

# Highways, Footways and Structures

Environment and Sustainable Communities Overview  
and Scrutiny Committee

October 2023



# Introduction

**Highways Act 1980** places a duty on the Local Highway Authority to inspect and maintain the adopted highway as outlined in Section 41 and provides a special defence under Section 58

**Code of Practice for Well Maintained Highway Infrastructure 2018** advises the Local Authority how to manage their highway assets

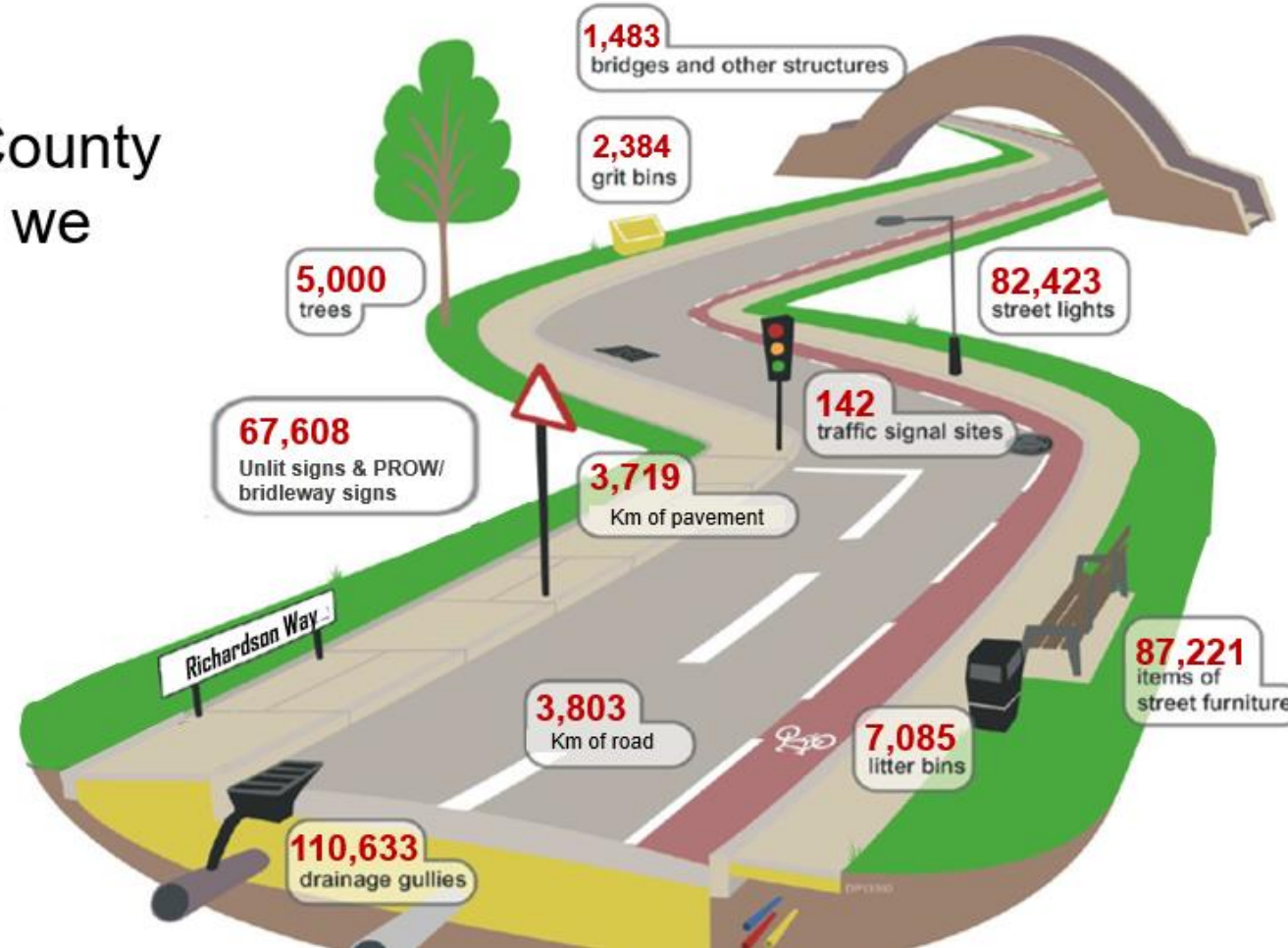
**Highway Maintenance Plan** sets out the Council's inspection regime, condition survey, reactive and routine maintenance service levels

**Highway Safety Inspection Manual** determines the Councils network hierarchy, inspection frequency and response times

**Highways Asset Management Plan (HAMP)** sets out the long term plan for managing the highway asset by applying programmed maintenance

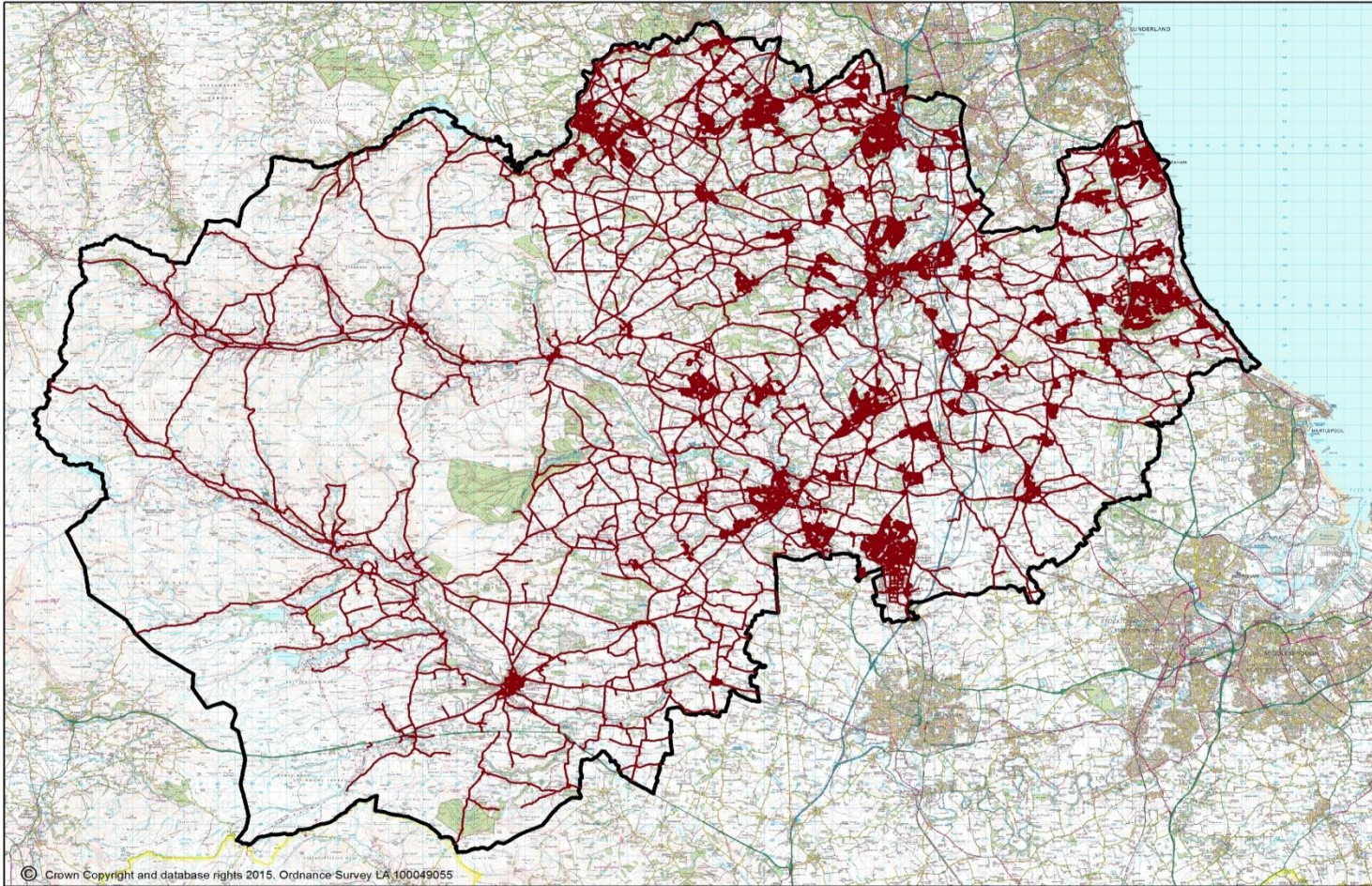
# Highway Inventory

Across County Durham, we have...





# Durham County Council Adopted Highway Network



# Types of Maintenance

Type of Maintenance	Funding	Description
Reactive	Revenue	Responding to inspections, complaints or emergencies
Routine	Revenue	Regular consistent schedule, generally for patching, cleaning, grass cutting and landscape maintenance
Programmed	Capital	Flexibly planned schemes primarily of resurfacing, reconditioning or reconstruction

# UKPMS – Condition Surveys

## **Visual Surveys**

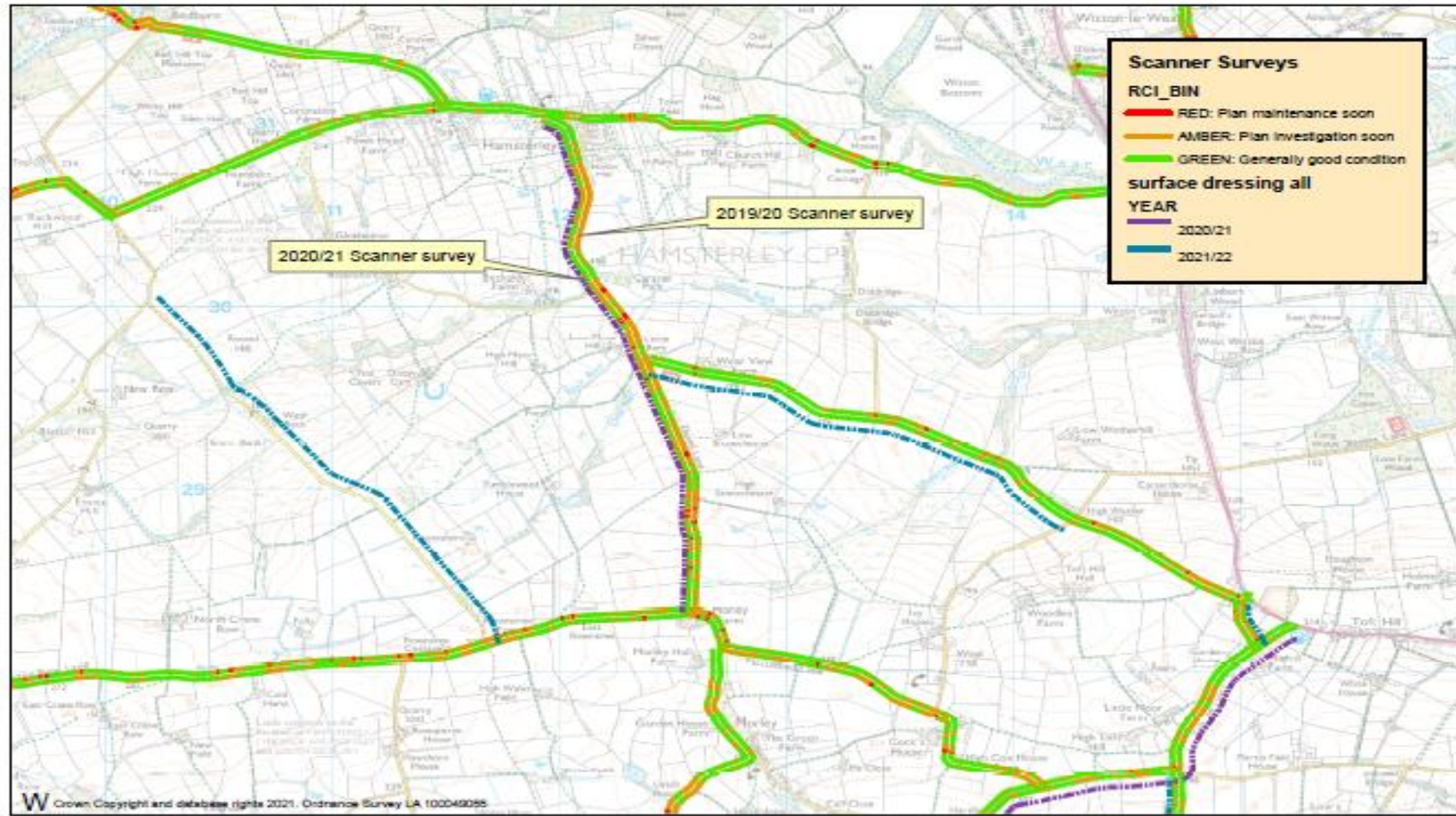
- Coarse Visual Inspections (CVI)
- Footway Network Survey (FNS)

## **Machine Surveys**

- SCANNER
- Skid Resistance
- Deflectograph



# Condition Data- Scanner Survey Results



# Major Groups - Asset Condition Headlines

**Classified Roads** where maintenance should be considered

A – 3.1%

B – 3.0%

C – 2.6%

Lower than National average

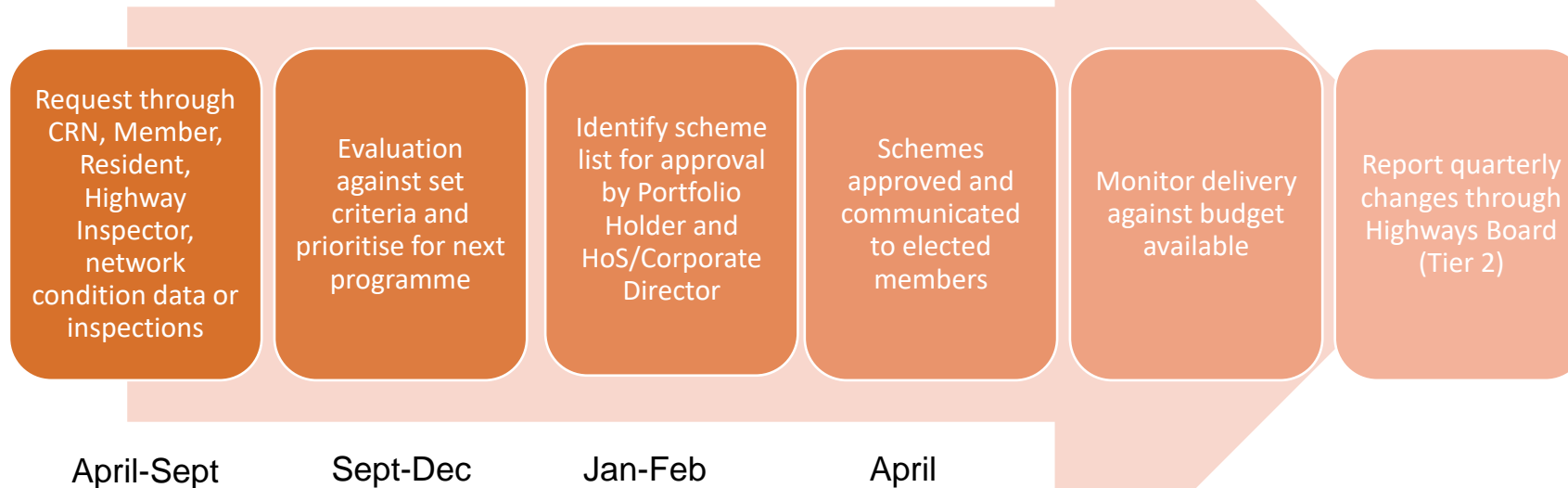
**Unclassified Roads** – 22.5% - Higher than National average

**Footways** – 22.5% Higher than national average

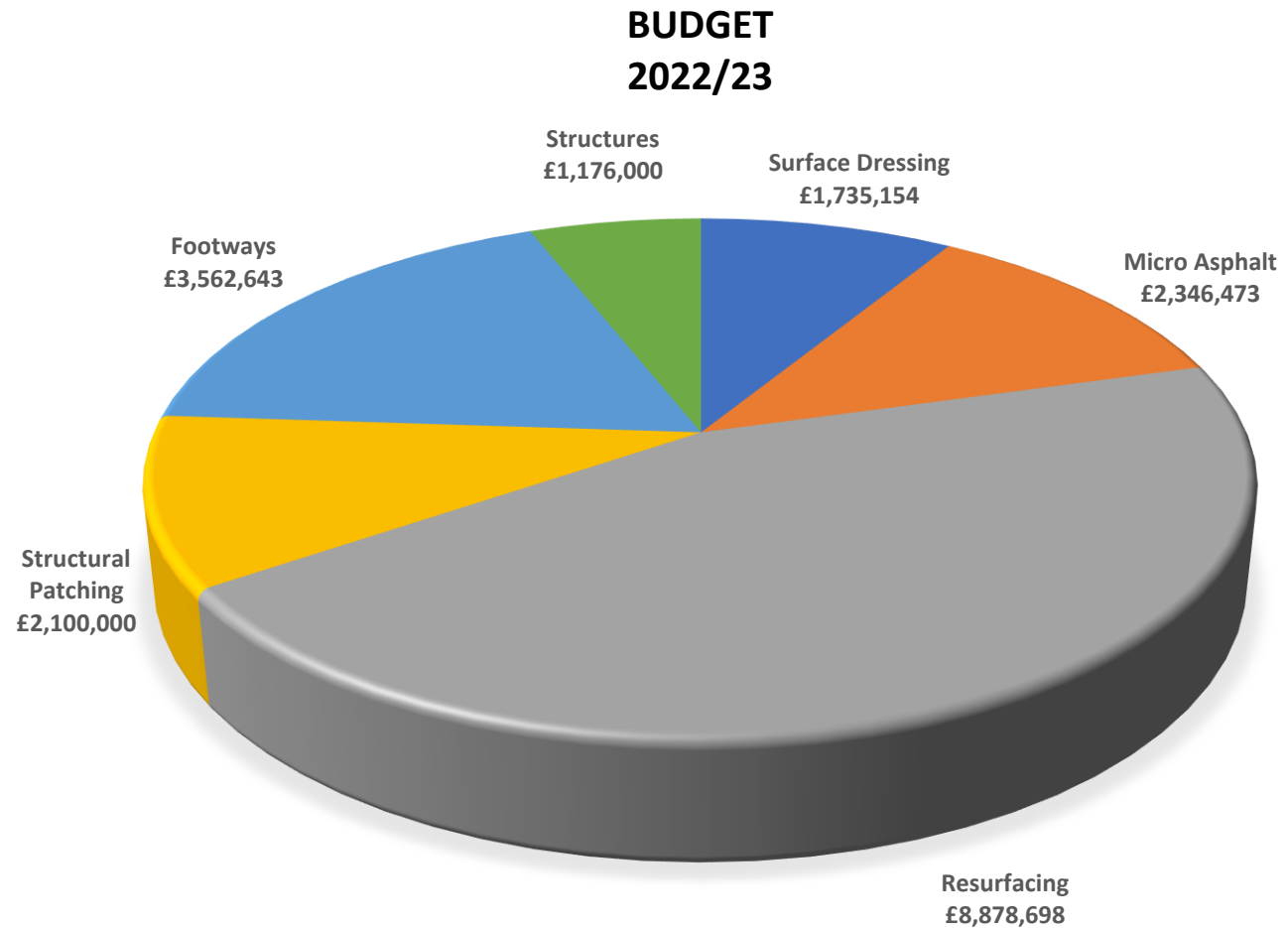
**Bridges** – 82% on principal roads and 81% on non-principal roads against a target of 95%



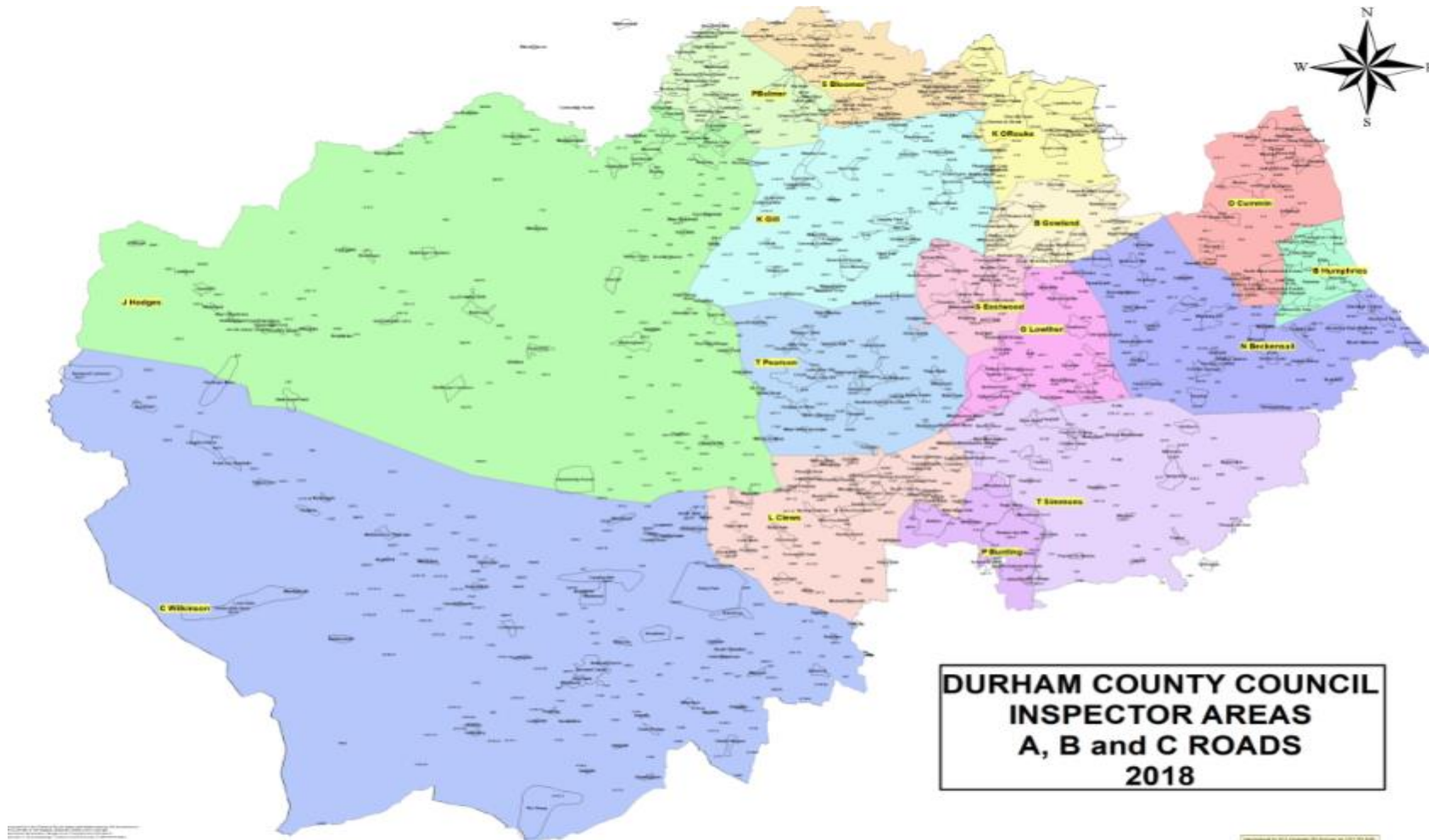
# Capital Programme - Scheme Identification Process



Work Type	Budget
Surface Dressing	£ 1,735,154
Micro Asphalt	£ 2,346,473
Resurfacing	£ 8,878,698
Structural Patching	£ 2,100,000
Footways	£ 3,562,643
Structures	£ 1,176,000
<b>Total</b>	<b>£ 19,798,968</b>



# Highway Inspector Areas



# Safety Inspections

- 1,126 statutory safety inspections are carried out each year to specific frequencies by 16 qualified Highway Inspectors.
- Inspection frequencies are determined by a number of factors including:
  - Category within the highway network
  - Character and traffic volume
  - Current and proposed usage
  - Routes to important local facilities (schools, hospitals etc..) and to the strategic network
  - Traffic sensitive routes
  - Accident history
  - Vulnerable users or people with special needs
  - Local knowledge / expertise



# Defect Repair Categories

In accordance with the Highway Safety Inspection Manual each defect is given a repair category based on the danger/potential danger and the hierarchy of the highway:

- 2 hours/immediate repair- Category 1.1 defect
- 72 hours - Category 1.2 defect
- 14 days – Category 2.1 defect
- 3 months – Category 2.2 defect

# Safety Defects

- Number of defects identified are intrinsically linked to the size of the highway network
- Type of defect – pothole, vertical face, depression, repair or replace kerb or paving slab, adjust ironwork, damaged signs & street furniture
- Defects completed on time – Approximately 93% each year over all categories
- Defect repair performance is difficult to measure accurately against other highway authorities due to the size and type of network combined with the different response times
- Repudiation rate of 3<sup>rd</sup> party claims = 94%

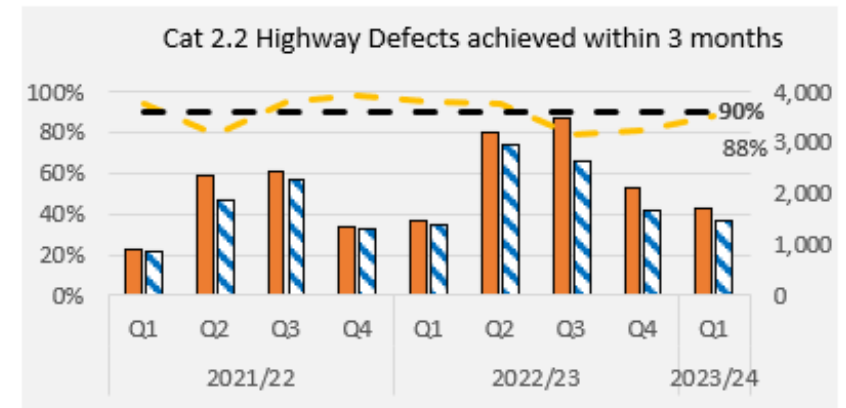
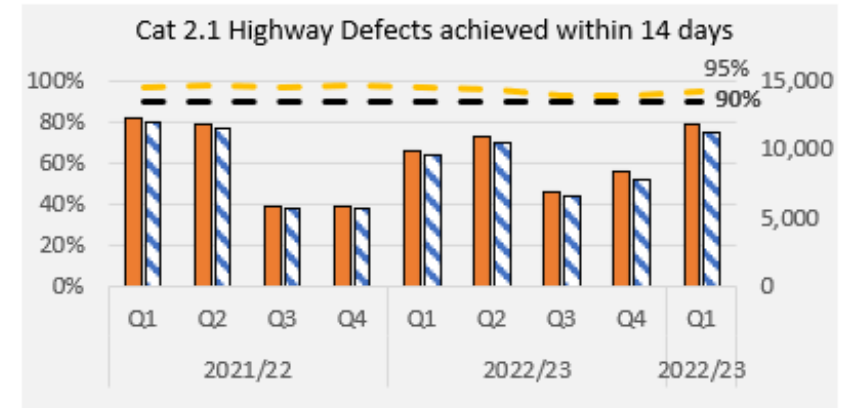
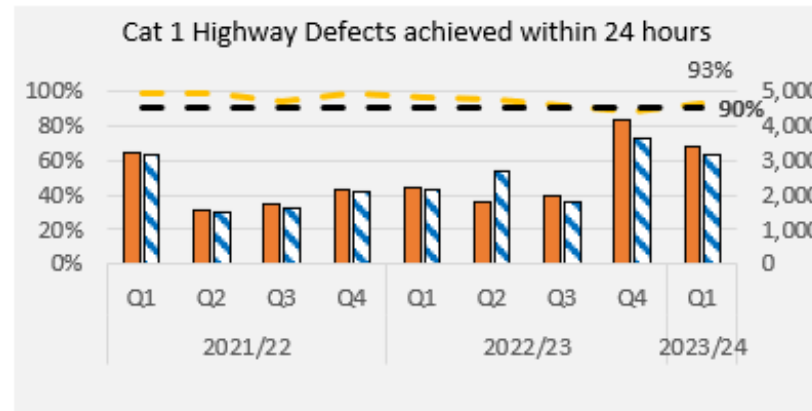
# Safety Defect Performance

**95%**  
Cat 2.1 highway defects repaired within 14 days (90%)

**88%**  
Cat 2.2 highway defects repaired within 3 months (90%)

## Highway Maintenance

- Operational teams have been supported through our framework contractors and an early indication for July shows improvement in Category 2.2 performance.



# Artificial Intelligence

- Assist with defect identification, assessing network condition and ultimately scheme identification
- Daily monitoring of condition
- Reduces the number of site visits
- Significant fuel, cost and staff time savings
- Robust defence against 3<sup>rd</sup> party PLI claims



# Structures

- Current maintenance backlog is £38.8m
- Current budget £4.8m
- Backlog is measured from condition data
- Principal Inspections (PI) are completed every 6 years although depending on previous inspection this can be increased to 12 years (externally)
- General Inspections (GI) are completed every 2 years (internally)
- Intrusive Inspections are carried out when required from findings of the PI and GI
- The capital programme is determined from the inspections

# Innovation

- Artificial Intelligence – scheme identification, robust defence, reduced carbon footprint
- Introduction of plastics and rubber into resurfacing materials
- Recycling of road materials
- On site resurfacing using existing road materials
- Mastic asphalt – one visit permanent repairs
- Spray injection patching
- All of the above combine to provide “right treatment right time cost effective repairs whilst reducing the Councils carbon footprint

# Challenges

- Reduced Budget Allocation
- Climate Change
- Global Economy
- Political Change – local and national
- Devolution
- Skill Shortages
- Digital Rollout
- Maintaining the highway network in a safe and serviceable condition with reduced budgets whilst maintaining customer satisfaction

# Highway Network Management – Background to Digital Rollout

- The Government's target is for gigabit broadband to be available to 85% of the UK by 2025 and nationwide by 2030
- The Government's policy is that gigabit-broadband infrastructure will be mostly built using private investment. Private companies decide when and where to build infrastructure based on commercial factors.
- The government's flagship £5 billion programme (Project Gigabit) will enable hard-to-reach communities to access lightning-fast gigabit-capable broadband by targeting homes and businesses that are not included in broadband suppliers' commercial plans.
- In January 2023, 72% of UK premises had a gigabit-broadband connection available, according to telecoms regulator, Ofcom.
- Broadband and mobile must be treated as the fourth utility, with everyone benefiting from improved connectivity.



# Highway Network Management – Coordination, Inspection & Enforcement of Digital Works

The Highway Network Management Section works with digital broadband suppliers to –

- to ensure the safety of their works
- to minimise inconvenience to people using a street
- to protect the structure of the street and the apparatus in it.

Between financial year 2020/21 to 2022/23 the Highway Network Management Section –

- Coordinated 20,410 individual digital works
- Inspected 9,216 digital works including live sites and reinstatements
- Issued 1,256 Fixed Penalty Notices for breaching permit conditions, working without a permit etc.

# Highway Network Management – On-Going Digital Works

There are currently six digital broadband suppliers working in County Durham. These include –

- Virgin Media, Openreach, Netomnia, Grain Connect, Go-Fibre, Rymote

During 2023 the digital roll-out will take place in 19 towns and villages throughout County Durham including –

- Chester-le Street, Ouston, Perkinsville Stanley, Annfield Plain, South Moor, Middleton-in-Teesdale, West Auckland, Barnard Castle, Gainford, Sherburn Village, Sherburn Hill, Low & High Pittington, Trimdon, Bishop Auckland, Crook and Seaham.

These works will provide gigabyte broadband to approximately 50,000 properties.

**Any Questions?**