Stantec UK Limited

Appendix D East Lothian Council Parking Review: Musselburgh Business Case

Prepared for: East Lothian Council

Prepared by: Stantec 26 September 2025

Project/File: 332610801 East Lothian Council Parking Management Review

Revision Schedule

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
1.0	First Draft	JL	17/09/25	JS	18/09/25	JS	18/09/25
2.0	Final Draf	JL	25/09/25	JS	26/09/25	JS	26/09/25

Disclaimer

The conclusions in the Report titled East Lothian Council Parking Review Business Case are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from East Lothian Council (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:	Joshu La		
	Signature		
	Joshua Lee		
	Printed Name		
Reviewed by:	SW Simmonds		
	Signature		
	Joshua Simmonds		
	Printed Name		
Approved by:	SW Simmonds		
	Signature		
	Joshua Simmonds		
	Printed Name		

Table of Contents

1	Introduction	
1.1	Purpose of document	
1.2	Town Background	
1.3	Description of the Scheme	1
2	Strategic Case	3
2.1	Policy Context	3
2.1.1	National Policy Context	
2.1.2	Regional and Local Policy Context	
2.2	Case for Change	
2.2.1	Current Off-Street Parking Provision	
2.2.2	Current On-Street Parking Provision	
2.2.3	Current Problems	
2.2.4	Opportunities	
2.2.5	Case for Change Summary	
2.3	Project Objectives and Theory of Change	
2.3.1	Objectives	
2.3.2	Theory of Change – Logic Map	
2.4	Stakeholders and Consultation Summary	
2.4.1	Engagement Activities	
2.4.2	Feedback from Engagement Activities	
2.5	Constraints, Dependencies, and Risks	
2.6	Summary	
	·	
3	Economic Case	
3.1	Introduction	
3.2	Options	
3.2.1	Do Minimum	
3.2.2	Do Something	23
3.2.3	Option Proposed	23
3.3	Option Impact Appraisal	
3.3.1	Appraisal Methodology	23
3.3.2	Environment	
3.3.3	Climate Change	
3.3.4	Health, Safety and Wellbeing	
3.3.5	Economy	
3.4	Value for Money Assessment	30
4	Financial Case	33
4.1	Financial appraisal	
4.1.1	Introduction	
4.1.2	Capital Costs	
4.1.3	Operational Costs	
4.1.4	Funding	
4.1.5	Revenue	
4.1.6	Income position	
4.2	Risks and Uncertainties	
5	Commercial Case	30
5 .1	Service requirement and output	
5.2	Procurement Strategy and route	
5.3	Risk allocation	
5.4	Contract arrangements and any personnel implications	
J	Portage and any personner implications	+∪

East Lothian Council Parking Review - Musselburgh Business Case

6	Management Case	43
6.1	Programme/project management governance arrangements	
6.2	Change and contract management	44
6.3	Benefit realisation arrangements	45
6.4	Risk management arrangements	
6.5	Contingency plans	
6.6	Monitoring and Evaluation	
6.6.1	Schedule of M&E Activities	49
List of	Tables	
Table 2	-2: Regional and local policies related to parking management proposals in Musselburgh	. 4
Table 2	-3: List of Streets included in the on-street parking beat survey - March and April 2022	. 7
	-5: Overarching and Musselburgh specific objectives of the scheme	
	-1: 2025 - Marginal External Costs by Vehicle based on Other Urban category (pence per vehicle km,	
	ices, 1 d.p.),	
	-2: Summary of Appraisal Impacts	
	-1: Capital Cost Assumptions	
	-2: Operational Cost Assumptions	34
	-3: Forecast Capital and Annual Operating Costs for Parking Measures in Musselburgh, rounded to	
	thousand	
	-4: Key revenue assumptions	
	-5: Forecast Income from Parking Measures in Musselburgh, rounded to nearest thousand	
	-1: East Lothian Parking Review Board	
	-2: East Lothian Parking Review Project Team - Roles and Responsibilities	
Figure 2	Figures 2-1: Off-Street car parks in Musselburgh. Number of spaces available shown in brackets. Information fro	
	thian Council Parking Strategy 2018-2024	
	2-2: Number of legal parking spaces in Musselburgh Town Centre. Data from 2022 on-street parking be	
	2-3: Percentage of legal spaces occupied by parked vehicles on selected surveyed streets in Musselbur entre, by time of day.	
Figure 2	ondo, by unio or day	. 6 gh
	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets	6 gh 9
Figure 2	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9
	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street. 2-5: Percentage of stops on streets which are illegal during on-street parking survey, by street	6 gh 9 10
	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11
Figure 2	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street. 2-5: Percentage of stops on streets which are illegal during on-street parking survey, by street	6 gh 9 10 11
Figure 2 15, 202 Figure 2	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12
Figure 2 15, 202 Figure 2 2023 Figure 2	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12
Figure 2 15, 202 Figure 2 2023 Figure 2 OpenR	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street. 2-5: Percentage of stops on streets which are illegal during on-street parking survey, by street. 2-6: Percentage of vehicles parked in Musselburgh Town Centre by street and kerbside restriction 2-7: Occupancy of off-street car parks in Musselburgh town centre in entry-exit survey conducted March 2-8: Occupancy of off-street car parks in Musselburgh town centre in ANPR survey conducted May 25, 2-9: Area accessible within 15 minutes walking distance of Musselburgh Town Centre. Analysis using outeService API.	6 gh 9 10 11 12 13
Figure 2 15, 202 Figure 2 2023 Figure 2 OpenRo	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12 13
Figure 2 15, 202 Figure 2 2023 Figure 2 OpenRo Figure 2 API and	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12 13 15
Figure 2 15, 202 Figure 2 2023 Figure 2 OpenRi Figure 2 API and	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12 13 15 16 20
Figure 2 15, 202 Figure 2 2023 Figure 2 OpenR Figure 2 API and Figure 2	2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12 13 15 16 20 28
Figure : 15, 202 Figure : 2023 Figure : OpenRo Figure : API and Figure : Figure (2-4: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets Musselburgh Town Centre, by street	6 gh 9 10 11 12 13 15 16 20 28 46



1 Introduction

1.1 Purpose of document

This business case outlines the case for introducing parking charges across the East Lothian town of Musselburgh. For this, the document follows STAG guidance by assessing the scheme through the strategic, economic, commercial, financial, and management cases. By carrying out this assessment it will provide a robust analysis to inform the decision-making process as to whether to enforce the parking charges in Musselburgh.

1.2 Town Background

Musselburgh is a coastal town about eight kilometres east of Edinburgh City Centre with a population of around 21,000 people. It is the largest town in East Lothian. The town features a major local high street with a significant concentration of local convenience retail and large supermarkets. The town is served by both Musselburgh and Wallyford Railway Stations, and has good bus connections to Edinburgh and other parts of East Lothian. Musselburgh is also home to Musselburgh Racecourse.

Musselburgh is a designated Air Quality Management Area, where a 21% reduction in transport emissions is being pursued through an Air Quality Action Plan. Additionally, Musselburgh's population rose by 7.7% between 2016 and 2017 and is forecasted to rise with 4,981 houses planned between 2019 to 2025. This will contribute to an increase in car journeys into Musselburgh, leading to a higher demand for parking while the number of parking spaces will remain the same.

1.3 Description of the Scheme

The parking proposals being put forward in Musselburgh are shown in Appendix B of the Council report. A summary of the parking proposals for each street is outlined below.

The following on-street parking measures are proposed:

- On-street short-stay parking on North High Street (between Lochend Road North and South Street), South Street, Bridge Street and Ladywell Way. It is proposed that short-stay charges will be free for the first 45 minutes, £1 for up to 75 minutes, and £2 for up to 90 minutes.
- On-street short-stay parking on High Street. It is proposed that short-stay charges will be free for the first 30 minutes, £1 for up to 60 minutes, and £2 for 90 minutes.
- On-street medium-stay parking at a cost of £0.50 per 30 minutes with a max stay of 6 hours.
 The medium-stay parking area will cover several streets in both the east and west of the town, including parts of New Street, Promenade, Mountjoy Terrace, North High Street (between Ladywell Way and Eskside West), Millhill, and Linkfield Road.
- On-street long-stay parking zone at a cost of £0.50 per 30 minutes with a maximum charge of £5 per stay. The long-stay parking area will cover several streets in the west of the town, including parts of New Street, Market Street, and Eskside West.
- Introduction of two Residential Permit Parking zones. The eastern permit zone will cover most streets north of Inveresk Road and streets west of Loretto Senior School, up to the River Esk and the coastline. The western permit zone will cover most streets north of Olive Bank Road and streets east of Fisherrow Harbour, up to the River Esk and the coastline.

The following off-street measures are proposed:

East Lothian Council Parking Review – Musselburgh Business Case

- Off-street medium-stay parking at a cost of £0.50 per 30 minutes with a maximum stay of 6 hours at Kerr's Wynd, Shorthope Street, Ladywell, Newbigging and Musselburgh Sports Centre car parks. Sports centre users will be able to park free for up to 90 minutes.
- Off-street long-stay parking at a cost of £0.50 per 30 minutes with a maximum charge of £5 on Olive Bank Road, Fisherrow Harbour, and Gracefield car parks.

2 Strategic Case

2.1 Policy Context

The parking charge proposals in Musselburgh help to support the relevant policies at a national, regional, and local level. The following section provides a summary of the policies relevant to the proposed parking management measures and highlights how management supports these policies.

For further information on each policy and relevance to the proposed parking management, please refer to the Impact Assessment Report for Musselburgh.

2.1.1 National Policy Context

Table 2-1 provides a summary of the key national policies relevant to the introduction of parking management measures in Musselburgh.

Table 2-1: National policies related to parking management proposals in Musselburgh

Policy Title	Summary of Policy
National Transport Strategy 2	Outlines the vision for Scotland's Transport System up to 2040. It has four priorities, which are:
	 Reduce inequalities Take climate action Help deliver inclusive economic growth Improves our health and wellbeing
	The strategy also outlines a Sustainable Travel Hierarchy, with investment in walking and cycling being the highest priority and investment in supporting private cars being the lowest priority.
Climate Change Plan 2018–2032 - Update	The Climate Change (Scotland) Act 2009 sets out the legally binding target for Scotland to achieve net-zero carbon emissions by 2045. This plan sets out how the government intends to reduce greenhouse gas emissions to net-zero by 2045. Although the act was amended in November 2024 to remove annual climate targets, the Scotlish Government has retained its target of achieving net-zero emissions by 2045.
Consultation on the 20% Reduction in Car KMs: Route Map	As part of the Climate Change Plan, the Scottish Government set a target of reducing total kilometres travelled by cars in Scotland (Car Kilometres) by 20 percent by 2030.
	In April 2025, the Scottish Government indicated that the policy target of reducing car kilometres by 20 percent by 2030 was to be dropped and would be subject to a review. However, it is still expected a reduction in private car travel is needed to meet Scotland's net-zero target.
National Planning Framework 4	Adopted by the Scottish Government in 2023 and sets out the Scottish Government's planning policies and how these are expected to be applied.

There is an importance nationally on addressing climate change. Scottish Government policies such as National Transport Strategy 2 and the Climate Change Plan 2018 – 2032 emphases acting on climate by reducing the number of people driving and encouraging the use of sustainable transport methods.

Introducing parking management measures is likely to reduce the number people who choose to drive into Musselburgh town centre and reduce local traffic volumes. With parking charges and reduced traffic, it will become comparatively more attractive to walk, cycle, or take a bus to reach the High Street. Management

would also reduce the number of vehicles cruising around the town centre to find available parking. This would reduce carbon emissions from transport and contribute towards Scotland's 2045 net-zero emissions target. Increased amounts of walking and cycling will also improve the health and wellbeing of Musselburgh residents.

2.1.2 Regional and Local Policy Context

Table 2-2 provides a summary of the key regional and local policies relevant to the introduction of parking management measures in Musselburgh.

Table 2-1: Regional and local policies related to parking management proposals in Musselburgh

Policy Title	Summary of Policy	
East Lothian Local Transport Strategy	The East Lothian Local Transport Strategy has the vision of "well-connected communities with increased use of sustainable transport modes to access services and amenities"	
East Lothian Parking Strategy 2018 - 2024	As part of the Local Transport Strategy, the East Lothian Parking Strategy defines two objectives:	
	 To provide balanced and appropriate parking facilities that support the economic, environmental and accessibility requirements of towns in East Lothian To maximise the efficient use of parking provision 	
East Lothian Local Economy Strategy highlights the vision, strategorous Strategy 2024-2034 The East Lothian Local Economy Strategy highlights the vision, strategorous and objectives guiding East Lothian Council from 2024 to 2034, with the strategy vision being "an increasingly thriving, sustainable, and increasingly thriving, sustainable, and increasingly thriving."		
	During stakeholder and community engagement for the strategy. Town centre traffic congestion and parking were noted as a key issue.	
East Lothian Local Development Plan 2018	The East Lothian Local Development Plan 2018 sets out site-specific plan that contains proposals that show where development can take place as well as the policies that can be used to manage development.	
Musselburgh Town Centre Strategy 2019	The Musselburgh Town Centre Strategy proposes several transport improvements to address threats, weaknesses, and opportunities identified with the town centre. These are:	
	 A planned programme of transport improvements to improve traffic flow and maintain air quality The reorganisation of town centre car park stay length 	

At a regional policy level, East Lothian have produced a Local Transport Strategy and a Parking Strategy with a focus on sustainable transport modes and the provision of appropriate and efficient parking supply. Parking management is highly consistent with this. Management of parking supply will make walking and cycling more attractive and reducing the attractiveness of driving into Musselburgh, supporting the Local Transport Strategy vision of increasing sustainable transport modes.

Locally, the Musselburgh Town Centre Strategy 2019 notes the reorganisation of on-street parking should be considered to address parking availability problems in the town. This highlights how the scheme outlined in this Business Case can support the wider Town Centre Strategy.

2.2 Case for Change

2.2.1 Current Off-Street Parking Provision

There are nine council-owned free car parks in Musselburgh. According to the East Lothian Parking Strategy, there are also three other identified major car parks in Musselburgh which are open to facility users and customers. There is one identified privately operated pay-and-display car park immediately south of the High Street. These are shown in Figure 2-1. The council-owned car parks provide a combined total of 392 off-street parking spaces. Most car parks are located within a five-to-ten-minute walk of either High Street section.

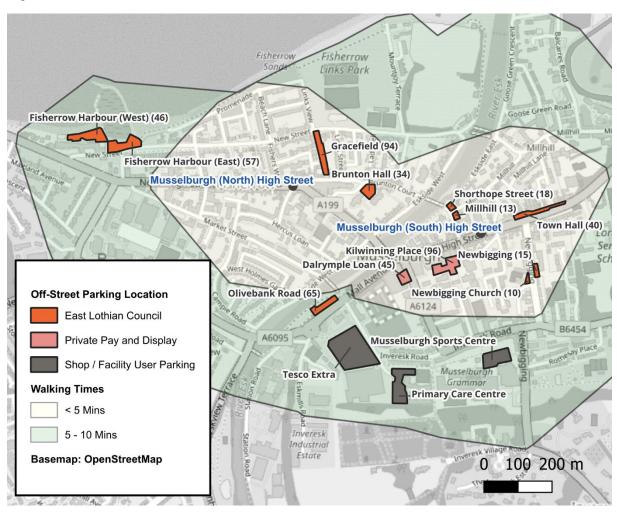


Figure 2-1: Off-Street car parks in Musselburgh. Number of spaces available shown in brackets.

Information from East Lothian Council Parking Strategy 2018-2024.

2.2.2 Current On-Street Parking Provision

Figure 2-2 shows the number of legal waiting and parking spaces of the selected streets in Musselburgh Town Centre, organised by the restriction type. New Street has the largest total number of parking spaces, but this is because New Street was one of the longest single streets recorded in the survey. Notably, there about 101 parking bays on the High Street, while North High Street had 100 parking spaces in either marked bays or unrestricted kerbsides. This represents a significant capacity for on-street parking on these two streets.

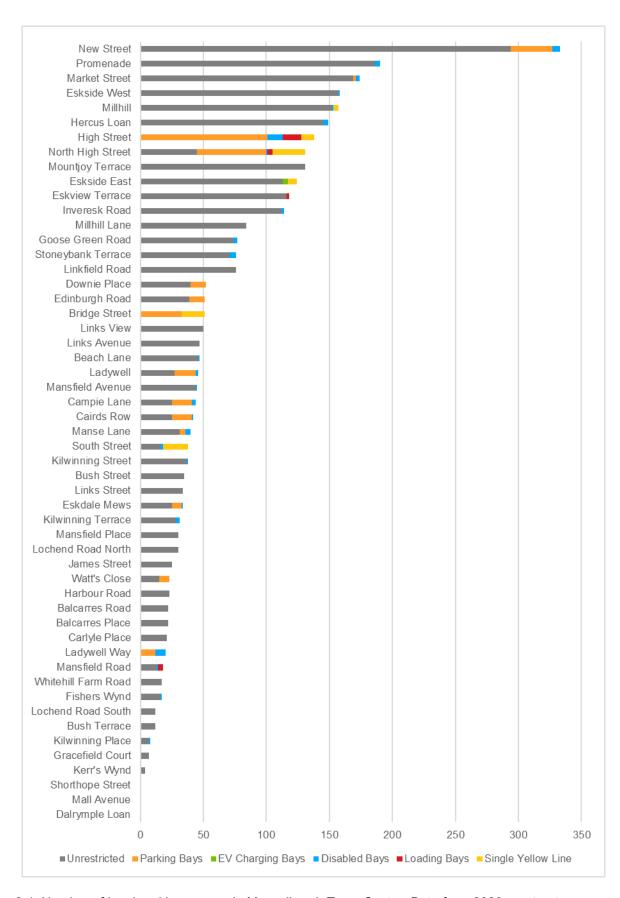


Figure 2-1: Number of legal parking spaces in Musselburgh Town Centre. Data from 2022 on-street parking beat survey.

2.2.3 Current Problems

2.2.3.1 Demand for Parking is Close to Exceeding Supply in Many Areas

To understand the utilisation of on-street parking in Musselburgh, an on-street parking beat survey was conducted. The surveys were commissioned by East Lothian Council and conducted on six days between March 24 and April 6, 2022. Surveys were conducted on Tuesdays and Thursdays, thereby better representing typical parking demand. The survey covered the streets shown in Figure 4 and are listed below in Table 2-3. Due to the number of streets surveyed, eight town centre streets have been specifically selected for a more focused analysis and review. These are marked with a star and bold text.

Table 2-2: List of Streets included in the on-street parking beat survey - March and April 2022.

 Balcarres Place 	 Hercus Loan 	 Mansfield Road
 Balcarres Road 	 High Street* 	 Market Street
Beach Lane	 Inveresk Road 	 Millhill
 Bridge Street* 	 James Street 	 Millhill Lane
Bush Street	 Kerr's Wynd 	 Mountjoy Terrace
 Bush Terrace 	 Kilwinning Place 	New Street
 Cairds Row 	 Kilwinning Street* 	 North High Street*
 Campie Lane 	 Kilwinning Terrace 	 Promenade
Carlyle Place	 Ladywell 	 Shorthope Street
Dalrymple Loan	 Ladywell Way* 	 South Street*
Downie Place	 Linkfield Road 	 Stoneybank Terrace
 Edinburgh Road 	 Links Avenue 	 Watt's Close
 Eskdale Mews 	 Links Street 	 Whitehill Farm Road
 Eskside East 	 Links View 	
 Eskside West 	 Lochend Road 	
 Eskview Terrace 	North*	
 Fishers Wynd 	 Lochend Road 	
 Goose Green Road 	South*	
 Gracefield Court 	 Mall Avenue 	
 Harbour Road 	 Manse Lane 	
	 Mansfield Avenue 	
	 Mansfield Place 	

For the selected town centre streets outlined in Table 3, Figure 2-3 shows the number of vehicles parking on surveyed streets in every 15-minute period between 07:00am and 19:00pm, as a percentage of legal parking spaces available. As above, this analysis excludes parking in dedicated disabled parking spaces, which are analysed separately. Parking in taxi ranks is also excluded.

Figure 2-4 shows the average occupancy rate on the surveyed streets between 07:00am and 19:00pm. This percentage reflects the number of vehicles parking on surveyed streets in every 15-minute period between, as a percentage of legal parking spaces available. To reflect that some spaces are dedicated to certain vehicle users and vehicle types, this analysis excludes parking in dedicated disabled parking spaces and taxi ranks.

The parking survey showed heightened pressure for on-street parking spaces on Bridge Street, High Street, Ladywell Way and North High Street. Average parking occupancies were not particularly high at 54 percent, 66 percent, and 69 percent respectively. However, the maximum recorded occupancy rate was above 90 percent for all these streets, with the High Street recording a 100 percent occupancy rate. On most of these streets, the peaks in parking demand only lasted for a couple of hours and they mostly occurred in the late morning and early afternoon. These streets are in the centre of Musselburgh and the focal point of activity in the town.

The streets with the highest overall average occupancies were Mansfield Road, Lochend Road North and Lochend Road South, with average occupancy rates being 114 percent, 93 percent, and 90 percent respectively. Parking occupancy on these streets stayed between 80 and 100 percent for most of the day. Lochend Road North and Lochend Road South are further from the High Street and are much more residential in nature. Therefore, these occupancy rates are likely reflecting the pressure on residents parking. Note that Mansfield Road is close to the High Street but is mostly residential in nature.

Occupancy rates on South Street stayed around 90 percent for most of the day between 09:00 am and 12:00pm. The street itself mostly comprises of residential properties but is close to activity centres on North High Street and Bridge Street. This could reflect competing pressures for both residential and town centre visitor parking in this area.

All the other streets surveyed had much lower occupancy rates. On these streets, parking demand was well within the supply of spaces and does not exceed 80 percent occupancy. Additionally, the demand was consistent throughout the day with fewer peaks and troughs. This reflects their distance from the main shopping areas and their residential land-uses. The exception to this is Harbour Road. Parking occupancy rates here were normally less than 20 percent, but there were three sudden spikes in parking demand lasting less than one hour each. The peaks were around 10:00am, 13:30pm and 16:30pm. During these spikes, parking occupancy rose to around 80 percent of supply. The reason for this pattern is unclear.





Figure 2-2: Percentage of legal spaces occupied by parked vehicles on selected surveyed streets in Musselburgh Town Centre, by time of day.



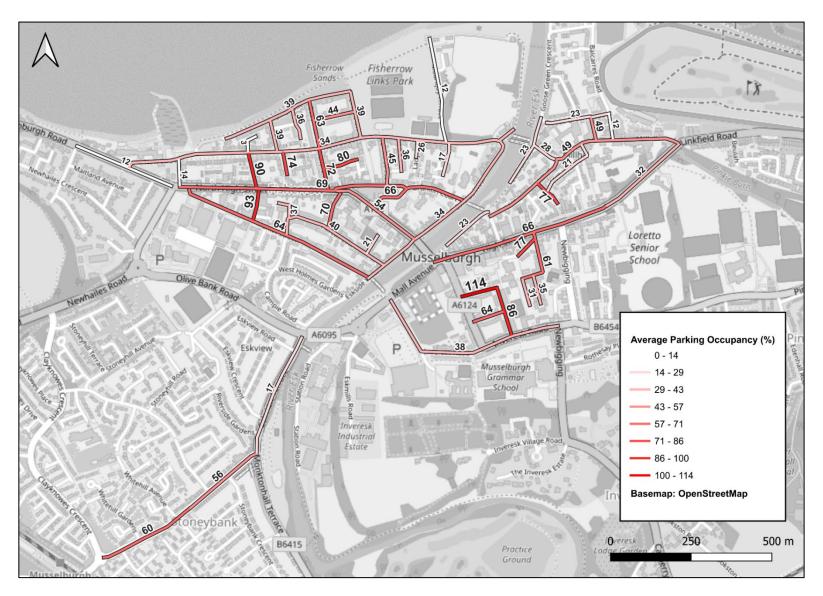


Figure 2-3: Average Occupancy Rate - Percentage of legal spaces occupied by parked vehicles on streets around Musselburgh Town Centre, by street.

2.2.3.2 Illegal Parking and Waiting Poses Risk to Safety and Traffic Flow

The percentage of all recorded vehicle stopped at non-permissible spaces is shown in Figure 2-5, with illegal stops for the selected town centre streets being broken down in Figure 2-6. The bars in red shades indicate the percentage of parking occurring in locations where not permitted. Grey shades indicate parking in permitted places, while green and blue shaded indicate the portion of vehicles stopping in bays dedicated for specific users or vehicles, such as bus stops or disabled bays.

Non-permissible spaces are defined here as dropped kerbs and driveways, including those with or without white park markers, double yellow lines, keep clear markings and zig-zags at pedestrian crossings. Notably, as the data comes from a beat survey, illegally stopped vehicles that both arrive and leave between the 15-minute survey beats would not have been recorded. In other words, illegal stopped vehicles that stopped for less than 15 minutes may not necessarily have been counted in the survey.

There is some illegal parking occurring on many of the surveyed streets. Overall, Illegal parking rates surveyed were above 10 percent on North High Street, Lochend Road South, Lochend Road North, High Street, Gracefield Court, Darlymple Loan, Mansfield Road, Mansfield Avenue, and Kilwinning Place.

The highest percentage of illegal parking was recorded on Darlymple Loan, where all vehicles were stopped on double yellow lines. Further examination of the survey data shows that only two vans were recorded parking here. The rate of illegal stops on the High Street was relatively low at six percent. However, there were many stops recorded on the High Street, and the absolute number of illegal stops on the High Street was quite high. A total of 71 illegal stops were recorded on the High Street, including 58 on double-yellow lines and 13 on zig-zag markings.

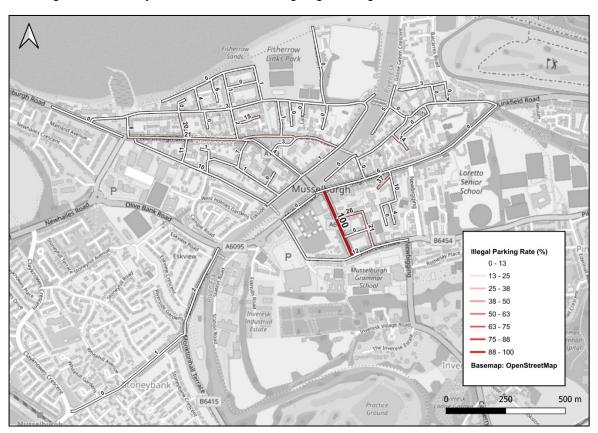


Figure 2-4: Percentage of stops on streets which are illegal during on-street parking survey, by street.

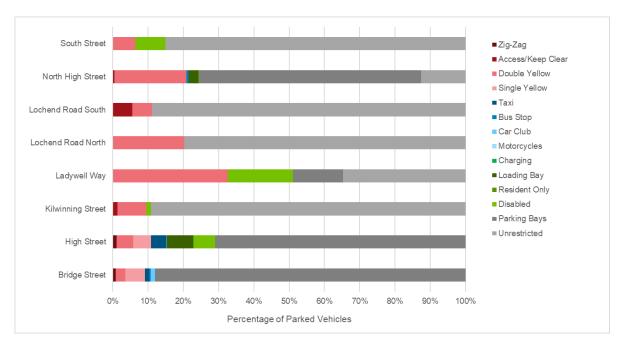


Figure 2-5: Percentage of vehicles parked in Musselburgh Town Centre by street and kerbside restriction

2.2.3.3 High Demand for Parking at Some Off-Street Car Parks

A series of entry and exit surveys and ANPR surveys were undertaken at off-street parking locations around Musselburgh. The entry and exit surveys were commissioned by East Lothian Council and conducted on March 15, 2022. The ANPR surveys were conducted on May 25, 2023. The surveys were conducted on weekdays (Tuesday and Thursday), which would better represent a typical parking demand.

Figure 2-7 shows the percentage occupancy of public car parks in Musselburgh Town Centre recorded in the 2022 entry-exit survey. This collection of surveys included car parks operated by ELC as well as car parks at Dalrymple Loan and Kilwinning Place, which are private pay-and-display car parks. Review of the survey outputs showed likely data reliability issues with entry-exit surveys at Kerr's Wynd, Gracefield, Brunton Hall, Shorthope Street, and Fisherrow Harbour car parks, and these have been excluded from the analysis of the 2022 survey data. These surveys experienced design and/or collection issues that meant that the survey did not fully count all vehicles entering and leaving the car parks, as they may have entered/exited from a different access point not covered by the survey. In the case of Brunton Hall, the data collection inadvertently counted vehicles passing through the car park to reach another location outside of the public car park. Therefore, the data collected at these locations is not considered reliable.

Following the data collection issues experienced in 2022, another round of surveys for Gracefield, Fisherrow Harbour, and Olive Bank Road car parks was conducted in 2023 using an ANPR survey. Figure 2-8 shows the percentage occupancy of Musselburgh Town Centre car parks covered in the 2023 ANPR survey. Note that Olive Bank Road car park was covered again in the 2023 ANPR survey. Surveys for Kerr's Wynd, Brunton Hall, and Shorthope Street were not repeated in 2023.

Three of the surveyed car parks exceeded full capacity at some point on the survey dates. These were Olive Bank Road, Newbigging, and Kilwinning Place. Of these, Olive Bank Road and Newbigging stayed above capacity for much of the surveyed period. This indicates demand for spaces is exceeding supply for these car parks. The occupancy rate exceeding the actual capacity could be caused by the entry-exit survey counting method being based on counting vehicle movements in and

out of the car park. This means that vehicles may have entered the car parks but did not occupy a bay. Possible explanations for this are that some vehicles are entering the car park area and waiting for a bay to become available and that in some car parks, some people are parking in spaces that are not demarcated for parking.

Notably, demand was still high for parking at Kilwinning Place despite being a private pay-and-display car park. This indicates that despite there being alternative free parking locations nearby, there is enough demand for parking in this area that drivers are still willing to pay to park close to the High Street.

Newbigging Car Park and Olive Bank Road Car Park had an occupancy rate around 120 percent and 110 percent respectively for most of the day. Occupancy rates for these car parks begins to fall around 16:00pm, but many remained above or close to 100 percent capacity. Additionally, parking occupancy at Kilwinning Place stayed close to 100 percent capacity between around 10:00am to 15:00pm, while Millhill's occupancy rate stayed above 80 percent from noon onwards.

The number of vehicles entering the car park did not exceed capacity at Fisherrow Harbour, Gracefield, Dalrymple Loan, and Millhill car parks. Particularly, Fisherrow Harbour and Dalrymple Loan never exceeded 60 percent capacity during the day. This means these car parks had much lower demand relative to the number of parking spaces there, and there was spare capacity. This is influenced by their distance from the core activity areas of Musselburgh. Fisherrow Harbour is the furthest car park from the High Street.

Demand for parking in the private pay-and-display car park at Dalrymple Loan was low, not exceeding 40 percent during the daytime. However, further investigation also shows this car park is mainly promoted by signage as customer parking for a nearby restaurant, potentially deterring other parking users and explaining why daytime demand at this car park is low but increases towards the evening.

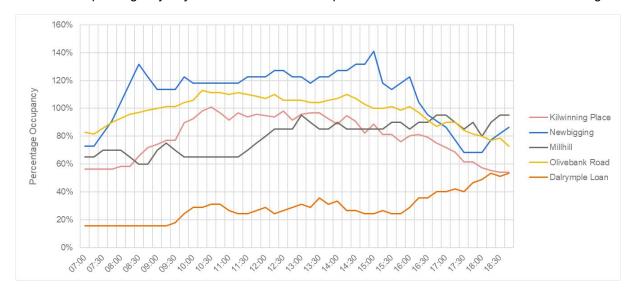


Figure 2-7: Occupancy of off-street car parks in Musselburgh town centre in entry-exit survey conducted March 15, 2022.

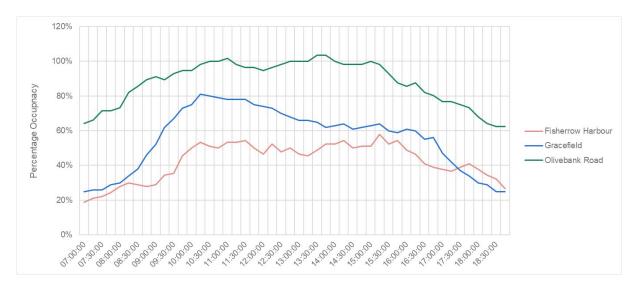


Figure 2-8: Occupancy of off-street car parks in Musselburgh town centre in ANPR survey conducted May 25, 2023.

2.2.3.4 Poor Air Quality on Musselburgh High Street

Musselburgh High Street has been declared as an Air Quality Management Area by East Lothian Council since 2013. This order is related to nitrogen dioxide levels on the High Street exceeding annual objectives. The area covers the street between the junction of Bridge Street and Mall Avenue, which is also the core activity area with the most shop frontages and footfall activity. Nitrogen dioxide is produced from the combustion of fossil fuels, with road transport being a significant source of these emissions.

Monitoring on Musselburgh High Street, as reported in the 2024 Air Quality Progress Report, notes that nitrogen dioxide levels have not exceeded annual objectives since 2016. Nevertheless, concentrations of the pollutant on the High Street are still significantly higher than in other parts of Musselburgh, showing that air quality here is still significantly worse than in other areas.

2.2.3.5 Higher Levels of Multiple Deprivation

The areas surrounding the main High Street, south of the River Esk, has elevated multiple deprivation levels. In particular, the area immediately south of the High Street is among the top 22 percent most deprived areas in Scotland. Multiple deprivation around North High Street is also relatively high, although not as high as the levels seen in the southern High Street. The most deprived area in the town is in the north of the town around Fisherrow Links Park and the Racecourse. This area is among the top 15 percent most deprived areas in Scotland.

2.2.3.6 Declining High Street Footfall

Footfall on Musselburgh High Street experienced significant decline between 2016 and 2022. Footfall fell by around 30% in this seven-year period. Footfall on the Musselburgh High Street fell by 37 percent in 2020 during the COVID-19 pandemic. However, the post-COVID recovery in high street footfall in Musselburgh has been weak, with the number of pedestrians recorded still being much lower than before the pandemic. It is worth noting that declining high street footfall and increased online shopping as a share of all retail spending is a general trend being experienced across the UK over the past two decades and is not unique to Musselburgh.

2.2.4 Opportunities

2.2.4.1 Better Utilise Spare Parking Capacity Around the Town Centre

Figure 2-7 and Figure 2-8, discussed above, showed that some car parks had much lower demand relative to their supply, with significant spare capacity during the day. This included Fisherrow Harbour and Dalrymple Loan car parks, which never exceeded 60 percent occupancy.

This means there is some spare parking capacity around Musselburgh Town Centre. Parking management and charges provides the opportunity to use the additional spare capacity to direct certain users to park in areas with more spaces and ease pressure for on-street parking in the town centre itself.

2.2.4.2 Encourage People to Walk, Cycle, or Use Public Transport to Reach the Town Centre

Figure 2-9 shows the area of Musselburgh that can be reached from the Town Centre areas within a 15-minute walk. This show many residential areas of the town can be reached with at least a 15-minute walk from the High Street. Approximately 10,700 of Musselburgh's 21,000 residents live within a 15-minute walk of either section of the High Street.

Figure 2-10 shows the area of Musselburgh accessible within 15 minutes cycling time of the centre of Musselburgh. Importantly the whole town can be reached from the High Street within 10-minutes of cycling. Additionally, both Wallyford Station and Musselburgh Station can be reached with 10-minutes cycling time, providing wider connections by rail.

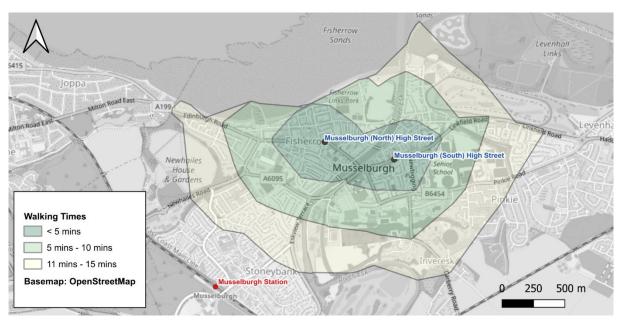


Figure 2-6: Area accessible within 15 minutes walking distance of Musselburgh Town Centre. Analysis using OpenRouteService API.

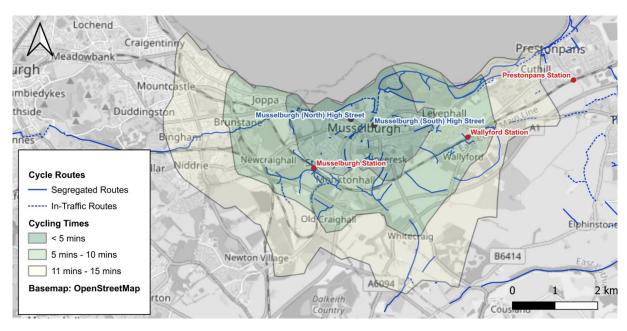


Figure 2-7: Area accessible within 15 minutes cycling from Musselburgh High Street, from OpenRouteService API and OpenStreetMap.

In terms of public transport, there are many bus services in Musselburgh with relatively high frequency. Musselburgh is within Lothian Buses' City Zone for Edinburgh, meaning it is effectively integrated into the city's wider bus network. There is a combined 16 buses per hour during weekday interpeak period between Musselburgh and Edinburgh. All bus routes make stops en-route to and from the High Street within Musselburgh, thereby providing frequent local connectivity between the residential areas of Musselburgh and the town's High Street for all corridors into the town centre.

Overall, this scheme provides an opportunity to encourage sustainable travel to Musselburgh Town Centre. Walking is a good alternative for accessing the Town Centre for many of the town's residents. There are also many frequent bus services that make using public transport a sustainable alternative to driving to Musselburgh.

2.2.5 Case for Change Summary

Problem / Opportunity	Description		
Problem			
There is some pressure on parking space in the town centre streets	 Lochend Road North and Lochend Road South had between 80 and 100 percent of parking spaces occupied for most of the day. Occupancy rates on these streets are likely reflecting the pressure on residents parking. There is heightened pressure for on-street parking spaces in the Town Centre, specifically on Bridge Street, High Street, Ladywell Way and North High Street. 		
Illegal parking was observed on several streets in the town centre, posting a potential safety risk.	 Around 20 percent of parked vehicles on Lochend Road North were surveyed as stopping on Double Yellow Lines. Illegal parking rates surveyed were above 10 percent on North High Street, Lochend Road South, Lochend Road North, High Street and Gracefield Court. 		
Demand for certain off-street car parks in Musselburgh is exceeding the number of spaces available.	Three of the surveyed car parks exceeded full capacity at some point on the survey dates. These were Olive Bank Road, Newbigging, and Kilwinning Place.		

	Olive Bank Road and Newbigging stayed above capacity for many of the survey hours.
Musselburgh High Street is a declared Air Quality Management Area, and nitrogen dioxide levels are much higher here than in other parts of the town.	 Musselburgh High Street has been declared as an Air Quality Management Area by East Lothian Council since 2013. This order is related to nitrogen dioxide levels on the High Street exceeding annual objectives. Although within annual objectives, the concentrations of the pollutant on the High Street are still significantly higher than in other parts of Musselburgh
Multiple deprivation levels in the areas surrounding the High Streets, and particularly the main southern High Street are relatively high compared to other areas in Scotland overall.	 The areas surrounding the main High Street has elevated multiple deprivation levels. In particular, the area immediately south of the High Street is among the top 22 percent most deprived areas in Scotland.
Footfall in Musselburgh town centre has fallen 30 percent between 2016 and 2022.	 Footfall fell by around 30% between 2016 and 2022. The post-COVID recovery in high street footfall in Musselburgh has been weak, with the number of pedestrians recorded still being much lower than before the pandemic.
Opportunity	
There is an opportunity to better use spare parking capacity at off-street car parks located within walking distance of the town centre.	Fisherrow Harbour and Dalrymple Loan car parks never exceeded 60 percent occupancy.
Many of Musselburgh's residents can reach the town centre by either walking or cycling, presenting an opportunity to support active travel within the town.	 Many residential areas of the town can be reached with at least a 15-minute walk from the High Street. The whole town can be reached from the High Street within 10-minutes of cycling. Both Wallyford Station and Musselburgh Station can be reached with 10-minutes cycling time, providing wider connections by rail.
There is an opportunity to support and encourage residents to travel within the town by public transport.	 There is a combined 16 buses per hour during weekday interpeak period between Musselburgh and Edinburgh. All bus routes make stops en-route to and from the High Street within Musselburgh, thereby providing frequent local connectivity between the residential areas of Musselburgh and the town's High Street for all corridors into the town centre.

2.3 Project Objectives and Theory of Change

2.3.1 Objectives

This section sets out the specific objectives and outcomes for the project. These define what the project aims to achieve. Several objectives have been set and achieving them will help to achieve the strategic outcomes of the scheme. The East Lothian Council objectives and specific objectives for Musselburgh are outlined in Table 2-4.

Table 2-3: Overarching and Musselburgh specific objectives of the scheme

Overarching Programme Objectives	Objectives	Context Behind this Objective
Environmental Improvements	Encourage a modal shift away from the private car and towards more sustainable modes of travel	There is a strategic need particularly at the national and regional level to discourage use of the private car.

	Improve air quality and reduce pollution	Musselburgh High Street is in an air quality management zone, with elevated nitrogen dioxide levels. There is also no 'safe' level of air pollution, so any improvement to air quality is positive.
Economic Growth	Increase footfall in the town centre	There has been a significant reduction in footfall in Musselburgh. Improving parking availability will make it easier for people to visit the High Street.
Place based improvements	Revenue generated from parking charges to be reinvested in public spaces/services	The significant amount of revenue that the scheme is estimated to generate will enable to council to reinvest in the region and improving public services. This while also improving local air quality by discouraging the use of the private car.
Improve parking conditions	Increase parking availability	By making parking more expensive it will discourage parking those who do not need to park on High Street, directing them to dedicated medium or long-stay car parks or encouraging them to walk, cycle, take the bus. This will free up parking spaces for those who need to park on the High Street close to their destination, including blue-badge holders.

2.3.2 Theory of Change – Logic Map

To understand the impacts of the proposed parking management measures, logic mapping is required to summarise the need, the benefits sought and, crucially, the strategic responses and changes required to address the need while achieving the benefits. To achieve this, we have employed a five-stage logic-chain / theory of change approach.

This approach considers the existing transport problems and opportunities to eventual impacts to contextualise the benefits and potential impacts that the measures will generate. Logic chains also provide a useful tool to monitor and evaluate impacts of policies after implementing them. This approach is recommended by both the Scottish Transport Appraisal Guidance (STAG) and HM Treasury Magenta Book.

The main components of the logic chain are:

- Context the strategic need: Transport problems and opportunities that the measures will
 address and the rationale for proceeding with the parking interventions. Through this we will
 demonstrate the justification for the proposed parking measures.
- Input: The processes required to implement the parking management measures.
- Outputs: The parking management measures.
- Outcomes: Changes in travel behaviour which result from the measures.
- Impacts: Societal changes which occur because of the changes in travel behaviour and connectivity stemming from the intervention, e.g., improved labour market efficiency.

A high-level Theory of Change / logic map for the parking interventions is shown in Figure 2-11. The expected outcomes and impacts outlined in the Theory of Change have been used the direction of the impact assessment for the study.

Strategic Need (Summary)

- There is some degree of pressure on parking space in the town centre streets, with occupancy rates being above 90 percent at peak times.
- A degree of illegal parking was observed on several streets in the town centre, posting a potential safety risk.
- Demand for certain off-street car parks in Musselburgh was high and the demand for parking is
 exceeding the number of spaces available in some car parks closest to the town centre.
- Musselburgh High Street is a declared Air Quality Management Area, and nitrogen dioxide levels are much higher here than in other parts of the town.
- Multiple deprivation levels in the areas surrounding the High Streets, and particularly the main southern High Street are relatively high compared to other areas in Scotland overall.
- Footfall in Musselburgh town centre has fallen 30 percent between 2016 and 2022. This is a challenge to the vitality and viability of the town centre.
- There is an opportunity to better use spare parking capacity at off-street car parks located within walking distance of the town centre.
- Many of Musselburgh's residents can reach the town centre by either walking or cycling, presenting an opportunity to support active travel within the town.
- Musselburgh is well connected by several bus services within the town and has good bus connections to Edinburgh and East Lothian. This is an opportunity to support and encourage residents to travel within the town by public transport.



Inputs

- East Lothian Council Parking Review and Economic Impact Study
- East Lothian Council Economic Development Strategy
- East Lothian Council Local Transport Strategy 2018-2024
- East Lothian Council Local Development Plan



Outputs

Off-Street Parking

- Off-street medium-stay parking at a cost of £0.50 per 30 minutes with a max stay of 6 hours at Kerr's Wynd, Shorthope Street, Ladywell, Newbigging and Musselburgh Sports Centre car parks. Sports centre users will be able to park free for up to 90 minutes.
- Off-street long-stay parking at a cost of £0.50 per 30 minutes with a max charge of £5 per stay on Olive Bank Road, Fisherrow Harbour, and Gracefield car parks.

On-Street Parking

- On-street short-stay parking on North High Street (between Lochend Road North and South Street), South Street, Bridge Street and Ladywell Way. It is proposed short-stay charges will be free for the first 45 minutes, £1 for 75 minutes, and £2 for 90 minutes.
- On-street short-stay parking on High Street. It is proposed that short-stay charges will be free for the first 30 minutes, £1 for 60 minutes, and £2 for 90 minutes.
- On-street medium-stay parking at a cost of £0.50 per 30 minutes hour with a max stay of 6 hours. The
 medium-stay parking area will cover several streets in both east and west of the town, including parts of
 New Street, Promenade, Mountjoy Terrace, North High Street (between Ladywell Way and Eskside West),
 Millhill, and Linkfield Road.
- On-street long-stay parking zone at a cost of £0.50 per 30 minutes with a max charge of £5 per stay. The
 long-stay parking area will cover several streets in the west of the town, including parts of New Street,
 Market Street, and Eskside West.
- Introduction of two Residential Permit Parking zones. The eastern permit zone will cover most streets
 north of Inveresk Road and streets west of Loretto Senior School, up to the River Esk and the coastline.
 The western permit zone will cover most streets north of Olive Bank Road and streets east of Fisherrow
 Harbour, up to the River Esk and the coastline.



Outcomes

- Increase in the use of walking, cycling, or public transport to access the town centre.
- Redistribution of parking demand across the town centre to better differentiate between parking for different stay durations and user groups.

- Improved provision and availability of short-term parking on the High Street for all users, including for disabled blue-badge holders and for loading or unloading goods.
- · Reduction in illegal parking through increased enforcement.
- Increase in parking tariff revenues.



Impacts

- Improved turnover and availability of spaces improves offering and makes Musselburgh a more convenient place to visit and shop, leading to
 - Reduced traffic congestion in the town centre, improving local air quality.
 - Improved vitality and viability in the town centre.
 - Increased consumer spending in the town.
- Reduction in illegal parking through increased enforcement, leading to:
 - Reduced safety risks posed be illegally parked vehicles
 - Reduced risk of congestion caused by illegally parked vehicles impeding traffic flow.
- Increased modal shift from car to walking, cycling or public transport, leading to:
 - Reduced traffic congestion in the town centre, improving local air quality.
 - Improved physical and mental wellbeing for residents, improving workforce productivity and reducing absenteeism.

Figure 2-8: Theory of Change

2.4 Stakeholders and Consultation Summary

Informing the proposals for Musselburgh, the Council commissioned Stantec to design and deliver a programme of public engagement. The purpose of this engagement was to firstly understand the views, experiences and priorities of those who live, work, and travel in and around Musselburgh, to then inform the development of practical, fair, and sustainable parking management arrangements in the town. Full details of the engagement activities and responses are available in the associated Public Engagement Report.

2.4.1 Engagement Activities

The following engagement activities were conducted:

- An initial meeting was held with a community representative on 13th of March 2025. The
 outcomes from this meeting helped shape the initial draft proposals, which were then subject
 to wider public engagement.
- An online questionnaire which was available for public responses from 9th June and 28th July 2025. The questionnaire was hosted on an ArcGIS StoryMap and was accessible via the East Lothian Council website. A total of 971 questionnaire responses were received.
- An in-person drop-in event was held on Thursday, 19th June at St Michael's Parish Church. The event allowed members of the public to view the consultation materials, ask questions, and complete a paper questionnaire if desired.

2.4.2 Feedback from Engagement Activities

There were consistent themes raised across the three engagement streams. Although several parking issues were experienced by many respondents, there was a high proportion of respondents who felt the scheme was unnecessary and proposed restrictions were not correctly targeted.

Questionnaire respondents experienced numerous issues when visiting Musselburgh. 37% of respondents reported that a lack of parking spaces was an issue, while 28% reported experiencing inconsiderate parking. Lack of parking enforcement was an issue experienced by 16% of respondents, while 11% reported experiencing issues caused by people parking for too long. 23% of respondents

reported difficulties walking in Musselburgh because of pavement parking of vehicles. Several businesses also expressed that they could not conveniently park delivery vehicles at their premises.

Although many respondents experienced issues with parking, many respondents opposed the proposed parking measures. 33% of respondents said they do not believe the proposals are correctly targeted, compared to 26% felt the proposals do target the right areas. The mixture in responses suggests that there is a degree of uncertainty among respondents whether the proposals are appropriate for Musselburgh. Additionally, around 22% of all respondents were unsure about whether the proposals focused on the appropriate areas, indicating a potential gap in awareness or knowledge on the proposal areas.

There was a significant degree of objection to the proposals. There was a view held by many respondents that the proposals were unnecessary, with some expressing concern that the only purpose of the scheme was to generate revenue for the council. Many respondents were concerned about the negative impact that these parking proposals would have on the High Street and the local businesses. The potential adverse impact that parking charges could have on these businesses was felt to be compounded by the availability of free parking at out-of-town retail parks and supermarkets such as Fort Kinnaird and Tesco.

Many respondents stated they should not need to pay to park while others cited the cost-of-living crisis and the inability to be able to afford to park their car for extended periods of time. Other concerns raised included access for people working in Musselburgh, equity in access for disabled persons, the desire for residents to have the 'right' to park on the highway outside their home, potential displacement of parking to other areas, and lack of parking enforcement.

There was also widespread opposition to resident parking permits, particularly residents having to pay for these permits. Of those who are residents of Musselburgh, 53% of questionnaire respondents indicated that the existing permit areas should not be amended, 14% felt that it should be amended, while 23% were unsure.

2.5 Constraints, Dependencies, and Risks

The introduction of parking charges will be subject to constraints, dependencies, and strategic risks, which need to be considered for the project. This includes factors such as:

- Public response The introduction of parking charges could cause negative effects on local
 businesses as their customers may choose to shop in alternative locations that does not have
 parking charges. Therefore, this may negatively impact the revenues of these businesses.
 However, the economic case presented in Section 3 shows the overall monetisable and nonmonetisable benefits expected from this scheme. Overall, these benefits of the scheme are
 forecast outweigh the negative impacts.
- Economic factors The charges need to be affordable for users whilst also generating
 sufficient revenue for the council to make the scheme financially viable. Those on low incomes
 that need to drive and park in the town centres will be impacted the most, resulting in
 increased levels of inequality. However, this is balanced by the expected reduction in vehicles
 traffic due to the parking charges. Reduce traffic will improve access to services for those
 travelling by other modes, such as public transport, walking, or cycling. This will help those
 who are on lower incomes.
- **Enforcement** There is a possibility that the costs of enforcement and implementing the parking measures will outweigh the revenue generated. Also, to ensure enforcement of charges there must be trained personnel available to maintain the system in place. However,

as shown in the Financial Case, the revenue generated from the parking charges will outweigh the costs of the scheme. The calculation of costs have also considered the cost of employing sufficient parking officers to enforce the charges.

2.6 Summary

Parking charges being implemented by East Lothian Council in Musselburgh is an opportunity to better manage parking provision and tackle some of the town's key parking challenges. Management would help to balancing parking demand across the town to areas with more parking supply. The scheme would direct drivers who want to park for longer periods to other nearby streets or car parks with more capacity, while improving availability for those needing to park close to their destination on the High Street, such as blue-badge holders. It will also encourage people to walk, cycle, or take the bus

The scheme also fits in well with the strategic policies at the national, regional, and local level largely due to its environmental benefits of encouraging a modal shift away from the private car and towards sustainable modes.

However, feedback from public engagement exercises revealed that although many respondents experienced parking issues in Musselburgh, many respondents also opposed the introduction of parking measures. There is a degree of uncertainty among respondents about whether the proposed measures are appropriate, with 33% of respondents saying they do not believe the proposals are correctly targeted, compared to 26% saying they are correctly targeted and 22% being unsure. Objections to the proposals were based on the perceived scheme necessity, impact on local economy, equity of access, and cost-of-living pressures, among other reasons.

3 Economic Case

3.1 Introduction

The purpose of the Economic Case is to undertake analysis of the proposed parking charges and demonstrate that there is an opportunity for the scheme deliver 'Value for Money' (VfM).

3.2 Options

3.2.1 Do Minimum

The Do-Minimum scenario where parking charges are not implemented across Musselburgh would result in the continuation of existing problems. This includes parking demand in the town centre being near capacity, occurrence of illegal parking, and poor air quality. This would contribute towards continuing negative environmental impacts, lack of kerbside parking, certain streets suffering from parking on the footway, and other issues that are caused by vehicle traffic.

3.2.2 Do Something

The Do-Something scenario where parking charges are implemented across the town will aim to tackle these issues. Additionally, the Do-Something scenario would take advantage of certain opportunities that a parking charge scheme can achieve. This includes better using the existing parking capacity across the town and organising the provision of parking in coherent way that improves availability for all users. There is also potential for parking charge revenue to be generated and reinvested within the town, which can contribute towards improved public services and infrastructure.

3.2.3 Option Proposed

The proposed do-something option for implementing parking charges are outlined in section 1.3. The extent and location of these parking proposals can be found in Appendix B in the Council Report.

3.3 Option Impact Appraisal

The following section outlines the appraised impacts of the scheme. The STAG Criteria used for appraisal in Scotland have been used as headings to organise the appraisal of scheme impacts. However, a full seven-point qualitative assessment has not been conducted. In addition to the STAG Criteria, the impact of potential revenue generated from the parking charges is also discussed.

3.3.1 Appraisal Methodology

This section provides analysis and appraisal of the expected potential outcomes of introducing the parking management scheme described above. The appraisal has been organised against the five Scottish Transport Appraisal Guidance (STAG) criteria as detailed in the STAG manager's Guide issued in January 2022. These criteria are:

- Environment
- Climate Change

- Health, Safety and Wellbeing
- Economy
- · Equality and Accessibility

One of the core principles of STAG is that the level of appraisal detail should be proportionate to the nature and scale of the impacts being studied. In this context, a qualitative appraisal of the parking management proposals is both appropriate and proportionate. In addition, the nature of potential impacts, along with a lack of high-quality and place-specific data sources, makes it inappropriate to attempt to quantify potential impacts. This is because the lack of high-quality data inputs means attempts to quantify impacts associated with the parking measures would be disproportionate and subject to high levels of uncertainty.

The following section therefore summarises the results of a qualitative appraisal of the five STAG criteria and the associated sub-criteria. To support the robustness of the appraisal, suitable research evidence and justification has been provided to underpin the impacts being identified. Impacts have been considered on the seven-point assessment scale specified by STAG, so that the scale of impacts can be understood in context.

The primary method for estimating traffic impacts in the absence of a multi-modal model is based on marginal external costs (MECs). The MEC method is based on the change in these external costs arising from an additional (or removed) vehicle (or vehicle km) on the network. We have extracted MECs value from TAG Table 5.4.2 of the DfT's TAG databook (May 2025 v2.01) to highlight the potential impact of reduced vehicle km's as result of the parking measures.

Table 3-1 shows the MECs in pence per vehicle km by vehicle type. We have assumed Musselburgh is classified as the Other Urban category based on the town's characteristics. It is clear from the table that the small reduction in cruising as result of the parking measures may lead to minor monetised impacts in terms of Congestion, Accident, Air Quality, Noise and Greenhouse impacts.

	Са	ırs	LG	Vs	Rigids	(Lorry)	Articulate	ed (Lorry)
Cost type	A roads	Other Rds	A roads	Other Rds	A roads	Other Rds	A roads	Other Rds
Congestion (average)	24.1	28.9	45.8	54.9	45.8	54.9	69.9	83.8
Accident	5.0	5.0	5.3	5.3	5.3	5.3	5.3	5.3
Local Air Quality	0.3	0.3	0.9	1.2	0.9	1.2	1.0	1.2
Noise	0.3	0.3	7.3	7.3	7.3	7.3	14.4	14.5
Greenhouse Gases	4.1	4.8	20.0	23.7	20.0	23.7	30.4	37.1

3.3.2 Environment

Among these s Environment Sub-criteria, only air quality and noise will be applicable to the proposed parking measures. The proposed measures would have no impact on the other sub-criteria and are

therefore excluded from the appraisal. In terms of air quality, it is expected that the introduction of parking charges and management measures will have a minor positive impact.

Academic research have shown that increased parking charges in urban centres increases the likelihood of car-users changing modes and using public transport, as well as displaces parking demand to other areas outside of the urban centre^{1,2}. This research also shows these measures reduce cruising for parking and reduces congestion. In the local context of Musselburgh, these changes would likely have the following local impacts on travel behaviour.

The travel behaviour changes will have a **minor positive impact** on air quality and noise. At a general level, reducing car mode share will broadly reduce vehicular-emissions and improve air quality in Musselburgh overall. At place-specific level, displacing vehicles outside the town centre will reduce the number of vehicles driving onto the High Street looking for parking. This would improve local air quality and noise in an area with higher shopping footfall and density of activities, thereby reducing pedestrian exposure to vehicle emissions. The impact on local air quality and noise will also be beneficial on residential streets where a resident permit scheme will be introduced, as external shopping traffic will no longer enter residential areas to park.

3.3.3 Climate Change

The impact on greenhouse gas emissions is the only relevant Climate Change sub-criteria to the introduction of parking charges. As noted above, there is academic evidence to suggest that the introduction of parking charges would support an increase in the share of sustainable transport model used to access the town centre. This is applicable to Musselburgh as the town has numerous internal bus connections, as well as external services to neighbouring towns.

Therefore, the modal shift from cars to other sustainable modes of transport would be expected to reduce greenhouse gas emissions associated with driving. Given the scale of the parking charges being introduced, and the provision of alternative cheaper parking outside of the town centre area, the degree of modal shift expected to occur would likely be modest. Therefore, it is expected that the proposed scheme only would have **minor positive impact** on Greenhouse Gas Emissions.

3.3.4 Health, Safety and Wellbeing

Among the Health, Safety and Wellbeing sub-criteria, the proposed parking measures are not expected to have any impact on security and visual amenity. The remaining sub-criteria are discussed below:

Accidents

It is expected that there would be a minor to moderate beneficial impact on accidents and safety resulted from the introduction of parking management and charges. This impact is expected because the existing strategic context has shown that there is a significant degree of illegal stopping across the

¹ 'The impact of parking pricing on mode choice' - Natasa Vidovic, Jelena Simicevic (2023)

² 'Parking demand and responsiveness to supply, pricing and location in the Sydof ney central business district' – David A. Hensher, Jenny King (2001)

town and High Street. This includes parking on double-yellow lines and zig-zag markings at pedestrian crossings.

These parking behaviours poses a potential safety risk. This is because illegal parking can impede the flow of vehicular traffic and reduce visibility for both drivers and pedestrians looking to cross the road. In addition, pavement parking (which is prohibited in Scotland), can block pavements and force pedestrians onto the carriageway, creating additional conflict between pedestrians and vehicles.

Minor to moderate beneficial impacts are expected. This is because the existing scale of the illegal parking problem, and the likely impact of regular enforcement of parking measures and kerbside restrictions.

Health Outcomes

As noted above, academic research have shown that increased parking charges in urban centres increases the likelihood of car-users changing modes. It is expected that some of the mode-shift would be towards active travel modes, mainly walking and cycling. This is expected as Musselburgh is a compact town, and many residential areas are within 15 minutes walking or cycling distance from the town centre.

It is well understood that increasing the uptake of walking and cycling at a population level can have substantial health and wellbeing benefits. Given the scale of the parking charges being introduced, and the provision of alternative free parking outside of the main town centre area, the degree of modal shift to walking and cycling expected to occur would likely be relatively modest. Additionally, the uptake of walking and cycling is highly dependent on the presence of safe, comfortable, and convenient active travel infrastructure. Overall, this means that parking measures alone are unlikely to drive a major modal shift towards walking and cycling, and therefore only **minor beneficial impacts** are expected.

Access to Health and Wellbeing Infrastructure

The following health and wellbeing facilities in Musselburgh town centre were identified as potentially being impacted by the introduction of parking management measures.

- Musselburgh Sports Centre
- Fisherrow Links Park (Sports Grounds and Children's Play Area)
- Esk Medical Centre

Medium-stay parking charges are proposed for Musselburgh Sports Centre Car Park. However, it is expected that under the current proposals, sports centre users will be able to park free for up to 90 minutes. Therefore, there is not expected to be any impact on facility users accessing this car park. Therefore, there is not expected to be any impact on access to this facility because of the parking proposals.

Fisherrow Links Park does not have dedicated off-street car park, but the closest parking locations are on Mountjoy Terrace, Links View, New Street, and Gracefield Car Park. Parking charges are proposed for all the above locations, which means there will be a slight negative impact on access to the sports fields and play area due to the increased parking cost compared to the current situation. However, these locations are to be subject to the cheaper medium-stay and long-stay parking charges, which are affordable compared to short-stay parking on the main town centre streets. Additionally, the park is within 250 to 300 metres from the nearest bus stops on North High Street, with a decent number of high frequency bus services.

Esk Medical Centre has a private car park to the rear of the facility, where charges cannot be introduced by ELC. The centre is also adjacent to the public Ladywell Way Car Park and on-street parking on Ladywell Way, where parking charges are proposed. The introduction of parking charges in the neighbouring car park and streets will have slight negative impact on access due to the increased cost of some parking options compared to the current situation. This impact would be removed entirely if the facility's private car park was available for facility users, which has not been confirmed. Additionally, the facility is approximately 180-250 metres from the nearest bus stops on North High Street, with a decent number of high frequency bus services providing access by public transport.

There is no impact on parking access for Musselburgh Sports Centre. For the remaining facilities, introducing parking charges may slightly reduce access due to slightly increased parking costs, but parking remains widely available in the area and the charges proposed are relatively affordable compared to the centre of town. Additionally, the location of these facilities means they remain accessible by walking, cycling, or public transport, providing good alternative access options. Therefore, only a **minor negative impact** is expected for access to health and wellbeing facilities.

3.3.5 Economy

The economy criteria is divided into two sub-criteria, namely Transport Economic Efficiency and Wider Economic Impacts. The following section will describe the outcomes of the qualitative appraisal of these two sub-criteria.

Transport Economic Efficiency

Transport Economic Efficiency (TEE) refers to the benefits typically captured in cost-benefit analysis, such as travel time savings, user and provider impacts, travel time reliability. Considering the scope and scale of the proposed measures, the following section will examine the impact of the parking charges on local travel delay and congestion, and on public expenditure and revenue.

The current parking situation in Musselburgh is likely causing increased congestion and travel delay, as drivers cruise to find suitable parking. When drivers cannot immediately find a vacant parking space, they are likely to drive and circle around the town for a parking space. This in turn increases the amount of traffic on a road and adds additional pollution to a town centre. One academic model suggests that cruising for a free parking space can reduce efficiency³. Similarly, commercial vehicles often require space to load/unload closer to their destinations, as delivering large cargo is more cumbersome. This would result in excess cruising for commercial vehicles as they have more specific requirements for parking. A study conducted in Seattle⁴ on the effects of commercial vehicle cruising suggests that most vehicles cruised for an average of 5.8 minutes.

However, if a parking fee is implemented at the optimal level to discourage cruising, then there are no welfare losses recorded. This allows for an authority to collect revenues with no burden at all⁵. The model in Figure 6.1 shows how a parking fee being implemented at an optimal level can reduce the

³ 'An integrated model of downtown parking and traffic congestion' - Richard Arnott, Eren Inci (2006), pp. 418-442

4 'Do commercial vehicles cruise for parking? Empirical evidence from Seattle' - Giacomo Dalla Chiara, Anne

^{4 &#}x27;Do commercial vehicles cruise for parking? Empirical evidence from Seattle' - Giacomo Dalla Chiara, Anne Goodchild (2020)

⁵ 'A review of the economics of parking' - Eren Inci (2015)

level of cruising, so no welfare losses are recorded. This would allow Musselburgh to collect revenue with no burden at all.

Panel A of Figure 6.1 shows the current cost of driving to town means that demand for parking in the town centre is exceeding supply. Because supply is limited, the difference between the maximum supply and the actual demand creates inefficiency in the form of drivers cruising around for spaces. If parking charges were introduced, demand for parking in the town centre would fall to the same level as the supply. The economic inefficiency caused by cruising would be eliminated and the value of that inefficiency turned into additional parking charge revenue for East Lothian Council instead.

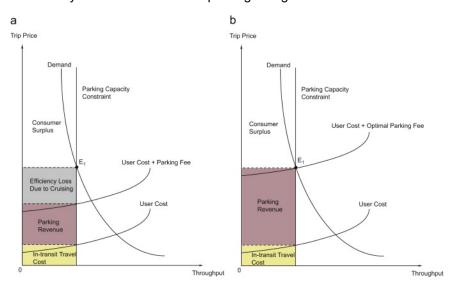


Figure 6-1: Economic model of optimal parking charge levels

This, however, needs to be implemented across both on street and off-street parking. This is because off-street parking would be considered a perfect substitute as it would be cheaper. If suitable alternative parking is not provided, drivers will continue to look for the cheapest parking options, which could lead to cruising⁶.

Given the scale of the parking measures being introduced, and that driving to the town centre is expected to be more likely to be displaced to outside areas rather than eliminated, a **minor positive impact** is expected.

Wider Economic Impacts

Wider economic impacts have a broad definition covering any economic impacts not directly related to transport user benefits. In the context of Musselburgh and the proposed parking measures, the most likely area of wider economic impacts would be on shopper numbers and economic viability of existing high street businesses. On this measure, it is expected that would be either a neutral or minor beneficial impact on visitor numbers and subsequently high street economic viability.

A review of academic evidence notes that there was no systematic relationship between parking provision and the economic performance of urban centres⁷. Academic evidence suggests that when

⁶ 'Regulating on-street parking' - Edward Calthrop, Stef Proost (2006)

^{7 &#}x27;The evidence base for parking policies—a review' - Greg Marsden (2006)

new parking charges are introduced in urban centres, many more drivers prefer to switch modes or parking locations than to change trip destination or avoiding travel entirely^{8,9}. Furthermore, it is worth noting that shoppers and visitors are typically less sensitive to parking charges than people driving for work¹⁰. This makes sense, as commuters would be regularly required to pay for parking for the duration of their work day, whereas shoppers are generally more flexible and not impacted by charges every day. Overall, this evidence suggests the impact of parking charges on the number of shoppers is likely to be neutral.

The proposed parking measures in Musselburgh will generally improve the availability and provision of parking by organising parking by duration. This has the impact of making the high street an easier and more coherent place for drivers to find parking. The proposed 30-minute free parking period on the high street would increase parking turnover and availability here. A review of existing research has shown that increasing parking turnover can increase visitor numbers to local centres¹¹. Additionally, improving the organisation and ease of finding parking would improve the overall access experience for shoppers, potentially increasing visitor numbers.

However, there is a degree of uncertainty that must be acknowledged. The economic viability and vitality of the town centre is influenced by many interacting factors beyond the availability and price of parking. Importantly, parking is not the only consideration for people choosing whether to visit a particular local centre. If the mix of shops and services, along with quality of street environment, are poor, then parking provision is unlikely to be the major constraint to visitor numbers.

Assuming external economic factors remain constant, it would be expected that the impacts on the parking measures on wider economic factors would either be **neutral or have minor beneficial impacts**.

3.3.6 Affordability

The introduction of parking charges will reduce the affordability of driving into the town centre. However, the negative impact of parking charges is balanced by a range of parking provisions being proposed. This includes a 45-minute free parking period in the main town centre streets, with cheaper medium-stay and long-stay parking in car parks and streets surrounding the town centre. These provide a range of alternative parking provisions that are relatively more affordable. Therefore, there is expected to be only a minor negative impact on the affordability of driving into the town centre. In terms of the resident permit parking proposals, the permit prices are proposed to be relatively affordable. Therefore, the introduction of a resident permit scheme is expected to have a minor negative impact on the affordability of parking resident vehicles on the public road in certain areas.

⁸ 'The impact of parking pricing on mode choice' - Natasa Vidovic, Jelena Simicevic (2023)

⁹ 'Parking demand and responsiveness to supply, pricing and location in the Sydney central business district' – David A. Hensher, Jenny King (2001)

¹⁰ <u>'The effect of parking charges and time limit to car usage and parking behaviour'</u> - Jelena Simićević, Smiljan Vukanović, Nada Milosavljević (2013)

^{11 &#}x27;The relevance of parking in the success of urban centres - A review for London Councils' - Sophie Tyler, Giles Semper Peter Guest, Ben Fieldhouse (2012)

3.4 Value for Money Assessment

Based the information provided in the Financial Case (section 4), the proposed parking charges in Musselburgh are financially positive. For the 10-year modelled period, the financial model forecasts the income collected from the parking management measures will exceed both the initial capital costs and annual operational costs. However, the model is indicating on a broader level that the management income will likely exceed costs, with surplus revenue over the 10-year period of approximately £236,000 per annum (including risk allowance).

The high levels of surplus generated by the scheme may allow East Lothian Council to invest significant amounts into their public services, infrastructure in the town, and the maintenance of parking facilities. This will have positive impacts as investment will make Musselburgh town centre a more attractive for people to visit, increasing local consumer spending, and providing a boost to the local economy.

In addition to financial analysis, Table 3-2 provides a summary of the relevant appraised impacts of the proposed parking measures. The key positive impacts are expected to be improved local air quality, improved road safety, reduced in travel delay and congestion, positive impacts on East Lothian Council budgets, an accessibility for disabled blue badge drivers and drivers with reduced mobility. Wider Economic Impacts are expected to be at least neutral.

There were some negative impacts expected in terms of access to health and wellbeing infrastructure, affordability and accessibility for car-dependent economically deprived groups. However, the impacts were balanced by the affordable alternative parking provision being proposed and the level of public transport connectivity in the area, so the scale of the impact would only be minor.



Table 3-2: Summary of Appraisal Impacts

STAG Criteria	Sub-Criteria	Seven-Point Assessment Scale	Description		
Environment	Air Quality	+ Minor positive impact	Parking charges are expected to: Reduce driving mode share for trips to the town centre, reducing vehicular emissions. Lead to more drivers choosing to park in the carparks or streets outside		
Climate Change	Greenhouse Gas Emissions	+ Minor positive impact	of the town centre, thereby not driving right into the centre of town where footfall is highest. Reduce the amount of time drivers spend cruising around the town centre looking for a parking space, reducing vehicular emissions.		
Health, Safety and Wellbeing	Accidents	++ Minor to moderate positive impact	There is currently a significant degree of illegal stopping, including on double-yellow lines and zig-zag markings at pedestrian crossings. Increased parking availability would decrease the attractiveness of illegal stopping locations, and increased enforcement would act as a deterrent.		
	Health Outcomes	+ Minor positive impact	Parking charges will likely result in some people who previously drove or walked to the town centre to switch to walking or cycling instead, bringing associated health benefits.		
	Access to Health and Wellbeing Infrastructure	- Minor negative impact	Introducing parking charges may slightly reduce access at a few sites, but parking remains widely available, and the charges proposed near these sites are affordable. Alternative public transport and active travel options also continue provide decent access to these sites.		
Economy	Transport Economic Efficiency	+ Minor positive impact	In terms of travel delay and congestion: Increasing parking availability will mean drivers can easily find a suitable parking space, thereby reducing travel delays and congestion associated with cruising around town looking for parking.		
		++ Moderate positive impact	In terms of public expenditure and revenue for East Lothian Council: • East Lothian Council is expected to recuperate capital and operational costs for the parking management measures with the revenue from parking charges, enforcement notices, and permit sales. • The council is forecast to have a surplus of around £236,000 per annum from the parking management measures.		
	Wider Economic Impacts	0 / + Neutral to Minor positive impact	In terms of impacts on town centre economic viability, the following issues were noted: • Current evidence suggests that existing drivers are more likely to switch modes or parking locations than to forgo travel altogether, meaning neutral/no impacts on shopper numbers.		



STAG Criteria	Sub-Criteria	Seven-Point Assessment Scale	Description		
			 Improved parking provision and organisation would make it easier to find appropriate parking, thereby improving the offering for shoppers to the high street. This would have a positive impact on shopper numbers. There is no systematic relationship between parking and town centre economic performance. There are many other factors impacting the town centre. 		
Equality and Accessibility	Comparative Access by People Group	++ Moderate positive impact	For disabled persons and people with reduced mobility: Increasing turnover and availability of parking in the town centre will mean disabled drivers with blue badges or those with reduce mobility more broadly can more easily find parking closer to their destination. Increasing parking enforcement will reduce illegal pavement parking and prevent blocking of pavement for people walking or wheeling.		
		- Minor negative impact	For car-dependent economically deprived groups: • The increased cost for parking in the town centre could reduce their access. This impact is strongly counter balanced by affordable parking alternatives within a short walking distance or by accessing alternative modes of transport which are readily available in the town.		
	Affordability	- Minor negative impact	The negative impact of parking charges is counter balanced by a range of affordable parking provisions being proposed within a short distance of the town centre.		

4 Financial Case

4.1 Financial appraisal

4.1.1 Introduction

East Lothian Council commissioned Stantec to develop a financial model to assess the income and cost implications of proposed parking orders in North Berwick. This model was developed in 2024 using the Flexible, Appropriate, Structured, and Transparent (FAST) financial modelling standard. FAST is a set of guidelines and best practices used in financial modelling and data analysis.

The FAST standard is designed to produce models that are both easy to create and simple to understand, enhancing their reliability and usability. The model for North Berwick was developed with the intention of being easily adaptable to assess parking measures in other towns. As such, the existing North Berwick model has been updated and used to assess the income and cost implications of the Preferred Parking Management Proposals for Musselburgh.

Appendix F – Technical Note – Musselburgh Parking Financial Model outlines how the income and cost implications of the Musselburgh parking proposals have been estimated. Since the development of the financial model for North Berwick, several minor updates / improvements to the model have been undertaken. The detail of these can be found in the technical note.

4.1.2 Capital Costs

The capital costs are based on the following items and assumptions shown in Table 4-1. In the financial model, a 23% adjustment has been applied to all capital costs to reflect potential risks. This is based on guidance outlined in the DfT's TAG unit A1-2. The unit suggests an optimism bias adjustment must take an 'outside view' where the uplift amount is based on statistical modelling of similar projects such as using reference class forecasting (RCF). Our assumption uses the P(Mean) value at Outline Business Case stage for Road projects from the DfT's Optimism Bias workbook.

Table 4-1: Capital Cost Assumptions

Capital Cost Unit Cost (£) Number of Units (If Applicable) Parking Charge Machines 4,100 20 Works associated with parking charge machines 5,000 20 Cost of signs and road markings per kilometre of kerb 550 per km 0.5 km ANPR Cameras¹² 30,000 15.000 Set-up of resident's scheme Office fit out, furnishings, and telephone connections 5,250 IT Equipment (PCs and Printers) 1,675 IT Equipment (HCCT Printers, cameras, and phones) 1,722

¹² There is a potential for ANPR Cameras to be installed at Musselburgh Sports Centre Car Park to facilitate the reimbursement or exemption of parking charges for centre users. This cost has been included to account for this possibility.

Capital Cost	Unit Cost (£)	Number of Units (If Applicable)
Publicity around new parking orders	2	2,000 -
Training Costs	supplying Decriminalis	ed in the current costs for NSL sed Parking Enforcement in will be no additional costs

4.1.3 Operational Costs

The operating costs are based on the following items and assumptions in Table 4-2. In the financial model, a 23% adjustment has been applied to all operational costs to reflect potential risks, reflecting the same approach taken for the capital costs.

Table 4-2: Operational Cost Assumptions

Capital Cost	Unit Cost Per Annum (£)	Number of Units (If Applicable)			
Parking attendants	25,960				
Consumables (fuel, office supplies, replacement uniforms etc.)	10,357	-			
Parking Attendant Uniforms	500	5			
Small van leases	£200 per Parking Manager is already included in the current costs for NSL supplying Decriminalised Parking Enforcement in East Lothian so there will be no additional costs.				
Notice processing software (SiDem)					
Client account manager					
Enforcement manager	These are already included in the current costs for NSL supplying Decriminalised Parking Enforcement				
Operations support manager					
Business intelligence analyst	—— NSL supplying Decriminalis —— in East Lothian so there wil				
IT officer	— III East Estillari 35 tilere wii	De no additional costs.			
Training Officer					
Admin Assistant					
Senior Area Officer Grade 10	£65,826	To be split equally across the 5 towns in			
Area Officer Grade 8	£50,572 parking measures are proposed.				
Back-office processing	13,183	-			
Adjudication Service	868	-			
Unexecuted Bailiff Actions	1,120	-			
DVLA correspondence and owner tracing	120	-			

Table 4-3 shows the expected capital and annual operating costs of the Preferred Parking Management Proposals for Musselburgh.

Table 4-3: Forecast Capital and Annual Operating Costs for Parking Measures in Musselburgh, rounded to nearest thousand

Cost Type	Cost Type	Core Scenario					
	(Breakdown)	Year 1 Capital Costs	Annual Operational Costs	10yr Total Modelled Costs			
Capital Cost	Excluding Risk	631,000	-	631,000			
	Including Risk	776,000		776,000			
Annual Operating	Excluding Risk	-	185,000	1,845,000			
Costs	Including Risk	-	227,000	2,270,000			

Cost Type	Cost Type	Core Scenario				
	(Breakdown)	Year 1 Capital Costs		Annual Operational Costs	10yr Total Modelled Costs	
Totals	Excluding Risk		-	-	2,476,000	
	Including Risk		-	-	3,045,000	

4.1.4 Funding

It assumed that the capital cost will not be initially independently financed through the measures itself. Instead, it is likely to be integrated into the Council's wider capital borrowing strategy. Capital costs will be financed through borrowing from the Council's general capital fund. Revenue generated from the parking measures (e.g. permit fees, pay-and-display income, penalty charges) is then used to offset the annual financing costs of that borrowing - typically interest payments and principal repayments.

The introduction of parking management measures in Musselburgh is designed to be financially self-sustaining. Operating costs associated with enforcement, maintenance, signage, and administration will be covered through the revenue generated from parking charges and permits.

4.1.5 Revenue

Table 4-4 outlines the key assumptions used in the calculation of parking revenue in the Musselburgh financial model. Where possible, assumptions have been based on survey or census data. In other cases, professional judgement has been used to determine the most suitable values for forecasting.

Table 4-4: Key revenue assumptions

	, ,	
Revenue Source	Revenue Factor	Data Source or Assumption
Parking Charges	Number of spaces	Sections of street where parking would be permitted were mapped and length of kerbs measured using GIS software. The number of available spaces was estimated by dividing the relevant kerb length by 6 metres for parallel parking spaces and 2.75 metres for bay parking spaces. Virtual review on Google StreetView were performed to check the estimations were close to the observed number of spaces.
	Average stay duration per user	Based on professional interpretation of parking surveys conducted in March 2022 and the likely impact of new parking measures on stay durations.
	Seasonal parking utilisation rate	Based on parking spot-check surveys conducted in Cupar from January 2022 to October 2023.
	Utilisation rate by charging zone or carpark	Based on the median occupancy from off-street and on-street parking surveys conducted in March 2022.
		Off-Street Carparks, Short-Stay On-Street Parking: The median occupancies observed in the surveys were adjusted downwards by 15% for use in the financial model. This is to reflect uncertainty and account for any potential optimism bias the parking model assumptions.
		Medium-Stay and Long-Stay On-Street Parking: The median occupancies observed in the surveys were adjusted downwards by 75% for these locations.
		As these streets are largely residential in land use, it can be assumed most vehicles parked in these locations are residents' vehicles. Therefore, utilisation rates observed

Revenue Source	Revenue Factor	Data Source or Assumption			
		during the parking surveys in these areas would have mainly captured the parking of residents' vehicles.			
		This means using the survey's observed utilisation rate to estimate chargeable parking in these locations would result in a significant overestimation of paid parking uptake. This is because the model would effectively be using the resident parking utilisation rate to estimate the utilisation of chargeable parking instead.			
		Parking of resident vehicles are already accounted for in the model permit calculation elsewhere. Therefore, the utilisation rate applied here needs to reflect a likely utilisation for chargeable parking only. As such, an adjustment of the surveyed utilisation rate downwards by 75% was performed to reflect the likelihood that most the vehicles on these streets are resident's vehicles. This provides a more appropriate estimation for the uptake of chargeable parking on these streets.			
	Displaced parking adjustment factor	A factor set to reduce parking demand based on parking displaced to other areas without charges because of the parking measures. Set to 95%.			
	Mode shift adjustment factor	A factor set to reduce parking demand that would be displaced to other modes because of the parking measures. Set to 95%.			
	Parking charge regimes to and operational hours	Based on high level management proposals as of the end of August 2025. Parking charges are assumed to be applied between 8:30am and 18:00pm on Monday to Saturday. No parking charges are modelled for the Musselburgh Sports Centre Carpark, as it is proposed that sports centre users will be able to park free for up to 90 minutes so revenue generated from this car park is expected to be low.			
Resident Permits	Number of resident vehicles in charging zones	Estimated using data from the 2011 Scottish Census.			
	Estimated private off-street spaces by charging zone	Estimated by 2011 Census Output Area for each charging zone. Estimates based on desktop assessment using Google Maps and Google StreetView.			
	Percentage of households with driveways and do not purchase permits	Set at 80%. Based on a professional judgement that parking measures will increase the utilisation of private driveways.			
	Adjustment for non- purchase of resident permits	Set at 97.5%. Assumes that 2.5% of residents with vehicles that need to park on the street do not purchase a permit.			
	Occupancy of resident permit spaces during operational hours	Estimated by 2011 Census Journey to Work data. Calculated based on mode share of residents driving to work in each charging zones. This is factored to include non-commuting trips.			
Enforcement Charges	Parking infringement rates for over-staying and non-payment	Set at 2% of all users. Based on professional judgement and more conservative estimation of potential infringements to be expected.			
	Enforcement Levels	Set at 5% of all infringements. Based on professional judgement on the number of parking infringements that would be issued Penalty Charge Notices.			
	Income Per PCN	Set at £50, which is the 50% discount rate for early payment of a PCN.			

Table 4-5 outlines the expected annual income for the Preferred Parking Management Proposals for Musselburgh. By reviewing the model outputs, the following observations have been noted:

- The revenue forecast is reasonably balanced between both on-street parking and off-street
 car parks. However, a large portion of the revenue from on-street parking will come from the
 sale of permits. Only around half of the on-street parking revenue comes from parking
 charges, while 32 percent of the revenue comes from permit sales.
- Supressed on-street parking revenue is because all the revenue forecast in the on-street parking areas comes from the medium and long-stay parking streets, which are much more residential in land-use and subsequently have lower utilisation rate assumptions. The model also assumes no revenue from the short-stay parking areas, as it is assumed all those parking in the short-stay parking areas in the centre of town will only park with in a 30-min free parking allowance and not pay for parking. This impact is combined with a large residential permit area, resulting overall in a large amount of revenue coming from permit sales.

Table 4-5: Forecast Income from Parking Measures in Musselburgh, rounded to nearest thousand

Parking	Income Source	Core Scenario			
Location		Annual Income	10yr Modelled Income		
On-Street	Parking	125,000	1,251,000		
	Enforcement Income	51,000	515,000		
	Permit Income	83,000	829,000		
	Total	259,000	2,595,000		
Off-Street	Parking	267,000	2,670,000		
	Enforcement Income	14,000	143,000		
	Total	281,000	2,813,000		
Total	Parking	392,000	3,922,000		
	Enforcement Income	66,000	658,000		
	Permit Income	83,000	829,000		
	Total	540,000	5,409,000		

4.1.6 Income position

For the 10-year modelled period, the financial model forecasts the income collected from the parking management measures will exceed both the initial capital costs and annual operational costs. Although the model shows forecasted outputs down to the nearest pound, the level of detail and assumptions used in the models means it is inappropriate to interpret these values as exact forecasts. However, the model is indicating on a broader level that the management income will likely exceed costs, with surplus revenue over the 10-year period of approximately £236,000 per annum (including risk allowance).

4.2 Risks and Uncertainties

There are financial risks and uncertainties that can occur from the proposed parking charges. The most significant ones to consider are outlined below:

- High inflationary impacts which could result in significant increases in both capital and operational costs.
- The levels of enforcement are not high enough, leading to revenue leaks and the scheme not generating the expected levels of revenue.

- Parking charges could lead to a significant reduction in drivers around Musselburgh causing the scheme to result in a financial loss as the levels of revenue will not be close to what is expected.
- If technological issues were to occur with the parking charge equipment this could delay or limit the amount of revenue collected.

5 Commercial Case

5.1 Service requirement and output

East Lothian Council has entered into a strategic joint procurement arrangement with City of Edinburgh Council, Midlothian Council, and Highland Council to commission Marsden Holdings Ltd (trading as NSL Services) for the provision of comprehensive parking management and decriminalised enforcement services.

The joint contract provides a robust and flexible route to market for a wide range of parking-related services, including but not limited to:

- On-Street Enforcement Services: Deployment of Civil Enforcement Officers to monitor and enforce parking regulations.
- Car Pound Services: Vehicle removal and storage operations for illegally parked or abandoned vehicles.
- Pay and Display Services: Installation, maintenance, and management of pay and display infrastructure.
- Suspension and Dispensation Services: Temporary changes to parking restrictions to accommodate events, construction, or other local needs.
- Lining and Signing Services: Road marking and signage installation to support enforcement and improve user compliance.
- Cashless Parking Services: Digital payment solutions to enhance customer convenience and reduce cash handling risks.
- Permit Services: Administration of residential, business, and visitor parking permits.
- Back-Office Support Services: Data management, reporting, and administrative support to ensure operational efficiency.
- Notice Processing Services: Handling of Penalty Charge Notices (PCNs), including appeals and payment processing.
- Online Services: Web-based platforms for permit applications, payments, and customer service interactions.
- Foreign Debt Collection Services: Recovery of unpaid PCNs issued to non-UK registered vehicles.

This procurement model not only streamlines service delivery but also fosters innovation and continuous improvement through shared performance monitoring and supplier engagement. The commercial arrangement is underpinned by a framework that allows for scalability, adaptability to local policy changes, and alignment with broader transport and environmental objectives.

Service review and re-organisation will be necessary as increased feedback on the parking service will require staff enhancement. Staff allocations are already in place to parking design and technical support, on street enforcement and management but further consideration of the management and contract administration might be necessary due to the increased volume and responsibility.

5.2 Procurement Strategy and route

The collaborative procurement arrangement delivers a range of strategic, operational, and financial benefits that strengthen the commercial viability and long-term sustainability of parking management services. This procurement model not only streamlines service delivery but also fosters innovation and continuous improvement through shared performance monitoring and supplier engagement.

Using an existing joint procurement framework reduces the time, cost, and complexity associated with running separate tenders. It ensures compliance with public procurement regulations while accelerating service mobilisation. Close working practices with neighbouring authorities and consistency of delivery through term contract arrangements are considered best value for East Lothian.

Use of a single overarching supplier for procurement of services allows better collaboration of resources to minimise waste and delay in operation. A single route has demonstrated value for money with multiple elements outsources to neighbouring authorities. Machine installation, planning and programming of activities are co-ordinated through the single contract that allows for economy of scale purchases.

5.3 Risk allocation

Risk allocation is managed through the dedicated risk register, which records all identified risks issues assumptions and dependencies along with their assigned owners, both internal teams and external stakeholders. Each risk is assessed and rated for likelihood and impact providing a consistent basis for monitoring and mitigation. A risk allocation matrix is applied to ensure that risks are appropriately transferred or shared with the sector best place to manage them, while maintaining clear accountability through our governance arrangements.

The joint procurement model introduces a range of commercial, operational, and strategic risks that must be actively managed to ensure successful delivery and long-term sustainability. However, the collaborative nature of the arrangement also provides a strong platform for risk mitigation through shared governance, pooled expertise, and contractual safeguards. Shared procurement reduces individual council exposure to procurement and operational risks. Contractual risks such as supplier failure, service disruption, or legal challenges are mitigated through joint oversight and contingency planning.

5.4 Contract arrangements and any personnel implications

Since 2018, East Lothian Council has participated in the City of Edinburgh Council (CEC) parking services contract, a term maintenance agreement designed to deliver decriminalised traffic and parking enforcement services. This contract has provided a comprehensive framework for both frontline enforcement and back-office support, enabling East Lothian to implement consistent, scalable, and legally compliant parking management across its jurisdiction.

The contract includes provisions for:

 Decriminalised Parking Enforcement: Civil Enforcement Officers (CEOs) deployed to enforce parking regulations across designated areas.

- Back-Office Support: Processing of Penalty Charge Notices (PCNs), appeals, complaints, and customer service functions.
- Permit Management: Administration of residential, visitor, and business parking permits.
- Operational Flexibility: Reactive deployment of enforcement resources based on local needs and seasonal demand.

The second-generation contract is scheduled to commence on **1 October 2025**, building on the strengths of the existing arrangement while addressing evolving service requirements and community expectations.

Key Contractual Requirements

The new contract will need include enhanced provisions to ensure the service remains responsive, equitable, and effective. These include:

1. Staffing and Coverage

- Maintain appropriate staffing levels to deliver seven-day enforcement across Musselburgh and other designated towns in East Lothian.
- Ensure targeted enforcement during school journey times to support road safety and reduce congestion.
- Provide seasonal and event-based coverage along the coastal areas, particularly during peak tourism periods.
- Address indiscriminate and dangerous parking, including enforcement against double pavement parking and obstruction of pedestrian routes.

2. Back-Office Operations

- Ensure timely and accurate processing of PCNs, including issuance, appeals, and payments.
- Respond to public complaints and inconsistencies in notice serving with transparency and fairness.
- Maintain robust data management systems to support auditability and legal compliance.

3. Permit Administration

- Deliver consistent and user-friendly permit management, including application processing, renewals, and system guidance.
- Provide clear advice and support to residents and businesses regarding permit eligibility and usage.

4. Community Responsiveness and Public Safety

 Ensure parking services are reactive to local needs, including temporary restrictions, event support, and emergency access.

5. Performance Monitoring and Continuous Improvement

- Embed Key Performance Indicators (KPIs) and service-level benchmarks to monitor delivery and drive improvements.
- Facilitate regular contract review meetings with East Lothian Council to assess performance and address emerging issues.

6. Technology and Innovation

- Support integration of digital tools, such as mobile enforcement apps, online permit portals, and data analytics platforms.
- Enable future enhancements, including ANPR (Automatic Number Plate Recognition) and real-time reporting dashboards.

6 Management Case

6.1 Programme/project management governance arrangements

The East Lothian Parking Programme is a significant investment and will require robust governance with dedicated project management resources operating under strong project management principles. The day-to-day management of the programme will be undertaken by East Lothian Council, overseeing its appointed consultants and contractors as outlined in. The arrangements are the same for each of the towns in programme.

The Parking Management Review Board is made up of representatives from East Lothian Council across the relevant teams. Table 6-1 below shows the makeup of the Project Board as currently understood.

The Project Sponsor/Project Director for the scheme is Tom Reid. The Sponsor is accountable for the project meeting its objectives, delivering the projected outcomes and realising the required benefits. The day-to-day management of the project is led by Peter Forsyth as described below in Table 6-2. This follows an established structure that has been used by East Lothian for delivery of North Berick Parking Measures.

Table 6-1: East Lothian Parking Review Board

Name	Position
Tom Reid (Chair)	Head of Infrastructure
Keith Dingwall	Head of Development
Carlo Grilli	Service Manger – Legal and governance
Alan Stubbs	Service Manager for Roads
Peter Forsyth	Project Manager – Growth & Sustainability
Jamie Baker	Service Manager – Economic development
Liz Hunter	Senior Officer – Transport planning
Grant Talac	Senior Officer – Parking and Sustainable Transport
Eamon John	Head of Communities
lan King	Team Manager, Asset and Regulatory
David Henderson	Service Manager – Finance- Service Accounting
Stewart Cooper	Service Manager – Communications
Charlann Peggie	Senior Project Officer - Transformation and Digital Team

Table 6-2: East Lothian Parking Review Project Team - Roles and Responsibilities

Role	Responsibility	Name	Position
Project Sponsor/Project Director	Project sponsor – oversight of project delivery	Tom Reid	Head of Infrastructure
Senior Responsible Officer(s)	Project manager (Growth and sustainability) – delivery of parking	Peter Forsyth	Project manager – growth and sustainability

Role	Responsibility	Name	Position
	management interventions across county.		
	Support Project manager in delivery of parking management interventions	Liz Hunter	Senior Officer – Transport planning
	Assist project manager in business planning for parking management.	Charlann Peggie	Senior Project Officer - Transformation and Digital Team
	Assist project manager in demand management and supply assessment	Joseph Appiah	Roads officer
Finance Manager(s)	Capital finance support	Doreen Pringle	Corporate accountant
		Michelle Ritchie	Corporate accountant
	Revenue finance support	Matthew Conlon	Interim Principal Accountant
Supplier(s)	Parking enforcement service	NSL Services	
	TIM manufacture and delivery	IPS Services	
	Signs and Lines	NSL Services / Pheonix Services	
	Parking design and implementation support	Stantec	

6.2 Change and contract management

Material changes are identified, managed and authorised through the parking Board. Communication plan will require timing of change and instruction to stakeholders and the public.

Effective contract and change management are essential to ensuring that the parking services contract delivers its intended outcomes, remains responsive to evolving needs, and maintains legal and commercial integrity throughout its lifecycle. East Lothian Council has established robust arrangements to oversee both the operational delivery and strategic evolution of the contract.

Contract Management Framework

The parking services contract will be managed under a structured framework that includes:

- Designated Contract Manager: A senior officer within East Lothian Council will be appointed
 as the Contract Manager, responsible for day-to-day oversight, supplier liaison, and
 performance monitoring.
- **Performance Monitoring**: The contract includes a suite of Key Performance Indicators (KPIs) and Service Level Agreements (SLAs) covering enforcement coverage, PCN processing times, permit administration, customer service responsiveness, and system uptime. These are reviewed monthly and reported quarterly.
- **Supplier Relationship Management**: Regular engagement with NSL Services is maintained through scheduled review meetings, issue resolution sessions, and collaborative planning workshops.

Change Management Process

To ensure the contract remains fit for purpose and responsive to local needs, East Lothian Council will implement a formal change management process:

- Change Control Procedure: All proposed changes to the scope, service levels, or delivery
 model will be submitted through a documented change request form. This includes
 justification, impact assessment, cost implications, and proposed timelines.
- **Evaluation and Approval**: Change requests are evaluated by the Parking Review Board. Legal and procurement teams are consulted to ensure compliance with contract terms and public procurement regulations.
- **Implementation Planning**: Approved changes are implemented through a structured plan, including stakeholder communication, operational adjustments, and system updates. Progress will be tracked through a change log and reviewed at contract meetings.

6.3 Benefit realisation arrangements

East Lothian established a transformation programme in 2016, aimed at the Council becoming more efficient, effective, transparent, and accountable, which in turn can lead to better services for citizens and a more sustainable future. The East Lothian Transformation Strategy 2024-2029 aims to build on those ambitions and achievements, while making it applicable to the 2024 operating environment.

A benefits realisation plan is in place to ensure that all anticipated benefits of the strategy are clearly identified, planned, record, tracked and effectively managed. The plan sets out the method for capturing expected outcomes, establishing measures of success, and monitoring progress against delivery. We have assumed a timeline of 3 to 5 years for achieving the benefits identified for the parking measures in Musselburgh.

Benefits will be reviewed and reported through established governance through the Transformation Board providing assurance that they remain on track and enabling timely action where risks to delivery are identified.

Figure 6-1 outlines a visual map of benefit dependencies for the East Lothian Parking Review Programme. Figure 6-2 outlines a visual map of expected benefits to be realised for the Programme and their alignment with the wider council objectives and priorities.

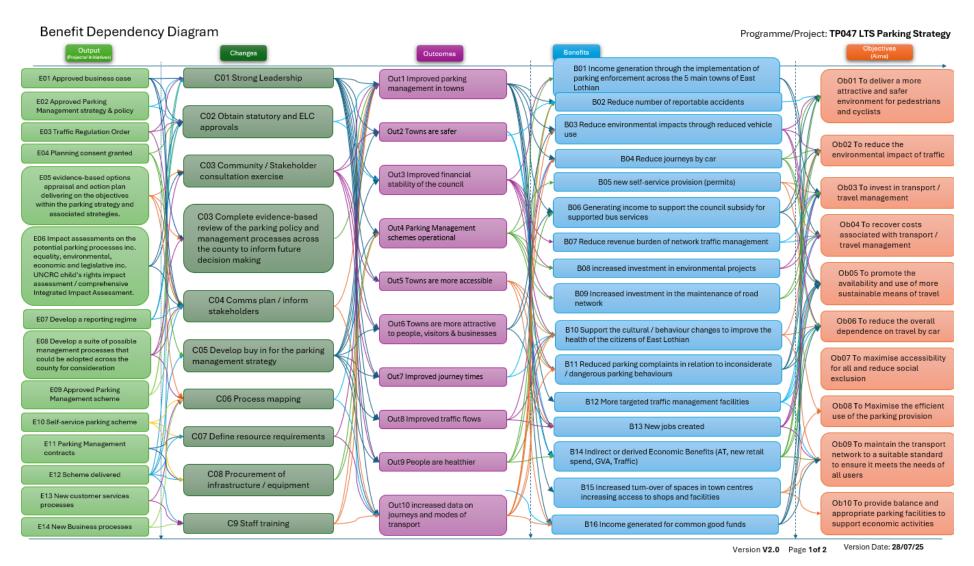


Figure 6-1: East Lothian Parking - Benefits Dependencies

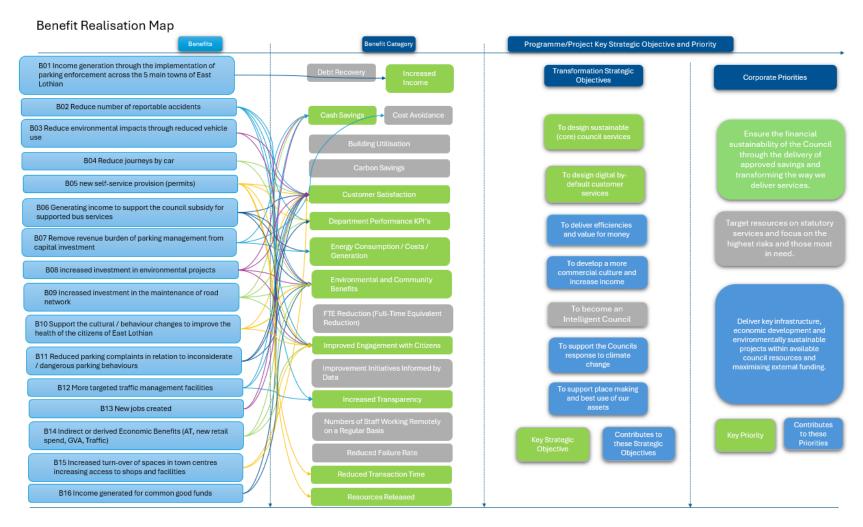


Figure 6-2: East Lothian Parking - Benefits Realisation Map

6.4 Risk management arrangements

Risk management is a continual process involving the identification and assessment of risks and the implementation of actions to mitigate the likelihood of them occurring and the impact if they did. The approach to risk management will be proportionate to the decision being made or the impact of the risk, to enable the Council to manage risks in a consistent manner, at all levels.

Key to effectively mitigating risks is to develop a series of well-defined steps to support better decision-making through an in-depth comprehension of the potential risks inherent in a scheme and their likely impact. HM Treasury Green Book recommends a four-stage process which is broadly cyclical (plan-do-review) requiring on-going review and update of risks to ensure that effective controls are implemented during project development and delivery.

Robust risk management processes are in place to ensure effective oversight of the project. A comprehensive risk register is maintained, capturing the key management risks and mitigation plans associated with delivery, these include an assessment of the following categories:

- Financial
- Delivery timescale
- Technology
- · Data protection and compliance
- Customer experience
- Stakeholder engagement
- · Operational continuity

A monthly Risks, Issues, Assumptions and Dependencies (RAID) review meeting is held, and the RAID report is escalated monthly through established governance processes as outlined in 6.1, to provide assurance and enable timely decision making.

6.5 Contingency plans

Contingency plans are included in the mitigation actions and plans contained within the risk register. Contingency plans are specific to each individual risks dependent on the impact to project delivery. These plans set out predefined actions, alternative approaches, and escalation routes to ensure that risks or unforeseen events can be managed promptly and effectively. The implementation of contingency measures is monitored through our project governance, ensuring that any required actions are coordinated, proportionate, and minimise disruption to project and service delivery.

6.6 Monitoring and Evaluation

The monitoring and evaluation plan is designed to determine whether the scheme:

- · Has been designed and delivered efficiently and effectively
- Has me the requirements of the stated scheme objectives
- · Has achieved the expected benefits
- Has resulted in any unintended outcomes and impacts (both positive and negative)
- Represents good value for money

In addition, the M&E plan has secondary objectives that the outcomes of the M&E will support:

- To provide information for stakeholders and members of the public
- To provide an evidence base to support future schemes

To carry out effective monitoring and evaluation, data collection for the scheme is required at various stages as the scheme develops to ensure an effective M&E process. The minimum number of stages are detailed and reported are as follows:

- Baseline conditions: prior to scheme implementation
- One year after scheme implementation
- Three years after scheme implementation
- Five years after scheme implementation

The data collection process can be carried out through manual counts or by Automatic number plate recognition (ANPR) counts. Data should be collected across Musselburgh with a focus on the streets where parking charges have been implemented, and it should cover various types of parking restrictions. Due to the parking charges being sensitive to travel behaviour it is appropriate to undertake post-scheme data collection one year and then five years after it has been implemented.

6.6.1 Schedule of M&E Activities

A schedule of the monitoring and evaluation activities proposed for the scheme is summarised in Table 6-3.

Table 6-3: Schedule of the monitoring and evaluation activities proposed for the scheme

Overarching programme Objectives	Musselburgh specific objectives	Definition – How is it calculated?	Baseline	Data Source – How will it be measured?	Frequency- How often will it be measured?	Responsible – Who will measure it?
Environmental Improvements	Encourage a modal shift away from the private car and towards more sustainable modes of travel Improve air quality and reduce pollution	Levels of those travelling to work by private car compared to the level of active travel and public transport use. Levels of reported congestion by residents	50 percent of Musselburgh commuters drove to work. Musselburgh has a much higher proportion of commuters traveling to work by bus, minibus or coach. 21 percent of Musselburgh residents commute by bus. More recent data needs to be collected for Musselburgh to give an accurate picture of car use	Data collection carried out through surveys to measure the proportion of those in Musselburgh travelling by car.	Annually	East Lothian Council
Economic Growth	Increase footfall in the town centre	The number of people who travel into the Musselburgh town centre.	The pedestrian counts, which were undertaken in November 2022, showed highest footfall activity was recorded on the High Street south of the River Esk. The weekly footfall in this section is between 7,001 and 15,000 persons per week. Footfall immediately outside of this core section is much lower. With most of the North High Street between 2,001 and 3,000 persons per week.	Footfall surveys carried out in Musselburgh	Annually	East Lothian Council

Overarching programme Objectives	Musselburgh specific objectives	Definition – How is it calculated?	Baseline	Data Source – How will it be measured?	Frequency- How often will it be measured?	Responsible – Who will measure it?
Place based improvements	Revenue generated from parking charges to be reinvested in Musselburgh public spaces/services	The amount of money that East Lothian Council invests into public spaces/services from the money raised through parking charges.	2024/25 Budgets	East Lothian Council's Annual Accounts	Annually	East Lothian Council
Improve parking conditions	Increase parking availability	The number of available spaces for parking	Off-street The entry and exit surveys were commissioned by East Lothian Council and conducted on March 15, 2022. The ANPR surveys were conducted on May 25, 2023. On Street Surveys were commissioned by East Lothian Council and conducted on six days between March 24 and April 6, 2022	Anecdotal evidence by parking attendants.	Annually	East Lothian Council



Stantec is a global leader in sustainable engineering, architecture, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec UK Limited

Part 4th Floor, Whitehall Quay II Whitehall Road Leeds LS1 4HR UNITED KINGDOM stantec.com