

## 7. Mitigation

### 7.1. Integral mitigation

#### 7.1.1. Measures to mitigate adverse effects on the environment

Mitigation is one of the key outputs from the SEA process. Measures to prevent, reduce, and as fully as possible offset any significant adverse effects of the LIP on the environment will be identified and outlined within the Environmental Report. Where adverse environmental effects cannot be avoided, it may be possible to limit damage with mitigation. However recognition should be given to any mitigation measures that themselves have adverse environmental effects (taken from Advice on Strategic Environmental Assessment for Local Implementation Plans).

The nature of many of the measures in the LIP is that they are designed to mitigate the adverse environmental effects of traffic. This is particularly true of measures designed to promote walking, cycling and other more sustainable modes of travel and to improve road safety. It is not therefore appropriate to provide additional mitigation unless those measures are clearly lacking.

### 7.2. LIP measures potentially requiring additional mitigation

#### 7.2.1. Improving road safety

There is some emphasis on speed management which clearly has benefits for safety. However there is a concern that these measure may reduce speeds to the extent that emissions to air are increased. Some speed reduction measures, for example speed bumps, can increase noise levels from vehicles passing through and measures which require motor vehicles to slow down or stop and then speed up, may increase both noise and emissions to air.

Recommended additional mitigation – It is important to evaluate how these measures will operate in practice to ensure that safety benefits are not offset by higher noise levels and emissions to air.

#### 7.2.2. Bus priority measures

A number of proposals will enhance bus priority. These may only achieve wider environmental benefits if:

- There is a shift away from the private car;
- The noise, emissions to air and other environmental impacts of buses are better per passenger mile than the private car; and
- There is no shift towards increased trip length as bus trips become easier.

Recommended additional mitigation – Mitigation might be achieved by assessment of the overall environmental benefits on a scheme by scheme basis before deciding to proceed.

### 7.2.3. Reducing congestion

This is focused on traffic management and promotion of sustainable transport. Wider environmental benefits may be negated if as a consequence of reduced congestion people use cars more.

Recommended additional mitigation – Mitigation might be achieved by measures to discourage people from using their cars, for example by ensuring that the use of public transport to access town centres is, in overall terms, more convenient than using a private car and having to park. This fits with the promotion of sustainable transport.

### 7.2.4. Parking and loading arrangements

Both the parking and enforcement plan and town centre redevelopment measures are intended to enhance town centres and make them more attractive. Some of these measures, for example Improvement to existing off-street parking, will potentially encourage more motor vehicle traffic and increase traffic flows. However this traffic might otherwise have been attracted to centres outside the Borough or to out of town centres; there may be no net increase in traffic and some reduction is possible.

Recommended additional mitigation – Parking improvements need to be accompanied by improvements that encourage people to use other modes, walking, cycling and public transport, wherever possible. The key is to manage this in a way that provides no net increase in motor vehicle traffic and encourages the use of more sustainable modes. Mitigation might be achieved by measures to discourage people from using their cars, for example by ensuring that the use of public transport to access town centres is, in overall terms, more convenient than using a private car and having to park. This fits with the promotion of sustainable transport.

### 7.2.5. Accessibility and social inclusion measures

A number of proposals will enhance public transport, notably station access and bus stop accessibility. These may only achieve wider environmental benefits if:

- There is a shift away from the private car;
- The noise, emissions to air and other environmental impacts of the improved modes are better than the private car; and
- There is no shift towards increased trip length as public transport trips become easier.

Recommended additional mitigation – Mitigation might be achieved by assessment of the overall environmental benefits on a scheme by scheme basis before deciding to proceed.

### 7.2.6. Walking and cycling

These are two of the mayoral priorities. The effectiveness of some cycle facilities may need further evaluation particularly kerbside lanes on busy roads and it has been suggested that experienced cyclists agree with these views.

There is a clear emphasis on footway renewal and on practical and focused improvements for walking, for example in town centres, at stations and at bus stops.

Recommended additional mitigation – There is potential for a greater emphasis on walking and cycling, particularly at a strategic level, but clearly if underlying adverse conditions for cycling and longer distance walking are present this will not deliver wider environmental benefits.

#### 7.2.7. Road maintenance and bridge strengthening

Improvement to maintenance of road surfaces may require additional use of construction materials notably aggregates. This may place additional demands on natural resources.

Recommended additional mitigation – Recycling of secondary aggregates including those deriving from road construction and maintenance activities can reduce demand for aggregates from natural resources. There are other benefits from using such material, including reduced impacts from the transport of secondary aggregates, which are sourced from within London, and the avoidance of landfill of waste materials.

#### 7.2.8. Town centre measures

The aim of town centre development and redevelopment is to attract investment and consumers to an area. This inevitably means more traffic. Careful planning consideration needs to address the balance between private vehicles, public transport, and pedestrian and cycle access.

Recommended additional mitigation – Parking improvements need to be accompanied by improvements that encourage people to use other modes, walking, cycling and public transport, wherever possible. Town centre mitigation measures will depend on:

- The development of more sustainable modes of travel into town centres particularly walking and cycling; and
- An approach that favours those approaching the town centre on foot, cycle or by public transport by making it more convenient than the car alternative.

#### 7.2.9. Travel awareness and travel plans

In promoting the use of sustainable travel modes this is clearly an area where environmental benefit is possible. However the sustainability of travel modes is sometimes imperfectly understood. Under some circumstances, family car carrying a full load of passengers can perform well against public transport modes with low patronage.

Recommended additional mitigation – In pursuing this area there needs to be a good understanding of what is sustainable, for example walking and cycling are almost always sustainable. While public transport by bus is usually sustainable it has problems in dealing with low flows. Public transport by train can be relatively inefficient in terms of environmental costs particularly where utilisation is low. Private vehicle use may generally be poor in terms of sustainability but there are instances, for example use by people working unsocial hours where it is more efficient.