Since the events we held last summer, we have been working on developing the preliminary design for the scheme. We have now completed our assessments regarding traffic, environmental and other aspects and will be holding another series of public engagement events to update you.

This time, we will be using an exhibition van in six venues, from Scotswood to North Brunton giving you the chance to speak to the team and ask questions about the scheme.
Have you heard about the A1 Scotswood to North Brunton improvement scheme?

Talk to us at events in 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday 25 October</td>
<td>3pm-7pm</td>
<td>Newcastle Great Park, Park and Ride, NE13 9NR</td>
</tr>
<tr>
<td>Friday 26 October</td>
<td>9.30am-1.30pm</td>
<td>Tesco Extra Car Park, Brunton Lane, NE3 2FP</td>
</tr>
<tr>
<td></td>
<td>3pm-7pm</td>
<td>Morrisons Cowgate Car Park, NE4 9SZ</td>
</tr>
<tr>
<td>Saturday 27 October</td>
<td>9.30am-1.30pm</td>
<td>Morrisons Car Park, West Denton, NE5 2QZ</td>
</tr>
<tr>
<td></td>
<td>3pm-7pm</td>
<td>B&amp;Q Scotswood Car Park, NE15 6UJ</td>
</tr>
</tbody>
</table>

Keeping in touch

Online

www.highwaysengland.co.uk/a1scotswood

Email

A1Scotswood.toNorthBrunton@highwaysengland.co.uk

Telephone

0300 123 5000

Have you heard about the A1 Scotswood to North Brunton improvement scheme?
Traffic levels when scheme is finished

Key
- Green: Moving freely
- Yellow: Moving slowly
- Red: Stop/start

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Technology

Queue protection (variable message signs) Standalone vehicle management units providing drivers with advance warning of any queuing or slow moving traffic ahead. Communicates wirelessly with the vehicle detection equipment.

Queue protection (vehicle detection) Standalone vehicle detection units to detect any queuing or slow moving traffic ahead, it communicates wirelessly with the vehicle management system.

Emergency roadside telephone These provide roadside assistance to motorists.

Traffic monitoring equipment These collect traffic data that includes vehicle count, speed, headway and classification.

Automatic number plate recognition Allows real time monitoring of journey times by analysing vehicle number plates and determining the time taken for a vehicle to travel between two points.

CCTV cameras General surveillance cameras providing coverage to Highways England’s control rooms supporting incident responses and operations.

<table>
<thead>
<tr>
<th>Item</th>
<th>Equipment</th>
<th>Existing quantity</th>
<th>Proposed quantity</th>
<th>Current proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Queue protection (variable message signs)</td>
<td>4</td>
<td>0</td>
<td>Remove all as scheme proposals include additional lane and a reduced speed limit.</td>
</tr>
<tr>
<td>2</td>
<td>Queue protection (vehicle detection)</td>
<td>5</td>
<td>0</td>
<td>Remove all as scheme proposals include additional lane and a reduced speed limit.</td>
</tr>
<tr>
<td>3</td>
<td>Emergency roadside telephone (ERT)</td>
<td>1</td>
<td>1</td>
<td>Retain in existing location.</td>
</tr>
<tr>
<td>4</td>
<td>Traffic monitoring equipment</td>
<td>19</td>
<td>12</td>
<td>Remove all obsolete variant to improve data collection.</td>
</tr>
<tr>
<td>5</td>
<td>Automatic number plate recognition cameras (ANPR)</td>
<td>2 Sites (6 cameras)</td>
<td>2 Sites (6 cameras)</td>
<td>Retain in existing locations.</td>
</tr>
<tr>
<td>6</td>
<td>CCTV Cameras</td>
<td>9</td>
<td>8</td>
<td>Remove/relocate/rationalise/retain.</td>
</tr>
</tbody>
</table>
Noise

Decibels (dB)

Breathing (barely audible)
Rustling leaves
Whisper
Bird call, library
Light rainfall
Vacuum cleaner
Dishwasher
Alarm clock, busy street
Petrol lawn mower, power tools
Bass drum, car horn @1m
Remote control, jet engine
Fire alarms, air raid siren
Motorcycle
Thunder clap
Jackhammer
Jet take off @5m

Noise level change
-10 and lower (reduction)
-10 to -5 (reduction)
-5 to -3 (reduction)
-3 to -1 (reduction)
-1 to 1 (reduction)
1 to 3 (increase)

Decibels
Moderate
Very loud
Extreme
Painful

North Brunton
Newcastle International Airport
Newcastle United Golf Club
Newcastle Upon Tyne

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Air Quality

The scheme will keep levels of nitrogen dioxide (NO²) below 40mg/m³, in line with current EU objectives.

Nitrogen Dioxide is a reddish brown gas with the chemical formula NO². This gas is measured in µg/m³ (micrograms per cubic meters of air) by air monitoring equipment. NO² is a poisonous gas that is formed when fuel is burnt, in high concentrations NO² is bad for your lungs and can effect your breathing.

### Current levels along the A1 Gateshead Western Bypass

<table>
<thead>
<tr>
<th>Pollution levels</th>
<th>Nitrogen Dioxide µg/m³ levels</th>
<th>Current levels (Number of receptors)</th>
<th>Predicted levels when scheme is finished (Number of receptors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>40 – 100µg/m³</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Medium - High</td>
<td>36 – 40µg/m³</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Medium</td>
<td>30 – 36µg/m³</td>
<td>35</td>
<td>13</td>
</tr>
<tr>
<td>Low – Medium</td>
<td>20 – 30µg/m³</td>
<td>204</td>
<td>171</td>
</tr>
<tr>
<td>Low</td>
<td>0 – 20µg/m³</td>
<td>34</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Total 281</td>
<td></td>
<td>Total 281</td>
</tr>
</tbody>
</table>

*When the Scotswood scheme is finished. Does not include when the Birtley to Coalhouse scheme is open for traffic.

What is a receptor?

We’ve analysed current information from 281 significant locations (receptors) along the A1 which helps us to predict how air quality will change when the scheme is finished.
Speed limits when scheme is finished

Key
- Green: Proposed speed limit change 70mph to 60 mph
- Orange: 50mph speed limit (no change to existing speed limit)
- Green: 70mph speed limit (no change to existing speed limit)

Proposed speed limit change 70mph to 60 mph
The aim of the project is to adapt an existing pond to the east of the A696 to reduce the effect of the drainage from the road (attenuate), improving water quality and reducing peak flood flows in the Ouseburn.

Hadrian’s Wall trail and site improvements

The aim is to reconnect local people and regional visitors with the remains of the wall in Newcastle, through an innovative blend of interpretation boards, improved signs, installations, panoramas and improvement of the surviving sites to create a trail through the western suburbs of Newcastle that follows Hadrian’s Wall.

Shibdon Meadow and Shibdon Pond

Designs have been produced to propose improvements that significantly increase/improve opportunities for a broad range of priority species including breeding and wintering waders (including curlew, lapwing & redshank), amphibians (including common toad) and otter.

Newcastle Great Park Wetland

Wetland is an area of marsh or swamp which is saturated with water. For the outfall of the highway drainage north of the Ouseburn if the wetland is brought back into use the flows will not discharge straight into the Ouseburn and will instead flow through a series of wetlands before discharging to the Ouseburn. The benefits of this include reducing flood risk, improving water quality and enhancing biodiversity.