Walkers, Wheelers, Cyclists, Horse-Riders Strategic Road Network Research North West Region

February 2025



Contents

- 1. Research Background & Objectives
- 2. Methodology
- 3. The A590
- 4. Hotspot Findings
- 5. Key Findings & Recommendations

P. el. ret

Background & Objectives





Background & Objectives Introduction

National Highways manage England's motorways and major 'A' roads, known as the Strategic Road Network (SRN). The SRN is a vital part of England's transport system, carrying a third of all passenger miles, despite only making up 2% of the road network.

While the SRN is primarily used by those driving cars, lorries and other motorised vehicles, people do make journeys on, alongside, or over these busy roads by other means. For example, some people make journeys which interact with the SRN travelling on foot, by bicycle, or occasionally on a horse.

Transport Focus, the transport user watchdog, represents all users of the SRN and therefore commissioned SYSTRA to undertake research into the experiences of walkers, wheelers, cyclists and horse-riders when travelling on, adjacent to or across the A590, a major SRN route in South Cumbria, North West England.

This work builds on walkers, wheelers, cyclists and horse-riders research undertaken in other SRN regions.

Objectives

This research aims to increase understanding of what it is like to use the A590 as a walker, wheeler, cyclist or horse-rider, and to provide practical, realistic recommendations to National Highways about improving the user experience.



Background & Objectives This report

This report provides key findings for all A590 hotspot locations identified as part of this study and is structured as follows:

- Section 2 summarises our approach;
- Sections 3 provides an overview of the A590 and describes how users travel along the full route;
- Section 4 provides findings from hotspot specific locations: Ulverston Centre; Greenodd; Haverthwaite; Newby Bridge; and Gilpin Bridge Inn; and
- Section 5 provides the study conclusions and recommendations based on the study findings.

More details on each of the hotpot locations can be found in the hotspot-specific reports.

Throughout the report, walkers, wheelers, cyclists and horse-riders are defined as follows:

- Walkers/Wheelers pedestrians, with or without a pram, pushchair, wheeled frame, walking stick, mobility scooter, wheelchair, or other mobility aid;
- Cyclists bicycle, tricycle, tandem, scooter; and
- Horse-riders equestrians.

Copyright notice: This report contains site images and videos taken by SYSTRA or provided by research participants. All imagery has been captured with participant consent. The maps provided throughout this report have been used in accordance with Open Street Maps terms of service.

SYSTIA





Methodology Approach overview

Stage 1: Site familiarisation

Stakeholder engagement



Online interviews and focus groups were undertaken with a range of stakeholders to understand the A590 in depth, including identification of key hotspot areas where users faced issues Systematic site audits



Using industry standard assessment criteria, on-site audits objectively evaluated the infrastructure available at hotspots for each of walkers/wheelers, cyclists and horseriders Stage 2: User Research



Digital ethnography task

Researchers completed accompanied journeys and interviews with site users to understand user experiences when interacting with the hotspots

Accompanied

journeys and

interviews

Site users and stakeholders were invited to provide feedback on the whole of the A590, in their own time, using an online interactive map

Methodology Site familiarisation

Stakeholder engagement: The following stakeholder organisations provided feedback on walking, wheeling, cycling and horseriding provision and experience across the whole A590 route, including challenges, successes, suggestions for improvement, and suggestions for hotspots where the research should be focussed:

Stakeholders	Ulverston centre	Greenodd	Haverthwaite	Newby Bridge	Gilpin Bridge Inn
National Highways' local area teams	х	х	x	x	x
WCA Consulting	Х	Х		X	x
West Morland and Furness council	х	х		x	x
Dalton Community Association	х	х			
Harness Change			X	X	
Cumbria Bicycle Mayor	Х	Х	X	X	X
Sustrans	Х	Х		X	x

This range of stakeholders ensured understanding of the issues from both the perspectives of user groups and of those responsible for maintaining the hotspots and making decisions about improvements.

Systematic site audits: Hotspots were split into separate sections ('links'), which were evaluated and scored whilst on site, using PERS (Pedestrian Environment Review System) and CLOS (Cycling Level of Service) assessments. This approach ensured a standardised assessment across hotspots. Whilst a standardised assessment was undertaken across all hotspots, this report highlights just the key outcomes. More detail can be found in the full hotspot-specific reports.

Methodology User research

A mix of walkers, wheelers, cyclists and horse-riders took part in user research at each of the sites:

Site	Accompanied journeys	Online interactive map responses	
Ulverston Centre	 2 Walkers 1 Wheeler 1 Cyclist 	 1 Stakeholder 1 Cyclist 2 Cyclists and Walkers 1 Horse-rider 	
Greenodd	 3 Walkers 1 Cyclist	1 Stakeholder1 Walker and Cyclist	
Haverthwaite	3 Walkers	 2 Walkers 1 Cyclist	
Newby Bridge	 2 Horse-riders 3 Walkers 1 Wheeler	2 Walkers and Cyclists	
Gilpin Bridge Inn	 1 Walkers 2 Cyclists 2 Horse-riders 	 2 Cyclists 1 Walker and Cyclist 1 Stakeholder 	

The following sample limitations should be noted:

- The sample size of the user groups is small;
- This research considers users of the route, and therefore does not consider suppressed demand from those who avoid it;
- The sample of participants is self-selecting and therefore the findings do not aim to be representative of the site user population or road user groups; and
- The findings reported are the views and perceptions of the participants only, with recommendations based on suggestions put they put forward.

Walkers, Wheelers, Cyclists and Horse-Riders SRN Research: North West

Methodology User research

Details of the accompanied journey sample are provided below:

Site	User type	Age group	Frequency of use*	Gender	Disability status
Ulverston Centre	Walker	31-64	Frequent	Male	No disability
Ulverston Centre	Walker	31-64	Frequent	Female	Pram
Ulverston Centre	Wheeler	65+	Frequent	Female	Mobility impairment
Ulverston Centre	Cyclist	65+	Frequent	Male	No disability
Greenodd	Walker	31-64	Infrequent	Male	No disability
Greenodd	Walker	18-30	Frequent	Female	No disability
Greenodd	Walker	18-30	Frequent	Male	No disability
Greenodd	Cyclist	65+	Frequent	Male	No disability
Haverthwaite	Walker	31-64	Infrequent	Male	No disability
Haverthwaite	2 x Walker	65+	Frequent	Female & Male	No disability
Newby Bridge	Horse-rider	31-64	Frequent	Female	No disability
Newby Bridge	Horse-rider	31-64	Frequent	Female	No disability
Newby Bridge	2 x Walker	18-30	Frequent	Female & Male	No disability
Newby Bridge	Walker	31-64	Frequent	Female	No disability
Newby Bridge	Wheeler	65+	Infrequent	Female	Mobility impairment
Gilpin Bridge Inn	Cyclist	65+	Frequent	Male	No disability
Gilpin Bridge Inn	Cyclist	Under 35	Frequent	Female	No disability
Gilpin Bridge Inn	Walker	31-64	Frequent	Male	No disability
Gilpin Bridge Inn	Horse-rider	31-64	Frequent	Female	No disability
Gilpin Bridge Inn	Horse-rider	31-64	Frequent	Female	No disability

*Frequent users were defined as those who use the hotspot at least once a week, and infrequent as those who use the hotspot less than once a week.







Site background

The A590 is a significant part of the 530mile SRN in North West England; one of the most diverse regional networks of motorways and major A-roads in the country.

The A590 is in South Cumbria and covers 28 miles of the North West's SRN. To note, it is located just south of the Lake District National Park¹.

This research focused on the stretch of A590 between the A591 near to Sizergh and the end of the SRN at Park Road in Barrow-in-Furness.

Five hotspot locations, highlighted as having particular issues for walkers, wheelers, cyclists and horse-riders during the early stakeholder engagement stage, were selected for detailed investigation in this research. Hotspots are shown on the adjacent map and table.

1 https://www.lakedistrict.gov.uk/



Hotspot number	Hotspot description
1	Ulverston Centre
2	Greenodd
3	Haverthwaite
4	Newby Bridge
5	Gilpin Bridge Inn

horse-riders, Walkers, Wheelers, Cyclists Strategic Road Network Research: Haverthwaite



Going along the A590



Between Ulverston (hotspot 1) and Greenodd (hotspot 2), there is a mixture of single and dualcarriageway, with no dedicated on-road active travel infrastructure. Despite this, users have been observed cycling along the A590 at this section, with the A-road the fastest, most direct and most level route available.



Colton

2

Spark Bridge

Oxen Park

2 to 3

Bouth

Grenodd crossing (hotspot 2) connects the A590 to the National Cycle Network (NCN) and a shared use path that utilises a disused railway track, providing access with Haverthwaite (hotspot 3).

Backbarrow



3 to 4

Finsthwaite

Despite a lack of dedicated active travel infrastructure on this stretch, walkers have been observed directly on the A590 between Backbarrow (hotspot 3) and Newby Bridge (hotspot 4). This includes walking on a grass verge, and directly on the A590 itself to access local tourist destinations and camp sites.

B5271

High Newton

Field Broughton





Foulsi Moss N Rese

Witherslack

Meathop

4 to 5

There is a lack of infrastructure to support active travel between hotspot 4 and 5. Parallel roads, such as Heather's Lane, provide a pleasant alternative to the SRN and are well utilised for accessing off-road paths and local nature reserves. Just north hotspot 5, the A590 around Levens is popular with professional cyclists for time trials, due to the roads challenging gradients. Only confident cyclists are typically able to navigate travelling on the A590 in this location.

horse-riders, Walkers, Wheelers, Cyclists Strategic Road Network Research: Haverthwaite

realand Conver



Going along the A590

Challenges, identified by users and stakeholders who took part in this research:

- Along the whole length of the A590, inconsistent footways and unsignalised crossings present challenges for individuals to walk or wheel continuously. For example, limited routes from Haverthwaite to connected routes, particularly for access to Windermere.
- Similarly, inconsistent cycling infrastructure and narrow vehicle lanes presents hazards for cyclists when travelling on the A590, particularly when navigating junctions (e.g. Greenodd Roundabout). Cycling on-road is therefore only possible for very confident or experienced cyclists.
- Riding along or crossing the A590 as a horse-rider is challenging due to high **levels of traffic** and **noise pollution** which frighten horses. This is despite the road intersecting bridleways and nature reserves which are frequented by horseriders.
- Overall, the lack of infrastructure along the route causes safety concerns due to high vehicle speeds and lack of visibility.
- Users, particularly cyclists, noted a lack of usable alternatives to detour away from the A590 for navigation along the route. Although some alternatives were described as enjoyable (e.g. Heather's Lane), most had more challenging gradients, were less direct or were poorly maintained.

Successes, identified by users and stakeholders who took part in this research:

- Stakeholders identified that going along the A590 on-road was typically more **direct**, and a more **level gradient** than travelling on alternatives.
- The A590 was also perceived to be better maintained than many smaller, alternative side roads (e.g. in Arrad Foot), with fewer potholes and better lines of sight.
- Some parts of the A590 have a marked 1m edge of carriageway strip, and a wide road alignment, offering a safe buffer for cyclists compared to travelling with heavy traffic on narrower sections.
- National Highways changes to the speed limits (e.g. in Haverthwaite and Newby Bridge) were viewed positively.
- Connections to the National Cycle Network and other active travel infrastructure, such as the disused railway path between Greenodd and Haverthwaite, were used frequently and described as pleasant detours away from the busy A590.

"The road is single road in places and the cars pass fast and close making it extremely dangerous and scary. The road is also of poor surface. There is no space to ride it, and the experience is terrifying. I have also seen random walkers on the road trying to link Ulverston to Greenodd." (Walker and Cyclist) **Suggestions for improvement**, identified by users and stakeholders who took part in this research:

- **Extend and maintain the disused railway path** that connects to Greenodd crossing, taking it the full length of the A590, where budget and land use allows, in order to encourage active travel across the area of the A590.
- Construct a short section of off-road cycleway on the north side of the A590, from the Lakeside and Haverthwaite Steam Railway to Backbarrow Road.
- Add a footway between Newby Bridge Roundabout and the Shell garage to provide safer access for walkers.
- Introduce and maintain quiet lanes which approximately follow the A590 alignment on both sides of the road (e.g. Heather's Lane). It is noted that these changes would be difficult due to constraints with road alignment and budget.
- Install signalised crossings at high-risk areas (e.g. bus stops).







Hotspot background

As a major town within the Furness Peninsular, **Ulverston** offers a variety of shops, restaurants and housing for its 11,700 residents.

The A590 runs through the centre of the town, meaning interacting with the SRN is common.

To the north of Ulverston, the SRN (Link 4 on map) becomes dual and single carriageway, with cyclists known to travel on this route to connect with cycle routes up to Haverthwaite.

This hotspot was split into **five** separate sections ('links') for this research (see map).



Link 2b Link 2b

"The crossing waits sometimes feel too long... Mum's back can't handle standing there forever." (Walker)





"When [the A590] is really busy, it's a bit **dangerous**." (Walker)



"I go in the way south of Ulverston several times a week, but I don't go north of Ulverston because the A590 is very dangerous and the alternative is extremely hilly. I tend to do that only once a week." (Cyclist)



"The A590 route through the town centre suffers from putting the motor vehicle capacity above all other design considerations making it difficult and unattractive for pedestrians and cyclists." (walker and Cyclist)



SYSTIA

Challenges and Successes – site audit findings & stakeholder views

The challenges and successes for each user group, as identified by stakeholders and during site audits, are provided below.

There is no provision for horse riding in Ulverston Centre.

Walkers and wheelers navigate paths alongside the busy and fast A590 which runs through the centre of the town. A lack of safe crossing points and lack of pedestrian priority are a cause for concern.

The footway around the Blue Light Hub area provides good connectivity.

Within Ulverston Centre, cyclists contend with fast traffic on narrow lanes, with dangerous junctions. Out of town, there are limited safe routes between Ulverston and Greenodd.

Back roads between Alpine Road and Ulverston offer an alternative, and there is strong support for a proposed cycleway to improve safety and connectivity.

SYSTIP

Challenges – user views

Challenges, identified by users who took part in this research, included:



Despite signage indicating use by horse-riders, adjoining and crossing the A590 at Newland Service Station is dangerous due to high vehicle speeds and lack of visibility.

Horse-riders

- Concerns arising from a lack of safe crossing points, particularly on busy sections near Booths roundabout and Marks and Spencer's (Link 2b) were:
 - Crossing at these areas is unsignalised, which creates safety risks due to the speed of traffic and poor visibility for walkers.
 - There is a fear among hotspot users due to past accidents and unpredictable driver behaviour.
 - Signalised crossings have long wait times, which can be difficult for the elderly who struggle to stand for long periods.
 - Other safety concerns include:
 - Overgrown hedges and greenery and limited lighting in some places, means visibility is poor.
 - Generally, high-speed traffic, including motorcycles, creates anxiety and safety risks.
 - Inconsistent or unclear road markings and abrupt speed limit changes.
 - Uneven paths, raised flagstones, and inconsistent curb heights hinder safe navigation.



Wheelers

•

Walkers

- When using the paths along and across the A590, users expressed concerns about:
 - Uneven footway surfaces and inconsistent gradients and curb heights make navigation difficult and lead to stalls and struggles for mobility scooters.
 - Pavements are narrow or obstructed, adding to the difficulty of manoeuvring.
 - High-speed traffic, inadequate visibility and long wait times at crossings poses heightened risks for vulnerable users.





"You wouldn't want to cross slowly because you don't get a good view, and the traffic speed is... they're shooting down big." (Wheeler)

"It is particularly tricky for cyclists to turn right from the A590 onto Swan Street (the best route to avoid the main road through Ulverston). This requires filtering across three traffic lanes." (Cyclist)



SYSTIA

Challenges – user views

Challenges, identified by users who took part in this research, included:

- Users expressed the following concerns when cycling along the A590 through Ulverston centre or using alternative routes:
 - The A590 has dangerous narrow sections north of Ulverston Centre (Link 3 and 4), with traffic passing at 50-60mph and no dedicated cycling provision, apart from a 1m edge of carriageway marking which is used informally as a cycle lane by confident cyclists in daylight. Cyclists travel in close proximity to high-speed vehicles, which often pass by closely.
 - Potholes, debris and overgrown greenery are common within the 1m edge of carriageway boundary, causing safety challenges.
 - Alternative side roads north of Ulverston are steep and time-consuming, and also poorly maintained, with potholes. Additionally, the NCN diversion is steep and time consuming. This means alternatives are less usable than the A590 itself, despite safety challenges on the SRN.
 - Increased traffic from road works diversions worsens conditions for cyclists in this area, and lack of consultation on these diversions frustrates cyclists.
 - Cyclists travelling from the east of the hotspot (Link 2), often turn off the A590 onto Swan Street to avoid cycling on the A590 through Ulverston Centre, opting instead for side streets, some of which are one-way. However, crossing the A590 onto Swan Street is challenging, due to having to cross three lanes of SRN.
 - It is not possible to use one-way streets throughout Ulverston Centre to avoid the A590 if travelling from the west.
 - SRN sections out of Ulverston Centre to the west are very intimidating to cross, including for right-hand turns off the A590. Crossing is required for access to shops and the Beehive Business Park.

"You've got massive juggernauts coming along at 50/60mph... if you keep doing that then one of these days you're gonna get mowed down." (Cyclist)



"The road is single road in places and the cars past fast and close making it extremely dangerous and scary. The road is also of poor surface. There is no space to ride it, and the experience is terrifying. I have also seen random walkers on the road trying to link Ulverston to Greenodd." (Walker and Cyclist)







Cvclists

Successes – user views

Successes, identified by users who took part in this research, included:



- Signalised crossings on the central Ulverston sections of the A590 are viewed positively.
- Adequate lighting on the central Ulverston sections of the A590 creates feelings of safety and comfort, especially during winter months.
- Familiarity with routes and the presence of known landmarks creates a sense of ease for regular users.
- Aesthetically pleasing environment with vegetation and planters along the route.
- Signalised crossings on the central Ulverston sections of the A590 are viewed positively.
- Wide pavements in some areas accommodate prams and mobility scooters when well-maintained.
 The fact way along the AERO through control Lilly areas in more
 - The footway along the A590 through central Ulverston is more accessible for mobility scooters than alternative routes, despite the challenges highlighted.





Wheelers

- Some parts of the A590 have a marked 1m edge of carriageway strip, and a wide road alignment, offering a safer buffer for cyclists compared to travelling with heavy traffic on narrower sections.
- Despite its challenges, the A590 is better maintained than many smaller side roads within Arrad Foot, with fewer potholes and better lines of sight.
- For confident, experienced horse-riders, the A590 offers a faster and more direct route compared to the hillier alternatives through Arrad Foot.
- Cycling in this area allows access to the South Lakes, including popular destinations like Coniston, Ambleside and Barrow, supporting both recreation and health benefits.
 - Cyclists can combine cycling with public transport (e.g. buses) for longer journeys.

"When you get near town there's a lot more of these signalised crossings, which I thought work fairly well." (Walker)





"This route has its issues, but trying to walk somewhere else to avoid the A590 is almost impossible, especially with a mobility scooter." (Wheeler)



Recommendations for improvements

Recommended improvements for Hotspot 1: Ulverston Centre, arising from the research, are provided below.

- Improve accessibility for elderly and disabled users, as well as users travelling with prams and other wheeled aids, by:
 - Improving the surface of paths and roads;
 - Standardising curb heights at key crossing points;
 - Reducing crossing times at signalised crossings; and
 - Widening footpaths, where possible;
- Address safety and security concerns, by:
 - Installing more signalised crossings at high-risk areas like Booths and near Marks and Spencer;
 - Improving visibility at crossings by regularly maintaining overgrown vegetation and adding mirrors;
 - Reducing speed limits and adding speed cameras or other enforcement measures to slow down vehicles near crossings and junctions; and
 - Enhancing lighting where it is currently lacking.
- Introduce dedicated infrastructure, in particular:
 - Adding a dedicated two-way cycle lane through Ulverston Centre;
 - Off the A590 alignment, adding 'Except Cyclist' signage to one-way side streets through Ulverston Centre, creating alternative routes for less experienced cyclists;
 - North of Ulverston, undertaking a feasibility study to transform the Ulverston-Greenodd SRN section by introducing active travel provision via a cycle lane or shared-use path; and
 - Where new infrastructure in unable to meet standards, looking for alternative options and mitigations to make it as good as possible, or ways to encourage use of
 existing infrastructure, where available.
 - Improve **user access** to and from the hotspot to encourage journeys along the A590 by sustainable transport modes, by:
 - Extending and maintaining the disused railway path from Greenodd crossing down to Ulverston, taking it the full length of the A590, where budget and land use allows.







"My mum has a wheelchair or mobility scooter and the nature reserve I am trying to cross into, is actually an all-mobility trail. But people can't access this mobility trail because there is no paths that can get you there." (Walker)





"The little one metre strip is going narrower and narrower and disappearing again, just before the roundabout, forcing you into the traffic flow." (Cyclist) "As long as you have got a central reservation you are alright, because it gives you the barrier in the middle, and you have only got to navigate the traffic going in one direction." (Walker)





"This bridge over the river takes you on to where the Cumbria cycleway goes... that track the other side of the bridge, is quite rough and it floods a lot, so it's somewhat problematic for cyclists... you have to climb over the barrier... there's no way through." (Cyclist)



SYSTIA

Hotspot background

The **Greenodd** site incorporates Greenodd crossing (located on Link 2a) which is an unsignalised crossing point¹ on the A590. The crossing provides access to the National Cycle Network 70 / 700, the footbridge over the River Levens (Link 2b), a bus stop, Greenodd village, and local nature reserves for leisure walks by those in surrounding areas. As an alternative to the surfacelevel unsignalised crossing point, users can access an underpass beneath the SRN.

Walking, wheeling and cycling are common at this hotspot, with cyclists travelling along the A590 towards Penny Bridge or using the NCN route.

This hotspot was split into **four** separate sections ('links') for this research (see map).



¹⁻ A pedestrian crossing without traffic light signals

Challenges and Successes – site audit findings & stakeholder views

The challenges and successes for each user group, as identified by stakeholders and during site audits, are provided below.

There is no provision for horse riding on the Greenodd crossing. A bridge over the River Levens to join this link has parapets which fall short of the required height stated in design for manual roads and bridges (DMRB) guidance. Stakeholders identify high noise pollution, and lack of well-suited crossing points may be challenging for horse-riders across the whole A590.

No successes were identified for horse-riders at Greenodd.



High speed traffic creates difficulty at the surface-level Greenodd crossing, despite good segregation and footway width. The alternative underpass, is difficult to use with a steep, uneven and poorly lit footpath.

The surface-level crossing point has a refuge island, with good visibility of traffic. Whilst the underpass is not fully accessible, it is currently well utilised.



No segregated cycle lanes are present along the A590 at this hotspot and the speed of traffic is a challenge, in addition to visibility. Despite the underpass providing an alternative crossing to the surface-level crossing, with good signage, it is often poorly maintained with an uneven surface that is difficult for cyclists.

Gradient of the A590 is flat and the route is direct, making it preferable for cyclists compared to alternative routes through Greenodd village.

Challenges – user views

Challenges, identified by users who took part in this research, included:

- When using the unsignalised surface level crossing across the A590, users expressed concerns regarding:
 - High speeds of traffic reduced feeling of safety at crossing, despite being protected by barriers at the central reservation.
 - Walkers described difficultly in judging speeds of oncoming traffic and long waiting times associated with crossing, which is especially challenging for elderly users.



- High noise pollution from traffic is also unpleasant.
- Challenges identified in using underpass as an alternative to crossing at surface level, and pathway into Greenodd village, included the rocky, uneven surface and poor lighting.
- Signage of routes is considered poor, with walkers discovering the underpass route into Greenodd Village through the phone application AllTrails.





- Surfacing of the underpass and path into Greenodd village is particularly difficult for those with prams and mobility scooters, limiting their ability to access the nature reserve.
- When cycling along the A590 in Greenodd, users expressed concerns safety concerns regarding:
 - Dangerous driving behaviours such as vehicles overtaking cyclists on narrow sections, and general speeding. There is no dedicated cycle lane on the A590 at Link 2.



- High volumes of high-speed traffic, and reduced visibility from overgrowth/foliage, particularly along Link 3.
- Users described being frequently pressured by vehicles to use the 1m edge of carrigeway road marking as a cycle lane, despite the insufficient space to be used in that capacity, and the inconsistent presence along the A590, including on approach to Greenodd roundabout and within narrow sections of the A590. The available width of the edge of carriageway road marking is further reduced by overgrowth and drains.



- Cyclists identified those who were less confident would find it difficult to navigate cycling on the A590.
- Accessing the footbridge through the crossing at link 2 can be difficult on a bicycle, especially when having luggage attached due to the tight turns and needing to lift bike over barriers.
- Surfacing of NCN route is challenging for cyclists past link 2b, and frequently floods.

"My mum has a wheelchair or mobility scooter and the nature reserve I am trying to cross into, is actually an all-mobility trail. But people can't access this mobility trail because there is no paths that can get you there." (Walker)



"This bridge over the river takes you on to where the Cumbria cycleway goes... that track the other side of the bridge, is quite rough and it floods a lot, so it's somewhat problematic for cyclists... you have to climb over the barrier... there's no way through." (Cyclist)



Successes – user views

Successes, identified by users who took part in this research, included:

• Although poorly maintained and a longer route, the existence of an alternative crossing route through the underpass was appreciated by walkers.



- The lighting at Greenodd crossing and barriers between pavement and the road contributed to increased feelings of safety, notwithstanding the concerns outlined.
- When utilising the bridge over River Levens for onward travel, walkers felt calmer and were able to enjoy the scenery.

enough space for vehicles to pass in dual carriageway sections.

• This site provides good connections to other walking and cycling routes along the A590 e.g. disused railway to Haverthwaite.



Once off the A590, the disused railway route for cycling towards Haverthwaite was appreciated by cyclists. Routes around the Greenodd Estuary offer peaceful, visually rewarding rides, making them attractive for leisure cyclists.

The A590 includes an edge of carriageway marking which can be used as a cycle path and there is just

• The section of road at Greenodd is considered better lit than elsewhere along the A590.



"Being out in the fresh air, I enjoy that. The traffic doesn't help... the fumes. Once you can get out and about off the main road, it's a lovely area for cycling." (Cyclist)

"The fact you can get over the footbridge, onto the old railway track... it gets you off the road, it's scenic, pleasant, birds, really good views of the lakes... it's a really good route." (Cyclist)



"Now we are on the middle part of this dual carriageway, which feels protected because of the barriers...but it's just the noise... because it's so oppressive with the really fast cars." (Walker)



Recommendations for improvements

Recommended improvements at Hotspot 2: Greenodd, arising from the research, are provided below.

- Improve accessibility for elderly and disabled users, as well as users travelling with prams and other wheeled aids, by:
 - Improving access to the alternative underpass crossing, enabling all users to avoid the surface-level crossing;
 - Improving the surface of the underpass;
 - Improving the surface of routes connecting to the surface-level crossing and underpass, including the disused railway path and pathways down to Greenodd village.
- Address safety and security concerns, by:
 - Putting rumble strips and signage on the A590 either side of the surface-level crossing to warn traffic to reduce speed;
 - Implementing a reduced speed limit around the surface-level crossing, to allow for safer and easier crossing;
 - Improving signage for the underpass, to encourage users off the surface-level crossing;
 - Widening the surface-level crossing, where feasible;
 - Increasing lighting throughout the hotspot.
- Introduce dedicated infrastructure, in particular:
 - Add dedicated cycle lanes either side of the A590, making use of the existing edge of carriageway markings; and
 - Where new infrastructure in unable to meet standards, looking for alternative options and mitigations to make it as good as possible, or ways to encourage use of existing infrastructure, where available.
- Improve user access to and from the hotspot to encourage journeys along the A590 by sustainable transport modes, by:
 - Extending and maintaining the disused railway path from Greenodd crossing up to Haverthwaite, taking it the full length of the A590,

where budget and land use allows.





Hotspot background

There is an unsignalised crossing¹ on the dual carriageway outside Lakeside and **Haverthwaite** Steam Railway (Link 1 on map). With bus stop access on the south of the road, providing services to Greenodd, the dual carriage SRN severs access to the railway and other leisure attractions on the north of the A590.

Past Haverthwaite Steam Railway, and to the North, the A590 becomes single carriageway with limited to no footways running on the A590 alignment (Link 2 and 3).

Link 4 starts with an unsignalised crossing (Brow Edge crossing), underpass, and bus stops before the SRN runs through Backbarrow.

This hotspot was split into **four** separate sections ('links') for this research (see map).

1- A pedestrian crossing without traffic light signals





"There isn't much at all good for walkers in this section of the A590, there's not much in the way of continuous paving... I think anywhere where there is a busy road, people would prefer to not be near the road because of traffic and fumes and noise and everything else. We just try to use it as an artery to get to the main location." (Walker)









"I wouldn't do it in the dark, no there's no streetlights. Only the odd one. We wouldn't want to go walking in the dark, we wouldn't see anything in the dark." (Walker)



SYSTIA

Walkers, Wheelers, Cyclists and Horse-Riders SRN Research: North West

Link 1

Challenges and Successes – site audit findings & stakeholder views

The challenges and successes for each user group, as identified by stakeholders and during site audits, are provided below.

High speed of traffic, lack of appropriate refuge spots and poor visibility make crossing challenging for horse-riders. There are no specific provisions for horse-riders at this hotspot.

No successes were identified for horse-riders.



Where available, footway widths are inconsistent, with poor surfaces and a lack of lighting. Crossing points are also inadequate, lacking lighting and safe segregation from high-speed traffic.

National Highways have made updates in this area, including speed limit reductions and technology at crossings in Backbarrow to increase safety for users.

Cycling conditions are poor and inconsistent due to a lack of dedicated cycling infrastructure and high-speed traffic on the A590 alignment.

National Highways have made updates in this area, including speed limit reductions.

SYSTIC

Challenges, identified by users who took part in this research, included:

- When using the path adjacent to the A590 and unsignalised crossing at Haverthwaite Railway Station, users expressed concerns about:
 - Lack of lighting;
 - Perceived high noise and air pollution discouraged walking along the A590.
 - Inconsistent footpaths along the A590 mean walkers must use longer alternative through Haverthwaite village to reach connected walking routes e.g. to Bouth.
 - Available unsignalised crossing is not located in appropriate place for connecting footways and junctions at this location, meaning walkers use alternative crossing points.

- When using path adjacent to the A590 in • Backbarrow to access bus stops, users expressed concerns about:
 - Lack of lighting in this area, which increases safety risk at night.
 - The footpath is narrow and close to the road, so walkers describe having to take a torch or wear a headlamp to illuminate the footpath, which could be a distraction to traffic along this stretch of road.
 - The speed of the traffic and lack of protection, particularly when using the unsignalised surface-level crossings along the route.
- Further to the north of Link 4, walkers are reported to walk directly on the dual carriageway to access Backbarrow. This includes walking on a grass verge, and directly on the A590 itself, which is unsafe.

"Walking to the bus stops at night can be very dangerous. There are no lights in this area and the footpath is very narrow and close to the road, so have to take a torch or wear a headlamp to illuminate the footpath. This could be a distraction to any traffic along this stretch of road." (Walker)









Walkers

- Road surfacing is poor, with large cracks and potholes forcing cyclists further into the road.
- The dual carriageway section along link 1 is short with narrow lanes, so drivers overtake cyclists dangerously.






Successes – user views

Successes, identified by users who took part in this research, included:



- Walkers feel confident and safe where there is a pavement.
- When crossing over the A590 from the bus stop, more confident walkers use the grass islands in the central reservation as refuge points. These grass islands increase their sense of safety despite not being designed as a crossing point. Walkers prefer crossing at this location as it is more direct.
- Good visibility of traffic at dedicated unsignalised crossing outside Lakeside and Haverthwaite Steam Railway.



No successes were identified by cyclists.



"We sometimes use the [Haverthwaite] crossing, but it depends on which direction we are walking. We crossed here[at the railway cross roads] because it's just more direct, and we can use the grass as an island to help cross." (Walker)

"You've got to be careful, and look out for any cars turning left off the A590 [at the railway cross roads]...As long as you've got your wits about you and you're looking all around it's fine." (Walker)





Recommendations for improvements

Recommended improvements at Hotspot 3: Haverthwaite, arising from the research, are provided below.

- Address safety and security concerns, by:
 - Converting dual carriageway section to single carriageway, using space for dedicated infrastructure, such as continuous footways, cycle lanes and wider central refuge areas at crossings;
 - Adding traffic signals at the Lakeside and Haverthwaite Steam Railway crossing and implementing an additional controlled crossing where the B5278 meets the A590 near Lane Ends;
 - Implementing a reduced speed limit around the surface-level crossings, to allow for safer and easier crossing;
 - Taking lessons from the crossing technology trial at Backbarrow and consider retaining it and wider roll out in the area; and
 - Increasing lighting throughout the hotspot, especially at surface-level crossings.
- Introduce dedicated infrastructure, in particular:
 - Adding a continuous footway and cycle lane, or shared-use path along the A590 at this hotspot, making space by converting the dual carriageway to single carriageway, which would also improve road safety;
 - Constructing a short section of off-road cycleway on the north side of the A590, from the Lakeside and Haverthwaite Steam Railway to Backbarrow Road; and
 - Where new infrastructure in unable to meet standards, looking for alternative options and mitigations to make it as good as possible, or ways to encourage use of existing infrastructure, where available.
- Improve user access to and from the hotspot to encourage journeys along the A590 by sustainable transport modes, by:
 - Extending and maintaining the disused railway path from Greenodd crossing up to Haverthwaite, taking it the full length of the A590, where budget and land use allows.



Hotspot background

Newby Bridge village is at the southern end of Lake Windermere. The A590 runs through the village, connecting tourists to this key attraction.

Newby Bridge roundabout (Link 3) is a very busy junction and is frequently accessed by walkers, wheelers, cyclists and horse-riders to navigate between local amenities within the village.

horse-riders also navigate this hotspot to access bridleways on and around Simpson Ground Reservoir to the east.

The Shell garage to the south of the route (Link 5) includes a well-used local shop, but lacks access for walkers, wheelers, cyclists and horse-riders.

This hotspot was split into **five** separate sections ('links') for the purpose of this research.







"When you're coming out of The Swan, you're going over the bridge... you cannot see the traffic coming round." (Wheeler)



"There's just too much speed and unpredictability. You can be on a road, but the waggons and motorbikes make it difficult [to ride] – it's very noisy, and they go fast." (Horse-rider)





"This section of the A590 between Newby Bridge and the High Newton turn off is completely unsuitable to walkers. I have never walked on this route as I regard it as dangerous." (Walker)



SYSTIA

Walkers, Wheelers, Cyclists and Horse-Riders SRN Research: North West

Link 1

Challenges and Successes – site audit findings & stakeholder views

The challenges and successes for each user group, as identified by stakeholders and during site audits, are provided below.

No dedicated paths or crossings for horses, with high-speed traffic creating dangerous conditions near Newby Bridge Roundabout and Shell garage.

Significant local demand for riding facilities due to a large number of horses and horse-riders in the area, with bridleways connecting to the A590 in this location.



There are some footways of varying widths, surface quality and segregation from traffic. However, these lack lighting and good crossing points. There is also a lack of footways and safe crossings around key destinations, such as the Shell garage, a key community hub, and to access natural trails.

SYSTIF

No successes were identified for walkers.

High-speed traffic, narrow roads, and lack of cycling infrastructure create significant safety risks, particularly out of Newby Bridge village.

Strong local demand highlights the route's importance for cyclists accessing amenities.



42

Challenges – user views

Challenges, identified by users who took part in this research, included:



- The A590 severs bridleways, particularly at Chapel House Wood and Newby Bridge Caravan Park.
- Fast-moving noisy traffic intimidates horses, making riding challenging, especially for young or inexperienced horses.

• Minimal signage indicating use of the route by horse horse-riders, as well as minimal facilities specifically for horse-riders on the road alignment or for crossing, creating unsafe conditions.



- Lack of footways along Link 1 and Link 5 results in people avoiding the link or having to walk on the road (A590) itself, which is dangerous and has fast-moving traffic. To note, the Shell garage on link 5 provides the nearest local shop for some residents and lacks walker access.
- Fast-moving traffic and poor visibility near junctions, crossings and Newby Bridge roundabout pose a significant risk, especially for elderly walkers.
- Cyclists sharing paths can make walking more feel uncomfortable.



Wheelers

Fast-moving traffic and poor visibility near junctions, crossings and Newby Bridge roundabout pose a significant risk, especially at the Newby Bridge and Newby Bridge Hotel junctions. Therefore, wheelers often have to wait a long time to cross the A590 safely.





"The Newby Bridge service station offers the only shop for local residents for 8 miles around, yet there is no pedestrian or dedicated cycle access to if from Newby Bridge [village]." (Walker and Cyclist)

"There is nothing for them [walkers] to walk... and they're walking in the direction of the traffic, so they can't see anything. And it's just life in their hands." (Walker)



"I've been waiting quite some time at the [Newby Bridge hotel junction crossing] island... A lot of people will not slow down... I'm really only using it as a means to an end to get across to the other side of the road." (Wheeler)

SYSTIA

Successes – user views

Successes, identified by users who took part in this research, included:



Bridleways connect to this section of the A590, providing traffic-free, scenic paths suitable for experienced horse-riders and preferable to the A590.

"We followed the bridleways because you're just off the main road and can avoid the fast traffic. It's quieter there." (Horse-rider)



- Signage improvements and reduced speed limits have slightly improved safety.
- Whilst the existing footways are limited, they are functional for crossing roads and provide access to key locations like bus stops and local services.

Walkers



Whilst the existing footways are limited, they are functional for crossing roads and provide access to key locations like bus stops and local services.

Wheelers









SYSTIA

Recommendations for improvements

Recommended improvements for Hotspot 4: Newby Bridge, arising from the research, are provided below.

- Address safety and security concerns, by:
 - Installing more crossings at high-risk areas like bus stops and the Shell garage;
 - Adding a footway between Newby Bridge Roundabout and the Shell garage to provide safer access for walkers;
 - Adding speed cameras or other traffic calming measures to slow down vehicles near crossings and junctions; and
 - Improving signage to indicate shared use of paths and horse-rider presence.
- Introduce dedicated infrastructure, in particular:
 - Designating horse-rider crossing points, with traffic calming measures, near bridleway entry areas, particularly around the Shell garage;
 - Providing dedicated cycle lanes or wider shoulders, particularly near the Newby Bridge Roundabout and the Shell garage;
 - Replacing the dual carriageway towards Backbarrow with a single carriageway to create a dedicated walking and cycling route;
 - Adding segregation or barriers to any new riding, walking, wheeling or cycling infrastructure to enhance feelings of safety; and
 - Where new infrastructure in unable to meet standards, looking for alternative options and mitigations to make it as good as possible, or ways to encourage use of existing infrastructure, where available.
- Improve user access to and from the hotspot to encourage journeys along the A590 by sustainable transport modes, by:
 - Extending and maintaining the disused railway path from Greenodd crossing down to Ulverston, taking it the full length of the A590, where budget and land use allows.



Hotspot background

The eastern end of the A590 between Town End and Levens provides connections to the M6 and A65; key routes within the SRN in North West England.

Link 1 of the A590 at this hotspot is single carriageway, with footways connecting to bus stops at junctions. The A590 then becomes dual carriageway at Links 2 and 3, with limited provisions for walkers, wheelers, cyclists and horse-riders.

Alternative routes are available around **Gilpin Bridge**, on the single-track road at Link 5 (Heather's Lane) and the off-road path at Link 4, however, crossing the A590 to access these alternative routes is dangerous.

This hotspot was split into **five** separate sections ('links') for the purposes of this research.







"There are several unpleasant right-turns onto and off the A590 here [at the eastern section around Levens]." (Cyclist)



"The overall design of the

A590 dual carriageway appears dangerous as in

several junctions (e.g. at Witherslack and Levens)

there is neither a

roads." (Cyclist)

deceleration lane nor

acceleration lane for

the highway from side

vehicles leaving or entering





"Extremely dangerous [joining the A590 and] turning right towards Levens at the [Church Road] junction. Traffic travelling at 70 mph is excessive on a road accessible by all users." (Cyclist)



Walking between Levens village and the bus stops on the A590 slip and at Levens Hall is unpleasant, especially in the dark winter evenings. Currently there is no footpath, so walkers (including schoolchildren catching a bus) need to walk in the narrow 60mph roadway." (Walker)



Ϛϒͻτィ

Challenges and Successes – site audit findings & stakeholder views

The challenges and successes for each user group, as identified by stakeholders and during site audits, are provided below.

Heather's Lane, which provides an alternative route for horse-riders to the A590, lacks any dedicated infrastructure. Crossing the A590 to access Heather's Lane and other locations is a challenge as there is no horse-rider infrastructure at this hotspot. No successes were identified.

Walker/wheeler access is limited at this hotspot, with intermittent or lacking footways and dangerous crossing points on the A590 alignment, particularly at Gilpin Bridge Inn.

Heather's Lane, which provides an alternative route for walkers to the A590, is a safer, more appealing route.

Cyclist access is limited at this hotspot, with intermittent or lacking infrastructure and dangerous crossing points, particularly at Gilpin Bridge Inn and towards Levens.

SYSTIC

Heather's Lane, which provides an alternative route for cyclists to the A590, is a safer, more appealing route.

Challenges, identified by users who took part in this research, included:



Fast moving and noisy traffic above the Derby Arms underpass intimidates horse-riders and horses who are crossing the A590 between Whitbarrow Nature Reserve and Foulshaw Moss Nature Reserve. Horse-riders need to dismount at the underpass due to its height. This makes riding challenging, especially for young or inexperienced horses.



Safety concerns when walking along the A590 at this section include:



- No or inconsistent footway between Levens village and bus stops on the A590 slip road, forcing walkers (including school children) into the 60mph road. This is especially hazardous during dark winter evenings.
- High levels of parked cars, narrow road widths and • narrow to non-existent footpaths in routes through Gilpin Bridge.
- High vehicle speeds and poor visibility at crossing points presents challenges (e.g. at the unsignalised crossing by Gilpin Bridge junction).

- An alternative route often used by walkers through Heather's Lane to avoid A590 (Link 4 and 5) presents challenges such as:
 - Heather's Lane is a single-track road, without a footway and vehicles travel at high-speed, with limited visibility around blind corners, creating unsafe conditions.
 - Challenges are exacerbated when the A590 is closed, due to rat running.



- Safety concerns when cycling along the A590 at this section include:
 - High speed of traffic;
 - Dangerous crossing points and junctions, particularly around Levens and Witherslack:
 - Lack of visibility at crossing point, particularly at the unsignalised Gilpin Bridge slip-road crossing.
- An alternative route often used by cyclists through Heather's Lane to avoid A590 (Link 4 and 5) presents challenges such as:
 - Heather's Lane is a single-track road, without a footway and vehicles travel at high-speed, with limited visibility around blind corners, creating unsafe conditions.
 - Challenges are exacerbated when the A590 is closed, due to rat running.
 - Whilst Heather's Lane is less challenging than the A590, it is a longer route, with steeper gradients and inconsistent maintenance (for example, gritting).



"The National Cycle Network route 700 passes under the SRN [at Levens Lane], with traffic coming off the busy slip road. There is inconsistent and non-existent footway in both directions, and the footway runs out underneath the SRN underpass, stranding walkers." (Cyclist)



Successes – user views

Successes, identified by users who took part in this research, included:



Derby Arms underpass provides good opportunity to cross the A590 between Whitbarrow Nature Reserve and Foulshaw Moss Nature Reserve.



- Despite challenges with vehicle speeds, Heather's Lane, which provides an alternative route to the A590 for walkers, is an enjoyable walking route for access to Whitbarrow National Nature Reserve.
- There are footways on the A590 leading to bus stops on Link 2, and also alternative preferred routes through Gilpin Bridge with less traffic.
- Walkers Drivers are generally mindful of walkers and the route through Gilpin Bridge, which is peaceful and scenic.



Despite challenges with vehicle speeds, Heather's Lane, which provides an alternative route to the A590 for cyclists, supports an enjoyable cycling route for access to Whitbarrow National Nature Reserve and is used often.

Cyclists

The traffic-free path up to Gilpin Bridge Inn also provides safe cycling connections, with good alignment and gradient.









"[Heather's Lane is] a great example where the old road has been left in place [when the A590 was added], and families, walkers, cyclist, electric wheelchair users can move from Grange-over-Sands to Levens with ease and enjoyment. It's often busy with cyclists at the weekend and during the week. Only negative is that some car users can get excited at the quiet road and drive too fast, or if there has been an accident of the A590 and people divert." (Walker and Cyclist)



Recommendations for improvements

Recommended improvements for Hotspot 5: Gilpin Bridge, arising from the research, are provided below.

- Address safety and security concerns on the A590 alignment, by:
 - Adding speed cameras or other traffic calming measures to slow down vehicles near crossings and junctions;
 - Improving visibility at A590 junctions;
 - Introducing a dedicated, segregated cycle-way through this location; and
 - Adding signage to encourage users onto alternative routes.
- Introduce dedicated crossing infrastructure, in particular:
 - Installing safer crossings, with segregation and refuge points, at high-risk areas like Gilpin Bridge Inn and to cross between the Nature Reserves;
 - Improving the Derby Arms underpass with sound proofing, extension of the footway, enhanced traffic signal enforcement, and improved height for horse-riders, where possible; and
 - Improving the Levens Lane underpass with extension of the footway, working with Sustrans, the local authority and other partners.
- Introduce **dedicated infrastructure and maintenance** on Heather's Lane, in particular:
 - Introducing a dedicated shared-use path for walkers, wheelers and cyclists;
 - Adding signage to signify the shared-use paths, as well as signage to highlight use of the road by horse-riders;
 - Introducing formal Quiet Lane treatment, such as speed-reduction measures and signage; and
 - Ensuring consistent road maintenance, including gritting and lighting.
- Improve user access to and from the hotspot to encourage journeys along the A590 by sustainable transport modes, by:
 - Developing a safe, continuous footpaths between Levens village and nearby bus stops on the A590; and
 - Extending and maintaining the disused railway path from Greenodd crossing down to Ulverston, taking it the full length of the A590, where budget and land use allows.





Summary of successes and challenges

Overall, there was limited, if any, provisions for horse-riders at each of the hotspots, and provisions for walkers and cyclists were mixed.

At some hotspots, paths directly alongside the SRN provide connectivity and access for walkers, wheelers and cyclists along key desire lines (e.g. Ulverston Centre). At other sites, good alternative routes, running adjacent to the SRN, provide connectivity for these users (e.g Heathers Lane). Some of the positive elements on these routes include:

- Segregation from the SRN;
- The relatively flat gradient; and
- The pleasant scenery and limited noise pollution, making routes attractive for leisure cyclists.

Across all sites, there are many challenges which pose safety concerns for all users, in particular:

- Poor lighting along paths;
- Poor maintenance of overgrown greenery;
- Poor surfaces;
- Conflict between various users resulting from narrow shared use paths (e.g. Newby Bridge), or roads where there is no segregation between road users;
- Lack of safe crossing points;
- Inadequate height of underpasses (particularly a concern for horse-riders); and
- Lack of dedicated infrastructure for active travel (e.g. Newby Bridge).

Other challenges impacting on the enjoyment and ease of use of the sites for all users include:

- Steep inclines;
- Poor or no signage to indicate who can use the route; and
- Noise and air pollution (especially at sites in close proximity to the SRN such as Greenodd and Haverthwaite).

SYSTIP

Summary of Improvements

Recommendations for improvements arising from the research, are provided below.

Address safety and security concerns, in particular:

- Improve lighting along existing surface-level paths, crossing points and underpasses;
- Introduce additional signalised crossings, both at surface-level on the SRN and on alternative routes;
- Improve infrastructure maintenance, including vegetation and mud clearing;
- Provide a physical barrier between existing surface-level paths and the traffic on the SRN, or re-routing paths away from the SRN alignment; and
- Introduce traffic calming measures, such as reduced speed limits, at dangerous junctions.

Introduce dedicated infrastructure, in particular:

- Improve signage to indicate routes suitable for horse-riders, walkers, wheelers, and cyclists, especially at critical points;
- Introduce cycle infrastructure, including at Greenodd roundabout, between Greenodd and Ulverston and at busy Haverthwaite and Newby Bridge junctions;
- Work with local authorities to extend existing paths to key destinations, for example to the Shell garage at Newby Bridge;
- Extend and maintain the disused railway path that connects to Greenodd crossing, taking it the full length of the A590, where budget and land use allows, encouraging travel along the A590;
- Work with Sustrans to support the introduction of **quiet lanes** which approximately follow the A590 alignment on both sides of the road (e.g. Heather's Lane). It is noted that these changes would be difficult due to constraints with road alignment and budget; and
- Where new infrastructure in unable to meet standards, looking for alternative options and mitigations to make it as good as possible, or ways to encourage use of existing infrastructure, where available.

Improve the **user environment**, in particular:

- Re-surface paths where necessary to improve surface quality; and
- Provide waste bins and benches at regular intervals.

Improve accessibility for mobility impaired walkers, walkers with prams, and wheelers, in particular:

- Improve gradients where possible;
- Widen footpaths and providing dropped kerbs throughout all sites, where possible; and
- Ensure step-free access to all sites and alternative routes (e.g. Greenodd underpass).





CONFIDENCE MOVES THE WORLD