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Safer Active Travel Law Primary & North Berwick High School

Final Report

On behalf of **East Lothian Council**



Project Ref: 45410 | Rev: 1.1 | Date: July 2019

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
Office Address: 2nd Floor, 160 West George Street, Glasgow G2 2HG
T: +44 (0)141 352 2360 E: glasgow@peterbrett.com

Document Control Sheet

Project Name: Safer Active Travel; Law Primary & North Berwick High School

Project Ref: 45410

Report Title: Final Report

Doc Ref: 1.4

Date: 30/07/2019

	Name	Position	Signature	Date
Prepared by:	N Cuthill	Assistant Transport Planner	NC	11/04/2019
Reviewed by:	G Scott	Associate Transport Planner	GS	11/04/2019
Approved by:	R Mackenzie	Senior Associate	RM	12/04/2019
For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved
1.1	12/04/19	Final Draft – Client Issue	NC	GS	RM
1.2	26/06/19	Minor amendments from client	NC	GS	RM
1.3	01/07/2019	Final Issue	NC	GS	RM
1.4	30/07/2019	Update to Final Issue	NC	GS	RM

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1 Introduction and Background

1.1 Introduction

1.1.1 East Lothian Council (ELC) commissioned an active travel study that will provide options to address road safety concerns and local transport related issues, that may be 'actual' or 'perceived' barriers to encouraging sustainable trips within the Council area. They have appointed Peter Brett Associates LLP (PBA), now part of Stantec, to undertake one such study, focusing on Law Primary School & North Berwick High School.

1.1.2 This study, entitled "Safer Active Travel: Law Primary & North Berwick High School", will examine the existing walking and cycling infrastructure, identifying barriers, weaknesses, local issues and concerns. The study report also takes into account the impact of current, or planned developments in and around the study area, as shown in Figure 1.1 below.

1.2 Background

1.2.1 North Berwick has a primary school, Law Primary (LP) located on Haddington Road, and a secondary school, North Berwick High School (NBHS) closely associated on Grange Road. They are adjacent to each other to the south side of the town. Both schools are served via the same local roads and shared access routes to school. Additionally, within the same area is North Berwick Sports Centre, accessed from Grange Road, with a rear car park that has unrestricted use.

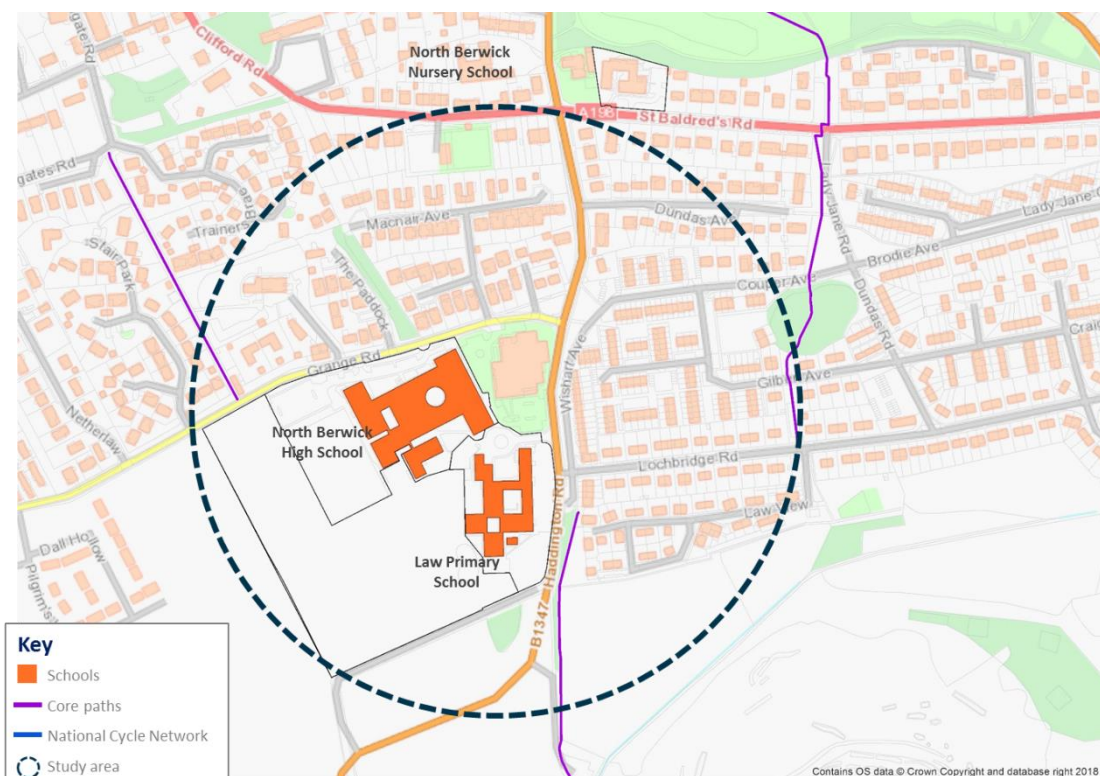


Figure 1.1 Study Area

1.2.2 Over a number of years, both schools have been active in encouraging travel planning and promoting road safety, walking and cycling and engaging active travel initiatives and projects including, but not limited to; Walk to School Week, Bikeability and Junior Road Safety Officers.

- 1.2.3 The 2017 National Hands-Up Survey results for these schools showed that:
- Law Primary - school roll 613 – actual surveyed 595, of which 20.2% claimed to have been driven to school; and
 - North Berwick High School – school roll 907 – actual surveyed 682, of which 6.5% claimed to have been driven to school.
- 1.2.4 The full results across all modes are shown in more detail in Appendix A.
- 1.2.5 North Berwick is experiencing a significant growth in population with a number of new housing developments, not only in the town itself but also in surrounding settlements and villages that are included in the NBHS catchment area, resulting in higher school rolls in both schools, that has required additional school building and classroom extensions. The land around the schools, much of which was formerly open greenspace and farmland, has been subject to development for housing, changing the open space ‘feel’ to a suburban environment.
- 1.2.6 The provision of safe routes to schools has been integral in the transport planning process as the housing numbers increase, with the relevant physical infrastructure to support active travel, along with a range of traffic calming and other interventions associated with planning consents / conditions. Despite this, there are still those that wish to use vehicles on the journey to and from the schools and their continual presence is having a significant impact on those walking and cycling raising conflicts and concerns, whether real or perceived.

1.3 Purpose of the Report

- 1.3.1 The study will identify safety issues and concerns around both schools and within the wider community and will assess how to reduce car use on the ‘school run’ and improve general safety for the benefit of active travel users. This report will then create audited and costed interventions and proposals for ELC to use to support any funding application(s) that aligns with the criteria and outcomes set out by Sustrans (Principal Funding Partner).
- 1.3.2 ELC is committed to promoting and encouraging safer active travel across the Council, as a whole and via East Lothian’s Local Transport Strategy which includes an Active Travel Improvement Plan. This study will contribute to delivering key outcomes from that Plan.
- 1.3.3 Section 9 then provides recommendations incorporated within an Action Plan that lists interventions scored against strategic objectives, affordability and deliverability. The Action Plan will include likely timescales, costs and responsibilities and will produce a range of measures from low cost, “easy-win” (which can be implemented relatively quickly) to higher value, more ambitious ‘infrastructure’ projects (likely to be implemented in the medium to long-term).

1.4 Benefits

- 1.4.1 There are many advantages of encouraging more children to walk or cycle to school:
- the physical exercise can help to improve children's health, and active children are more likely to become healthier active adults;
 - the environment and safety around schools can be improved because of less traffic and dangerous conflicts;
 - for many children it is their first opportunity to travel independently and is an important part of personal and social development;
 - children learn efficient ‘life-long’ travel habits; and

- there are opportunities for parents and Councils to direct resources to the areas which will generate the best returns.

1.5 Methodology

1.5.1 The study follows an objective-led approach with stakeholder engagement considered a key aspect. A full Communication / Engagement Strategy has been prepared to support the study and is included in Appendix B.

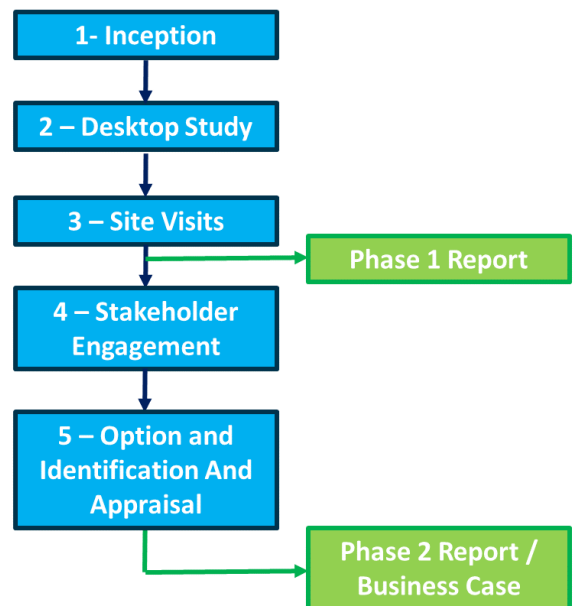
1.5.2 The following guidance documents have been considered in developing the methodology

- The Sustrans Community Links Programme Route Option Appraisal and Feasibility Study Minimum Requirements.
- Sustrans Design Manual Handbook for cycle-friendly design¹
- Scottish Transport Appraisal Guidance (STAG)²
- *How to Run a Successful Safer Routes to School*³

1.5.3 Monitoring and evaluation will be given consideration as it is an often a neglected stage of the project lifecycle, yet it is as important, if not more important, than any other stage in the project to ensure that any measures implemented are fully assessed.

1.6 Wider Issues

1.6.1 As a result of the positive engagement with the local community, a number of key issues and concerns were raised that were beyond the defined study extents but are still important in respect of understanding active travel barriers and opportunities. The study focussed on identifying potential actions to tackle the issues within the defined study area, but the wider issues have been recorded so that they can be considered at a later date.



¹ https://www.sustrans.org.uk/sites/default/files/file_content_type/sustrans_handbook_for_cycle-friendly_design_11_04_14.pdf

² <https://www.transport.gov.scot/media/41507/j9760.pdf>

³ <https://www2.gov.scot/Resource/Doc/158146/0042791.pdf>

2 Study Objectives

2.1 Introduction

- 2.1.1 Developing a robust set of objectives is a key part of this study and demonstrating that an objective-led approach has been followed will help where the Council submit future funding applications.
- 2.1.2 This process will benefit from being broadly aligned with the Scottish Transport Appraisal Guidance (STAG). Whilst not a STAG-based study as such, following an objective-led and evidence-based process will add credibility and will be beneficial in later funding bids.

2.2 East Lothian Objectives

- 2.2.1 The study objectives should broadly align to those included in the East Lothian LTS 2018 - 2024 which identifies the following:

- To deliver a more attractive and safer environment for pedestrians and cyclists;
- To reduce the overall dependence on the car and the environmental impact of traffic;
- To promote the availability and use of more sustainable means of travel;
- To locate new development where it reduces the need to travel;
- To maximise accessibility for all and reduce social exclusion;
- To promote integration and interchange between different means of travel; and
- To maintain the transport network to a suitable standard to ensure it meets the needs of all users.

2.3 Study Objectives and Outcomes

- 2.3.1 The LTS objectives form the basis of the identified study objectives, which are:

- To deliver a more attractive and safer environment for pedestrians and cyclists;
- To reduce the overall dependence on the car and the environmental impact of traffic on the school surroundings;
- To promote the availability and use of more sustainable means of travel;
- Improve physical and mental well-being through the associated benefits of active travel; and
- To maximise accessibility for all and reduce social exclusion.

- 2.3.2 It should be noted that as the study progressed the objectives were discussed amongst the client team and stakeholders before being confirmed.

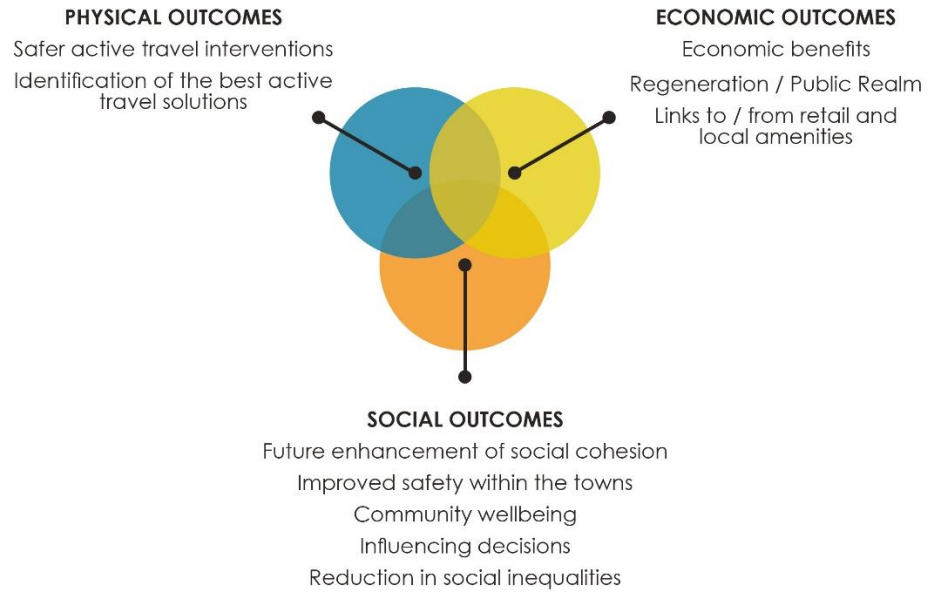


Figure 2.1 Study Outcomes

3 Policy Context

3.1 Introduction

3.1.1 It is important to consider the relevant national, regional and local policy context and how this relates to local issues in the context of this study.

3.2 National Policy

Scottish National Transport Strategy⁴

3.2.1 The National Transport Strategy (NTS) for Scotland was published in 2006 and sets out the long-term vision for Scotland's transport policies up to 2026. The Strategy is based around three Strategic Outcomes for transport which are aligned to the Scottish Government's overall purpose. These are:

- Improve journey times and connections between our cities and towns and our global markets to tackle congestion and provide access to key markets;
- Reduce emissions to tackle climate change, air quality and health improvement; and
- Improve the quality, accessibility and affordability of transport, to give people the choice of public transport and real alternatives to the car.

Active Travel

3.2.2 There are a number of key documents that set out the national policy in respect of active travel, the key ones being;

- Let's Get Scotland Walking, 2014⁵
- A long-term vision for Active Travel to 2030⁶; and
- Active Travel Task Force Report, 2018⁷

3.2.3 These documents set out the ambitions to promote walking & cycling as a community led solution that provides health benefits, attractive safe communities and increased economic activity and promotes active travel as part of people's everyday lives.

3.2.4 These documents also seek to reduce inequalities and to promote integration across travel modes with well connected links that aim to encourage sustainable local trips.

Designing Streets⁸ and the National Roads Development Guide⁹

3.2.5 Designing Streets and the National Roads Development Guide (NRDG) follow the same basic principles, whereby a user hierarchy to the design process is implemented with pedestrians

⁴ <https://www2.gov.scot/Resource/Doc/157751/0042649.pdf>

⁵ <https://www.gov.scot/publications/lets-scotland-walking-national-walking-strategy/>

⁶ <https://www.transport.gov.scot/media/33649/long-term-vision-for-active-travel-in-scotland-2030.pdf>

⁷ <https://www.transport.gov.scot/media/42284/active-travel-task-force-june-2018.pdf>

⁸ <https://www.gov.scot/binaries/content/documents/govscot/publications/publication/2010/03/designing-streets-policy-statement-scotland/documents/0096540-pdf/0096540-pdf/govscot%3Adocument>

⁹ <http://www.scotsnet.org.uk/documents/national-roads-development-guide.pdf>

being prioritised first. This means considering the needs of pedestrians first when designing any new road layout, as shown in Figure 3.1 extracted from the NRDG.

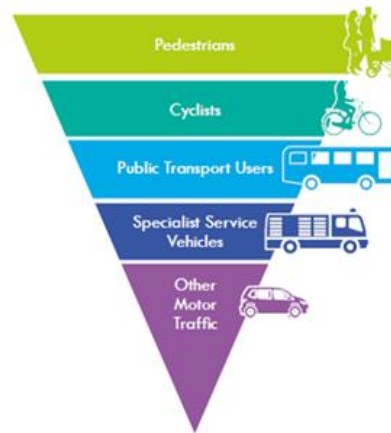


Figure 3.1 Road Hierarchy

Cycling by Design¹⁰

3.2.6 Cycling by Design was originally published in 1999 with revisions up until 2011. The purpose of the document was to specify how cycling can contribute to the national and local policy objectives of reducing emissions, tackling congestion and improving physical and mental health, while also aiding in accessibility and social inclusion objectives. It highlights measures to plan and attract more cyclists onto our road networks through design and network planning while also providing methods of appraisal.

Handbook for Cycle Friendly Design¹¹

3.2.7 Sustrans Design Manual, “Handbook for Cycle-Friendly Design” was published in 2014 and provides key principles for user friendly cycling design through illustrations and technical guidance relating to everything from design issues through to the management and maintenance of routes.

3.2.8 It aims to provide guidance which will readdress the imbalance on Scotland’s streets which has resulted in motorised vehicles becoming the dominant mode of transport in our urban environments.

3.2.9 References to this document will be made that will be considered when physical interventions and infrastructure changes are being proposed.

¹⁰ https://www.transport.gov.scot/media/14173/cycling_by_design_2010_rev_1_june_2011_.pdf

¹¹ https://www.sustrans.org.uk/sites/default/files/images/files/Route-Design-Resources/Sustrans_handbook_for_cycle-friendly_design_11_04_14.pdf

3.3 Regional and Local Policy

East Lothian Local Development Plan¹²

- 3.3.1 The Local Development Plan contains technical evidence on the effects of land use planning throughout East Lothian and takes account of future population projections and policy direction.

East Lothian Local Transport Strategy 2018 to 2024¹³

- 3.3.2 The East Lothian Local Transport Strategy 2018 to 2024 has been designed to support the Council's Plan to provide for "an even more prosperous, safe and sustainable East Lothian, with a dynamic and thriving economy, that enables our people and communities to flourish". The LTS focuses on enabling economic competitiveness and growth, by delivering reliable and efficient transport networks; reducing transport's emissions of carbon dioxide and other greenhouse gases through reducing the dependency on the cars. This will be achieved through a range of measures and will include encouraging people to switch to public transport, cycling or walking.
- 3.3.3 In association with the Local Transport Strategy, the Council has developed four associated plans and strategies to assist in the delivery of key themes under the strategy;
- The Active Travel Improvement Plan (to increase walking and cycling)
 - The Parking Management Strategy (to encourage modal shift and balance parking supply and demand).
 - The Road Asset Management Plan is to provide a suite of maintenance strategies
 - The Road Safety Plan (to encourage improved safety)

3.4 School Policy

Home to School Transport¹⁴

- 3.4.1 ELC's policy is to provide free transport for all East Lothian pupils who live more than two miles from their local primary, or secondary school. Children qualifying for free transport are provided with a season ticket for public transport routes, or when public transport is not available, then the Council will arrange transport, via a private transport company.

Curriculum for Excellence (CfE)¹⁵

- 3.4.2 With the rollout of CfE across Scotland there has been a renewed focus on health and wellbeing. Its importance is highlighted as one of the three areas of particular importance, along with literacy and numeracy, which accentuates the importance the Government has placed on healthy lifestyles for young people.

¹²

https://www.eastlothian.gov.uk/download/downloads/id/27791/local_development_plan_2018_adopted_270918.pdf

¹³ <https://eastlothianconsultations.co.uk/policy-partnerships/east-lothian-local-transport-strategy/>

¹⁴ https://www.eastlothian.gov.uk/info/210557/schools_and_learning/12038/home_to_school_transport

¹⁵ [https://education.gov.scot/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-\(building-from-the-statement-appendix-incl-btc1-5\)/What%20is%20Curriculum%20for%20Excellence?](https://education.gov.scot/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-(building-from-the-statement-appendix-incl-btc1-5)/What%20is%20Curriculum%20for%20Excellence?)

- 3.4.3 The flexibility that CfE offers should help to promote active travel, embedding it into the lifestyles of young people which will hopefully perpetuate throughout their lives.
- 3.4.4 For CfE to effectively encourage active travel then it is important that schools embed active travel within daily habits for pupils and staff. This report is the first step to producing an action plan for your local area to promote this policy.

A More Active Scotland - building a legacy from the Commonwealth Games¹⁶

- 3.4.5 Inspired by the success of the 2014 Commonwealth Games in Glasgow the Government launched a 10-year physical activity implementation plan.
- 3.4.6 Within this plan, schools, and in particular school journeys, were seen as an area which could be positively impacted by this goal.

Common School Day

- 3.4.7 East Lothian Council is committed to reducing the poverty related attainment gap, raising the attainment and achievement of their children and young people and improve inclusion, wellbeing and equality. In order to support the delivery of this commitment, it has been agreed that from June 2019 schools in East Lothian will have a common school day, starting and ending at the same times.

¹⁶ <https://www.gov.scot/publications/more-active-scotland-building-legacy-commonwealth-games/>

4 Best Practice Examples

4.1 Introduction

4.1.1 It should be acknowledged that every single school is different in respect of location, size, scale, access, road network and infrastructure and therefore it is often difficult to find a 'one size fits all' mentality to potential road safety solutions. The following show examples of initiatives or technology that have been used in other areas of the UK.

4.2 Research Studies

4.2.1 The following recent research studies have been reviewed and identify useful initiatives and measures, including case studies, relevant to this study:

- A Guide to Improving School Transport Safety, Transport Research Laboratory (TRL), (2010)¹⁷;
- Go Safe on Scotland's Roads: Road Safety Framework to 2020, Scottish Government (2009)¹⁸;
- Scottish Government Tackling the School Run Research Study, Scottish Government (2017)¹⁹; and
- Evaluation of Road Safety Scotland's Learning Resources, Transport Scotland (2017)²⁰.

4.3 Case Studies

Park and Stride

Location:	Castehill Primary School, Cupar
Type:	Park and Stride using local supermarket car park (Tesco)
Aim:	To help improve the safety of pupils going to and from Castlehill Primary School which has a problem with drivers who park irresponsibly.
More Info:	https://www.fifetoday.co.uk/education/tesco-delivers-park-and-stride-initiative-1-4242672/amp
Relevance to Study:	One, or more, park and stride site(s) could reduce the number of vehicles driving and parking around the schools at opening and closing times. It would encourage pupils to walk more and remove some of the safety concerns associated with cars parking around the schools.
Summary Results:	The Police are monitoring the areas around the school for irresponsible parking and sending out letters to drivers who continue to ignore designated bus lanes, zig-zag lines and double yellow lines.”

¹⁷ <https://trl.co.uk/sites/default/files/PPR544.pdf>

¹⁸ <https://www.gov.scot/publications/go-safe-scotlands-roads-everyones-responsibility-scotlands-road-safety-framework/pages/14/>

¹⁹ <https://www.gov.scot/binaries/content/documents/govscot/publications/research-publication/2017/01/tackling-school-run-research-study/documents/00513039-pdf/00513039-pdf/govscot%3Adocument>

²⁰ <https://www.transport.gov.scot/media/39512/evaluationofrssllearningresourcesjuly2017.pdf>

I-Bike (Sustrans)

Location:	160+ schools
Type:	Curriculum (activities and competitions)
Aim:	The overarching aim is to increase the number of pupils cycling to school and in leisure time.
More Info:	https://www.sustrans.org.uk/scotland/i-bike
Relevance to Study:	Potentially encourage more girls to cycle
Summary Results:	Increased regular cycling levels to I-Bike schools by both female and male pupils by 2.6% and 3.7% respectively
	Source: Scottish Government Tackling the School Run Research Study

- 4.3.1 I-Bike is an intensive pro-cycling curriculum linked programme to schools in Scotland which takes the form of a variety of activities and competitions throughout the academic year. In 2016 the programme has expanded and in excess of 160 schools are enrolled, covering 13 local authority areas. Specific aims are to counter the decline in cycling levels as pupils move from primary to secondary school and to recognise and support the different needs of boys and girls.

School Streets – East Lothian / Edinburgh

Location:	Haddington / Dunbar / City of Edinburgh
Type:	Restricted Streets (TROs)
Aim:	Transform roads outside schools so they can only be accessed by residents, pedestrians and cyclists during certain pick-up and drop-off times
More Info:	http://www.edinburgh.gov.uk/streetsahead/info/35/school_travel/87/school_streets
Relevance to Study:	Could increase the proportion of children using active travel and decrease the number of cars used for the school journey
Summary Results:	An average speed reduction of 1.2mph across School Streets and surrounding streets
	An indication of an increase in the number of children walking to school by 3% alongside a 6% reduction in the number of children being driven and 2% increase in Park and Stride, although cycling reported a 1% drop
	Source: Scottish Government Tackling the School Run Research Study

- 4.3.2 School Streets is an initiative developed in Italy and brought to cities such as Edinburgh to transform roads outside schools so they can only be accessed by pedestrians and cyclists during certain pick-up and drop-off times.

- 4.3.3 Its aim is to tackle the issues of congestion and improve air quality, while making it easier and safer for active travel to be used. It is a simple strategy to prevent private car travel around schools during particular times, unless under special circumstances.
- 4.3.4 This type of measure would be challenging to implement in North Berwick because many of the roads around the schools carry wider strategic traffic (not just school related) which have limited options in terms of alternative routes(s). However, a wider traffic modelling / management study could examine the impacts / benefits of any changes. Enforcement would be a challenge and it may be that physical measures are more appropriate. For example, blocking Lochbridge Road as a through route for private motor vehicles while retaining residential access and bus services. Measures which disadvantage bus users should be avoided.

Encouraging Active Travel Amongst Secondary School Girls

Location:	Smithycroft Secondary School (Glasgow)
Type:	Traffic Regulation Order (including temporary for 18 months as a trial)
Aim:	The aim of this project is to engage with groups of secondary school girls who are not finding other forms of physical activity appealing. It is hoped that they would increase their own physical activity and self-confidence as well as encouraging others to follow in their footsteps.
More Info:	https://www.livingstreets.org.uk/media/3886/travel-to-school-case-study-final-for-screen-1.pdf
Relevance to Study:	It is identified that while cycling to Dunbar Primary is higher amongst boys than girls and that measures to encourage the latter to cycle might continue into later life.
Summary Results:	Monitoring of the project was carried out via pre-course questionnaires and formal final evaluations, the Youth Achievement Award requiring candidates to collect evidence themselves and self-assess with a tailored tool. Travel patterns themselves were not specifically monitored due to the lack of appropriate software for secondary schools – but in a further iteration of the project, this could be carried out using mobile phone apps or activity trackers.

HomeRun - Aylesbury

Location:	Aylesbury
Type:	Information (App)
Aim:	HomeRun provides a live and measurable data-set and allows for easy consultations and polling.
More Info:	https://www.homerun-app.com/
Relevance to Study:	Potential method to capture data and identify future interventions which could be introduced as part of new developments.
Summary Results:	HomeRun identified a simple obstacle that was rendering a million-pound investment in transport infrastructure in Aylesbury ineffective. Source: https://www.homerun-app.com/transport-infra

- 4.3.5 HomeRun is an app that helps to deliver the most effective solutions to improve journeys. The app collects journey information from users which can help to inform decision-making, at the local level. The app has already been used to accelerate the move to safe independent travel, develop multi-modal journey sharing information and create automated travel plans with real journey data.

5 Desktop Review and Site Visit

5.1 Influencing Factors

- 5.1.1 Compared to other towns in East Lothian, North Berwick has a higher dependence on the private car associated with the school run. There are a number of factors for this, including infrastructure and policy issues but there are also geographic issues such as the hilly terrain from the old town to the schools, the large catchment areas for both schools and onward journeys to employment.
- 5.1.2 In addition to this, there are usually differing patterns of behaviour in the morning school peak and the afternoon. In the morning, there is a higher number of trips made that are part of a longer journey and this often creates an issue in respect of the value of time, whereby time constraints often encourage poor decision making, or inappropriate short-term parking habits and behaviours which can often be copied by other drivers.
- 5.1.3 There is a breakfast club and an after-school club at Law Primary, and this operates from 0730 hrs to school start and from school finish to 18.00 hours. This will help to spread the trips to the school as parents arrive at very different times during the morning and in the evening and not just in condensed peaks.

Census Data

- 5.1.4 A review of 2011 Census data, using the Datashine website²¹, has been undertaken to understand key demographic characteristics impacting on the study area. Outputs are included in Appendix C, with the key findings as shown in Table 5.1, below.

²¹ <http://scotland.datashine.org.uk>

Table 5.1 Census Data Overview

Data	Sub Categories	Study Area Characteristics
Population Basics	Population density Density (number of persons per hectare)	The highest population density is in the 'old town', in the area surrounding High Street.
	Families with dependent children All dependent children in households	The location with the most school age children is concentrated immediately north of the High School.
Travel to Work	Method of travel to work or study Bicycle	The locations where most pupils are likely to cycle to school are beyond the areas immediately surrounding the school. The location where most pupils are likely to walk to school are largely dictated by proximity. Those living closest to the school walk and further away they tend to cycle.
	Method of travel to work or study On foot	This may seem obvious but is not always the case; sometime pupils living close by have a preference for cycling due to very good infrastructure provision.

Cultural Heritage Designations

5.1.5 A review of land designations has been undertaken with the outputs included in Appendix D, with the key considerations as follows:

- The old town of North Berwick, to the north of both schools, is a Conservation Area; and
- Ancient Woodland can be found around North Berwick Law to the south-east of Law Primary.

5.1.6 Note that Scottish Natural Heritage confirmed on 13 January 2015 that the area of land extending to 5.22 hectares or thereby at North Berwick Law, in the East Lothian Council area is no longer part of a site of special scientific interest (SSSI) and has notified the relevant interested parties²².

East Lothian on the Move



5.1.7 During the *East Lothian on the Move Study*, the following key issues were identified for North Berwick:

- There is generally a good network of walking routes exists with some small gaps to be filled and better signage required to promote them;
- Lowering of speed limits at entrances/exits to villages to improve pedestrian environment;

²² <https://www.tellmescotland.gov.uk/notices/scottish-natural-heritage/general/0000093173>

- Focus on providing a network of walking routes to schools, which can also be used by the wider population, should be provided; these could potentially be provided as part of new developments;
- More cycle training for children at school with more 20 mph speed limits in town and villages to make it safer for everyone to cycle; and
- A need for safer cycle routes which are segregated from other traffic, or cycle lanes at least.

5.1.8 The following physical interventions were identified:

- Widen Law Road footways to make it more pedestrian friendly; and
- Introduce controlled crossing on Haddington Road, near Sports Centre.

5.1.9 More information can be found here:

- https://eastlothianconsultations.co.uk/policy-partnerships/east-lothian-on-the-move-1/consult_view/; and
- https://eastlothianconsultations.co.uk/policy-partnerships/east-lothian-on-the-move-1/supporting_documents/N%20Berwick%20Report_v1.2.pdf

Strava Data

5.1.10 Strava is a social fitness network where users track their cycling and running using GPS. A review of Strava Data, shown in Figure 5.1, shows the most well used routes for active travel. The data is limited to Strava users and covers all modes of active travel.



Figure 5.1 Strava Movements (All Active Travel Modes)

- 5.1.11 In close proximity to the two schools there are concentrations of active travel trips around Berwick Law and also in high numbers along the coast and then well spread between main arterial routes.
- 5.1.12 This is reflective of the size and scale of the town and proves that a sustainable network is available to connect between places on foot and bike with a good level of porosity.

5.2 Demographics

- 5.2.1 North Berwick is a medium sized town of around 7,000 residents. The town is within commuting distance of Edinburgh with a population predominantly of higher income households and high levels of private housing. The town has an ageing population with 57.3% of the town over the age of 45. Due to the affluence and the commuter feel of the town many residents own two, or more cars with over 1 in 5 commuting over 10km to work.²³ The demographics of North Berwick accentuate many of the issues which are witnessed within the town and provide challenges which are not unique within Scotland but often exaggerated within the confines of a small town.
- 5.2.2 East Lothian's population is projected to grow by one percent, per year over the next 19 years. Significant growth is projected across all age groups, particularly in the 0-16 year group which is projected to grow by almost a third. As a consequence of this planned growth, five out of six secondary schools are being expanded and a new secondary school is being built within the Musselburgh area²⁴.
- 5.2.3 This population growth provides an opportunity to improve existing transport links and create new links, while diluting some of the demographic issues. North Berwick is not exempt from this phenomenon with further new developments planned, especially surrounding the schools (see Figure 5.2). With the expansion of the schools themselves there are opportunities to improve the allocation of land for active travel and promote such measures through policy, physical infrastructure and actions.

²³ <https://www.usp.scot/Town?mainTownName=North+Berwick>

²⁴

https://eastlothianconsultations.co.uk/education/commonsecondaryschool/day/supporting_documents/CSD%20Consultation%20Document%20FINAL%20%20PUBLIC.pdf

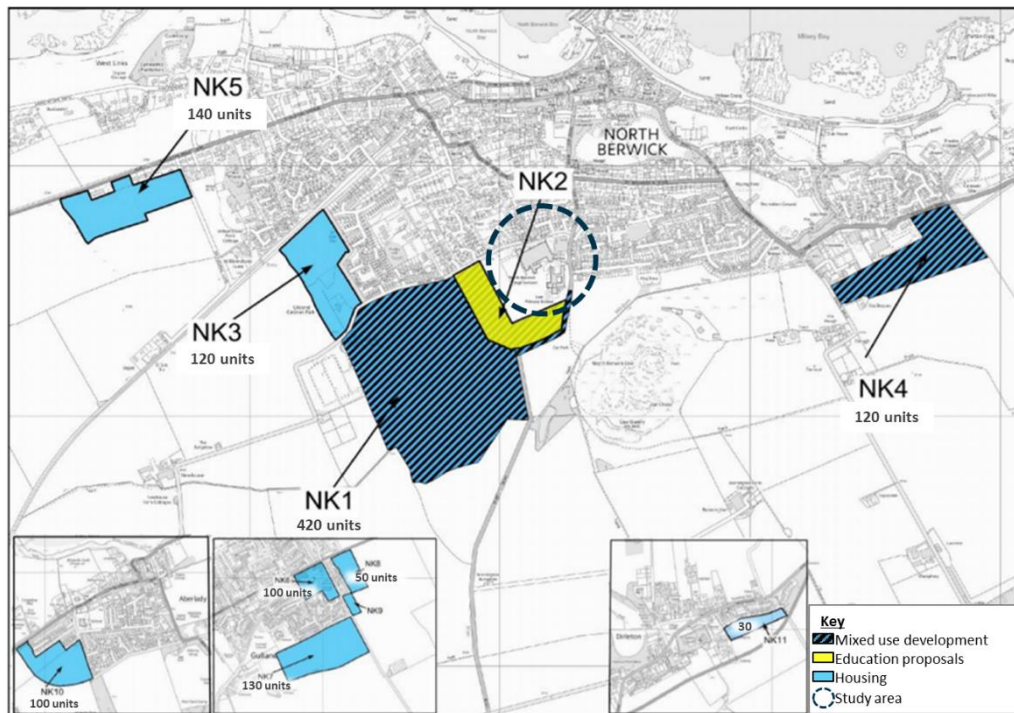


Figure 5.2 North Berwick Development Sites

5.2.4 Figure 5.2 demonstrates that the schools in the local area will become landlocked but also have expansion plans themselves due to the future housing commitments indicates the progress of these developments.

Table 5.2 Development Progress as of May 2019

Code	Development Name	Nom. Units	Progress
NK1	Mains Farm	~420	Under construction – 305 complete
NK2	North Berwick High School and Law Primary School Expansion Land	N/A	Law Primary completed. NBHS plans submitted. Plans for nursery to relocate to site south west of Law Primary.
NK3	Gilsland	~120	Under construction – 102 complete
NK4	Land at Tantallon Road	~125	Under construction – 32 complete
NK5	Land at Ferrygate Farm	~140	Under construction – 108 complete
NK6	Former Fire Training School	~125	Under construction – 38 complete
NK7	Saltcoates	~150	Not Started
NK8	Fenton Gait East	~48	Under construction – 12 complete
NK9	Fenton Gait South	~16	Not yet consented
NK10	Aberlady West	~107	Under construction
NK11	Castlemains	~30	Not yet consented

5.2.5 North Berwick High School currently has an enrolment of 900 pupils but this is expected to rise to 1200 in the next 5 years and Law Primary School currently has an enrolment of 784 and a further 140 nursery pupils split 50:50 between the morning and afternoon. The nursery also has plans to potentially move within the ground of Law Primary which will create additional movements across all modes in the area.

5.2.6 Both the High School and Law Primary have safeguarded land for expansion to accommodate these developments and through these planned expansions action must be taken to encourage more facilities to encourage active travel, which should be possible due to the close proximity of circa. 800 new homes to both schools.

5.3 Current Initiatives

North Berwick High School

5.3.1 North Berwick High School focusses on the prevention of dangerous driving through its Young Drivers' Safety Course but does not currently have an Active Travel Safety Course and its Bike Fix and Bike Safety courses are no longer running.

Law Primary School

5.3.2 Law Primary School has a more dynamic approach to active travel with the following initiatives:

- A newsletter which highlights safety concerns;
- Bikeability, which is undertaken by a team of volunteers to a level 6 and 7;
- HeadWay, to encourage helmet use;
- Be Safe Be Seen;
- Ziggy Booklets;
- Cycle training programme (roll out June this year); and
- Junior Road Safety Officers.

Behaviour Change

5.3.3 The *Scottish Government Tackling the School Run Research Study*²⁵ identified there are varied and key requirements to the success of school travel-based initiatives and key factors include:

- School level engagement and interest, mirrored by support from the local authority;
- Engaging pupils in the initiatives, both peer-to-peer and in terms of “taking messages home” around the opportunity and benefits of active travel within the school setting;
- Infrastructure, training and behaviour change happening in tandem, or at least the building blocks being in place to facilitate active and sustainable transport; and
- Capacity and resource, with an emphasis on a dedicated team or officer, to support the school to enable active and sustainable travel and with greater involvement from Education departments.

Success Factors and Challenges

- School Level Engagement
- Incentive Competition and Reward
- Flexibility of Initiatives
- Pupil Acceptance and Engagement
- Peer to Peer Engagement
- Inter-Initiative Linkages
- Linking to the Curriculum
- Communication with School Community
- Education Involvement
- Capacity and Sustained Resource
- Funding

Cultural and Social Attitudes

- School Culture**
- Active Schools
 - Travel Champions
 - Peer Involvement and Communication
- Social Attitudes**
- Normalising Active Travel Choices
 - Parental Travel Behaviour
 - Perceptions of Safety
 - Health and Well-Being
 - Socialising with Friends
 - Awareness of Environmental Impacts
 - Gender

5.4 Land Ownership

5.4.1 Figure 5.3 highlights the areas which have been identified as requiring clarification on land ownership.

²⁵ <https://www.gov.scot/binaries/content/documents/govscot/publications/research-publication/2017/01/tackling-school-run-research-study/documents/00513039-pdf/00513039-pdf/govscot%3Adocument>

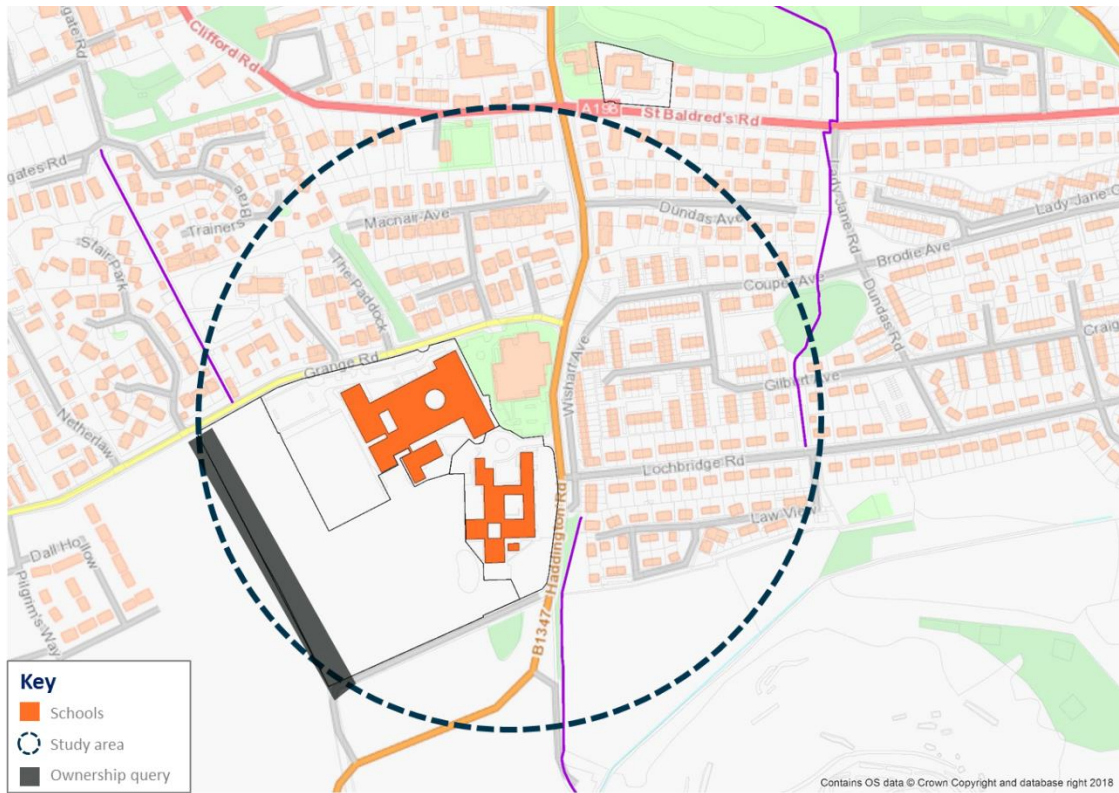


Figure 5.3 Land Ownership Query

- 5.4.2 It appears that the strip of land shown above (in dark grey) is owned by North Berwick Trust and therefore this would require their support if there were any plans to promote this as a new connection.
- 5.4.3 Any proposal to strengthen connections for walking & cycling would be encouraged but can only be planned where the ownership of land is not a barrier.

6 Consultation

6.1 Introduction

6.1.1 A number of emerging issues have been identified through:

- Discussion with ELC Officers;
- Site visits and direct observations;
- Engagement with school staff (face-to-face meeting on Thursday 24th January);
- Engagement with key stakeholders - workshop on Tuesday 5th February;
- Engagement with wider public on Thursday 28th February at Law Primary;
- Interviewer surveys of parents/guardians picking up and dropping pupils off; and
- Online feedback form which was live from 19/02/2019 until 10/03/2019.

6.2 Discussions with Schools and Key Stakeholders

6.2.1 Discussions were held on the 24th January with Law Primary and separately with North Berwick High School on the same day, these discussions were focussed on issues relating to school travel and surrounding transport infrastructure.

6.2.2 A further workshop with key stakeholders was held on the 5th February and the ELC project team were in attendance. Invites were sent to:

- East Lothian Council Officers;
- School representatives (teachers);
- Parent Councils;
- Community Councils;
- Bikeability
- Cycleforth;
- School Crossing Patrol Supervisor; and
- Sustrans.

Table 6.1 Issues Identified by Schools

	Law Primary	North Berwick High School
Dropping off on double yellow lines	✓	✓
The crossing point at Law View	✓	✓
Parking in Leisure Centre car park	✓	✓
Road markings and crossing within Leisure Centre car park	✓	
Dog owners not picking up dog mess	✓	✓
The double crossing at Wishart Avenue	✓	✓
Lack of footpath provision at hole in the wall	✓	✓
Bus stop location and footpath provision at bus stop (Law Road)	✓	✓
Pupils crossing before the crossing guide on Law Road	✓	✓
Route from Aldi through Lochbridge Road	✓	✓
Trainers Brae acts as a barrier as it is a cul-de-sac	✓	
The effectiveness of Grange Road traffic calming	✓	✓
Law Road poor footpath provision at points	✓	✓
Poor provision and knowledge of cycle routes from wider area and	✓	✓
Construction traffic during school pick up and drop off times.	✓	✓
Senior pupils display dangerous driving		✓
Poor visibility at historic entrance/exits of school		✓

Opportunities and Constraints

- 6.2.3 Through site visits, direct observations and discussions with local stakeholders and groups several opportunities and constraints have been identified. There are a variety of infrastructure and policy issues which will feed into the final report. Figure 6.1 maps some of the infrastructure issues that have been identified.

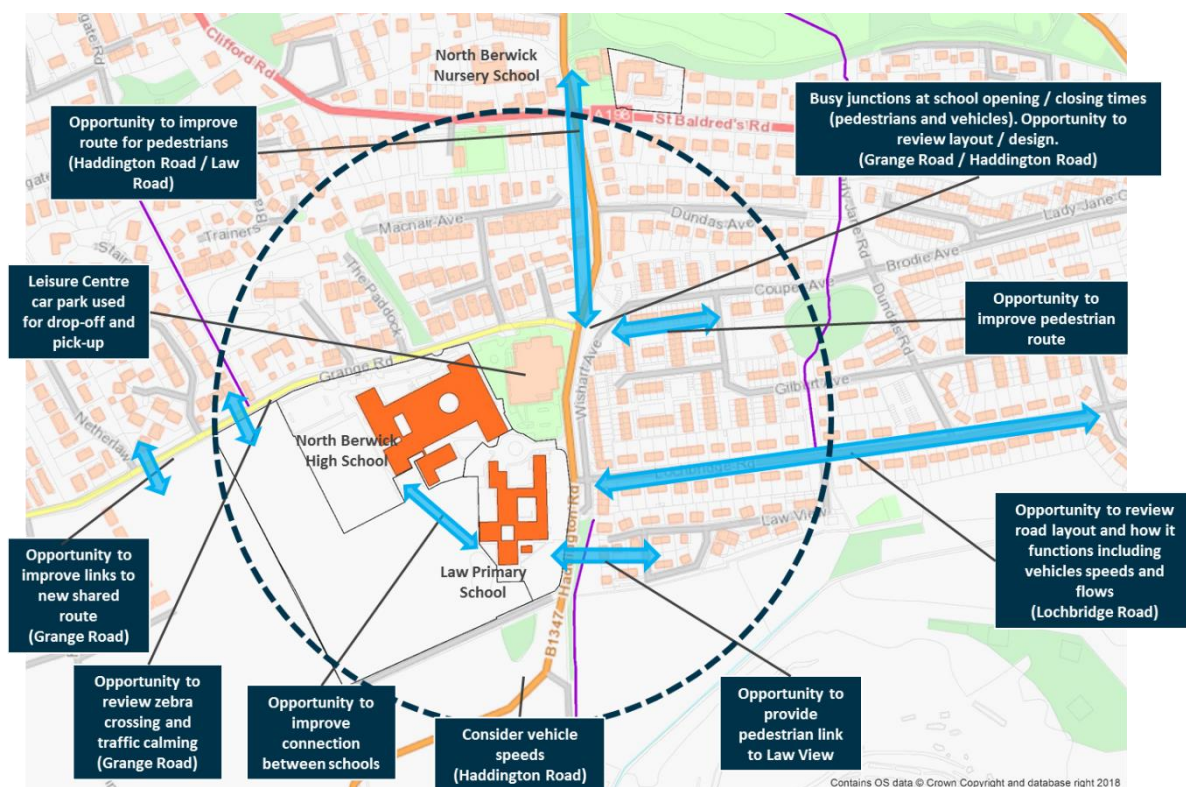


Figure 6.1 Mapped Opportunities and Constraints

6.2.4 The following opportunities have emerged at this stage:

- Improve connections from existing housing to the new active travel corridor on Grange Road that was created for the Walkers housing development;
- Create improved walking routes to schools to align with the key current and future housing areas and promote them;
- Review the available width of the zebra crossing and related traffic calming on Grange Road;
- Review the layout of the junction of Grange Road and Haddington Road to improve pedestrian safety and crossing opportunities;
- Improve permeability between the campuses and Leisure Centre;
- Create improved active travel routes and safer crossing facilities from the Law View area;
- Review the use of the Leisure Centre for pick-up / drop-off by parents;
- Explore the barriers to active travel and identify how parents can be discouraged from driving their children to / from school;
- Promote the benefits of active travel;
- Review the footway along Haddington Road in relation to perceived danger of children falling / entering onto the road (downhill gradient, relatively high vehicle speeds and slippery when wet / icy);

- Maintain provision for bus turning manoeuvres at Lochbridge Road / Haddington Road junction; and
- More “Park & Stride” sites.

6.3 Public Event

6.3.1 A public event was held on 28th February at Law Primary between 15:00-19:00 hours. Invites were sent to a range of stakeholders contained within a developed contact list and disseminated by the schools to parents via their usual methods. This included:

- Parents of school pupils;
- Parent Councils;
- Area Partnerships;
- Community Councils;
- Sustrans; and
- Local residents and groups.

Feedback

6.3.2 Concerns, ideas and issues were recorded in a variety of ways, including through annotations on a map of the area, one example of these maps can be seen below in Figure 6.2.

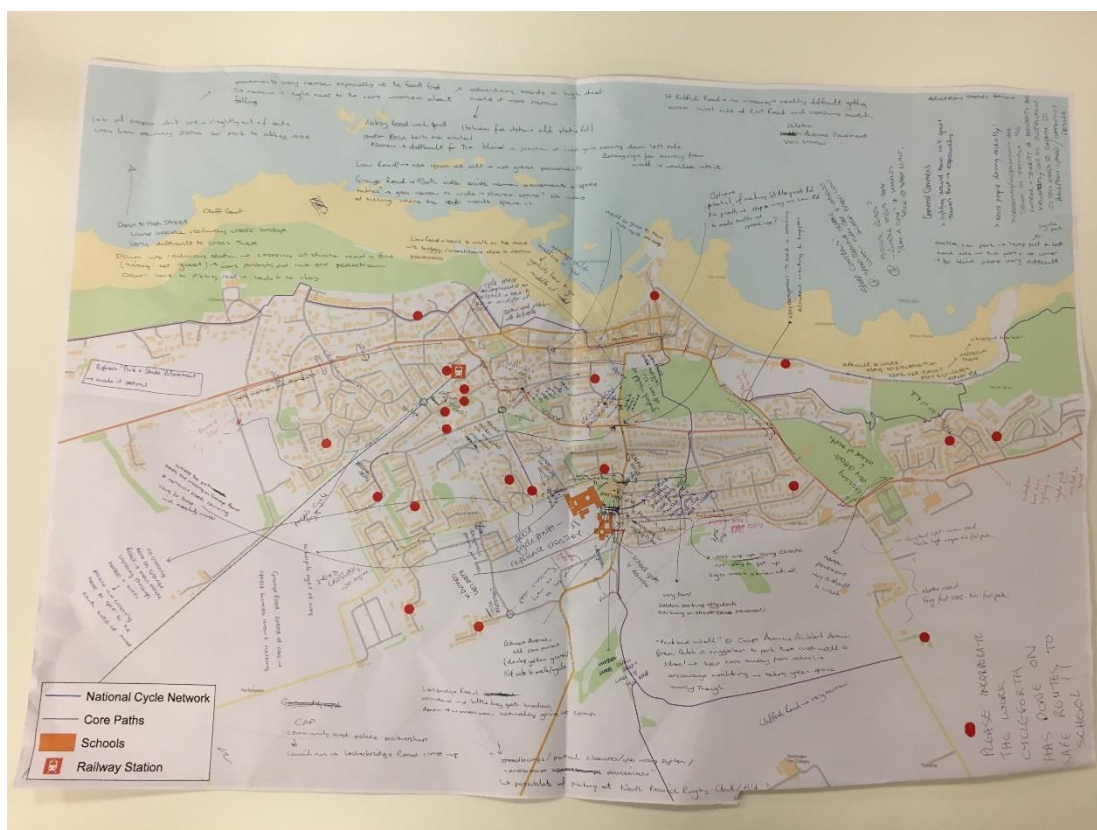


Figure 6.2 Annotated Map from Public Engagement Event

6.3.3 All the feedback from the public event, along with feedback from the other meetings and discussions have been recorded and a full list can be found in Appendix E.

6.4 Online Feedback Form

6.4.1 An online feedback form (survey) was developed to allow parents and local residents, including those who could not attend the engagement event, to submit their views. This survey also asked for home postcode data which made it possible to identify geographical travel patterns and potential actions by location. With the help of the schools, the survey was distributed to all parents using their usual communication methods.

Respondent Details

6.4.2 An online feedback form (Survey Monkey) was live from 19/02/2019 until the 10/03/2019.

6.4.3 A total of 210 responses were received, of which:

- 117 were parents of primary school pupil(s);
- 18 were parents of a secondary school pupil(s);
- 36 were parents of primary and secondary school pupil(s); and
- 39 were not parents of pupils at school.

6.4.4 Full results of the online feedback form, including postcode plots, are included in Appendix F with the following key considerations identified and summarised below:

- More children use active travel on the way home from school than on the way to school and this demonstrates that active travel is a potential option for some children who are driven to school. It suggests that the reasons for children being dropped off at school are not related to road safety and could just be convenience or combined trips;
- Fewer pupils are driven to secondary school than primary. Measures to improve road safety could encourage parents to allow older primary school pupils to walk to school (distance permitting) and cut down on traffic around schools;
- Many parents state their preference is for children to use active travel modes to travel to school. Even if the barriers to active travel were removed, there is no certainty this would be realised but it does seem to demonstrate that parents understand that active travel is beneficial / preferred;
- Proximity to the school appears to be a key factor in uptake of active travel. However, there are areas where some pupils use active travel and others are driven, suggesting real or perceived barriers / concerns or behavioural choices which justify the use of the car. The vast majority of parents also wish to use active travel but due to the real / perceived issues many still choose to drive (weather can influence decision making);
- More safe crossing facilities and measures to reduce vehicle speeds were most commonly identified by parents as the measures most likely to encourage active travel;
- Law Road, Haddington Road and Grange Road were most commonly cited as the locations requiring better crossing facilities;
- Beyond more safe crossing locations, respondents identified a number of measures to improve road safety and encourage active travel. These reflect the local issues with some typical of those found at many other schools. The suggestions will be incorporated into the actions considered as part of the study.

6.5 Hands Up Survey

- 6.5.1 To produce a baseline of travel patterns an unannounced 'Hands Up' survey was rolled out across both schools in March 2019. This was compared against previous 'official / pre-planned' surveys which takes place every September. This assisted in identifying any changes in behaviour (or seasonality) and provides accurate results which can then be used to demonstrate if measures which are initiated improve active travelling in the area, over time.

Law Primary

- 6.5.2 Figure 6.3 shows that in the 2019 version of the survey, the number of pupils walking to school is higher and those being driven to school much lower. 'Park and stride' was not included as an option in the 2019 version as it was unclear if pupils who travelled to school using this method travelled the majority of the way via car and then walked from the Leisure Centre car park, for example.
- 6.5.3 It is worth noting that the number of pupils cycling and walking is greater in the 2019 study version of the study, suggesting use of this mode may have increased since the 2017 survey. There is also a far higher percentage that are driven suggesting that those that selected 'Park and Stride' in the 2017 survey were driven the vast majority of the way.

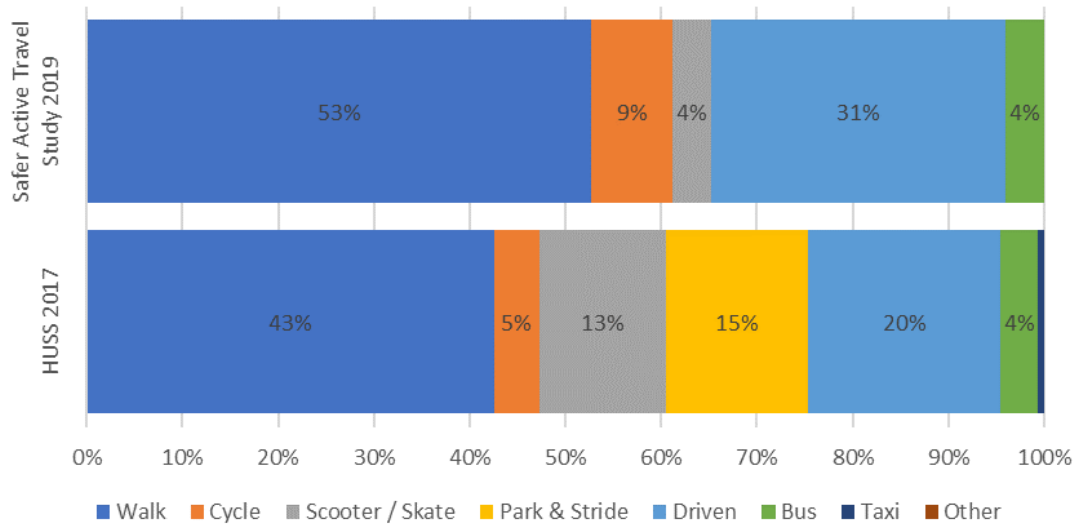


Figure 6.3 Comparison between HUSS 2017 and 2019 for Law Primary

North Berwick High School

6.5.4 Figure 6.4 shows the number of pupils being driven to school were higher in the 2019 version, suggesting an increase since 2017 or a seasonal variation. The number of pupils walking was also much lower in 2019, with similar numbers travelling by bus or cycling.

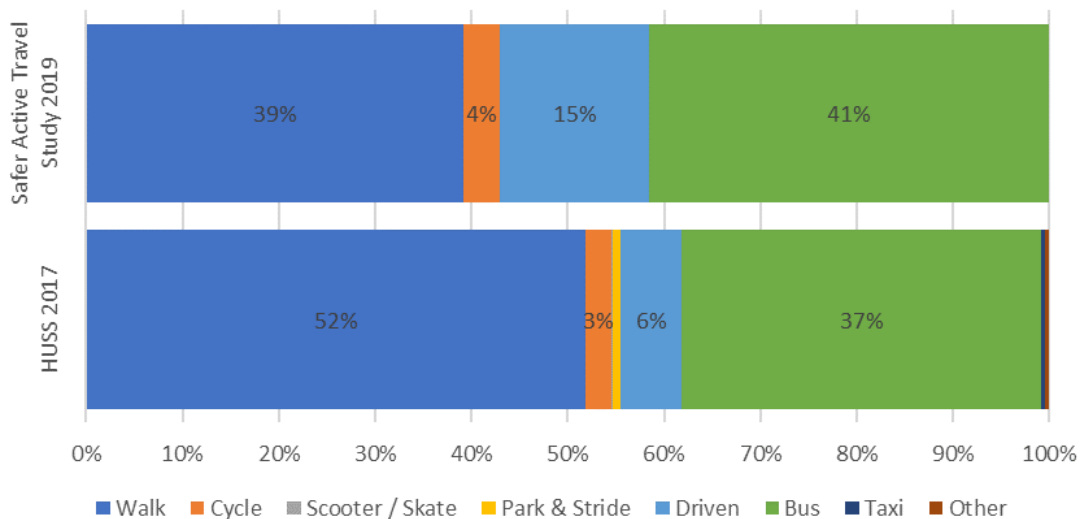


Figure 6.4 Comparison between HUSS 2017 and 2019 for North Berwick High School

6.6 Interviewer Surveys

6.6.1 PBA staff also undertook short face-to-face surveys during school pick-up and drop-off times at both campuses. The aim was to explore the reasons for travel choice, understand why some were not travelling using active travel and promote the benefits / opportunities to / for active travel.

6.6.2 In total, around 70 discussions took place across the morning and afternoon with a summary of the key issues identified by parents noted as follows:

- Grange Road shared path was busy during peaks but was an improvement to pre footpath introduction as it was segregated from vehicles;
- More opportunities to move onto the shared footway from estates to the north of Grange Road were required;
- Irresponsible driving and parking in the Leisure Centre car park was a recurring issue;
- Speeding along the roads around the schools and the pollution emitted from these vehicles;
- Some felt that Grange Road cycle path was a good start, but further efforts were required as currently you would need to cycle past the High School to get to Law Primary on the main road;
- The weather was a big influencer in respect of deciding to drive;
- The poor provision of bins along school routes was cited as an issue;
- The amount of dog mess on the footways put parents with small children off walking and cycling;
- Construction traffic during school pick up and drop off was too high to and from the new housing estates;
- Those that drove (due to the distance) would be inclined to make use of 'Park and Stride' sites if provided;
- The footpaths surrounding the schools were too narrow for the volume of pedestrians (especially on exit from school when condensed activity takes place); and
- Pupil behaviour at the crossing at Grange Road was felt to hinder road safety.

6.7 Other Feedback and Wider Considerations

6.7.1 On top of the feedback received through the above channels, additional views and documents were provided to PBA and these have been considered when identifying potential actions. Where they relate to locations outwith the study area it has been incorporated into Appendix E. It can be summarised as:

Cycleforth

6.7.2 Cycleforth are a small body set up to try and improve cycling and walking facilities in North Berwick who have already produced a number of useful documents / tools which have been provided:

- An interactive map²⁶ which includes specific interventions which would improve the walking/cycling environment through a proposed shared cycle/footway. Some of these have been incorporated into this study, others fall outwith the defined study area and are included the full list of issues within Appendix E. An issue emphasised within this map is

²⁶ https://www.scribblemaps.com/maps/view/Map_of_pedestriancycle_routes_proposed/SafeRoutes2SchoolNB

the integration of the new housing developments which currently feel car dominated and so the proposed route attempts to link these new developments into the route;

- A video cycle-through of the western portion of the interactive map above was used to clarify these issues;
- A PowerPoint presentation²⁷ which identified interventions to the east of the school and a photo library of the section of the proposed cycle/footpath to the east of the schools in the interactive map; and
- Proposals to the 'On the Move' subgroup of the NB Coastal Ward Area Partnership (February 2016).

Law Primary Parent Council

6.7.3 Law Primary's Parent Council provided the following:

- An annotated map with suggestion to provide a safer walking a cycling route to both schools which has been built upon with many of the issues incorporated into Cycleforth's interactive map;
- Outputs of a "Route to School" survey concerned with road safety (October 2018); and
- Law Primary School Parent Council & Junior Road Safety Officers (JRSO), Outputs of Survey on "Route to School" road safety concerns, April 2011.



Figure 6.5 Law Primary Parent Council Map

²⁷ <https://www.dropbox.com/s/7wikd8mbt78857q/safer-routes-nb-east.pptx?dl=0>

6.8 Summary

6.8.1 An extensive consultation exercise has been undertaken to inform the study, as summarised in Figure 6.6

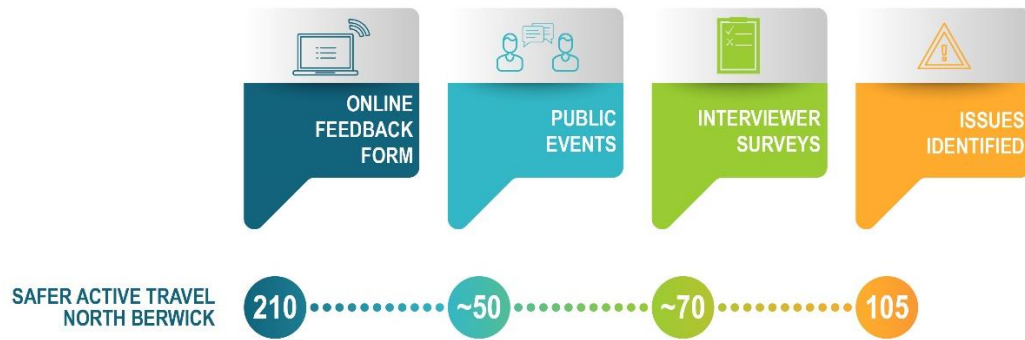


Figure 6.6 Summary of Consultation Feedback

7 Traffic Data

7.1 Introduction

7.1.1 East Lothian Council has undertaken an extensive traffic data collection exercise at key junctions and the results have been analysed to inform this study.

7.1.2 From this, the following has been provided

- Junction Turning Counts to provide traffic data to populate local junction models (Thursday the 13th December and Saturday the 15th December 2018). These also provide survey footage which will provide a visual record of pedestrian movements and evidence of potential risks / issues or conflicts.

7.1.3 Figure 7.1, below, presents an overview of the data collection sites.

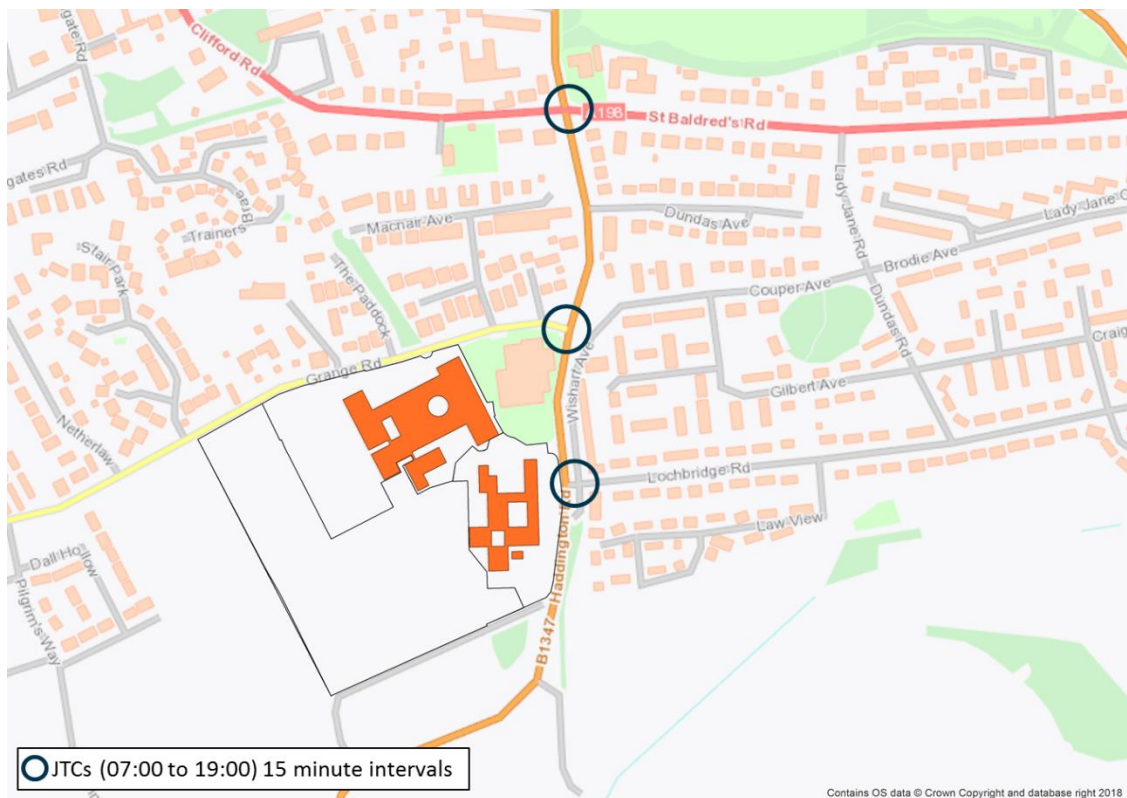


Figure 7.1 Data Collection Overview

7.2 Law Road / A198

7.2.1 Table 7.1 displays the vehicles movements at Law Road / A198 junction and shows Law Road to the north (where the road and footway are more constrained) is less heavily trafficked.

Table 7.1 Junction Movements on Law Road / A198

	To A	To B	To C	To D	Total
From:	AM Peak (08:00 to 09:00)				
A - Law Road	-	7	49	2	58
B - (East) A198 St Baldreds Road	22	-	37	74	133
C - B1347 Law Road	105	41	-	69	215
D - A198 St Baldreds Road	11	77	119	-	207
Total	138	125	205	145	-
From:	PM Peak (16:00 to 17:00)				
A - Law Road	-	38	67	5	110
B - (East) A198 St Baldreds Road	24	-	35	116	175
C - B1347 Law Road	69	30	-	92	191
D - A198 St Baldreds Road	5	114	113	-	232
Total	98	182	215	213	-

7.3 Grange Road / Haddington Road / Law Road

7.3.1 Table 7.2 displays the vehicle movements at Grange Road / Haddington Road junction.

Table 7.2 Junction Movements on Grange Road / Haddington Road / Law Road

	To A	To B	To C	Total
From:	AM Peak (08:00 to 09:00)			
A - B1347 Law Road	-	73	122	195
B - B1347 Haddington Road	80	-	131	211
C - Grange Road	129	54	-	183
Total	209	127	253	-
From:	PM Peak (16:00 to 17:00)			
A - B1347 Law Road	-	101	116	217
B - B1347 Haddington Road	81	1	62	144
C - Grange Road	102	84	-	186
Total	183	186	178	-

7.3.2 Table 7.3 presents an overview of vehicle speeds on Grange Road which is a 20mph mandatory speed limit when flashing lights show at school opening and closing times and 30mph at all other times. The data shows that:

- At least 80% of vehicles travel over the 20mph in both directions; and

- The 85th percentile speed is 28.5mph eastbound and 28.3mph westbound.

Table 7.3 Overview of Daily Traffic Flows on Grange Road

	No. Vehicles (Weekly)			
	Eastbound	Westbound	Eastbound	Westbound
0-20	666	549	20%	16%
21-35	2,608	2,786	79%	83%
36-50	28	33	1%	1%
51-100	2	1	0%	0%
Mean Speed			24.2	24.7
85thile Speed			28.5	28.3

7.3.3 Figure 7.2 presents the breakdown of vehicle speeds on Grange Road in more detail and shows that:

- The greatest proportion of vehicles travel between 20mph and 30mph; and
- Vehicle speeds are generally higher during the weekend.

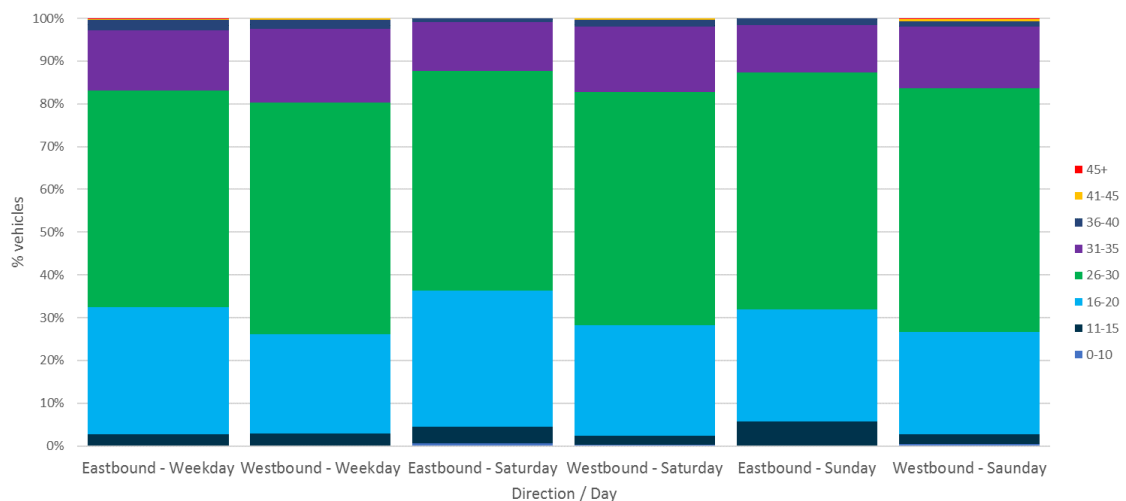


Figure 7.2 Vehicle Speeds on Grange Road

7.3.4 A temporary 20mph speed limit is in place at school opening and closing times but the ATC data only disaggregates by hour, so it is not possible to extract the data for those periods only.

7.3.5 Table 7.4 presents an overview of vehicle types on Grange Road and shows that:

- The percentage of larger vehicles is 8% eastbound and 7% westbound; and
- On average, more vehicles travel westbound along Countess Road than eastbound.

Table 7.4 Overview of Traffic Flows on Grange Road

	Daily Average			
	Eastbound	Westbound	Eastbound	Westbound
Car / LGV /	573	587	92%	93%
OGV1 / Bus	52	43	8%	7%
OGV2	0	-	0%	0%
	625	631		

7.3.6 Figure 7.3 and Figure 7.4 present the daily traffic flow profile on Grange Road for the weekday average, Saturday and Sunday in each direction and show:

- The weekday profile is typical of many road networks, with a defined AM and PM peak; and
- The Saturday and Sunday flows are generally lower with the busiest periods in the afternoon.

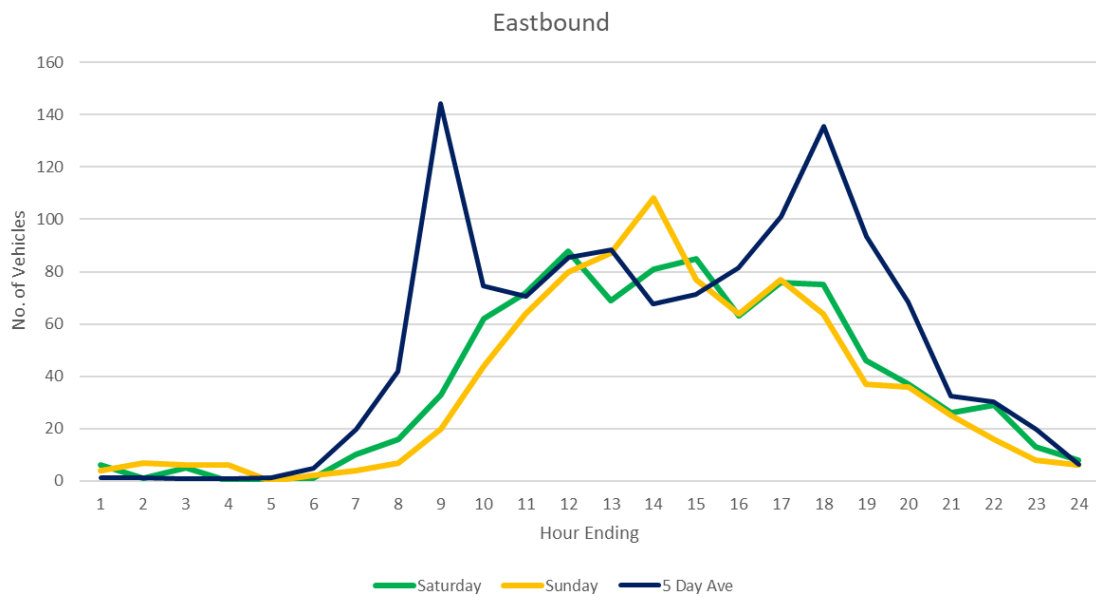


Figure 7.3 Daily Traffic Flow Profile Grange Road - Eastbound

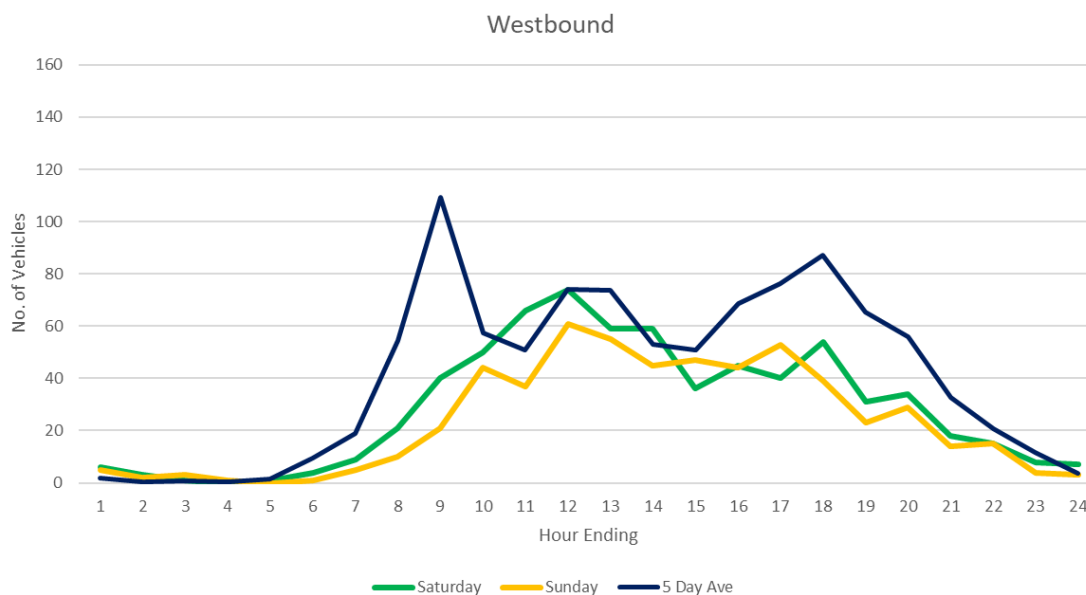


Figure 7.4 Daily Traffic Flow Profile Grange Road – Westbound

7.4 Haddington Road / Lochbridge Road

7.4.1 Table 7.5 displays the vehicles movements at Haddington Road / Lochbridge Road junction and shows that traffic volumes are lower at this junction compared to the others that were measured for this study.

Table 7.5 Junction Movements on Haddington Road / Lochbridge Road

From:	To A	To B	To C	Total
A - (North) B1347 Haddington Road	-	47	78	125
B - Lochbridge Road	62	-	62	124
C - (South) B1347 Haddington Road	164	26	-	190
Total	226	73	140	-
From:	PM Peak (16:00 to 17:00)			Total
A - (North) B1347 Haddington Road	-	83	112	195
B - Lochbridge Road	56	-	61	117
C - (South) B1347 Haddington Road	88	56	-	144
Total	144	139	173	-

7.5 Accident History – Road Traffic Collisions

7.5.1 A review of accidents in the local area have been considered by assessing www.crashmap.co.uk that identifies personal injury incidents up to a 19-year period. The information shown below is the last 5 years which is suitable for the purposes of assessing any trends / patterns.

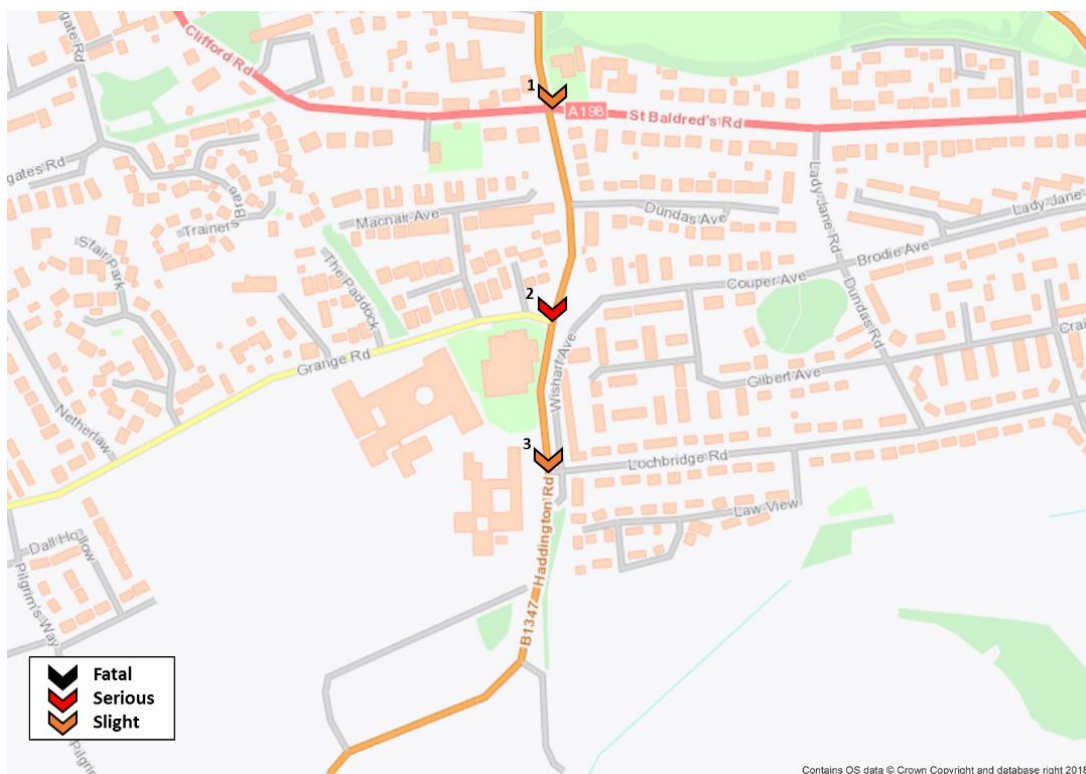


Figure 7.5 Crashmap – Personal Injury Incidents over the previous 5 years

- 7.5.2 There are three recorded incidents over the latest 5-year data set available via www.crashmap.co.uk surrounding the schools, primarily on Haddington Road / Law Road. Local stakeholders suggested there have been other incidents on Lochbridge Road which have not been reported / recorded.
- 7.5.3 The details of these collisions are shown in Table 7.6, no further information on cause is available.

Table 7.6 Summary of Road Traffic Collisions

Incident No. / Location	Time and Date	Vehicles (Casualties)	Description
1 / Law Road	13:00 on 23/08/15	1 (1)	The vehicle was proceeding normally along the carriageway. The casualty was in the vehicle and the severity of their injury was slight .
2 / North Berwick Sports Centre	07:00 on 10/11/14	2 (1)	The crash took place along a single carriageway at a give-way / uncontrolled junction. One vehicle was proceeding normally along the carriageway, whereas the other was in the act of turning right. The casualty was in the vehicle and the severity of this injury was serious .
3 / Haddington Road	08:30 on 01/12/14	1 (1)	The crash took place on a single carriageway at a give-way / uncontrolled junction. The casualty was a pedestrian who was crossing from the driver's nearside. The severity of their injury was slight .

8 Option Identification

8.1 Introduction

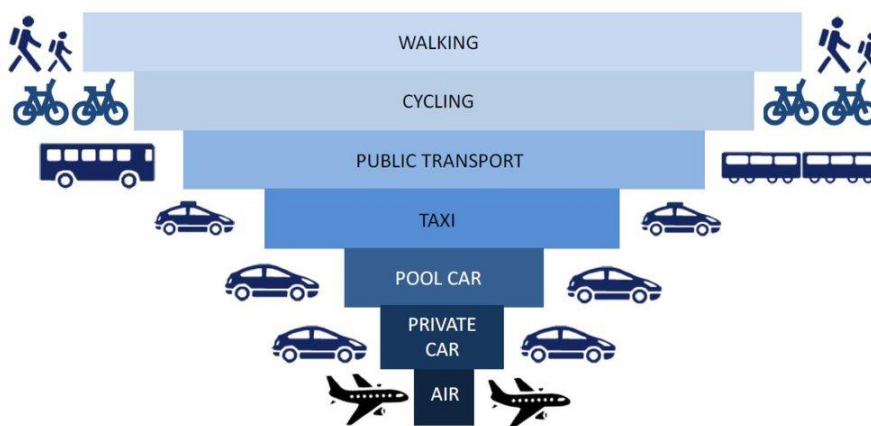
8.1.1 Through extensive engagement with schools, pupils, parents, the public and local groups, as well as the desktop analysis and site visits, a large list of issues have been collated. When identifying potential actions to address these issues, consideration has been given to *Guidance on How to Run a Successful Safer Routes to School²⁸* which notes the following measures (amongst others):

- Traffic management improvements including new crossing facilities, parking management, 20mph zones, traffic calming, signs and road markings;
- Construction of cycleways and active travel facilities;
- Map based exercise plotting current and preferred routes to school; and
- Physical constraints such as topography / perceived danger / potential conflicts.

8.1.2 Options have also been identified based on a number of principles, qualities and measures, as follows.

Road User Hierarchy

8.1.3 Measures have been considered based on the road user hierarchy which places walking and cycling as a priority (at the top).



Cycle Design Core Principles (from Cycling by Design)

- Safe;
- Direct;
- Coherent;

²⁸ <https://www2.gov.scot/Resource/Doc/158146/0042791.pdf>

- Comfortable;
- Attractive; and
- Adaptable.

Accessible Qualities of successful places (from Designing Streets)

- Distinctive;
- Safe and pleasant;
- Easy to move around;
- Welcoming; and
- Adaptable.

Resource efficient helpful quality measures, highlighted at ‘Raising the Standards Day’ 2017

- Traffic related safety;
- Surface quality;
- Social safety;
- Flow; and
- Route signage quality.

8.2 Potential Actions (Options)

General Issues and Interventions

8.2.1 In general, North Berwick experiences a lower level of active travel for the journeys between school when compared to other localities such as Dunbar. This is likely a result of infrastructure, barriers to active travel, including topography. However, a number of general issues have been identified along with associated opportunities for improvements. These can be summarised as follows:

- Minimal wayfinding to publicise routes;
- Lack of information on active travel routes;
- Streets cluttered with “assets” such as street signs and street furniture etc; and
- Perception and evidence of non-compliance with speed limits / desensitisation to 20mph speed limit where they exist (Lochbridge Road area).

Behaviour Change

8.2.2 From the information and data received, it is clear that there are opportunities for behaviour change amongst pupils /parents to increase the number of people using active travel. While this is already considered in a number of ways, through initiatives, dissemination of material and the school curriculum, there is no co-ordinated approach.

- 8.2.3 It is recommended that a Travel Champion (or equivalent) is appointed who can develop an overarching approach to changing travel behaviour; they would work closely with school, pupils, parents and local groups. Although this would not be a full-time position, it may be too onerous to incorporate into a current role. Therefore, the role could be undertaken by a consultant, with potential external funding being secured given the high emphasis on active travel.
- 8.2.4 Another approach would be to form a group of Travel Champions to undertake the role and spread the burden, although this may be challenging co-ordinate.
- 8.2.5 A first task for the Travel Champion(s) would be to undertake a full review of how travel behaviour is currently influenced / challenged to identify the gaps and opportunities. It could include a review of:
- How / when schools disseminate information to parents and what messages they send;
 - How travel behaviour is dealt with in the curriculum; and
 - What travel events / initiatives are run.
- 8.2.6 The Travel Champion(s) would then prepare a Behaviour Change Strategy (or equivalent) which provides a clear overview of targeted measures to be employed with defined timescales / frequencies. This could be prepared in close consultation with schools, pupils, parents and local groups.
- 8.2.7 The Behaviour Change Strategy could focus on the following
- Measures to encourage pupils to walk and cycle more safely / responsibly;
 - Measures to challenge reliance on the car, such as promoting the benefits of active travel or changing perceptions of safety; and
 - Measures to promote more responsible driving / parking by parents which is often cited by other parents as a reason for driving their own child to school; and
 - Measure to promote more responsible driving amongst 6-year pupils.
- 8.2.8 There may be opportunities beyond this, and a key source of ideas is the Scottish Government *Tackling the School Run Research Study*, Scottish Government (2017) which covers:
- Factors Influencing School Travel Choices;
 - Scottish School Travel Initiatives;
 - Scottish School Travel Initiative Delivery;
 - Success Factors and Challenges; and
 - Cultural and Social Attitudes.
- 8.2.9 A long list of potential initiatives, events and material are listed in Appendix G; in particular, the following may be of benefit:
- Clear the Air which raises awareness of air pollution, including how changes in travel behaviour can have a positive impact;

- Play on Pedals is an initiative which aims to teach nursery pupils how to balance on bikes providing an early introduction to cycling²⁹;
- Cycle Friendly Schools is a programme similar to the STARS Europe programme but at a national level. It again can promote cycling as a cultural norm within North Berwick which in turn can commit further pupils to cycle to and from school³⁰³¹; and
- Give Everyone Cycle Space is a road safety campaign which focusses on vehicles overtaking cyclists in efforts to improve cycle safety³².

8.2.10 The overarching interventions are presented in the table below.

Table 8.1 Overarching Interventions

Potential Action:		Considerations:
Initial Intervention(s)	NB1 – Active travel wayfinding to promote available routes	Relatively low-cost from current Council budget or external funding given high emphasis on promoting active travel. All these measures could be undertaken in parallel.
	NB2 – Active travel route maps produced and disseminated	
	NB3 – Review of street furniture to identify items requiring repaired / removed	
	NB4 – Identification of Park and Stride sites	Consideration of land ownership. Some areas identified in Figure 8.1
	NB5 – Encourage Police to undertake more enforcement of speed limits	Dependence on availability of resources
	NB6 – Appoint Travel Champion(s)	Part of existing role or external consultant (would require external funding).
Longer-term Intervention(s)	NB7 – Traffic modelling exercise for streets around Lochbridge Road	A study of the impact of different options to reduce rat-running through these streets and where traffic may be displaced to. Subject to external funding.

²⁹ <https://www.cycling.scot/our-programmes/training/play-on-pedals>

³⁰ <https://www.cycling.scot/our-programmes/cycle-friendly/primary-school>

³¹ <https://www.cycling.scot/our-programmes/cycle-friendly/secondary-school>

³² <https://www.cycling.scot/our-programmes/campaigns/give-everyone-cycle-space>

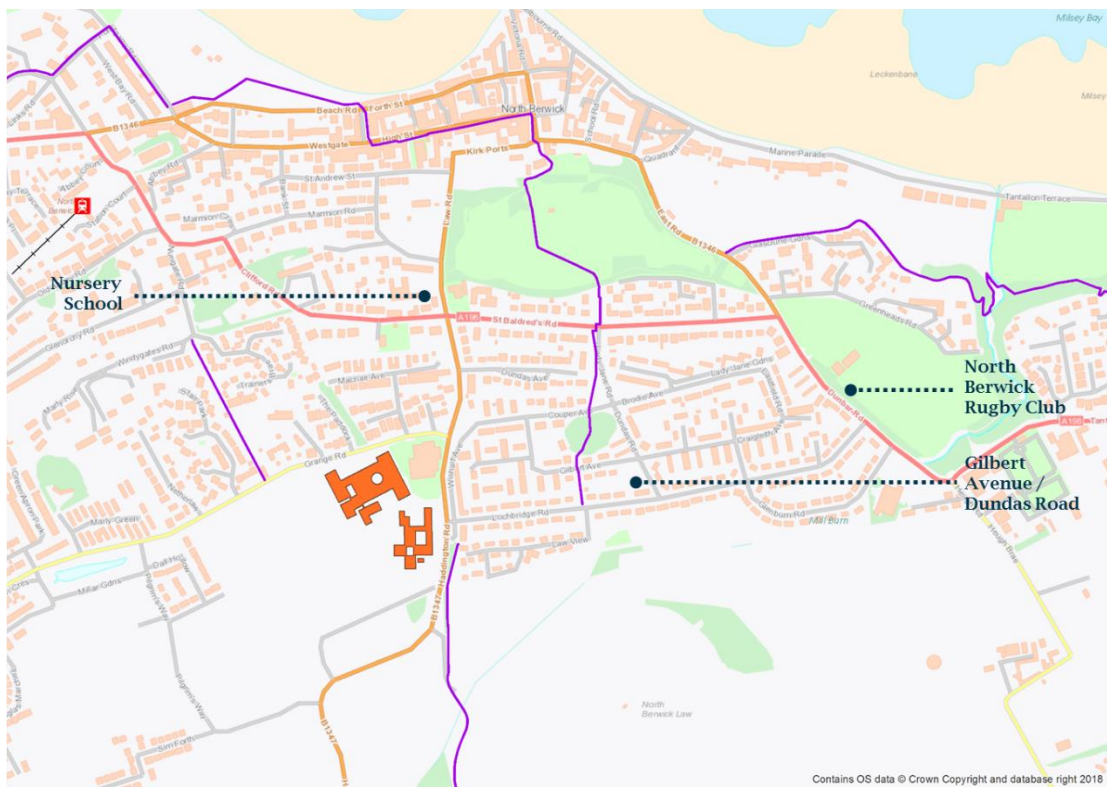


Figure 8.1 Potential Park & Stride Sites

8.2.11 In order to identify potential actions, the study area has been split into different segments, as shown in Figure 8.2.



Figure 8.2 Potential Action Locations

8.2.12 The remainder of this section discusses the issues within each segment and presents potential actions to resolve them.

A1 Core Path (288) between Grange Road and Windygames Road

A1 Core Path (288) between Grange Road and Windygames Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
			✓	✓	
Details:					
This path, which is lit, is an important link for active travel between the schools and many residential streets with otherwise poor permeability. Given its importance, the route should be maintained, and it could benefit from being further promoted through signage and active travel route maps. There is no direct link to the shared footway on the south side of Grange Road and provision of this could be considered as part of changes to Grange Road (see A14) including crossing facilities.					
Potential Action:			Considerations:		
Initial Intervention(s)		NB1 – Active travel wayfinding to promote available routes		See Table 8.1.	
		NB2 – Active travel route maps produced and disseminated		See Table 8.1.	
Longer-term Intervention(s)		None identified			

A2 Link between High School and Law Primary

A2 Link between High School and Law Primary	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
			✓	✓	
<p>Details: The lack of permeability between both school campuses makes it difficult to get to Law Primary from the north side and the High School from the south without going onto Haddington Road (a more circuitous route). There is a grassed area between the school's boundaries (gates) with a missing section of footpath which is used by some pupils / parents informally. A drop kerb / ramp should be provided between the High School building and sports pitch to make the route fully accessible and it could then be promoted through signage and active travel route maps. The zebra crossing markings within the High School car park could be made more prominent or a raised crossing provided.</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A2.1 – Form a link between the two school boundary gates with associated works to make fully accessible from Grange Road.		Land ownership assumed not to be an issue. Would require agreement from both schools as security may be an issue, however, the gates could still be locked during the school day, if required. Relatively low-cost given length so could be met by Council.		
	NB1 – Active travel wayfinding to promote this route		See Table 8.1.		
	NB2 – Active travel route maps produced and disseminated		See Table 8.1.		
Longer-term Intervention(s)	None identified				



A5.1



A5.2

A3 Law Primary Staff Entrance (Old Haddington Road)

A3 Law Primary Staff Entrance (old Haddington Road)	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
		✓	✓	✓	✓
Details: With the new Haddington Road built, the old Haddington Road acts as a vehicular access to Law primary for staff, visitors and service vehicles. The school actively discourage parents from dropping-off or picking-up on this link or pedestrians / cyclists using it. There is no footway, but it is only lightly trafficked with low vehicle speeds. Some cars overspill from the formal car park and park at the roadside. Some stakeholders highlighted this link as providing a more direct active travel route from the Law Gardens development (rather than the circuitous route around the school perimeter on Haddington Road). A further consideration is potential plans to relocate North Berwick Nursery School nearby.					
Potential Action:			Considerations:		
Initial Intervention(s)	A3.1 – Allow pedestrians and cyclists to use this link (Old Haddington Road)		The school would need to be supportive of this measure. It could be done relatively low-cost. Consideration should be given to signage / traffic calming etc. to create a shared space environment. A Road Safety Audit may be required.		
	NB1 – Active travel wayfinding to promote this route		See Table 8.1.		
	NB2 – Active travel route maps produced and disseminated		See Table 8.1.		
Longer-term Intervention(s)	A3.2 – A formal footway could be provided adjacent to the road or remote.		There would be more cost associated with this, but it could be incorporated as part of any plan to locate a nursery in the vicinity.		



A3.2



A3.2

A4 B1347 Haddington Road

A4 B1347 Haddington Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
	✓		✓	✓	✓
<p>Details:</p> <p>A number of stakeholders suggested that the speed of vehicles travelling north into the town are a concern, in spite of the 30mph speed limit, vehicle activated speed sign and “school” warning sign.</p> <p>Despite its generous width, stakeholders also suggested that they do not feel comfortable using the shared footway due the perceived danger of fast vehicles passing close by. Various suggestions were made about how to reduce the perceived conflict including rumble strips or guardrail. Guardrail could have the effect of creating a corridor which encourages higher vehicle speeds and is likely to be a last resort.</p> <p>It was suggested that more signage was required to warn of the approach to the school and / or move the existing signage further from the school.</p> <p>It was also noted that the route needs gritted in cold weather.</p> <p>The optimum location seems to be between Lochbridge Road and the school access (turning area) where a controlled crossing could be provided. However, there is no crossing point directly adjacent to Law View, although there is some evidence that a route is being used by pedestrians (worn path up the embankment).</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A4.1 – Safety measures on Haddington Road.		Could be rumble strips, signage or guardrail so cost variable; likely to require to be funded by Council.		
Longer-term Intervention(s)	A4.2 – Consider formal crossing of Haddington Road.		To be considered in conjunction with A4.1 and A5.1.		



A4.2

A5 Haddington Road / Lochbridge Road

A5 Haddington Road / Lochbridge Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
	✓	✓	✓		✓
<p>Details: The alignment of this junction, with Wishart Avenue in close proximity, raises safety concerns which are magnified by cars parking up to drop-off / pick-up pupils. A School Crossing Patrol operates here. Pedestrians are required to cross at different points with cars approaching from various directions.</p> <p>A number of measures could reduce user conflict here including, signage or raised /delineated crossings on both sides of Wishart Avenue. Lochbridge Road or Haddington Road. The layout of this junction means it would be difficult to signalise to provide pedestrian crossing facilities (challenging to accommodate stop lines with Wishart Avenue close by). Any measures to make crossing Haddington Road safer would therefore be best located away from the junction to the north (section A8) or south (section A4) on Haddington Road, although alignment with school access gates and guardrail should be considered. Another option would be to prevent vehicular access to Wishart Avenue (north) from Lochbridge Road to remove the need for pedestrians to cross a road here.</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A5.1 – Retain School Crossing Patrol.		In the short term the School Crossing Patrol should be retained at this location.		
Longer-term Intervention(s)	A5.2 – Feasibility study for layout options.		In conjunction with NB4, consider options for improving the junction layout to remove user conflict. Potential external funding given active travel focus. One option may be a Puffin crossing on Haddington Road away from the junction.		
	NB4 - Traffic modelling exercise for streets around Lochbridge Road		To be considered as part of this potential action, including preventing vehicular access to Wishart Avenue (north) from Lochbridge Road		



A5.1

A6 Lochbridge Road

A6 Lochbridge Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
	✓	✓	✓	✓	✓
<p>Details:</p> <p>A number of stakeholders stated Lochbridge Road carries too much traffic for a primarily residential street (rat-running) and perceive vehicle speeds to be too high / above the speed limit (20mph). This does not make the route pleasant for walking / cycling or crossing. Measures to reduce speed could include traffic calming in the form of speed tables, horizontal deflection (carriageway narrowing or priority working) and / or signage. Improved crossing facilities could be incorporated; i.e. reducing crossing distances or refuge island(s).</p> <p>It should be noted that Lochbridge Road is a bus route so any measures would have to take this into consideration (i.e. vertical traffic calming not likely to be acceptable to bus operators).</p> <p>Parked cars on both sides of carriageway reduce visibility but narrow the road which naturally reduces drivers' speed. Some sections of the road have parking restrictions, (double yellow lines), to prevent parking at inappropriate locations (i.e. close to junctions). Removal of on-street parking would require a TRO, which would likely receive some objections from local residents, and could encourage higher vehicle speeds (unless the space is reallocated as footway / cycle lane).</p> <p>A number of stakeholders suggested that an active travel route could be provided on the land south of Law View. The route would, at least in part, be formed of existing informal routes and would require a feasibility study to determine land ownership and identify start and end points.</p> <p>It is recommended that a traffic modelling exercise is undertaken to estimate the impact of any measures which are likely to impact on traffic flow. A set of scenarios could be tested, for example: road closures / filtered permeability or bus gate.</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A6.1 – Introduce speed reduction measures (traffic calming / signage), potentially incorporating formal crossings.		Seek external funding by demonstrating improved active travel focus.		
	NB4 - Traffic modelling exercise for streets around Lochbridge Road		To be considered as part of this potential action, with emphasis on reducing rat-running.		
	A6.2 – Feasibility study for active travel route south of Law View.		External funding given high emphasis on active travel.		

A7 North Berwick Leisure Centre Car Park

A7 North Berwick Leisure Centre Car Park	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
	✓	✓	✓		✓
<p>Details:</p> <p>The use of the leisure centre car park by parents dropping-off and picking-up pupils causes a number of safety concerns, especially given the high volume of pedestrians (and cyclists) moving through the area. As well as adding additional traffic to local roads and junctions, making a less safe environment for active travel, vehicles park inappropriately within the car park.</p> <p>A blanket ban on drop-off / pick-up may encourage more active travel or may simply displace the problem to surrounding streets. It is therefore considered that the priority should be to make the current situation operate more safely.</p> <p>There have been reports of bicycles being stolen from the Leisure Centre Car Park and suggestions that cycle parking is not secure. It is unclear if these have been reported to the Police.</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A7.1 – Add sheltered cycle parking, potentially with CCTV (though potentially excessive).		Existing Council budget / external funding		
	A7.2 – Campaign to encourage safer drop-off / pick-up		Although the schools try to encourage more responsible behaviour, a targeted campaign could be employed. This could be through emails / newsletters, increasing signage / advertising (perhaps designed by school pupils) or a visible presence.		
Longer-term Intervention(s)	A7.3 – A review of the car park layout.		Could consider signage and lining with crossing locations and routes more clearly delineated and made wider and fully accessible (i.e. drop kerbs). There are some areas where grass has been worn over demonstrating it sits on a pedestrian desire line. Could include measures to discourage inappropriate parking, such as bollards. See Figure 8.3.		



A7.3



A7.3



A7.3



A7.3

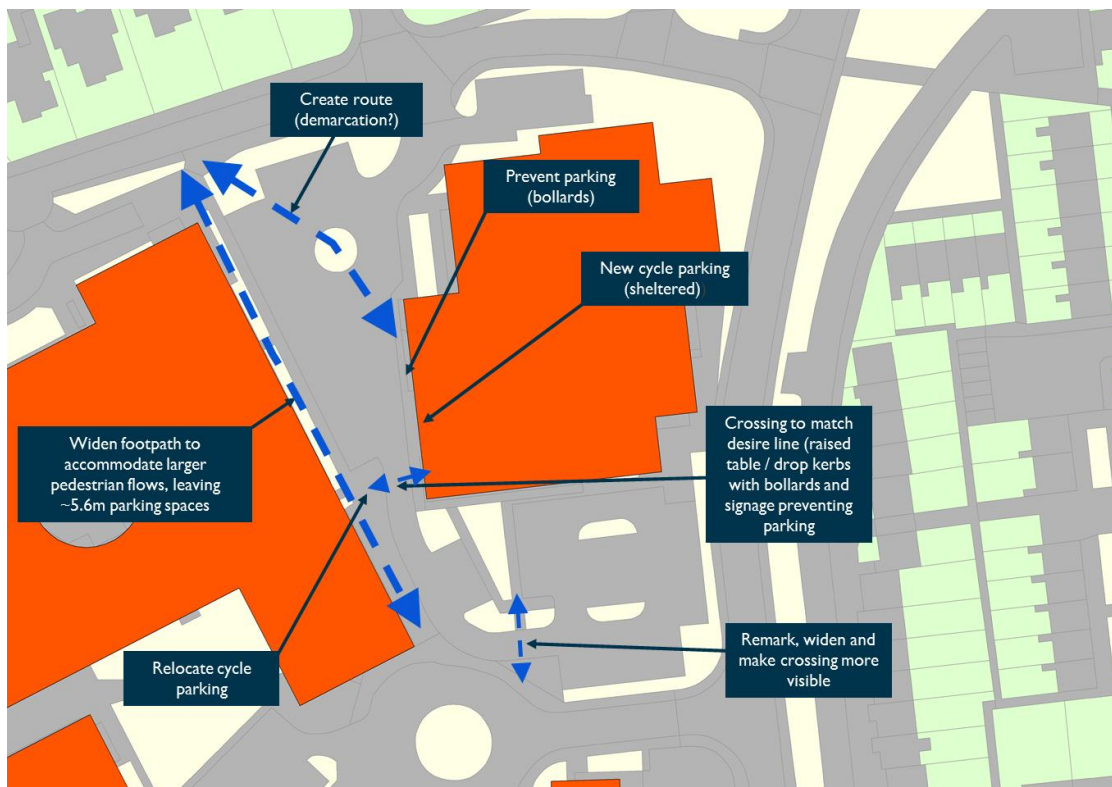


Figure 8.3 North Berwick Leisure Centre Car Park Layout Considerations

A8 Haddington Road at School Access

A8 Haddington Road at School Access	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
		✓	✓		✓
<p>Details: People do not cross the road at the marked raised crossing between the Leisure Centre and Law Primary because it does not match the desire line and is not wide enough to accommodate the large volume of pedestrians. The markings are heavily worn. Vehicle flows are low, restricted to school buses and staff car park access only, although a minority of parents still use it for drop-off / pick-up. The area would benefit from the creation of a footway crossover at the mouth of the junction, where pedestrians would assume priority over vehicles.</p>					
Potential Action:			Considerations:		
Initial Intervention(s)	A8.1 – Footway crossover / pedestrian priority		From External funding as this needs to be reviewed as part of wider schemes – requires engineering works and has drainage implications. Children could be given the chance to design the crossing markings / signage (coloured surfaces can be expensive).		
	A8.2 – Measures to restrict / prohibit access.		Could include signage, or encouragement from schools to parents (i.e. Junior Road Safety Officers).		



A8.2



A8.1

A9 Grange Road / Haddington Road Junction

A9 Grange Road / Haddington Road Junction	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
			✓		✓
Details: There are a number of issues with the junction which currently has a School Crossing Patrol; Figure 8.4 shows some suggested potential improvements. Queues of traffic form over a short period to match school opening and closing times, particularly the morning with pedestrians crossing between parked cars. Pedestrian provision is poor in places, particularly on the east side at the “hole in the wall” and bus stop.					
Potential Action:			Considerations:		
Initial Intervention(s)	A9.1 – Relocate grit bin.		This is currently located on a narrow part of the footway. Reducing the available width further. No cost associated.		
	A9.2 – Reform the drop kerbs on Grange Road at junction.		These are not well formed (steep) as highlighted by School Crossing Patrol (dangerous when icy).		
Longer-term Intervention(s)	A9.3 – Concept / Feasibility Study to redesign Grange Road / Haddington Road junction (including Grange Court).		External funding given high emphasis on active travel. Could include signalisation with inclusion of pedestrian / cycle crossings, drop kerbs and tactile paving and footway widening / road narrowing (see Figure 8.4).		



A9.1



A9.2



A9.3



A9.3



A9.3 – As the school crossing guide assists with crossings across Grange Road, those wishing to cross Law Road must either wait for assistance or cross this junction themselves.



A9.3 – Again as the school crossing guide assists with crossing along Grange Road, pupils wait for assistance on Law Road. If those on Law Road began to cross, there is a conflict with the driver overtaking the van.



A9.3 – A typical scene during the AM drop off at this junction; cars queuing to access (on Law Road) and egress (on Grange Road) the Leisure Centre car park.



A9.3 – Bus drops off pupils on narrow footway and then must avoid pupils queuing on the footway to cross Law Road.

8.2.13 A LinSig3 model of the busiest period, the AM peak has been built to consider how signal operations at this junction could be improved. The following assumptions have been made:

- Geometric parameters (i.e. road widths) have been measured from OS MasterMap or estimated;
- The quickGreen package has been used to calculate intergreens. In order to build in additional safety, the intergreen time could be increased;
- To model the pedestrian stage being continuously called at peak times, the cycle time has been modelled at 60 seconds with the pedestrian phase called every cycle;
- Two model scenarios have been tested, one with the flows for the peak hour (08:30 to 09:30) and one with the flows for the peak 15 minutes (08:30 to 08:45).

8.2.14 The results show that, with the above parameters, the junction would operate with the following observations (full model reports are included in Appendix H):

- Over the peak hour the junction would operate well with average delay for pedestrians of around 32 seconds and minimal queuing for vehicles; and
- Over the peak fifteen minutes the delay for pedestrians is the same but significant queuing would form; around 11 vehicles on Grange Road and 22 on Law Road. This

could be reduced by increasing the cycle time to 90 seconds (queues down to around 4 vehicles on each approach) but average delay for pedestrians would increase to around 54 seconds. It is considered that delay for pedestrian should be kept to a minimum to positively encourage walking.

8.2.15 The benefits of signalisation would have to be considered in relation to the current School Crossing Patrol provision, including the following:

- Installation and maintenance cost;
- Potentially less responsive to queues forming. Although the signals could be demand dependent, the pedestrian stage would likely be called continuously at peak times. The School Crossing Patrol may be better able to manage queuing of vehicles; and
- While signalisation would offer improved crossing provision at all times of the day, it could be considered an over-provision as flows are relatively low outwith the peaks. However, it does provide a safer crossing facility for all times of day and for all users including Leisure Centre users, after school clubs, breakfast clubs etc.

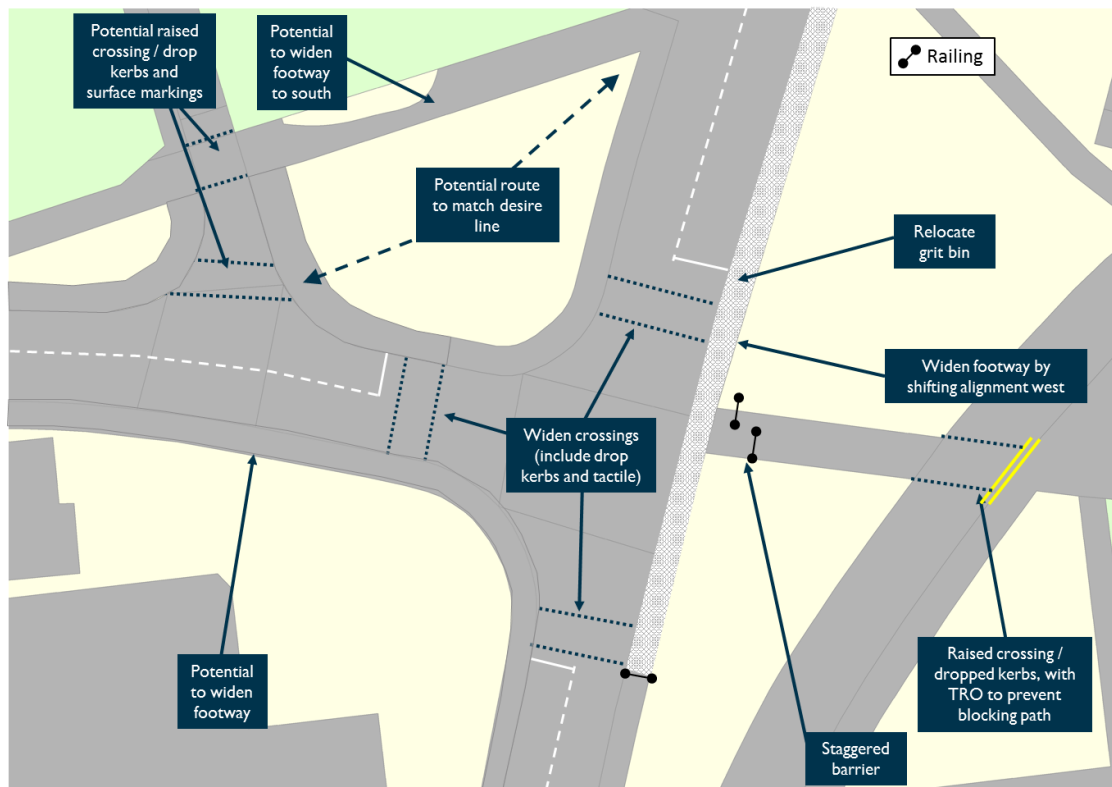


Figure 8.4 Grange Road / Haddington Road Junction Layout Considerations

8.2.16 Where any design is developed, vehicle tracking would be required to ensure larger vehicles can be accommodated. In particular, large static caravans require to be transported to and from the Gilsland Holiday Park (at the end of Grange Road) and any design should take consideration of this. For example, signal heads set back to ensure sufficient space for any overhang.

A10 Coupar Avenue Back Route

A10 Couper Avenue Back Route	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
		✓	✓	✓	
Details: This route presents a good opportunity for a shared traffic free, lit footpath linking to residential areas. A number of small improvements could be made to make the route fully accessible including creation of a formal crossing on Wishart Avenue and Gilbert Avenue (drop kerbs with marked crossing or raised crossing) and measures to prevent parking where it intersects Wishart Avenue and other minor road crossings.					
Potential Action:			Considerations:		
Initial Intervention(s)	NB1 – Active travel wayfinding to promote this route		See Table 8.1.		
	NB2 – Active travel route maps produced and disseminated		See Table 8.1.		
	A10.1 – Create formal crossing, add shared footpath signage and create TRO to prevent parking.		External funding could be pursued given emphasis on active travel.		



A10.1



A10.1

A11 Law Road

A11 Law Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
			✓	✓	
Details: It was identified that the footways on this section could be wider given the volume of pedestrians and the topography makes it challenging for cycling. Some signage on the footway reduces the available width. The road surface is uneven in places and on-street parking takes place on the west side of the carriageway close to the A198 signalised junction. The available road and footway width is typically 12.7 metres, so there may be opportunities to narrow the road and widen the footway or provide a segregated cycle lane for cyclists in the southbound direction (uphill). On-street parking would be affected. This is a key link toward the town centre and any improvements would benefit the wider community and encourage active travel.					
Potential Action:			Considerations:		

Initial Intervention(s)	A11.1 – Review street furniture.	With view to decluttering and maintaining available footway width. Low cost, within Council budget.
Longer-term Intervention(s)	A11.2 – Feasibility Study to consider reallocation of some of the road space to active travel.	External funding given high emphasis on active travel



A11.1



A11.2

A12 B1347 Haddington Road / A198 St Baldreds Road / Law Road / A198 Clifford Road Signalised Junction (Existing)

A12 B137 / A198 Signalised Junction	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
					✓
Details: This junction is formed of key links and stakeholders suggested that the traffic signal timings do not allow for diagonal movements for pedestrians.					
Potential Action:			Considerations:		
Initial Intervention(s)	A12.1 – Review signal timings.		Potential to give more priority to active travel as indicated in road hierarchy without severe impact on traffic (queuing / delay).		

8.2.17 The key issues raised by stakeholders are:

- Pedestrians having to wait too long to cross (i.e. for green man); and
- There is no provision for crossing diagonally.

8.2.18 The issue to consider are:

- There is guardrail on the south-west corner (downhill approach to junction) to guide pedestrians to the crossing locations. This prevents diagonal crossing movements;

- The crossing time for the other diagonal would require to be around 21 seconds (approximately 25 metres to travel at 1.2 m/s), during which all traffic would require to be stationary. This does not account for intergreen times, which would also be significant.

8.2.19 Any review would need to:

- Consider physical layout;
 - If the stop lines be pulled closer together with footways widened to reduce crossing distance (ensure radii can still accommodate larger vehicles - swept path assessment);
 - If refuge islands be accommodated to provide pedestrian 'walk-with' phases (pedestrian green man and traffic running at the same time);
 - Review guardrail provision; and
 - Review compliance against current Equalities Act standards (drop kerbs, tactile, distance between crossing and stop lines); and
- Review signal timings, including phasing, staging, intergreens, minimum green times.

A14 Grange Road

A14 Grange Road	Vehicle Speeds	Parking	Footway / footpath provision	Cycle Provision	User Conflict
	✓	✓	✓	✓	✓
<p>Details: This a key route for traffic, pedestrians and cyclists and there is a relatively new remote shared footpath running adjacent which is well-used and links between the High School car park and the Mains Farm development site. The road has traffic calming in the form of cushions and raised table, with a zebra crossing close to the High School. The footway on the north side of the carriageway is narrow with overhanging vegetation in place. There is no footway on the south side. There are a number of residential streets forming junctions on the northern side of the road with the High School car park access and egress (separate) and Leisure Centre access on the south side. A large number of issues were identified as follows:</p> <ul style="list-style-type: none"> • The location and layout of the zebra crossing could be improved, with suggestions that is not wide enough and there is a gradient on the southern approach. Bins are located at the crossing and obscures vision for both drivers and people crossing; • The success of the shared path for walkers and cyclists has created conflicts between users (for example, cyclists / groups of slower pedestrians / dogs on leads) with some saying it is too narrow. Some stakeholders stated a desire to extend the path onto the further estates to the west. There are some reported issues with dog fouling. • The northern footway is generally narrow, even more so at locations where vegetation overhangs. • Within the High School car park there is a poorly created ramp, a pinch point at the school hall, narrow footpaths with no dropped kerbs. Visibility to and from the car park entrances is poor. • The crossing of Pilgrim's Way has cyclists dismount signs, even though it is a raised table. This is in contrast with the road user hierarchy. • There are no formal connections from the residential streets to the north to the remote shared footpath, although some informal connections have been created through the fence / hedge (highlighting demand); 					
Potential Action:			Considerations:		
Initial Intervention(s)	A14.1 – Route review		Identify and undertake easily implementable actions such as where vegetation should be cut back, bins relocated, access to remote footpath provided (change in level is a challenge)		
Longer-term Intervention(s)	A14.2 – Street Layout Feasibility Study		Consider street layout including traffic calming, zebra crossing location / layout, car park layout. Seek external funding given high emphasis on active travel.		



A14.1



A14.2



A14.2



A14.2

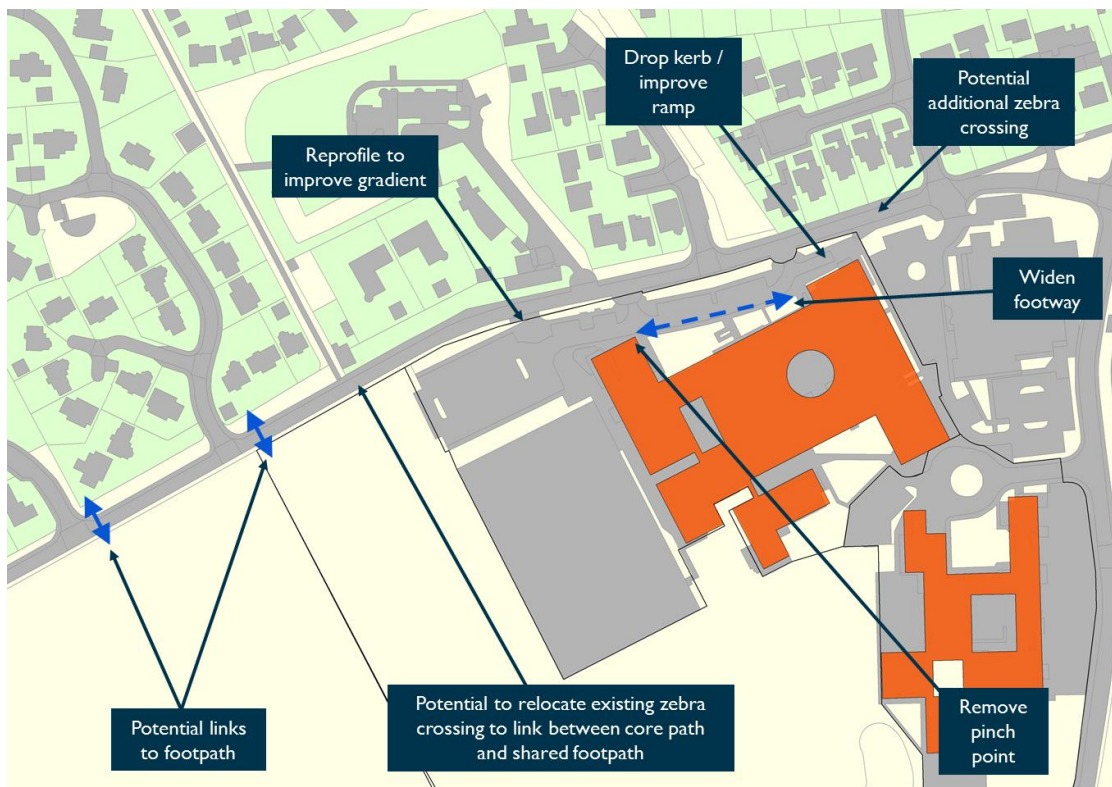


Figure 8.5 Grange Road Layout Considerations

9 Option Appraisal

9.1 Introduction

9.1.1 The full set of identified potential actions (options) are shown in Table 9.1.

Table 9.1 Potential Actions

Location	Action	Action Description
Study Area Wide	NB1	Active travel wayfinding to promote available routes.
	NB2	Active travel route maps produced and disseminated.
	NB3	Review of street furniture to identify items requiring repaired / removed
	NB4	Identification of Park & Stride sites
	NB5	Encourage Police to undertake more enforcement of speed limits
	NB6	Appoint Travel Champion(s)
	NB7	Traffic modelling exercise for streets around Lochbridge Road
Link between High School and Law Primary	A2.1	Form a link between the two school boundary gates with associated works to make fully accessible from Grange Road.
Law Primary Staff Entrance (old Haddington Road)	A3.1	Allow pedestrians and cyclists to use this link
		A formal footway could be provided adjacent to the road or remote.
B1347 Haddington Road	A4.1	Safety measures on Haddington Road.
	A4.2	Formal crossing of Haddington Road.
Haddington Road / Lochbridge Road	A5.1	Retain School Crossing Patrol.
	A5.2	Feasibility study for layout options.
Lochbridge Road	A6.1	Introduce speed reduction measures (traffic calming / signage), potentially incorporating formal crossings.
	A6.2	Feasibility study for active travel route south of Law View.
North Berwick Leisure Centre Car Park	A7.1	Add sheltered cycle parking, potentially with CCTV.
	A7.2	Campaign to encourage safer drop-off / pick-up at Leisure Centre car park
	A7.3	A review of the car park layout.
Haddington Road at School Access	A8.1	Widen crossing, repaint, create shared space environment (through different material / surface colouring).
	A8.2	Measures to reduce prohibited access.
	A9.1	Relocate grit bin.

Location	Action	Action Description
Grange Road / Haddington Road Junction	A9.2	Reform the drop kerbs on Grange Road at junction.
	A9.3	Concept / Feasibility Study to redesign Grange Road / Haddington Road junction (including Grange Court).
Couper Avenue Back Route	A10.1	Create formal crossing, add shared footpath signage and create TRO to prevent parking.
Law Road	A11.1	Review street furniture.
	A11.2	Feasibility Study to consider reallocation of some of the road space to active travel.
B137 / A198 Signalised Junction	A12.1	Review signal timings.
Grange Road	A14.1	Identify and undertake easily implementable actions such as where vegetation should be cut back, bins relocated, access to remote footpath provided along Grange Road
	A14.2	Street Layout Feasibility Study along Grange Road

9.1.2 The next step is prioritisation; often a difficult task as initiatives will have their own supporters keen to see this as the top local priority. In order to give this process some structure, a high-level objective-led prioritisation methodology has been utilised.

9.1.3 The process was used to classify each of the recommendations in order to identify a realistic set of interventions for the short (0 to 2 years), medium (2 to 5 years) and long-term (more than 5 years), as follows:

Strategic Objectives

9.1.4 Each of the potential actions have been scored against the objectives identified earlier in the study, as follows:

- 1) To deliver a more attractive and safer environment for pedestrians and cyclists;
- 2) To reduce the overall dependence on the car and the environmental impact of traffic on the school surroundings;
- 3) To promote the availability and use of more sustainable means of travel;
- 4) To maximise accessibility for all and reduce social exclusion; and
- 5) Maximise accessibility (including equality).

9.1.5 The objective *to improve physical and mental well-being through the associated benefits of active travel* has been dropped as it is considered that, where achieved, the other objectives contribute to this. The scores against the strategic objectives are as follows:

- 1 – Little / no impact;
- 2 – Small impact;
- 3 – Medium impact;

- 4 – High impact; and
- 5 – Very high impact.

9.1.6 Where a future feasibility study is a potential action, the objective scores are based on what benefits any physical interventions could achieve.

9.1.7 The scores against objectives 1 to 5 were summed to create a total score for contribution to the strategic objectives.

Value for Money

9.1.8 Importantly, the methodology takes account of the bias towards large schemes in such scoring exercises (i.e. large expensive schemes typically tend to perform best simply because they are larger and cost more), by also scoring each option in terms of its deliverability and affordability. The two scores for these criteria will then be combined to create a broad “Value for Money” score for each option.

9.1.9 The deliverability scores are as follows:

- 1 – Very challenging;
- 2 – Challenging;
- 3 – Neutral;
- 4 – Easy; and
- 5 – Very easy.

9.1.10 Deliverability is influenced by the extent of physical works, land ownership uncertainty, public acceptability and required changes to TROs.

9.1.11 The affordability scores are as follows (based on estimated costs):

- 1 - Very high cost (greater than ~£50k);
- 2 - High cost (between (~£20k and ~£50k);
- 3 - Moderate cost (between ~£10k and ~£20k);
- 4 - Minor cost (less than ~£10k); and
- 5 - No cost.

9.1.12 Where feasibility studies have been identified, the cost is for undertaking the study rather than any physical works which may then be identified, as a result of the study.

Total Score

9.1.13 Finally, the score for the contribution to the strategic priorities will be multiplied by the value for money score to provide a total score, with the highest scoring option assuming the highest rank.

9.1.14 From previous studies, it is known that typically a range of low cost, “easy-win” measures which can be implemented relatively quickly should be identified. These often include improving active travel route signage, providing more secure cycle storage, promoting a range

of active travel routes / bus services available, on-line journey planners, cycle hire or pool bikes / cars.

Responsibility and Cost

- 9.1.15 The Action Plan includes a column on responsibility and while this predominantly falls to the Council, external funding (or match funding) will be required for many of the actions to be delivered (see Section 10.2).

Risk

- 9.1.16 The Action Plan also gives an indication of the level of risk associated with not implementing some of the actions; this reflects both safety and public acceptability and is scored low, medium or high.

9.2 Prioritised Action Plan

- 9.2.1 The fully prioritised Action Plan is presented on the next page and at A3 scale in Appendix I
- 9.2.2 The overall ranking is intended as a guide and it will be for East Lothian Council to decide which actions are to be taken forward. Some of the actions are easy wins which can be taken forward relatively quickly whereas others will require funding to be secured.

Area Name	Action	Action Description	Responsibility	Timescale	Indicative Cost Estimate	Objective Scores					Value for Money Score				Rank	Risk
						1. Safer environment for active travel	2. Reduce car dependence	3. Promote sustainable travel	5. Maximise accessibility (including equality)	Total	Deliverability	Affordability	Total	Weighted Score		
Grange Road / Haddington Road Junction	A9.3	Concept / Feasibility Study to redesign Grange Road / Haddington Road junction (including Grange Court).	ELC (External funding)	Medium	~£10k to ~£20k Feasibility (Physical works require to be costed)	5	2	3	4	19	4	3	7	133	1	High
Law Primary Staff Entrance (old Haddington Road)	A3.1	Allow pedestrians and cyclists to use Law Primary Staff Entrance (Old Haddington Road)	ELC / Law Primary	Short	£10k (signs and road markings)	3	4	4	4	18	2	5	7	126	2	Medium
Haddington Road / Lochbridge Road	A5.1	Retain School Crossing Patrol.	ELC	Short	<£10k (annually)	5	2	1	3	16	4	3	7	112	3	Medium
Grange Road / Haddington Road Junction	A9.1	Relocate grit bin.	ELC	Short	No cost	3	1	1	3	11	5	5	10	110	4	Low
Grange Road	A14.1	Identify and undertake easily implementable actions such as where vegetation should be cut back, bins relocated, access to remote footpath provided along Grange Road	ELC	Short	~£10k to ~£20k	4	2	2	3	15	4	3	7	105	5	Low
Study Area Wide	NB6	Appoint Travel Champion(s)	ELC/External	Short	~£10k to ~£20k	3	2	4	1	13	5	3	8	104	6	High
Link between High School and Law Primary	A2.1	Form a link between the two school boundary gates with associated works to make fully accessible from Grange Road.	ELC / schools (External funding)	Medium	~£20k to ~£50k	4	3	4	4	19	3	2	5	95	7	Medium
North Berwick Leisure Centre Car Park	A7.3	A review of the car park layout.	ELC (External funding)	Medium	~£20k to ~£50k Feasibility (Physical works require to be costed)	4	1	1	3	13	5	2	7	91	8	Medium
Study Area Wide	NB4	Identification of Park and Stride sites	ELC (External funding)	Short	<£10k	4	3	3	1	15	2	4	6	90	9	Low
Couper Avenue Back Route	A10.1	Create formal crossing, add shared footpath signage and create TRO to prevent parking.	ELC (External funding)	Medium	~£20k to ~£50k	4	1	3	3	15	4	2	6	90	9	Low
North Berwick Leisure Centre Car Park	A7.2	Campaign to encourage safer drop-off / pick-up at Leisure Centre car park.	ELC/External	Ongoing	<£10k	4	1	1	1	11	4	4	8	88	11	Medium
Law Primary Staff Entrance (old Haddington Road)	A3.2	A formal footway on Old Haddington Road could be provided adjacent to the road or remote.	ELC (External funding)	Medium	>£50k	4	4	5	4	21	3	1	4	84	12	Medium
Study Area Wide	NB2	Active travel route maps produced and disseminated.	ELC (External funding)	Short	<£10k	1	2	4	1	9	5	4	9	81	13	Low
Haddington Road / Lochbridge Road	A5.2	Feasibility study for layout options.	ELC (External funding)	Long	~£10k to ~£20k Feasibility (Physical works require to be costed)	4	2	3	3	16	3	2	5	80	14	Medium
North Berwick Leisure Centre Car Park	A7.1	Add sheltered cycle parking, potentially with CCTV.	ELC (External funding)	Short	~£10k to ~£20k	1	3	4	1	10	5	3	8	80	14	Low
Law Road	A11.2	Feasibility Study to consider reallocation of some of the road space to active travel.	ELC (External funding)	Medium	~£20k to ~£50k Feasibility (Physical works require to be costed)	4	4	4	4	20	2	2	4	80	14	Medium
Grange Road	A14.2	Street Layout Feasibility Study along Grange Road	ELC (External funding)	Long	~£20k to ~£50k Feasibility (Physical works require to be costed)	4	3	2	3	16	3	2	5	80	14	Low
Study Area Wide	NB7	Traffic modelling scenario testing for streets around Lochbridge Road	ELC (External funding)	Medium	~£20k to ~£50k (physical changes excluded)	4	2	2	1	13	4	2	6	78	18	Medium
Study Area Wide	NB5	Encourage Police to undertake more enforcement of speed limits	ELC	Short	No cost	4	1	1	1	11	2	5	7	77	19	High
Grange Road / Haddington Road Junction	A9.2	Reform the drop kerbs on Grange Road at junction.	ELC / External if wider upgrade	Short (or part of A9.4)	~£10k to ~£20k	3	1	1	3	11	4	3	7	77	19	Low
B137 / A198 Signalised Junction	A12.1	Review signal timings.	ELC	Short	<£10k	3	3	3	3	15	2	3	5	75	21	Medium
Law Road	A11.1	Review street furniture.	ELC	Short	<£10k	2	1	2	2	9	4	4	8	72	22	Low
Study Area Wide	NB3	Review of street furniture to identify items requiring repaired / removed	ELC	Short	~£10k to ~£20k	2	1	2	3	10	4	3	7	70	23	Medium
Haddington Road at School Access	A8.2	Measures to restrict / prohibit access.	ELC (External funding) / schools	Short	~£10k to ~£20k	4	1	1	1	11	3	3	6	66	24	Medium
Lochbridge Road	A6.2	Feasibility study for active travel route south of Law View.	ELC (External funding)	Long	~£20k to ~£50k Feasibility (Physical works require to be costed)	4	4	4	4	20	1	2	3	60	25	Low
Haddington Road at School Access	A8.1	Footway crossover / pedestrian priority	ELC (External funding)	Medium	~£20k to ~£50k	4	1	3	3	15	2	2	4	60	25	Medium
Study Area Wide	NB1	Active travel wayfinding to promote available routes.	ELC (External funding)	Medium	~£10k to ~£20k	1	2	3	1	8	4	3	7	56	27	Low
B134 Haddington Road	A4.2	Consider formal crossing of Haddington Road.	ELC (External funding)	Long	>£50k	5	2	2	4	18	2	1	3	54	28	Medium
B134 Haddington Road	A4.1	Safety measures on Haddington Road.	ELC (External funding)	Medium	>£50k	4	2	2	1	13	3	1	4	52	29	Medium
Lochbridge Road	A6.1	Introduce speed reduction measures (traffic calming / signage), potentially incorporating formal crossings.	ELC (External funding)	Medium	>£50k	4	2	2	3	15	1	1	2	30	30	Medium

9.3 Road Safety Audits

9.3.1 Stage 1 Road Safety Audits will require to be undertaken where changes to any physical infrastructure is being proposed but would require outline design to be prepared. This would be as follows:

- Introduction of traffic signals on the Grange Road / Haddington Road / Law Road junction;
- Any other proposed new pedestrian crossings, likely Haddington Road or Grange Road.

9.3.2 These would be undertaken once concept design are prepared which are not part of this study.

10 Conclusion and Recommendations

10.1 Conclusions

- 10.1.1 In general, North Berwick experiences a lower level of active travel for the journeys between school when compared to other localities, such as Dunbar. This is likely a result of available infrastructure, barriers to active travel, including topography and local travel habits and commuting patterns.
- 10.1.2 From the information and data received, it is clear that there are opportunities for behaviour change amongst pupils /parents to increase the number of people using active travel. While this is already considered in a number of ways, through initiatives, dissemination of material and the school curriculum, there is no coordinated approach.
- 10.1.3 A number of general issues have been identified along with associated opportunities for improvements. These can be summarised as follows:
- Minimal wayfinding to publicise routes;
 - Lack of information on active travel routes;
 - Streets cluttered with roadside “assets” such as street signs and street furniture etc; and
 - Perception and evidence of non-compliance with speed limits / desensitisation to 20mph speed limit.
- 10.1.4 The study presents a range of recommendations incorporated within an Action Plan that lists interventions scored against strategic objectives, affordability, deliverability. The Action Plan includes likely timescales, costs and responsibilities and contains a range of measures from low cost, “easy-win” (which can be implemented relatively quickly) to higher value, more ambitious projects (likely to be implemented in the medium to long-term).
- 10.1.5 The Action Plan also gives an indication of the level of risk associated with not implementing some of the actions; this reflects both safety and public acceptability and is scored low, medium or high.
- 10.1.6 As a result of the positive engagement with the local community, a number of key issues and concerns were raised that were beyond the study extents but are still important in respect of understanding active travel barriers and opportunities. While the study focussed on identifying potential actions to tackle the issues within the defined study area, the wider issues have been recorded such that they can be considered at a later date.

10.2 Recommendations

- 10.2.1 It is recommended that the Council pursue a range of low-cost measures which could be implemented from existing budgets fairly quickly while pursuing external funding for other potential actions (including feasibility studies) which may have a longer timescale and greater cost.
- 10.2.2 Potential funding sources are outlined below.

Sustrans – Places for Everyone³³

10.2.3 The aim of *Places for Everyone* is to create safe, attractive, healthier places by increasing the number of trips made by walking, cycling and wheeling for everyday journeys. The minimum criteria for a successful *Places for Everyone* bid are:

- Develop ideas collaboratively and in partnership with communities.
- Facilitate independent walking, cycling, and wheeling for everyone, including an unaccompanied 12-year old.
- Design places that provide enjoyment, comfort and protection.
- Ensure access for all and equality of opportunity in public space.
- Ensure all proposals are developed in a way that is context-specific and evidence-led.
- Reallocate road space, and restrict motor traffic permeability to prioritise people walking, cycling and wheeling over private motor vehicles.

10.2.4 These are closely aligned with the strategic objectives identified for this study meaning all of the potential actions identified are suitable for this type of funding. Initial applications are required by the 1st of May 2019.

Paths for All – Smarter Choices, Smarter Places Local Authority Fund³⁴

10.2.5 The Smarter Choices, Smarter Places programme supports Scottish local authorities to encourage more journeys by foot, bike and public transport. The projects encourage and promote active and sustainable transport in a number of innovative ways including:

- Maps, apps, real time passenger information and guides;
- Work with schools, businesses and local communities;
- Community and workplace active travel challenges;
- Walking and cycling festivals; and
- Support to voluntary and community organisations supporting active travel.

Community Organisation Funding

10.2.6 Beyond the above, there are a number of funding streams open to community organisation (such as the Community Council), including:

10.2.7 Paths for All – Community Path Grants³⁵ scheme which provides communities with the resources they need to create, promote and maintain community paths close to where they live. Projects must be well planned and ready to start as soon as funding is confirmed, and the 2018 grant fund has now closed.

³³ <https://www.sustrans.org.uk/scotland/places-for-everyone>

³⁴ <https://www.pathsforall.org.uk/smarter-choices-smarter-places/local-authority-fund>

³⁵ <https://www.pathsforall.org.uk/cmp-grants>

10.2.8 The Scottish Government's Climate Challenge Fund (CCF)³⁶ provides grants and support for community-led organisations to tackle climate change by running projects that reduce carbon emissions. Applications for 2018 are now closed.

10.3 Equality

10.3.1 As a public sector organisation, ELC are required to assess the impact of their decisions and policies on equalities groups.

10.3.2 The Council have recently launched a new way of undertaking Equalities Impact Assessments (EQIA) which sets equality considerations alongside their social policy objectives e.g. tackling poverty It also considers the impact of their decisions in relation to the environment and the economy. The new process is called Integrated Impact Assessment (IIA), which will be used by the East Lothian Partnership and the Integrated Joint Board.

10.3.3 An EQIA should be prepared before actions are taken forward.

10.4 Monitoring and Evaluation Framework

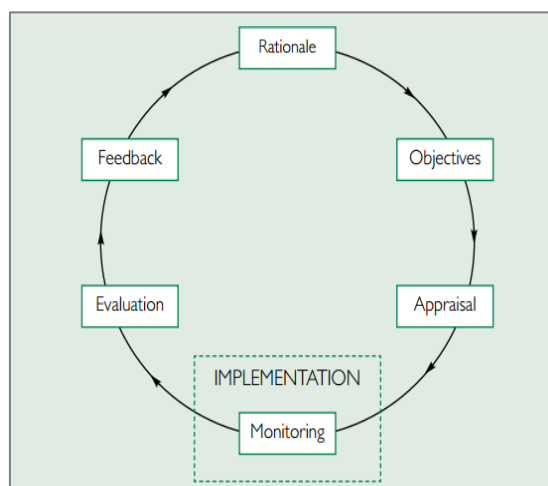
10.4.1 As the Action Plans are intended to guide investment, a supplementary framework covering monitoring and evaluation has been developed.

Monitoring

10.4.2 The importance of monitoring is enshrined in H.M. Treasury's Green Book: Appraisal and Evaluation in Central Government, the key document for scheme appraisal and evaluation in the UK. The Green Book stresses the importance of the 'ROAMEF' cycle as is illustrated below:

10.4.3 The ROAMEF cycle recommends that all schemes should be based on:

- A rationale (i.e. tackling problems and realising opportunities);
- Objectives, which reflect the rationale (i.e. those identified by our stakeholder consultation and approved by East Lothian Council); and
- Appraisal.



10.4.4 The figure shows that as an organisation moves towards the implementation stage, they should implement a monitoring programme designed to collect evidence on the performance of an investment.

10.4.5 It is very important to note that a monitoring framework should be put in place before the investment is made. If such a baseline is not established, it is often very difficult to discern whether a scheme has been a success or otherwise.

10.4.6 Monitoring is an often-neglected stage of the project lifecycle, yet it is as important, if not more important, than any other stage in the project. The developed monitoring and evaluation

³⁶ <https://www.keepsotlandbeautiful.org/sustainability-climate-change/climate-challenge-fund/>

framework relies on low-cost measures or existing data to minimise the financial burden on the Council.

10.4.7 This report in itself, represents a good baseline of data for the area and Table 10.1 presents a monitoring framework.

Table 10.1 Monitoring Framework

Element	Baseline	Purpose	Frequency
Traffic flow data	Collected by the Council for a large number of junctions in North Berwick in 2018/19	Identify any change in traffic flows (i.e. increased / decreased reliance on the car)	Biennial area-wide or locally after any specific changes to junctions / streets
Traffic speed data	Data available for Grange Road (2019)	Monitor compliance with speed limits	After any specific modifications to street layouts
Hands-Up Survey data	Historic data available plus information collected as part of this study	Monitor any changes in travel behaviour over time	Twice per year as current
Road traffic collisions	Presented in this study	Monitor any changes over time	Review annually
Non-motorised user surveys	None	Measure the impact of specific interventions	Collect at localised site before and after any specific infrastructure changes

Evaluation

10.4.8 A well-designed monitoring framework provides a basis for undertaking the next stage of the ROAMEF cycle, evaluation. An outcome evaluation should attempt to determine the extent to which an investment has delivered against its initial goals – i.e. has it delivered the objectives?

10.4.9 The collection of good quality monitoring data would allow ELC to carry out a robust evaluation and understand both quantified and behavioural impacts of their investment. It will also make it possible to gauge the extent to which the objectives have been achieved, spell out what has worked and what has not, and provide a basis for future prioritisation exercises. The process evaluation would aim to identify lessons that could be learned for delivering similar schemes in the future. It will aim to gather a collection of qualitative and quantitative data to understand what worked well and what didn't.

10.4.10 Reference should be made to *Sustrans Design Manual Chapter 16 Monitoring and evaluation of walking and cycling (draft), November 2014*³⁷.

³⁷ <https://www.sustrans.org.uk/sites/default/files/images/files/Route-Design-Resources/Monitoring-31-10-14.pdf>

Table 10.2 Evaluation Plan Example

Element	Example
Objective	To deliver a more attractive and safer environment for pedestrians and cyclists To reduce the overall dependence on the car and the environmental impact of traffic; To promote the availability and use of more sustainable means of travel; Improve physical and mental well-being through the associated benefits of active travel; and To maximise accessibility for all and reduce social exclusion.
Input	Infrastructure improvement
Output	Physical route
Outcome	Increased active travel / improved perception of safety
Impact	Increase in cycling, improved perception of safety, reduction in car use / emissions, visibility of active travel route options, increased accessibility

Appendix A Hands Up Survey Results

Please refer to separate attachment.

Appendix B Communication / Engagement Strategy

Please refer to separate attachment.

Appendix C Census Data (Datashine)

Please refer to separate attachment.

Appendix D.1 / D.2 Land Designations

Please refer to separate attachment.

Appendix E List of Identified Issues

Please refer to separate attachment.

Appendix F Online Feedback Form Results

Please refer to separate attachment.

Appendix G List of Initiatives

Please refer to separate attachment.

Appendix H Model Reports

Please refer to separate attachment.

Appendix I Prioritised Action Plan

Please refer to separate attachment.

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