

2018

MJ Achievement  
Awards 2018

# Highways Management

ACHIEVEMENT  
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## Executive summary

- 1 Driven by a desire to provide the best possible service it can, Durham leads the way in working efficiently and collaboratively to improve public satisfaction with highways.
- 2 With a track record of innovating to achieve efficiencies and directing savings to front-line services, the council is rated as one of the most efficient highways authority in the country.
- 3 Always with an eye to improving public service, communications and public engagement have been key in delivering challenging and complex projects with minimal disruption.
- 4 And through effective staff recognition, Durham celebrates and praises the staff who make things happen.

## Durham County Council

- 5 Durham County Council is the seventh largest unitary authority in England, serving a population of over 520,000 people and an administrative area of 862 square miles.
- 6 Durham is a large rural county, with a challenging topography. Stretching from the North Pennines in the west to the East Durham Coast, the county sits between the urban conurbations of Tyneside and Wearside and Tees Valley.
- 7 Durham City is the commercial centre, with an internationally renowned university and the Durham Cathedral and Castle UNESCO World Heritage Site. The county also has 11 other significant settlements and over 300 smaller towns and villages.
- 8 Nearly two thirds of the county is designated as rural and compared with other areas, we suffer from relatively high levels of deprivation due to our rural nature and long term decline in traditional industries, in particular coal mining.
- 9 The county has a highway network of 3,773 km of carriageway. It is the council's largest and most valuable tangible asset, and is fundamental to all economic and social activity in the county.
- 10 The council's highways service (including design, construction, maintenance and winter maintenance) is delivered by an in-house team of 300 staff. The team is supplemented by a competitively procured supply chain of external contractors and mutual assistance from neighbouring councils through the North East Highways Alliance (NEHA).
- 11 In an era of pressured budgets, continued maintenance needs and rising demand, the council has found innovative solutions to ensure the smooth

functioning of the highways network and continued to adapt and shape the service to deliver efficient and effective services which meet and exceed customers' expectations.

- 12 Recognised as one of the country's most efficient highways authority, Durham is making a real impact on its community, delivering innovative customer-oriented schemes which help to keep people safe and the county moving.

## Department for Transport's Incentive Fund

- 13 Managing a sustainable highway network requires using limited resources as efficiently as possible. We have had an exceptional year and been recognised as one of the most efficient highway authority in the country by Department of Transport's Incentive Fund.
- 14 We have made great strides in maximising efficiency and improving customer satisfaction. This resulted in Durham being one of only two highway authorities in the country to achieve the maximum Band 3 efficiency rating under the Incentive Fund when it was introduced in 2016.
- 15 The rating which has been maintained in subsequent years has maximised funding from the DfT for essential maintenance works.

## National and International Standards

- 16 We use national and international standards to measure our performance and to ensure the quality of our work. We were the first in the UK to achieve ISO 55001 Asset Management and one of the first to achieve BS 11001 Collaborative Business Relationships accreditation.



- 17 ISO 55001 accreditation helps ensure that the highway asset is managed as efficiently as possible on a whole life costs basis for the benefit of all highway users.
- 18 BS 11001 Collaborative Business Relationships helps promote collaborative working between our internal clients, the NEHA and our supply chain of external contractors.

## Asset management

- 19 We have embedded an asset management approach to highways management, which helps ensure that the right treatment is selected at the right time, within budget constraints.
- 20 We update the Transport Asset Management Plan each year, which helps to inform stakeholders of the condition of the highway asset and the investment levels required.
- 21 In turn, this has helped the service to secure additional capital funding from the DfT and the council, to maintain and stabilise the condition of the highway asset.

## Collaborative working

- 22 We promote collaborative working with neighbouring councils and led the development of the North East Highways Alliance, which helps share resources and achieve efficiencies for member councils. This includes a mutual assistance agreement, led by Durham whereby member councils share spare capacity with each other. Other successful projects include collaborative procurement of street lighting columns and LEDs.
- 23 Our in-house team also works with a supply chain of sub-contractors.
- 24 Our team is permanently available to provide reactive maintenance, winter maintenance and respond to severe weather events. Our external providers ensure that we maximise efficiency from planned works such as re-surfacing.

## Improving network condition

- 25 We have developed a strategy that concentrates on improving the condition of our highway network over time.
- 26 In recent years, we have concentrated on improving the condition of the principal road network and now we are turning our attention to improving unclassified roads, in line with asset management principles.

## Project delivery

- 27 Major road schemes which could have caused major disruption have been delivered on time, in budget and successfully kept the public informed, engaged and on-board.
- 28 Recent projects include the delivery of a number of innovative and challenging schemes, delivered by both our in-house team and external contractors.

### Old Elvet Bridge

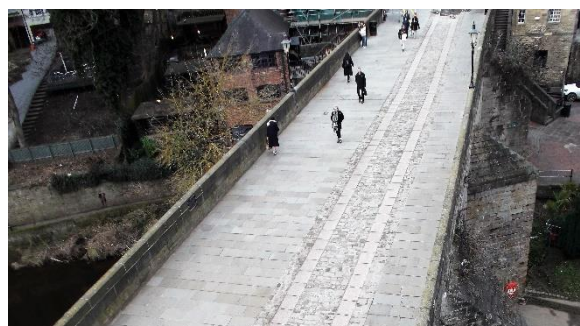
- 29 Old Elvet Bridge is a Grade 1 Listed Scheduled Ancient Monument over the River Wear, offering iconic views of Durham Cathedral and Castle. Almost every visitor to the city will visit this area.

- 30 The bridge was last improved in the mid 1970s and needed to be refurbished to address deterioration which has occurred over time.



- 31 Works have been carried out to waterproof the bridge deck to protect it for future generations.

- 32 Paving and setts have been realigned and replaced and loading bays created on the approaches to the bridge.



- 33 An innovative solution using a concrete canvas to waterproof the deck, in line with the requirements of Heritage England, reduced installation costs and time dramatically.

- 34 This will provide a wider surface for pedestrians, which is also robust enough to deal with access for emergency services and delivery vehicles.

### Neville's Cross

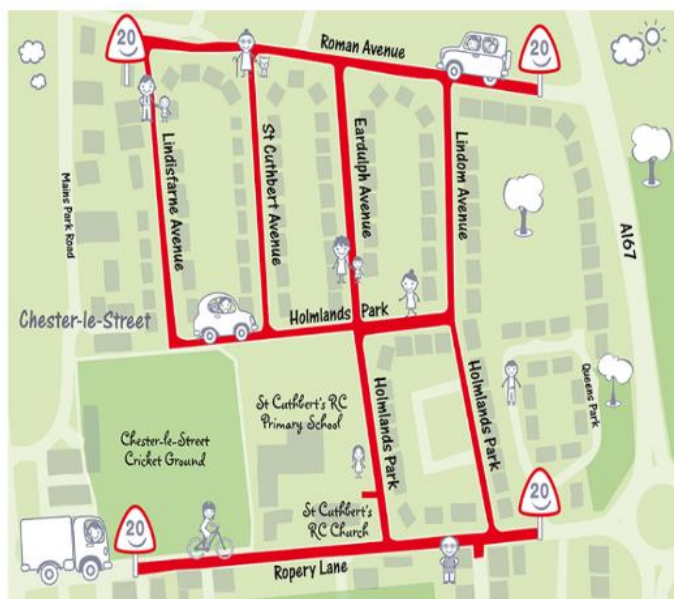
- 35 Neville's Cross, just outside Durham city centre is a busy signalised crossroads on the A167 and the A690, the principal north-south and east-west roads through the county.
- 36 The traffic light poles and cables were 25 years old and needed to be replaced and upgraded to modern safety standards. The condition of the

roads also needed to be improved to ensure that the busy junction continued to work effectively for the thousands of vehicles using it every day.

- 37 We upgraded the junction with energy efficient lights and new pedestrian crossing facilities. This included removing old underground cables and installing new cables which meet modern safety standards.
- 38 We also rebuilt the road surface at Neville's Cross Junction and Neville's Cross Bank.
- 39 Residents and road users were forewarned and kept informed through correspondence, public meetings, strategically located matrix signs and the effective use of social media including Facebook, Twitter and YouTube, to spread the message of potential delays and reduced traffic flows in the area while improvement works were underway.
- 40 We also invested in the use of camera monitored Urban 64 temporary traffic lights, to fully replicate the existing traffic light system including protected right filter systems and pedestrian crossing points. The first time this system has been used in the North East, it enabled us to remotely monitor and manage traffic flows to minimise disruption to the travelling public.

### Schools 20 mph part-time speed limits project

- 41 Highways management is not confined to maintaining the highway infrastructure. It also includes community based projects, such as the schools 20 mph speed limit project
- 42 To reduce traffic speeds around schools during drop-off and pick-up times, and improve road safety for vulnerable road users, we introduced part-time advisory 20 mph zones around 71 schools. A further 20 schools will be added over the next 12 months.



- ✓ Safer and healthier community
- ✓ Lower driving speeds
- ✓ Reduce road casualties
- ✓ Encourage more people to walk or cycle
- ✓ Children to play outside safely and be more active
- ✓ Reduce noise for nearby homes

- 43 The project includes education and awareness raising to encourage motorists to reduce their speed and encourage children to walk and cycle to school.
- 44 An evaluation by Durham University identified widespread acceptance of the schemes by motorists, residents and parents and perceptions that safety had increased, leading more children to walk or cycle to school.

## Carriageway repairs

- 45 We have invested heavily in fully mechanising structural patching and use a variety of options to ensure that permanent repairs are the first choice when repairing potholes.
- 46 This is supported by a number of static hot boxes which are located in depots, strategically placed across the county, to ensure hot bituminous materials are available for permanent repairs.
- 47 We have also developed our own in-house durable micro-asphalt patching system, to supplement current structural patching methods and provide an extremely cost effective repair to defects on unclassified and estate roads.
- 48 We engaged with a binder supplier to develop the process, trialling a number of different binder mixes at different ambient temperatures.
- 49 The process has been well received by the public, as it fixes minor defects and produces a significant improvement in the visual appearance of the road.



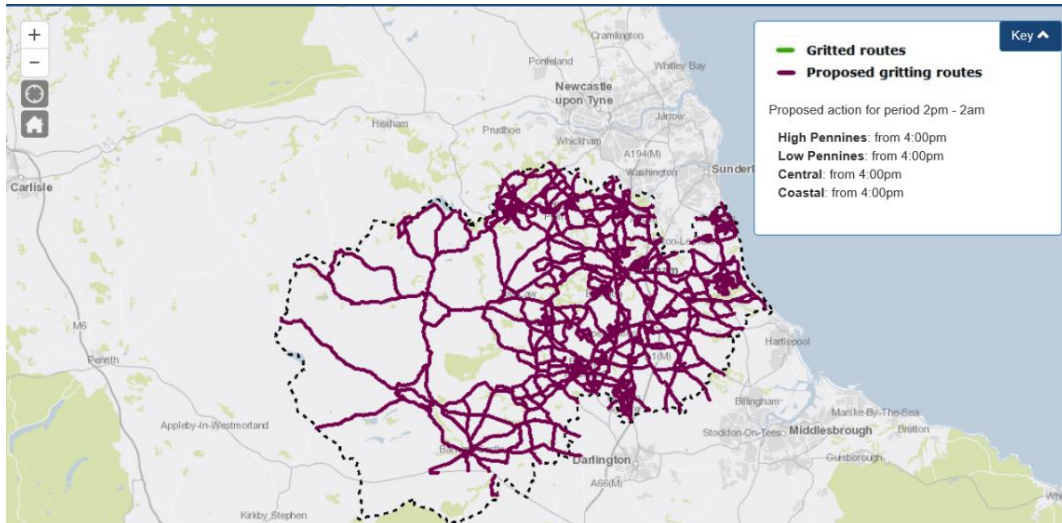
## Operational Hub

- 50 To make efficiency savings we reduced the number of highways inspectors and invested in a central operational hub.
- 51 Associated cost savings have been reinvested in highway repairs and have enabled us to afford 'repair by default', which is having a positive impact on customer satisfaction.



## Winter Maintenance

- 52 County Durham has the most snow days in England and winter maintenance is a top priority with approximately 45% of our network treated.



- 53 We have installed additional remote weather stations in areas where data was not available, to provide more extensive and accurate information on local weather and road conditions.

- 54 In addition, we are currently optimising and thermally mapping all winter maintenance routes, to ensure that the service remains as robust and efficient as possible.

- 55 We have introduced vehicle tracking and cab webcams so that the public can view gritting and road conditions live, via a public website.



- 56 We provide daily morning and lunchtime updates, including links to key parts of the service, online and through social media.

- 57 This proactive approach has resulted in increased customer satisfaction.

## Street Lighting Energy Reduction Project

- 58 Through the Street Lighting Energy Reduction Project, 55,000 street lighting lanterns are being replaced.

- 59 The project which will be delivered over four years includes replacing high-energy use lanterns with low energy LEDs.





- 60 Savings are being realised through reduced energy consumption and reduced maintenance.
- 61 The project also helps us to meet our carbon reduction targets and reduce light pollution in urban and rural areas.

## Public satisfaction

- 62 The council participates in the National Highways & Transportation Public Satisfaction Survey which is undertaken by IPSOS/MORI.

Key Benchmark Indicator (KBI)	% Public Satisfied (Year)				
	2011	2012	2013	2014	2016
<b>KBI 23 - Condition of highways</b>					
Durham County Council	33.8	37.7	N/A	38.2	45.0
North East	32.6	38.4	26.4	37.5	41.0
National Average	34.7	36.6	31.1	34.4	38.0
<b>KBI 24 - Highway maintenance</b>					
Durham County Council	46.2	47.8	N/A	49.4	55.0
North East	47.0	49.1	46.6	49.4	53.0
National Average	49.3	49.0	49.6	49.4	53.0

- 63 The results show a large increase in satisfaction with the condition of the highway and highway maintenance since 2011, which reflects the effectiveness of our service and the extra capital investment (from DfT and the council) in resurfacing carriageways and footways.

## Great Staff, Great Stuff – going the extra mile

- 64 A great service relies on great staff. Through the council's Great Staff, Great Stuff scheme, we recognise and reward excellent work by our people.
- 65 Instant recognition certificates are presented throughout the service during the course of the year and exceptional achievement is recognised through the council-wide annual Staff Awards.



## Conclusion

- 66 In spite of the challenges we face, Durham strives to provide the best possible service it can and is leading the way in working efficiently and collaboratively.
- 67 Rated one of the most efficient highways authority in the country, we are constantly evolving: implementing innovative solutions and techniques to improve the quality of the highway; increasing public safety; and delivering challenging and complex projects with minimal disruption.
- 68 The approach we have taken and the investments we have made are driving significant improvements in public satisfaction compared with our peers regionally and nationally.

## Appendix 1: Compliments

*“Thank you for resurfacing the footpaths in Whitworth Close, Spennymoor. Your resurfacing men did a brilliant job, working in very difficult conditions of ice, rain and snow. They were very polite and courteous to allow access even if it was inconvenient for them. They left the close very tidy and clean.”*

*“On 20th December, I reported a street light which was out. I would like to say congratulations and well done for your quick response to this problem, which is now resolved.”*

*“Please pass my thanks to street lighting department for their quick response in dealing with my request. Also thanks to yourselves at Customer Service for passing on this issue so quickly and keeping me informed.”*

*“I work as a deputy head at Hope Wood which is a special needs school. The snow was causing the roads surrounding the school to become dangerous and we have over 200 pupils who are collected by mini buses. I spoke to a really helpful young man in customer services called Callum who was so nice and helpful. He requested that the gritter and road clearing team came to help us clear the area. They arrived and were amazing! They really went above and beyond our expectations to ensure our pupils could be safely collected and our school remained open. Thanks to both Callum and the road team from all of us here at Hope Wood Academy and our pupils!”*

*“Customer would like to say how great the two lads were that came today to fill the salt bin after she raised the request yesterday. They were both very professional, helpful and very polite. They even offered to put salt in bucket for elderly resident with parkinson's disease due to the fact they live on very steep hill and can't get to salt bin in icy conditions.”*

*“Huge thanks to everyone who keeps our roads clear in the bad weather. Your website is great for keeping us up to date and helped me plan my route to use only gritted roads.”*

*“Mr Jackson called last week to request that the salt bin in his street be refilled. The bin has been refilled and Mr Jackson would like to say a big thank you for this being done so quickly.”*

*“It was showing -9 this morning when I left Brasside to travel to Green Lane in Durham and what a joy the journey was - the roads were perfect even the ones through Newton Hall Estate. Thank you and well done to all of your overnight gritting, logistics and maintenance teams - please feel free to use the comment as you see fit.”*

*“Wanted to say what an amazing job the gritting service has provided. Very difficult conditions this morning but the gritters were out all night and once the grit got some traffic on it, it worked well. Snow ploughs came through and cleared both sides of the road early this morning making life so much easier.”*