

Proposed methodology for considering life satisfaction

Definition

This component considers the potential impact of a road on levels of life satisfaction experienced by individuals, communities and community groups living in the surrounding area.

Life satisfaction is considered to resonate well as a means of measuring wellbeing and includes a package of issues including financial security, relationships, accommodation, day-to-day activities and achievement of goals¹. For the purposes of this guidance, which is focused on the relationship of life satisfaction to roads, the topic has been defined in terms of two factors that replicate aspects of Defra's approach to this theme.

Figure 6.1 defines the two factors covered by this chapter, and their likely relation to road scheme design and delivery.

Fig. 6.1: Components and factors of Life Satisfaction related to road schemes

Component	Factor	Example impact of road scheme design/delivery
Life satisfaction	Environmental justice	<p>The development of a road scheme may cause a relative decrease in environmental quality in the surrounding area (e.g. reduced aesthetic quality, air quality, increased dirt and dust, etc.), which may cause a decline in the standard of living conditions for residents and dissatisfaction with their local area. This may affect a whole community, or specific groups within the community.</p> <p>People that have historically had less political "voice" to object to environmental deterioration may be particularly vulnerable to environmental injustices. This may include those of lower socio-economic status and ethnic minorities.</p>
	Sense of belonging (social networks)	<p>Where a road bisects a cohesive community possessing a specific social identity it is possible that the road may compromise individuals' ability to participate in social networks or access social and community facilities (e.g. community halls, pubs, libraries, places of worship, etc.), possibly leading to a sense of isolation and a decreased sense of belonging.</p>

A review of life satisfaction impacts should consider the degree to which each factor contributes to life satisfaction in the study area, and the extent to which the road or project may alter the baseline conditions associated with each factor.

Determine baseline characteristics

Notable data concerning baseline characteristics of life satisfaction should be collected and incorporated within the community profile. Data for each factor can be sourced as follows.

Factor 1: Environmental Justice

This factor considers the baseline level of community satisfaction with the local environment surrounding the proposed road project, taking into account the relationship between environmental quality, living conditions and life satisfaction, and the likely impacts of the proposed road scheme for different community groups.

A review of environmental justice in relation to proposed road schemes should utilise information from sources such as:

Data	Source	Purpose
Residents' views of the area in which they live	<p>Highlighted by the Communities and Local Government Place Surveyⁱⁱ and the Office of National Statistics' Area Profileⁱⁱⁱ.</p> <p>Defra survey of Public Attitudes and Behaviours towards the Environment^{iv}, in which people were asked to rate their satisfaction with their lives, by using a scale from 0-10.</p> <p>Consultation with community representatives may provide a greater understanding of the types and extent of participation activities in the community.</p>	<p>These subjective perspectives should provide a high-level indication of the community's baseline level of satisfaction with their local area and the features of their neighbourhood which they value the most.</p> <p>Understanding these attitudes will help to identify how negative impacts of the road scheme can be mitigated, or how the local area might be enhanced through appropriate scheme design.</p>
Location of landscape and heritage features and facilities (e.g. unique landscape features, features of cultural or historical importance)	<p>Landscape and heritage features may be identified as part of environmental assessments undertaken in accordance with DMRB chapters on Landscape Effects (Vol. 11, Section 3, Part 4) and Cultural Heritage (Vol. 11, Part 2, HA 208/07).</p> <p>Local geographical information available from Ordnance Survey mapping^v. Community information available via local authorities and/or parish councils.</p> <p>Field observation may contribute to practical understanding of these geographical features and the frequency of their use.</p> <p>Aerial photography and historical records</p>	<p>To determine the baseline level of environmental, cultural and landscape quality in the local area, from which to assess how this might be deteriorated or enhanced as a result of the scheme proposals.</p>
Location of existing road	Available from Highways Agency	To map infrastructure in

Data	Source	Purpose
and infrastructural elements (e.g. underpasses, lay-bys, etc.)	databases and Ordnance Survey data.	relation to perceived environmental quality, to gain an understanding of possible relationships between infrastructure design and life satisfaction.
Location of community groups (e.g. ethnic minorities, women, elderly, etc.)	Local demographic data available from recent national census database ^{vi} and local authority databases. Field observation may contribute to practical understanding of these settlement patterns.	To map the distributional impacts of changes to baseline environmental quality across different community groups, and highlight groups at particular risk of deterioration in their living conditions. This will support the assurance of social and environmental justice for different community groups.

Assembling this information should provide a good basis from which to review existing levels of actual and perceived environmental quality, and to ensure that the impacts of the road or project do not present any significant detrimental impacts for the living conditions of anyone. Opportunities may be taken to improve the baseline standard of living conditions through appropriate urban design, and to secure greater environmental justice for all.

Factor 2: Sense of Belonging (Social Networks)

This factor considers the baseline level of individuals' ability to access social networks within their community, taking into account the relationship between social networks, sense of belonging and life satisfaction, and the impacts of the road or project on social networks. Care should be taken to ensure that the social reference points of all groups within the community are considered

A review of social networks in relation to proposed road schemes should utilise information from sources such as:

Data	Source	Purpose
Community participation statistics	Data from the Communities and Local Government Place Survey ^{vii} and Office of National Statistics' Area Profile ^{viii} incorporate objective statistics on certain aspects of community participation. The Office for National Statistics also reports trends in social participation ^{ix} . Consultation with community representatives may provide a greater understanding of the types and extent of participation activities	To develop an understanding of the baseline level of participation within community networks, and how community members interact with one another. This should provide an indication of the geographical scope and importance of social networks, which can inform the design and development of road scheme proposals.

Data	Source	Purpose
	in the community.	
Location of community groups (e.g. ethnic minorities, disabled communities, socio-economic groups, elderly people, etc.)	<p>Local demographic data available from recent national census database^x and local authority databases.</p> <p>Field observation may contribute to practical understanding of these settlement patterns.</p>	<p>To map the geographic location and spatial extent of community groups with common characteristics. This may provide a high-level perspective on the geographies of likely social networks, which may be preserved by sympathetic scheme design.</p>
Location of community features and facilities (e.g. community centres, parks, pubs, places of worship, plus key routes to social facilities)	<p>Local geographical information available from Ordnance Survey mapping^{xi}. Community information available via local authorities and/or parish councils.</p> <p>Field observation may contribute to practical understanding of these geographical features and the frequency of their use.</p>	<p>To map central points of social activity in the local area and develop an understanding of baseline access arrangements, including opportunities to enhance access, as well as mitigate negative impacts on accessibility. This data can provide a sense of the geography of social networks, which may be preserved through sympathetic scheme design.</p>

This information may be mapped to establish a basis from which to review existing social networks and related sense of belonging in the local community, and to ensure that the impacts of the proposed road scheme do not present any significant detrimental impacts for the social interactions of any community group. Opportunities may be taken to enhance or facilitate social interactions through inclusive urban design^{xii}.

- ⁱ *Sustainable Development Indicators in your Pocket 2009*. Defra (2009).
- ⁱⁱ Available at <http://www.audit-commission.gov.uk/localgov/audit/nis/Pages/placesurvey.aspx> (06.04.10).
- ⁱⁱⁱ Available at www.areaprofiles.audit-commission.gov.uk (06.04.10).
- ^{iv} Available at <http://www.defra.gov.uk/evidence/statistics/environment/pubatt/> (08.04.10).
- ^v Available at www.ordnancesurvey.co.uk (06.04.10).
- ^{vi} Available at <http://www.ons.gov.uk/census/index.html> (07.04.10).
- ^{vii} Available at <http://www.audit-commission.gov.uk/localgov/audit/nis/Pages/placesurvey.aspx> (06.04.10).
- ^{viii} Available at www.areaprofiles.audit-commission.gov.uk (06.04.10).
- ^{ix} Available at <http://www.statistics.gov.uk/CCI/nscl.asp?ID=7856> (08.04.10).
- ^x Available at <http://www.ons.gov.uk/census/index.html> (07.04.10).
- ^{xi} Available at www.ordnancesurvey.co.uk (06.04.10).
- ^{xii} Guidance on inclusive design is available from the Homes & Communities Agency (HCA) (see <http://www.englishpartnerships.co.uk/inclusivedesign.htm>) and the Commission for Architecture and the Built Environment (CABE) (see *Inclusion by Design: equality, diversity and the built environment* (November 2008), available at <http://www.cabe.org.uk/publications/inclusion-by-design>) (both as at 08.04.10).