Appendix C: Cost Benefit Screening

EU MEASURE	EU CLASSIFICATION	OPTION	PROJECT FEASIBILTY	LOCAL ECONOMIC IMPACT	IMPACT ON CONGESTION	LOCAL AIR QUALITY IMPACT (NO_2)	PUBLIC HEALTH IMPACT ($PM_{2.5}$ & wider determinants)	CO_2 IMPACT	COMPATIBILITY WITH SDC PLANNING POLICIES	COMPATIBILITY WITH NYCC PLANNING POLICIES / LTP	PUBLIC PERCEPTION	SOCIO ECONOMIC / EQUALITY IMPACTS	OTHER COMMENTS	PRIVATE CAR EMISSIONS	FLEET CAR EMISSIONS	BUS EMISSIONS	HGV EMISSIONS	LGV EMISSIONS	TAXI EMISSIONS	COMMUTER	BUSINESS TRIPS	DELIVERIES	LEISURE / SHOPPING	EDUCATION	CAPITAL COST	REVENUE COST	COMMENT
Alternatives to private vehicle use	Bus based Park & Ride	Investigate opportunities for a diesel bus based P&R Barlby											Would need to include a link to the railway station. Level of demand for service questioned. Would need a more detailed feasibility study, to include looking at current parking levels around the station. Would need to consider emission and noise impacts for people along the route. To encourage use of a P&R site parking charges would need to be introduced / increased in town centre. This would have negative public perception and socio-econopmic impacts. There would be concerns about impact on local businesses.												HIGH	HIGH	High cost associated with feasibility study and any associated scheme delivery. Revenue cost would depend on operating model. Would be lower ongoing fuel costs for electric service. Both site development and running of such a scheme could be contracted out to a third party if an interested party could be found.
		Investigate opportunites for an ultra low emission bus based P&R Barlby											All same issues arising as for diesel based P&R system. Additional issue might be extra electricity use and impact this could have on CO_2 emissions from power stations in the district. Buses would need to operate on a green energy tariff or energy to be generated on site (potentially solar?)												HIGH	HIGH	High cost associated with feasibility study and any associated scheme delivery. Revenue cost would depend on operating model. Would be lower ongoing fuel costs for electric service. Both site development and running of such a scheme could be contracted out to a third party if an interested party could be found.
	Car & lift sharing schemes	Introduce a car share only lane through New Street											Requires further analysis of current vehicle occupancy to determine how many vehicles would need to be diverted and if this would be enough to make a difference. Would need some form of enforcement which could be expensive. Diverted vehicles might have higher CO_2 emissions. Potentially fits with air quality improvement aspects of NYCC transport plan.												HIGH	MEDIUM	Revenue cost would depend on enforcement model. Camera based system would be expensive to install but might have cheaper ongoing costs than manual onstreet enforcement. Actual cost would depend on level of compliance / need for court action.
	Car clubs	Car club operated by SDC											Levels of current demand for such a service were questioned but opportunities may exist in relation to new housing developments. Agreed that any scheme would most likely be provided locally by Selby DC not NYCC. Idea of a NYCC operated car club removed from the list. Compatibility with Selby DC planning polices needs further investigation. Potentially a car club could be based at SDC offices for staff and public use)												HIGH	MEDIUM	High captial cost associated with infrastrucutre provision / website development. Ongoing staffing costs. Would most likely be contracted out to a third party for delivery.
Freight and Delivery Management	Freight Consolidation Centre	Investigate opportunites for a freight consolidation centre within SDC area (with potenital for sharing with York)											Would need to identify suitable land to develop a consolidation centre on and undertake a feasibility study to dermine if there are enough HGV movements / interested parties to support the concept. If linking to a CNG refuelling project would need to have a high pressure gas main nearby but could just operate as a consolidation centre. Potential to work with York.												HIGH	HIGH	High cost associated with feasibility study and any associated scheme delivery. High ongoing staffing costs. Could be contracted out for third party delivery and operation if an interested party could be found.
	Freight Partnerships for city centre deliveries	Set up a Freight Partnership for operators regularly moving in and around Selby											NYCC already have lots of experience with setting up FQPs for timber, quarries etc. A QFP could be used to develop local delivery schedules / management plan, promote fleet improvement / management etc for vehicles which regularly enter Selby. Would need more feasibility to gauge interest etc but fairly confident it could work. Could include a move towards quieter / out of hours delivery if considered practical.			[illegible]									LOW	LOW	Main costs associated with officer time to facilitate discussions and develop policies etc
	Route Management Plans/ Strategic routing strategy for HGV's	Improve signage on bypass about HGV weight limit on New Street											HGVs have a disproportionate impact on air quality so removal of some of the larger vehicles from New Street could be beneficial. Some lorries may have to travel further to make their deliveries increasing cost and CO_2 emissions. Could have a negative impact on smaller businesses.												MEDIUM	LOW	Main costs associated with signage provision. Exact cost dependant on type of signage e.g. VMS vs static. Some ongoing maintenance costs.
		Undertake active enforcement of weight limit on New Street											Enforcement of weight limit is being enforced at Cawood Bridge due to . Ability to enforce on New Street requires further investigation and some further consideration of access rights. NYCC to provide further advice and guidance.												HIGH	MEDIUM	This assumes a camera based enforcment system. Cost of cameras could be high. Revenue cost would depend on amount of enforcement required / court costs. Sporadic manual checks / enforcment could be cheaper.
Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Develop local LES planning guidance (Selby DC) to promote provision of EV charging and CEMPs on most developments											LES planning guidance has already been produced in York and a template is available for use. Selby DC planning officers willing to review and consider use in Selby												LOW	LOW	Main costs associated with officer time to develop and implement guidance.
	Low Emission Strategy	Development of a regional EV charging strategy (NYCC)											NYCC already working with district authorities to roll out EV charging. This is an existing commitment in the Local Transport Plan												HIGH	MEDIUM	High costs associated with provision and installation EV charging infrastrusture. Require ongoing management (back office system) and maintenance. Both aspects could be contracted out to a third party. Some grants available for infrastructure. Some infrastructure could be provided via developer contributions
	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	Continue to work with YALPAG to agree 'common principles' approach to LES planning measures											Other YALPAG members also working on LES planning guidance. There may be increased costs for developers in meeting the LES planning requirements so a regional approach is important to ensure Selby is not disadvantaged compared to other areas.												LOW	LOW	Main costs associated with officer time to develop and implement guidance.
	Sustainable Procurement Guidance	Investigate opportunites for further developing sustainable procurement policies within SDC and NYCC											SDC already has a joint procurement strategy with Ryedale and Scarborough District Councils which endeavours to embed sustainability issues into all aspects of the procurement process. The strategy is due for review in 2017 which presents an **opportunity to strengthen the existing polices.**												LOW	LOW	Main costs associated with officer time to develop and implement guidance.
Promoting Low Emission Transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	Work with City of York Council to promote uptake of low emission vehices by businesses through promotion of short lease demonstrator vehicle scheme											Potential for joint promotion with City of York Council electric demonstrator vehicle											school minibuses?	LOW	LOW	Vehicle already available in York. Main cost is officer time to contact businesses and artrange hire.
	Low Emission Zone (LEZ) or Clean Air Zone (CAZ)	Develop a Low Emission Zone or Clean Air Zone where vehicles access would be restricted based on emission standard		[illegible]									Selby's AQMA is small and concentrated on a single street. The cost of implementing and enforcing a LEZ / CAZ would be disproportionate to the issue and likely to have a severe deterimental impact on the local economy. A LES / Clean air zone should only be considered a last resort if other measures do not successfully reduce pollutant concentrations on New Street. Links here with proposed CAZ in City of York that will clean up some frequent bus services using New Street.	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction						HIGH	MEDIUM	Introduction of LEZ / CAZ would require a large amount of planning and publicity. Likely to require an expensive camera based enforcement system. Financial assistance may be needed for some vehicle operators / businesses to enable them to comply. Ongoing enforcement costs would depend on level of compliance and associated court costs.
	Priority parking for LEV's	Provide priority parking for LEVs at Selby DC council offices and in other car parks owned by SDC. Update parking policies to reflect this requirement.						[illegible]			[illegible]		Could be linked to car club use by SDC staff. May be some socio-economic issues around ability to access a low emission vehicles												MEDIUM	LOW	Some initial investment needed in creation of priority parking bays/ signage and publicity. Enforcement could be undertaken by existing staff.
	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharing	Provide public EV charging infrastructure in car parks owned by SDC											May be some socio-economic impacts associated with low emission vehicle ownership. Amount and type of charging would need further investigation based on expected demand. Funding would be required to support provision. Could be linked to LEs planning measures.												HIGH	MEDIUM	High costs associated with provision and installation EV charging infrastrusture. Require ongoing management (back office system) and maintenance. Both aspects could be contracted out to a third party. Some grants available for infrastructure. Some infrastructure could be provided via developer contributions
	Public Vehicle Procurement - Prioritising uptake of low emission vehicles	Review and amend fleet vehicle procurement polices within SDC and NYCC to promote prioritisation of low emission vehicles NO											Low emission vehicles may have higher procurement costs but these can usually be offset via fuel and tax savings over time. There may be concerns around residual value of vehicles when moving away from diesel to alternatives. There is already a general joint procurement strategy for Selby DC, Ryedale DC and Scarborough DC which incorporates sustainability issues. This is due for renewal in 2017 and this may present an opportunity to further influcence vehicle procurement within Selby.			[illegible]									MEDIUM	LOW	There may be some increased costs associated with the ongoing procurement of lower emission vehicles but ongoing running costs maybe lower depending on type of vehicles purchased.
		Review local bus fleet and work with operators to identify which services could be upgraded to low emission / hybrid services or retrofitted to reduce emissions. Apply for grants to fund upgrades and retrofit projects.	Need to review age profile of bus fleet / potential upgrades / available funding / whether upgrades would be district wide or on New Street										Low emission vehicles may have higher procurement costs but these can usually be offset via fuel and tax savings. May be some socio-economic costs if retrofit costs passed onto passengers but this can be avoided via use of grants. Links here with proposed CAZ in City of York that will clean up some frequent bus services using New Street. Need to observe progress with CAZ in City of York.												LOW	LOW	Main costs associated with officer time to work with bus operators to review vehicle fleets, identify opportunites for improvement and apply for grants.
	Taxi emission incentives	Undertake a review of current taxi fleet to identify current ages and emission standards. Investigate use of a taxi incentive grant to promote replacement of vehicles.	ongoing										Low emission vehicles may have higher purchase costs but these can usually be offset via fuel and tax savings . May be socio-economic impacts for taxi drivers. Some initial analysis has been carried out showing a relatively modern taxi fleet age profile at present.												LOW	LOW	Main costs associated with officer time to work with taxi operators to review vehicle fleets, identify opportunites for improvement and apply for grants.
	Taxi Licensing conditions	Review taxi licensing conditions at next opportunity and promote inclusion of emission standards (longer term measure)											Taxi licensing conditions have just been reviewed and updated - there is unlikely to be another opportunity for several years												LOW	LOW	Main costs associated with officer time
Promoting Travel Alternatives	Encourage / Facilitate home-working	Include home working measures as part of LES planning guidance emission mitigation measures / SDC staff home working								[illegible]			Not everyone will be able to access a home suitable for homeworking. Would need to ensure facilities for homeworking are incorporated into local planning policies. Impact on small business - provision of facilities / costs for heating homes etc would be a consideration. Existing homeworking policy at SDC, NYCC are working towards homeworking												LOW	LOW	Main costs associated with officer time to development and implement policies
	Intensive active travel campaign & infrastructure	Investigate funding opportunities for improving walking and cycling signage in and around town centre to show approximate distances and time for trips by these modes											NYCC funding for sustainable transport measures in Selby is currently very limited. Any additional measures at a local level will need to be funded via developer contributions or be the subject of external fudning bids. Funding is currently being explored for a new sustainable travel officer post.												HIGH	MEDIUM	May require significant investment in walking and cycling infrastructure. High level of ongoing officer involvement needed to maintain high levels of interest and participation from the public.
	Personalised Travel Planning	Investigate the Introduction of on line journey planning tools for use by residents, particularly at new developments (as currently used in Harrogate)											NYCC funding for sustainable transport measures in Selby is currently very limited. Any additional measures at a local level will need to be funded via developer contributions or be the subject of external fudning bids. An online journey planning tool has been introduced in Harrogate and could be expanded to Selby if funding was available.												LOW	MEDIUM	Journey planning tools already available from Harrogate work. Requires high level of additional staff resource to apply effectively in Selby.
	Promote use of rail and inland waterways	Work with Transpennine express to identify opportunites to further promote use of the railway station in Selby. Identify key steps and action points needed.											Some negotiations around improved access and parking at Selby railway station are currently taking place with the rail operator												LOW	LOW	At this stage requires ongoing input of staff resource to maintain an ongoing dialogue with the rail operator. There could be high future captial and resource costs if a major improvement scheme is implemented.
		Investigate opportunites to promote the use of waterways for movement of goods / construction materials etc			[illegible]	[illegible]							Currently very limited use of the river for movement of goods												LOW	LOW	At this stage requires ongoing input of staff resource to maintain an ongoing dialogue around potential opportunities. There could be high future captial and resource costs if a major improvement opportunity was identified.
	Promotion of cycling	Investigate opportunities for Park and cycle at Barlby											Links to OD study and high % shopping trips (may not be possible by cycle).												MEDIUM	LOW	Cost associated with undertaking of a feasibility study. Any future infrastructure provision likely to be expensive . On going revenue costs associated with cycling aspects likely to be low.
		All schools within Selby to continue to deliver bikeability training											Training already takes place but access to a bike and safety concerns by parents can limit uptake of cycle to school.												LOW	MEDIUM	Programme is already well developed. Requires ongoing staff resources to support the scheme.
	Promotion of walking	Investigate opportunites for Park and Walk site at Barlby											OD study shows most trips are local based and probably walkable from home. Would need to be linked to longer commuter based trips to be worthy of futher investigation.												MEDIUM	LOW	Cost associated with undertaking of a feasibility study. Any future infrastructure provision likely to be expensive . On going revenue costs associated with walking aspects likely to be low.
		Investigate opportunites to increase pavement width on New Street to facilitate walking in this area. Links to other access control measures (e.g one way, car share only etc)											Full survey would be needed to look at viability and modelling of impact on traffic. Some vehicles might have to travel further as a result of reducing road space. Would assist those unable to afford a vehicle or unable to drive.												HIGH	LOW	Costs associated with feasibility study and any future implementation.
	School Travel Plans	Continue active promotion of school travel plans and improve data collection											Some children who live further away may not be able to use active travel modes / public transport												LOW	MEDIUM	Programme is already well developed. Requires ongoing staff resources to support the scheme.
	Workplace Travel Planning	Introduce use of on line journey planning tools for commuter / workbased trips particularly at new business developments											Dependent on funding at NYCC. Not deliverable within current budget.												LOW	MEDIUM	Journey planning tools already available from Harrogate work. Requires high level of additional staff resource to apply effectively in Selby.
Public Information	Via leaflets	Produce and circulate traffic route maps for local businesses											Will need a timescale for this and a nominated person(s) but could have a positive impact at relatively low cost.												LOW	LOW	Small cost associated with leaflet production and distribution
	Via radio	Provide air quality information via Radio York											Will need to determine who will arrange this and when. Will need to be part of an agreed air quality communication strategy.												LOW	LOW	Small cost associated with advert production and time to attend interviews etc.
	Via the Internet	Review SDC web pages relating to air quality, traffic management etc											Will need to determine who will arrange this and when. Will need to be part of an agreed air quality communication strategy.												LOW	LOW	Mainly time needed to update existing CYC site
Traffic Management	Anti-idling enforcement	Erect anti-idling signage on New Street											May be some concerns that switching engines off in traffic could result in breakdowns / slow moving off of traffic which could impact on congestion on New Street. Would be advisory signage only in the first instance.												LOW	LOW	Some costs associated with production and placement of signs. At this stage signs to be advisory only.
	Reduction of speed limits, 20mph zones	Introduce 20mph zone NO	**Awaiting DfT review safety issues**		[illegible]	[illegible]					[illegible]		Traffic on New Street is already slow moving and this is unlikely to change as a result of introducing a 20mph zone. Depending on outcome of DfTsafety **review Selby DC may introduce safety based** 20mph zones in other parts of the district in the future.												LOW	LOW	Some costs associated with production and placement of signs. Any enforcement would have to be undertaken by the police.
	Road User Charging (RUC)/ Congestion charging	Introduce a road user charging scheme on New Street NO											Selby's AQMA is small and concentrated on a single street. The cost of implementing and enforcing congestion charging would be disproportionate to the issue and likely to have a severe deterimental impact on the local economy. Congestion charging should only be considered a last resort if other measures do not successfully reduce pollutant concentrations on New Street.	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	HIGH	HIGH	The development and enforcement of a scheme of this type could be expensive, particularly if it relied on camera enforcement. Actual enforcement costs would depend on level of compliance and associated court costs. Road user charging can generate an income source which can be re-invested in transport and air quality improvment measures.
	Strategic highway improvements, re-prioritising road space away from cars, inc access management, selective vehicle priority, bus priority, high vehicle occupancy lane	Close New Street at peak times											Local traffic management measures at New Street are likely to form a major part of the overall programme of air quality improvements in Selby. A number of feasibility studies are needed to establish what the most effective measures are likely to be for improving air quality on New Street and what the implications will be for other parts of the town. The AQAP will be updated once the most cost effective traffic management measures have been fully identified and consulted upon and specific measures have been identified as the best ones to take forward. Public perception may be positive amongst residents in the New Street area and users of low emission vehicles but a greater number of people are likely to be inconvienienced by potential access changes	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	Depends on access restriction	HIGH	HIGH	All these measures need to be the subject of a detailed feasibility / cost benefit study to identify which are the most appropriate for New Street. All would require some infrastructure changes and ongoing enforcment, potentially using a camera based system. Actual enforcement costs would depend on level of compliance and associated court costs.
		Make New Street one way (at all times or in peak hours only)																							HIGH	HIGH	
		Two person only (peak or all the time)																							HIGH	HIGH	
		Electric vehicles only (peak or all the time)																							HIGH	HIGH	
		Bus priority scheme												[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Some journeys move to bus, others get delayed	HIGH	HIGH	
	Testing Vehicle Emissions	Undertake a further programme of spot checks on taxi emissions	Checks already carried out and all vehicles meet standards.										Selby have already undertaken similar activities. Need to review the outcome of previous campaigns in terms of number of failed vehicles to decide if it is worth repeating. Could be some socio-economic impacts relating to independant taxi drivers running older vehicles												LOW	MEDIUM	Selby DC has already undertaken testing of this type and already has the facilities to do so. Main cost would be staff resources.
	UTMC, Congestion management, traffic reduction	Introduce a wider UTMC system across the town centre area which is responsive to local pollution levels - to include use of VMS signs to redirect traffic when problems occur on the network or pollution is particularly high											The need for a UTMC system in Selby is fully recognised but progress is currently hindered by lack of funding. Introduction of a UTMC system will form part of a wider traffic management options study to inform future AQAP development. Opportunities to obtain funding from developers to support UTMC will be continued to be pursued at a local level.												HIGH	MEDIUM	A large amount of financial investment is needed to establish a UTMC system in Selby and would have ongoing running and maintenance costs.
	Workplace Parking Levy, Parking Enforcement on highway	Introduce a workplace parking charge in Selby	No information currently on levels of workplace charging							[illegible]			Measure is likely to be highly unpopular and may impact on the local economy. OD study indicates that commuter trips are only a relatively small contributor to the air quality issues on New Street. To be considered further only if other measures are unsuccessful.												HIGH	MEDIUM	A scheme of this type would have high set up costs and would require ongoing enforcement. Some income could be generated for reinvestment in transport and air quality measures.
Transport Planning and Infrastructure	Bus route improvements	Review bus routes and identify opportunities for re-routing away from New Street	Bus routes are already optimised taking into account practicality of routing and demand	[illegible]				[illegible]		[illegible]			Bus routes are already optimised based on demand and practicality of movement through the town centre. Changes to routes could reduce access to some businesses or require passengers to walk further to access the bus or their final destination.												LOW	LOW	There is little further work that could be done with respect to bus routing as current system optimises routes taking into account demand and physical restraints on where buses can be operated.
	Cycle network	Continue delivery of improved cycle networks *(dependent on developer and SUSTRANS funding)*.											Need to review planned cycle route works to determine what is planned and by when.												HIGH	MEDIUM	Cycle routes require high capital investment and have ongoing maintenance costs associated with them.
	Public cycle hire scheme	Continue roll out of 'WELCOME TO YORKSHIRE' borrow bike scheme											Scheme already operational in some areas												MEDIUM	MEDIUM	Some costs associated with setting up the schemes and adminstrating them in the longer term. Bikes also require ongoing maintenance work.
Vehicle Fleet Efficiency	Driver training and ECO driving aids	Undertake further training on eco-driving techniques											SDC already undertaken some driver training. SDC will pursue further opportunities to undertake further eco-driver training							[illegible]			[illegible]		LOW	LOW	Some costs associated with using the eco-driving simulator and organising ongoing administration etc
	Fleet efficiency and recognition schemes	Introduce a fleet recognition scheme											This would involve introducing a fleet recognition scheme such as ECO-Stars to Selby. It has been undertaken in many other areas but requires ongoing investment to keep schemes running. Would need to consider how many potential users of the scheme there are in Selby												MEDIUM	MEDIUM	Initial start up costs assoicated with fleet recognition schemes and ongoing resourcing required. Usual approach is to employ a third party to set up and and administer the scheme.
	Promoting Low Emission Public Transport	Develop a low emission vehicle marketing strategy											This measures would involve drawing up a plan for the ongoing promotion and incentivisation of low emission vehicles in Selby. Would need to identify target audiences, resourcing needed etc. Development of the marketing plan could be included in the first AQAP with specific events /initiatives to follow in further versions of the AQAP.												LOW	LOW	Main costs associated with officer time to develop and promote the strategy
	Vehicle Retrofitting programmes	Feasibility study to consider bus services that require retrofitting with emissions abatement technology / exploration of funding sources for such upgrades	Funding dependent										This would be a feasibility project only looking at current bus fleet, prioritising those requiring retrofitting and exploring funding opportunites to carry out retrofitting. If a viable scheme could be found then this could be included as a specific action in later versions of the AQAP. May be some socio-economic issues if retrofit costs are passed onto passengers - can be avoided by accessing grant funding							Trips by bus			Trips by bus	Trips by bus	LOW	LOW	Main costs associated with officer time to review current fleet, identify opportunities for retrofit and pursue grant funding to achieve it.