

Winter Service in Cheshire East



Simon Davies

- Operations Manager
- Cheshire East Highways

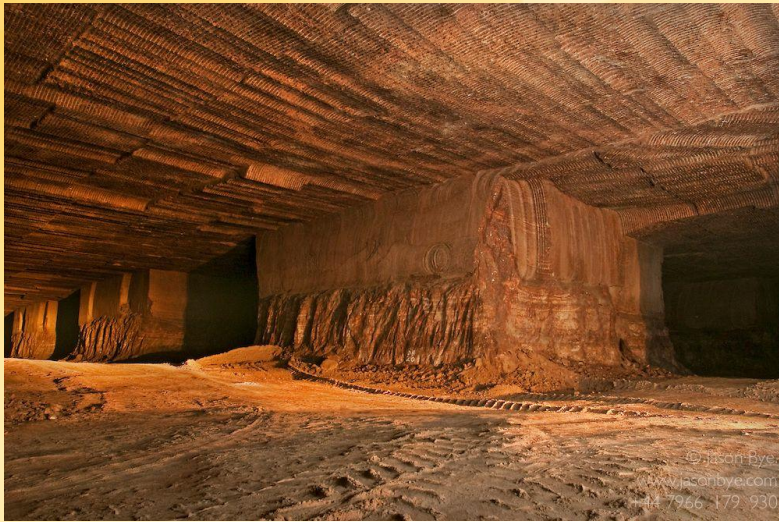
Cheshire East Winter Maintenance Service

- Cheshire East
- Our Winter Service
- Service Review
- Drivers
- Carbon reduction
- Adverse Weather Desk
- Future challenges

Cheshire East

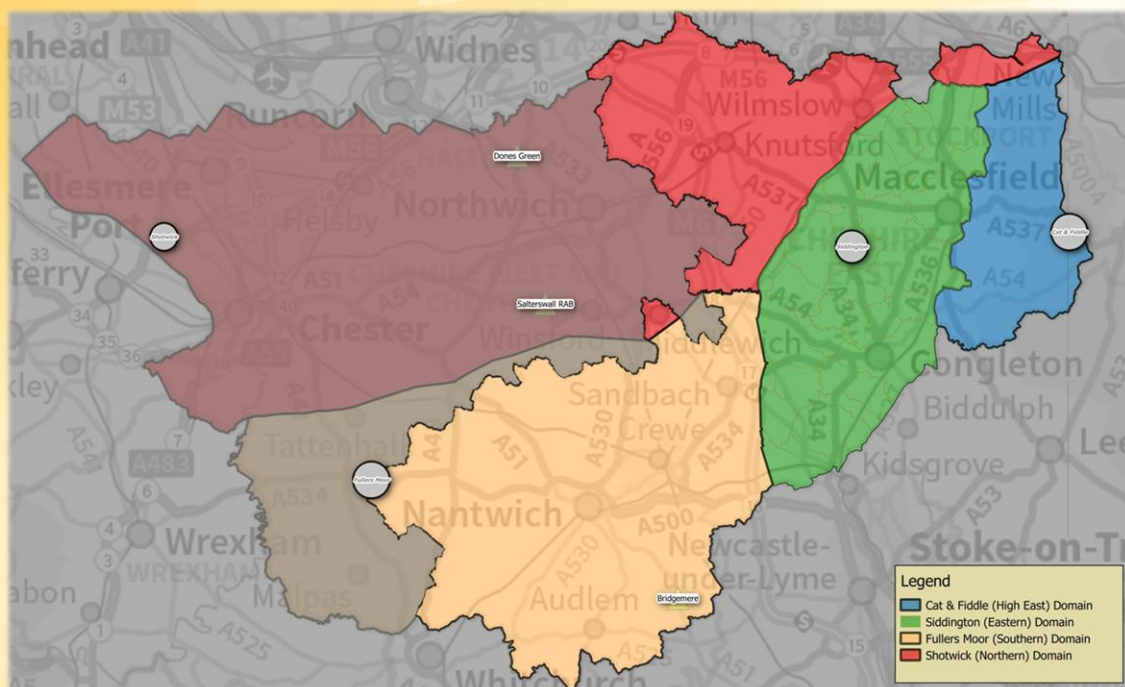


Cheshire East



Working for a **brighter future** together

Cheshire East

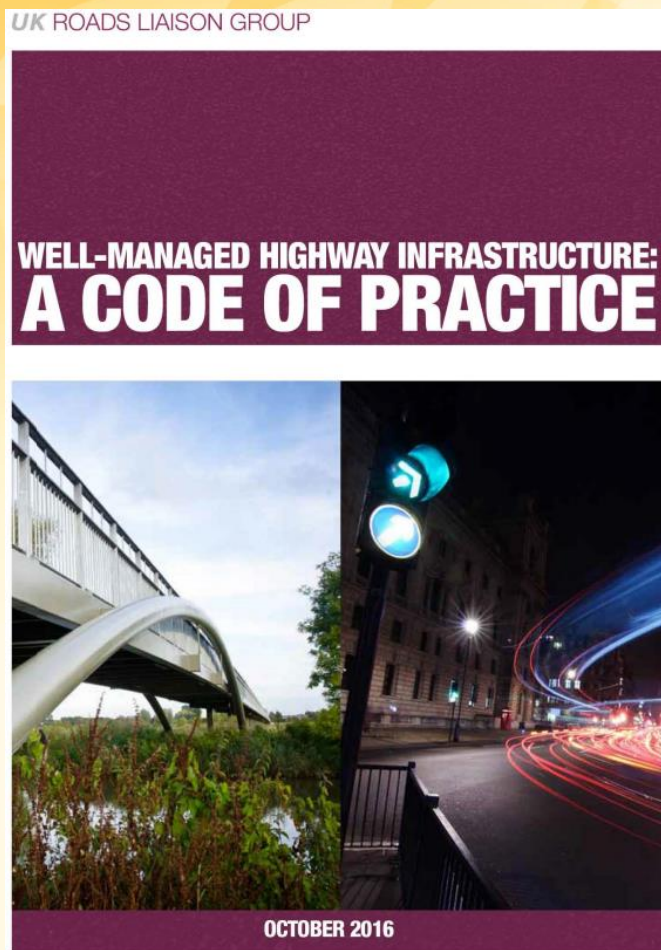


- High East
 - Above 200m
 - Weather station at the Cat and Fiddle, A537
- South
 - Cheshire Plain
 - Weather station at Fullers Moor, A534
- East
 - Transition
 - Weather station at Siddington, A34
- North
 - Legacy from CCC

Our Winter Service

- 17 primary routes
- 2 depots
 - Macclesfield
 - Wardle
- New fleet
- Dry salt
- Navtrak automated salt spreading
- Forecasting and decision making
- Communications

Service Review



- Well Managed Highway Infrastructure
- Risk-based approach
- New winter policy
- Methodology and scoring matrix
- Whole network
- Consultation
- Route optimisation
- Implementation
- Annual review

Methodology and scoring matrix


| Council | Public Transport | Industrial | Education | Topographical | Climate | Emergency | Establishment | Community | Infrastructure |
|-------------------------|------------------|------------|-----------|---------------|---------|-----------|---------------|-----------|----------------|
| Cheshire West & Chester | 0.50 | 1.00 | 1.00 | 1.00 | 0.25 | 1.00 | 1.00 | 0.50 | 0.50 |
| Derbyshire CC | 0.50 | 1.00 | 0.50 | 1.00 | 0.90 | 0.25 | 0.10 | 0.25 | 0.25 |
| High Peak Council | 0.50 | 0.75 | 0.25 | 0.50 | 0.10 | 0.25 | 1.00 | 0.10 | 0.10 |
| Manchester CC | 0.50 | 0.50 | 1.00 | 0.25 | 0.25 | 0.10 | 1.00 | 0.10 | 1.00 |
| Newcastle under Lyme BC | 0.50 | 0.25 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.25 |
| Shropshire CC | 0.50 | 1.00 | 1.00 | 1.00 | 0.75 | 1.00 | 1.00 | 0.50 | 0.25 |
| Staffordshire CC | 0.50 | 1.00 | 1.00 | 1.00 | 0.50 | 1.00 | 1.00 | 0.50 | 1.00 |
| Staffordshire Moorlands | 0.50 | 1.00 | 1.00 | 1.00 | 0.25 | 1.00 | 1.00 | 1.00 | 1.00 |
| Stockport MBC | 0.50 | 0.50 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Stoke on Trent CC | 0.50 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Trafford MBC | 0.50 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Warrington BC | 0.50 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

| | | | | | |
|---|-----------------------|---------------|--|---|---|
| *** <i>Scheduled Bus X Boundary</i> refers to those routes that travel between large towns and as a consequence of the distance involved, the routes are less frequent. | Business Park (Cat 1) | Through Route | Gradient 110 (Cat 1) -- falls to Gradient 110 (Cat 2) -- falls to Gradient 110 (Cat 3) -- falls to Gradient 110 (Cat 4) -- falls to | Strategic Route Main Distributor Secondary Distributor Link or Local Access Road | <p><i>Village</i> - larger than a hamlet few services, a church and or small shop/post office.</p> <p><i>Hamlet</i> - population (<100) and very few services, only a few buildings.</p> <p><i>Isolated dwelling</i> - 1 to 5 buildings or families negligible services, if any.</p> <p>Hamlets in CEC</p> <p>Dean Green Dodd's Green Gatley Green Salesbrook</p> |
| | | | Care home large Care home medium Care home small | over 100 beds 25 to 100 beds up to 25 beds | |

Example risk assessment score

Knutsford__Faulkners Lane__Great Warford__C111_05

| | | | | |
|-----------------------------|--|----------------|---|---|
| Road Number | <input type="text" value="C111_05"/> | Road Name | <input type="text" value="Faulkners Lane"/> | |
| Highway Area Group | <input type="text" value="Knutsford"/> | Parish/Town | <input type="text" value="Great Warford"/> | |
| USRN | <input type="text" value="24100822"/> | X-point | <input type="text" value="380253.5524"/> | Y-point <input type="text" value="378562.6468"/> |
| Road classification | <input type="text" value="C Road"/> | Section Length | <input type="text" value="615"/> | metres <input type="text" value="Secondary Distributor"/> |
| Add to precautionary route? | <input type="text" value="NO"/> | | | |

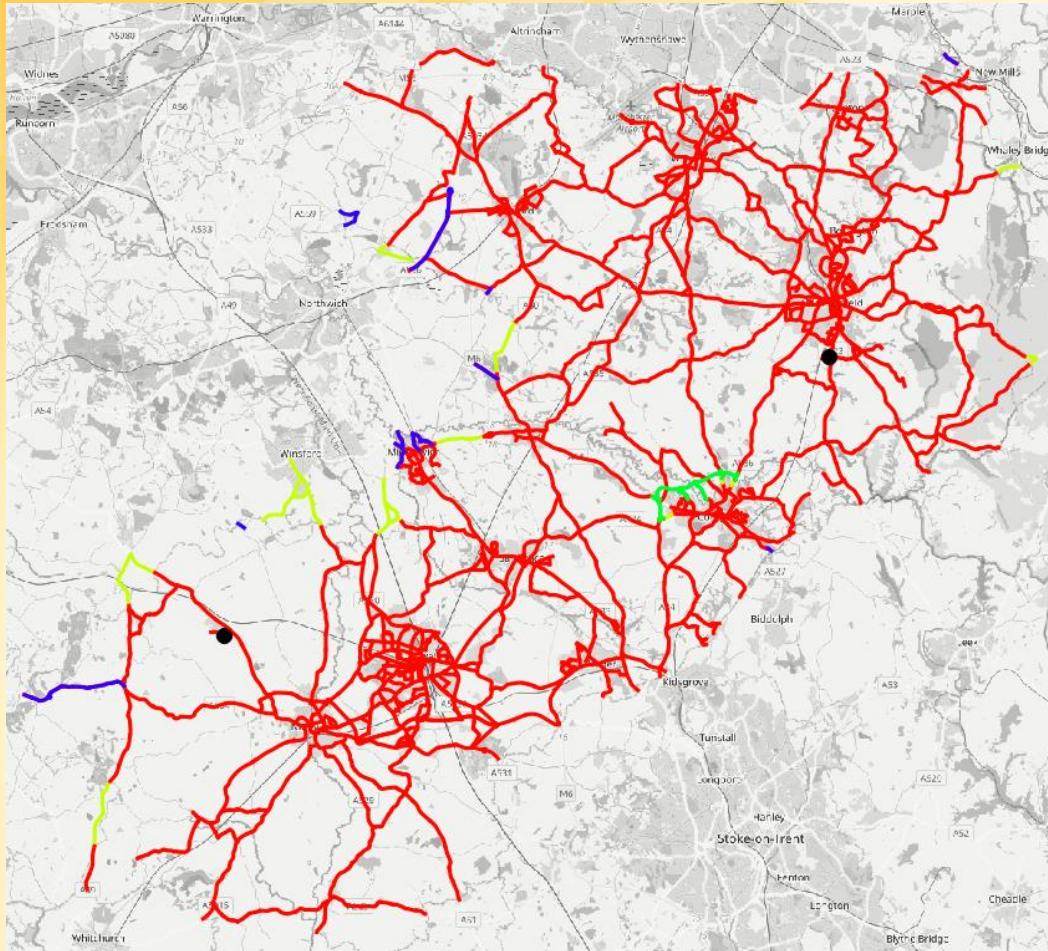


| | Score | Mitigating Factors |
|---|---------------------------------|----------------------|
| Emergency Services | <input type="text" value="0"/> | <input type="text"/> |
| Public Transport Hubs | <input type="text" value="0"/> | <input type="text"/> |
| Education Establishment | <input type="text" value="0"/> | <input type="text"/> |
| Locality Resilience | <input type="text" value="0"/> | <input type="text"/> |
| Local Infrastructure | <input type="text" value="25"/> | Care Home (Medium) |
| Manufacturing & Industrial Centres | <input type="text" value="0"/> | <input type="text"/> |
| Rural Communities | <input type="text" value="0"/> | <input type="text"/> |
| Topological Features | <input type="text" value="0"/> | <input type="text"/> |
| Existing or Prevailing Climate Conditions | <input type="text" value="10"/> | Bridge deck |
| Co-ordination with Adjacent Highway Authorities | <input type="text" value="0"/> | <input type="text"/> |
| Total | <input type="text" value="35"/> | |

Following the risk assessment carried out in accordance with the Defined Methodology, this length of highway (on the Cheshire East Highway Network) DOES NOT MEET THE THRESHOLD for inclusion on the Winter Treatment Network

Additional Comments:

Route optimisation



- Initial scoping report
- Detailed optimisation to include:
 - Maximum treatment times
 - Spread rates
 - Vehicle capacities
 - Depot locations
 - Reciprocal arrangements
 - Additional capacity for new roads

Adverse Weather Plan



- Key Objectives
 - Prepare and plan
 - Process, roles and responsibilities
 - Prioritise response
 - Manage and supervise
 - Record
 - Communication
 - Recovery

Adverse Weather Plan



- Adverse Weather Desk
- Provides key roles
 - Manager
 - Telephone
 - Prioritiser
 - Recorder
 - Comms
 - Supervisor

Drivers

- Recruitment
- Retention
- Supply chain
- Training
- Reduced requirement
 - Fewer routes
 - Changes to shift pattern
- Zero hours contracts

Carbon Savings



- Solar panels
- Route optimisation
 - Less routes, less gritters
 - More efficient routes
 - Subsequent fuel saving
 - Reduced emissions
- Dynamic calibration of gritters
 - More accurate spreading
 - Less waste.
- Alternative fuels

What next?

- Climate change
 - Warmer and wetter winters?
 - More storms and severe weather events
- Sustainability
- Technology
- Innovation

Thank You!

Any questions?

