

Early Assessment and Sifting Tool (EAST) Guidance

The Early Assessment and Sifting Tool (EAST) is a new tool and as such is likely to evolve and adapt over time in response to priorities and new analytical techniques. The guidance will be updated to reflect any changes.

1. Overview

1.1 EAST is a decision support tool that has been developed to quickly summarise and present evidence on options in a clear and consistent format. It provides decision makers with relevant, high level, information to help them form an early view of how options perform and compare¹. The tool itself does not make recommendations and is not intended to be used for making final funding decisions.

1.2 The tool can be used to:

- help refine options by highlighting adverse impacts or unanticipated consequences;
- compare options, for example, within or across modes, geographical areas and networks;
- identify trade-offs between objectives aiding package development;
- filter the number of options, i.e. discount non-runners early on to ease the appraisal burden and avoid resources being spent unnecessarily; and
- identify key uncertainties in the analysis and areas where further appraisal effort should focus.

1.3 This guidance note explains how the EAST summary sheet should be completed. It sets out the issues that need to be considered and addressed by respondents. In many cases, only high level information will be available at the early stage of assessing options: respondents are expected to form a view based on the best evidence available. This is likely to vary widely between options from data and analysis of the problem identified to modelling results for options that have been considered and assessed previously.

1.4 EAST has been designed so that it can be applied without having to obtain detailed evidence as is usually required to support funding applications. This flexibility allows options to be considered at an early stage of development, however, the level of confidence that can be applied to

¹ For example options may be compared within modes or across modes, geographical areas and networks.

comparisons facilitated by the tool will depend on the robustness of the underlying evidence base.

- 1.5 EAST has been designed to assess and compare all types of transport-related intervention across all modes and places. It can be used to assess individual options, packages, strategies and plans.
- 1.6 EAST has been designed to be consistent with Transport Business Case principles in that the issues respondents are asked to consider when assessing the economic impact of schemes are the same as those they will need to address in a more detailed way in a full Transport Business Case. It is not intended to duplicate or replace it.

2. EAST Summary Sheet

- 2.1 The summary sheet (at Annex A) is a checklist of factors relevant to the decision making process. In the early stages, respondents may not have answers to every question, but are encouraged to provide a best estimate. Where there is very little evidence, respondents are asked to form their best view, drawing on knowledge from where similar projects have worked, stakeholder experience and their analysis of the problem that has been identified.
- 2.2 The sheet does not include a “don’t know” category, as even in the early stages respondents are expected to make a judgment, making clear in the justification boxes alongside where judgments are based on little or no evidence.
- 2.3 The tool has been designed to provide a uniform format for assessing the costs and impacts of all transport-related options. It is not intended to discriminate against or penalise options that are innovative, low cost or small scale (or are different in other ways from more standard options). There will inevitably be variations in the quality of supporting data and analysis of options and one of the potential uses of the tool is to highlight where gaps are and where further analysis should focus.
- 2.4 There is a set of guidance attached to the top of the opening sheet ('Summary of Options' sheet) which will take you through how the spreadsheets works and functions. It should be noted that if you have entered more than 1,024 characters into a text box, only the first 1,024 will show on this sheet.

Option name/number

- name and identifier for option. It is recommended that each study or project using EAST develops a system to identify options to enable package development and comparison and to trace options/packages through subsequent iterations if required. Identifiers which note which mode/geographical area/type of option will facilitate comparisons.

Description

- short description of the option (policy/scheme/initiative etc), what it is and the geographical area covered or scale of the option.

Strategic Case

Identified problems and objectives of the option

- short description of what the identified problem is (eg scale of problem, timescale over which the problem will emerge, key drivers);
- what the option is trying to achieve; and
- whether the option aims to meet any specific transport, network or cross-cutting objectives (possibly non-transport related).

Scale of impact

- to what extent does the option alleviate the identified problem?

1	Very small overall impact	Would have a very small positive impact, possibly with undesirable consequences
2	Minor impact	Would have a modest overall impact
3	Moderate impact	Expected to have a reasonably significant impact on the problem identified
4	Significant impact	Expected to significantly alleviate the problem
5	Fully addresses the identified problem	Expected to fully solve the identified problem, without any undesirable consequences

Note: The description provides a guide to how the evidence is interpreted but it is for the respondent to judge the overall scale of impact, providing a justification in the space provided.

- respondents are expected to provide a brief justification for their assessment, highlighting supporting evidence.
- options that have only a very small or minor impact will not necessarily be penalised, particularly if they are low cost or part of an overall package.

Fit with wider transport and government objectives

- how does the option fit within the EU legislative framework governing transport proposals? Does it complement EU proposals? Could it qualify for EU funding? Has it been considered whether Government funding for the option would contravene state aid rules or give rise to any other legal difficulties within an EU context?
- are there any other policies/proposals affecting the same study area as the option/package or addressing the same issues? Please provide details. Does the option complement/enhance pre-existing proposals or is there potential for conflict?

- might the option impact negatively on other modes or types of transport? In particular, has the assessment considered the impact passenger proposals might have on freight transport and vice versa?
- to what extent does the option make better use of existing infrastructure or demonstrate innovation in terms of 'doing more with less'?
- how have other government priorities, beyond transport, been impacted by the option?

Assessment		Description
1	Poor fit	There is significant conflict with other policies/options affecting the study area which needs to be resolved. Possibly also conflicts with other modes.
2	Low fit	There is some conflict with other policies/options or modes.
3	Reasonable fit	Overall the option fits well with other policies affecting the study area.
4	Good fit	The option fits very well with other policies affecting the study area.
5	Excellent fit	Option complements other policies/proposals affecting study area, has no negative impacts on other modes or outcomes and demonstrates 'doing more with less'.

Note: The description provides a guide to how the evidence is interpreted but it is for the respondent to judge the overall fit, providing a justification in the space provided.

Fit with other objectives

2.5 These will vary depending on how the tool is being used. This is an opportunity to draw out and highlight any relevant network or regional objectives specific to an option and to outline how it performs against any local or modal objectives.

Key uncertainties

- what are the main uncertainties, especially those related to the government and strategic objectives?
- what are the most uncertain assumptions that have been made?

Degree of consensus over outcomes

- what consultation has taken place with relevant stakeholders?

1	Little or no consultation has taken place yet, or consultation has revealed a high level of disagreement about the option's ability to deliver the stated outcomes
2	Little consultation and/or strong reasons to suggest the outcomes are controversial

3	Some consultation has taken place with some agreement
4	Wide consultation and broad agreement on the outcomes, possibly one or two areas of disagreement remaining
5	Extensive consultation has taken place with a high degree of consensus on the outcomes

Note: The table provides a guide to how the evidence is interpreted but it is for the respondent and stakeholders to judge the overall quality

Economic Case

- 2.6 In line with the Treasury's Green Book, "Appraisal and Evaluation in Central Government"², EAST aims to identify - at a high level - the nature and extent of all the economic, environmental and social impacts of options.
- 2.7 The decision trees (at Annex B) provide a one-page guide to the issues that need to be considered when forming a view about the likely impact of options on the economy, carbon emissions, socio-distribution impacts and the regions, local environment and well being. It may not be possible to answer every question at this stage, rather they are intended as a set of prompts to ensure all relevant areas have been considered and/or flagged for further investigation. Not all of the questions will be applicable to every option and it is for the respondent to decide which are most relevant for their option(s). The effort that goes into assessing impacts should be proportionate to their anticipated scale.
- 2.8 The questions are consistent with the five case approach adopted by the Transport Business Case. This guidance is consistent with webTAG and the Appraisal Summary Table (AST) but is not intended to duplicate or replace either as it is intended for use in the early stages of the process, before full appraisal has been developed. Practitioners should refer to the relevant sections of webTAG to ensure any calculations and values used are consistent; for example, values of time and vehicle operating cost parameters where relevant.
- 2.9 EAST is different to, and separate from, the proposed WebTAG requirement of an Option Assessment Report (currently in consultation). EAST is a pre-cursor to the Transport Business Case that may yield information that is later useful for an Option Appraisal Report, and demonstrate that the requirement to sift options has been fulfilled
- 2.10 The Red/Amber/Green (RAG) scores for each question are intended to provide a visual guide to the respondent as to the option's impact and a record for future reference. It is not intended that they are aggregated or averaged to provide a final RAG status for each economic indicator. The overall impact will obviously depend on the strength of individual impacts and it is up to the respondent to weigh up the individual RAGs and form a view as to the likely overall impact of the option, justifying the

² http://www.hm-treasury.gov.uk/data_greenbook_index.htm

- 2.11 In some cases, impacts on an indicator will work in different directions. For example, an option that increased the efficiency of road goods vehicles would on the one hand reduce carbon emissions. However, there may also be a shift from rail to road which could work in the opposite direction. In this case, respondents would be expected to judge which would be the greater impact, noting the two competing impacts in the justification box. Where the relative magnitudes of the opposing shifts are unclear, respondents are encouraged to illustrate different scenarios and sensitivities to different assumptions. So, for example, if the option increased the efficiency of a particular category of road goods vehicles by 5%, how much freight would need to move from rail to road to fully offset the benefits? They would then need to assess how realistic/feasible such shifts were to form a view on the likely impact.
- 2.12 Some of the impact assessments will be location-specific, for example, whether options impact on air quality management areas (AQMA) and noise problem areas. Options may impact on these even when they are not targeted at a specific location, for example, a European or national level option to reduce the pollution associated with vehicles will impact on local AQMAs even though that may not be the focus of the policy and these impacts should be assessed accordingly.
- 2.13 Because of the varying potential uses of EAST, decisions will need to be made on a case by case basis by those using the tool regarding the most appropriate base year for comparison.
- 2.14 In addition, the use of appraisal period and discount rates may or may not be relevant depending on the quality of data available. The impact on each indicator should be assessed over the relevant appraisal period, that is, the period over which streams of costs and benefits should be assessed, discounted back to a base year. In the early stages of appraisal, numerical estimates may not be available, however the likely impacts should still be considered over the relevant time frame. For investments with an indefinite life, including most road, rail and airports infrastructure, the appraisal period should end 60 years after the scheme opening year. For other projects, the project life may be determined from the limited life of its component assets. In these cases, the appraisal period selected should be stated, along with a justification in the box provided. Further information on appraisal periods and discount rates can be found at
<http://www.dft.gov.uk/webtag/documents/expert/pdf/unit3.5.4.pdf>
- 2.15 If relevant, the profile of costs and benefits should be noted in the justification/comments box, for example, if an option increases carbon emissions in the early years of operation but reduces carbon emissions over time.

2.16 Options should be assessed against a “base case” scenario where the intervention does not take place. This will vary depending on what the tool is being used for.

2.17 If there is no impact on a particular indicator then this should be noted with a blue assessment. A no impact is where an option will obviously not affect an objective one way or the other. It is not the same as unknown where the outcome is uncertain.

Economic Growth

2.18 The assessments of connectivity and reliability should apply to business travel (which includes freight) and commuters.

Connectivity

- will journeys get shorter, quicker and/or cheaper?
- in some cases, options will have opposite impacts on time and cost and respondents will need to weigh up the individual impacts to form an overall judgement.

Reliability

- will the option impact on the day to day variability in journey times or the average minutes of lateness?
- will there be any impact on the number of incidents?

Wider economic impacts

- at this stage, respondents are not expected to assess wider economic impacts, instead the questions are intended to screen whether there may be an impact that would need to be considered in more detail later on in the appraisal process, should the option progress.

Resilience

- does the option have an impact on the vulnerability of the network to terrorism, severe weather events or the effects of climate change?

Delivery of housing

- in some cases, the need for new development in a specific location will mean that the development will require some form of transport development to support it.
- respondents are asked to assess how their option will facilitate new housing.

Carbon emissions

2.19 The decision tree on carbon emissions is consistent with the Transport Business Case and takes account of the fact that carbon is valued differently depending on whether it is in the traded sector, and so covered by the EU Emissions Trading System, or in the non-traded sector. The respondent is asked to provide an overall assessment by considering:

- what impact the option could have on carbon emissions either through changes in activity, an increase in embedded carbon, changes in the carbon content of fuel or changes in efficiency; and,
- whether the change in carbon emitted is associated with the traded or non-traded sectors.

2.20 When assessing what impact the option will have upon transport activity, and what impact this will have on carbon emissions, it is important to consider how vehicle-km would change as a consequence of the option being implemented. This may involve commenting on changes in the number of vehicle trips, the number of public transport services being provided, changes to journey length and shifting vehicle occupancy levels, in both private and public transport. The respondent should use their judgement and evidence on the relative magnitudes of impacts to assess the net impact the option will have upon activity, noting impacts working in opposite directions in the comments box.

2.21 Embedded carbon should also be considered when assessing the carbon impact of a project. Though this impact will tend to be less significant, building new infrastructure could have a notable effect on carbon emissions.

2.22 The carbon content of the fuel used could also have a notable effect on carbon emissions. Please comment on the carbon content of the fuel indicating whether the carbon content per litre is lower or higher than in the 'base case' scenario.

2.23 The respondent should consider how the option would impact or change efficiency, that is, fuel use per vehicle-km. The assessment should consider whether more efficient vehicles (this includes cars, freight carriers, trains and buses) could be used or more efficient speeds. If it has not been considered whether more efficient vehicles could be used at this stage in the appraisal process, then a best estimate based on similar schemes (perhaps in other regions or countries) or trends in the industry (for example Safe and Fuel Efficient Driving (SAFED) training for bus drivers) would be welcomed with appropriate comments. The respondent may also want to consider if the option would encourage any behavioural change, and note possible effects accordingly.

2.24 Once all the impacts above have been considered, an assessment should be made of whether the impact of any change in carbon

Socio-distributional Impacts and the Regions

Social and distributional

2.25 Social and distributional impacts need to be considered when assessing the impact of options on noise, air quality, severance, accessibility, security, accidents, user benefits and personal affordability.

Respondents will need to consider whether the expected impact of their option (both positive and negative) is either significant in extent or concentrated in terms of the people groups or spatial areas affected, or both.

- might the option have negative or positive impacts on specific groups of people, including children, older people, disabled people, Black and Minority Ethnic communities, people without access to a car and people on low incomes?
- can all of the expected negative impacts be eliminated through some form of amendment to or redesign of the initial option(s)?
- where there are positive impacts, and where negative impacts cannot be eliminated, are impacts sufficiently minor and socially and/or spatially dispersed such that a detailed SDI appraisal is disproportionate to the potential impacts?
- where impacts are either significant or concentrated, a full SDI appraisal will need to be undertaken as part of a Transport Business Case. See <http://www.dft.gov.uk/webtag/documents/project-manager/unit2.13d.php> for more information.
- if the option has negative impacts on particular vulnerable social groups (elderly, low income, disabled etc), it should consider whether additional measures can be introduced to mitigate this impact.

Regeneration

- does the option have an impact on a targeted regeneration area where poor transport been identified as a constraint and, if so, what is the impact likely to be?

Regional imbalance

- this is intended to identify the extent to which the proposal impacts on a region or sub-region which is underperforming when compared to other areas or to the country as a whole. This underperformance or 'weakness' will need to be defined in terms of economic and/or social indicators.
- for further details on regional imbalance metrics see paragraph 8.3.3 of WebTAG 3.5.3d
<http://www.dft.gov.uk/webtag/documents/expert/pdf/unit3.5.3d.pdf>

Local environment

Air Quality

- the Air Quality Strategy for England, Scotland, Wales and Northern Ireland sets health based objectives for nine air pollutants and two for the protection of ecosystems. The objectives are the same or similar to mandatory limit values set in European Directives, which the UK Government is legally obliged to meet.
- local authorities have a duty to review and assess local air quality and where it is found that objectives for pollutants are unlikely to be met by the due date they have to declare Air Quality Management Areas. Respondents should therefore note whether their option impacts on any AQMAs.

Noise

- respondents are asked to refer to the DEFRA noise action plan <http://www.defra.gov.uk/environment/quality/noise/environment/actionplan/index.htm> to assess whether their option is likely to impact on a noise problem area.

Natural environment, heritage and landscape

- landscape refers to both the physical and cultural (ie use and management) characteristics of the land. Physical characteristics include fields, hedges, trees and streams. Cultural characteristics include stone walls, water meadows and field barns.
- the man-made historic environment (heritage) comprises:
 - buildings (individually or in association) of architectural or historic significance;
 - areas, such as parks, gardens, other designed landscapes or public spaces, remnant historic landscapes and archaeological complexes; and

- sites (e.g. ancient monuments, places with historical associations such as battlefields, preserved evidence of human effects on the landscape, etc.).
- heritage also includes the sense of identity and place which the combination of these features provides.
- natural environment includes impacts on biodiversity and water.

Streetscape and urban environment

- streetscape is the physical and social characteristics of the built and unbuilt urban environment and the way in which we perceive those characteristics. It is this mix of characteristics and perceptions that make up and contribute to townscape character and give a 'sense of place' or identity.

2.26 Appraising the impact of options on natural environment, heritage, landscape and streetscape should broadly follow webTAG's environmental capital approach:

- what are the characteristic features of the countryside/heritage/streetscape/biodiversity/water environment?
- what is the importance of the features identified? Who are they important to and why? What are their relationships in terms of overall landscape/streetscape forms/heritage patterns/biodiversity and water?
- how will the option impact on these features, including effects on its distinctive quality and substantial local diversity?
- respondents should produce an overall assessment of whether the option is likely to have a positive, negative or no impact, noting key elements in the comments box.

2.27 Further information on the environmental capital approach can be found at <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.6.php>

Well being

Physical activity

- the impact the option has on physical activity should be noted and it is relevant if the option impacts on an area of deprivation or poor health.

Injury or deaths

- the impact on the number of people killed or injured in transport accidents should be assessed as well as the impact on the risk of travelling.

- this should include all transport-related accidents, including those accessing transport modes (for example injuries caused by stairs or escalators) or those sustained while working.

Crime

- options that address perceptions of crime are relevant in addition to those that demonstrably reduce crime.

Terrorism

- respondents are asked to consider if the option might affect our vulnerability to terrorism and note in the comments box provided.

Enabling people to enjoy access to a range of goods, services, people and places

- does the option make it easier for people to access key locations (doctors, hospitals, supermarkets etc)?
- does it make leisure trips quicker or cheaper?
- does it make leisure trips more reliable? Will it have an impact on the number of incidents?

Severance

- severance issues relate primarily to pedestrians though they can affect all non-motorised modes including cyclists and equestrians.
- respondents should consider the impact on pedestrian movement, for example, whether there will be hindrance to pedestrian movement, whether some people (particularly children and old people) are likely to be dissuaded from making journeys on foot, or they will be less attractive to others or whether people will be deterred to the extent that they reorganise their activities?

Expected VfM category

- value for money measures the benefits for each £1 of costs. It includes both the benefits and costs that can be counted in monetary terms (which can be described as a benefit/cost ratio) and other non-monetised impacts such as regeneration and environmental effects.
- have you calculated the BCR (benefit cost ratio) and, if so, what is it? Further information on calculating the BCR can be found at <http://www.dft.gov.uk/webtag/documents/expert/pdf/unit3.5.4.pdf>. It should be noted that there is a new BCR metric in draft webTAG guidance. It is advised that calculations produce estimates using both metrics for comparison.

- are there significant impacts which you have not been able to include in the BCR? What are these impacts and what evidence do you have on their scale?
- if you have not yet calculated the BCR, is there evidence of the BCR and/or value for money of similar options that may be relevant, explaining why similar results might be expected?

At a later stage, if your option belongs to a package of proposals, can you explain how low/medium value for money schemes are justified within the context of the package level business case?

Managerial Case

Implementation timetable from inception to delivery

- respondents will need to give an estimate of the timescales for implementing the option, from inception to delivery (this might include construction timescales or time for bringing legislation into force).
- how long is the option expected to be in operation/force if it is a fixed term project? What timescales would be involved if it is a recurrent project?

Public acceptability

- an assessment of whether there are likely to be any issues around public acceptability of the option. For example, will the option require a long period for public consultation?
- does the option require behavioural changes (like mode shift or seatbelt campaigns)?
- what stakeholder engagement has already taken place?

Practical feasibility

- has the option been tested and proven to be practical and effective?
- how certain are you of the governance and legal feasibility of the option?
- who would operate the option?
- does the operator have the required statutory powers? Are there planning implications?
- if there is technology involved, it should be stated whether this is proven, prototype or still in development.

Quality of the supporting evidence

- if it is based on evidence from where similar options have been implemented elsewhere, how transferable are the impacts likely to be?

- how well-developed is the supporting evidence at this stage?
- is it based on initial modelling?

1	Low level of supporting evidence - a scheme in the very early stages of development that has not been implemented elsewhere with little supporting data and/or analysis
2	Poor level of supporting evidence – may be some underlying data or some informal analysis
3	Reasonable level of supporting evidence – good underlying data explaining the problem and some analysis of the outcomes
4	Good level of supporting evidence, possibly including some modelling and/or sensitivity testing demonstrating robust outcomes
5	High level of supporting evidence – option has been modeled in detail or subjected to a Transport Business Case appraisal

Note: The table provides a guide to how the evidence is interpreted but it is for the respondent and stakeholders to judge the overall quality

Key Risks

- what risks have been identified with regard to implementing such an option/project?
- where appropriate, include an assessment of how probable they are, interdependencies with other sources of risk and their expected impact.
- this might include examples of problems and risks experienced in similar schemes in the past, or extrapolations drawn from pilot schemes.
- how will the identified risks be actively managed? What countermeasures could be introduced?

Financial Case

2.28 Where numeric estimates are available, all entries in the table should be present values - that is, streams of costs occurring over the appraisal period should be discounted to the Department's standard base year using the Department's standard discount rate. This implies that benefits received far in the future are given less weight than benefits received today, in line with social preferences.

2.29 The costs of interest are those to central and local government and these should be noted separately in the comments box.

Affordability

- the issue of affordability needs to be put in the context of the available budget and relevant budget period. This will vary depending on what the tool is being used for and should be clarified in relation to each study or project using the tool.
- some options that are unaffordable in the immediate budget period may be affordable in later years. Also, when assessing how affordable an option may be, it may be relevant to consider what sort of package of options is being put forward alongside the option under consideration.

Capital Cost

- the user should select the appropriate cost category from the drop down menu. Capital costs should include all the costs involved in setting up the option and getting it up and running. In some cases cost information may be very uncertain. Respondents need to provide their best estimate, stating in the justification box if the estimate is particularly uncertain (and why).

Comments should note:

- the appraisal period over which the option has been assessed (see paragraph 3.9 for more information).
- whether optimism bias³ has been applied and at what rate? If non-standard rates are being applied, what evidence do you have for the values used?

Revenue Costs

- includes subsidy costs
- revenue costs include all running costs to keep the scheme in operation

Cost profile

- do previous estimates include all implementation, operation, maintenance and enforcement costs including administration?
- what are the costs (and savings) to business? In particular, you should consider whether there is the potential for disproportionate burden on small business and how this might be minimised.
- if the option being considered is a regulation, what are the full/wider costs imposed?

³ Optimism bias is the demonstrated systematic tendency for appraisers to be over-optimistic about key project parameters including capital costs, works duration, operating costs and under delivery of benefits. Further details on optimism bias can be found on page 85 of The Green Book http://www.hm-treasury.gov.uk/data_greenbook_index.htm

Overall cost risk

- respondents are asked to provide a risk rating of 1 (low risk) to 5 (high risk). Supporting evidence should be provided where possible and this might include examples of what similar schemes have cost in the past, how these costs have differed from original estimates or extrapolations drawn from pilot schemes.

Commercial Case

Flexibility of option

- to what extent can the option be scaled up or down depending on the level of funding available?
- how easy would it be to stop the option/scheme once it has been put into operation? Or before it starts operating?
- how easily could the scheme be amended to fit with changing circumstances?

Where is funding coming from?

- brief qualitative statement on how capital and running costs will be financed and the certainty of funding

Any income generated?

- yes/no
- best estimate of incomes generated from the scheme
- have options for making beneficiaries pay for improvements been considered (eg. fare increases)?

ANNEX A

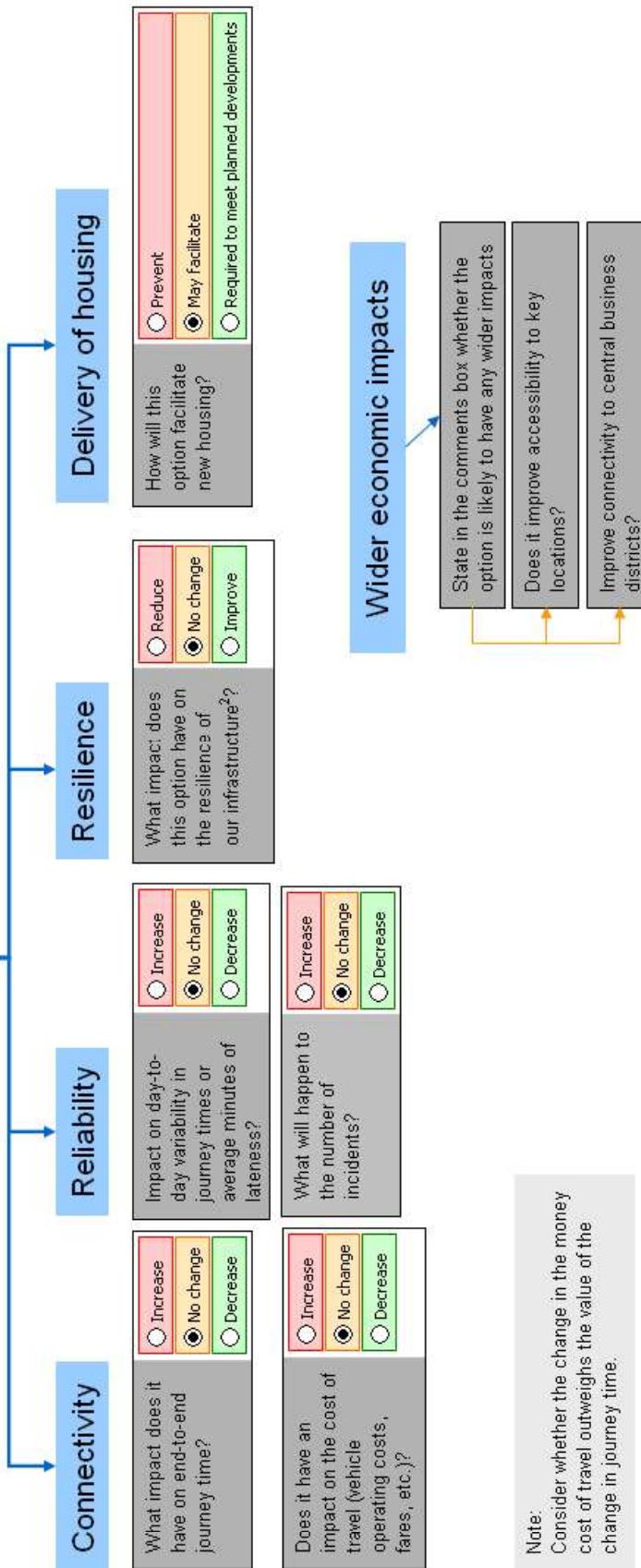
Early Assessment and Sifting Tool - Saved Option

Option name/no.	Enter option name here	
Date	15/04/2011	
Description		
Strategic		
Identified problems and objectives		
Scale of Impact	▼	
Fit with wider transport and government objectives	▼	
Fit with other objectives	▼	
Key uncertainties		
Degree of consensus over outcomes	▼	
Economic		
Economic growth	▼	
Carbon emissions	▼	
Socio-distributional impacts and the regions	▼	
Local environment	▼	
Well-being	▼	
Expected VfM Category	▼	
Managerial		
Implementation timetable	▼	
Public acceptability	▼	
Practical feasibility	▼	
What is the quality of the supporting evidence?	▼	
Key risks		
Financial		
Affordability	▼	
Capital Cost (£m)	▼	
Revenue Costs (£m)	▼	
Cost profile		
Overall cost risk	▼	Other costs
Commercial		
Flexibility of option	▼	
Where is funding coming from?		
Any income generated (£m)	▼	

ANNEX B

Economic growth

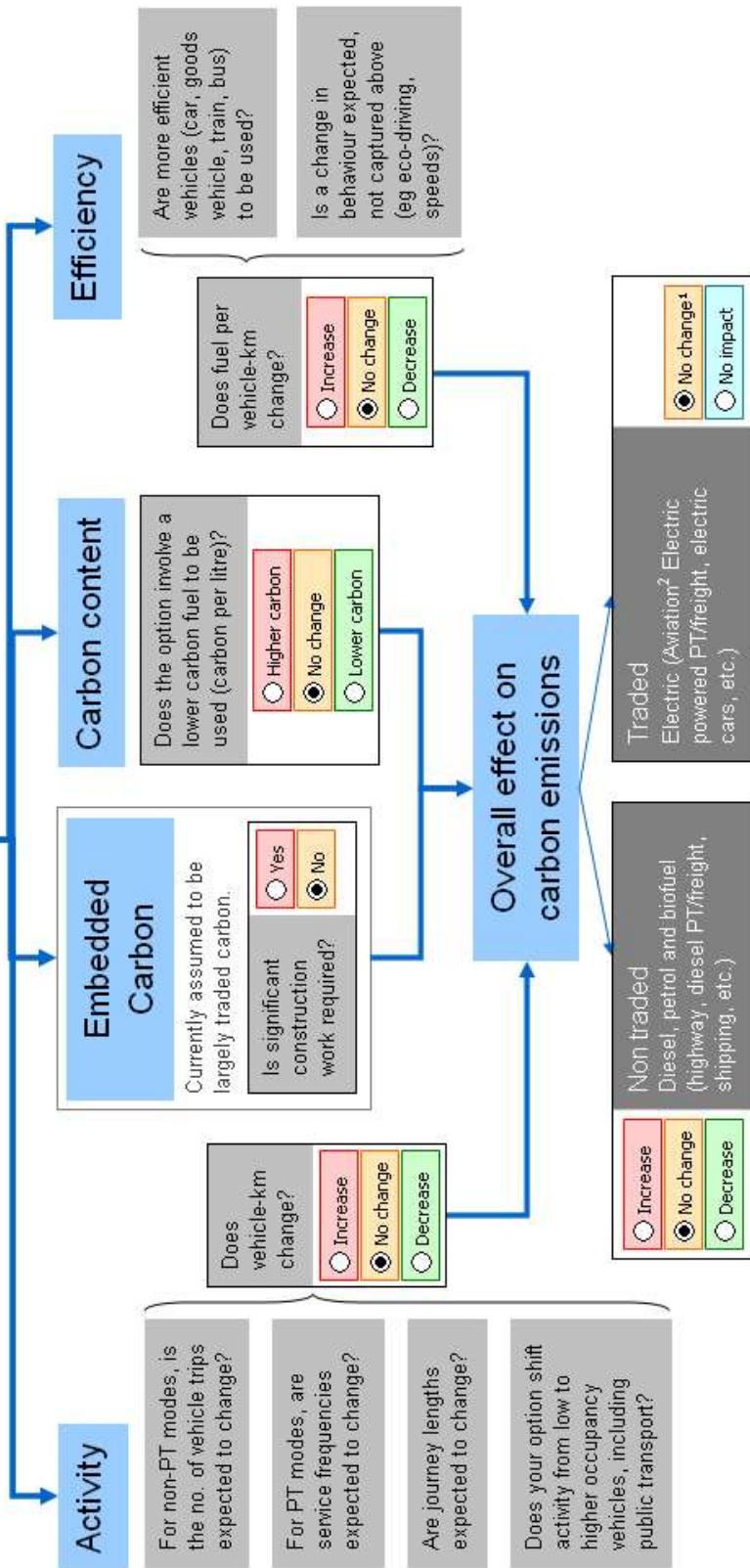
Economic growth¹
What is the expected impact of the intervention?



¹ Applicable only to business and commuters only (excludes leisure) ² Eg. acts of terrorism, severe weather events or the effects of climate change

Carbon emissions

What is the expected impact of the intervention on carbon emissions?

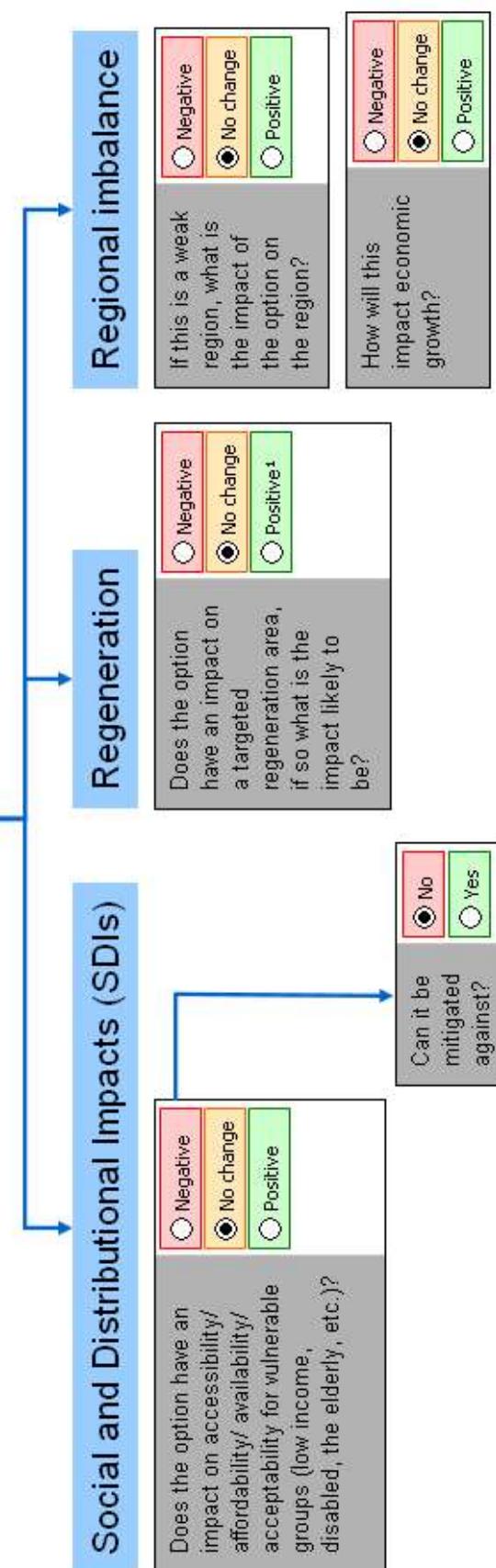


¹ Net effect on traded carbon would not impact total carbon dioxide emissions, and hence, the net impact should be reflected as 'No change'.

² Aviation is due to enter the traded sector in 2012

Socio-distributional impacts and the regions

Socio-distributional impacts and the regions
What is the expected impact of the intervention?



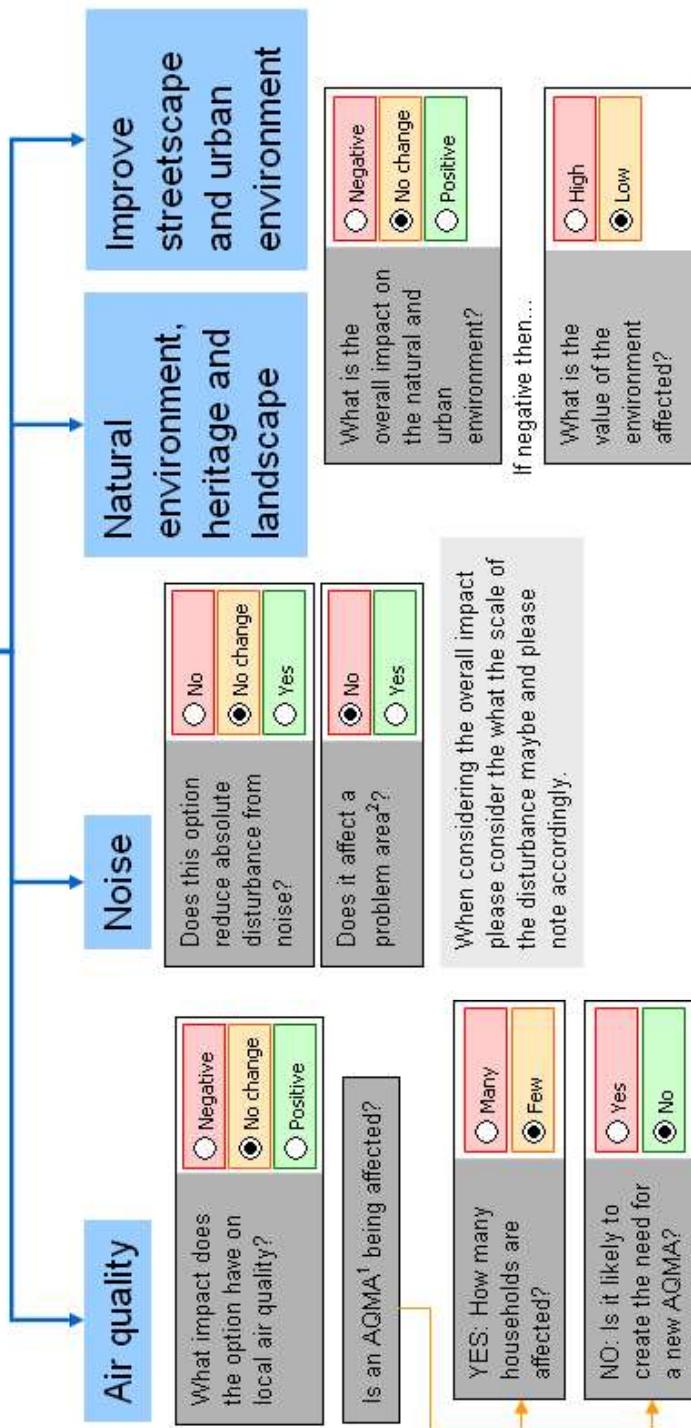
It should be noted that there are eight Social and Distributional Impacts (SDIs) that need to be considered in a full appraisal. The eight SDIs are Noise, Air Quality, Severance, Accessibility, Personal Affordability, Accidents, Security, and User Benefits, which are also relevant to the other goals. See the Strategic Appraisal Guidance for more information.

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Local environment

[working •](#)

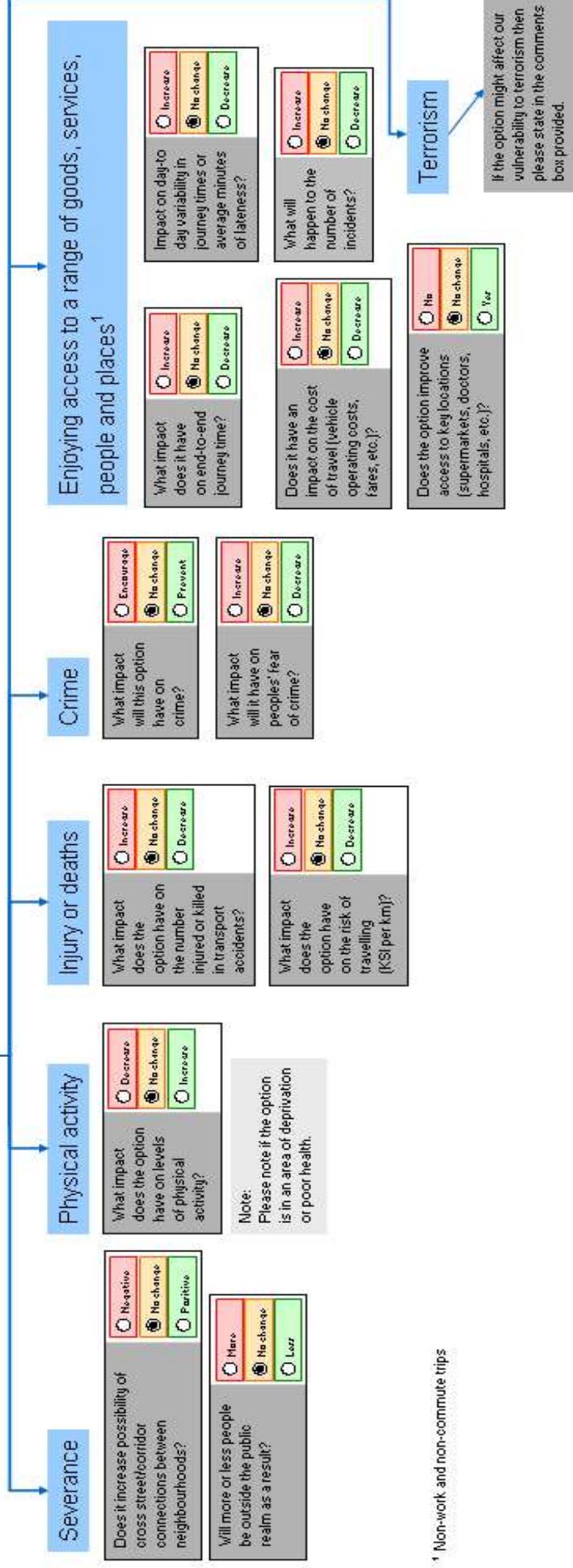
Local environment
What is the expected impact of the intervention?



¹ AQMA – Air Quality Management Area ² See DEFRA Noise Action Plan

Well being

Well being
What is the expected impact of the intervention?



¹ Non-work and non-commute trips