

Improvements to Delivery and Maintenance

- **Roads and Infrastructure continue to introduce improvement measures that can be applied across the service in order to see an overall improvement in road network condition and customer experience:**
 - Target investment to improve the Road Condition Index (RCI). RCI now one of main KPIs in new Council Business Plan.
 - Make capital investment available for Road Operations to carry out more extensive repairs.
 - Increase the number of permanent repairs carry out on carriageway and footway defects (potholes).
 - Explore and trial new material and surfacing methods. **Pothole Pro** being introduced March 2023.
 - Continue to carry out safety inspections and defect repairs on time.
 - Improve roadworks coordination.
 - Continue the use of preventative maintenance i.e. surface treatments.
 - New Framework contracts introduced in 2022.
 - New Procedures and Performance Indicators developed and introduced since Transport realignment in 2020.
 - Further rollout of our Asset Management System (Confirm) to allow better use of existing data. Most asset information is now available online.
 - New hierarchy of carriageways and footways developed an introduced in April 2022.

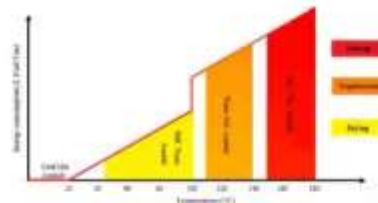
“Category 1” potholes / defects must be treated within 24 hours – usually a quick response ‘cold repair’ – striving to increase rate of permanent ‘hot repairs’ as a first response.

Wider array of Key Performance Indicators deployed.

Improvements to reduce Carbon Emissions

- **Roads and Infrastructure are looking at new materials and construction methods to road maintenance in working towards reducing carbon emissions and achieve sustainability goals.**
- **Some of the measured that are being investigated and trialed are:**

- **Warm Mix Asphalts (WMAs)** - These can reduce the CO2 associated with asphalt production by up to 15% whilst improving efficiencies on roads projects.



- **Expanding the in-situ road recycling programme** – Recycles the existing road material eliminating the need to dispose of material at tip.
- **Enhanced Material Durability** – Reduces waste, uses less raw material and leads to fewer interventions. This includes using Polymer Modified Bitumens (PMBs), alternative binders and asphalt products which improve flexibility strength and resistance to fatigue and deformation.
- **Longer Term Approach to funding** – This would allow Roads Infrastructure to better plan proactive maintenance, allowing for better efficiencies, cutting waste and delivering improved road surface.
- **Ethical Sourcing of Material** – Using, where possible, UK or European stone rather than importing material from countries that incur significant transportation, therefore, reducing carbon emissions. This will also include the recycling of existing stone material rather than purchasing new material.

Day-to-day maintenance/repairs of road network

- Pothole repairs
- Gully Cleaning
- Road Markings
- Carriageway Patching
- Winter Maintenance



Current Revenue Budget: £3.972m per annum (2022/23)

Make Safe:

- 2 man reactive squads to make safe
- High performance >95% KPI
- 100% Cat 1 response for 2 years
- 100% mobile technology (End to End)



Revenue Patching:

- 2nr 4man squads c/w Hot Box and JCB 3CX compacts
- Undertake c. 350 Jobs a year, jobs contain somewhere around 2/3 patches historically.
- Linked in Confirm to permanently reinstate behind other works (Drainage / Street Lighting etc)

Revenue Resurfacing:

- 1nr 10man squad
- 65-70,000m2 PA
- Targeting Local Priorities
- Driven off Confirm reporting and customer feedback
- Cross-referenced annual with main Capital Works



www.edinburgh.gov.uk/roadproblem

Cyclic Maintenance:

- 56,603 gullies across the city
- Treated on 2-year cycle
- 3nr new Gully Motors + 1 Hired
- Grouped into route types and separated for TTRO / Non TTRO
- Selected sensitive gullies treated every 6 months
- Planned maintenance c. 2.5times more efficient (75 vs 30)
- All managed on Asset Management system using mobile technology.

2022-24 Cycle	
Total gullies	55990
Total Visited	6922
Total to Visit	49068
Total Cleaned	5143
Total to Clean	50847
Start Date	04/04/2022
Planned Completion	03/04/2024
Report date	24/05/2022
Target %	7%
Visit %	12%
Clean %	9%
Average Clean Rate	74%

Reactive Works:

- 1nr gully motor on reactive reports
- Flexed up during flooding conditions
- Can be reported on the website



Gully Investigation Required:

- 1nr dig up squad to fix GIR's – year round
- Require significant time to repair due to PU's / registration / digging at depth.

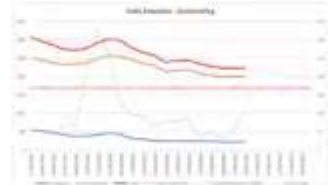
2022-24 - Visit Completions



2022-24 - Clean Completions



Gully Visits - Summary



www.edinburgh.gov.uk/gully

Roads Operations – Trees & Foliage

Road (Scotland) Act:

- Powers under Section 91 to ask the public to cut back trees and foliage where it presents a safety issue.
- 28day soft notice to help identify ownership issues and not be too heavy handed.
- If that fails > 28 Statutory Notice is served.
- If that fails > pass to Parks & Greenspace to cut back and seek cost recovery.
- All managed on Asset Management system using mobile technology.



Garden Aid:

- Older and infirm may be able to get assistance through Garden Aid.
- Details included in the lettering notices.



www.edinburgh.gov.uk/overhangingfoliage

Roads Operations – Winter

- **£2.3m budget per annum (£660k contingency)**

Prioritised System:

- Council has more adopted network that it can treat at any one time.
- Carriageway split into Cat 1 / 2 / 3 routes developed.
- City separated into 3 domains:- South / NW / Urban.
- 2 daily decisions by the Duty Manager.



Footpath/Cycleways:

- Undertaken by Roster B using Mini Tractors & Road Sweepers.
- 11 Additional routes added in 2022/23 – mapped back to schools / care homes and arterial network.



Grit Bins:

- 3,122 Grit bins
- Filled each year ahead of the season
- Refill request via the website

www.edinburgh.gov.uk/gritbinproblem

Pressures & Future Initiatives

2022/23 Pressures:

- 15% Up in road surfacing materials / 40% increase in fuel / 8% increase in Road Salt prices. **increase of £300k PA** in budget to maintain the current level of service.



Initiatives:

- Establishing new Confirm (The Asset Management system) attributes to capture more accurate data on what can and cannot be permanently repaired or what requires more extensive Capital repair. This will be tracked and monitored to help identify opportunities to drive improvement.
- Established, but embedding a process to schedule permanent repairs for all Category 1 (most serious) defects, where not attributable to a 3rd party.
- Undertaken full roads maintenance hierarchy in line with SCOTS guidance and will look to embed this within Confirm to produce more prioritised repairs.
- Essentially, the output is limited by available resources. Option to increase resource numbers to target additional patching:



Street Lighting

- The Energy Efficient Street Lighting Programme (EESLP) consisted of:
- The design, supply and installation of approximately 50,000 energy efficient street lighting luminaires
- Installation of approximately 4,500 heritage luminaires supplied by the employer
- Installation of approximately 64,000 nodes/telecells (approximately 54,000 on new luminaires and retrofit approximately 9,000 on existing luminaires)
- Installation of new columns as required by design and sundry items/small repairs to facilitate installation
- Project Duration: Jun 2018 to Dec 2021
- All street lights now controlled by new Central Management System (CMS)
- Dark lights 4589 No. in 2020 , Dark lights 649 No. in 2023 (190 associated with Scottish Power connection issues).



- Challenging times for all roads authorities across the UK.
- Long term funding remains a real issue with aging assets.
- Covid has dramatically changed the demands on the transport network.
- Adapting to climate change.
- Road networks and how they are maintained will have to change and adapt to future requirements (i.e. climate change, how people travel).
- Strategic Investment, Digitisation and Innovation will be at the forefront of future improvements.
- Edinburgh has already made many improvements over the past few years to how we maintain our roads.
- Future Improvements will continue to be developed and implemented to meet the changing demands.

Questions