

*April* 2019



# **Arbroath Overview Map**

### **Key Trip Attractors** St. Vigeans 1 - RM Condor 2 - Golf Club 3 - Caravan Park Warddykes 4 - Industrial Park Kirkton 5 - Muirfield Primary School 6 - Retail Park 7 - Hospitalfield Hayshead 8 - Industrial Park 9 - Timmergreens Primary School 10 - Caravan Park 11 - Arbroath Sports Centre 12 - Arbroath High School 13 - Inverbrothock Primary School Cliffburn 14 - West Links Park 15 - Keptie Pond 16 - Arbroath Hospital 17 - Dundee and Angus College 31 Abbey 18 - Gayfield Stadium 19 - Supermarket Town Centre Seaton Cliffs 20 - St. Vigeans Lochlands 21 - Council Offices Port 📋 22 - Arbroath Train Station 23 - Supermarket Fit O' 24 - Signal Tower Museum The Toon 25 - Ladyloan Primary School 26 - Bus Station Key 27 - Arbroath Harbour Harbour 28 - Warddykes Primary School Core Project Area Hospitalfield 29 - Supermarket National Cycle Network 30 - Abbeygate Shopping Centre 31 - Arbroath Abbey Key Cycle Network 32 - Town Centre West Key Path Network 33 - Saltire Leisure Centre Links 34 - Arbroath Library Train Station 35 - Hayshead Primary School 36 - Arbroath Academy **Bus Station** 37 - St. Thomas' RC Primary School 38 - Victoria Park Key Trip Attractors Elliot To E 39 - Caravan Park 40 - Seaton Cliffs Nature Reserve Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User





Project Outcomes and Strategic Vision

### 1. Project Outcomes and Strategic Vision

### 1.1 Strategic Project Vision

The Arbroath Active Travel Active Town (ATAT) vision builds on the foundation that Angus is a great place to live, work and visit. The strategic project vision is to unlock the potential of the town making Arbroath somewhere that is welcoming, connected, thriving and reconnecting the town with its seafront. The project aims to contribute to the five 'A's vision for Arbroath 2026 developed during the 2016 Arbroath Town Centre Design Charrette of:



### 1.2 Project Objectives

In addition to the Community Links PLUS competition objectives the Arbroath ATAT project has the following overarching objectives.

Arbroath ATAT Objectives	Achieved by Proposals
To create an attractive, legible and safe place for people to walk and cycle through Arbroath. The route will focus on improving access along both the north to south route as well as at key crossing nodes from west to east to better connect Arbroath across the A92 corridor.	✓
To involve the Arbroath community in the shaping of the proposed Active Travel Route, including consultation and providing facilities that support local needs.	<b>✓</b>
To enhance the streetscape of the A92 with coastal style planting, specimen trees, high quality materials and interactive play/art features.	<b>√</b>
To maximise the environmental benefit of the route by strengthening local biodiversity with large areas of dedicated planting. Planting will need to be resilient to the coastal climate and will also help to create microclimates in areas that are currently exposed, improve amenity, provide increased drainage for surface water and improve local biodiversity.	✓

### 1.3 Outline Business Case

An outline business case has been prepared for the Arbroath ATAT project covering a broad range of criteria and factors for success which demonstrate the project as a viable opportunity for Arbroath and for this competition. The following information provides a brief summary of the detailed business case.

### 1.3.1 Community Links PLUS Competition Objectives

Community Links PLUS Objectives	Achieved by Proposals
Increasing Modal Shift, helping to achieve the shared CAPS vision of 10% of everyday trips by bike by 2020	<b>√</b>
Creating safer, convenient, seamless and segregated routes to and through towns and cities in both rural and urban areas	✓
Connecting to and through major short trip generators	<b>√</b>
Improving the quality of the urban realm, delivering high quality designs and integrating green infrastructure, whilst meeting the needs and aspirations of communities	✓
Improving accessibility for all, including making substantial improvements to the environment for people on foot. This should follow, as a minimum, the principles of Designing Streets and consider the needs of groups, with protected characteristics as defined in The Equality Act	<b>√</b>
Ensuring the Accessible Travel Framework vision of movement is taken into consideration where "All disabled people can travel with the same freedom, choice, dignity and opportunity as other citizens"	<b>√</b>

### 1.3.2 Strategy and Policy Alignment

The Arbroath ATAT project contributes both directly and indirectly to meeting a vast range of national, regional and local policy and strategy objectives, targets and outcomes. The table overleaf shows how this project and specific objectives are well supported.







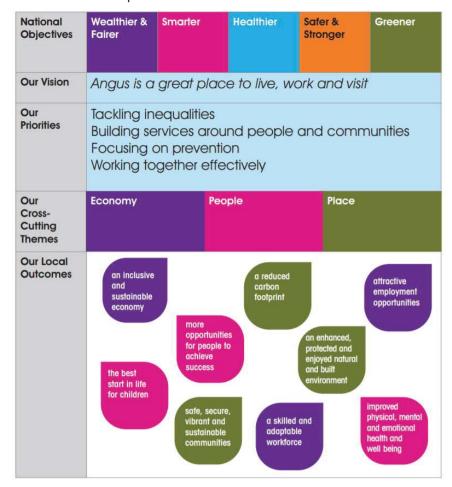
Arbroath ATAT Objectives	from west to east to better connect Arbroath across the A92 corridor.	and providing facilities that support local needs.	To enhance the streetscape of the A92 with coastal style planting, specimen trees, high quality materials and interactive play/art features.	To maximise the environmental benefit of the route by strengthening local biodiversity with large areas of dedicated planting. Planting will need to be resilient to the coastal climate and will also help to create micro-climates in areas that are currently exposed, improve amenity, provide increased drainage for surface water and improve local biodiversity.
	Policy Documents			
	<u>National</u>		ı	
National Transport Strategy, 2016, Transport Scotland	√	✓		<b>√</b>
Cycling Action Plan for Scotland 2017-2020, Transport Scotland	✓	✓		<b>√</b>
Let's Get Scotland Walking: The National Walking Strategy, 2014, Scottish Government	✓	✓	✓	
Equality Act 2010 and The Equality Act 2010 (Specific Duties) (Scotland) Regulations 2012, Scotlish Government	<b>√</b>	<b>√</b>	✓	<b>√</b>
A Long-Term Vision for Active Travel in Scotland 2030, 2014,	,	,	,	,
Transport Scotland	✓	✓	✓	✓
Going Further: Scotland's Accessible Travel Framework, 2016, Transport Scotland	<b>√</b>	<b>√</b>	✓	✓
Climate Change Plan 2018-2032, Scottish Government	✓	✓	✓	✓
	Regional			
Regional Transport Strategy 2016-2036 Refresh, Tactran	✓	✓		✓
	Local			
Angus Local Development Plan, 2016, Angus Council	✓	✓	✓	✓
Angus Local Transport Strategy, 2000, Angus Council	✓	✓		✓
An Active Travel Strategy for Angus, 2016, Angus Council	✓	✓	<b>√</b>	✓
Angus Economic Strategy 2013-2020, Angus Council	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Local Outcomes Improvement Plan 2017 – 2030, Angus Council	<b>√</b>	<b>√</b>	✓	✓
Angus Health and Social Care Partnership Strategic Plan 2016-19	<b>√</b>	<b>✓</b>	,	
Arbroath and Area Locality Plan, 2017, Angus Council	·		✓	<b>✓</b>
Increasing Modal Shift, helping to achieve the shared CAPS vision of	Community Links PLUS (	riteria		
10% of everyday trips by bike by 2020	<b>√</b>	<b>√</b>		
Creating safer, convenient, seamless and segregated routes to and through towns and cities in both rural and urban areas	✓	✓	✓	✓
Connecting to and through major short trip generators	✓	✓		
Improving the quality of the urban realm, delivering high quality designs and integrating green infrastructure, whilst meeting the needs and aspirations of communities	✓	✓	✓	✓
Improving accessibility for all, including making substantial improvements to the environment for people on foot. This should follow, as a minimum, the principles of Designing Streets and consider the needs of groups, with protected characteristics as defined in The Equality Act	<b>✓</b>	<b>√</b>	<b>√</b>	<b>√</b>
Ensuring the Accessible Travel Framework vision of movement is taken into consideration where "All disabled people can travel with the same freedom, choice, dignity and opportunity as other citizens"	<b>✓</b>	<b>✓</b>	✓	✓

Arbroath and Area Locality Plan:

Policy and Strategy Alignment



The table below shows an extract from the Arbroath and Area Locality Plan showing the vision, key priorities and key local outcomes as outlined in the Local Outcomes Improvement Plan.



Angus Community Planning Partnership Vision



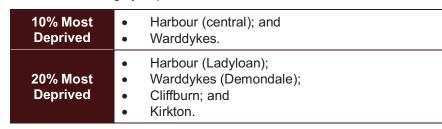
https://www.sustrans.org.uk/sites/default/files/file content type/transport poverty in scotla nd report.pdf



Extract from Arbroath and Area Locality Plan

### 1.3.3 SIMD and Transport Poverty

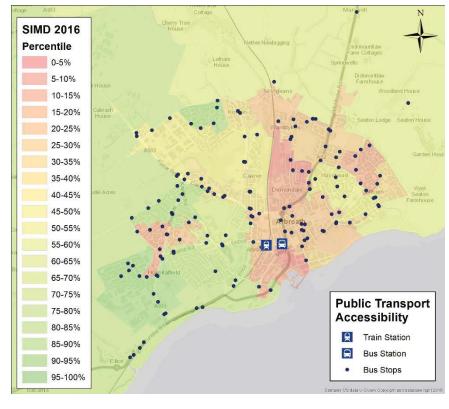
The map on the right shows the Scottish Index of Multiple Deprivation (SIMD) area statistics for 2016. This shows several areas in Arbroath within the most highly deprived in Scotland.



In recent years there has been a greater understanding of the impacts of transport poverty; where people lack access to services or work from a lack of affordable transport options. Those communities in Arbroath at highest risk lie to the north of the town. The map on the right shows bus stops and the 2016 SIMD percentiles. This however does not demonstrate the frequency, quality or directness of these services.

Sustrans Scotland identified three key areas which help tackle transport poverty<sup>1</sup>:

- 1. People-centred transport planning;
- 2. Quality public transport; and
- 3. Provision for cycling.



### 1.3.4 Tourism

Arbroath contains many significant tourist attractions, particularly The Abbey where the famous Declaration of Arbroath was signed in 1320 along-side rolling countryside, the beautiful Angus coastline and Seaton Cliffs Nature Reserve. Visit Scotland research<sup>2</sup> showed the top five reasons people visited Dundee and Angus were:

- 1. To visit a particular attraction
- 2. The scenery & landscape
- 3. To visit family / friends who live there
- 4. The history & culture
- 5. To get away from it all

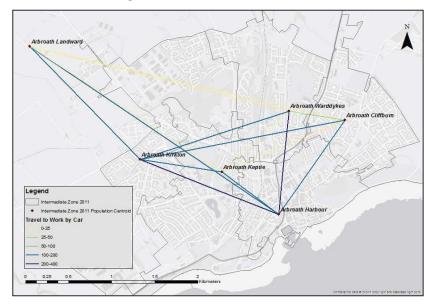
In addition to enhancing the tourism offer and accessibility to attractions in Arbroath the project has the potential to enhance cycle tourism opportunities in the area; a market estimated to have a cumulative annual contribution to GVA in Scotland of £129 million<sup>3</sup>.



<sup>&</sup>lt;sup>2</sup> https://www.visitscotland.org/binaries/content/assets/dot-org/pdf/research-papers/scotland-visitor-survey-dundee-angus-2016.pdf

<sup>&</sup>lt;sup>3</sup> http://transformscotland.org.uk/wp/wp-content/uploads/2014/12/The-Value-of-Cycle-Tourism-full-report.pdf

### 1.3.5 Increasing Modal Shift



Travel to work data within Arbroath

2011 Census data shows 58% of trips to work or study within Arbroath and the immediate area were undertaken by car, one third of these were under 5km. Walking mode share was 26% and cycling 1.7%. The 2016 Scottish Household Survey showed Angus among the top Local Authorities with access to at least one bike for private use at 44.0%, compared to a national average of 34.9%. These suggest a great potential for modal shift to active and more sustainable travel modes.

### 1.3.6 Urban Realm and Green Infrastructure

Criteria	Comments	Scoring
Pedestrians from all walks of life	Wider high-quality footways areas free of obstructions create much more welcoming spaces for all pedestrians to walk and spend time in.	1
People choose to walk, cycle	Wider footways, segregated cycleways, additional greenspace and public spaces	
and use public transport	will make walking and cycling through the area much more attractive.	1
Clean air	Reallocation of spaces from the private car to active travel, the linking and improvement of traffic signals reducing traffic iding times and the planting of trees and green spaces will result in improved air quality.	4
People feel safe	Wider footways, segregated cycleways, improved crossings and the segregation of people from general traffic will reduce potential conflict between different users helping improve both real and percieved safety. The reduction of carriageway lanes is also likely to reduce traffic speeds and overtaking in the area.	4
Not too noisy	The reduction of traffic lanes, the improvement of traffic flow through existing junctions, discouraging overtaking, reducing traffic speeds, the encouragement of people choosing active travel over driving will all contribute to an overall reduction in noise pollution from existing traffic.	*
Easy to cross	Shorter crossing distances due to narrower carriageways and improved pedestrian and cycle crossing facilities will make streets easier to cross and in turn encourage greater uptake of active travel and use of the area.	1
Places to stop and rest	Public realm improvements planned throughout the core route corridor and wider footways will create more opportunities for seating and resting areas for people walkind, cycling in the area making it a more attractive place for people to spend time in.	4
Shade and shelter	Landscape and public realm proposals are still currently being developed but these will include opportunities to create areas for shade and shelter including proposed wind break wind break features along the seafront.	*
People feel relaxed	The separation of different route users to their own dedicated facilities and the improvement of pedestrian and cycle crossings will reduce potential conflict between these different users along the route. The creation of wider footways with public spaces, seating and rest areas segregated from general traffic are expected to people feeling generally more relaxed when using the area.	4
Things to see and do	Arbroath and the route corridor already has a wealth of natural and historic places of interest and improves links between key trip attractors around the town centre and beyond. The project will enance access between these places of interest whilst adding new landscaping and public realm features and improvements.	1

Extract from TfL Healthy Streets Approach Assessment for project



A "Healthy Streets Approach" Assessment based upon a Transport for London Tool has been undertaken for the project looking at the wider function of a street or area.

An extract of the assessment shown on the left demonstrated that the proposed project contributes to improving a wider street function for more user types and shows an integrated approach to generating the social, economic and environmental benefits in addition to the promotion of more sustainable travel choices.

### 1.3.7 High Quality Active Travel Network

High-quality segregated walking and cycling facilities will be created which link with the wider active travel network, NCN, Angus Coastal Path, North Sea Cycle Route and designated path network. Urban realm and greenspace improvements will create a high-quality area supporting active travel as an attractive and safe option.

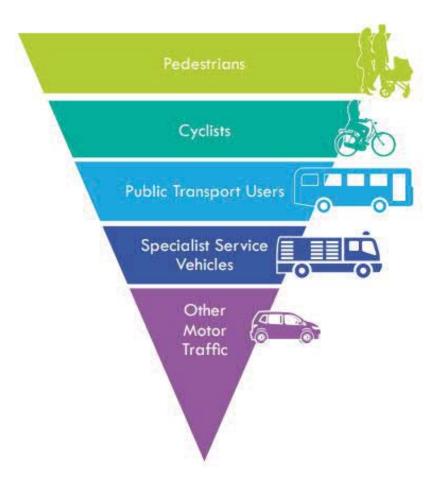
### 1.3.8 Connecting Arbroath

Realising the desire of the local community to reduce the severance created by the dual carriageway is at the heart of this project including those areas of high SIMD rank. Improvements would reconnect the town with its key trip attractors, the town centre, shopping centre, West Port shops, rail and bus stations, harbour, stadium and seafront.

### 1.3.9 Accessible Arbroath

Accessibility and addressing severance are two core principles of this project arising from community and stakeholder engagement. This project provides a unique opportunity to reallocate a former trunk road dual carriageway back to people and place; and realign with the National Roads Development Guide (NRDG) Hierarchy of Users. The project would create an inclusive and accessible environment prioritising people and promoting access for all.





NRDG Hierarchy of Users

### 1.3.10 Economic Catalyst

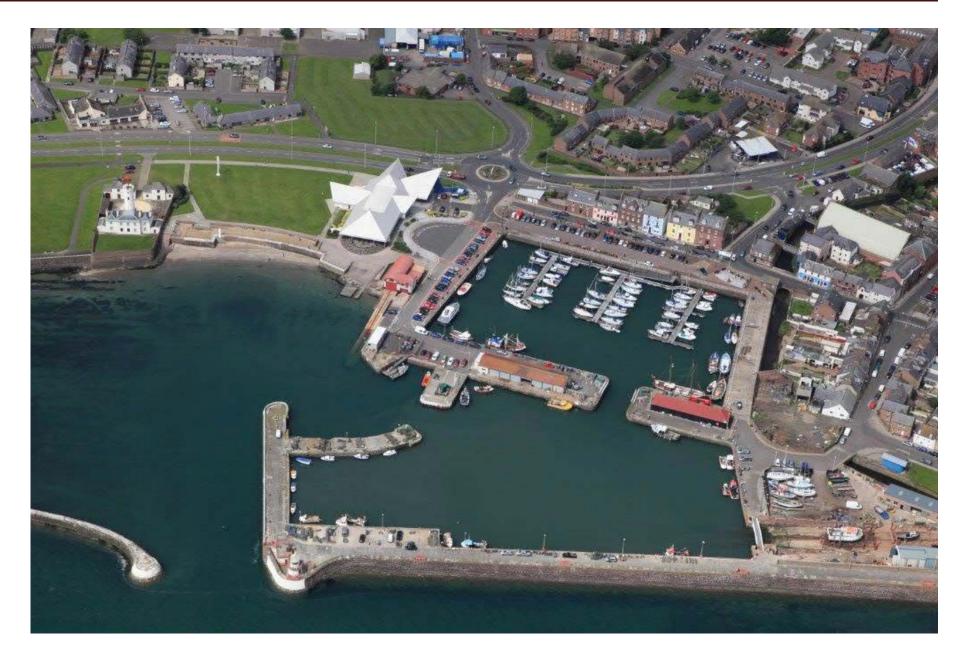
This project has significant potential to act as a major economic catalyst attracting further public and private investment to Arbroath. The core corridor links recent developments like the new Ladyloan Primary School with proposed developments such as a major seafront hotel, development of the Signal Tower Museum and a proposed new RNLI lifeboat station.

Significantly, the wider region has attracted committed investment through the Tay Cities Deal; agreed in 2018 among local leaders and the Scottish and UK Governments to invest £700 million of funding across Tayside, Fife and Angus<sup>4</sup>. The Deal represents a major investment in the region with great potential to link in both directly and indirectly to the project.





<sup>&</sup>lt;sup>4</sup> https://www.taycities.co.uk/



### 1.3.11 Health and Wellbeing

The health and wellbeing benefits of physical activity have long been understood with more evidence emerging annually linking the two. Health indicators from Angus and Tayside Health Board<sup>5</sup> show activity levels in Tayside in adults and children and children's participation in sport slightly lower than national averages demonstrating room for improvement. Active travel offers the most accessible opportunity to realise health benefits including reduction in the chance of serious illnesses such as heart disease, asthma, diabetes and cancer. Studies show direct links between increased physical activity and improved mental health<sup>6</sup>.

### 1.3.12 Outline Business Case Summary

The proposed project will support the uptake of active travel in Arbroath, improving and enhancing access for all. In addition, streetscape and landscape proposals, will help improve the quality of place of the existing A92 corridor through Arbroath, adding value economically, socially and with regards to tourism, health and environmental outcomes. These benefits would contribute in the short/medium/long term and reverberate throughout Arbroath's community across all socio-economic strata with knock on benefits for the wider Angus area.



<sup>&</sup>lt;sup>5</sup> https://www2.gov.scot/Resource/0050/00509813.pdf

<sup>&</sup>lt;sup>6</sup> <a href="https://www.sustrans.org.uk/what-you-can-do/use-your-car-less/health-benefits-walking-and-cycling">https://www.sustrans.org.uk/what-you-can-do/use-your-car-less/health-benefits-walking-and-cycling</a>

### 1.4 Proposed Improvements

The map on the right shows the Arbroath ATAT Proposed Improvements Masterplan.

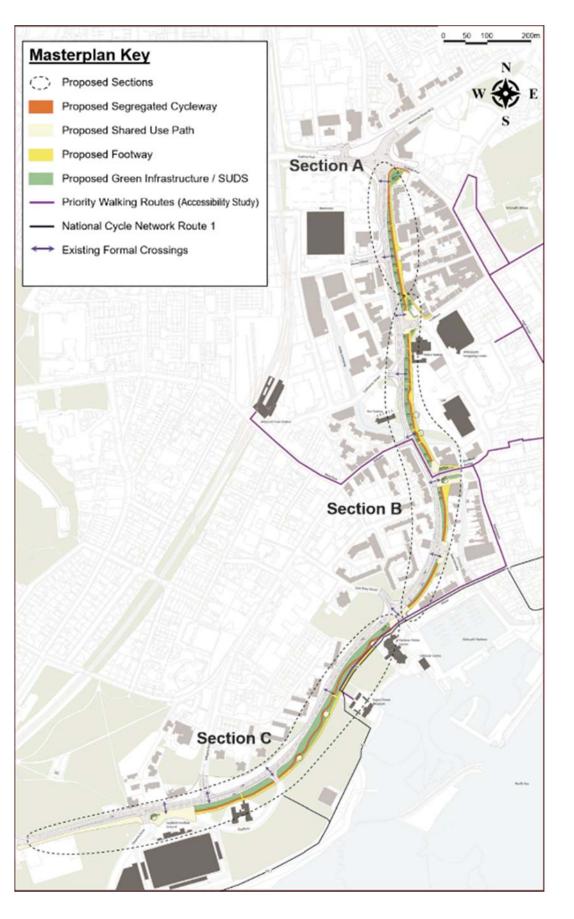
### 1.4.1 Core Corridor Improvements:

- Reallocation of existing A92 dual carriageway corridor through Arbroath to single carriageway
- Bi-directional segregated cycleway
- Improved footway
- Greenspace creation with coastal planning and Sustainable Urban Drainage Systems (SUDS)
- Streetscape and public realm improvements with communityled proposals for street art and play areas
- Accessibility and crossing improvements
- Linkages with the NCN Route 1, Angus Coastal Path and the North Sea Cycle Route
- Traffic signal improvements and linking into combined network
- Creation of gateways

### 1.4.2 Wider Area Improvements

- Improvement of accessibility, walking and cycling links between the town centre and West Port, the train and bus stations.
- Active travel signage strategy
- Accessibility improvements highlighted in the 2017 Town Centre Accessibility Strategy
- Cycle friendly streets measures
- Behaviour change programme
- Cycle parking strategy





### 1.4.3 Streetscape and Landscape Proposals

Transport infrastructure alone will not provide an environment which encourages people to change their travel habits and use of the area. Whilst the area currently facilitates active travel, it is not one which inspires or motivates people to walk, cycle or use the area.

In order to provide a step change in encouraging residents to travel more actively and encourage greater tourism once again in Arbroath, this project also focuses on improving the environment surrounding new infrastructure and linking the town with its natural and historic assets.





### Planting and Drainage







A linear park of trees and coastal planting will be created bringing about many benefits of high-quality green spaces. This will also allow opportunities for SUDS to manage and store water, reducing pressure on other drainage infrastructure and providing a level of water treatment.

### Streetscape







Street furniture and public art will be implemented; aimed at enriching the experience of everyday journeys and visits to the area developed in partnership with the local community. Additional seating play and recreation opportunities will be created ensuring that the area is a more interesting and dynamic street with opportunities for all in terms of both place and movement.



### 1.4.4 Section A – Burnside Drive Proposals





### **Core Proposal**

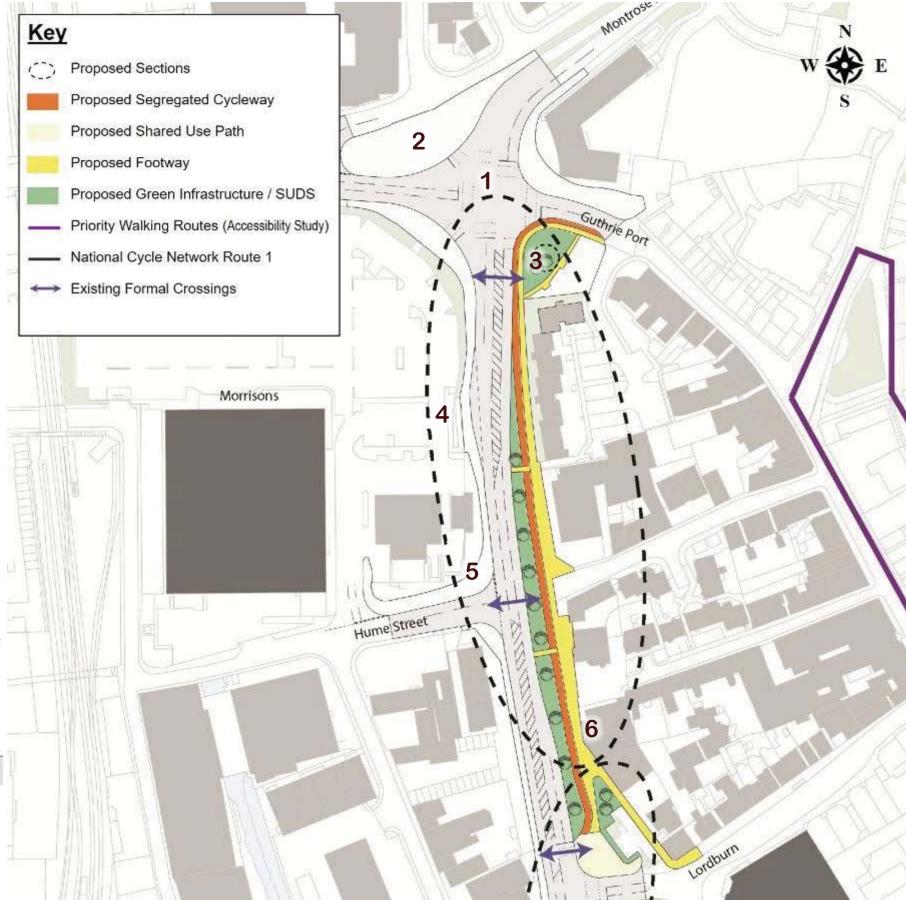
Reallocate existing dual carriageway to single carriageway with a new widened footway and public realm improvements, two-way segregated cycleway and separation strip of low-level planting and street trees.

### **Supporting Proposals**

- 1. Area gateway feature
- 2. Northbound connections to wider active travel and path network
- 3. Replace existing Guthrie Port Roundabout with signalised junction with controlled crossings
- 4. Northbound bus layby reconfiguration; potential additional southbound stop with pedestrian crossings
- 5. Modify existing priority junction at Hume Street allowing all movements. Incorporation of right turn ghost island for general traffic
- 6. Southbound bus layby reconfiguration; potential for northbound stop



Section A - Typical Cross Section





### 1.4.5 Section B – Town Centre Proposals



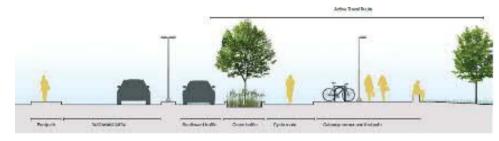


### **Core Proposal**

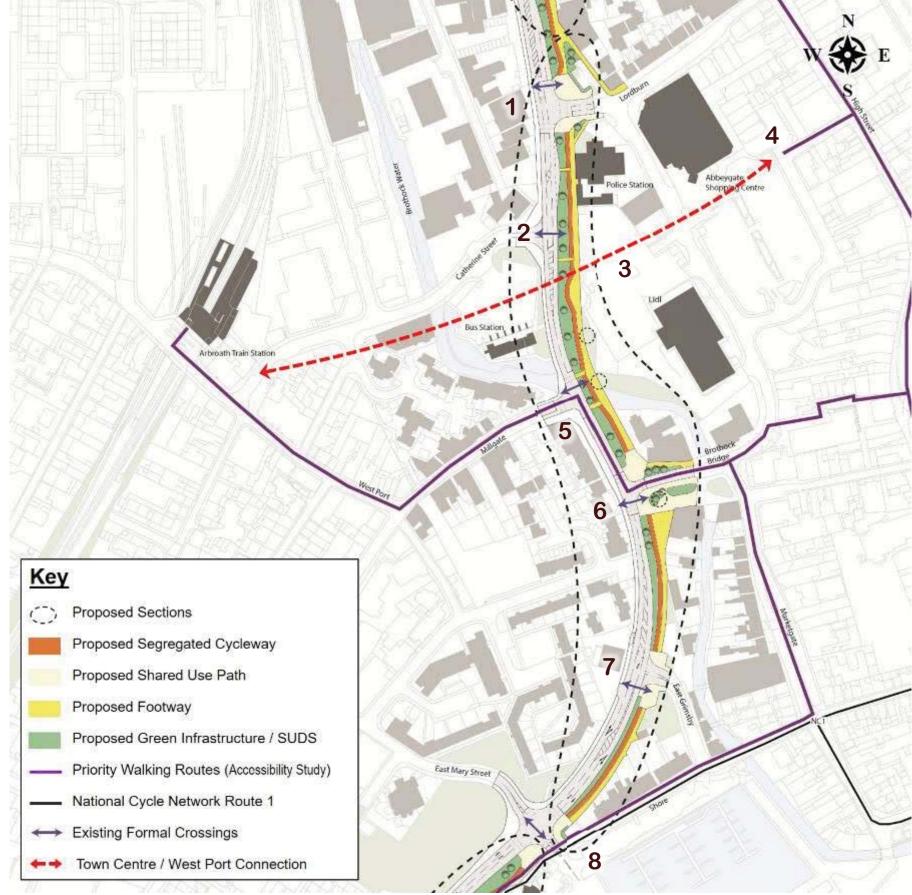
Reallocate existing dual carriageway to single carriageway with a new widened footway and public realm improvements, two-way segregated cycleway and separation strip of low-level planting and street trees.

### **Supporting Proposals**

- 1. Replace existing roundabout with traffic signals and controlled crossings. Reconfiguration of Maule Street access and parking
- 2. Reconfigure Catherine Street junction upgrading traffic signals and crossings
- 3. High-quality active travel connections between the town centre with West Port areas (private landowner discussions underway)
- 4. Creation of prominent town centre gateway feature
- 5. Reconfigure Millgate junction upgrading traffic signals and crossings
- 6. Reconfigure Brothock Bridge / Gravesend junction upgrading traffic signals and crossings
- 7. Reconfigure East Grimsby junction and gateway feature
- 8. Linkage with NCN1 at Arbroath Harbour



Section B - Typical Cross Section





### 1.4.6 Section C – Seafront Proposals





### **Core Proposal**

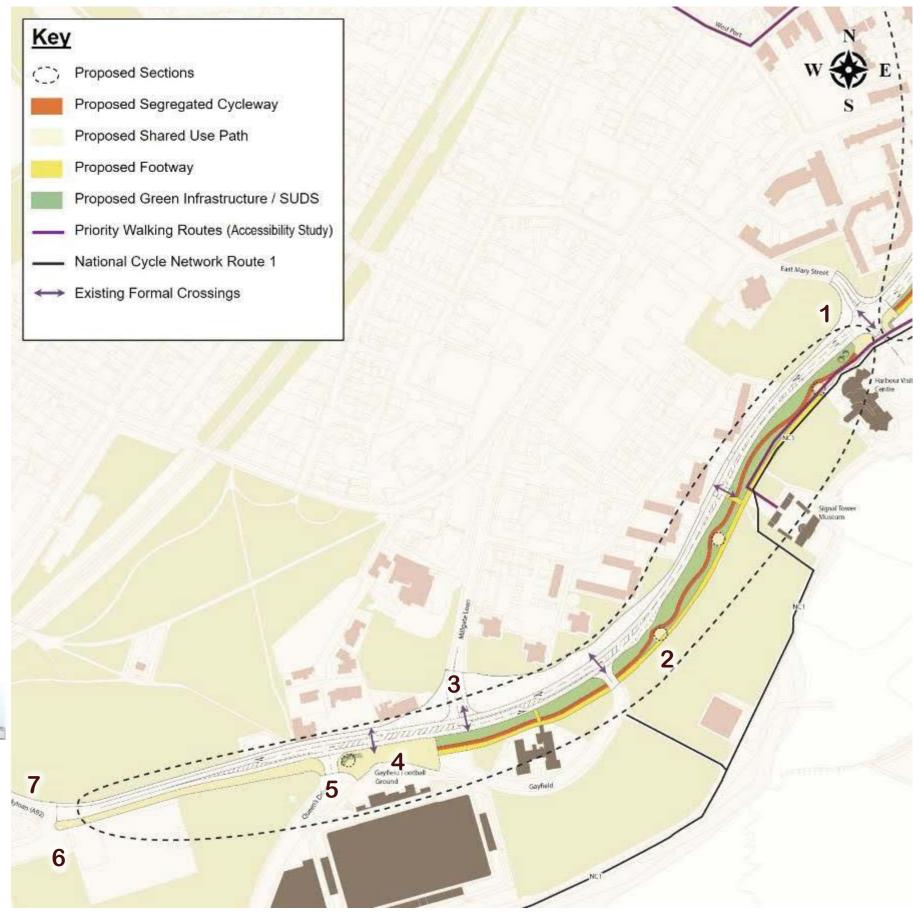
Reallocate existing dual carriageway to single carriageway with a new widened footway and public realm improvements, two-way segregated cycleway and separation strip of low-level coastal planting between seafront and general traffic.

### **Supporting Proposals**

- 1. Replace East Mary Street / Arbroath Harbour Roundabout with traffic signals allowing controlled crossings
- 2. Replace existing bus laybys to include "floating" bus stops and reconfigure access for Signal Tower Museum and Inchcape Park
- 3. Modify Millgate Loan junction allowing all movements incorporating right turn traffic island. Tighten corner radii and improve pedestrian crossing.
- 4. Creation of wide shared use path outside Gayfield Stadium catering for pedestrian and cycle movements during events
- 5. New pedestrian crossing at Gayfield Stadium and reconfiguration of Queen's Drive junction improving crossing
- 6. Link with shared use path through West Links Park and south with NCN Route 1
- 7. Creation of prominent gateway feature

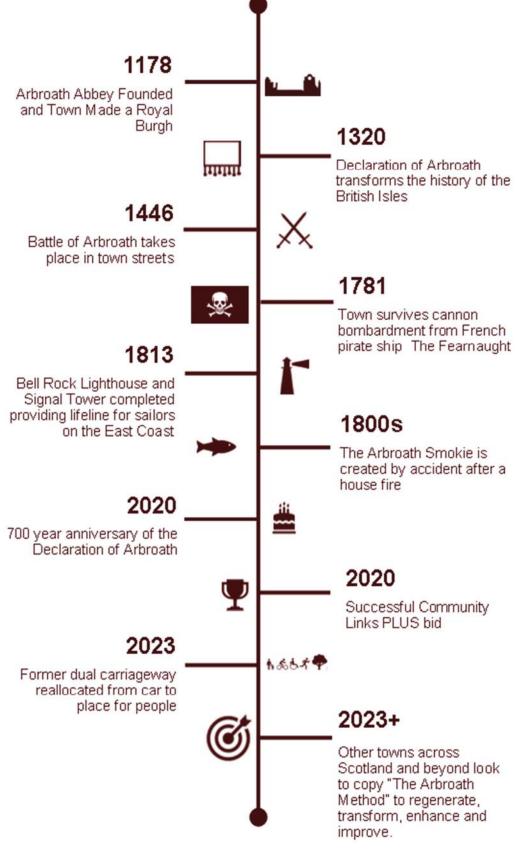


Section C - Typical Cross Section





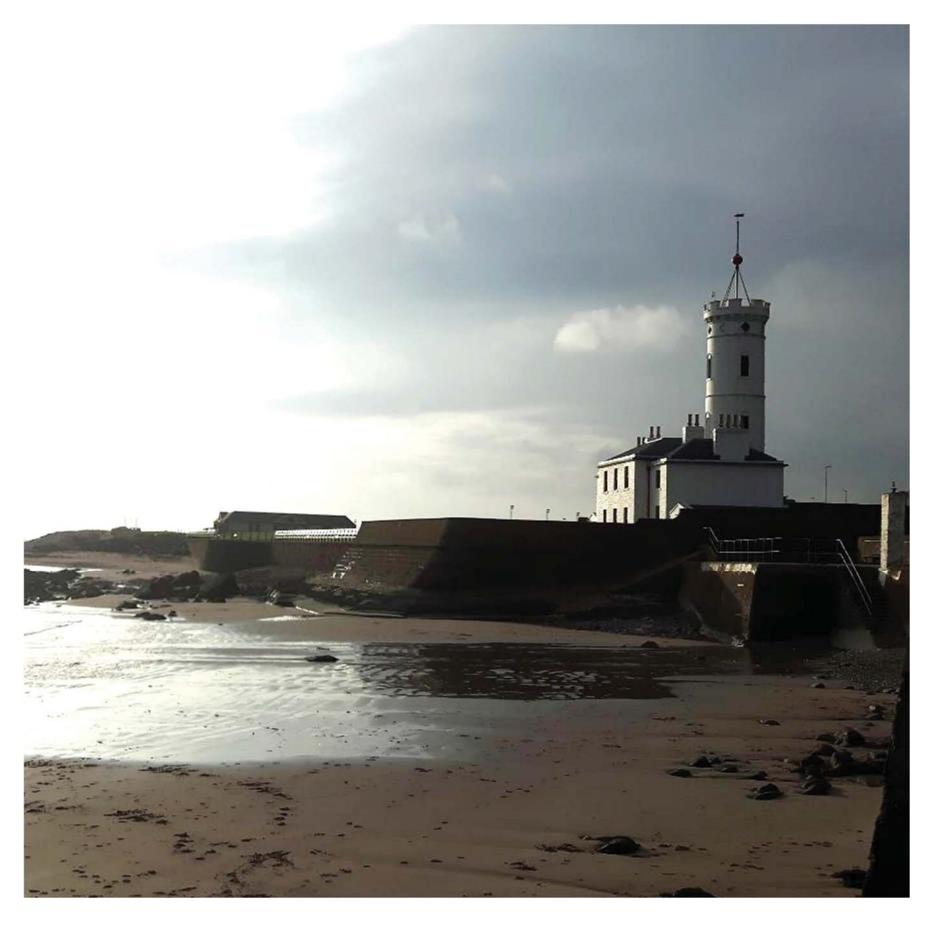






# 1.5 Why Arbroath?

- **Truly transformative project** reaching the entire town
- Entire project led by strong community and stakeholder engagement
- Ambitious **first-of-its-kind** project in Scotland which will provide an example for other towns and cities
- Reallocation of dual carriageway space from private car back to people
- Opportunity to reconnect Arbroath with its seafront and severed communities
- **Directly links with NCN Route 1**, Angus Coastal Path and North Sea Cycle Route
- Project meets national, regional and local policy objectives and competition objectives
- Project would provide catalyst for future investment and regeneration in the town and across Angus
- Huge potential to unlock Arbroath's natural and outdoor assets and improve access
- Potential to greatly increase tourism and active tourism from Dundee, Aberdeen and across the country
- Core proposals within accessible walking and cycling distance of entire town
- 2020 would mark the 700<sup>th</sup> Anniversary of the Declaration of Arbroath







Design: Process, Quality and Innovation

# 2. Design: Process, Quality and Innovation

### 2.1 Outline Design Process

- 1. Stakeholder and Community Engagement
- 2. Identification of Need / Desire for Improvements
- 3. Feasibility / Concept Design, Optioneering and Engagement
  - 4. Preliminary Design and Consultation
    - 5. Detailed Design and Consultation
  - 6. Technical Design and Consultation
- 7. Procurement and Delivery / Construction
- Promotion, Behaviour Change, Monitoring and Evaluation

### 2.2 Project Evolution

### 2.2.1 2015 Place Challenge

The 2015 Place Challenge was a two-day collaboration event organised by Architecture and Design Scotland with over 100 delegates from local and national governments, planning, urban design, business and innovation professionals. The event considered how to create town centres as living places that re-use existing spaces to deliver housing, employment and services with Arbroath as a pilot to test ideas. A Summary Report<sup>7</sup> presented some learning from the event including key outcomes

# Connectivity emerged as a key theme



### 2.2.2 2016 Arbroath Town Centre Design Charette

The Arbroath Town Centre Design Charette<sup>8</sup> in February 2016 consisted of four days of intensive engagement with local people, businesses and agencies around shaping the future of Arbroath. Engagement identified common themes including:

- The potential of Arbroath's natural and historic assets was waiting to be unlocked;
- The dual carriageway caused significant severance; and
- There was a poor sense of arrival into Arbroath by road and rail.

The local community worked alongside professionals to prepare a:

- Long-Term Vision
- Action Plan of non-physical measures; and
- Development Framework of physical interventions

2016 Charette Engagement Activities

The Five A's Vision for Arbroath in 2026 was developed:

- **Ambitious** Arbroath
- Active Arbroath
- Accessible Arbroath
- Authentic Arbroath
- Attractive Arbroath



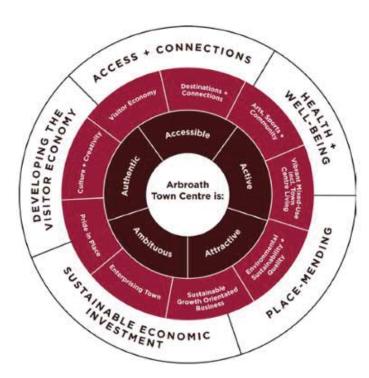


Charette Connecting Key Destinations Map

<sup>&</sup>lt;sup>7</sup> https://www.ads.org.uk/place-challenge-2015-summary-report-2/

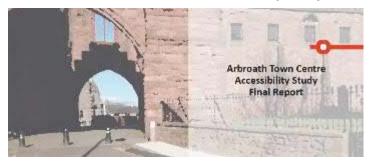


<sup>&</sup>lt;sup>8</sup> http://www.angus.gov.uk/sites/angus-cms/files/2017-08/Arbroath%20Final%20Draft.pdf



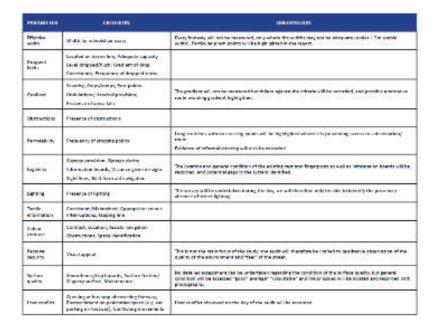
Charrette Vision, Objectives and Action Plan

### 2017 Arbroath Town Centre Accessibility Study 2.2.3



The 2017 Arbroath Town Centre Accessibility Study undertaken for Arbroath Community Council identified key issues and an Action Plan to improve the attractiveness of Arbroath town centre for visitors and locals. Walking Network Audits looked at a wide range of accessibility criteria. The study recommended improvements to wayfinding and crossings in the town centre and four priority routes:

- Arbroath Abbey—Fit O' the Toon
- Railway Station—High Street
- Signal Tower—High Street
- Abbey Car Park—Abbey Visitor Centre



Accessibility Study Audit Parameters Checklist

### 2.2.4 2018 Accessible Arbroath: A92 Active Travel Corridor

In 2018 an Active Travel Corridor Study<sup>9</sup> was undertaken for the A92 corridor through Arbroath reviewing current transport needs, traffic flows and opportunities to enhance active travel, streetscape, public realm, and accessibility to and within the town centre. Traffic surveys and a traffic modelling exercise were undertaken modelling different scenarios where the dual carriageway was redetermined as single carriageway. Consultation on this study included:



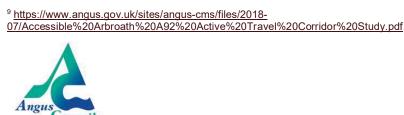
- Social Pinpoint Tool online engagement site

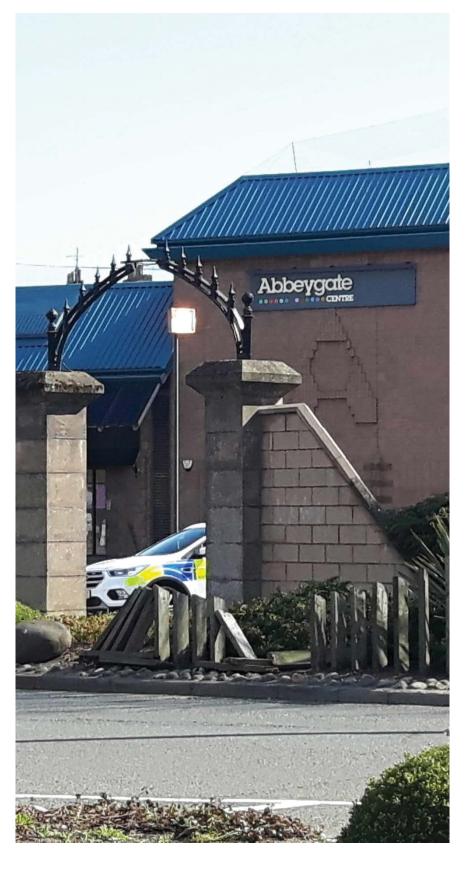
- Identification of the great potential and a strong local appetite for







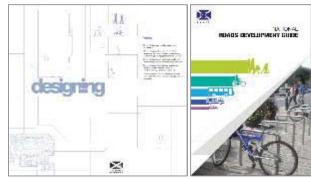




### 2.3 Design Guidance and Quality

A wide range of design guidance and standards have been and will be utilised taking this project forward. Core documents include:

- The National Roads Development Guide (NRDG);
- Designing Streets;
- Cycling by Design; and
- Inclusive Mobility.





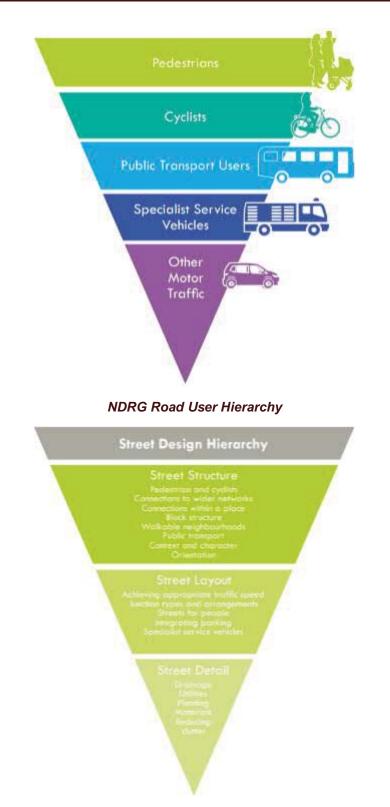
Detailed infrastructure and construction design will utilise:

- Design Manual for Roads and Bridges;
- Traffic Signs Regulations and General Directions;
- Local Transport Notes; and
- Traffic Advisory Leaflets.

These represent the core design guidance however other emerging documents such as Sustrans Design Guidance Documents and examples from elsewhere in the UK, Transport for London and Continental Europe will be utilised to match industry best practice.

Angus Council have adopted the NRDG showing a clear road user hierarchy with more vulnerable road users at the top.

NDRG supports Designing Streets and its headline policies are supported by the Street Design Hierarchy.



Designing Streets Street Design Hierarchy (image from NDRG)

### 2.4 Equality and Accessibility

Angus Council look to more specific guidance to ensure accessible street designs works best for all users. Documents like Inclusive Mobility<sup>10</sup> provide a baseline for designs whilst more specialist documents such as Care and Repair England's Age Friendly Street Design<sup>11</sup> help keep up to date with best practice and assist in a proactive application of the Equalities Act.

### 2.4.1 Scotland's Accessible Travel Framework

The 2016 Accessible Travel Framework for Scotland<sup>12</sup> was created to:

- Support disabled people's rights by removing barriers and improving access to travel; and
- Ensure disabled people are fully involved in work to improve all aspects of travel.

This project has been proactive in meeting the various outcomes set out in the Framework aiming to remove barriers to accessible travel; undertaking impact assessments and workshops to discuss proposals and set out a new accessibility framework for the project.



<sup>12</sup> https://www.transport.gov.scot/media/20113/j448711.pdf

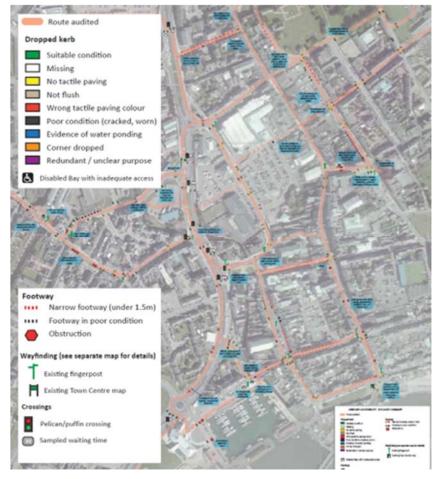


 $<sup>^{10}\ \</sup>underline{\text{https://www.gov.uk/government/publications/inclusive-mobility}}$ 

<sup>11</sup> http://careandrepair-england.org.uk/wp-content/uploads/2016/09/Age-Friendly-Street-Design-Sept-2016.pdf

### **Town Centre Accessibility Study**

The Town Centre Accessibility Study for Arbroath identifying key issues and an action plan to improve the attractiveness of the town centre for visitors and locals. Detailed site audits were undertaken noting in particular where those with visual or mobility impairments could face difficulties moving around the town centre and surrounding area.



### Accessibility Audit Map

Recommendations were developed for accessibility improvements including wayfinding, accessible crossings and identification of a desire to see travel times on active travel signage.

### **Equality Impact Assessment**

Angus Council proactively consider equality when carrying out work, in order to mainstream equality into the core business, in everything the Council does.

Equality Impact Assessments (EqIA) are used to show that The Council has met the general duty and shown due regard to eliminating discrimination, advancing equality of opportunity and fostering good relations.

The EqIA demonstrates that any impact –positive or negative – has been identified for one or more of a group sharing the same protected characteristics which are:

- Age
- Disability
- Gender reassignment
- Marriage or civil partnership
- Pregnancy/maternity
- Race
- Religion or belief
- Sex (gender)
- Sexual orientation.
  - Scotland: 3. Clear and updated signage:

design principles:

4. Segregation of different route users to minimise potential conflict;

and equality issues from a local perspective, and the development of key

1. Shared spaces should not be promoted as these can be very

difficult for more vulnerable and visually impaired users;

2. Pedestrian crossings should be full accessible standard with

high-contrasting tactile paving unlike other places across

- 5. Reduction of footway clutter;
- 6. Improved footway lighting;
- 7. Seating opportunities;
- Availability of accessible toilet facilities;
- 9. Ongoing partnership with Angus Access Panel.



An EqIA for the proposals showed that the proposed project did not have any negative impacts on these groups, only positive impacts; generally focussed on improving ease of access and infrastructure and improving **Angus Access Panel Workshop** 2.4.4

A workshop was hosted with Angus Access Panel on the 25th of March 2019 giving an opportunity to discuss the project, potential accessibility



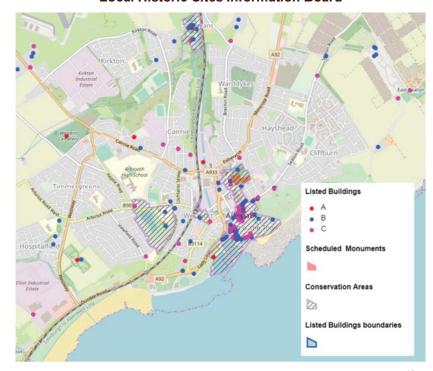


### 2.5 **Celebrating Local Heritage**

One of Arbroath's greatest assets is its rich history and heritage. Throughout all current and previous engagement Arbroathians (also known as Red Lichties after the famous red light of the Bell Rock Lighthouse Signal Tower) have repeatedly stressed how strong this sense of heritage runs through the town, but also how work needs to be done to help visitors and locals access these sites.



Local Historic Sites Information Board

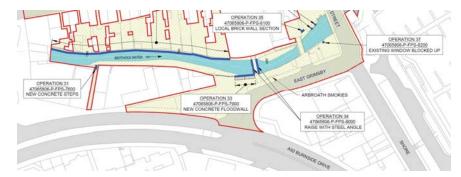


Historic Environment Scotland Designated Sites in Arbroath<sup>13</sup>



### **Flood Prevention**

Arbroath has a history of flooding and a major flood protection scheme for Arbroath is due to begin construction in 2019/20 building upon works in recent years. Works will take place adjacent to the core project study area with a concrete floodwall close to the existing dual carriageway<sup>14</sup>. A Surface Water Management Plan for Arbroath is currently in development. Flood modelling will identify potential hotspots. Preliminary discussions have been held with the flooding team who will continue to work in close partnership through the detailed design stage.



Extract from 2019/20 Flood Protection Works Design by A92



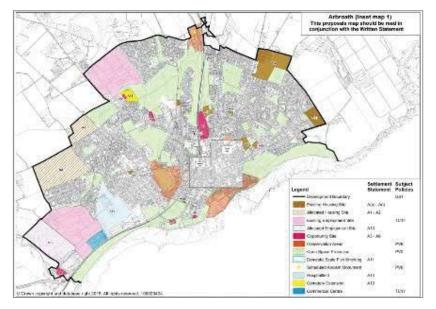
https://www.angus.gov.uk/the\_environment/flooding\_and\_coastal\_erosion/arbroath\_brothock\_water\_flood\_protection\_scheme



<sup>&</sup>lt;sup>13</sup> https://www.historicenvironment.scot/advice-and-support/listing-scheduling-anddesignations/listed-buildings/search-for-a-listed-building/

### 2.6 Local Development

There are several key development sites around Arbroath and along the core route corridor. The extract below from the 2016 Angus Local Development Plan (LDP)<sup>15</sup> shows major housing development allocation sites. Major business and retail sites to the south of the town are in the planning cycle. These demonstrate proven local investment and confidence from the private sector and how this project could act as a catalyst attracting continued future private and public sector investment.



Angus LDP Arbroath Map



A92 Proposed Retail Park Expansion Masterplan<sup>16</sup>



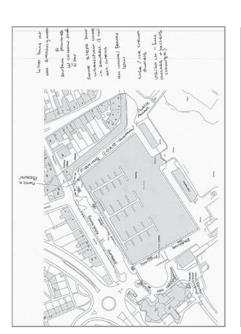
### 2.7 Public Life Survey

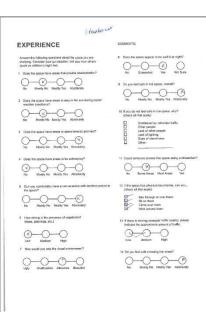
Surveys were undertaken using the Gehl Institute Public Life Assessment Tools<sup>17</sup>.

A "People Moving Count" was undertaken at several sites along the core route corridor highlighting specific areas with the highest movements across the dual carriageway. The survey concluded that a number of factors and the existing road layout deterred use of the area for active travel.

A "Place Inventory" Assessment was also undertaken assessing the Arbroath Harbour area highlighting a number of strengths and areas for improvement.

The Public Life Assessment Tools helped inform proposals for walking and cycling crossing locations, links and for streetscape and public realm improvements along the route and at key locations.





Place Inventory Assessment at Arbroath Harbour



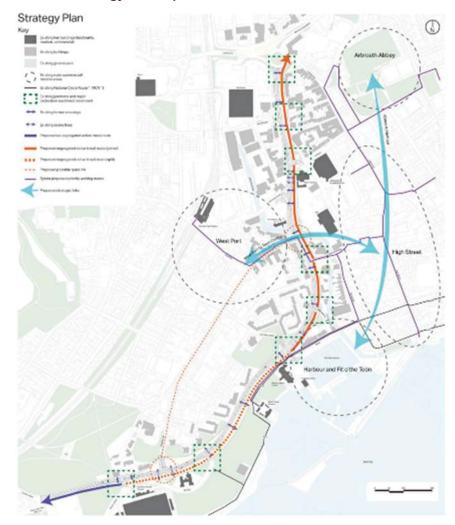
https://www.angus.gov.uk/sites/angus-cms/files/Angus%20local%20development%20plan%20adopted%20September%202016.pdf

<sup>16</sup> https://planning.angus.gov.uk/onlineapplications/applicationDetails.do?activeTab=documents&keyVal=PJO2RPCFJWJ00

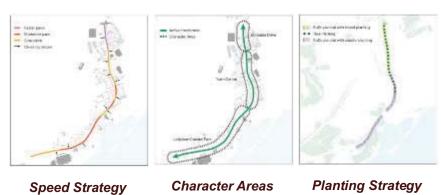
<sup>&</sup>lt;sup>17</sup> https://gehlinstitute.org/using-public-life-tools-complete-guide/

### **Design Development** 2.8

### **Strategy Development** 2.8.1

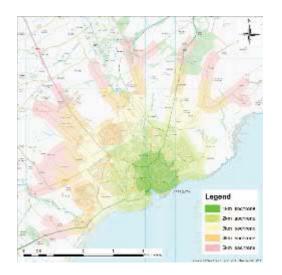


Design Development Strategy Plan

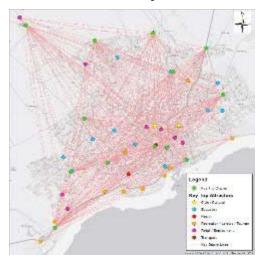


Planting Strategy Character Areas

### 2.8.2 Isochrones

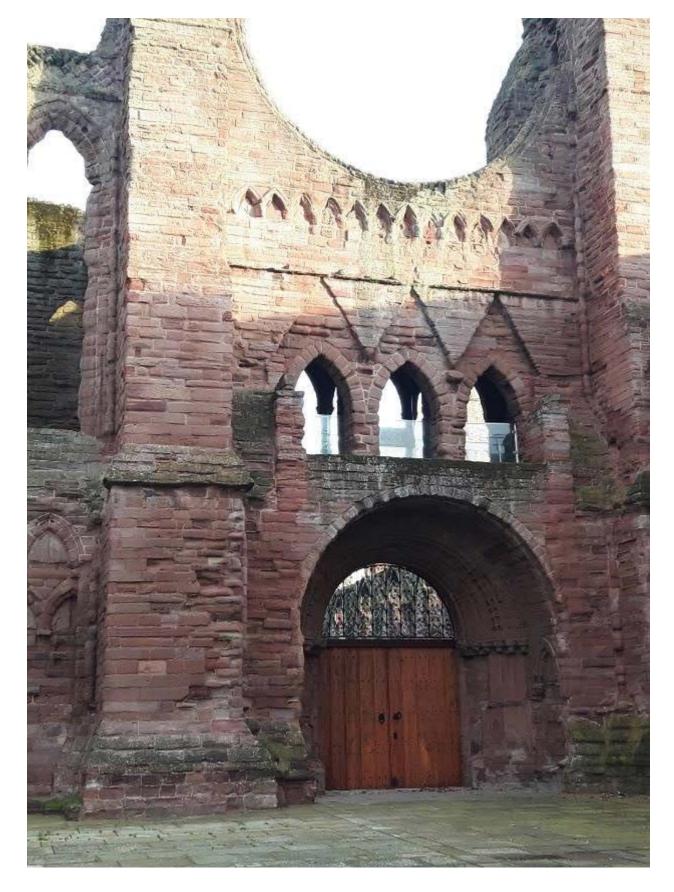


**Network Analysis** 2.8.3



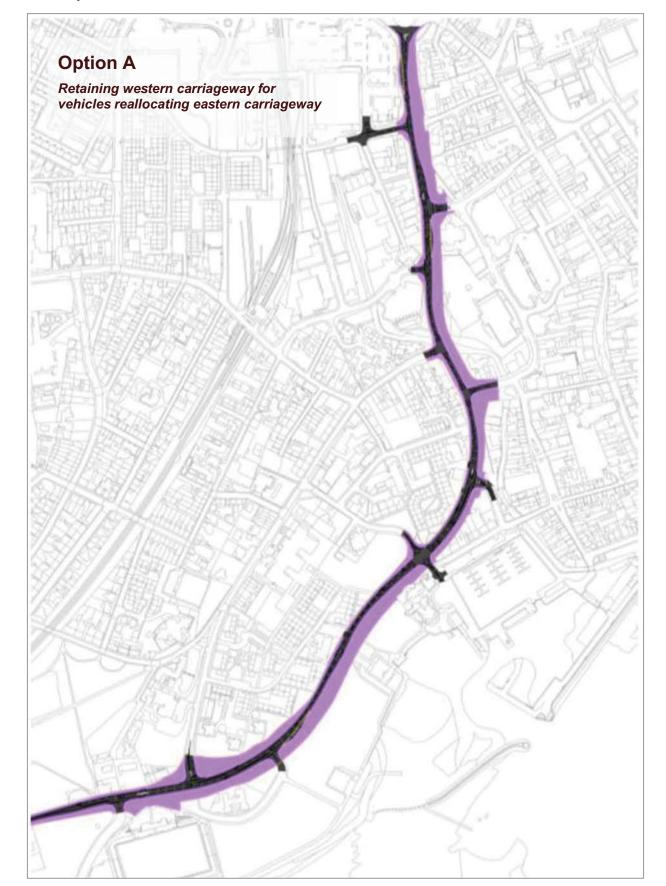
**Active Travel Network** 2.8.4

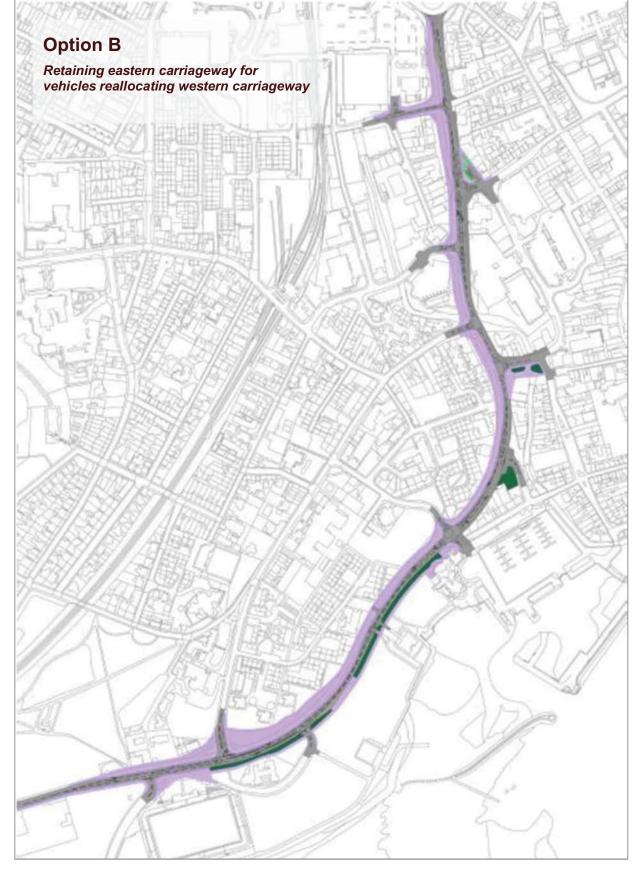






# 2.9 Option Development





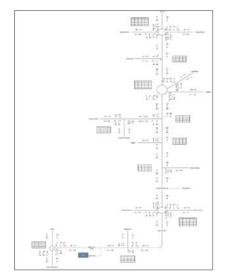


The map on the previous page shows the two initial high-level options developed which retained additional carriageway lanes at junctions to accommodate vehicle turning movements.

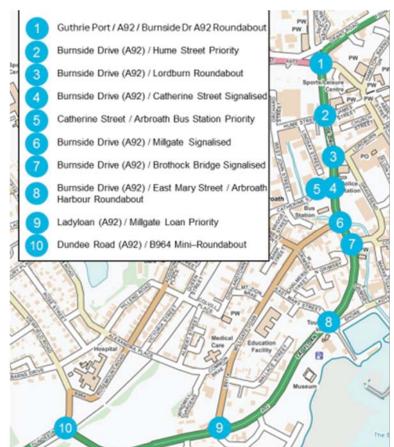
### 2.9.1 Traffic Modelling

Traffic modelling was undertaken to test the operation of options and combined with traffic survey data collected for the route. A future baseline scenario was calculated based upon 2016 LDP allocated sites to determine additional traffic impact.

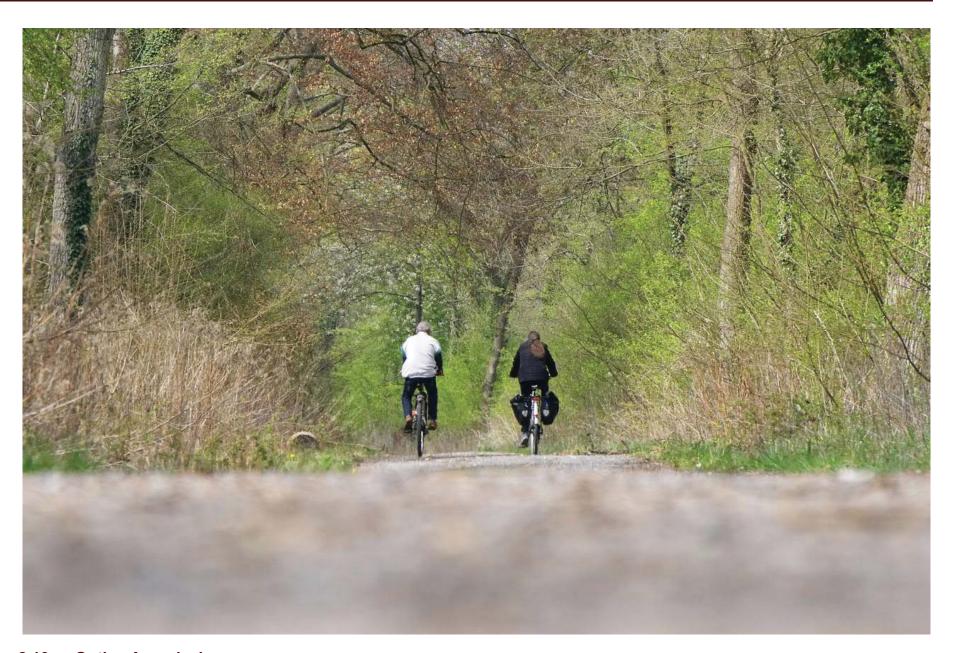
Analysis showed all junctions within the network were predicted to operate within capacity in both options with the exception of Junction 10 which was outside of the project area and has been recommended for a separate study.



### Modelling Network Flow Diagram



Junctions surveyed and modelled through traffic modelling exercise



### 2.10 Option Appraisal

Option Appraisal looked into the needs of different route users, properties and businesses along the route alongside the core design criteria set out in Cycling by Design: Safety; Coherence; Directness; Comfort; and Attractiveness. Adaptability and deliverability were similarly assessed alongside route user audits.

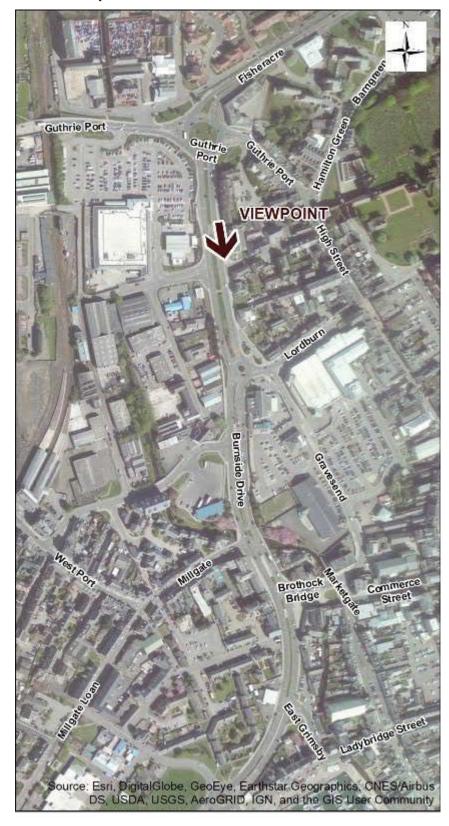
Reallocating the eastern carriageway and retaining the western carriageway for vehicles was the highest scoring option, however there were recognised benefits to improving public space at areas such as Ladyloan Primary School and the Bus Station. Further design development therefore looked to accommodate these where possible. The needs of route users, the local community and businesses could only be determined through engagement. How this was achieved and fed into design proposals will be demonstrated within Section 4 of this submission.



Route Cycle Audit Videos



# 2.11 Proposal Visualisations



# A92 Burnside Drive looking south towards James Street and Hume Street

# Existing







# VIEWPOINT rce: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

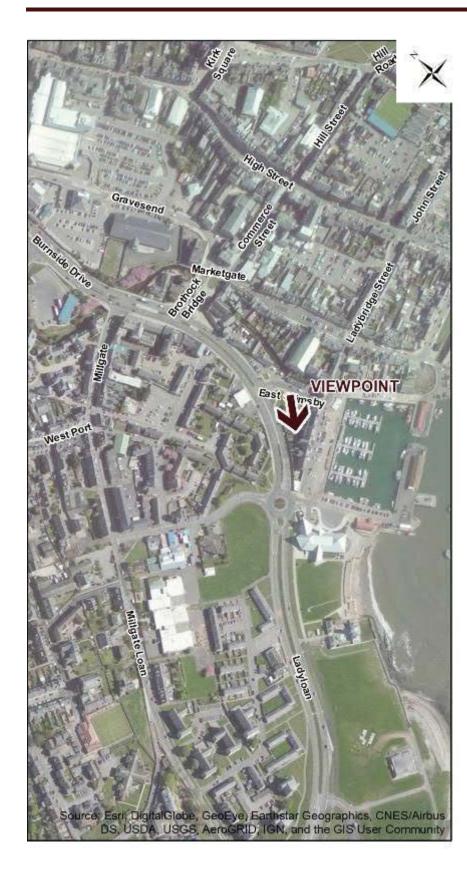
# A92 Burnside Drive looking south towards Lordburn and Maule Street

# Existing









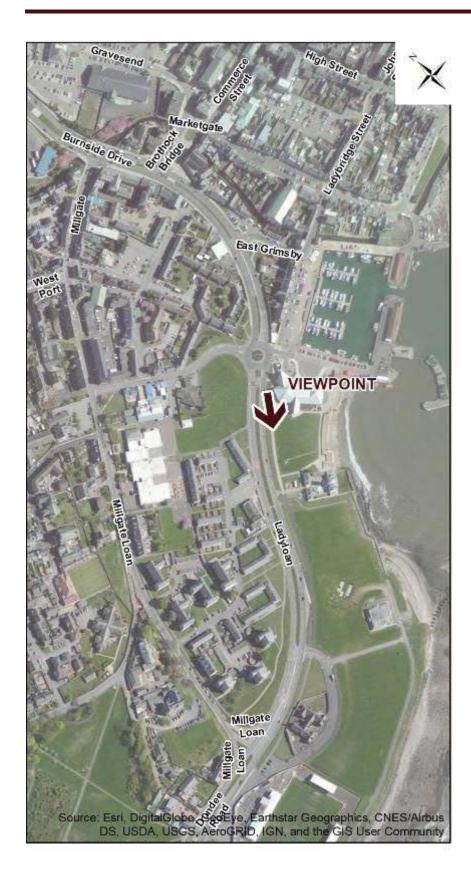
# A92 Burnside Drive looking south-west towards East Mary Street and Harbour

# Existing









# A92 Ladyloan looking south-west towards Signal Tower Museum

# Existing









# A92 Dundee Road looking east towards Queens Drive and Gayfield Stadium

# Existing







### 2.12 Proposed Street Trial

A street trial is proposed during the design development phase of this competition. Key aims would be to:

- 1. Test concept road reallocation;
- 2. Allow opportunity for public use of road space; and
- 3. Host event to promote proposals and allow feedback.

Dates will be confirmed pending discussions with local community groups about using the event for a festival of active travel potentially tying in with "European Mobility Week" or an "In Town Without My Car" day. The proposed location is shown; however, the final location and arrangement will be agreed between Angus Council and local community groups due to take part in the event.

### 2.12.1 Active Travel Street Festival Event Plan

A core aim of the street trial is to host a public festival event promoting active travel and feedback on proposals. Visitors would be encouraged to travel actively to the event where possible. Festival themes are in discussion with delivery partners, but themes may include:

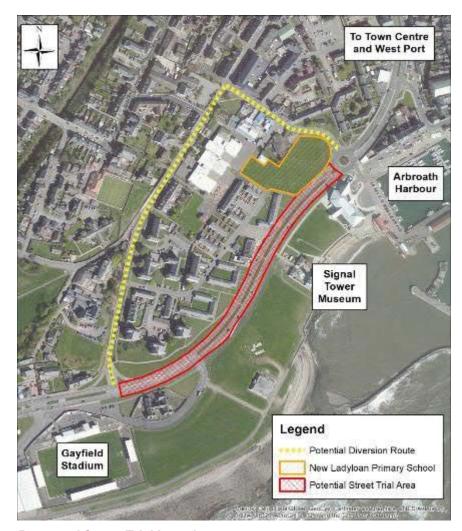
- Community-based festival and market;
- Temporary parklets, seating, surface treatments, planters and green screening;
- Active travel festival in partnership with Angus Cycle Hub;
- Community led street art;
- Partnership with Ladyloan Primary School;
- Cycle training, maintenance workshops, demonstrations and hire opportunities; and
- Signal Tower Museum and Harbour facilities access.

### 2.12.2 Proposed Temporary Traffic Management

Temporary road closures would be implemented through Temporary Traffic Orders and enforced by Temporary Traffic Signals and Traffic Marshalls.

General traffic would be removed from the north-western side of the dualcarriageway and both movements would be accommodated on the southeastern carriageway. A contingency diversionary route could also be promoted between Millgate Loan and East Mary Street. Angus Council will work in close partnership with residents and businesses to ensure access is provided.

The final arrangement for the street trial will be agreed during Stage 3 between key delivery partners.



Proposed Street Trial Location

### 2.12.3 Street Trial Key Delivery Partners













### 2.13 Wider Area: Walking and Cycle Friendly Streets

Proposals for the wider Arbroath area which will greatly enhance the uptake of active travel alongside core corridor proposals including:

- Active travel signage and wayfinding;
- Cycle parking;
- Reinstatement and improvement of existing cycle lanes and shared use paths;
- Contraflow cycling;
- Filtered permeability;
- 20mph streets;
- Traffic calming;
- Improved lighting;
- Removing access controls; and
- Underpass improvements.

### 2.14 Design Innovation

This project promotes design innovation in a number of key areas:

- Dual Carriageway Reallocation Arbroath ATAT would be the first of its kind dual carriageway reallocation to active travel in Scotland;
- Access Panel Design Framework Establishment of a set of Design Principles with local accessibility groups;
- Social Pinpoint Engagement Use of Social Pinpoint as a dedicated online interactive engagement hub where users can join in conversations and keep up to date with the project;
- Journey Times on Signage Rather than traditional distances helps break down barriers making short active travel journeys seem more accessible to many potential users;
- School Pupil Input Involving local school children directly impacted by any proposals at an early stage in design development; and
- Wind Break Investigation into potential planting, landscaping and streetscaping strategies to help reduce the impact of coastal wind on proposed footways and cycleways without obstructing seafront views.







Partnership Working and Deliverability

### 3. Partnership Working and Deliverability

### 3.1 Project Support

### 3.1.1 Community and Stakeholder Support

This project has demonstrated wide ranging support for both the proposals and its broader aims at improving:

- Walking;
- Cycling;
- Accessibility;
- Public Spaces; and
- Green Spaces in Arbroath.

The proactive and widespread engagement and consultation undertaken directly for this project and in recent years demonstrates a great appetite for change from the local community, key stakeholders and elected members alike.

The table below shows the level of support for various project aims from those who completed an online survey hosted through the Social Pinpoint engagement site. Response fields included:

- Strongly Support;
- Support;
- Neither Support nor Oppose;
- Oppose; and
- Strongly Oppose.

The questions referred to improvements along the existing A92 dual carriageway corridor through Arbroath and the core project route corridor.

To what extent would you support:	Support or Strongly Support
The aim of improving conditions for walking	77.2%
The aim of improving conditions for cycling	80.7%
The aim of improving conditions for those with mobility, visual, hearing or any other hidden impairments	82.5%
The aim of improving greenspace and public spaces	77.2%
Exploring reallocation of existing road space from the existing dual carriageway through Arbroath to a single carriageway with other improvements explored along that corridor?	66.7%

### 3.1.2 Angus Council Leaders Statement of Project Support

Community Links PLUS provides the town of Arbroath with an unprecedented opportunity to address severance caused by a historic dual carriageway to create a place for people. To transform an area to somewhere people want to be, to visit and to reconnect Arbroath where it has been historically split through the town centre and seafront. This first-of-its kind transformational project aims to provide the template for other towns across Scotland to take back their places for people following "The Arbroath Method".

Arbroath is an iconic east coast town rich in history, character and opportunity sitting between two of Scotland's major cities. 2020 will see the 700th anniversary of the Declaration of Arbroath; a defining moment in the history of the British Isles. Whilst the town has many assets and attractive characteristics, there is no doubt it faces challenges like many other small towns. However, it has huge potential to become a truly great place where people want to live, work and visit.

The Arbroath Active Travel Active Town project has the potential to be a major catalyst for positive change in Arbroath. It represents a once in a lifetime opportunity outside of the major Scottish City regions deals to be a truly transformative project for the entire town; making a significant impact on modal shift, lifestyle, health and placemaking. Arbroath also represents the perfect opportunity to be a catalyst and demonstrator town showing how to unlock the potential of a smaller settlement and provide a framework for other towns across Scotland looking to reach 10% of everyday journeys by bike.

In the past, the A92 through Arbroath was the main road up the east coast of Scotland before the development of the A90; now the key trunk road route in the East. The A92 dual carriageway through Arbroath was therefore built for a very different time and environment. Decades later and years of community and stakeholder consultation and engagement have shown that many feel the dual carriageway severs the key areas and features of the town, cutting access between the town centre, harbour, West Port high street, bus and train stations and the waterfront.

Engagement and consultation have demonstrated that there is a huge desire from the Red Lichties (Arbroathians) to see the dual carriageway redeveloped to reduce the severance in the town and reallocate that space back from the car to people: to walking and cycling, to green and public spaces, to leisure and tourism and back to Arbroath.



**Councillor David Fairweather** Angus Council Leader





Councillor Lois Speed
Chair of Angus Health and Social
Care Integration Joint Board



### 3.2 Project Delivery

### 3.2.1 Outline Project Delivery Plan

Stage	Task	Proposed Dates
.+ 7e 1	Competition Announcement	w/b 12 <sup>th</sup> March 2018
CL+ Stage	Expressions of Interest Submissions Due	1 <sup>st</sup> June 2018
0,	Expressions of Interest Review	20 <sup>th</sup> June 2018
σ.	Stage 2 Project Award Announcement	w/b 25 <sup>th</sup> June 2018
CL+ Stage 2	Production of Stage 2 Proposals	June 2018 -April 2019
<u>'</u>	Stage 2 Proposal Submission	w/b 22 <sup>nd</sup> April 2019
)	Stage 2 Panel Assessment	April – June 2019
Je	Announcement of winning five applications	w/b 10 <sup>th</sup> June 2018
ign t Stag	Collaborative design development	June 2019 – April 2020
)es	Submission of developed proposals	w/b 20 <sup>th</sup> April 2020
CL+ Design Development Stage	Final proposal review	April 2020 – May 2020
Dev	Promotion of projects to be taken forward for further development and construction	May 2020 – June 2020
	Pre-Construction Monitoring	2019-2020
uc	Street Trial	2019
ctic	Developed Design	2019-2022
stru	Technical Design	2019-2022
ons	Design Consultation	2019-2022
Pre-Construction	TRO advertising, statutory consultation, responses, objections, addressing of issues, implementation (up to 18-month process)	2019-2022
Construction	Phased Construction Phase 1: West Links to Harbour Roundabout Phase 2: Harbour Roundabout to Lordburn Roundabout Phase 3: Lordburn Roundabout to Guthrie Port Roundabout Phase 4: Wider Area Works and Snagging	2020-2023
0 ~	Full Scheme Opening	2023
eme	Initial scheme monitoring	2023
Post-Scheme Construction	Public Life (Re) Assessment	2023
st-S nstu	Annual monitoring	2023-2028
Pos	Continued Wider Network Improvements and Behaviour Change Programme	2023+



### 3.2.2 Project Delivery Team

Angus Council would lead on project delivery using Council Officers formed from a key project delivery group consisting of different Council departments. This project team may also include the use of external consultants to offer specific project expertise and resources where required, however, this will be confirmed during the detailed design phase of this project. Angus Council would also utilise the internal Communities team to keep engaged with the wide range of community groups and organisations throughout project design, construction and implementation.

The project delivery group would work closely with Sustrans throughout the detailed design, construction and post-construction phases.

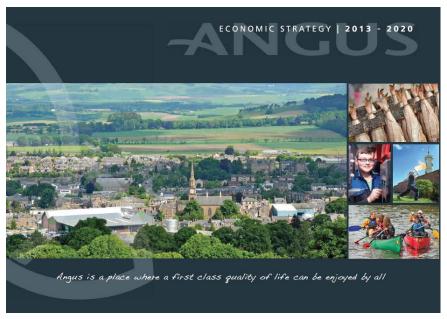
Finally, there have been commitments to create a dedicated full-time equivalent role of Project Delivery Officer and Behaviour Change Officer on behalf of this project.







### 3.2.3 Arbroath Community Planning Partnership



The Angus Economic Strategy<sup>18</sup> was developed to meet both current and future needs of the local economy in Angus. In Angus, Community Planning Partner agencies are united by a single vision:

# "Angus is a place where a fist class quality of life can be enjoyed by all"

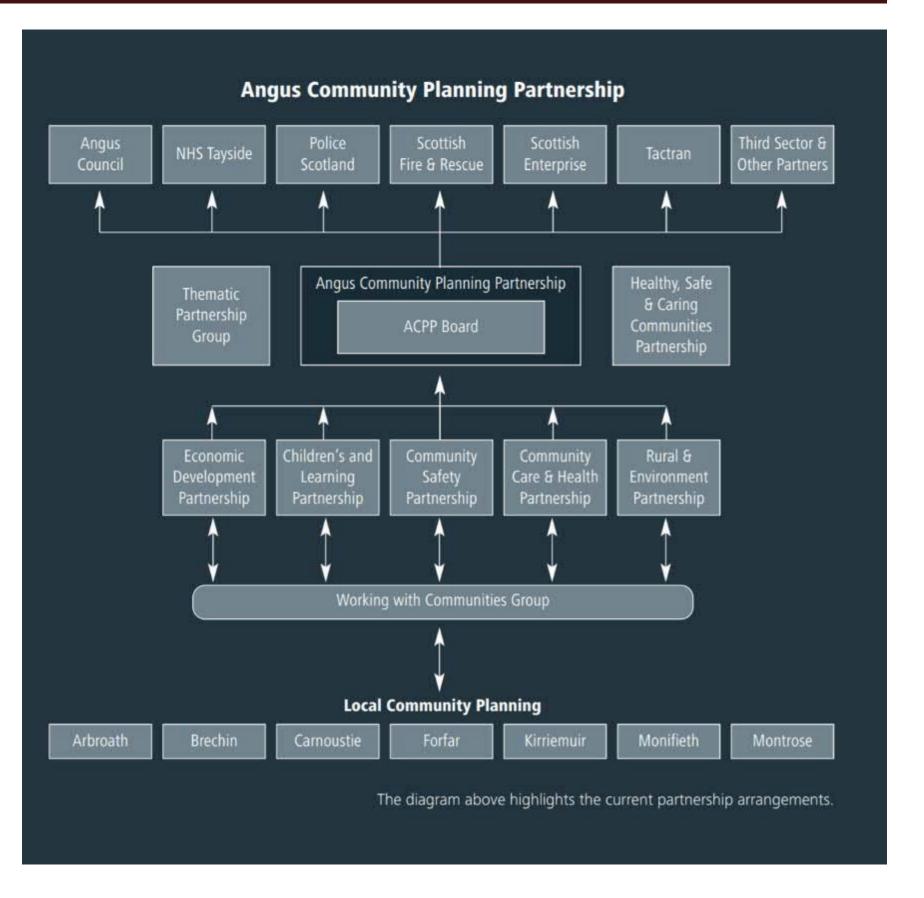
Angus Council recognises the importance of community planning as a means of making public bodies work together with local communities to design and deliver better services that make a real difference to people's lives. Community planning is a key driver of public service reform at local level. It provides a focus for partnership working driven by strong shared leadership, directed towards distinctive local circumstances. Partners work together to improve local services, ensuring that they meet the needs of local people, especially for those people who need those services most.

The diagram shows the Angus Community Planning Partnership; consisting of a wide cross-sector involvement working down to a local level and how these organisations work together towards the single vision for Angus.

This demonstrates that there is a well-established existing framework for co-operation across sectors within Angus and Arbroath itself. This project has been presented to the Arbroath Locality Planning Partnership receiving good feedback.

<sup>&</sup>lt;sup>18</sup> http://www.angus.gov.uk/sites/angus-cms/files/Angus Economic Development Strategy 2013 2020.pdf





### 3.3 Project Delivery Plan

Sustrans Project Delivery Plan has been used as a template for this project showing the proposed project stages, phases, forecast budgets and proposed Sustrans match funding claims.

Project Phases relate to discrete geographic areas of the project. These have been adapted from the Sections outlined earlier in this report.

- Phase 1 Section C between West Links and the Harbour Roundabout
- Phase 2 Section B between Harbour and Lordburn Roundabouts
- Phase 3 Section A between Lordburn and Guthrie Port Roundabouts
- Phase 4 Wider area improvements outside of core route corridor

Project Stages are based on the Royal Institute of British Architects Plan of Work 2013 stages:

- 0 Strategic Definition
- 1 Preparation and Brief
- 2 Concept Design
- 3 Developed Design
- 4 Technical Design
- 5 Construction
- 6 Handover and Close Out
- 7 In Use

More detailed project costings are provided overleaf showing a section by section breakdown of outline project costs.



				EOI Stage			JRRENT S 18-2019)				esign Develop (2019-20				Year 1	2020-20	)21)			Υє	ear 2 (2	021-20	22		Year	3 (202	2-2023)	
MONTH (starting June 19)	For	recast total budget	Forecast Sustrans cla m	M A M J	2018 J A S	S O N	D J	F M	20 A M J	19 J A	. S O N D	J F M	20 A M J	J A	S O N	D J	F M	20 A M	21 J A	s o	N D	J F	МА	2022 J A	s o I	N D J	FM	2023
Stages 0-2 (for entire project area)	£	50,000.00	£ 50,000.00																									
Stage 0 Strategic Definition	£	-	£ -																									
Stage 1 Preparation and Brief	£	-	£ -																									
Stage 2 Concept Design	£	40,000.00	£ 40,000.00																									
04/2019 Panel Submission	£	5,000.00	£ 5,000.00																									
06/2019 Panel Presentation	£	5,000.00	£ 5,000.00																									
Stages 3-6 (Phase 1) West Links to Harbour Roundabout	£	2,740,000.00	£ 1,430,000.00																									
Stage 3 Developed Design	£	80,000.00	£ 80,000.00																									
Stage 4 Technical Design	£	40,000.00	£ 40,000.00																									
Stage 5 Construction, Supervision, Project Management	£	2,600,000.00	£ 1,300,000.00																									
Stage 6 Handover + close out	£	20,000.00	£ 10,000.00																									
Stages 3-6 (Phase 2) Harbour to Lordburn Roundabouts	£	3,048,000.00	£ 1,584,000.00																									
Stage 3 Developed Design	£	80,000.00	£ 80,000.00																									
Stage 4 Technical Design	£	40,000.00	£ 40,000.00																									
Stage 5 Construction, Supervision, Project Management	£	2,908,000.00	£ 1,454,000.00																									
Stage 6 Handover + close out	£	20,000.00	£ 10,000.00																									
stages 3-6 (Phase 3) ordburn to Guthrie Port Roundabouts	£	2,132,800.00	£ 1,126,400.00																									
Stage 3 Developed Design	£	80,000.00	£ 80,000.00																									
Stage 4 Technical Design	£	40,000.00	£ 40,000.00																									
Stage 5 Construction, Supervision, Project Management	£	1,992,800.00	£ 996,400.00																									
Stage 6 Handover + close out	£	20,000.00	£ 10,000.00																									
Stages 3-6 (Phase 4) Nider Area	£	590,800.00	£ 325,400.00																									
Stage 3 Developed Design	£	30,000.00	£ 30,000.00																									
Stage 4 Technical Design	£	30,000.00	£ 30,000.00																									
Stage 5 Construction, Supervision, Project Management	£	510,800.00	£ 255,400.00																									
Stage 6 Handover + close out	£	20,000.00	£ 10,000.00																									
itage 7 n use	£	470,000.00	£ 235,000.00																									
SUB TOTAL  Project Delivery Officer Salary +	£	8,981,600.00 210,000.00																										
Overheads (4 years)  SUB TOTAL		9,191,600.00																										
Optimism Bias (44%)	£	4,044,304.00	£ 2,114,552.00																									
TOTAL forecast budget / claim*	£	13,235,904.00	£ 6,920,352.00												2 2													

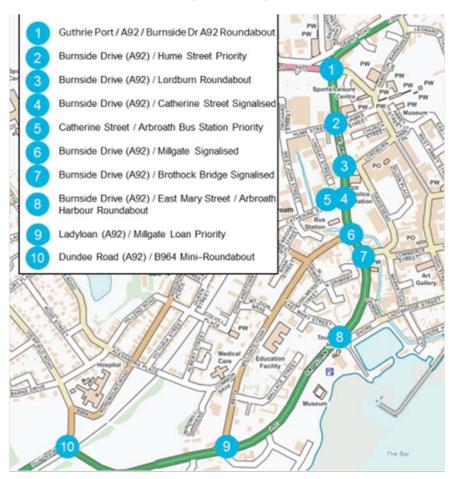
<sup>\*</sup> Total forecast budget above does not include Stage 2 design fees

£13,235,904 Forecast Total Project Budget



### 3.4 Project Costings

This project provides a comprehensive sustainable transport network along the A92 corridor. The following action plan will list the key tasks required to progress the core scheme and it is envisaged that of the 10 junctions analysed below, all would require some form of significant reconfiguration with the exception of Arbroath Bus Station (Junction 5) and the B964 mini-roundabout (Junction 10).



A high-level cost estimate has been prepared based on unit cost rates extracted from Transport for Greater Manchester's Cycling Design Guidance. The estimate has also been benchmarked against recent pricing examples, to confirm that it is in line with the current competitive market. It should be noted that the estimate does not include costs associated with land purchase, design and contract documentation, legal fees and traffic management. As this project is at the feasibility stage, an Optimism Bias of 44% has been applied per Table 13.4 - Stage 1: Programme Entry, 'The Scottish Transport Appraisal Guidance' (STAG), Technical Database, 2014'

\*Note the costs shown exclude land ownership and public utilities albeit it is estimated that all works would be within the existing highway boundary. Costs of traffic signal installation would also be dependent upon whether a SCOOT system is implemented. In addition, no allowance has been made for possible implications to existing structures such as that over Brothock Water.

Phase	Section	Item	Description	Low Cost	
Tildoo	Scotion	itom		Range	Range
3	Junction 1 – A92 Burnside Drive/ Guthrie Port Roundabout	Infrastructure & Landscaping	Conversion of large 52-metre ICD Roundabout to a form of traffic signals to allow controlled crossings for pedestrians and cyclists. Streetscape / Public Realm enhancement	£800,000	£1,200,000
3	Section between Junctions 1 & 2 (115 metres)	Infrastructure & Landscaping	Northbound bus layby to be reconfigured with potential additional stop southbound. Pedestrian crossing to be incorporated as part of new bus stop arrangements enhancing movements to/ from Morrison's and Hume Street	£150,000	£220,000
3	Junction 2 – A92 Burnside Drive/ Hume Street Priority Controlled		Modifications to existing priority junction to allow all movements. Incorporation of right turn ghost island.	£180,000	£250,000
3	Section between Junctions 2 & 3 (80 metres)	Infrastructure & Landscaping	Southbound bus layby to be reconfigured to floating bus stop. Possible northbound bus stop with reconfiguration of Junction 3 including crossing facilities.	£100,000	£150,000
2	Junction 3 – A92 Burnside Drive/ Lordburn Roundabout	Infrastructure & Landscaping	Reconfiguration of 4-arm Roundabout to a form of traffic signals to allow controlled crossings for pedestrians and cyclists. Would also require reconfiguration of Maule Street access and parking	£500,000	£650,000
2	Section between Junctions 3 & 4 (55 metres)	Infrastructure & Landscaping	Reconfiguration of carriageway required	£80,000	£100,000
2	Junction 4 – A92 Burnside Drive/ Catherine Street Traffic Signals	Infrastructure & Landscaping	Reconfiguration of carriageway required as well as upgrade of existing signals	£275,000	£350,000
2	Section between Junctions 4 & 6 (80 metres)	Infrastructure & Landscaping	Reconfiguration of carriageway required	£130,000	£150,000
2	Traffic Signals	Infrastructure & Landscaping	Reconfiguration of carriageway required as well as upgrade of existing signals	£275,000	£350,000
2	Section between Junctions 6 & 7 (55 metres)	Infrastructure & Landscaping	Reconfiguration of carriageway required	£80,000	£100,000
2	Junction 7 – A92 Burnside Drive/ Brothock Bridge Traffic Signals	Infrastructure & Landscaping	Reconfiguration of carriageway required as well as upgrade of existing signals	£275,000	£350,000
2	Section between Junctions 7 & 8 (230 metres)	Infrastructure & Landscaping	Includes reconfiguration of E Grimsby	£500,000	£650,000
1	Junction 8 – A92 Burnside Drive/ E Mary Street/ Harbour Roundabout		Reconfiguration of 4-arm Roundabout to a form of traffic signals to allow controlled crossings for pedestrians and cyclists.	£500,000	£600,000
1	Section between Junctions 8 & 9 (440 metres)	Infrastructure & Landscaping	Includes replacement bus laybys/ stops to be floating bus stops and reconfiguration of access points associated with Signal Tower Museum and Inchcape Park	£800,000	£1,000,000
1	Junction 9 – A92 Ladyloan/ Millgate Load Priority Controlled		Modifications to existing priority junction to allow all movements. Incorporation of right turn ghost island and tightening of corner radii.	£250,000	£350,000
1	Intermediate Section between Junctions 9 & 10 (Dual Carriageway Section and integration to existing single carriageway 250 metres)	Infrastructure & Landscaping	Includes new pedestrian cross at Gayfield and reconfiguration of Queen's Drive	£450,000	£550,000
4	Wider Area	Infrastructure & Landscaping	Active travel signage across wider area	£10,000	£20,000
4	Wider Area	Infrastructure &	Cycle parking across wider area	£25,000	£50,000
4	Wider Area	Infrastructure & Landscaping	Wider area accessibility improvements (ISM and Accessibility Audit Recommendations)	£200,000	£200,000
4	Core Project Route	Public Art & Heritage	Public art / local interest / heritage installations along core route and connecting routes	£50,000	£75,000
4	Street Trial	Street Trial	Festival, Promotion, Staff and Traffic Management	£30,000	£50,000
SubTotal				£5,380,000	£7,415,000
Traffic Sign	nalling and Software Upgrades			£200,000	£300,000
Behaviour	Change and Smarter Choices			£250,000	£450,000
	nd Technical Design			£315,000	£420,000
Site Supervision and Project Management					£296,600
Monitoring and Evaluation					£100,000
Project Delivery Staff Salary + Overheads (4 years)  \$\xi\$0 total  \$\xi\$6,					£210,000
SubTotal Outlinian Pina for Civil Monte (440)					£9,191,600
Optimism I	Bias for Civil Works (44%)			£2,910,688	£4,044,304
Total All	Sections			£9,525,888	£13,235,904



### 3.4.1 Match Funding Breakdown

Details of the Sustrans match-funding request for the Arbroath ATAT project are contained within the Project Delivery Plan costings section.

A detailed match funding breakdown will be created during the design development phase of this project. A number of key match funding sources have been identified which could help contribute to the project directly or indirectly.

- Green Infrastructure Fund Bid submitted, response due June 2019, minimum £650k if successful
- SCSP / SCSP Open Fund £159k (and £12k carry over)
- Cycling Walking Safer Streets £190k
- Tay Cities Deal £26 million for projects in Angus potential for Clean Growth initiative
- Signal Tower Museum Improvements Refurbishment and alterations to the existing Museum cottages to provide new exhibition spaces, installation of a new access ramp and refurbishment & repairs £49k
- Angus Council Bus Stop Infrastructure Improvement Programme – 2019/20 £40k plus £20k carry over
- Angus Council Dropped Kerb Crossing Programme Target £50k for 2019/20
- Arbroath Flood Defence Scheme £11.5m 2019
- Developer Contributions Developers across Angus being requested to identify active travel infrastructure. Two major sites likely to be active – Crudie and Wardmill. Crudie. West Links Park improvements

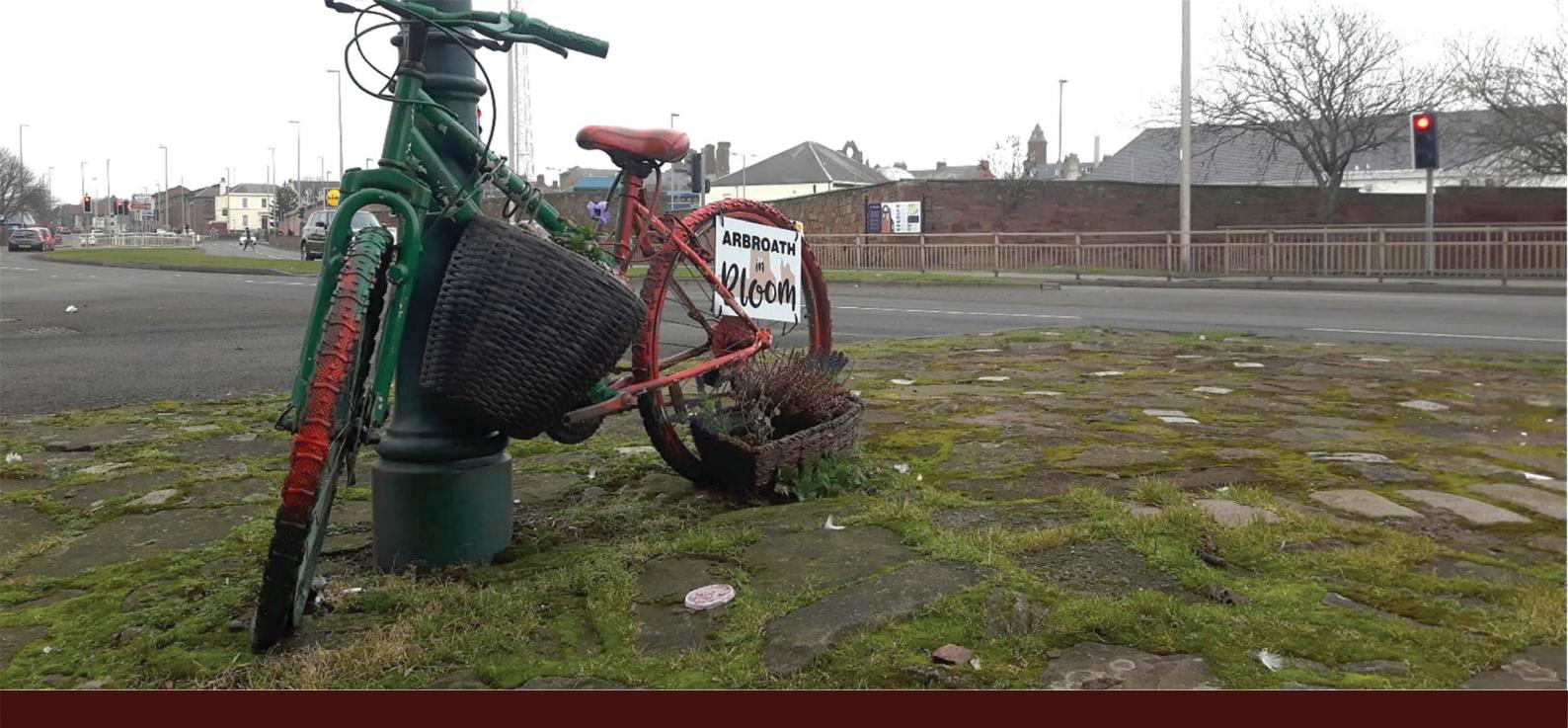
Projects and Developments which include active travel:

- Hayshead School Campus Development £14.1m 2018-20
- Housing: Angus Council / SRL Sunnyside, Sunnyside,
  Montrose; Timmergreens, Arbroath; Dubton, Brechin; Dundee Road,
  Forfar: all will incorporate active travel links. Others emerging over
  the build period
- Carnoustie Legacy £35k 2019/20

The list above only shows potential sources which are currently identified for match funding. There are many other potential sources; more detailed project costings and match funding breakdown will be confirmed during the detailed design phase of this project.







Integration of Behaviour Change and Strong Community Engagement

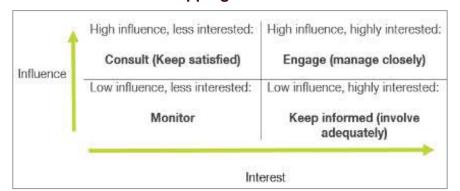
# 4. Integration of Behaviour Change and Strong Community Engagement

Arbroath ATAT has set out to achieve exemplary levels of community and stakeholder engagement ensuring engagement led-designs supporting the needs of the local community.

## 4.1 Previous Engagement and Consultation Summary

**Section 2** of this submission demonstrated the previous project evolution and how the project benefitted from a wealth of previous engagement and consultation exercises.

### 4.2 Stakeholder Mapping



Sustrans Stakeholder Mapping Template Action Matrix

A detailed stakeholder mapping exercise based upon Sustrans Stakeholder Mapping Template identified key stakeholders and the level of engagement required. Drop-in sessions were hosted with key Council Officers and the Arbroath Locality Planning Partnership who helped identify further stakeholders for engagement activities.



Stakeholder mapping from drop-in session





#### **Project Engagement Summary** 4.3

#### **Engagement Promotion** 4.3.1

A community and stakeholder engagement and communications strategy was developed underpinning engagement activities and delivery of key messages which were promoted through local community groups, a number of public drop-in sessions, visits to local groups and businesses, digital and print media, posters and leaflets locally, online through the Social Pinpoint Engagement Tool, the Council website and through various social media platforms.

Key engagement activities are shown on the right; activities included multiple community pop-up events and official drop-in engagement sessions, elected member briefings, schools workshops, stakeholder meetings.



Extract from Council Website

Extract from TheCourier.co.uk19



**Twitter Promotion** 



**Facebook Promotion** 

<sup>&</sup>lt;sup>19</sup> https://www.thecourier.co.uk/fp/news/local/angus-mearns/846606/ambitious-plans-totransform-arbroath-for-walkers-and-cyclists/



### **Calendar of Key Engagement Activities**



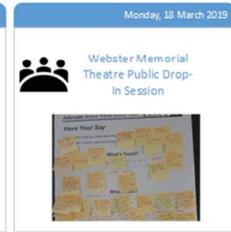
















Thursday, 21 March 2019







### 4.3.3 Internal / Council Drop-In Sessions

Drop-in sessions were hosted with key stakeholders and Council Officers on 13/02/19 gaining early input in the project and identifying key stakeholders and community groups to be engaged.





### 4.3.4 Arbroath Locality Partnership Meeting

The project team met Arbroath Locality Partnership who represent a wide range of cross-sector community groups and services on 19/02/19 helping identifying further groups to be targeted through engagement.

### 4.3.5 Arbroath Farmer's Market Public Pop-up Stand

A public pop-up session was hosted in the town centre on 23/02/19 during the busy Arbroath Farmer's Market allowing locals, visitors and businesses who might not otherwise be engaged to share their thoughts and views.





### 4.3.6 Morrisons Supermarket Public Pop-up Stand

An open public pop-up session was hosted in the local Morrisons Supermarket by the core route on 14/03/19 targeting the local community helping promote upcoming online engagement and public engagement sessions.





### 4.3.7 Ladyloan Primary School Pupil Workshop

A workshop was hosted with Ladyloan Primary School P6/7 pupils on 18/03/19. The school was redeveloped directly on the core route in January 2019. Pupils took part in a street model workshop creating four different streets and sharing what they wanted to see.

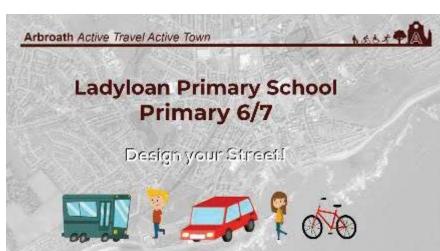












### 4.3.8 Webster Memorial Theatre Public Drop-In Session

The main public drop-in session was hosted on 18/03/19 in Webster Memorial Theatre, Arbroath High Street. This was a very well attended event with opportunities for members of the public and key stakeholders to learn more about the project, talk with the project team, complete surveys and share their views.





### 4.3.9 ISM Behaviour Change Workshop

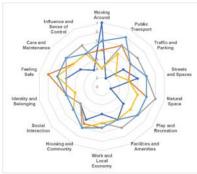
An Individual Social Material (ISM) Workshop was held on 20/03/19 with key Council, Community Council and local stakeholders discussing opportunities to promote active travel in Arbroath. Attendees identified priority groups, key destinations, barriers to active travel, options and priority recommendations.



### 4.3.10 Place Standard Tool Workshop Sessions

A Place Standard Tool Workshop was hosted on the 02/04/19 with a group of key stakeholders, Council Officers and members of the public discussing the broad range of topics in the tool. Key discussions included the lack of street lighting, poor accessibility to existing assets and the poor connectivity across the dual carriageway and to the town centre.

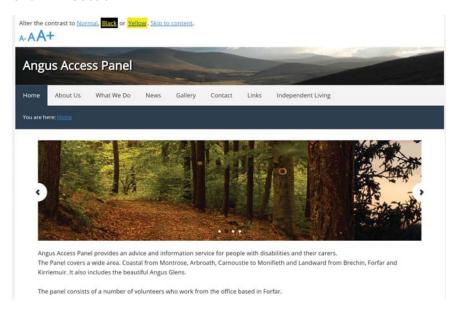




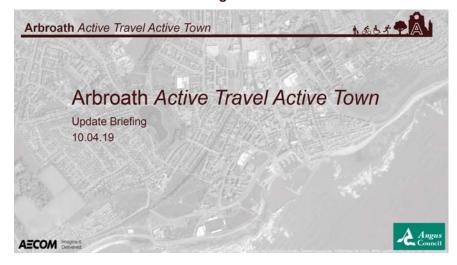


### 4.3.11 Angus Access Panel Workshop

A workshop was hosted with Angus Access Panel on the 25/03/19 discussing accessibility and equality issues from a local perspective. The workshop established a number of core design principles for the project. Shown in **Section 2**.



### 4.3.12 Elected Member Briefings



Workshops and briefing sessions with local Elected Members were hosted in Arbroath and the Council Headquarters in Forfar on 21/03/19, 10/04/19 and 11/04/19; providing Elected Members with information and the opportunity for feedback on proposals.





### 4.4 Social Pinpoint Tool Engagement

Angus Council have taken a pioneering approach to community and stakeholder engagement developing a dedicated online engagement hub through Social Pinpoint online community engagement site.

Users could find out more about the project, see upcoming events and share their views about what should be improved in the area.

Users could add comments and have conversations online through an interactive map and an online survey. Engagement was open for comments between 22/02/19 to 31/03/19. The site was still visible after this time.



### **Top Comments Word Cloud**

**Event Calendar** 

Look below to see what engagement events are coming up soon and how you might be able to get involved to help Arbroath

MAR

Morrisons Pop-up
Stand: Morrisons
Supermarket, Arbroath
Thursday 14th March
5:00-8:00PM
Our project staff will be on hand to hear your thoughts and
ideas, ensure any of your questions about the project and
stron know you can get involved.



**Upcoming Event Promotion** 

521

654

14:16

100

123

5/

**Total Visits** 

**Unique Users** 

Avg Time (min)

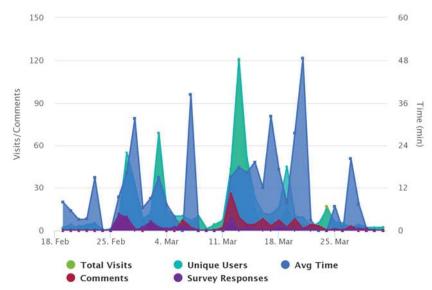
**Unique Stakeholders** 

Comments

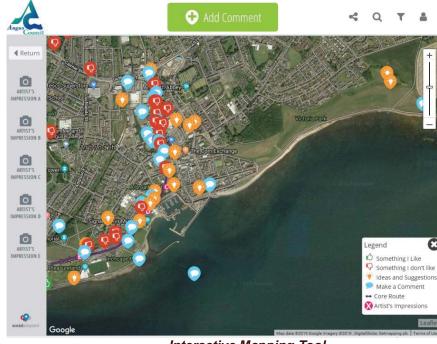
Survey Responses

Site Engagement Summary





Stakeholder Engagement by Day



Interactive Mapping Tool



**Promotional Flyers** 

 $<sup>^{20}\,\</sup>underline{\text{https://shapingangus.mysocialpinpoint.co.uk/arbroath-active-travel-active-town-home}$ 



### 4.5 Key Engagement Feedback

This project has demonstrated exemplar levels of community and stakeholder engagement drawing upon strong prior engagement. The high level of engagement and average of over 14 minutes per website visit show a high level of community interest and engagement with materials and conversations. Interactive mapping allowed users to post comments on the map under:

- Something I Like;
- Something I Don't Like;
- Make a Comment; or
- Ideas and Suggestions

User comments could be "upvoted" or "downvoted" indicating the levels of support for certain comments, however, it should be noted that those comments most "upvoted" were regularly the most "downvoted" and vice versa. Some of the most voted on and recurring comments revolved around the following key themes:

- Road changes will create significant traffic delays;
- Redevelopment and accessibility to the High Street;
- Better linking of Arbroath's key attractions;
- Town-wide cycle hire; and
- More facilities along the seafront: seating, play and recreation facilities, toilets and sensory garden.

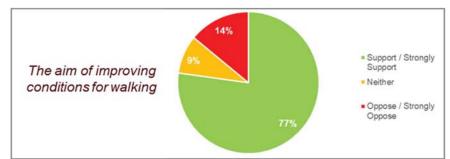
The most commonly recurring negative comments related to traffic impacts of proposals. Traffic modelling showed that the traffic network would operate within capacity under proposals. To demonstrate the impact of both positive and negative engagement feedback on proposals the project adopted a **You Said – We Did** approach (discussed later).

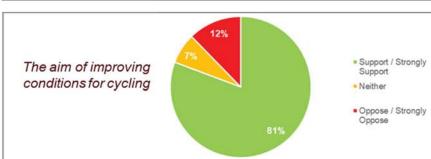
Surveys asked about levels of support for certain project aspects along the A92 dual-carriageway through Arbroath. These online and paper survey responses were combined and are shown in the charts to the right.

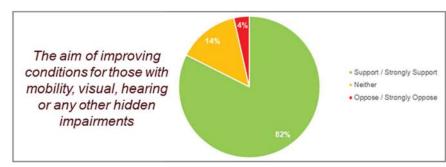
Surveys also asked for a word or phrase which respondents felt best described the identity or character of Arbroath. A significant amount of responses centred around the following two themes:

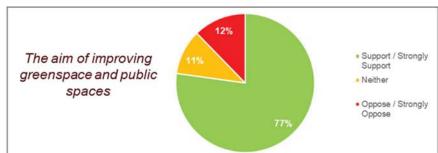
- Great unlocked potential, "a rough diamond", "a gem waiting to shine"; and
- The importance of Arbroath's heritage and "birthplace of Scotland".

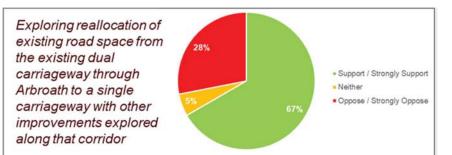
This project has the potential to be truly transformative to Arbroath, the local community, businesses and visitors. Stage 3 project funding announcement in 2020 would coincide with the 700<sup>th</sup> anniversary of the Declaration of Arbroath and the birth of Scotland as we know it. The project would create a blueprint for other towns and cities to follow to make their streets and urban spaces places for everyone.













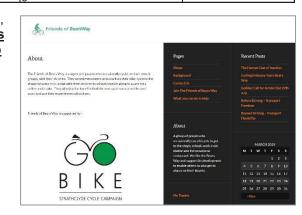


## 4.6 Proposed Consultation and Engagement Strategy

Key engagement and consultation planned throughout the detailed development phase of this project include:

Activity	Purpose	Stakeholders Targeted	
Pop up avants	Engage on design proposals	General public	
Pop-up events	Continuous feedback loop	General public	
	Engage on design proposals		
Elected Members Briefings	Continuous feedback loop	<ul> <li>Elected Members</li> </ul>	
	Maintain political buy-in		
	Ensure effective project		
	management and ownership from		
	outset and throughouth		
Establish Project Delivery Group	Involve all delivery partners	Key delivery partners	
	from outset and throughout	ne, dente, paraners	
	Ensure successful delivery of		
	project to time and within budget		
Public Consultation Events	Engage on design proposals	General public	
T done consultation Events	Continuous feedback loop	General pasite	
Social Pinpoint Tool	Engage on design proposals	General public	
	Continuous feedback loop	General public	
	Ensure design meets Sustrans		
Co-Design Workshops	requirements and best design	<ul><li>Sustrans</li></ul>	
	principles		
TRO Consultation	• Statutory requirement as part of	<ul> <li>Statutory consultees</li> </ul>	
The consultation	carriageway re-determination	Statutory consumers	
	Foster community ownership	General public	
Establish Community Group	and involvement	Key local	
	Maintain community buy-in	stakeholders	
	Engage on design proposals	School students	
Student Engagement	Continuous feedback loop	College / University	
- Ingagement	Opportunity to inspire 'next	students	
	generation'	J. G. G. C.	

In addition to the above, the creation of "Friends of" Community Group will be explored (See Friends of the Bears Way, East Dunbartonshire<sup>21</sup>).



### 4.7 Engagement Summary and Influence

Engagement to date has helped inform evolving design proposals through a two-way iterative process. In order to demonstrate this impact a **You Said – We Did** approach has been adopted and shared through the Social Pinpoint site an extract of which is shown below.

You Said	We Did
'More focus should be given to the High Street and attracting tourists to it and places like the Abbey'	Links to the town centre and other key destinations have become core features of the proposals including walking and cycle signage.
'The traffic here can already become backed up at the lights, cutting the road capacity in half seems like a very bad idea and will case tailbacks and issues'	Traffic surveys and modelling of the proposals were undertaken in 2018 demonstrating that the proposed improvements and junctions would operate within capacity.  Changes would provide an opportunity to link existing traffic signals into a combined network able to improve traffic flow and dynamically assess traffic conditions and priority traffic movements in real time.  All proposals to reduce existing road carriageway widths cater for turning lanes at junctions where possible.
'could we have hire bikes available at different locations across the town?'	Angus Council will hold discussions with Angus Cycle Hub and other providers to look into the possibility of extending bike hire availability throughout the town and at key attractions.
'Changing this to a single [carriageway] will cause bottle necks and put people off coming into town'	Traffic surveys and modelling of the proposals were undertaken in 2018 demonstrating that the proposed improvements and junctions would operate within capacity.  Changes would provide an opportunity to link existing traffic signals into a combined network able to improve traffic flow and dynamically assess traffic conditions and priority traffic movements in real time.  All proposals to reduce existing road carriageway widths cater for turning lanes at junctions where possible.
'What about linking all the way through to St. Vigeans via the Brothock Water?'	Proposals now include redesigning of Guthrie Port Roundabout to a signalised junction, improving crossings for people walking and cycling and onward links connecting with the path networks along the Brothock Water towards St. Vigeans.
'Could we have some picnic benches / sensory garden and some outdoor fitness equipment suitable for ALL children, alongside the signal tower?	Opportunities for seating, play and recreation included into proposals along key route corridor and will be further developed during the detailed design phase of this project.
'The designs should include cycle connections into the high street and other shops or businesses'	Linkage between West Port and the town centre now core feature of design proposals.
'The cycle routes should include the treating of this roundabout' (Guthrie Port Roundabout)	Designs include the redevelopment of Guthrie Port Roundabout into a signalised junction to improve crossings for people walking and cycling, accessibility, safety and traffic management in the area.

Extract of Engagement Feedback and Impact on Proposals



<sup>&</sup>lt;sup>21</sup> https://friendsofbearsway.wordpress.com/



### 4.8 Behaviour Change and Smarter Choices

### 4.8.1 Current Behaviour Change Activities

Several significant behaviour change initiatives are undertaken in Arbroath and across Angus. £157,000 of Smarter Choices Smarter Places (SCSP) projects were delivered across Angus in 2018/19 including:

- **Public transport information** delivered to households, key points in community networks and social media
- Walk Once a Week in 15 primary schools
- Weekly Dr Bike sessions and led rides at large employers and key trip attractors.
- Bike recycling, cycle training services and a new bike library service from Angus Cycle Hub.
- **Step Count Challenge** for all Angus Council (including schools) staff and promote a Lift share system for Angus Council.
- Car share and other sustainable transport measures at the Arbroath campus of Dundee & Angus College.
- Health Walks based in and around Arbroath.

### 4.8.2 Angus Cycle Hub

Angus Cycle Hub based in Arbroath town centre plays vital role promoting and supporting cycling in Angus. The Hub is involved in a wide variety of areas including training, outreach, bike hire and purchase, bike maintenance workshops, social rides, cycle advice, bike recycling service, route planning and cycle festivals. The Hub was awarded the Cycle Friendly Communities Award by Cycling Scotland.



### 4.8.3 Arbroath Active Travel Network

Arbroath Active Travel Network<sup>22</sup> is a signposted route using footpaths and roads around Arbroath linking with the NCN and other routes and core paths. It was designed in partnership with Angus Cycle Hub and the local community to help encourage journeys on foot and by bike by locals and visitors and funded via Paths for All "Communities Active Travel Grant".



<sup>&</sup>lt;sup>22</sup> http://www.arbroathactivetravelnetwork.co.uk



#### 4.8.4 Parking Charges

Angus Council have recently implemented a Council-wide rollout of parking charges at off-street Council car parks demonstrating commitment to sustainable transport. Through the appropriate use of parking charges, local authorities can create town centre environments conducive to walking, cycling and other sustainable modes.

### 4.8.5 Schools and College Travel Planning

A number of school travel planning initiatives are taking place across Angus and in Arbroath. Ongoing initiatives include:

- Sustrans Hands Up Surveys in all Angus Schools;
- Walking Bus at Ladyloan Primary School directly on the core project corridor;
- Walk Once A Week in Warddykes Primary School Arbroath and nine others across Angus;
- School parking behaviour campaigns across Angus; and
- Annual School Active Travel Workshop in partnership with Angus Cycle Hub

Dundee and Angus College Arbroath Campus participates in the Cycle Friendly Employer Award for both students and staff.



### 4.9 Barriers to Active Travel

Community and stakeholder engagement helped identify local barriers to active travel in Arbroath. The ISM Workshop identified barriers under the following key themes:

BARRIERS TO ACTIVE TRAVEL

- Infrastructure and Place;
- Information and Awareness;
- Social Factors; and
- Other Factors

Specific barriers included:

- The dual carriageway forms a physical barrier; splitting the town;
- Intimidating traffic and road safety concerns;
- Lack of good infrastructure;
- Lack of secure cycle parking;
- Environmental factors;
- Lack of awareness / recognition of health benefits of active travel:
- · Habit of using car for short trips;
- Unable to enforce obstruction of advisory cycle lanes throughout town;
- Lack of a clear route to the town centre from the bus and rail stations

This project would help address many of the barriers identified above on the project corridor and help provide a focal point from which the local active travel network expands outwards; connecting the town centre to where people live, work and play.

### 4.10 Proposed Behaviour Change Programme

Angus Council is committed to continuing to promote behaviour change throughout Angus and Arbroath. The Council will continue their SCSP programme and continue to support local organisations such as Angus Cycle Hub deliver meaningful behaviour change projects.

Dedicated behaviour change activities proposed for implementation alongside the project are:

- School Travel Plans Develop and implement effective travel plans for Arbroath's schools, to improve infrastructure on routes to/from them, reduce parking pressures nearby, and engage with pupils to encourage them and their families to use healthy transport choices
- Social Prescribing Work with NHS Tayside to enable health professionals to recommend more physical activity to Arbroath

- residents that would benefit from it, and signpost them to support services
- Access to Bikes and Training Expand bike recycling/library functions, to enable everyone in Arbroath to access good value bikes, expand training for confident cycling and bike maintenance, and promote these services widely to local people
- **Improve Mapping** Provide and widely disseminate printed and web-based versions of good quality active travel maps for Arbroath
- Walking Support Expand led walk capacity so that everyone who needs some help to get out and walk more can do so, and promote these services widely to local people
- Campaigns and Events Organise a campaign to raise awareness
  of the new infrastructure and encourage its use, including promoting
  the benefits of active travel, and a series of community events to
  'launch' the new proposals
- Journey Time Signage Travel times rather than distances on active travel signage demonstrating how active travel choices may be more accessible than many think.







Monitoring and Evaluation Plan

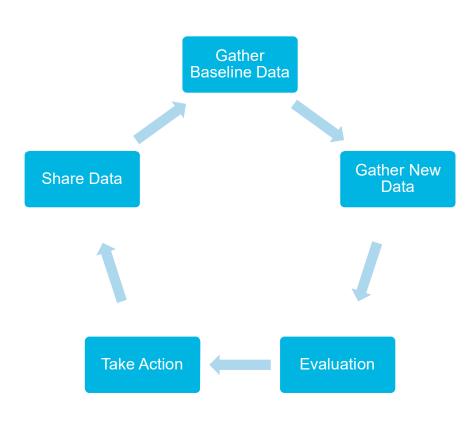
### 5. Monitoring and Evaluation Plan

### 5.1 Outline Monitoring and Evaluation Plan

Angus Council will establish a monitoring framework allowing the scheme to be monitored and evaluated using a number of mechanisms. A Full Monitoring and Evaluation Plan will be developed alongside key project partners during Stage 3.

The aim of the monitoring plan is to assess the impact of the scheme through data collected before and after scheme implementation. This data will be collected and shared with key parties including Sustrans. The graphic below shows a high-level overview of the process.

Angus Council aim to establish a monitoring framework which enables effective benchmarking against other comparable projects around Scotland and the UK. This will help maximise the benefits of the monitoring and evaluation plan.



Monitoring and Evaluation Cycle

### 5.2 Baseline Data

Angus Council actively monitor a range of areas including:

- Transport and Active Travel;
- Health;
- Economy;
- Employment;
- Tourism; and many other areas.

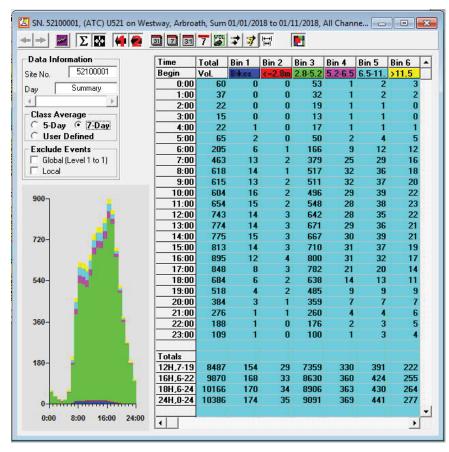
Below is a list of some of the existing key monitoring sources the monitoring and evaluation strategy would utilise.

	Automatic Traffic Counters (ATCs)	
	Automatic Cycle Counters	
	Road Traffic Accident Statistics (STATS19)	
Angus Council	Air Quality Monitoring	
	Local Economic Monitoring	
	Project Community Engagement	
	Other Community Engagement	
Visit Scotland / Visit Angus	Scotland / Visitor and Tourism Performance and Sources (Including Local Attractions)	
Sustrans	Hands Up Surveys	
Cycling	Annual Monitoring Report (Scottish Household Survey)	
Scotland	Bikeability Scotland Training	
	Scottish Census	
Scottish Government	Scottish Index of Multiple Depravation	
	NHS / Health Monitoring	
Community Arbroath Accessibility Audit (Arbroath and Area Community Council)		

It is very important to consider the qualitative sources of monitoring rather than just the more traditional quantitative sources which can be tracked through a number of different methods. This project has ensured that community and stakeholder engagement activities have been undertaken in such a way as to be capable of assessing the impact of proposals through continued engagement.

A number of key sources have allowed the recording of both quantitative and qualitative indicators. These will form a key aspect of the monitoring and evaluation plan going forward. Some of these sources include:

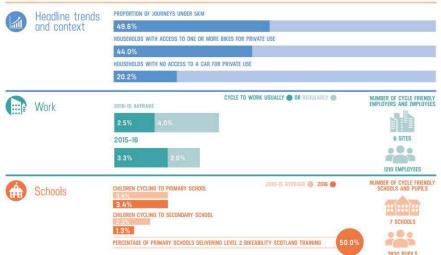
- The Online Social Pinpoint Tool engagement;
- Online and paper questionnaires;
- Place Standard Tool Workshops;
- Individual Social Material Workshops;
- Arbroath Town Centre Accessibility Audit; and
- Many other activities.



Automatic Traffic Counter Data including cycle data



### **Angus**



### Extract from Cycling Scotland 2018 Annual Monitoring Report<sup>23</sup>



Sustrans 2017 Hands Up Survey<sup>24</sup>

Sustrans Hands Up Survey Data for 2017 showed that Angus was joint third out of 32 Local Authorities for percentage of children walking to school and 13<sup>th</sup> out of 32 for percentage of children cycling to school. All schools within Arbroath participate in the Hands Up Survey. The 2018 survey has been undertaken and it is currently anticipated that Sustrans will share this information with Angus Council in May. This more up to date information can therefore be analysed throughout the detailed design phase of this project.



<sup>&</sup>lt;sup>24</sup> https://www.sustrans.org.uk/scotland/hands-up-scotland-survey



<sup>&</sup>lt;sup>23</sup> https://www.cycling.scot/mediaLibrary/other/english/3028.pdf

### 5.3 Monitoring and Evaluation Objectives

The aim of the monitoring and evaluation plan is to provide an innovative methodology and evaluation of the project before, during and after project completion.

The project will also be evaluated against the Community Links PLUS competition objectives and the project objectives below:

- To create an attractive, legible and safe place for people to walk and cycle through Arbroath. The route will focus on improving access along both the north to south route as well as at key crossing nodes from west to east to better connect Arbroath across the A92 corridor.
- To involve the Arbroath community in the shaping of the proposed Active Travel Route, including consultation and providing facilities that support local needs.
- To enhance the streetscape of the A92 with coastal style planting, specimen trees, high quality materials and interactive play/art features.
- To maximise the environmental benefit of the route by strengthening local biodiversity with large areas of dedicated planting. Planting will need to be resilient to the coastal climate and will also help to create micro-climates in areas that are currently exposed, improve amenity, provide increased drainage for surface water and improve local biodiversity.

Many of these objectives can only be evaluated through a qualitative assessment, it is therefore proposed that this will be undertaken by the project delivery group in partnership with the local community and area

Angus Council will further develop this monitoring and evaluation plan throughout the detailed design stage of this project including the setting of final objectives and targets for certain quantitative and qualitative objectives.

### 5.3.1 Accessibility and Equality

Working towards delivering the requirements of the Equality Act will play a key role in the monitoring and evaluation of this project. The Arbroath Town Centre Accessibility Study gives a good baseline for physical and infrastructure issues.

The Arbroath Access Panel Workshop established a core design framework for the project. The Access Panel will continue to be engaged throughout the project evolution and after implementation. It is also proposed that members of disability organisations such as the Mobility and Access Committee Scotland are also invited to feedback on proposals through design and after implementation.

### 5.4 Monitoring and Evaluation Summary

Project Stage Monitoring and Evaluation				
<b>Stage 2</b> (2018/19)	Creation of Outline Monitoring and Evaluation Strategy			
(2010/10)	<ul> <li>Identification of existing and historic sources of monitoring and existing baseline</li> </ul>			
	Gathering of qualitative and quantitative community engagement feedback			
	<ul> <li>Public Life Survey (Jan Gehl Public Life Assessment)</li> </ul>			
Stage 3	Continued monitoring of existing sources			
2019/20	<ul> <li>Installation of ATCs at key locations around study area</li> </ul>			
	<ul> <li>Public Life Survey (Jan Gehl Public Life Assessment)</li> </ul>			
	Street Trial Traffic Monitoring			
Construction	Continued monitoring of existing sources			
2020/23	ATCs at key locations around study area			
	<ul> <li>Public Life Survey (Jan Gehl Public Life Assessment)</li> </ul>			
	Traffic surveys during construction period			
Post-	2023-27 Annual Monitoring and Evaluation Report			
Construction 2023/28	<ul> <li>Continued monitoring of existing sources</li> </ul>			
2023/28	<ul> <li>ATC for transport and active travel indicators</li> </ul>			
	<ul> <li>Sustrans Hands Up Survey</li> </ul>			
	<ul> <li>Progress against project objectives</li> </ul>			
	<ul> <li>Public Life Survey (Jan Gehl Public Life Assessment)</li> </ul>			
	2028 Project Close Monitoring and Evaluation			

Report









