

4. SCOPING PROCESS

4.1 Alternative strategic options

Five options have been developed that show alternative strategy scenarios for the policy instruments available within LTP2. All of the options fulfil the requirements of the LTP objectives, but each puts emphasis on a different policy area. The five options are not prioritised or weighted in any way and are all considered to be of equal value for the purposes of the SEA. To keep the scenarios as realistic as possible only those policy instruments considered to be feasible to implement within the five year LTP period have been included. The five options under consideration are:

- **Option One:** is the existing situation that can be treated as a “do-minimum” or background situation. For the purposes of the hypothetical situations that follow, it can be assumed that the development / investment in the policy instruments here would be maintained with no further growth.
- **Option Two:** an alternative consisting of Option One (existing) plus policy instruments skewed towards constraining the strong demand for car travel.
- **Option Three:** an alternative consisting of Option One (existing) plus policy instruments skewed towards sustainable transport modes.
- **Option Four:** an alternative consisting of Option One (existing) plus policy instruments skewed towards unconstrained demand for car travel.
- **Option Five:** an alternative consisting of Option One (existing) plus policy instruments skewed towards targeted improvements to roads together with some improvements for walking, cycling and public transport.

Further explanation of the options & their related policy instruments can be found in appendix 3.

4.2 Appraisal methodology

An initial brainstorming session was held with the LTP Environmental Advisory Task Group to identify some of the major environmental issues relating to transport in West Yorkshire. Possible indicators and data sources were also discussed, and the results of this session can be found in appendix 4. The impacts of each of the five strategic alternative options on West Yorkshire’s environment were considered against each of the SEA objectives by the assessment team, using their expert knowledge and subjective opinion. The results of this exercise contributed to the choice of a preferred alternative – the strategy that forms the basis of the LTP2 – which is considered in more detail in chapter 5.

The matrices in section 4.3 display the findings of the scoping exercise for each option, with each matrix grid having been assessed as having a likely beneficial or possible slight beneficial effect, the equivalent adverse effects, or no likely effect. Accompanying comments explaining the decisions made by the assessment team during the scoping exercise are included in appendix 5. It is worth noting that the assumption was made during the scoping assessment that the policy instruments described for each of the options would be fully implemented.

The policy instruments for each of the alternative options have been placed into one of four categories to aid the assessment, namely: public transport; network; road safety; and mobility management. Within these categories three further sub-divisions have been established for policy instruments regarded predominantly as “services”, “information” or “infrastructure”. This sub-division is also intended for ease of understanding and to make the tables more accessible to the non-transport specialist. A detailed breakdown of the policy instruments for each option, and information on the relationships between the options can be found in appendix 3.

4.3. Scoping matrices

OPTION 1: EXISTING

+	Likely beneficial effect
+/O	Possible slight beneficial effect
-/O	Possible slight negative effect
-	Likely negative effect
	No likely effect

SEA OBJECTIVES	PUBLIC TRANSPORT			NETWORK			ROAD SAFETY			MOBILITY MANAGEMENT INITIATIVES		
	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure
1 To reduce transport-related impacts on local/regional noise climate.												
2 Improve local/regional air quality and mitigate transport-related AQMAs.	-/O	-/O	-/O	+/O		+/O			-/O	+/O	+/O	
3 Reduce transport-related emissions of greenhouse gases.	-/O	-/O	-/O	+/O		+/O			-/O	+/O	+/O	
4 Improve the ability of transport systems to adapt to climate change.			-/O			-/O			-/O			-/O
5 To protect and enhance landscape and townscape diversity.						-/O			-/O	+/O		+/O
6 Avoid loss or damage to historic buildings, land, structures, Conservation Areas and historical areas or their setting [<i>includes visual impacts</i>].									-/O			
7 To help protect and enhance habitats and species of local, European or international importance.												
8 Reduce the detrimental impact of transport on water quality.												
9 To secure improvements to health.						+/O				+/O		
10 Reduce the number of vehicular, pedestrian, and other transport-user casualties.								+/O	+/O	+/O		
11 Reduce the risk and fear of crime for pedestrians, cyclists and public transport users.			+/O									
12 Reduce community severance and fragmentation to aid community cohesion.									+/O			+/O
13 Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside.	+/O		+/O			+/O						+/O
14 To support employment, economic competitiveness and the revival of priority regeneration areas.	+/O		+/O	+/O		+/O					+/O	
15 To protect and retain soil quality.												
16 Maximise the efficient and effective use of materials and minimise the amount of waste generated.												

OPTION 2: EXISTING PLUS POLICY INSTRUMENTS SKEWED TOWARDS CONSTRAINED CAR DEMAND

+	Likely beneficial effect
+/O	Possible slight beneficial effect
-/O	Possible slight negative effect
-	Likely negative effect
	No likely effect

	SEA OBJECTIVES	PUBLIC TRANSPORT			NETWORK			ROAD SAFETY			MOBILITY MANAGEMENT INITIATIVES		
		Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure
1	To reduce transport-related impacts on local/regional noise climate.						+			+/O			+/O
2	Improve local/regional air quality and mitigate transport-related AQMAs.	+	-/O	+/O	+/O	+/O	+			+	+/O	+/O	+/O
3	Reduce transport-related emissions of greenhouse gases.	+	-/O	+/O	+/O	+/O	+			+	+/O	+/O	+/O
4	Improve the ability of transport systems to adapt to climate change.			-/O		+	-/O			-/O			-/O
5	To protect and enhance landscape and townscape diversity.	+/O			+/O	-/O	+/O			-	+/O		+*
6	Avoid loss or damage to historic buildings, land, structures, Conservation Areas and historical areas or their setting <i>[includes visual impacts]</i> .	+/O					+/O			-/O			+/O
7	To help protect and enhance habitats and species of local, European or international importance.	+/O											+/O
8	Reduce the detrimental impact of transport on water quality.												
9	To secure improvements to health.	+/O					+				+/O		
10	Reduce the number of vehicular, pedestrian, and other transport-user casualties.	+/O			+/O	+/O	+/O	+/O	+/O	+			+/O
11	Reduce the risk and fear of crime for pedestrians, cyclists and public transport users.	+/O		+/O			+/O						+/O
12	Reduce community severance and fragmentation to aid community cohesion.						+			+			+/O
13	Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside.	+		+/O			+/O						
14	To support employment, economic competitiveness and the revival of priority regeneration areas.	+		+/O	+/O	+/O	+/O						+/O
15	To protect and retain soil quality.												
16	Maximise the efficient and effective use of materials and minimise the amount of waste generated.												

* = Presuming other measures are introduced to back up this policy.

OPTION 3: EXISTING PLUS POLICY INSTRUMENTS SKEWED TOWARDS ENCOURAGING USE OF SUSTAINABLE MODES.

+	Likely beneficial effect
+/O	Possible slight beneficial effect
-/O	Possible slight negative effect
-	Likely negative effect
	No likely effect

SEA OBJECTIVES	PUBLIC TRANSPORT			NETWORK			ROAD SAFETY			MOBILITY MANAGEMENT INITIATIVES		
	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure
1 To reduce transport-related impacts on local/regional noise climate.												
2 Improve local/regional air quality and mitigate transport-related AQMAs.	+		+	+/O					-/O	+	+/O	
3 Reduce transport-related emissions of greenhouse gases.	+		+/O*	+/O					-/O	+	+/O	
4 Improve the ability of transport systems to adapt to climate change.			-/O			-/O			-/O			-/O
5 To protect and enhance landscape and townscape diversity.	+/O		-/O			-/O			-/O	+/O		+/O
6 Avoid loss or damage to historic buildings, land, structures, Conservation Areas and historical areas or their setting <i>[includes visual impacts]</i> .												
7 To help protect and enhance habitats and species of local, European or international importance.			-/O							+/O		+/O
8 Reduce the detrimental impact of transport on water quality.												
9 To secure improvements to health.	+/O	+/O	+/O		+/O	+/O				+		+/O
10 Reduce the number of vehicular, pedestrian, and other transport-user casualties.					+/O	+/O	+/O	+/O	+/O	-/O		+/O
11 Reduce the risk and fear of crime for pedestrians, cyclists and public transport users.	+/O	+/O	+/O			+/O				+/O		
12 Reduce community severance and fragmentation to aid community cohesion.			-/O		+/O	+/O			+			+
13 Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside.	+		+		+/O	-/O						+/O
14 To support employment, economic competitiveness and the revival of priority regeneration areas.	+		+	+/O						-/O	+/O	
15 To protect and retain soil quality.												+/O
16 Maximise the efficient and effective use of materials and minimise the amount of waste generated.												+/O

* = Although need to assess CO₂ implications of the construction process.

OPTION 4: EXISTING PLUS POLICY INSTRUMENTS SKEWED TOWARDS UNCONSTRAINED CAR DEMAND.

+	Likely beneficial effect
+/O	Possible slight beneficial effect
-/O	Possible slight negative effect
-	Likely negative effect
	No likely effect

	SEA OBJECTIVES	PUBLIC TRANSPORT			NETWORK			ROAD SAFETY			MOBILITY MANAGEMENT INITIATIVES		
		Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure
1	To reduce transport-related impacts on local/regional noise climate.				-/O		-						
2	Improve local/regional air quality and mitigate transport-related AQMAs.	-/O	-/O	-	-	+/O	-			-/O		-/O	
3	Reduce transport-related emissions of greenhouse gases.	-/O	-/O	-	-		-			-/O	-/O	-/O	
4	Improve the ability of transport systems to adapt to climate change.			-/O		+	-/O			-/O			-/O
5	To protect and enhance landscape and townscape diversity.				-/O	-/O	-			-/O			
6	Avoid loss or damage to historic buildings, land, structures, Conservation Areas and historical areas or their setting <i>[includes visual impacts]</i> .									-/O			
7	To help protect and enhance habitats and species of local, European or international importance.				-/O		-/O						
8	Reduce the detrimental impact of transport on water quality.						-/O						
9	To secure improvements to health.				-/O		-/O						
10	Reduce the number of vehicular, pedestrian, and other transport-user casualties.				-/O		-/O	+/O	+/O	+/O	-/O		
11	Reduce the risk and fear of crime for pedestrians, cyclists and public transport users.			+/O									
12	Reduce community severance and fragmentation to aid community cohesion.				-/O		-			+/O			
13	Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside.	+/O		+/O			+						-/O
14	To support employment, economic competitiveness and the revival of priority regeneration areas.	+/O		+/O	+/O	+/O	+/O						
15	To protect and retain soil quality.						-/O						-/O
16	Maximise the efficient and effective use of materials and minimise the amount of waste generated.												

OPTION 5: EXISTING PLUS POLICY INSTRUMENTS SKEWED TOWARDS TARGETED IMPROVEMENTS TO ROADS TOGETHER WITH SOME IMPROVEMENTS FOR WALKING, CYCLING AND PUBLIC TRANSPORT.

+	Likely beneficial effect
+/O	Possible slight beneficial effect
-/O	Possible slight negative effect
-	Likely negative effect
	No likely effect

SEA OBJECTIVES	PUBLIC TRANSPORT			NETWORK			ROAD SAFETY			MOBILITY MANAGEMENT INITIATIVES		
	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure	Services	Information	Infrastructure
1 To reduce transport-related impacts on local/regional noise climate.						+/O			+/O			
2 Improve local/regional air quality and mitigate transport-related AQMAs.		-/O		+/O		+			-/O	+	+/O	
3 Reduce transport-related emissions of greenhouse gases.	-/O	-/O		+/O		+/O			-/O	+/O	+/O	
4 Improve the ability of transport systems to adapt to climate change.			-/O		+/O	-/O			-/O			-/O
5 To protect and enhance landscape and townscape diversity.			-/O			-/O			-/O	+/O		+/O
6 Avoid loss or damage to historic buildings, land, structures, Conservation Areas and historical areas or their setting <i>[includes visual impacts]</i> .												
7 To help protect and enhance habitats and species of local, European or international importance.												
8 Reduce the detrimental impact of transport on water quality.												
9 To secure improvements to health.						+/O				+/O		
10 Reduce the number of vehicular, pedestrian, and other transport-user casualties.							+/O	+/O	+			
11 Reduce the risk and fear of crime for pedestrians, cyclists and public transport users.			+							+/O		
12 Reduce community severance and fragmentation to aid community cohesion.						+/O			+			+/O
13 Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside.	+/O		+		+/O	+						+/O
14 To support employment, economic competitiveness and the revival of priority regeneration areas.	+/O		+/O	+/O		+/O					+/O	
15 To protect and retain soil quality.												
16 Maximise the efficient and effective use of materials and minimise the amount of waste generated.												

4.4 Summary of the scoping appraisal

The results of the SEA scoping appraisal has been briefly summarised in table 4.1 below:

Table 4.1: Summary of scoping exercise

	Likely adverse effect	Possible slight adverse effect	No likely effect	Possible slight beneficial effect	Likely beneficial effect	Environmental rating
Option 1	0	15	150	27	0	4 th
Option 2	1	8	124	44	15	1 st (best performing)
Option 3	0	14	131	35	12	2 nd
Option 4	9	30	138	13	2	5 th (worst performing)
Option 5	0	12	147	26	7	3 rd

N.B. This summary table maybe slightly out of date due to a second assessment of each alternative option, although the overall ratings remain the same.

OPTION 1: Existing / do-minimum.

Option 1 results indicate no significant beneficial or adverse effects are expected on the environment, with 78% of the scoping appraisal indicating no likely effects on the SEA objectives. However, possible slight benefits are expected for 14% of the matrix grid, with only 8% of the grid indicating a possible slight negative effect. Option 1 provides the 4th best environmental rating out of the five alternative LTP strategies.

Option 1 highlights the majority of potential adverse effects & some beneficial effects focused within the transport emissions objectives. This is to be expected as emission changes are very sensitive to changes in traffic flow. Potential beneficial effects are mainly expected for objectives addressing casualties, accessibility, & economic development. The option 1 findings indicate little overall change in environmental conditions but it does indicate a small net beneficial effect, mainly for topics related to the LTP's 'shared priorities'.

OPTION 2: Existing plus policy instruments skewed towards constrained car demand

Option 2 results clearly indicate a significant net beneficial effect on the environment. Just over 30% of the matrix grids identified either likely or slight possible beneficial effects, with only around 5% having some form of negative environmental effect. Option 2 provides the best performing environmental rating of all the alternative strategies.

Many of the policies that targeted car constraints will provide the most significant beneficial effects for transport emissions. Other potential environmental benefits were generally spread across a range of SEA objectives & LTP shared priorities, excluding water quality, soil & waste issues.

OPTION 3: Existing plus policy instruments skewed towards encouraging use of sustainable modes.

Option 3 results also indicate a net beneficial effect on the environment, but less substantial than for Option 2. Approximately 25% of the scoring matrix grids highlight some form of positive environmental effect, with 7% identifying potential adverse on the environment. Option 3 provides the 2nd best performing environmental rating from all the alternative strategies.

Policies aimed at encouraging sustainable modes will provide some potential environmental benefits spread across many SEA objectives & Shared Priorities. However, areas including climate change adaptation & visual impacts some potential adverse effects, mainly relating to transport infrastructure.

Option 4: Existing plus policy instruments skewed towards unconstrained car demand.

Option 4 results clearly indicate a significant net adverse effect on the environment. Just over 20% of the matrix grid identifies potential adverse environmental effect, with just 8% of the grid highlighting a potential for environmental improvement. Option 4 provides the worst performing environmental rating of all the alternative strategies.

Many of the policies aimed at promoting unconstrained car demand will impact greatly on all the transport emission objectives. Other potential adverse effects are spread across other SEA objectives & some shared priorities. However, some potential beneficial effects are possible for access & economic development objectives.

Option 5: Existing plus instruments skewed towards targeted improvements to roads together with some improvements for walking, cycling & public transport.

Option 5 results are similar to Option 1 regarding the fact there are no expected significant beneficial or adverse effects on the environment. However, Option 5 does indicate a slightly improved net beneficial effect on the environment, with 17% of the grid identifying potential benefits & only 6% with possible adverse effects. Option 5 provides the 3rd best performing environmental rating of the alternative strategies.

The above policies provide a mix of transport instruments that provide potential environmental improvements for the more social SEA objectives & some shared priorities. Limited potential adverse effects were identified for transport emissions & visual aspects of the SEA objectives. Option 5 has no likely effects on heritage, biodiversity, soil & water quality or waste issues.