling best practice.
- 2.11 Supplementary economic models are still open to innovation, and we do not believe it is helpful to provide prescriptive guidance at this stage. From one generation to another, the capabilities of a particular model type can vary, such that the scope of the quality assurance will vary. For this reason, we have not prescribed the quality assurance criteria for specific model types.
- 2.12 With respect to the provision of best practice examples, this has been identified as an area for future research – see section 3 for more details. Due to the currently limited use of such models in appraisal, it is not possible to provide best practice examples as part of the current guidance release; the Department intends to provide these as part of future guidance releases, as their use in appraisal increases.

Assessment of displacement

- 2.13 Key to any value for money assessment is understanding the net national impact. However, decision makers are also interested in local/regional impacts. In most instances, the local/regional economic impacts will be greater than the national impact, as economic activity will be displaced from other areas. Therefore, whilst local/regional impacts are important in their own right, in terms of the value for money assessment, the analysis must account for displacement to derive the net national impact.
- 2.14 Within the guidance there is a starting assumption of 100% displacement, in which economic impacts are assumed to be fully captured by user benefits unless evidence of market failures is presented. It is the responsibility of scheme promoters to present evidence identifying and justifying the existence of wider economic

impacts. In the absence of forthcoming evidence, the Department will assume economic impacts are fully captured by user benefits.

- 2.15 Some respondents criticised the starting assumption and raised the following objections: it relies upon unrealistic assumptions about agents' acting rationally and the efficient functioning of markets; it is irrelevant in the context of large, multi-scheme programmes; and future economic growth will require infrastructure investment. In addition, respondents considered the evidence requirements to demonstrate additionality disproportionate, in particular those in the dependent development guidance (Induced Investment A2.2).
- 2.16 We have not made any change to guidance following this feedback. The starting assumption provides a consistent basis against which promoters can identify and justify the context-specific wider economic impacts relevant to a particular scheme. The starting assumption does not deny their existence nor rule out the use of alternative assumptions if evidenced.
- 2.17 With respect to assessing displacement in the case of dependent development, we have removed the proposal that scheme promoters compare National Trip End Model forecasts of housing and population growth with local development plans. Instead scheme promoters are encouraged to use the Department for Communities and Local Government guidance to assess displacement. This ensures a proportionate treatment of displacement.

Changes to the reporting requirements

- 2.18 The principle of context specific analysis requires high levels of transparency in the reporting of impacts. To this end, the framework introduces the 'economic impacts report'. This is a technical annex to the economic case in which the scheme promoter sets out details of the analysis, such as the key assumptions driving the analysis. In addition, in the consultation we proposed that the high level estimates of the analysis should be reported within the main body of the business case; in particular that the welfare and non-welfare estimates should be reported in the economic and strategic cases respectively. The purpose of this distinction between the strategic and economic cases was twofold: (1) to reduce confusion regarding which impacts are included in the value for money assessment; and (2) to ensure decision makers can clearly understand the extent to which economic objectives are expected to be achieved.
- 2.19 There was a mixed response to the new reporting requirements. In general, respondents were supportive of including an economic impacts report to help frame and detail the analysis. However, some respondents noted that they already have reporting requirements similar to the economic impacts report and were concerned about duplication. In addition, there were some requests for more detail as to how a good economic impacts report would look in practice.

- 2.20 Several respondents were critical of the separate reporting of welfare impacts in the economic case and non-welfare impacts in the strategic case. They were concerned this reporting structure could create confusion, with GDP and welfare estimates being inadvertently construed as additional, rather than as alternative measures of economic impacts.
- 2.21 In response to this feedback, we have revised the guidance. With respect to the potential to duplicate reports of the technical analysis, we have clarified that where equivalent reporting requirements already exist, the production of a separate economic impacts report is not necessary. In addition, we have revised the guidance to advise that both welfare and non-welfare impacts should be reported in the economic case; these measures may be referenced in the strategic case if they inform the extent to which an economic objective is likely to be met.
- 2.22 As outlined in Section 3 of this document, we plan to build up a series of appraisal case studies over time, which could include examples of best practice in writing economic impact reports.

3. Priorities for future research

- 3.1 The publication of this new guidance marks a significant milestone in the development of the wider economic impacts guidance, which started in early 2014 with the commissioning of the Transport Investment and Economics Performance report⁷. The new guidance provides a framework to capture a broader range of economic impacts in appraisals. In addition, we have structured the guidance around the three types of economic impacts – investment, productivity and employment – to ensure new sources of evidence can be incorporated within the framework, as and when they become available.
- 3.2 As this phase of development ends, we turn our attention to the future research priorities. The purpose of any research is to ensure the guidance continues to meet the needs of users and we are grateful for the numerous helpful suggestions provided by stakeholders in response to our questions on research priorities. Over the course of the next year we will develop a new analytical strategy and will engage with stakeholders to define the scope of the strategy and research priorities. We plan to finalise the new analytical strategy in late 2018.

Consultation questions

- 3.3 The following consultation questions covered our priorities for future research:

7. What evidence/research do you think could be used to inform the supplementary economic modelling benchmarks?
8. Are there other areas not covered here that we should also be considering in developing our research programme?
9. What do you view as the highest priorities for further research into wider economic impacts?

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/386126/TIEP_Report.pdf

Supplementary economic modelling benchmarks

- 3.4 One of the newest elements of this WebTAG update is guidance setting out a series of modelling principles relating to the development and assessment of supplementary economic models. These models use analytical techniques outside of standard WebTAG methodology to assess the economic impacts of schemes.
- 3.5 These models have the potential to provide useful insights into how the spatial distribution of economic activity might change in response to a transport investment. Nevertheless, their use presents its own set of challenges, in particular the accuracy of their forecasts is unclear.
- 3.6 In order to help scheme promoters determine whether the forecasts are reasonable, we proposed the use of benchmarks. The intention would be for scheme promoters to compare their model outputs against the benchmarks.
- 3.7 While developing the new guidance we looked for suitable sources of empirical evidence which could serve as benchmarks with limited success and we had hoped stakeholders would be able to suggest potential benchmarks. Unfortunately, no new potential sources were forthcoming. Nevertheless, respondents provided other suggestions for the development of supplementary economic modelling:
 - Many respondents suggested the Department commission or proprietarily develop a set of standardised economic models and industry-wide datasets to be used for scheme appraisal, as recommended by the SACTRA report (1999). We feel, however, that given the known limitations and rapidly evolving nature of current models, picking a preferred model for appraisal is premature; the development of the state-of art is best served by continuing innovation across a range of models.
 - Some respondents wanted the Department to be clear on the specific assessment criteria for particular model types. While we agree with this idea in principle, the innovative nature of these models means one generation of models can look quite different to the previous. It is not yet possible to say definitively that certain criteria are more or less appropriate for a given type of model.
 - A large number of respondents commented on the challenges they faced in applying guidance in this area and suggested that we publish case studies of best practice and application. The Department recognises the potential benefits of this suggestion and will consider taking this forward subject to addressing the sensitivities around releasing confidential business cases. Currently, however, the pool of business cases informed by supplementary economic modelling is limited.
 - It was also suggested that we undertake more research into the spatial distributional impacts of transport investments. The Department's Monitoring and Evaluation Programme will

ensure the future evidence pipeline will be substantially improved. However, some caution must be exercised as these are, by their nature, long term projects, and hence building up the evidence base will take time.

- Lastly, suggestions for the development of supplementary economic modelling asked that we commission the production of publicly available inter-regional trade statistics. The Department agrees this venture would allow for more granular analysis but is outside the purview of the Department and within the realms of the ONS. The Department will continue to engage with the ONS on this issue going forward.

Other areas for inclusion in a future research programme and the highest priorities for future research

3.8 In the 2016 consultation document we identified several areas we felt were top priorities for the future development of the wider economic impacts guidance – see below. Most respondents agreed with our prioritisation.

- **Development of case studies and practical applications –** The Department recognises the challenges to practitioners in applying new guidance, such as identifying when it is proportionate and relevant to assess wider economic impacts. The Department proposes to publish case studies detailing best practice application of wider economic impacts guidance and further support scheme promoters in building good business cases.
- **Improving the evidence base on “additionality” –** Economic impacts can occur at the local, regional and national level. However, only national level impacts are included in the value for money assessment. Currently there is limited evidence regarding the extent to which local and regional impacts relate to national impacts. Stakeholders agreed with us that improving the evidence base of additionality should be a priority for future research.
- **Transport and labour market interactions –** the employment effects guidance is currently limited to assessing how many people would enter employment or change job as a result of transport investment. However, increasing the size of labour markets via a transport intervention may encourage employees to develop new skills leading to productivity improvements; this represents another potential mechanism through which transport affects the labour market.
- **Developing the evidence base to value ‘attractiveness’ benefits –** current guidance does not capture the benefits associated with transport investments improving the commercial viability of an area. Practitioners are currently

pointed towards supplementary modelling guidance to capture attractiveness. This research would therefore focus on practical testing of potential methods to identify robust approaches.

- 3.9 In addition to the topics identified in the consultation document, multiple respondents suggested the following as research priorities:
- **User benefits under variable land use** – currently there is no methodology for quantifying user benefits under variable land use within WebTAG and scheme promoters are encouraged to undertake supplementary economic modelling to estimate these. Future research would focus on identifying potential robust alternatives that can be consistently applied and scrutinised.
 - **Interactions between transport, land and property markets** – our current guidance does not provide standard methodology on estimating the impacts of a transport scheme on land and property markets and their potential feedback effects on the transport network. It is currently difficult to robustly estimate these impacts given a lack of evidence on land use responses.
 - **Links between welfare and non-welfare measures of impacts** – Some types of supplementary economic models produce non-welfare measures of economic impacts, such as estimates of the change to GDP. However, in order for the impacts to be included in value for money assessments, they need to be welfare measures. Currently there is no guidance as to how scheme promoters can derive welfare measures from non-welfare estimates.
 - **Updating the wider impacts dataset** – the data, provided to assess wider economic impacts, should be updated to be consistent with the latest OBR and Local Authority forecasts. This will ensure forecasts are used consistently for the appraisal of transport impacts.
- 3.10 Beyond these priority areas, respondents identified other potential areas for future research. These included investigating the impacts of transport investment on trade performance, foreign direct investment and employee skills, as well as whether the type and scale of economic impacts differs between rural and urban areas.

4. External Engagement

- 4.1 The key objective of the new guidance is to ensure that users are able to better communicate and robustly appraise economic impacts across their transport business cases. By working collaboratively, openly and transparently with our stakeholders during the development of this guidance we remained focused on this objective.
- 4.2 Having finalised the new guidance, we will continue to engage with our stakeholders. We are developing an external engagement strategy with two key aims: to publicise the guidance, and to support users in implementing the guidance to build business cases and make decisions. Through these engagement activities we will also be able to address some of the specific challenges that the Department's appraisal guidance receives and answer explicit queries on application of the guidance.
- 4.3 We will engage with a range of stakeholders including: officials in local authority transport departments, local enterprise partnerships, regional transport bodies, consultants, academics and senior decision makers.
- 4.4 We are aware that these different stakeholders have different concerns, including around the technical application of the guidance, use of the guidance to support decision making, as well as the weight given to wider economic impacts in appraisals and value for money assessments.
- 4.5 Over the short term, our engagement strategy will include:
 - a one-off, technical-focused event to support consultants and academics on specific details of quantifying and valuing wider economic impacts, including the links to transport modelling and assessing the robustness of supplementary economic modelling;
 - a series of workshops around the country for local authorities, local enterprise partnerships and regional transport bodies on using the guidance to build a business case and addressing stakeholders' particular concerns; and,
 - one-to-one engagement with key senior decision makers at different organisations on interpreting wider economic impacts analysis and using it to draw value for money conclusions.

4.6 Over the longer term, our engagement strategy will include:

- encouraging the sharing of best-practice between local authorities, local enterprise partnerships and regional transport bodies on developing business cases;
- publishing a series of case studies to demonstrate the application of the new guidance for practitioners, project managers and decision makers;
- establishing an expert panel to advise on the application, interpreting the results and assessing the robustness of supplementary economic modelling on a case-by-case basis; and,
- providing ongoing, individually tailored advice, both technical and non-technical, through our guidance mailbox - TASM@dft.gsi.gov.uk.