



Stockton-on-Tees
BOROUGH COUNCIL

APPENDIX 1

**ECONOMIC GROWTH AND
DEVELOPMENT SERVICES**

**PEDESTRIAN HEART
DARLINGTON**




ROAD SAFETY ASSESSMENT REPORT



Stockton-on-Tees
BOROUGH COUNCIL

Pedestrian Heart Darlington

Road Safety Assessment

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1 Introduction

- 1.1 This report details the results of a Road Safety Assessment of two options
- Prohibiting cyclists in the pedestrian area of Darlington Town Centre and redirecting cyclists onto a safe route to navigate the town centre.
 - Provide additional measures to retain pedal cyclists within the pedestrian area of Darlington Town Centre.
- 1.2 The road safety assessment team consisted of Anthony Wilton Principal Engineer and Jonathan Kibble Principal Engineer who undertook a day audit on Tuesday 4th April 2017. Weather conditions on site were overcast whilst the road surface was dry.
- 1.3 The road safety assessment was undertaken in accordance with the brief provided by Louise Neale, Transport Policy Officer. A list of information provided to the audit team has been provided as appendix A to this report.

2 Site Description

- 2.1 The pedestrian heart of Darlington Town Centre was completed in 2007 and consists of the following streets Blackwell Gate, High Row, Bondgate, Duke Street, Skinnergate, Post House Wynd and Northgate. Vehicle access is permitted for loading for all streets between 5pm and 10am; taxis are permitted off Northgate between 10pm and 7am; all vehicles are permitted on Duke Street and Skinnergate between 5pm and 10am. Pedal cyclists are allowed in the pedestrian areas with the exception of Post House Wynd.

The pedestrian heart is bounded by an inner ring road to the north, south and east and a series of residential streets to the west. An existing off carriageway cycle lane is provided on the eastside of the inner ring road between Feethams in the south and St Cuthbert's Way (North East Street) in the north.

Currently there are several cycle routes linking the outer town area of Darlington into the town centre via designated crossing facilities along the inner ring road.

- 2.2 There are approximately 33,000 pedestrians and 1,100 cyclists accessing the town centre daily.
- 2.3 The accident information provided shows 8 recorded pedal cycle collisions within the Town Centre between April 2008 and November 2016. It should be noted that none of the cycle collisions occurred within the pedestrianized area. The collisions occurred on Northgate 2, Priestgate 2, Stonebridge 3 and Bondgate 1. One of the collisions involved a pedestrian who entered the carriageway and collided with the pedal cyclist.

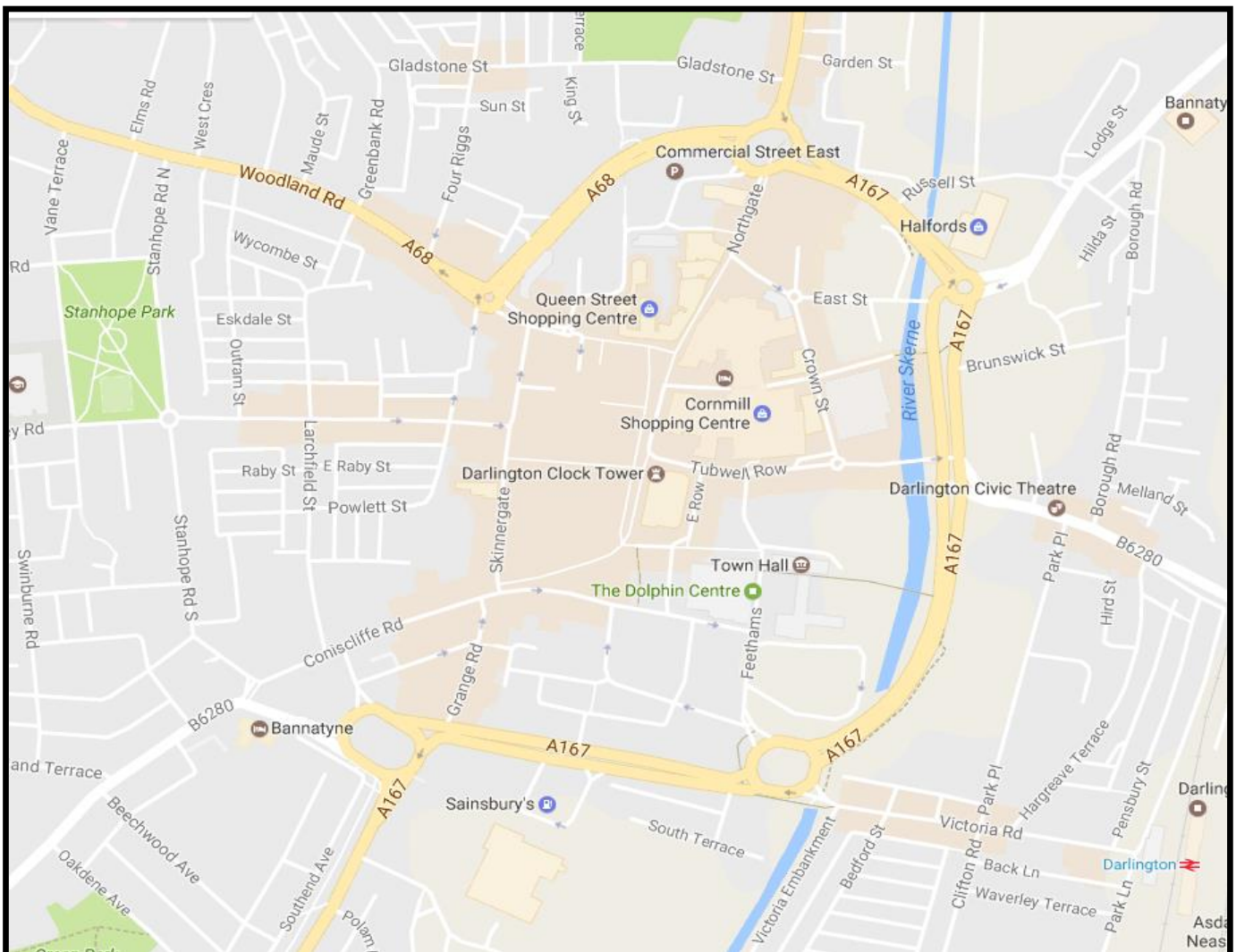
A cycle survey report (May 2016) indicated that 130 of the respondents had personally experienced "problems" with cyclists. No further details of the "problems" experienced have been provided.



There have been 24 recorded pedal cycle collisions on the inner ring road between March 2007 and September 2016. 16 of the collisions occurred at Bondgate, Northgate and St Cuthbert's roundabouts and the signalised junction of B6280 (which was previously a roundabout). 50% of these collisions involved a vehicle failing to give way to a pedal cyclist on the circulatory of the roundabout.

The remaining 8 collisions occurred at various points along St Cuthbert's Way (5), Victoria Road (1), St Augustine's Way (1) and Bondgate (1). Almost two thirds of the collisions were a result of the other driver. The main causations were failing to give way, left turning movement across pedal cyclist and travelling too close.

None of the pedal cycle collisions on the inner ring road involved pedestrians.





3 Options

The study investigated two options.

Option 1

Prohibit cycling within the pedestrian area in the town centre between 10am and 5pm. Investigate an alternative safe route around the town centre which connects to all the radial cycle routes, including any mitigating measures.

Option 2

Review the existing signing and lining in the town centre and provide any mitigation measures to maintain pedal cyclists access within the pedestrianized area.

4 Mitigation Measures

A Option 1

A1.1 Issue

Location: General

Summary: Insufficient/unclear directional signage may increase the risk of collisions occurring.

Description: Currently cyclists travelling along one of the various radial routes are clearly guided into the town centre. However if pedal cyclists are to be prohibited from using the town centre between 10am and 5pm then clear signage at all the various links around the town centre will be required. Lack of clear signage may increase the risk of collisions and/or nonconformity of the pedal cycle restrictions.

Recommendation: Ensure clear signage is located at all points around the town centre to clearly advise cyclists that they are not permitted to access the town centre between 10am and 5pm and clear directional signage to navigate the Town Centre on a safe route.

A1.2 Issue

Location: General.

Summary: Lack of cycle parking areas may increase the risk of nonconformity of the restrictions and/or increase the risk of pedestrian/pedal cycle conflict.

Description: Currently approximately 1100 pedal cyclists access the town centre daily. A proportion of these cyclists are likely to be cycling to work. Prohibiting access between 10am and 5pm is likely to generate an additional demand for cycle parking. The lack of suitable cycle parking may result in noncompliance of the proposed restriction which may increase the risk of pedestrian/pedal cycle conflict.

Recommendation: Ensure there is sufficient secure cycle parking located at various locations around the perimeter of the town centre.



A1.3 Issue

Location: St Cuthbert's Way (North East Street).

Summary: Termination point of existing off carriageway cycle facility may increase the risk of collisions occurring.

Description: The existing off carriageway cycle lane adjacent to the inner ring road terminates south of East Street. The accident data shows 5(no.) pedal cycle collisions at Northgate roundabout. The proposed restriction on pedal cyclists accessing the town centre is likely to increase the volume of pedal cyclist using the ring road. The lack of off carriageway facilities at this location may increase the risk of pedal cycle collisions occurring.

Recommendation: Provide off carriageway pedal cycle facilities north of East Street.

A1.4 Issue

Location: General.

Summary: Existing street furniture may increase the risk of pedal cycle collisions occurring.

Description: To facilitate the prohibition of pedal cyclists accessing the town Centre the existing footway around the town centre will need to be altered to accommodate pedal cyclists. However this will also require existing street furniture such as signs to be moved to allow cyclists to use safely. Failure to move the street furniture may increase the risk of pedal cycle collisions.



Recommendation: Ensure all signs and street furniture are positioned to accommodate both pedestrians and pedal cyclists around the perimeter of the town centre.



A1.5 Issue

Location: East of Northgate.

Summary: Increased risk of pedestrian/pedal cycle conflict due to width of existing footway.

Description: There are several locations east of Northgate where the proposed off carriageway route for cyclists narrows. The proposed prohibition of pedal cyclists is likely to increase the numbers travelling along the footway to navigate around the town centre. The lack of width of the proposed shared route may increase the risk of pedestrian/pedal cycle conflict.

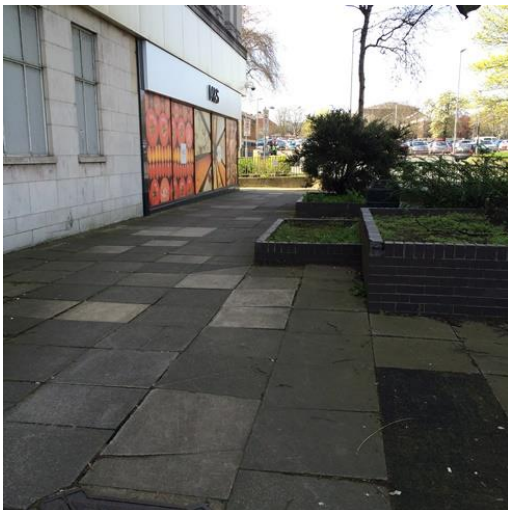
Recommendation: Ensure the shared area along this section of St Cuthbert's Way is sufficiently wide enough to accommodate both pedestrians and cyclists.

A1.6 Issue

Location: East and west of Northgate.

Summary: Lack of forward visibility may increase the risk of pedestrian/pedal cycle collisions occurring.

Description: The proposed off carriageway cycle route will involve negotiating a severe turn when approaching Northgate from both the east and west. Due to the existing building line there is limited forward visibility. There is an increased risk of pedestrian/pedal cycle conflict.



Recommendation: Provide cyclists dismount signs on both approaches to Northgate or provide an alternative layout which improves visibility on this corner.



A1.7 Issue

Location: Northgate.

Summary: Lack of crossing facilities may increase the risk of pedal cycle collisions occurring.

Description: The proposed off carriageway route crosses Northgate. However there are no crossing facilities. The lack of crossing facilities may increase the risk of pedal cycle collisions or nonconformity of restrictions associated with the pedestrianized area.

Recommendation: Provide a safe crossing point.

A1.8 Issue

Location: Commercial Street.

Summary: Lack of dropped kerbs may increase the risk of collisions occurring.

Description: The proposed cycle route will cross Commercial Street; however there are no dropped kerbs. The lack of dropped kerbs may increase the risk of collisions occurring.

Recommendation: Provide dropped kerbs.

A1.9 Issue

Location: Commercial Street Car Park.

Summary: Existing wooden barrier may increase the risk of pedal cycle trips and falls occurring.

Description: To encourage cyclists to use the proposed route to navigate the town centre the most direct path where possible has been considered. Therefore the route proposes to travel along the access road to Commercial Street Car Park, before accessing the footway to link back towards St Augustine's Way. However there is a small section of wooden barrier rail which may restrict pedal cycle movement and increase the risk of trips and falls occurring.

Recommendation: Remove this section of wooden barrier rail.

A1.10 Issue

Location: St Augustine's Way.

Summary: Compact radius of bend may increase the risk of pedestrian/pedal cycle conflict.



Description: The proposed off carriageway cycle route involves negotiating a severe turn. There is concern that cyclists may lose control and increase the risk of pedestrian/pedal cycle conflict.



Recommendation: Relax the radius of the bend.

A1.11 Issue

Location: Bondgate/St Augustine's Way.

Summary: Lack of forward visibility may increase the risk of pedestrian/pedal cycle collisions occurring.

Description: The proposed off carriageway cycle route involves negotiating a severe turn when approaching Bondgate from both the southeast and northwest. Due to the existing building line there is limited forward visibility. There is an increased risk of pedestrian/pedal cycle conflict.

Recommendation: Provide pedal cyclists dismount signs.

A1.12 Issue

Location: Salt Yard

Summary: Pinch point and limited forward visibility may increase the risk of pedal cycle collisions.

Description: The route proposes to guide pedal cyclists along Salt Yard which is currently one way (northbound). Salt Yard links onto Winston Street and Raby Terrace via a narrow link. The limited road width and forward visibility is likely to result in an increase in pedal cycle collisions occurring.



Recommendation: Prohibit motorised vehicles accessing Salt Yard from Winston Street/Raby Terrace. Widen the junction at A68/Salt Yard and allow two way movements on Salt Yard.

A1.13 Issue

Location: Larchfield Street/Coniscliffe Road.

Summary: Lack of crossing facilities for cyclists may increase the risk of collisions occurring.

Description: The proposed safe route links between Coniscliffe Road and Larchfield Street. However there is no safe crossing point for cyclists to access Larchfield Street when travelling northbound along Coniscliffe Road from the outer radial routes coming from Blackwell. The lack of safe crossing facilities may increase the risk of pedal cycle collisions.



Recommendation: Provide a protected right turn for pedal cyclists at this location.



A1.14 Issue

Location: Coniscliffe Road.

Summary: Lack of dropped kerb may increase the risk of pedestrian/pedal cycle conflict.

Description: The proposed route will travel along Coniscliffe Road before accessing an off carriageway route adjacent to the A67. However there is no dropped kerb for cyclists to access the off carriageway route. The lack of a dropped kerb may result in pedal cyclists travelling across the pedestrian crossing point to access the off carriageway pedal cycle facilities. There is an increased risk of pedestrian/pedal cycle conflict.

Recommendation: Provide a dropped kerb.

A1.15 Issue

Location: West Street.

Summary: Insufficient width of existing footway may increase the risk of pedestrian/pedal cycle conflict.

Description: The proposed off carriageway route will travel adjacent to the A167. The existing footway narrows due to an existing tree. The lack of width may increase the risk of pedestrian/pedal cycle conflict.

Recommendation: Remove existing tree and provide a shared area to accommodate both pedestrians and cyclists along this section of West Street/A167.

A1.16 Issue

Location: A167 (Victoria Road) between Grange Road and South Arden Street.

Summary: Limited width of existing footway may increase pedestrian/pedal cycle conflict.

Description: The proposed off carriageway route will travel adjacent to the A167. However the existing footway appears to be narrow along this section. The limited width is likely to increase the risk of conflict between pedestrians and pedal cyclists.



Recommendation: Provide a shared area to accommodate both pedestrians and cyclists along this section of the A167.

A1.17 Issue

Location: South Arden Street.

Summary: One way and limited width of existing footway may increase pedestrian/pedal cycle conflict and/or pedal cycle/vehicular conflict.

Description: The route proposes to travel along South Arden Street (which is currently one way southbound) before turning right onto unnamed access road. However the existing footway is narrow. The insufficient width of existing footway is likely to increase the risk of pedestrian/pedal cycle and/or pedal cycle/vehicular conflict.

Recommendation: Widen the access to south Arden Street and provide an on carriageway cycle lane to allow two way movements for pedal cyclists.

A1.18 Issue

Location: Access Road/Beaumont Street.

Summary: One way movement may increase the risk of pedal cycle collisions occurring.

Description: The route proposes to travel along unnamed access road before turning right onto Beaumont Street. The access road is one way northbound and also restricts turning movement at the junction to left only. There is concern that the one way movement and the prohibited right turn may increase the risk of collisions occurring.

Recommendation: Provide an on carriageway cycle lane at the access to allow two way pedal cycle movement and a link to an off carriageway link eastbound along Beaumont Street.



A1.19 Issue

Location: Beaumont Street.

Summary: Limited width of existing footway may increase the risk of pedestrian/pedal cycle conflict.

Description: Insufficient width of the existing footway is likely to increase the risk of conflict between pedestrians and pedal cyclists.

Recommendation: Provide a shared area to accommodate both pedestrians and cyclists along this section of Beaumont Street.

B Option 2

B1.1 Issue

Location: General

Summary: Unclear designated area for cyclists may increase the risk of pedestrian/pedal cycle conflict.

Description: There are various signs within the pedestrian area to highlight to pedestrians that pedal cyclists are permitted. However there is no clear route through the town centre that cyclists are expected to follow. Due to the unpredictable pattern of movement of pedestrians and the lack of clear route for cyclists to follow there is an increased risk of pedestrian/pedal cycle conflict.

Recommendation: Provide a clear route through the pedestrian area for cyclists.

B1.2 Issue

Location: Post House Wynd.

Summary: Lack of signage may increase the risk of pedestrian/pedal cycle conflict.

Description: Post House Wynd is restricted to pedestrians only between 10am and 5pm. However there are no signs to advise cyclists that they are prohibited during these times. The lack of signage for pedal cyclists may increase the risk of pedestrian/pedal cycle collisions occurring.

Recommendation: Provide clear signage to advise pedal cyclists that they are prohibited from this area between 10am and 5pm.



6 Appendix A – Documents and Drawings

Documents:

Darlington Town Centre Cycle Survey November 2007

Darlington Town Centre Survey 2008

Darlington Borough Council Cycle Survey May 2016 Survey Report

Code of Cycling

Place Scrutiny Committee Report February 2015

Drawings:

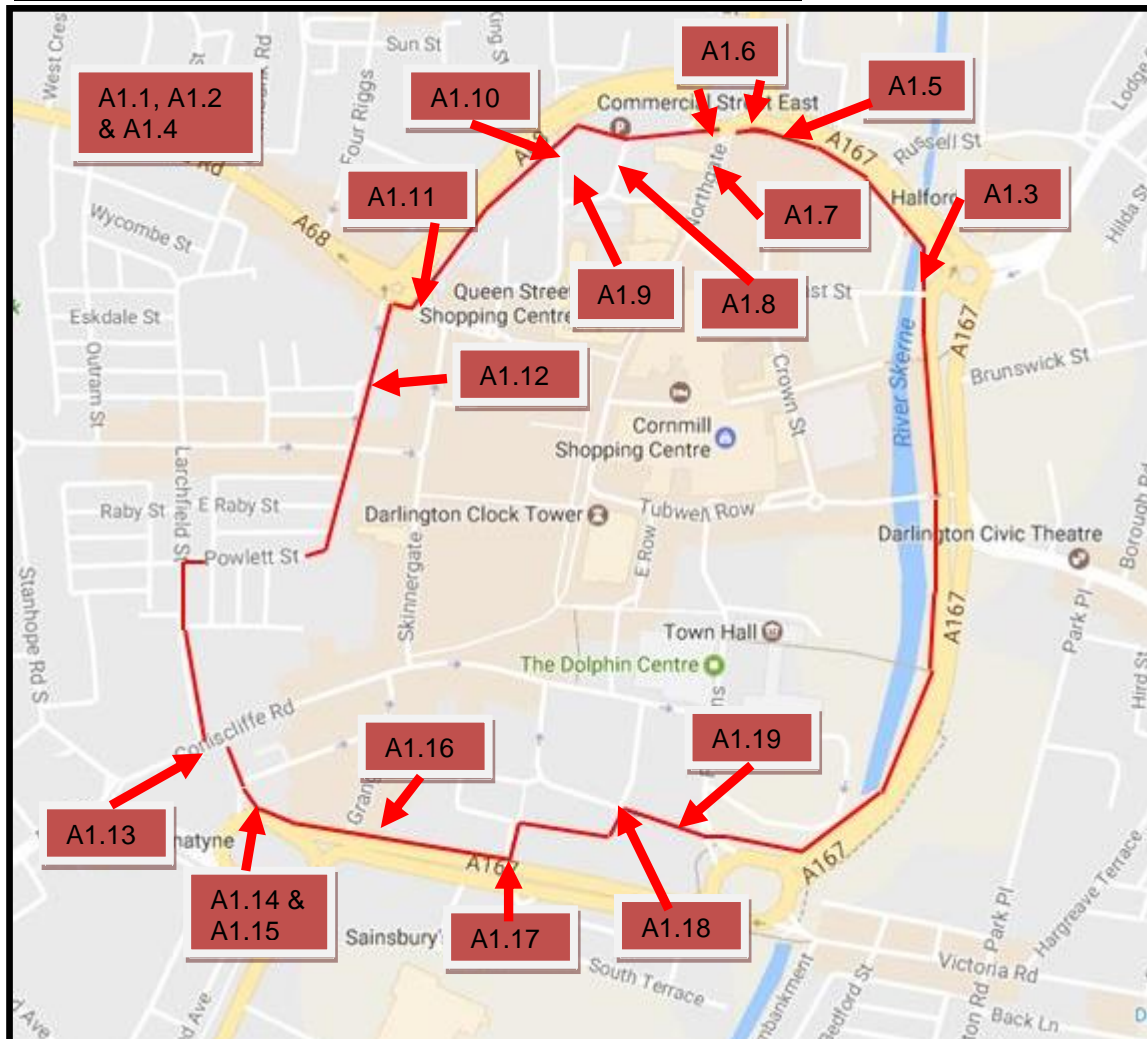
Cycle drawing for cycle maps

Current Access



7 Location Plan

Proposed Alternative Outer Link Route





Inner Pedestrian Heart

