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To: Cllr David Evans (Chair)

Councillors: Mel Buckley, David Coggins Cogan, Bill Crease, Chris Dolphin, Ray Hughes, Dennis Hutchinson, Richard Lloyd, Vicky Perfect, Mike Peers, Dan Rose and Roy Wakelam

2 October 2024

Dear Sir/Madam

NOTICE OF HYBRID MEETING
ENVIRONMENT & ECONOMY OVERVIEW & SCRUTINY COMMITTEE
TUESDAY, 8TH OCTOBER, 2024 at **10.00 AM**

Yours faithfully

Steven Goodrum
Democratic Services Manager

Please note: Attendance at this meeting is either in person in the Delyn Committee Room, Flintshire County Council, County Hall, Mold, Flintshire or on a virtual basis.

The meeting will be live streamed onto the Council's website. The live streaming will stop when any confidential items are considered. A recording of the meeting will also be available, shortly after the meeting at https://flintshire.public-i.tv/core/portal/home

If you have any queries regarding this, please contact a member of the Democratic Services Team on 01352 702345.

A G E N D A

1 **APOLOGIES**

Purpose: To receive any apologies.

2 **DECLARATIONS OF INTEREST (INCLUDING WHIPPING DECLARATIONS)**

Purpose: To receive any Declarations and advise Members accordingly.

3 **MINUTES** (Pages 5 - 8)

Purpose: To confirm as a correct record the minutes of the meeting held on 10 September 2024.

4 **FORWARD WORK PROGRAMME AND ACTION TRACKING** (Pages 9 - 18)

Report of Environment and Social Care Overview & Scrutiny Facilitator

Purpose: To consider the Forward Work Programme of the Environment & Economy Overview & Scrutiny Committee and to inform the Committee of progress against actions from previous meetings.

5 **REVIEW OF REDUCED OPENING HOURS AT HOUSEHOLD RECYCLING CENTRES** (Pages 19 - 26)

Report of Chief Officer (Streetscene and Transportation) - Leader of the Council and Cabinet Member for Streetscene and Transportation

Purpose: As requested at June meeting.

6 **FOOD SERVICE PLAN 2024-25 FOR FLINTSHIRE COUNTY COUNCIL** (Pages 27 - 70)

Report of Chief Officer (Planning, Environment and Economy) - Cabinet Member for Planning, Public Health and Public Protection

Purpose: To approve the Food Service Plan 2024-25

7 **ADDITIONAL LICENSING FOR HOUSES OF MULTIPLE OCCUPATION** (Pages 71 - 76)

Report of Chief Officer (Planning, Environment and Economy) - Cabinet Member for Planning, Public Health and Public Protection

Purpose: To request the authority of Cabinet Members to undertake a consultation exercise to consider whether 'Additional Licensing' for smaller Houses of Multiple Occupation (HMO'S) should be introduced to the county as a whole.

8 **REVIEW OF HIGHWAYS ASSET MANAGEMENT PLAN AND HIGHWAY AND CAR PARK INSPECTION POLICY** (Pages 77 - 240)

Report of Chief Officer (Streetscene and Transportation) - Leader of the Council and Cabinet Member for Streetscene and Transportation

Purpose: To provide Scrutiny with an update on the refreshed Highway Asset Management Plan (HAMP) and reviewed Highway and Car Park Inspection Policy.

9 **UPDATE ON LOCAL BUS SERVICES IN FLINTSHIRE** (Pages 241 - 254)

Report of Chief Officer (Streetscene and Transportation) - Leader of the Council and Cabinet Member for Streetscene and Transportation

Purpose: To receive an update.

Please note that there may be a 10 minute adjournment of this meeting if it lasts longer than two hours

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ENVIRONMENT AND ECONOMY OVERVIEW & SCRUTINY COMMITTEE
10 SEPTEMBER 2024

Minutes of the hybrid meeting of the Environment and Economy Overview & Scrutiny Committee of Flintshire County Council held on Tuesday, 10 September 2024.

PRESENT: Councillor David Evans (Chair)
Councillors: Mel Buckley, David Coggins-Cogan, Chris Dolphin, Bill Crease, Richard Lloyd, Mike Peers, Vicky Perfect, David Richardson, Dan Rose and Roy Wakelam

APOLOGIES: Chief Executive

ALSO PRESENT: Councillors Bernie Attridge and Andrew Parkhurst (as Observers)

CONTRIBUTORS:
Councillor Dave Hughes (Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy), Councillor Chris Bithell (Cabinet Member for Planning, Public Health and Public Protection) Councillor Paul Johnson (Cabinet Member for Finance, Inclusion, Resilient Communities including Social Value and Procurement), Councillor Dave Healey (Cabinet Member for Climate Change and Economy);Chief Officer (Planning, Environment & Economy), Chief Officer (Streetscene and Transportation), Highway Network Manager, Streetscene Maintenance Manager (South and Structures) and Strategic Performance Advisor. For minute no.25: Hedd Vaughan-Evans, Head of Operations, Ambition North Wales, and Kirrie Roberts, Digital Connectivity Budget Manager,

IN ATTENDANCE: Democratic Services Manager, Overview & Scrutiny Facilitator and Democratic Services Officers

22. DECLARATIONS OF INTEREST

There were no declarations of interest

23. MINUTES (link to recording)

To confirm as a correct record the minutes of the meetings held on:
11 June 2024 minutes
16 July 2024 minutes ; and
30 July, 2024. minutes

16 July 2024
Councillor David Coggins-Cogan requested that the minutes be amended on page 11 as follows: "The Facilitator explained that Emergency Planning matters were within the terms of reference of Corporate Resources Overview & Scrutiny Committee. She agreed to ask the Democratic Services Manager if the item could be considered by that Committee and if so, members of the Environment and Economy Committee could be invited to attend the meeting".

RESOLVED:

(a) That the minutes of the meetings held on 11 June and 30 July 2024 be approved as a correct record;

(b) That the minutes of the meeting held o 16 July 2024 be approved as a correct record subject to the above amendment..

24. FORWARD WORK PROGRAMME AND ACTION TRACKING (link to recording)

The Facilitator presented the Forward Work Programme and Action Tracking report. Forward Work Programme

Following discussion it was agreed that a briefing note be provided to members on Weed Control.

In response to a question regarding the status of the Access Barrier Review, the Chief Officer (Planning, Environment and Economy) advised that it was still work in progress. It was expected that an update report would be submitted to the Committee before the end of the calendar year.

RESOLVED:

(a) That the Forward Work Programme be noted;

(b) That the Facilitator, in consultation with the Chair of the Committee, be authorised to vary the Forward Work Programme between meetings, as the need arises; and

(c) That the Committee notes the progress made in completing the outstanding actions

25. NORTH WALES ECONOMIC AMBITION REPORT (link to recording)

The Chief Officer (Planning, Environment and Economy) introduced the report to present the Annual Report for 2023-24 of the Economic Ambition Board.

The Chief Officer provided background information and invited Hedd Vaughan-Evans, Head of Operations, Ambition North Wales, and Kirrie Roberts, Digital Connectivity Budget Manager, to give a presentation on the Annual Report.

RESOLVED:

That the Annual Report for 2023-24 be noted.

26. ANNUAL PERFORMANCE REPORT 2023/24 TO INCORPORATE THE COUNCIL PLAN END OF YEAR PERFORMANCE REPORT 2023/24 (link to recording)

The Chief Officer (Planning, Environment and Economy) introduced the report. The Committee was asked to consider the Annual Performance Report 2023-24, noting the Council Plan (2023-28) end of year performance for 2023-24.

It was requested that the following paragraph on page 79, right side, be removed: "Flintshire County Council continues to pride itself on being a Council which performs highly for its local communities and one which is guided and motivated by a set of strong values".

The Committee felt that the report needed further work prior to presentation at full Council, including formatting and hyperlinks on pages to all actions. It was also suggested that commentary be used rather than red mark for red risks.

It was felt that a Members briefing would be helpful to assist Members understanding of the revised format for the Performance Report & Annual Performance report

RESOLVED

(a) That the 2023/24 Annual Performance Report, combined with the Council Plan End of Year 2023/24 Performance Report, be supported noting the performance achieved;

(b) That the first paragraph on page 79 be removed; and

(c) That a briefing be arranged for Members by the Performance Team.

27. WINTER MAINTENANCE – DECISION MAKING REVIEW 2024 (link to recording)

The Chief Officer (Streetscene and Transportation) introduced the report. She provided background information and advised that the report outlined the current winter maintenance policy (see Appendix 1) and proposed alterations to the decision-making process and treatment routes, the legislative requirements for providing such a service, risks, and actions taken by the Streetscene and Transportation portfolio to support winter service operations.

Members welcomed the proposed transition to a domain based approach for a trial period with a view to progressing to a full migration in 2025/26.

RESOLVED:

(a) That the Committee supports the proposal to transition to a domain-based approach for decision making for gritting action with a step change proposed for the 2024/2025 season; and

(b) That the Committee supports the proposal to a full migration to domain-based treatments from the 2025/2026 season following the outcome of the step change over the 2024/2025 season.

28. MEMBERS OF THE PRESS IN ATTENDANCE

There were no members of the press or public in attendance.

(The meeting started at 10.00 a.m. and ended at 11.23 a.m.)

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Chair

ENVIRONMENT & ECONOMY OVERVIEW & SCRUTINY COMMITTEE

Date of Meeting	Tuesday 8th October 2024
Report Subject	Forward Work Programme and Action Tracking
Report Author	Environment & Economy Overview & Scrutiny Facilitator
Type of Report	Operational

EXECUTIVE SUMMARY

Overview & Scrutiny presents a unique opportunity for Members to determine the Forward Work programme of the Committee of which they are Members. By reviewing and prioritising the Forward Work Programme Members are able to ensure it is Member-led and includes the right issues. A copy of the Forward Work Programme is attached at Appendix 1 for Members' consideration which has been updated following the last meeting.

The Committee is asked to consider, and amend where necessary, the Forward Work Programme for the Environment & Economy Overview & Scrutiny Committee.

The report also shows actions arising from previous meetings of the Environment & Economy Overview & Scrutiny Committee and the progress made in completing them. Any outstanding actions will be continued to be reported to the Committee as shown in Appendix 2.

RECOMMENDATION	
1	That the Committee considers the draft Forward Work Programme and approve/amend as necessary.
2	That the Facilitator, in consultation with the Chair of the Committee be authorised to vary the Forward Work Programme between meetings, as the need arises.
3	That the Committee notes the progress made in completing the outstanding actions.

REPORT DETAILS

1.00	EXPLAINING THE FORWARD WORK PROGRAMME AND ACTION TRACKING
1.01	Items feed into a Committee's Forward Work Programme from a number of sources. Members can suggest topics for review by Overview & Scrutiny Committees, members of the public can suggest topics, items can be referred by the Cabinet for consultation purposes, or by County Council or Chief Officers. Other possible items are identified from the Cabinet Work Programme and the Improvement Plan.
1.02	In identifying topics for future consideration, it is useful for a 'test of significance' to be applied. This can be achieved by asking a range of questions as follows: 1. Will the review contribute to the Council's priorities and/or objectives? 2. Is it an area of major change or risk? 3. Are there issues of concern in performance? 4. Is there new Government guidance of legislation? 5. Is it prompted by the work carried out by Regulators/Internal Audit? 6. Is the issue of public or Member concern?
1.03	In previous meetings, requests for information, reports or actions have been made. These have been summarised as action points. Following a meeting of the Corporate Resources Overview & Scrutiny Committee in July 2018, it was recognised that there was a need to formalise such reporting back to Overview & Scrutiny Committees, as 'Matters Arising' was not an item which can feature on an agenda.
1.04	It was suggested that the 'Action tracking' approach be trialled for the Corporate Resources Overview & Scrutiny Committee. Following a successful trial, it was agreed to extend the approach to all Overview & Scrutiny Committees.
1.05	The Action Tracking details including an update on progress is attached at Appendix 2.

2.00	RESOURCE IMPLICATIONS
2.01	None as a result of this report.

3.00	CONSULTATIONS REQUIRED / CARRIED OUT
3.01	In some cases, action owners have been contacted to provide an update on their actions.

4.00	RISK MANAGEMENT
4.01	None as a result of this report.

5.00	APPENDICES
5.01	Appendix 1 – Draft Forward Work Programme Appendix 2 – Action Tracking for the Environment & Economy OSC.

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	Minutes of previous meetings of the Committee as identified in Appendix 2. **Contact Officer:** Margaret Parry-Jones Overview & Scrutiny Facilitator **Telephone:** 01352 702427 **E-mail:** Margaret.parry-jones@flintshire.gov.uk

7.00	GLOSSARY OF TERMS
7.01	**Improvement Plan:** the document which sets out the annual priorities of the Council. It is a requirement of the Local Government (Wales) Measure 2009 to set Improvement Objectives and publish an Improvement Plan.

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Environment & Economy Overview & Scrutiny Forward Work Programme 2024/25

Date of Meeting	Subject	Purpose of Report/Presentation	Scrutiny Focus	Responsible/Contact Officer	Submission Deadline
12 Nov 24 **10.00 am**	Residual Waste Collections Change and Communication Plan	To receive a progress report on the implementation of the conversion of the FCC fleet to electric and alternative fuels	Assurance	Chief Officer – Streetscene and Transportation	
10 Dec 24 **10.00 am**	Integrated Transport Strategy & Regional Transport Plan (RTP)	To receive an update	Assurance	Chief Officer Streetscene & Transportation	
	Streetscene Standards	To consider the recommendations of the Task & Finish Group	Pre-decision	Chief Officer Streetscene & Transportation	
	Car Parking Strategy	To receive an update	Assurance	Chief Officer – Streetscene and Transportation	
	Conversion of the FCC fleet to electric or alternative fuels	To receive an update	Information	Chief Officer – Streetscene and Transportation	

ENVIRONMENT & ECONOMY OVERVIEW & SCRUTINY FORWARD WORK PROGRAMME
APPENDIX 1

Date of Meeting	Subject	Purpose of Report/Presentation	Scrutiny Focus	Responsible/Contact Officer	Submission Deadline
	Welsh Government Deposit Return Scheme update	To receive an update	Assurance	Chief Officer – Streetscene and Transportation	
	Cost Recovery for Supporting Public Events	The purpose of this report is to inform Scrutiny in respect of the level of support Streetscene & Transportation offer to event organisers, and the necessity to recover associated costs.	Information	Chief Officer – Streetscene and Transportation	
14 Jan 25 10.00 am	Fleet Services Update	To receive an update	Assurance	Chief Officer Streetscene and Transportation	
	Grass Cutting Performance Update	To receive an update	Assurance	Chief Officer - Streetscene and Transportation	
	Waste Compliance and Duty of Care Across the Council	To receive an update	Assurance	Chief Officer – Streetscene and Transportation	
11 Feb 25 10.00 am					
11 March 25 10.00 am					

ENVIRONMENT & ECONOMY OVERVIEW & SCRUTINY FORWARD WORK PROGRAMME
APPENDIX 1

Date of Meeting	Subject	Purpose of Report/Presentation	Scrutiny Focus	Responsible/Contact Officer	Submission Deadline
8 April 25 **10.00 am**					
6 May 25 **10.00 am**					
10 June 25 **10.00 am**					
8 July 25 **10.00 am**	Annual Performance Report 2024/25 to incorporate the Council Plan End of Year Performance Report 2024/25	To review the levels of progress in the achievement of activities and performance levels identified in the Council Plan and to consider the Annual Performance Report.			

Items to be added :-

Place Making Plan Buckley
Place Making Plan Holywell
Update report on Bailey Hill in the Spring 25 with Site Visit in advance
Access Barrier Review update report

Update on 20mph New Guidance - Member Briefings 22 October 2024
- 1.30 pm In person Alyn & Deeside Room, County Hall, Mold
- 5.30 pm Zoom

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Action tracking for Environment & Economy OSC October 2024

Item/Date	Discussion	Action	By whom	Status
11 June 2024	Streetscene Standards Task & Finish Group – change of membership	Further meetings required and confirmation of Membership	Chris Goddard/ Facilitator	Ongoing
	A discussion took place around the 5 min parking outside schools and it was said that this matter was being considered by the School Parking Task and Finish Group.	It was requested that confirmation be sought that this was correct and if so that members of the Environment Overview and Scrutiny Committee receive an update on progress.	Facilitator	Ongoing T & F Group are meeting on the 30th of October.
Annual Performance Report & Performance Report	Members felt that a Members briefing would be helpful to assist Members understanding of the revised format for the Performance Report & Annual Performance report	Members briefing to be arranged	Emma Heath	Ongoing
Forward Work Programme	Access Barrier Review update report expected before end of calendar year.	Report to be added to Forward Work Programme	Facilitator	Completed

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Environment & Economy Overview & Scrutiny Committee

Date of Meeting	Tuesday, 8th October 2024
Report Subject	Review of Reduced Opening Hours at Household Recycling Centres
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and the Regional Transport Strategy
Report Author	Chief Officer for Streetscene and Transportation
Type of Report	Operational

EXECUTIVE SUMMARY

In August 2023, Streetscene & Transportation were instructed to find additional operational savings that would facilitate significant budget reductions as part of the Council's medium term financial strategy (MTFS). Streetscene Service Delivery put forward a range of options for members to consider.

This report, which has been requested by members of the Environment and Economy Overview and Scrutiny Committee, presents an overview of the approved changes to the operation of household recycling centres (HRC) within the county, as laid out in the Streetscene and Transportation efficiencies proposal for 2024/25. The changes were proposed to optimise efficiency, reduce costs, and explore potential income streams while maintaining essential services for the community. This report focuses on the first phase of the change programme, part-time opening for HRC sites.

RECOMMENDATIONS	
1	That the Environment & Economy Overview & Scrutiny Committee notes / welcomes the update following the approved changes to opening hours at the household recycling centres (HRCs)
2	That the Environment & Economy Overview & Scrutiny Committee endorses the introduction of a booking system which would reduce waiting times and improve the customer experience.

REPORT DETAILS

1.00	**BACKGROUND**
1.01	Streetscene Service Delivery are continually exploring ways to provide operational savings and efficiencies to ensure value for money and high levels of quality services. In Quarter 1 of 2023-2024, Service Delivery undertook a review of the HRC staffing structure to reduce the number of staff on site per day. This change reduced the number of charge hands and agency staff required per week and realised an operational reduction in costs for the service. However, this left only one option for further savings within this area of the service, reduced opening hours at the HRCs. In August 2023, Streetscene Service Delivery were instructed to find additional operational savings that would facilitate significant budget reductions as part of the Council's Medium Term Financial Strategy. Service Delivery put forward several options, although not all were supported or accepted. The following changes to HRC provision were supported and approved by County Council as part of the 2024/25 budget setting. The HRC Change Programme was divided into 3 distinct phases: • Phase 1 – Part-Time Opening Times • Phase 2 – DIY / Non-household Waste • Phase 3 – Trade and Business Site
1.02	**SERVICE CHANGE 1 - Part-Time Opening of HRC Sites**
	Part-Time Opening of HRC Sites: • Reduction of opening days from 7 to 5 days a week, excluding weekends. • Expected implementation date: May 1st, 2024. • Estimated annual budget impact: £0.220m. • Budget impact via reduced agency and staff hours. Prior to the change, the Council operated five HRCs across the county, which were open from 9am until 5pm, over 7 days per week with staff rostered on a five-day working pattern. This arrangement presented significant inefficiencies in rostering, resulting in inflated staff and agency costs. Since the introduction of the vehicle permit scheme in 2023, traffic counts and tonnages at each site have reduced, meaning that each site experiences large variations in the number of visitors per hour and per day. Reducing the opening schedule was preferred by both officers and Members of the Overview and Scrutiny Committee, over closing one site completely. Reducing the opening hours across all sites reduces the number of operatives required to cover the HRC sites and allows them to return to the general pool of Streetscene workforce to be redeployed in other essential frontline service. This in turn reduces the requirement for agency and overtime to deliver essential services across the wider service.

1.03 The table below shows the number of operatives required per day at each site and gives an indicative figure of salary requirements. This includes on-costs such as pension contribution and other employee benefits therefore illustrating the full cost per day. The table shows the savings between the seven-day opening model and the five-day opening models, which equates to £216,884.10.

	Greenfield	Buckley	Mold	Sandycroft	Oakenholt	Totals
Operatives per day	4	4	3	3	3	17
Operatives Cost per Day	£490.69	£490.69	£368.02	£368.02	£368.02	£2,085.42
362 Days per Year (7 day)	£177,629.06	£177,629.06	£133,221.79	£133,221.79	£133,221.79	£754,923.49
258 Days per Year (5 day)	£126,597.50	£126,597.50	£94,948.13	£94,948.13	£94,948.13	£538,039.39
						£216,884.10

It is important to note that the number of staff per day does not reflect the total number within the HRC team. In order to cover weekends, annual leave, sickness and training, a team of 22 Streetscene operatives is required as a minimum to ensure that the weekly rota is fully covered.

1.04 **Options Considered for Opening Models**

The delivery of part time opening was divided into two available options with both customer satisfaction and staff work life balance considered; however, the requirement to operate on a reduced budget was the key component to the decision-making process. The following two options were presented to the Cabinet Member, Chief Officer Team, and Trade Unions (TUs): -

Option 1	Greenfield	Buckley	Mold	Sandycroft	Oakenholt
Monday	CLOSED	9AM - 5PM	9AM - 5PM	CLOSED	9AM - 5PM
Tuesday	9AM - 5PM	CLOSED	9AM - 5PM	9AM - 5PM	CLOSED
Wednesday	CLOSED	9AM - 5PM	CLOSED	9AM - 5PM	9AM - 5PM
Thursday	9AM - 5PM	CLOSED	9AM - 5PM	CLOSED	9AM - 5PM
Friday	9AM - 5PM	9AM - 5PM	CLOSED	9AM - 5PM	CLOSED
Saturday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Sunday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Total Hours per site	40	40	40	40	40

Option 1 – This option offered staggered opening hours across all domestic sites and generated the lowest budget efficiency. This model went against the recommendation of the Scrutiny Committee to retain services on Mondays, Fridays and weekends. This schedule ensured that there would be sites open each day; however, the pattern requires more staff and offered much less savings. It also presented undesirable working patterns for staff, combining weekend working with split days off. Option 1 invited resistance from the TUs and staff, which could have resulted in higher absence rates, increased overtime, and agency costs thus negating any potential efficiency.

Option 2	Greenfield	Buckley	Mold	Sandycroft	Oakenholt
Monday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Tuesday	CLOSED	CLOSED	9AM - 5PM	9AM - 5PM	CLOSED
Wednesday	CLOSED	CLOSED	CLOSED	CLOSED	CLOSED
Thursday	9AM - 5PM	9AM - 5PM	CLOSED	CLOSED	9AM - 5PM
Friday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Saturday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Sunday	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM	9AM - 5PM
Weekly Hours per site	40	40	40	40	40

Option 2 – This option prioritised operational efficiency and staff work-life balance. Option 2 also allowed the service to realise the full budget efficiency. This option sees all sites closed 2 days sequentially, but no provision on a Wednesday. It did, however, meet the request of the Scrutiny Committee to retain services on Mondays, Fridays and weekends. Conversely, this schedule improved rostering and staff working patterns, reducing the potential for higher absence rates, increased overtime, and agency costs, and allowing non-working days to be taken as two consecutive days.

The Chief Officer Team, Cabinet Member and Trade Unions all supported Option 2 as the preferred way forward.

1.05 **Progress to Date**

The total closure of all sites one day per week has given Supervisors the opportunity to carry out essential maintenance and contractor collections when sites are closed, thereby reducing the risk to staff and customers when on site.

In the first four weeks following the change, increased queues to access the sites were reported, particularly in Buckley where access is shared by surrounding businesses and the football ground. This has become less of an issue over time and customers have become more accustomed to the new schedule. The ideal solution to this issue in future would be an online booking system for all customers.

The majority of local authorities across Wales now operate a booking system for customers to access HRCs, which has multiple benefits:

- Reduced customer queues and waiting times
- Greater traffic flow control
- Reduced traffic hazards on site
- Real visitor data to predict and manage trends.
- Improved site efficiency e.g. availability of skips, use of site plant, equipment and transport vehicles
- Improved demand management and enable more time to help visitors to segregate their waste streams, recycle more and reduce contamination.
- Prevent out of county residents using the sites.
- Enable sites to become more data driven e.g. waste types and volumes – enables us to understand waste trends, peak times, and popular disposal materials.
- Facilitate compliance by tracking and monitoring waste types and quantities, ensuring that all waste adheres to the latest regulations.

	• Prevent illegal disposal and ensures proper handling of hazardous materials. To date, there has been no impact on the recycling performance for each site. In addition, Streetscene has not experienced an increase of fly tipping since the change.
2.00	**RESOURCE IMPLICATIONS**
2.01	**Revenue:** there are currently no implications for the approved revenue budget for this service for either the current financial year or for future financial years, and the change will realise the efficiencies put forward. **Capital:** there are no implications for the approved capital programme for either the current financial year or for future financial years **Human Resources:** there are no implications for additional capacity or for any change to current workforce structures or roles, although, following consultation with HR, trade unions and staff, working patterns were adjusted.

3.00	**IMPACT ASSESSMENT AND RISK MANAGEMENT**
3.01	The following risks were identified as part of project and through operational management. Each risk was assessed in terms of likelihood and potential impact, with mitigation strategies developed accordingly. Risk 1: Customer Dissatisfaction and Increased Waiting Times Likelihood: Medium Impact: Medium to High Mitigation: The phased introduction of a part-time opening schedule initially frustrated some customers accustomed to a seven-day service. However, communication strategies, including signage, social media, and council publications, helped inform residents about the changes. The proposed online booking system will further mitigate this risk by controlling site access, reducing queues, and improving the overall customer experience. Risk 2: Increased Fly-Tipping Likelihood: Low to Medium Impact: High Mitigation: Although no significant increase in fly-tipping was reported following the reduction in HRC opening hours, this remained a key concern. A combination of enhanced surveillance, more frequent monitoring of illegal dumping hotspots, and collaboration with enforcement teams has been utilised to address this risk. The Council also promoted awareness campaigns to discourage illegal waste disposal and emphasised the continued availability of waste services. Risk 3: Operational and Staff Workload Disruption Likelihood: Low Impact: Medium Mitigation: The restructuring of staff rosters into a more efficient, sequential closure model reduced the potential for increased absenteeism, overtime, and

	associated agency costs. Regular staff feedback and engagement with Trade Unions helped identify any emerging issues and ensured work-life balance improvements were maintained. Risk 4: Inefficiencies in Waste Management and Recycling Targets Likelihood: Low Impact: Medium Mitigation: Recycling data is monitored and reviewed to ensure that the changes have not negatively impacted the Council's recycling performance. The introduction of a booking system will improve data collection, enabling the service to adjust strategies based on waste trends. Risk 5: Traffic Management and Congestion at Sites Likelihood: Medium Impact: Medium to High Mitigation: Congestion issues were identified in some locations, such as Buckley, following the introduction of the new schedule. An online booking system will facilitate managed traffic flows and reduced the risk of congestion. Risk 6: Health and Safety Risks to Staff and Visitors Likelihood: Low Impact: High Mitigation: With part-time site closures, Supervisors and Mangers, have dedicated time to conduct maintenance and contractor collections, reducing health and safety risks to both staff and visitors during operational hours. Health and safety training and audits are conducted regularly to ensure compliance with all relevant regulations. Risk Monitoring and Reporting: All identified risks are actively monitored and reported to the Senior Management Team. Key risks, particularly around customer satisfaction, recycling performance and environmental compliance, are monitored as part of the Council's ongoing risk management processes.

4.00	**CONSULTATIONS REQUIRED/CARRIED OUT**
4.01	Consultation undertaken with the Deputy Leader of the Council and Cabinet Member for Streetscene and the Regional Transport Strategy, three Trade Unions (UNITE, UNISON and GMB); Chief Officer Team and with the Environment and Economy Overview and Scrutiny Committee prior to the proposals being approved.

5.00	**APPENDICES**
5.01	None

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	None

7.00	CONTACT OFFICER DETAILS
7.01	**Contact Officer:** Christopher Goddard, Streetscene Service Manager **Telephone:** 07867 192311 **E-mail:** Christopher.Goddard@Flintshire.gov.uk

8.00	GLOSSARY OF TERMS **These are provided corporately on the Infonet (link) and maintained by the Executive Office**
8.01	HRC – Household Recycling Centre

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Environment and Economy Overview and Scrutiny Committee

Date of Meeting	8th October 2024
Report Subject	Food Service Plan 2024-25 for Flintshire County Council
Cabinet Member	Cabinet Member for Planning, Public Health and Public Protection
Report Author	Chief Officer Planning, Environment and Economy
Type of Report	Operational

EXECUTIVE SUMMARY

The purpose of the Food Service Plan is to provide an overview of the Food and Animal Feed Service in line with The Framework Agreement on Official Feed and Food Controls by Local Authorities April 2010. The plan sets out the aims and objectives for the Service for the forthcoming year and how these are to be achieved.

RECOMMENDATIONS	
1	To consider and endorse the Food Service Plan 2024-25.

REPORT DETAILS

1.00	**EXPLAINING THE FOOD PLAN FOR FLINTSHIRE COUNTY COUNCIL 2024-25**
1.01	Local authorities are required by the Food Standards Agency (FSA) to take the necessary action to implement the Framework Agreement on Official Feed and Food Controls by Local Authorities. This Framework Agreement became operational from 1st April 2001. The Framework has been developed to ensure a consistent food law enforcement service throughout the country.
1.02	The Service Plan has been produced by officers of the Food Safety and

	Standards Team within the Planning, Environment and Economy portfolio in line with the model format contained within the Food Law Code of Practice (Wales) July 2021. It outlines the proposals for service delivery for the period 1st April 2024 to 31st March 2025. It also contains a review of the service performance for 2023-24 with overall performance for 2023-24 detailed in Appendix 3 within the Service Plan.
1.03	The elements of the Food Service, namely Food Safety, Food Standards and Animal Feed are managed by the Team Manager – Food Safety and Food Standards, who reports into the Community and Business Protection Manager.
1.04	Key achievements for 2023-24 include: • All Category A Food Standards premises inspections due were achieved • All Category A-B Food Hygiene premises inspections due were achieved • 99% of Category C Food Hygiene inspections due were completed • The service dealt with 13 Food Incidents Targets for 2024-25 are: • To complete all Category A - Category C Food Hygiene inspections • To complete all overdue and due in-year Category D Food Hygiene inspections • To complete all Category E Food Hygiene interventions by inspection or Alternative Enforcement Strategy questionnaire that are due or overdue • To complete all Category A and Category B Food Standards inspections • To complete all Category C Food Standards interventions by inspection or Alternative Enforcement Strategy questionnaire that are due or overdue • To inspect all new businesses prioritised for inspection throughout the year • To inspect Feed businesses programmed for inspection as per the Regional Funding model
1.05	The Food Safety and Food Standards service areas were subject to a targeted audit by FSA Wales in June 2024. The auditors were pleased with the progress that had been made since the pandemic. The audit report indicated that good progress has been made to address the recommendations highlighted and that a risk-based approach is being taken.

2.00	**RESOURCE IMPLICATIONS**
2.01	The cost of implementing the plan will be met within the existing Planning, Environment and Economy portfolio budget.

3.00	IMPACT ASSESSMENT AND RISK MANAGEMENT
3.01	The Plan follows the 'farm to fork' principle to ensure food is safe for consumption by all.

4.00	CONSULTATIONS REQUIRED/CARRIED OUT
4.01	None

5.00	APPENDICES
5.01	Food Service Plan 2024 - 25

6.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
6.01	None

7.00	CONTACT OFFICER DETAILS
7.01	**Contact Officer:** Helen O'Loughlin, Team Manager – Food Safety and Food Standards **Telephone:** 01352 703390 **E-mail:** helen.o'loughlin@flintshre.gov.uk

8.00	GLOSSARY OF TERMS **These are provided corporately on the Infonet (link) and maintained by the Executive Office**
	Food Standards Agency - is a non-ministerial government department supported by seven agencies and public bodies. It is the central competent authority for the UK in relation to European Union food legislation. In Wales, The Food Standards Agency in Wales is responsible for Food Safety and Hygiene and Food Labelling Policy. It works with local authorities to enforce Food Safety, Standards and Feed regulations. **The Framework Agreement on Official Feed and Food Controls by Local Authorities** - sets out what the Food Standards Agency expects from local authorities in their delivery of official controls on feed and food law. It was developed in consultation with local authorities, local government associations and the relevant professional bodies. **Food Law Code of Practice (Wales) July 2021** - the Food Law Code of Practice is issued under section 40(1) of the Food Safety Act 1990,

	Regulation 24(1) of The Food Hygiene (Wales) Regulations 2006 and Regulation 6(1) of The Official Feed and Food Controls (Wales) Regulations 2009. It sets out the execution and enforcement of food legislation by Food Authorities and relates to Wales only. The code specifies how a local authority should risk rate a food business following its inspection which determines the frequency of food hygiene and standards inspections of that business. For Food Hygiene there are five risk bands A – E, for Food Standards there are three risk bands, A – C. There is a corresponding Code of Practice for Feed. **Regional Funding Model for Feed** - Since 1st April 2015, the number of inspections of feed premises has been determined by FSA in Wales in the form of the 'North Wales Feed Enforcement Delivery Plan'. **Alternative Enforcement Strategy** – every Competent Authority must devise an Alternative Enforcement Strategy to determine how they will conduct official controls duties at premises rated as low risk (i.e. rated Category E for food hygiene and Category C for food standards). Food hygiene ratings cannot be awarded as a result of this type of intervention. Ratings can only be awarded as a result of a food hygiene inspection of the premises.

FOOD SERVICE PLAN

2024-2025

FLINTSHIRE COUNTY COUNCIL

FOOD SERVICE PLAN 2024-25

INTRODUCTION

The Service Plan relates to the year commencing 1st April 2024 and ending 31st March 2025. It covers the service provision for the Food Safety, Food Standards and Animal Feed functions of Flintshire County Council.

The purpose of this Plan is to provide:

- Information about the scope of the Service
- Information about the services provided
- Information about the means of Service provision
- Information about performance of the Food Service against Performance Targets set out in the Plan
- Information relating to reviewing performance in order to address any variance from meeting the requirements of the Service Plan

Service Plans are usually produced annually to allow for meaningful review and progression, in accordance with the requirements of the Food Standards Agency (FSA) “Framework Agreement on Local Authority Food Law Enforcement” and the Food Law Code of Practice (Wales) July 2021.

In respect to Animal Feed, this function is delivered as part of the North Wales Regional Feed Enforcement Delivery Plan. This is funded by Food Standards Agency in Wales (FSA Wales) with all inspection and sampling targets being reviewed and set by FSA Wales.

For 2024-25, the service is planning to fully realign with the Food Law Code of Practice. As further endorsement of the level of realignment achieved, the Food Standards Agency in Wales have undertaken a targeted audit of the service in June 2024. At this time, the service was deemed to be making good progress on recovery and is taking a risk-based approach.

FLINTSHIRE COUNTY COUNCIL

FOOD SERVICE PLAN 2024-25

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1.0 SERVICE AIMS AND OBJECTIVES

1.1 Aims and Objectives

The aims of the Food Service are to:

1. Promote, through education and enforcement, the sale and/or production of food which is fit and without risk to health.

2. Prevent and control the spread of food borne illness through education and enforcement.

These will be achieved by:

(a) Providing a complete and holistic food law enforcement service covering the areas of food hygiene and safety, food standards and animal feed in accordance with relevant food legislation and Codes of Practice, fulfilling statutory obligations.

(b) Providing a responsive service to demand driven elements such as food safety incidents, outbreaks of food related infectious disease, complaints and request for advice from both businesses and members of the public, in accordance with relevant statutory Codes of Practice

(c) Assisting businesses to comply with all relevant legislation by using a balance of techniques and approaches to ensure the safety and well-being of the Public and of the environment in line with the Public Protection Enforcement Policy 2010.

(d) Maintaining an up-to-date database of all food establishments in the County so that resources can be effectively defined and utilised to meet statutory, national and locally defined targets of inspection, sampling, specific initiatives and tasks set by FSA Wales, other agencies, or based on local need.

(e) Providing an open and transparent Food Service with clear lines of communication for service users.

1.2 Links to Corporate Objectives and Plans

The objectives of the Food Service cut across a range of priorities within the Council Plan. It is particularly relevant to the Economy priority area, which includes a sub-priority of Business.

Details of the Plan are available on the Council's website.

The Food Service sits within the Community and Business Protection Service of the Planning, Environment and Economy Portfolio. Each Service area within Community and Business Protection writes annual Operational Action Plans, which have been informed by a range of external and internal drivers and through a greater focus on robust risk assessment, intelligence led intervention, targeting and performance management. All team members contribute to devising the Operational Action Plans for each Service Area. Food and Feed Law regulation is a statutory duty of the Council.

The following Service Improvement Data is also usually monitored and reported on within the Service Plan:

(a) Food Safety inspections undertaken
(b) Food Standards inspections undertaken
(c) New Food Safety and Standards businesses inspected
(e) Feed inspections carried out
(f) New Feed businesses inspected

The Food Service will continue to implement performance management systems to improve the efficiency and effectiveness of service delivery in a meaningful way to the citizens of Flintshire.

From July 2021 to the end of March 2023, performance monitoring had focused on the performance of the service against the Food Standards Agency COVID-19 Local Authority Recovery Plan: guidance and advice to local authorities for the period from 1 July 2021 to 2023-24. This was to ensure resources were targeted where they added the greatest value in providing safeguards for public health and consumer protection in relation to food and to maintain the credibility of the Food Hygiene Rating Scheme. During 2023-24, the Food Hygiene and Food Standards service areas were working towards full realignment with the Food Law Code of Practice.

For 2024-25, performance will be monitored against the Food Law Code of Practice (Wales) July 2021 for those premises due inspection within this financial year and against Appendix 2 of this plan for Medium and Low risk premises that are overdue their inspection.

2.0 BACKGROUND

2.1 Authority Profile	Flintshire is a Unitary Authority of 43,464 hectares and a population of approximately 155,000 as per the 2021

	Census. It is made up of a mixture of small towns and conurbations, particularly to the south, with rural and agricultural land is predominantly located in the north. The population is subjected to small seasonal fluctuations due to influx of tourists to the area. It has several industrial estates on which food manufacturers are located, as well as headquarters for several food manufacturers including one large national food retailer. The coastal edge of Flintshire County Council abuts the Dee Estuary upon which a cockle and mussel bed is situated. There is a small port located at Mostyn.
2.2 Organisational Structure	The Food Service sits in the Community and Business Protection Service within the Planning, Environment and Economy portfolio area. The responsibility of the Food and Feed service sits under the Team Manager – Food Safety and Food Standards, with the line management of most Feed officers being the responsibility of the Team Manager - Trading Standards Compliance and Animal Health. Feed officers also undertake other Trading Standards functions such as Animal Health. Both team managers' report to the Community and Business Protection Manager. The organisational structure of the Food and Feed Service is illustrated on the chart detailed in Appendix 1. Appendix 1 also includes the Management and Cabinet structure of the Council. The Lead Officer for Food Safety is the Team Manager – Food Safety and Food Standards. The Lead Officer for Food Standards is the Specialist Trading Standards Officer (Food Standards) and the Lead Officer for Feed is Specialist Trading Standards Officer (Feed). Specialist services are provided by Public Health Wales and Public Analyst Scientific Services as the Public Analyst.
2.3 Scope of the Food Service	The scope of the service is detailed below: <u>Food Safety</u> • Enforcement of food safety and food hygiene legislation in all food establishments in the County • Registration of food businesses and / or approval • Implementation of the Food Hygiene Rating (Wales) Act 2013 • Investigation of food complaints relating to fitness of food for human consumption; the nature, substance

or microbiological quality of the food, taking appropriate action as necessary
- Investigation of all complaints which relate to hygiene matters in food businesses
- Investigation of sporadic and suspected cases of food-related notifiable diseases
- Investigation and control of outbreaks of food poisoning and food-related notifiable diseases
- Respond to Food Alerts and food-related incidents
- Advice to food business, responses to plans, licensing and land charges referrals
- Providing relevant export attestations to businesses
- Act as Home and/or Originating Authority for other companies where necessary
- Undertake food sampling in accordance with the Sampling Programme
- Educational and promotional initiatives, when appropriate and based on local need

<u>Food Standards</u>

- Respond to requests for consumer advice regarding standards, labelling and composition
- Undertake a programme of visits to food premises within Flintshire
- Investigation of complaints relating to the nature, quality or substance of food and complaints relating to mislabelling of food, taking appropriate action as necessary
- Provide advice and guidance to food businesses
- Undertake food sampling in accordance with the Sampling Programme and in response to incidents
- Undertake promotional and educational initiatives, when appropriate
- Act as Home Authority and Originating Authority for food businesses within Flintshire, where necessary

<u>Feed</u>

- Undertake a pre-planned programme of visits to feed premises within Flintshire
- Undertake a programme of Feed sampling
- Provide advice, information and support to feed business operators, including manufacturers, distributers, and users of feed products
- Investigation of complaints relating to feedstuffs and complaint-based sampling of feed

The Service Delivery Point for the Food Safety, Food Standards and Feed Service is Ty Dewi Sant, Ewloe. For all of the above, the Service Delivery Points are usually open during normal office hours of 8.30 a.m. – 5.00 p.m. The service operates a hybrid working model for service delivery. The team provides a duty system to respond to reactive elements of the service.

There is no official "out of hours" provision. However, there is a call centre who will contact a team member should Food-related incidents be logged.

2.4 Demands of the Food Service

There are 1390 food premises in Flintshire. A full breakdown by activity type is provided below:

Table 1: Breakdown of food premises in Flintshire by FSA activity type

Premises Type	Number
Primary Producer	9
Supermarket / Hypermarket	37
Manufacturers / Processors	46
Retailer – Others	56
Importers / Exporters	1
Distributors / Transporters	53
Small Retailer	242
Restaurant / Café / Canteen	195
Hotel / Guest House	14
Pub Club	150
Takeaway	135
Caring Establishments	181
Schools / Colleges	87
Mobile Food Unit	45
Restaurant / Caterers – Other	138

There are 19 premises approved under Assimilated Regulation (EC) 853/2004 as they handle products of animal origin. This regulation places additional control measures and legislative requirements on these types of premises.

The types of food manufacturers within Flintshire vary greatly in the types of processes they use to produce food. These range from cooked meat and ready meal

manufacturers with national distribution, through to an on-farm milk pasteuriser supplying milk locally and shellfish dispatch centre. The diversity in the types of manufacturers operating within the County places a significant demand on the breadth and depth of knowledge required by officers within the Team.

Dee Estuary and Shellfish

The Dee Estuary has one actively fished cockle bed falling within Flintshire's jurisdiction. The remaining beds fall within Wirral Council's jurisdiction. Regulation of the shellfish bed places significant demands on the Team, particularly during the cockle opening season. The bed has a Class A classification, meaning that cockle harvested from this bed during these months is considered safe to consume without any further processing and can be exported to the EU. The bed is due to be opened at the end of July to the end of September. A further biomass survey will be undertaken by Natural Resources Wales (NRW) in September to determine whether the bed will be open after September.

The management of the Dee accounts for a large portion of the Sampling Budget due to the statutory sampling of the water and shellfish for both microbiological classification and for algal biotoxin monitoring.

There are several companies operating as buyers, grading yards and / or collection points for cockle harvested elsewhere within the UK at different times throughout the year. There is also one approved Dispatch Centre under Assimilated (EC) Regulation 853/2004.

Enforcement on the Dee involves a cross-agency partnership working with NRW, Wirral Council, the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), other Local Authorities, the North Western Inshore Fisheries and Conservation Authorities(NW IFCA) and FSA Wales.

There are approximately 50 licensed cockle gatherers for the Dee Estuary with a low number of endorsees. There are 12 businesses registered with fishing vessels also.

Port Health

There is a port at Mostyn. The service has responsibility in relation to ships coming into port requiring a Ship Sanitation Certificate or a food hygiene inspection.

Food Hygiene Rating (Wales) Act 2013 and associated legislation

Since 28th November 2013, the Food Hygiene Rating (Wales) Act 2013 mandated businesses with a food hygiene rating to display a valid food hygiene rating sticker. The administration of this Act accounts for a considerable volume of work for the Team. The introduction of the Food Hygiene Rating (Promotion of Food Hygiene Rating) (Wales) Regulations 2016, required takeaway food premises to provide a prescribed bi-lingual phrase on promotional literature which contains a price of the food and a method of ordering it remotely.

The Service is committed to delivering the requirements of the Food Hygiene Rating (Wales) Act 2013 and its associated regulations.

Premises Profile

The premises profile, as defined in the Food Law Code of Practice (Wales) July 2021, is detailed in Table 2:

Table 2: Breakdown of premises profile by risk band for Food Safety and Food Standards – May 2024

FOOD STANDARDS			FOOD SAFETY			
Risk	**Min.**	**No. of**	**Risk**		**Min.**	**No. of**
High - A	12 months	7	High	A	6 months	2
				B	12 months	19
Medium - B	2 years	369		C	18 months	338
Low - C	5 years	948	Medium	D	2 years	378
			Low	E	3 years	572
OUTSIDE		13		OUTSIDE		13
UNRATED		62		UNRATED		62
TOTAL		**1399***		**TOTAL**		**1384***

*please note – data within the new database is being reviewed to check for any anomalies. Figures in Table 2 have been taken from the end of year return data.

Feed

Under the Assimilated EU Feed Hygiene Regulation (183/2005), feed activities are clearly defined and are

broken down in to ‘Approved’ and ‘Registered’ feed activities. Activities requiring Approval include any activity involving the manufacture and/or placing on the market of feed additives with all such activities being classed as high risk. There are currently no businesses in Flintshire that have an Approval under the Regulations.

‘Registered’ feed activities are all other feed activities that are undertaken of which there are 14 registerable feed activities defined and coded by the FSA these are termed as ‘R Codes’ and run consecutively from R01 (the highest risk activity) through to R14 (the lowest risk activity).

Table 3: Breakdown of Feed premises by activity type – Apr 24

R01 - Manufacturer	3
R04 – Mobile Mixer	0
R05 – Distributor (including 1 Importer)	13
R06 – Pet Food Manufacturer	1
R07 – Supplier of Surplus Food	19
R08 - Transporter	4
R09 - Stores	1
R10 – On-farm mixer (Annex II)	3
R11 – On-farm mixer	32
R12 – Co-product producer	5
R13 – Livestock Farm	432
R14 – Arable Farm	4

The diversity in the types of Feed Businesses operating and activities being undertaken within the County places a significant demand on the breadth and depth of knowledge required by officers within the Team.

Following a review by FSA Wales in 2014 of the delivery of Animal Feeding Stuffs Enforcement across Wales, the system for risk assessing feed activities was simplified with all registerable feed activities across Wales being broken down in to one of two categories based on risk. These two categories are referred to as ‘*Above the Line’* and ‘*Below the Line’*. Above the line activities are high risk activities, which include businesses undertaking any ‘Approved’ feed activity and those engaged in ‘Registered’ feed activities involving production, processing, storage, transportation, sale of feed, or supply of food co-products, or surplus foods for use in animal feed and ultimately human consumption as part of the human food chain. These activities require a ‘qualified’ and ‘competent’ officer to inspect them.

Below the line activities are the low-risk activities that include premises that are feeding animal feed stuffs to livestock or growing straight feed crops that are to be consumed in their natural state such as silage. This applies to all of Flintshire's farms. These activities have a lower requirement for officers to be able to perform these activities, requiring that an officer be 'competent' to complete this work.

Since 1st April 2015, the number of inspections of feed premises has been determined by FSA Wales in the form of the 'North Wales Feed Enforcement Delivery Plan'.

The breakdown of the Feed premises profile is detailed below by risk band:

Table 4: Breakdown of the premises profile by risk band for Feed.

FEEDINGSTUFFS		
Risk	**Frequency of Inspection**	**Total no. of registered activities subject to inspection**
High	Every 3 years (as per Feed Law Code of Practice)	81
Low / Medium	Every 14 years (as per Feed Law Code of Practice)	436
TOTAL inspectable registered activities		**517**

The majority of food business owners are English speaking with a low requirement for written reports in Welsh. All advisory literature is produced bilingually in accordance with the Welsh Language Standards which came in to force on 30 March 2016. Approximately 14% of residents in Flintshire are recorded as Welsh speaking.

Approximately 4% of food businesses are of ethnic origin (Asian, Chinese, Turkish and Greek) and once again advisory literature is available in a range of ethnic languages to assist in understanding.

2.5 Regulation Policy

The Food Service undertakes enforcement in accordance with the Community and Business Protection Enforcement Policy which was approved by Members in

2010 and reviewed in 2020. This policy has been based upon the principles of the Enforcement Concordat adopted by Members in September 2000 and the Regulators Compliance Code. There is also a Food Safety and Food Standards Enforcement procedure which provides direction to officers in relation to their role.

There is an Enforcement Policy for residents, "Regulation and Enforcement – Involving Local Residents", which was approved by Council in September 2011.

3.0 SERVICE DELIVERY

3.1. Interventions at Food Establishments

The Food Service carries out inspections in accordance with pre-planned programmes drawn up annually and commencing on 1st April each year to coincide with the reporting requirements to FSA Wales. These inspection programmes are based on the risk rating of the premises.

The Food Law Code of Practice stipulates the type of inspection and intervention which can be applied at different risk bands of premises for both Food Hygiene and Food Standards. The corresponding Code of Practice gives the same direction in relation to Feed Interventions.

High risk premises must receive specific types of inspection. However, the Code of Practice allows for Alternative Enforcement Strategies (AES) to be applied to interventions at low-risk premises i.e. those that are risk band E for Food Hygiene or risk band C for Food Standards. The service uses AES questionnaires for this purpose.

<u>Food Safety and Food Standards</u>

For Food Hygiene Risk Bands A – C (High Risk), the team achieved 99% of inspections due. For the remaining 2 inspections that had not been completed, 1 of them had been subject to an intervention but could not be classed as an official control inspection for the purpose of the end of year return.

For Food Standards Risk Band A (High Risk), the team achieved 100% of inspections due.

As part of the move to realign with the Food Law Code of Practice, the service had prioritised interventions in Category D Food Hygiene and Category B Food

Standards premises (Medium Risk) over the lowest risk Category E Food Safety and Category C Food Standards premises (Low Risk). The service had also prioritised low risk Category C Food Standards premises that were due or overdue their Cat A – Category D Food Safety inspections.

For risk band Category D (Medium Risk) Hygiene premises, out of 292 inspections due or overdue, there were 156 outstanding by the end of March 2024 which gives a percentage of 47% of inspections achieved. For the low-risk Category E Food Hygiene interventions due or overdue, there were 203 interventions outstanding at the end of March 2024, which gives a percentage of 46% achieved.

For risk band Category B (Medium Risk) Food Standards premises, out of 199 inspections due or overdue, there were 76 inspections outstanding at the end of March 2024, which gives a percentage of inspections achieved of 62%. For Category C Food Standards, out of a total of 454 interventions due or overdue, there were 213 interventions outstanding at the end of March 2024, which gives a percentage of 53% achieved.

The service became aware of 209 new businesses during the year, of which 147 business received both a Food Hygiene and Food Standards inspection. By the end of March 2024, there were 30 businesses that were overdue their new business inspection by more than 28 days.

While the service had planned to realign fully with the Code of Practice, it was reliant on them being fully staffed throughout the year and the full effect on service delivery of moving to the new database provider was not known at the time of the previous service plan. During 2023/24, one officer left the service area to move to a new position – this left the team with a vacancy for four months. Two officers were also moved from completing programmed work to assist in the preparation and / or implementation of the new database for a significant period of time. Overall, while the service did not fully realign with the CoP during 2023-24, it made good progress which built on the significant work that had been done during 2022-23.

For 2024-25, the service is planning to fully realign with the Food Law Code of Practice. As further endorsement of the level of realignment achieved to date, the Food

Standards Agency in Wales have undertaken a targeted audit of the service in June 2024. At this time, the service was deemed to be making good progress on recovery and is taking a risk-based approach.

With regards to new businesses opening during the year, the service will prioritise those new businesses that undertake open food high risk food preparation but will also endeavour to inspect 90% of all of those businesses that begin to trade during the remainder of the year for both Food Hygiene and Food Standards.

The key objectives for the coming year in relation to programmed inspection and enforcement work are:

Food Safety

- Inspect all Category A – Category D Food Hygiene premises
- Inspect new businesses overdue from 2023-24
- Carry out prioritisation of new businesses we become aware of in 2024-25 and inspect 90% of those registering during the year
- Inspect those Category E food hygiene premises identified as requiring an inspection
- Carry out Alternative Enforcement Questionnaires at the remaining Category E risk band premises that are due this financial year or overdue by the end of March 2025
- To follow the requirements of the Food Hygiene Rating (Wales) Act 2013 and associated regulations
- To revisit all premises receiving a Food Hygiene Rating of 2 or lower to assess compliance, in line with the All Wales Revisit Policy
- To inspect any low-risk premises where local intelligence highlights a potential issue with compliance levels

Food Standards

- Undertake Food Standards inspections at all Category A – Category B premises due / overdue
- Inspect all those Category C food standards premises due their Category A – Category D Food Hygiene inspection
- Inspect new businesses overdue from 2023-24

- Carry out prioritisation of new businesses we become aware of in 2024-25 and inspect 90% of those registering throughout the year
- Inspect those Category C Food Standards premises identified as requiring an inspection
- Carry out Alternative Enforcement Questionnaires at the remaining Category C risk band premises that are due this financial year or overdue by the end of March 2025
- To revisit all premises with major non-compliance with Allergen Information requirements
- To inspect any Category C Standards premises where local intelligence highlights a potential issue with compliance levels

A full breakdown of premises programmed for inspection 2024-2025 by risk band is given in Appendix 2.

There were 24 revisits for Food Hygiene and Food Standards in 2023-24. The number of revisits may increase this year due to the increase in number of full inspections undertaken and due to a potential drop in compliance levels found in Category D Food Hygiene and Category B Food Standards premises.

Feed

For 2023-24, the FSA-directed inspection programme allocated 82 inspections to Flintshire, 17 Above the Line, 65 Below the Line. For a fuller description of 'above the line' and 'below the line', please refer to pages 8-9. In total, the number of inspections achieved was 43 and 14 premises no longer trading, which gave 25 inspections outstanding. The target was not met due to a temporary reduction in staffing levels.

FSA Wales have reduced the funding available to the regional delivery model which impacts on the number of Below the Line inspections that will be completed in 2024-25. Risk assessment has been applied to prioritise inspections. All 10 of the Above the line inspections due have been prioritised for inspection. For Below the Line premises, 36 inspections have been prioritised based on:

- Farms that are not registered but are known to keep livestock by other information sources
- Farms that have registered for Feed but have not yet been inspected and farms we become aware of as trading within the coming year

- Farms that due their Feed inspection this year or overdue and are not members of a Farm Assurance Scheme

The full breakdown of these by the activity code is detailed in Table C in Appendix 2.

3.1.1 Additional Targeted Inspection/ Enforcement Activity

Additional targeted inspection and enforcement activity due to be undertaken is as follows:

- Shellfish – compliance assessment with the completion of registration documents
- Effective and professional liaison and co-operation relating to Primary Authority (PA) matters.
- Investigation of notified food safety related fraud incidents including referrals made anonymously.
- Issue of Ship Sanitation Certificates for incoming vessels to the Port of Mostyn.
- Appropriate response and liaison with other agencies for Civil Contingency matters.

3.1.2 Resources for Inspections and Additional Enforcement Activity

<u>Food Safety and Food Standards</u>

Food hygiene inspections will be undertaken by Environmental Health Officers (EHOs) and Food Safety Officers (FSOs). A full breakdown of resources is given in 4.2 – Staffing Allocation.

Food Standards work will be carried by the Specialist Trading Standards Officer (STSO), EHOs and FSOs.

Other areas of Trading Standards work within food premises such as Weights and Measures will be carried out by the STSO within the Food Safety and Food Standards Team. This places an absolute requirement for a fully competent Trading Standards Officer to be within the Team.

<u>Feed</u>

All aspects of Feed work will be carried out by 0.2 FTE fully qualified STSO and 0.4 FTE Trading Standards Enforcement Officers (TSEOs). This work is to be distributed across 7 officers - 5 of the Feed officers are based in the Trading Standards Compliance and Animal Health Team and 2 officers are based in the Food Safety

and Food Standards team.

3.2 Food/Feed Complaints

Food complaints cover the full range relating to fitness for human consumption, presence of extraneous matter in foods, microbial contamination and Food Standards issues such as food labelling, chemical adulteration and spoilage of food. It is the policy of the Food Service to investigate all food complaints reported including those made anonymously.

Food Safety and Food Standards

All food complaints are dealt with in accordance with the Food Law Code of Practice (Wales) July 2021, having regard to the Public Protection Enforcement Policy 2010.

Based on data for previous years, the estimated number of Food Safety and Food Standards complaints is between 120 and 140. This estimation does not include food complaints referred by other Local Authorities when acting as Home or Originating Authority.

Feed

All feed complaints will be dealt with in accordance with the Feed Law Code of Practice (Wales) 2014, having regard to the documented Public Protection Enforcement Policy 2010.

The number of Feed related complaints received by the service is low, typically no more than 3 a year.

3.3 Home Authority and Primary Authority

Food Safety and Food Standards

Flintshire County Council subscribes to both the Primary Authority and the Home Authority Principle. The Food Safety and Food Standards Service acts as both Home Authority and/or Originating Authority for approximately 50 food businesses. Flintshire is also committed to improving relationships with business and will continue to develop relationships with business and encourage effective business engagement at all times.

There is currently no Primary Authority (PA) partnership in place with any Flintshire-based business for either

Food Safety, Food Standards or Feed. However, as an Enforcing Authority, the team regularly liaises with local authorities who are a PA for a company in relation to inspections and / or complaints / sampling results.

3.4 Advice to Business

The policy of the Food Service is to provide a balanced approach between the provision of advice and enforcement activity. The Service is committed to providing an effective and responsive advice and assistance service, both during inspections or upon request, for all Flintshire businesses, including a service in accordance with the Regulatory Delivery Primary Authority Principle and the Local Government Regulation Home Authority Principle.

In addition, the Service provides advisory literature to businesses to assist them with compliance with relevant legislation.

Food Safety and Food Standards

To maximise the use of resources, advice is targeted as follows:

- During inspections and as part of follow up documentation
- Advice, information and guidance on request, including to new businesses
- Through guidance information available on the website and sign posting to the FSA's website
- Distribution of food safety and food standards material to food businesses, as required

Based on data from the last 3 years, the estimated number of requests for advice is anticipated to be approximately 220-250 in relation to Food Safety and Standards. Advice to businesses is provided by all members of the Team.

Feed

Flintshire is committed to supporting feed businesses and working with them to enable compliance with all regulatory and best practice standards, and to protect animal health and welfare, and the human food chain. In order to maximise the use of limited resources, advice is targeted as follows:

- During inspections and as part of follow up documentation
- Advice, information and guidance on request, including to new businesses
- Through sign posting to guidance information available on the Trading Standards Wales and FSA websites
- Distribution of relevant feed hygiene and standards material to feed businesses.

Based on last year's requests, it is anticipated that the service will receive 10-15 requests for advice from Feed businesses, outside of the advice provided as part of the programme of Feed inspections.

3.5 Food Sampling

Food Safety and Food Standards

Sampling will be carried out in accordance with the documented Sampling Policy for the Food Service which was referred for Member Approval in July 2001. The sampling programme is devised so that the procurement of samples will follow a risk-based approach. The programme takes in to account statutory requirements as well as the requirements of the FSA, the Welsh Food Microbiological Forum and local need.

Samples taken for Food Standards issues are submitted for analysis by the formally appointed and NAMAS accredited Public Analyst for the Council (and Agricultural Analyst for Animal Feed purposes) at Public Analyst Scientific Services, Valiant Way, Wolverhampton, WV9 5GB.

Samples taken as part of the Sampling Programme for Food Safety issues are submitted for microbiological examination by the designated and NAMAS accredited laboratory of Public Health Wales, Ysbyty Gwynedd, Penrhosgarnedd, Bangor. Each Local Authority is allocated sampling credits by Public Health Wales.

Reactive sampling as a result of a food complaint or during food poisoning investigations and sampling undertaking as part of an Infectious Disease incident or outbreak are sent to the laboratory at Ysbyty Gwynedd.

A member of the team attends the WFMF, which is responsible for devising Food Safety Sampling Surveys across Wales, based on risk assessment and intelligence

	to target resources at particular foods or food poisoning organisms of concern within the UK. Samples are taken as part of programmed inspections at manufacturers and premises where product specific legislation applies. The anticipated number of samples for Food Standards is approximately 25 including samples taken for labelling checks as planned sampling and from complaints. There was no Regional Sampling project for Food Standards in 2023-24 as the region did not get confirmation from FSA Wales in sufficient time to run the sampling project. For 2024-25, there is a proposed regional sampling project, which will be reliant on grant funding from FSA Wales. Samples will be taken as part of programmed inspections at manufacturers, approved premises and premises where product-specific legislation applies for analysis. For Food Safety, there will be statutory sampling for shellfish classification, biotoxin monitoring, WFMF Surveys and in response to any serious food complaints / hygiene concerns. The anticipated number of samples for Food Microbiological examination is around 60 samples including the shellfish sampling. <u>Feed</u> There will be a minimal amount of sampling work undertaken by Flintshire officers in relation to Feed as this is prioritised and funded on a regional basis. Other than sampling directly funded by FSA Wales, any other feed samples taken during 2024-25 will only be done in response to complaints received or feed safety incidents.
3.6 Food/Feed Safety Incidents	<u>Food Safety and Food Standards</u> Food Alerts will be initiated and responded to in accordance the Food Law Code of Practice. The contact details for the Team and relevant Agencies (including out of hour's contacts) will be kept up to date. The resource implication of this function depends upon the category of Food Alert and the extent of businesses affected within Flintshire. There were 13 food incidents during 2023-24. From previous data, we anticipate we will be involved in 8 to 14 food incidents during 2024-25.

Feed

Alerts will be initiated and responded to in accordance with the Feed Law Code of Practice (Wales) 2014. Responses to Feed Alerts will be kept in a centralised documented format and the contact details for the Team and relevant Agencies (including out of hour's contacts) will be kept up to date. It is difficult to quantify the resource implication of this function as it depends upon the nature of the Feed Alert and the source, type, quantity and distribution of feed product involved.

3.7 Liaison with Other Organisations

The Food Service is committed to ensuring effective liaison with other relevant organisations to enforce consistency of approach. This includes liaison with:

- FSA Wales, NRW, CEFAS and Public Health Wales (PHW)
- Professional bodies such as Chartered Institute of Environmental Health (CIEH), Chartered Trading Standards Institute (CTSI)
- Other Local Authorities
- Relevant local and regional bodies such as the Dee Estuary Cockle Fishery Advisory Group and North Wales and Wirral Shellfish Liaison Group
- Liaison with regional and national panels including the All Wales Food Safety and Communicable Disease Expert Groups, WFMF, Food Hygiene Rating Steering Group and North Wales Food and Communicable Disease Task Group
- Relevant service areas within Flintshire County Council such a Planning and Licensing

The Food Team have monthly Team Meetings. There is also a weekly management meeting for Team Managers and the Service Manager.

The Feed element of the service is committed to ensuring effective liaison with partners and other relevant organisations to ensure consistency of approach. This includes liaison with:

- FSA Wales, Veterinary Medicines Directorate (VMD), Animal and Plant Health Agency (APHA)
- Professional bodies such as CTSI, National Trading Standards (NTS) and the Association of Chief Trading Standards Officers (ACTSO).

	• Other Local Authorities across Wales and the UK • Partner Local Authorities in the North Wales Feed Enforcement Delivery Plan (Wrexham, Denbighshire, Conwy, Gwynedd, Anglesey) • Liaison with regional and national panels including the joint Trading Standards Wales/FSA Feed Working Group, Trading Standards Wales and UK Animal Health and Welfare Panels Officers who deliver the Feed service have regular meetings with the Team Manager – Food Safety and Food Standards and one to ones with their line manager.
3.8 Food Safety and Standards Promotional Work	Educational and promotional activities are important components of a comprehensive Food Service. <u>Food Safety and Food Standards</u> During 2023-24, advice was provided to business during inspections, sampling, complaint investigations and Alternative Enforcement questionnaire completion. Guidance was sent to food and drink exhibitors at Mold Food and Drink Festival as well as providing face-to-face advice to businesses at the event. For 2024-25, we are proposing to undertake promotional work as part of the North Wales Food Standards sampling project on American Imported Confectionary and Drinks. <u>Feed</u> Officers provide advice and guidance on compliance with legal and best practice standards during inspections and when carrying out routine animal health and welfare and disease control work. Promotion work is usually done as part of routine inspection or in response to enquiries made by business to the service.
3.9 Control and Investigation of Outbreaks and Food Related Infectious Disease	Investigation and control of food-related infectious disease is in line with the Communicable Disease Outbreak Plan for Wales, which was approved by Members in 2011. The plan was revised by Public Health Wales in conjunction with partners including local authorities and published in January 2024.

Investigations of sporadic notifications of food related infections disease follow documented procedures. It is estimated there will be approximately 330 - 350 cases of sporadic notifications and between 0 and 10 outbreaks. Public Health Wales have introduced molecular testing of faecal samples of suspected cases and this has resulted in an increase in the number of positive cases detected for specific organisms.

Campylobacter was the highest incidence of food-borne illness for 2023-2024 in Flintshire and account for approximately 74% of cases. Cases of Campylobacter were sent a questionnaire to complete which, when returned to the service, was reviewed by a competent officer to assess for any food-related risk factors.

Outbreaks are characteristically resource intensive but do not follow an annual trend, therefore the anticipated burden on staffing cannot be predicted. Should they occur the impact on resources cannot be over-estimated and would require rapid contingency planning for maintaining the delivery of the rest of the Service.

4.0 RESOURCES

4.1 Financial Allocation

The financial allocation for the Food Service is split between budgets provided for the Food Safety and Food Standards and for Animal Health. The expected overall level of expenditure providing the Food Safety and Food Standards Service for 2024-25 is detailed in Table 5.

Table 5: Expected Overall Budget for the Food Safety and Food Standards Team 2024-2025

COST ITEM	FINANCIAL ALLOCATION
(a) Staffing (total staff costs)	£642,738
(b) Travel (mileage and rail warrants)	£4,127
(c) Equipment	£3,460
(d) Sampling	£4,177
(e) Shellfish Sampling	£10,000
(f) Support Costs for Printing and Translation	£1,150
(g) Training	Centrally held budget.

The Food Sampling budget covers Food Safety and Food Standards. This is in addition to the allocation provided by Public Health Wales. Additional funding can be made available should there be an incident. There is an income target of £8,712 which is generated by Food Hygiene re-rating inspections, Export Health Attestations and Ship Sanitation Inspections.

Table 6 shows the expected overall level of expenditure for Feed Service delivery:

Table 6: Expected Budget for the Feed Service Delivery 2024-25

COST ITEM	FINANCIAL ALLOCATION
(a) Staffing (total staff costs)	£30,494
(b) Travel (including mileages and Subsistence	£891
(c) Equipment	£500.00
(d) Sampling	Budget is held Regionally
(e) Training	Centrally held budget

4.2 Staffing Allocation

The Food Safety and Food Standards team consists of the Team Manager – Food Safety and Food Standards 1.0 FTE, 6.5 FTE Environmental Health Officers (EHOs), 3.0 FTE Food Safety Officers (FSOs), 1.0 FTE Specialist Trading Standards Officer – Food Standards (STSO) and 1.0 FTE Trading Standards Enforcement Officer (TSEO). The Team Manager – Food Safety and Food Standards is the Lead Officer for Food Safety and the STSO is the Lead Officer for Food Standards, both of which are designations required by the Food Law Code of Practice.

EHOs and FSOs undertake both Hygiene and Standards work. The STSO undertakes Food Standards, Feed and other TS duties in Food premises. The TSEO does not undertake any Food Safety or Food Standards duties – they undertake Animal Health, Feed and other TS duties in non-food businesses.

For part of 2023/24 and 2024/25, there has also been a fixed-term Trainee EHO position which has been funded by the FCC Modern Trainee scheme. This post finishes as of September 2024.

Administrative support is provided by 1.0 FTE Administration Officer which sits within the Planning, Environment and Economy portfolio.

All EHOs in post are qualified and registered with the Environmental Health Registration Board or subsequent requirements. All of the FSOs hold the Higher Certificate in Food Control. All officers are qualified in HACCP Principles (Hazard Analysis Critical Control Points).

Officers are authorised appropriately for the duties they perform. Two of the EHOs are at a level of authorisation which does not allow them to serve Hygiene Emergency Prohibition Notices or seize and detain food. They are due to be assessed against the competency framework during the year for their authorisation being increased.

The STSO – Food Standards holds the Diploma in Trading Standards and has also successfully completed the five-day QMS Auditor/Lead Auditor training course.

The breakdown of resources required to deliver the Food Safety and Food Standards service is given below:

Table 7: Full Breakdown of Resources by Full Time Equivalent (FTE) to Deliver the Food Safety and Food Standards Service

Intervention Type	Food Safety FTE	Food Standards FTE
Inspections	4.2	3.2
Revisits	0.1	0.1
Complaints and Food Incidents	0.4	0.1
Primary Authority	0.0	0.0
Food Business advice/promotion/ other Non-Official Controls Interventions	0.6	0.1
Communicable Disease	1.4	N/A
Sampling	0.2	0.2
Service Management / Technical Support / Regional Liaison	1.2	
TOTAL FTE	**11.8***	

*the 0.3FTE gap has been filled by a Trainee EHO, who is due to leave their post at the end of August 2024.

The inspection resource requirement is based on completing the majority of inspections as joint inspections i.e. the officer does both a Food Safety and Food Standards inspection during the same visit. This flexibility is key to ensuring the service can be delivered based on current resources.

Feed

All aspects of Feed work will be carried out by seven individual officers who sit in either the Food Safety and Food Standards team or the Compliance and Animal Health team within the Community and Business Protection service. The overall management of the Feed service area is the responsibility of the Team Manager – Food Safety and Food Standards. The Lead Officer for Feed is currently provided by the Team Manager – Trading Standards Compliance and Animal Health.

All officers involved in the delivery of the feed service also undertake other duties which are non-Feed related. The Feed component of their roles for this year equates to 0.2 FTE Specialist Trading Standards Officer and 0.4 FTE Trading Standards Enforcement Officer.

The STSO – Food Standards satisfies all of the criteria to be deemed ‘qualified’ and ‘competent’ to undertake the full breadth of Feed interventions. At the time of writing, the STSO in the Trading Standards Compliance and Animal Health team is vacant and is going through the recruitment process.

Four of the TSEOs satisfy the ‘competency’ criteria based on experience and training that enables them to perform Below the Line Feed work on Livestock and Arable Farms. A further TSEO is due to commence their Feed portfolio in 2025/26 which will enable them to undertake both Above and Below the Line inspections. Until this time, they are undertaking a supported programme of work that will enable them to undertake Below the Line inspections during 2024/25.

4.3 Staff Development Plan

During the forthcoming year the following training is planned:

(i) Support of national and regional seminars on relevant subject matters.

(ii) In-house training sessions

Each member of the Team will receive the required twenty hours Continuing Professional Development as required by the Food Law Code of Practice (Wales) July 2021 (or thirty hours for officers with Chartered Status). Staff will be subject to annual Staff Appraisals in line with the Corporate policy with a mid-year review which identifies and tracks training and development needs. All staff have monthly one to ones with the Team Manager to identify and monitor areas requiring development.

All officers achieved the required CPD during 2023-24 and they are fully supported to achieve this for 2024-25.

Feed

All authorised officers will take part in training to ensure the meet the CPD requirements for Feed during 2024-25. All feed training is provided regionally across Wales as part of the North Wales Regional Feed Enforcement Delivery Plan that is funded by FSA.

5.0 QUALITY ASSESSMENT

5.1 Quality Assessment and Internal Monitoring

Food Safety and Food Standards

Within the Food Service, quality systems are in place to ensure that work is completed and checked by a competent person in line with the fully documented Internal Monitoring Procedures. Documented procedures and work instructions exist to ensure consistency of approach with various computer report mechanisms to check accuracy on the Placis Database. Work Instruction is provided on key areas of work retained within formal Procedure Manuals.

The Team Manager sits on the North Wales Food and Communicable Disease Task Group, the All Wales Food Safety Expert Group and the All Wales Communicable Disease Expert Group. The STSO – Food Standards also sits on the North Wales Food and Communicable Disease Task Group. These forums offer the opportunity to discuss a wide range of quality issues relevant to Food Law Enforcement and Food Hygiene incidents and outbreaks.

The service completed and returned End of Year Return questionnaires to the FSA which assessed the service's

performance against the FSA-priorities during 2023-24 for Food Hygiene, Food Standards and Feed.

During 2023-24, internal training sessions were held as a result of the Internal Monitoring undertaken. As a result of this training, further training on completion of inspection records was also provided.

Feed

Quality systems are also in place to ensure that work is completed and checked by a competent person in line with the fully documented Quality Monitoring Procedures. Documented procedures and work instructions exist to ensure consistency of approach with various computer report mechanisms to check accuracy on the database.

In addition, for the whole Food service, external audits including focused audits, are undertaken by FSA Wales (frequency determined by FSA). The last audit was a targeted audit of the Food Safety and Food Standards service areas in June 2024.

The North Wales Regional Feed Delivery was audited by FSA Wales in November 2019. This audit did not involve FCC directly as two other North Wales were selected.

6.0 REVIEW PROCESS

6.1 Review Against the Service Plan

The Service Plan is subject to annual review. Performance against this Service Plan is monitored by:

- Monthly team meetings
- Monthly one to ones with individual team members
- Informal team briefings held on a regular basis
- Quarterly Feed returns to the regional Feed officer

The FSA require two returns per year for the Food Hygiene and Food Standards elements of the service; one as a six-monthly return and one as year-end.

Appendix 3 provides full quantitative analysis of service delivery during 2023-24.

As overarching achievements:

- 99% of Category A - Category C Hygiene inspections were completed
- 100% of Category A Food Standards inspections

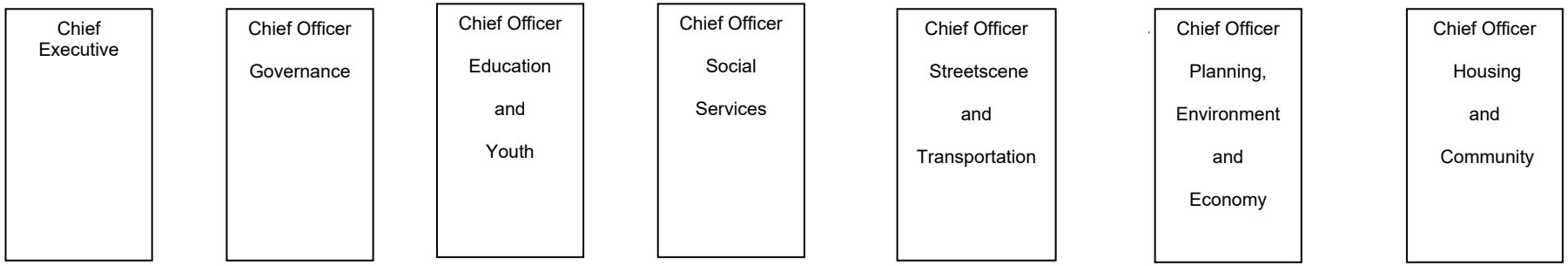
	were completed • The team dealt with 13 Food Incidents • The move to the new database supplier in October 2023 A review of progress with the programme of inspections was undertaken early in Quarter 4 as to the effect of the implementation of the new database on service delivery. As a result of this review, the programme was amended and a team member was removed from programmed work and reactive work to work fully on the new database implementation.
6.2 Identification of Any Variation from the Service Plan	The main areas where the service deviated from the Service Plan for 2023-24 were: • A fewer number of inspections of Category D Food Hygiene premises were undertaken than were due / overdue • A fewer number of Category B Food Standards inspections were completed than were due / overdue • The number of Below the Line Feed inspections undertaken was lower than programmed For Food Safety and Food Standards, the targets not met were due to the team being 1.0FTE down for a proportion of the year and due to the introduction of the new database which has impacted considerably on service delivery. For Feed, the officer resource available was impacted for a significant proportion of the year due to other priorities on vapes and due to staff absence for part of the year.
6.3 Key Areas of Improvement / Development	The main areas for improvement or further development are: • To inspect all overdue new businesses which had been prioritised for inspection • To inspect the overdue Category D premises by the end of Quarter 3 • To undertake AES interventions at the overdue Cat E Food Hygiene inspection • To complete the overdue Category B Food

	Standards inspections • To achieve the inspection of all Feed premises that are Below the Line, funded by the regional model • To register those Feed businesses that have previously not registered with the service • To improve the accuracy of the database in relation to Feed • To devise and follow a schedule for updating all relevant processes, procedures and documentation to reflect the changes due to the implementation of the new database
6.4 Forthcoming Considerations	• While the FSA have directed LAs to return to service delivery as per the Code of Practice, the backlog of lower risk premises inspections is such that the intervention frequency cannot be undertaken within 28 days of the inspection due date. The impact of this backlog on service delivery as per the code will continue for the coming year. The prioritisation of interventions will be done based on risk and on any relevant information • Further consultation is expected in 2024-25 on the outcome of the pilot on the new Food Standards Delivery Model as part of the FSA's Achieving Business Compliance programme • The service is in the process of signing up to the FSA's Register a Food Business platform which will streamline the food business registration process • The Food Safety and Food Standards service has been audited by FSA Wales in June 2024. The recommendations resulting from this audit and the corresponding Action Plan will be progressed • FSA Wales are continuing with a requirement for all LAs in Wales to submit six-monthly data collection, which they commenced during the COVID-pandemic. This places an additional burden on LAs to prepare this data twice yearly

APPENDIX 1

Chart 1

FLINTSHIRE COUNTY COUNCIL - ORGANISATIONAL STRUCTURE



APPENDIX 1

Chart 2

FLINTSHIRE COUNTY COUNCIL – COMMITTEE STRUCTURE

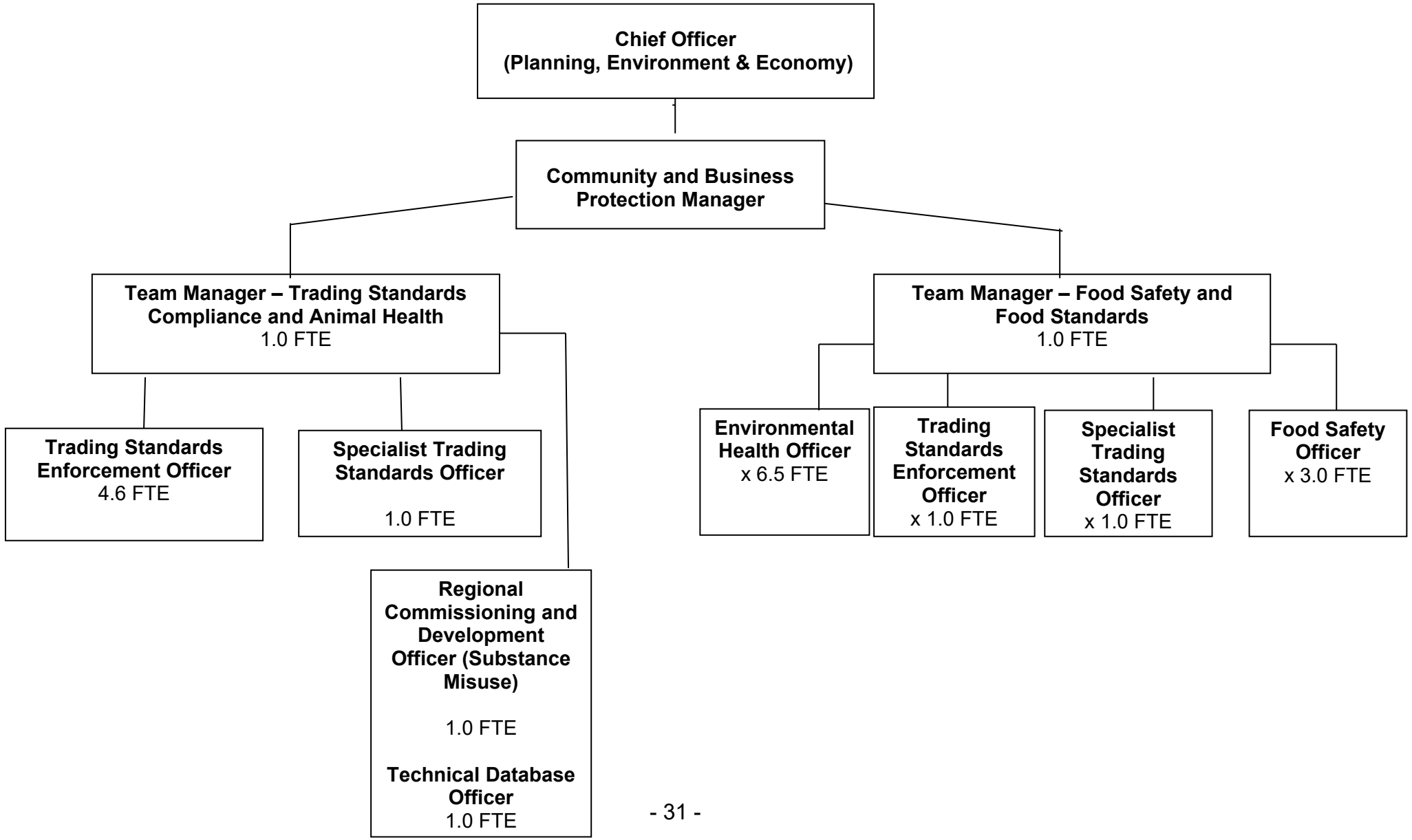
Please refer to the Flintshire County Council website for a current Committee structure:

https://committeemeetings.flintshire.gov.uk/mgListCommittees.aspx?bcr=1

APPENDIX 1

Chart 3

COMMUNITY AND BUSINESS PROTECTION - FOOD AND FEED SERVICE



APPENDIX 2

Table A - breakdown of the profile of programmed Food Safety inspections for 2024-25 by Risk Rating:

PROGRAMMED INSPECTIONS - FOOD HYGIENE		
Risk	**Number Due in Year**	**Number Outstanding from 2023-24**
A	2	0
B	18	0
C	220	2
D	105	156
E	83 (6*)	203 (48*)
New Businesses from previous year	N/A	54
SUB-TOTAL	351 inspections / 77 AES questionnaires	260 inspections / 155 AES questionnaires
TOTAL	**611 inspections / 232 AES questionnaires**	

Table B - breakdown of the profile of programmed Food Standards inspections for 2024-25 by Risk Rating:

PROGRAMMED INSPECTIONS - FOOD STANDARDS		
Risk	**Number Due**	**Number Outstanding from 2023-24**
A	3	0
B	174	76
C	72 (30*)	213 (123*)
New Businesses from previous year	N/A	54
SUB-TOTAL	207 inspections / 42 AES questionnaires	253 inspections / 90 AES questionnaires
TOTAL	**460 inspections / 132 AES questionnaires**	

The Risk Rating is determined in accordance with the Food Law Code of Practice. For Food Safety High Risk premises are those with a Risk Rating of A - C. For Food Standards High Risk premises are those with a Risk Rating of A.

The tables do not include the number of new businesses that we anticipate we will become aware of during the year.

*denotes the number of physical inspections that have been programmed. The remaining number of premises will be completed as an Alternative Enforcement Strategy (AES) questionnaire.

Table C - breakdown of the profile of programmed Feed inspections for 2024-25 by Feed Business Activity:

	PROGRAMMED INSPECTIONS - FEED	
High Risk (ATL)/Low Risk (BTL)	**Registered/Approved Feed Business Activity**	**Number Due**
High Risk – R01-4	Manufacturer of Feed	2
High Risk – R12	Co Product Producers	1
High Risk – R09	Feed Stores	0
High Risk – R05	Feed Distributor	5
High Risk – R08	Feed Transporter	0
High Risk – R10 and R11	On Farm Feed Mixers	1
High Risk – R07	Supplier of Surplus Food	1
High Risk – R06	Pet Food Manufacturer	0
Low Risk – R13	Livestock Farms	36
Low Risk – R14	Arable Farms	0
	Total	**46**

APPENDIX 3 – PERFORMANCE 2023-24

Food Safety

Risk	Interventions Due	No. outstanding at 1st Apr 2024	% Achieved
A High Risk	3	0	100
B High Risk	28	0	100
C High Risk	164	2	99
D Medium Risk	292	156	47
E Low Risk	376 (344 as AES)	203	46
Unrated at 1st Apr 2023	52	2	96

Food Standards

Risk	Interventions Due	No. outstanding at 1st Apr 2024	% Achieved
A High	7	0	100
B Medium	199	76	62
C Low	454 (422 as AES)	213	53
Unrated at 1st Apr 2023	54	2	96

Feed Inspections (as per requirements of FSA Regional Funding Model 2023-24)

Risk	Programmed	No. outstanding at 1st Apr 2024	% Achieved
High	17	1	94
Medium/Low	65	24	63
TOTAL	**82**	**39**	**52**

Food Hygiene Ratings

Profile of Ratings within Flintshire: July 2024

	5 Very Good	4 Good	3 Generally Satisfactory	2 Improvement Necessary	1 Major Improvement Necessary	0 Urgent Improvement Necessary
% of Premises	85.5	11.7	1.5	0.5	0.8	0.0

Food Hygiene Rating Safeguards 2023/24

Number of Requests for Rescore Visit to be undertaken	-	16
Number of Appeals on Rating	-	0
Number of Fixed Penalty Notices	-	0
Right to Reply	-	0

Other data in relation to Demands on Food Service

Food and Feeding Stuffs Complaints

Food Safety number of complaints	-	109
Food Standards number of complaints	-	19
Feed number of complaints	-	1
Food Incidents	-	13
Feed Incidents	-	0

Advice to Business

Food Safety	-	240 requests for advice
Food Standards	-	6 requests for advice
Feed	-	13 requests for advice

Food and Feed Sampling

Food Safety	-	64 plus 9 Shellfish Classification samples
Food Standards	-	10 samples – monitoring for composition and labelling
Feed	-	0

-

Control and Investigation of Outbreaks and Food Related Infectious Disease (Food Safety only)

Sporadic Notifications	-	341 (of which 254 were Campylobacter)
Outbreaks	-	0 Incidents or Outbreaks declared

Other Types of Service Requests (Food Safety only)

Water Disconnections	-	10
Ship Sanitation Certificates	-	0
Export Health Attestations	-	82
Shellfish Registration Document Requests	-	11

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Environment and Economy Overview and Scrutiny Committee	
Date of Meeting	8th October 2024
Report Subject	Additional HMO Licensing Consultation
Cabinet Member	Cabinet Member for Planning, Public Health and Public Protection
Report Author	Chief Officer (Planning, Economy and Environment)
Type of Report	Operational

EXECUTIVE SUMMARY

Flintshire County Council's 2024/25 budget made provision for additional staffing to implement a new 'Additional Licensing' regime for Houses of Multiple Occupation (HMOs). Subject to the outcome of public consultation, this could mean that all houses of multiple occupation (HMOs) will need to be licenced.

Before such licensing arrangements can be introduced Flintshire County Council is required to consult with stakeholders.

RECOMMENDATIONS	
1	To consider and endorse the commencement of a formal consultation on 'Additional Licensing' for Houses of Multiple Occupation which will be open to the public and stakeholders.
2	To receive the outcome of the consultation exercise when it has been completed.

REPORT DETAILS

1.0	LEGISLATIVE BACKGROUND
1.01	The Housing Act 2004 introduced a duty for local authorities to operate a Mandatory Licensing scheme for certain types of HMOs which consist of: • Three of more storeys • With five or more occupants • Forming two or more households. The aim of Mandatory Licensing is to ensure that HMOs are properly managed by a 'fit and proper' person; that the premises are suitably

	equipped with adequate amenities and facilities; and that fire safety arrangements are adequate.
1.02	Only a small number of HMOs in Flintshire fall within the mandatory licensing criteria. As of September 2024, there are fourteen HMOs that require such a licence.
1.03	The Housing Act 2004 also contains provisions to enable local authorities to extend their licensing scheme to other categories of HMO to address particular problems not covered by mandatory licensing, such as low standards in the private rented sector or anti-social behaviour. A licensing scheme that can cover all HMOs is called 'Additional Licensing'.
1.04	Section 56 of the Housing Act 2004 gives the local authority the power to either designate the area of their district, or an area in their district, as subject to additional licensing.
1.05	Section 63(3) of the Act states that the local authority may require a licensing application to be accompanied by a fee, fixed by the local authority.
1.06	Before introducing such a scheme, the Housing Act requires the local authority to take reasonable steps to consult with those who are likely to be affected by the designation of an 'Additional Licensing' scheme. The local authority must also consider any representations received prior to implementation. It states: *Before making a designation, the authority must—* *(a)take reasonable steps to consult persons who are likely to be affected by the designation; and* *(b)consider any representations made in accordance with the consultation and not withdrawn.*
2.0	**THE BENEFITS OF ADDITIONAL LICENSING**
2.01	The effective and efficient management of the private rented sector, and in particular HMO properties, has many benefits. It is anticipated that additional licensing could ensure greater compliance with legal housing requirements. Smaller HMOs, at present, only come to the attention of the Housing Enforcement Team when either a complaint is made about the property, or concern is raised by other professionals. Such a scheme could also identify where such properties are located in the county, which could assist wider policy development in areas, such as Planning.
2.02	In line with the Council Plan 2023-2028, introducing additional licensing will help support the Council's aims to: • Support the private sector to raise standards in the management and condition of housing and promote tenancy sustainment in our communities.

	The requirements associated with additional licensing will help to contribute to the Council Plan by: • Ensuring landlords and tenants are supported to sustain quality homes and well managed tenancies within the local private sector. • Maximising opportunities within the private rented sector for low-income households to live successfully Relieve pressures on homelessness services through better access to privately rented homes. • Raise living standards for tenants living in houses of multi-occupation.
3.00	**AREAS TO BE CONSIDERED AS PART OF THE CONSULTATION**
3.01	A public consultation exercise will be required to be undertaken if Additional Licensing is to be introduced. It is proposed that consultation is carried out with the following individuals, groups, and organisations: • Tenants/ Contract Holders • Landlords • Local Letting/ Managing Agents • Local Residents • Rent Smart Wales • North Wales Fire and Rescue • North Wales Police • Shelter Cymru • Elected Members • Other associated Council Departments (Waste, Homelessness Teams etc) • The Property Ombudsman • Flintshire Local Voluntary Council • Flintshire Citizens Advice Bureau • Neighbouring Local Authorities It should be noted that Rent Smart Wales holds data for FCC landlords and managing agents. This data can be used to target those who have properties registered in Flintshire. Other methods of reaching the community will be to communicate the message through the FCC website; to write to groups and organisations and where applicable, to carry out letter drops. Information can also be provided to Connect Offices, libraries, community centres and Town Community Councils. The consultation period will be required to last for a minimum of 10 weeks. After that period findings will be shared with Members.
3.02	It is proposed that the new licensing regime should include all types of HMOs that meets one of the following two categories that do not fall within the mandatory licensing scheme:

	a) Any type of HMO as defined by Section 254 of the Housing Act 2004 which: b) HMO properties which are defined within the scope of Section 257 of the Housing Act 2004. It relates to a building (or part of a building) which has been converted into, and consist of, self-contained flats. Buildings of this description are also classed as HMOs if; i. the conversion work was not done in accordance with 'appropriate building standards' and still does not comply with them, and ii. less than two-thirds of the self-contained flats are "owner-occupied."
3.03	For the reasons outlined above it is recommended that the additional licensing of HMOs is carried out across the whole county of Flintshire. This is because Flintshire has a wide and varied housing stock of HMOs throughout the county. The most common hazards related to the following areas: • Damp and Mould Growth. • Fire • Domestic Hygiene, Pests and Refuse • Electrical Hazards • Excess cold

4.00	**RESOURCE IMPLICATIONS**
4.01	Budget has been allocated to recruit new officers to implement this scheme as there is no capacity within the existing service.

5.00	**CONSULTATIONS REQUIRED / CARRIED OUT**
5.01	As outlined in the report

6.00	**RISK MANAGEMENT**
6.01	This is a means of managing a housing associated risk due to an increase in compliance with the required standards once the regime has been established.

7.00	APPENDICES
6.01	None

8.00	LIST OF ACCESSIBLE BACKGROUND DOCUMENTS
8.01	**Contact Officer:** Sian Jones, Community and Business Protection Manager **Telephone:** 01352 702132 **E-mail:** sian-jones@flintshire.gov.uk

9.00	GLOSSARY OF TERMS
9.01	Not required

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ENVIRONMENT AND ECONOMY OVERVIEW AND SCRUTINY

Date of Meeting	Tuesday, 8th October 2024
Report Subject	Review of Highways Asset Management Plan (HAMP) and Highway and Car Park Inspection Policy
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and Transportation
Report Author	Chief Officer, Streetscene & Transportation
Type of Report	Strategic

EXECUTIVE SUMMARY

This report provides an update on the county's Highway Asset Management Plan (HAMP) and Highway and Car Park Inspection Policy to ensure that Cabinet members are informed about the current status and future plans for highway asset management.

The report provides an explanation of how the Council utilises the principles of the HAMP to guide the strategy for managing and maintaining the highway infrastructure. It highlights improvements, challenges, and opportunities, and outlines a strategic path forward. The report underscores the importance of effective asset management and compliance with regulations, whilst emphasising the critical role of the highway network, worth over £1.2billion, in maintaining economic and social connectivity, both within Flintshire and for the wider region, as well as supporting key Council objectives and meeting the needs of future generations.

We have committed to reviewing the HAMP every 5-7 years and this report explains how we intend to report on the key assets and progress against our improvement plan over that period utilising Annual Status Reports (ASRs), progress reporting and policy review when necessary.

RECOMMENDATIONS	
1	That Scrutiny notes the revised HAMP as presented in this report and as attached in **Appendix 1.**
2	That Scrutiny notes the revised Highway & Car Park Inspection Policy as a Maintenance Manual in **Appendix 2**.
3	That Scrutiny supports the outlined procedure to provide updates and performance reporting to inform future reviews of both the HAMP and the Maintenance Manual.

4	That Scrutiny endorses the content of this report and supports the review of the Highway Asset Management Plan (HAMP) and the current arrangements and actions of the portfolio to maintain the highway network.

REPORT DETAILS

1.00	BACKGROUND TO THE HIGHWAY ASSET MANAGEMENT PLAN (HAMP)
1.01	The highway network is the highest valued infrastructure asset owned by the Council, with the carriageway and footway asset alone valued in excess of £1 billion. The safe and usable condition of the network is essential in maintaining economic and social connectivity, both within Flintshire and with the wider region. The HAMP framework provides the principles for managing the network, recognising the importance of the highway infrastructure in supporting a number of the Council's key objectives.
1.02	Flintshire County Council as the 'Highway Authority' has a statutory duty to maintain all adopted highways, including highway structures within the county (excluding Trunk Roads). This is carried out notwithstanding the following increasing pressures that continue to exist: • Limited budgets • Limited staff resources • An ageing network with a backlog of maintenance requirements • Increasing public expectations in respect of highway condition
1.03	Asset management is a strategic approach to highway maintenance that identifies the optimal allocation of resources for the management, operation, preservation, and enhancement of the highway infrastructure to meet the needs of current and future customers. However, it needs to be recognised that the condition of the highway network will naturally continue to deteriorate each year and, without sufficient annual investment, the overall condition of the network will decline.
1.04	Residents, businesses and visitors in Flintshire rely on the local highway infrastructure, and the principle of applying an Asset Management strategy is to improve the management of the highway asset in respect of those components that are maintainable at public expense in the most cost-effective way possible with the available funding. Our aim is to ensure effective and efficient, proactive maintenance of the asset to ensure both a safe and serviceable condition in support of the Council's key objectives.
1.05	Currently the Council allocates the following financial resources to be made available for investment through HAMP, which are recognised in the Council's medium term financial strategy (MTFS): • Capital Investment - £1.500m (granted annually on submission of a bid) • Revenue Allocation - £0.225m Previously, Flintshire County Council has benefited from Welsh Government (WG) capital grant funding through the Highways Refurbishment Grant (2018-2021); however, this funding stream was removed by WG in 2020-2021.

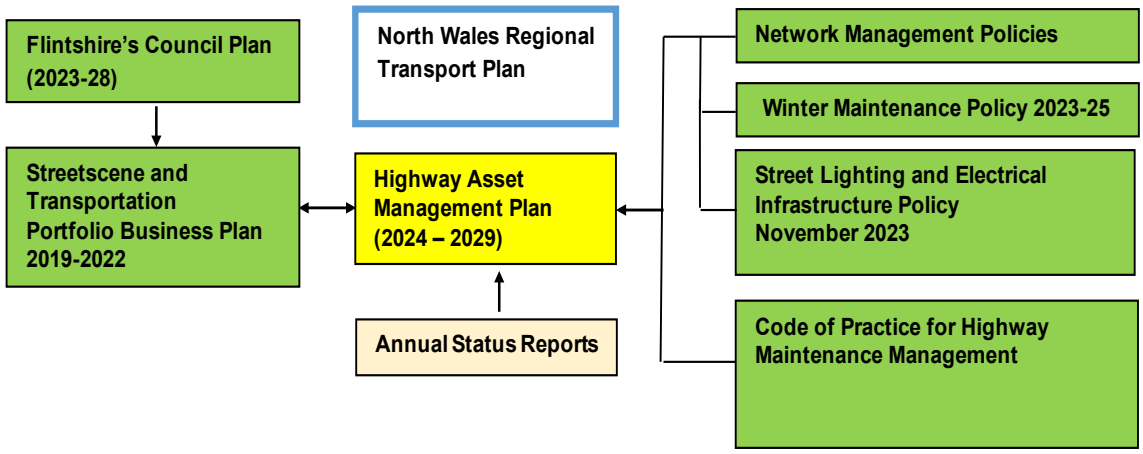
	Subsequently, an additional revenue grant (issued March 2021) of £571k was given to Flintshire in 2021-2022 as a one-off payment, which helped to fund planned maintenance for carriageways. This additional funding from WG was critical in maintaining the network and the council has made WG aware of the importance of protecting this funding source in future years. This additional funding has not been available in recent years and there is no indication of additional funding in the coming years.
1.06	Ideally, the authority would like to achieve a continuance of the current condition level – this is known as "Steady State". The level of capital investment required to achieve this position was calculated in 2016 as £2,745,680 per annum, and this figure has been recalculated in 2024 and more than £3.92m per annum is now required. This level of investment would simply maintain the condition of the carriageways alone and the required investment level does not consider the deteriorating condition of other highway assets such footways, structures, and the street lighting / electrical infrastructure network. Given the deteriorating condition of the carriageway (road network), much of the available funding is therefore allocated to this particular asset, with minimal budget allocation to the other asset types to deal with emergency and critical issues.
1.07	The Council operates an approved inspection regime for all assets, which ensures that the funding allocated to each element is sufficient to ensure the asset is safe and fit for purpose and thus ensures that we comply with our statutory requirement to maintain the network. Any available funding therefore needs to be carefully allocated to provide maximum benefits. All roads are surveyed to develop programmes for each year's resurfacing, surface dressing and patching programmes, ensuring that the most effective use of funds is allocated to those areas in most need of corrective or preventative maintenance.
1.08	Regular safety inspections are carried out on all assets of the network, which involves the Streetscene Area Coordinators visiting each section of the highway infrastructure at the approved scheduled frequency. During the inspections, any defects that may be present are noted, and the required maintenance repair work arranged. Safety inspections are carried out on all carriageways (roads), footways and cycleways and on all publicly accessible car parks operated by the Council.
1.09	**Revised HAMP** We have been supported in the review of the HAMP by EXP Consulting, a consultancy firm appointed to assist the County Surveyor Society Wales (CSSW) to deliver specialist roads/highway asset management advice and training to the professional association of local authority chief officers who operate at the strategic tier of local government in Wales. EXP have reviewed our available data and previous submissions to WG over a number of years to assist us in reviewing our approach to the strategic management of the highway asset.

1.10	This revised HAMP provides a clear overview of the content and format of the Highway Asset Management Plan, along with necessary revisions and additions to address funding assumptions, risk, asset status, and future funding considerations.
1.11	The purpose of refreshing the HAMP is to appropriately inform the council of the risks across the highway asset groups, and to present a clear strategy to manage the asset with the available resources, in the landscape of increasing costs and static or diminishing funding of both revenue and capital, and ageing infrastructure.
1.12	Three issues are addressed in the revised HAMP (Appendix 1): 1. Despite a significant backlog of deferred maintenance, addressing it within a short timeframe would be impractical, even with ample funds available. However, it remains the council's responsibility to acknowledge this backlog and work towards its resolution over an extended period. 2. With competing demands for resources, informed decision-making is paramount. To facilitate this, we intend to develop a long-term plan (HAMP), report on its progress annually (Annual Status Reports (ASRs)), and improve it as necessary, based on evolving circumstances and improved data. 3. Certain practices warrant refinement at present, including the Highway Inspection Policy, the 5-day response time and our approach to managing and monitoring skid residence through Sideways-force Coefficient Routine Investigation Machine (SCRIM). It is imperative to streamline these processes to enhance efficiency and effectiveness.
1.13	This will require a revision of inspection regimes (included in the Action Plan) and adjusted remediation times, which are now included within the Highway Inspection Policy, and a reprioritisation of investment through the annual programme of works across asset groups and asset type to reflect the challenges and restrictions we currently face. This will be set out in the long-term strategy within the HAMP, which will be reported on regularly through the ASRs to update the Council on its risk and challenges.
1.14	**Revised Highway and Car Park Inspection Policy** To align with the County Surveyor Society Wales (CSSW) recommended practices, the previous Highway and Car Park Inspection Policy will be developed as a "Maintenance Manual" (see **Appendix 2**). A Maintenance Manual creates a place to formalise and record how things are done with descriptive identification of roles, responsibilities and competencies, details of the asset register, an outline of our risk management approach, the network hierarchy, the inspection regime, including defect types and the intervention levels and repair regimes.
1.15	EXP have recommended that the realignment of the inspection and repair policy to the 'Maintenance Manual' recommended practice is undertaken as soon as possible to allow the HAMP to include scheme identification and prioritisation methods.

1.16	The council's policy for inspection and repair of highways was last updated in 2018, with a revision made in 2021. This report sets out the results of a recent review which recommends an updated policy. The policy has been reviewed as part of an exercise to review and update our approach to management of highway assets (roads, including footways, streetlights, bridges and other associated assets signs, lines etc).
1.17	The review was undertaken by EXP using a method developed for that purpose by CSS Wales (CSSW). The review identified several areas where council practice could be improved and aligned with accepted good practice. EXP's findings are detailed below. i. The current repair regime does not include any guidance relating to the size of a defect following the publication of a revised Code of Practice in 2016. Inspectors are expected to assessed defects using an assessment of risk. There is no specified method of doing this and it consequently results in assessment that are largely the personal judgement of an individual. ii. The CSSW method includes dimensional criteria (depth and length/width) that guide what is actionable. Inspectors are still able to record defects that do not meet these criteria and to increase the priority of a defect when they assess that it is warranted. iii. 15 of the 22 Welsh authorities include dimensional criteria within their maintenance standards. iv. Our current repair regime does not differentiate between busy roads and quiet roads. A review of the highway carriageway hierarchy (within the Action Plan) will allow us to do this in the future. v. The CSSW minimum standards reflect the higher level of risk that is presented by a defect on a road carrying 20,000 vehicles a day compared to a residential street that may carry 300 vehicles a day (or less). vi. 10 of the 22 Welsh authorities currently employ different regimes for different road hierarchies (levels of use). vii. Our repair regime does not differentiate between the response to a large defect or a small defect, other than 'a situation with potential to cause serious injury or accident,' which receives a response time described currently as 'Immediate Response - Make Safe, Restricted Access or Temporary Repair', otherwise, if any defect is considered as actionable during inspection it is assigned a 5-day response time. viii. CSSW minimum standards apply a higher level of response to defects on busier roads, which is specified as a next working day response. ix. This approach, or a close variant of it, e.g. 24 hrs, is used by 20 out of the 22 Welsh authorities. x. Our regime of 5 days for all non-critical safety defects is a higher standard than the CSSW minimum standard for smaller actionable defects on all roads.

	xi. The CSSW minimum standard response time for a maintenance defect is 28 days or 3 months minimum, depending on the level of use of the road. xii. All other Welsh authorities use a regime like this. There is greater variance on standards on these defects (referred to as "maintenance defects" in the CSSW Minimum standards). xiii. Flintshire's compliance in completing repairs to the council's standard is low. For the last 3 years less than 25% of defects have been repaired within the specified response time. xiv. It must be noted that there are other authorities with low compliance. Most authorities are managing to repair "safety defects" by the end of the next working day more than 85% of the time. The compliance level drops to 65% for "maintenance defects". In addition to the service provided to users, Flintshire's position when defending third party claims is severely weakened by the low level of repair completion compliance.
1.18	The change of policy will be accompanied by training of inspectors to use the method which is expected to create greater consistency in the assessment of defects, leading to a more uniform level of service across the council network, and aligned to the implementation of a procured highways asset management system. CSS Wales published a set of recommended minimum standards for inspection and repair in September 2019, which are attached as appendices (see **Appendix 3-6**). The following documents are appended as reference in support of this policy: 1. **CSSW Risk-Based Approach Summary** - summarises the method proposed by CSSW for Welsh authorities to respond to the Code of Practice, 2016, requirement to adopt a risk-based approach. 2. **CSSW Risk-Based Approach** - detailed method proposed by CSSW for Welsh authorities to respond to the Code of Practice, 2016, requirement to adopt a risk-based approach. 3. **CSSW National Minimum Standards Inspection and Repair Regimes** - minimum standards of inspection and repair recommended by CSSW as part of the risk-based approach. 4. **CSSW Risk-Based Approach Rationale** - an explanation of the logic and analysis applied to arrive at the method and the minimum standards.
1.19	**HAMP Improvement Plan** The HAMP also include an improvement plan (see **Appendix 7**), which will be reviewed and progress reported annually, along with the Annual Status Reports (ASRs) for each major asset group. The improvement plan prioritises changes in procedures and training to embed them across the teams, and data collection and systems improvements to facilitate more robust performance analysis.

1.20	Prioritising an improvement plan ensures efficient resource allocation, enhances safety, and maintains network performance. It allows for proactive risk management, statutory compliance, and long-term sustainability. This plan also provides accountability and transparency in decision-making, ensuring that critical needs are addressed first.
1.21	**Annual Status Reports (ASRs)** Four annual status reports have been included with this report: i. Carriageways ASR 2023 (see **Appendix 8**) ii. Footways ASR 2023 (see **Appendix 9**) iii. Structures ASR 2023 (see **Appendix 10**) Further work is required to finalise ASRs on road markings, street lighting and traffic signals asset groups, and these will be presented to Cabinet again once available.
1.22	The purpose of Annual Status Reports (ASRs) in the context of Highway Asset Management Planning, as supported by EXP Consulting for the County Surveyors Society Wales (CSS Wales), is to provide a comprehensive overview of the current condition and performance of the highway network. These reports serve several key functions: • **Monitoring Asset Condition**: ASRs track the current status of highway assets, such as roads, structures, and street furniture, helping authorities understand the overall health of their network. • **Performance Evaluation**: The reports assess how well the network is performing against predefined performance indicators. Include review the investment and works undertaken to maintain the asset group. • **Data-Driven Decision Making**: ASRs provide evidence-based insights that guide resource allocation and planning decisions. By analysing trends in asset condition and performance, the reports help prioritise maintenance and repair activities, ensuring that investment is directed where it is most needed. • **Risk Management**: The reports identify areas of potential risk, such as deteriorating infrastructure, and suggest options for mitigating these risks through targeted interventions. • **Strategic Planning**: ASRs support long-term strategic planning by offering different options for managing the highway network, including cost-benefit analysis and lifecycle planning. This enables local authorities to make informed decisions about future investments and interventions. • **Accountability and Transparency**: By documenting the condition and performance of the highway network, ASRs provide transparency to stakeholders, including the public, elected officials, and funding bodies such as Welsh Government, ensuring accountability in the management of public assets. In summary, the Annual Status Reports are crucial tools in highway asset management, providing the necessary data and analysis to ensure effective, efficient, and sustainable management of the highway network.

1.23	The service will present annual updates on the major asset groups using the ASR methodology, along with progress updates on the improvement plan and any necessary policy reviews identified through the analyses of data, ensuring alignment with the objectives outlined in the Highway Asset Management Plan (HAMP). This will be included in future forward work planning for committees.
1.24	The diagram below shows the relationship between the HAMP and other Council plans, strategies, and policies. 

2.00	RESOURCE IMPLICATIONS
2.01	**Revenue Budget**: The revised Highway Asset Management Plan (HAMP), which prioritises addressing the backlog of minor repairs over resurfacing, will address increasing pressures on revenue budget. Minor repairs, although typically less expensive individually, will be managed efficiently through careful planning and resource allocation. This proactive approach will allow us to tackle issues before they escalate into more significant problems, thereby reducing the need for costly interventions in the future. The revenue budget will be adjusted to accommodate the shift towards more frequent, smaller-scale repairs, ensuring the network is maintained to a high standard utilising the plant and equipment already available to the service.
2.02	**Capital Budget**: While larger resurfacing schemes may still be required in the future, this strategy allows us to prioritise capital investment where it will have the most impact, minimising deterioration and maximising the efficiency of our spending at this time.
2.03	**Human Resources**: The increased emphasis on minor repairs will be supported by our existing workforce, with strategic use of external contractors as needed. This approach provides flexibility and scalability in operations, ensuring that we can manage the increased volume of smaller repairs without overburdening our resources. Workforce planning will focus on optimising the deployment of teams to manage this shift efficiently.
2.04	**Other Resources**: By adopting a new approach to HAMP, we will optimise the use of materials and equipment, reducing waste and improving overall efficiency. The increased demand for repairs will be managed through streamlined processes and close coordination with external contractors, ensuring that all resources are utilised effectively to maintain service levels.

2.05	**Technology**: A data-driven approach will be central to the success of this strategy. By investing in advanced asset management technology, we will enhance our ability to prioritise, track, and execute minor repairs. This will enable us to manage the backlog effectively and ensure that decisions are based on real-time data and evidence, improving overall network performance and minimising disruption. Funding of has already been committed to replace the existing highway asset management system (Mayrise replacement) in 2024-2025.
2.06	**Other Implications**: This shift towards a more proactive, repair-focused strategy aligns with our commitment to maintaining the network to a high standard while being fiscally responsible. It will also enhance public satisfaction by addressing visible issues more promptly. Our policies and procedures will be updated to reflect these new priorities, ensuring clarity and consistency in our operations, while ongoing stakeholder engagement will help communicate the benefits of this change in focus.
2.07	Highway maintenance operations on the highway network are predominantly carried out by Streetscene staff and resources are supplemented by local contractors as and when necessary.

3.00	**IMPACT ASSESSMENT & RISK MANAGEMENT**
3.01	The highways maintenance service has undertaken various risk assessments on the procedures involving highway inspection, which are outlined within the policy.
3.02	Safety defects identified during Highway Safety Inspections should be repaired within the specified timelines. Failure to comply with this will result in the Council being liable to claims from road users. The annual programme of preventative maintenance (resurfacing, surface dressing and patching) should reduce the occurrence of safety defects on the network.
3.03	A full integrated impact assessment is required and is attached in **Appendix 3** of this report, which elected members are advised to read. **Ways of Working (Sustainable Development) Principles Impact**

Long-term	Positive – The Ways of Working principles may impact how the highway asset management plan (HAMP) considers the future needs and challenges of the transport system, how it prevents or reduces negative impacts on the environment and society, how it integrates with other policies and objectives, how it collaborates with stakeholders and partners, and how it involves the public and communities in the planning process. Having a highways asset management plan that sets out the strategy and objectives for maintaining and improving the road network will: -

	• Improve safety and reliability of the road network • Reduce costs and environmental impacts • Increase customer satisfaction and economic benefits Create better alignment with corporate priorities and stakeholder expectations.
Prevention	Positive – By applying the sustainable development principles to the highway asset management plan, we can prevent future trends such as environmental degradation, social inequality, economic decline and cultural erosion. They can also ensure that the highway network supports and facilitates connectivity, well-being and resilience within Wales and beyond.
Integration	Positive - The highway asset management plan helps with integration by: • Providing an integrated framework for the delivery of highway maintenance services across the road network. • Aligning the highway objectives and priorities with the well-being goals and the corporate plan of the council. • Considering the interactions and impacts of the highway network on other aspects of well-being, such as health, environment, economy and culture. Working with other departments, organisations and sectors to share information, resources and best practices
Collaboration	Positive – The highway asset management plan helps with collaboration by enabling the local authority to: • Working with other public bodies, private contractors, community groups and stakeholders to deliver highway maintenance services in a coordinated and efficient way. • Sharing data, information, resources and best practices with other organisations and sectors to improve the performance and quality of the highway network. • Engaging with users, customers and residents to understand their needs, expectations and feedback on the highway services. Aligning the highway objectives and priorities with the national transport strategy and the well-being goals of Wales

Involvement	Neutral - The highways asset management plan will need to: • Focus on the needs of users and the community, and their active involvement in the development and review of policies, priorities and programmes. • Engage with users, customers and citizens to understand their needs, expectations and feedback on the highway services. • Provide information, consultation and participation opportunities for the public and stakeholders to influence the decision-making process.

Well-being Goals Impact

Prosperous Wales	Positive - Providing a transport system that helps to keep people mobile and connected, supports economic prosperity, enhances environmental resilience, improves public health, reduces inequalities, fosters social cohesion, promotes cultural diversity and contributes to global responsibility. A well-managed HAMP supports economic growth by providing a reliable and efficient transport network that facilitates the movement of people and goods, reduces congestion and travel costs, and attracts investment and tourism.
Resilient Wales	Positive – Enhances environmental sustainability by adopting a lifecycle approach that minimises the use of natural resources, reduces waste and emissions, and improves the resilience of the highway assets to climate change and extreme weather events.
Healthier Wales	Positive - Improves public health by promoting active travel modes such as walking and cycling, reducing air and noise pollution, improving road safety and accessibility, and creating attractive and liveable public spaces.
More equal Wales	Positive - Reduces social inequalities by ensuring that the highway assets are maintained to a safe and serviceable condition, that the needs and preferences of different user groups are considered, and that the benefits and costs of highway maintenance are distributed fairly.
Cohesive Wales	Positive – Fosters social cohesion by engaging with the local communities and stakeholders in the planning and delivery of highway maintenance, by respecting the local character and identity of the places, and by enhancing the connectivity and integration of the communities.

	Vibrant Wales	Positive - Supports cultural diversity by recognising the importance of the highway assets as part of the cultural heritage of Wales, by protecting and enhancing the historic and natural features of the highway network, and by promoting the use of Welsh language in the communication and signage of highway maintenance.
	Globally responsible Wales	Positive - Contributes to global responsibility by aligning with the international standards and best practices of highway asset management, by aligning with the UK Road Liaison Group Code of Practice for Well-managed Highway Infrastructure, by supporting the UK's commitment to reduce greenhouse gas emissions by 80% by 2050, and by sharing best practices and learning from other highway authorities, and by demonstrating leadership and innovation in highway maintenance.

The policy also links to the Council's **Well-being Objectives** 2022-2023 in terms of supporting safer communities and limiting the impact of the Council's services on the natural environment and supporting the wider communities of Flintshire to reduce their own carbon footprint.

The HAMP also aims to contribute to the Council's priorities in terms of providing a well-connected, safe and clean local environment and supporting people in need by creating resilient communities where people feel connected and safe.

4.00	**CONSULTATIONS REQUIRED / CARRIED OUT**
4.01	Consultation has taken place with: • With the Cabinet Member • Operational service teams and stakeholders • EXP Consulting via County Surveyor's Society Wales
4.02	Consultation will be undertaken with the Environment & Economy Overview & Scrutiny Committee.
4.03	A communications plan will be developed and implemented once the new strategy is adopted and approved.

5.00	**APPENDICES**
5.01	HAMP (**Appendix 1**), Maintenance Manual (**Appendix 2**) CSSW Risk-Based Approach Summary (**Appendix 3**) CSSW Risk-Based Approach (**Appendix 4**) CSSW National Minimum Standards Inspection & Repair Regimes (**Appendix 5**) CSSW Risk-Based Approach Rationale (**Appendix 6**)

	HAMP Improvement Plan (**Appendix 7**) Carriageways ASR 2023 (**Appendix 8**) Footways ASR 2023 (**Appendix 9**) Structures ASR 2023 (**Appendix 10**)

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	Highways Act 1980.
6.02	Railways and Transport Act 2003
6.03	Traffic Management Act 2004
6.04	UKRLG Code of Practice – "Well Managed Highway Infrastructure" - http://www.ukroadsliaisongroup.org/en/codes/

7.00	**CONTACT OFFICER DETAILS**
7.01	**Contact Officer:** Barry Wilkinson, Highway Network Manager **Telephone:** 01352 704656 **E-mail:** barry.wilkinson@flintshire.gov.uk

8.00	**GLOSSARY OF TERMS**
8.01	**Financial Year (FY):** the period of 12 months commencing on 1 April
8.02	**Budget:** a statement expressing the Council's policies and service levels in financial terms for a particular financial year. In its broadest sense it includes both the revenue budget and capital programme and any authorised amendments to them.
8.03	**HAMP**: Highway Asset Management Plan - A strategic framework for managing the Council's highway infrastructure, aiming to ensure optimal allocation of resources for maintenance, operation, and enhancement of roads, footways, and other transport assets.
8.04	**Well Managed Highway Infrastructure:** An industry developed approach that sets out guidance and advice for the management and maintenance of highway infrastructure and assets
8.05	**Highway Authority:** The legal body responsible for maintaining adopted highways within its jurisdiction. For Flintshire County Council, this excludes Trunk Roads.
8.06	**Carriageway:** The part of the highway used by vehicles, commonly referred to as the road.

8.07	**Footway:** Pedestrian pathways alongside roads, often called pavements.
8.08	**MTFS (**Medium Term Financial Strategy**):** The Council's financial plan for allocating resources over the medium term.
8.09	**Capital Investment:** Funds allocated for long-term infrastructure projects, such as road repairs.
8.10	**Revenue Allocation:** Ongoing operational budget for maintenance and smaller works.
8.11	**Steady State:** Maintaining the highway network in its current condition through adequate funding.
8.12	**Deferred Maintenance:** Postponed maintenance leading to a backlog of required works.
8.13	**SCRIM (**Sideways-force Coefficient Routine Investigation Machine**):** Equipment used to measure skid resistance on road surfaces.
8.14	**Annual Status Report (**ASR**):** Yearly reports on the condition and performance of highway assets groups.
8.15	**Risk-Based Approach:** A method of prioritising maintenance based on risk levels, as recommended by the 2016 Code of Practice.
8.16	**Inspection Regimes:** Regular inspections to monitor the condition of highways and identify required repairs.

Flintshire County Council

Highway Asset Management Plan

2024 - 2029

Foreword

The council's highway network is a crucial asset, integral to the daily lives of our residents and vital to the economic and social wellbeing of the area. Whether it's travelling to work, attending school, accessing services, or enjoying leisure activities, our roads, footways and highways infrastructure are an essential part of daily life.

"Maintaining our highway network to a safe and appropriate standard is a significant challenge, particularly in the face of difficult financial times. It is essential that we manage our highways infrastructure efficiently, balancing immediate needs with long-term sustainability. We must ensure that our investment today meets the demands of tomorrow, delivering value for money whilst ensuring the safety and usability of the network.

This Highway Asset Management Plan (HAMP) outlines our strategic approach for managing the council's highway assets over the next five years. The highway infrastructure asset is a significant and diverse asset including carriageways and footways, bridges and structures, street lighting, traffic signals and drainage.

Developed in accordance with national guidance, the Council is committed to the principles of recognised best practice in highway asset management to enable informed decisions to be made about the levels of investment and maintenance funding required, which will assist us with targeting our resources to where they can be most effective. This plan is the result of careful planning and analysis, taking into account the external challenges we face, such as the impact of the changing climate, budget constraints and limited resources. It is therefore imperative that we adopt a long-term approach and ensure that funding is spent in the most efficient and cost-effective way. Our commitment remains clear: to provide a safe, effectively maintained and well managed highway network that supports the economic prosperity of Flintshire.

Despite the current financial challenges, we will continue to prioritise the needs of our communities and ensure that our highway assets remain fit for purpose, now and in the future."

Chief Officer, Streetscene & Transportation

Document Control

Version Number	Amendments Made	Date
v1	Nil – Original	09 September 2024
Next Review Due	Stage 2 consideration (tbc)	September 2026

Council Approval

Version Number	Council Committee	Date
v1	Cabinet (tbc)	14th October 2024

Responsibility for the Plan

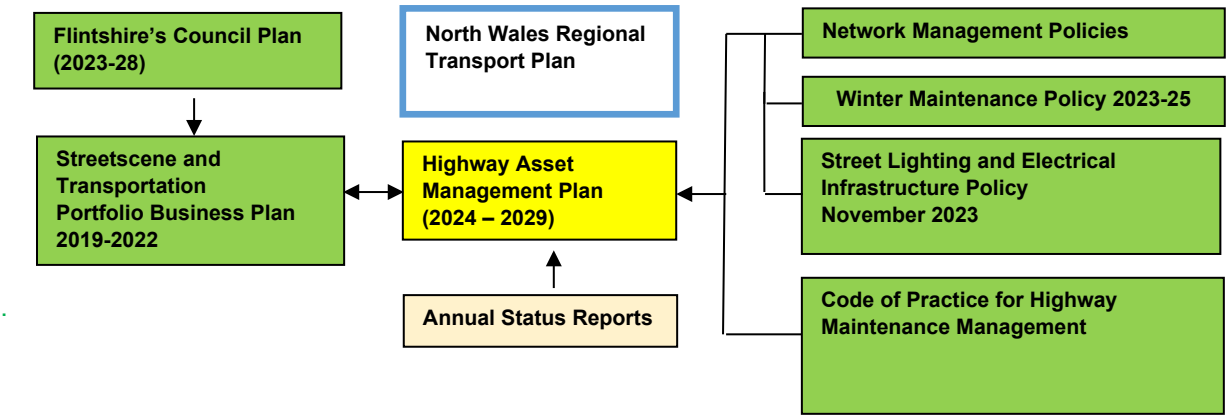
The responsibility for the delivery of and updating of this plan are shown below

Council Officer	Responsible for
Mr Barry Wilkinson	Delivery of the plan
Mr Barry Wilkinson	Updating of the plan

References

1. CSSW Highway Asset Management Planning - Recommended Practices.
2. Code of Practice for Highways “Well Managed Highway Infrastructure”, October 2016

Relationship with other Council Plans and Strategies



Summary

The council's plans for the highway asset for the period 2024 to 2029 recognise the financial constraints the council is working within. The plan targets ensuring user safety and then mitigating against deterioration. A concerted effort to reduce defects on roads will be the priority for 2024 to 2026. At the end of this period a review will be undertaken to determine if priority works are required of bridges (scour protection and strengthening) and lighting column replacement.

2024 to 2026

Carriageways: ***target reduction in defects and limit deterioration***

- Annual funding of approx. £900k will be invested in surface treatments, patching and minor repairs
  - Repair of approx. 3,500 defects identified from routine inspection
  - Patching approximately 8,000 sqm of road each year
  - Surface treatments on approximately 7.6km of road each year
- Annual funding of approx. £500k on the repair of additional carriageway defects
  - Repair of additional defects approx. 7,000 per annum

Footways: ***condition may deteriorate over the plan period***

- Approximately £100k p.a. will be invested in patching and slurry surfaces for footways
  - Patching approximately 1,300 sqm of footway each year
  - Slurry treatment, approximately 12,000 sqm of footway per year.
- Annual funding of approx. £150k on the repair of footways defects
  - Repair of approx. 1,500 footway defects per annum

Street Lighting: ***manage column condition***

- Annual funding of £150k will be invested in life-expired columns identified by structural testing
  - Aim will be to maintain the current level in need of immediate replacement
- Annual funding of approx. £150k on the repair of street lighting faults
  - Repair defects to current standard, repairing approx. 1,500 per annum

Structures: ***reduce the number of structures in a very poor condition***

- Annual funding of approximately £245k
  - Undertake refurbishment works to identified structures in very poor condition
- Flintshire Bridge Maintenance
  - The Flintshire Bridge has a detailed maintenance plan which has been approved and requires funding.

Traffic Signals, *continue to maintain in an operable state*

- Annual funding of approximately £150k.
    - Undertake planned works to traffic signals in poor or failing condition

Road Marking, *maintain markings in a legible condition*

- Annual funding of approximately £180k.
    - Remark of illegible markings identified by condition survey
    - Instigate cyclic remarking regime

2027 to 2029

At the end of 2026 a review of the HAMP will be undertaken. The review will consider the results of work to investigate if scour protection works are required at certain bridges, whether some bridges need strengthening and whether there is a need to increase investment in the replacement of aged street lighting columns. The effectiveness of the strategy between 2024 and 2026 in reducing the level of carriageway detects and minimising deterioration of all assets will be considered. Stage 2 of this plan will be published based on this assessment.

1. Introduction

This plan sets out the council's plans for our highway assets for the period 2024-2029.

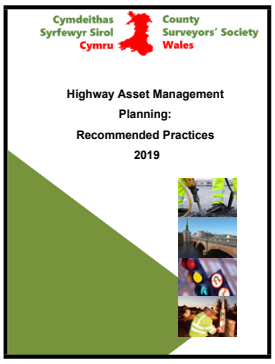
Purpose

The purpose of the HAMP is to:

- Define the service standards that users can expect
- Explain the strategies to be implemented to achieve these standards

Context

This plan has been developed in accordance with the CSSW recommended highway asset management planning practices [1] and the other council plans and strategies shown above. The plan is consistent with the council's corporate approach to asset management.



The standards, targets and spending assumptions contained within this HAMP will be monitored and an annual status report produced, which will be provided to senior management and members along with any recommended changes to the plan.

Stages

This plan involves 2 stages. Stage 1 from 2024 to 2026 will focus on repairing additional quantities of carriageway and footway defects with the aim of ensuring user safety and reducing exposure to defects. This will be accompanied by targeted replacement works on assets to minimise deterioration. At the end of this period a review will be undertaken and the strategy for Stage 2 will be confirmed. During stage 1 investigations will be made into issues relating to potential need for Scour protection at bridges, the strength of some bridges and the condition of street lighting columns. The results of these investigations will inform the priority for works in Stage 2.

2. Highway Assets

The highway asset is made up of roads, footways, bridges, streets lights, traffic signals and street furniture.

The council's highway assets covered by this plan are:

- 1,183km carriageways
- 938km of footways
- 21,300 streetlights on 20,370 columns
- 3,250 illuminated signs and bollards
- 52 signalised junctions
- 62 signalised pedestrian crossings
- 372 bridges and culverts
- 27 retaining walls (estimated)
- Approx. 30,000 items of street furniture

The plan does not cover bus stops, private roads and bridges, council owned bridges not on or crossing the highway network and decorative, seasonal lighting.

Data

Asset data for some assets is currently limited. Sample surveys and local estimates have been used to include them within this plan. To ensure that future plans are based on better information a Data Improvement Plan [2] has been created to support this plan.

3. External Pressures

This plan has considered relevant external pressures.

Asset Growth

Over the last 10 years the council taken over the maintenance of 20 km of additional road. These roads create will create need for maintenance, management and associated funding in future years as they age.

Weather

This plan assumes average winter conditions. If, harsh winters are experienced it can be expected that additional damage to road surfaces will occur and the council will need to repair significantly more potholes and to potentially adjust the standards in this plan.

Flooding

Climate change is resulting in an increased frequency and intensity of storm events. The increase in such storms places pressure on highway drainage infrastructure that the roads were not designed for and flooding can occur. Extreme flood events can damage the road. When flood events occur, resources are deployed to respond. This may involve clearing land slips or repairing part of roads eroded by flood waters. Such events may impinge upon the ability to meet the targets in this plan unless additional resources (and funding) are made available.

Service Standards

Service standards define what users can expect.

Services Standards

Service standards in this plan have been set with reference to:

- **Inspection**
  - Routine inspections for safety and to record maintenance defects
- **Safety**
  - The number of critical incidents/defects requiring an immediate (2hr) response
  - The number of “safety” defects requiring a (24hr) response
- **Condition**
  - The percentage of the asset in a “poor” (red) condition
  - The percentage of the asset that should be “considered for maintenance”, (amber) condition
  - The number of maintenance defects requiring a 7-day response

Inspection and reactive repair standards are set out in the council’s highway maintenance manual. This plan assumes those standards will be consistently met. The specific standards that users can expect from each highway asset group during the plan period are shown below (section 5).

Strategies

The strategy to be applied for each asset group to achieve the standards is given in the section below. The strategies include predictions of the types and quantities of works required to deliver the standards. The strategies aim to prioritise the repair or replacement of elements of each asset in a manner that will achieve the standard at the best possible short and long-term cost.

Works Programmes

The strategies will be used to create programmes of works. Records of potential works are maintained for each asset based on the results of inspection and condition surveys. These records are used to derive works programmes.

Funding Assumptions

The standards included in the plan are based upon levels of funding that are indicated. Significant changes in these funding levels would result in the standards in the plan needing to be revised.

4. Carriageways

The council manages 1,183km of roads; 495km of classified (A, B & C roads) and 688km unclassified

Standards

Safety

The council's targets for carriageway defect repair are:

Repair of Defects*	Standard	Anticipated Annual Quantity
Critical defects shall be made safe within	2 hours	20
Safety defects shall be rectified by	End of Next Working Day	230

**definition of critical and safety defects for carriageways are given in the maintenance manual*

Typical defects:

A **critical** carriageway defect is one that poses immediate danger to users such that it is appropriate to guard it until it can be coned off or repaired. Such defects occur rarely but warrant prompt attention to ensure user safety. The response to a critical defect refers to the time to attend the site and to make the safe site.

Safety defects are those that pose an imminent risk of injury to road users, requiring a response as soon as possible to remove a potential risk of injury to users.




Condition

Maintenance defects are defects that pose a lesser danger to users and are typically repaired to prevent them deteriorating into safety defects. The time to repair them reflects the reduced risk they pose to users.

The council's targets for carriageway maintenance defect repairs are:

Repair of Maintenance Defects	Standard	Quantity#
Maintenance defects (high priority) shall be rectified within	1 month	1,000
Maintenance defects (medium priority) shall be rectified within	3 months	2,000

#typical annual quantities

The council's targets for carriageway condition (measured by condition surveys) for the duration of the plan are:

Measured Condition Road Class		A	B	C	U
Percentage in a poor condition shall be kept below		5%	5%	10%	20%
Percentage that should be "considered for maintenance" shall be kept below		30%	30%	30%	40%




Strategies

The strategy for carriageways comprises of:

- the continued repair of reactive repairs
- repair of minor defects
- capital investment in patching and surface treatment

Repair of Defects

Safety defects such as potholes are identified by a regime of inspection or notified to the council by users. Safety defects are assessed based upon the risk they pose to users and their repair prioritised in accordance with the council's maintenance manual. Routine and reactive repairs are expected to continue at current levels throughout the period of this plan. This plan assumes that the works gangs currently deployed to repair safety defects will continue to do so and that the quantities of repair required will be like those experienced in recent years.

Repair of Minor Defects

The condition survey has identified a large quantity of minor defects of varying sizes which do not meet the criteria for reactive repair. These defects are scattered on all road classes around the county. Funding will be provided to repair an amount of these defects. The purpose of these repairs is to reduce the number of defects present on the network and reduce the exposure of users to defects.

Patching

Patching programmes will be undertaken to repair all areas of carriageway assessed as poor condition which are not included in the resurfacing and surface treatment programmes. These smaller areas tend to be located on roads which are in generally good condition which may not be considered for planned treatments for many years.

Resurfacing and Surface Treatment

The current level of condition on classified roads (A, B and C Roads) is reasonably good. Flintshire's classified road condition survey results rank them as having some of the best local authority roads in Wales. This has come through continual investing in planned maintenance treatments. The county procured a condition survey of the unclassified roads in May 2022. The results showed the level of poor condition of unclassified roads is much higher than the classified roads. This is due to the lower levels of historical investment.

The strategy for this plan is to invest all the planned maintenance investment on unclassified roads. Most treatments will be surface treatments as these will enable more roads to be treated. The classified roads will therefore deteriorate during the period of the plan.

Works

The strategy detailed above is expected to require the following amounts of works to be undertaken.

Reactive Repair

Between 3,000 and 3,500 highway defects are predicted to be repaired annually from identification during routine inspections.

Minor Defect Repair

Between 6,000 and 7,000 highway defects are predicted to be repaired annually.

Planned Maintenance

It is estimated that the following approximate annual quantities of treatments will be carried out during the first period of the plan.

Road Class	A	B	C	U
Resurfacing (Corrective Maintenance)	-	-	-	-
Surface Treatment (Preventative Maintenance)	-	-	-	7,000 – 8,000sqm
Patching (Corrective Maintenance)	7,000 - 8,000 sqm			

Annual Works Programme

A rolling programme is maintained of all roads where maintenance should be considered. A prioritisation process documented in the council's highway maintenance manual is used to create an annual programme of work that is approved by council and published.

The prioritisation process ensures that the strategy is implemented and that there is a documented method for choosing which schemes get completed first.

Funding Assumptions

The works quantities detailed above are based upon the following anticipated funding levels:

Works Type	Annual Funding Required
Planned	£900k
Routine & Reactive	£500k

5. Footways

The council manages 938km of footways.

Standards

Safety

The council's targets for footway safety defect repairs are:

Repair of Safety Defects*	Standard	Quantity#
Critical defects shall be rectified or made safe within	2 hours	10
Safety defects shall be rectified or made safe within	24 hours	90

**definition of critical and safety defects for carriageways are given in the maintenance manual*
#typical annual quantities




Condition

The council's targets for footway maintenance defect repairs are:

Repair of Maintenance Defects	Standard	Quantity#
Maintenance defects (high priority) shall be rectified within	1 month	500
Maintenance defects (medium priority) shall be rectified within	3 months	1,000

#typical annual quantities

The council's targets for footway condition (measured by condition surveys) are:

Measured Condition		
Percentage in a poor condition shall be kept below		0.5%
Percentage that should be "considered for maintenance" shall be kept below		25%




Strategies

The strategy for footways comprises of:

- the continued repair of reactive defects
- patching sections of footway in poor condition
- preserving the life of footways by applying slurry treatments

Repair of Defects

Safety defects such as potholes and trip hazards are identified by a regime of inspection or notified to the council by users. Safety defects are assessed based upon the risk they pose to users and their repair prioritised in accordance with the council's maintenance manual. Routine and reactive repairs are expected to continue at current levels throughout the period of this plan. This plan assumes that the works gangs currently deployed to repair safety defects will continue to do so and that the quantities of repair required will be like those experienced in recent years.

Patching

The condition information shows that the areas of footways in poor condition are small and scattered around the county. The most cost-effective option is to repair all the poor sections with a patch. It is proposed to complete all the patches in the first year of this plan.

Slurry Treatments

The footway asset is ageing. The condition survey has clarified this ageing by identifying surface defects including cracking, chip loss and fretting. The slurry treatment is used to extend the life of the footway by covering the surface defects. The treatment will be used on footways with areas of surface defects greater than 50sqm. This will maximise the amount of treatment completed. Larger areas of surface defects are more likely to reflect age than smaller areas which may be due to some other factor.

Works

The strategy detailed above is expected to require the following amounts of works to be undertaken.

Reactive Repair

Between 1,500 and 1,600 footway defects are predicted to occur annually.

Planned Maintenance

It is estimated that the following approximate annual quantities of treatments will be carried out during the period of the plan.

Strategy	Indicative Area of Works / Year		
	2024/25	2025/26	2026/27
Programme of footways slurry treatments.	4,000 sqm	4,000 sqm	4,000 sqm
Programme of patching	1,280 sqm	-	-

Funding Assumptions

To undertake the amounts of works detailed the following funding will be required annually.

Works Type	Annual Funding Required
Planned	£100k
Reactive	£150k

6. Street Lighting

The council manages 21,300 lanterns on 20,370 columns.

Standards

Safety

The council's targets for street lighting safety faults are:

Repair of safety defects	Target Standard
Critical defects shall be rectified or made safe within	2 hours

A critical defect could be an exposed cable, or column on the verge of collapse (for example having been hit by a vehicle. The standard is to attend and make the site safe within 2 hours. NB. It may not always be possible execute a permanent repair within this timescale.




Condition

The council's targets for street lighting maintenance faults repairs are:

Repair of maintenance defects	Target Standard	
	Standard	Compliance
Maintenance defects (high priority) shall be rectified within	24 hours	90%
Maintenance defects (low priority) shall be rectified within	10 working days	90%



The council's targets for street lighting column condition (measured by structural testing) are:

Measured Condition		Standard
Percentage in a poor condition; the percentage of street lighting columns testing results requiring instant removal or retesting in one year shall be kept below		<3%
Percentage that should be "considered for maintenance"; percentage of street lighting columns testing results requiring retesting within three years shall be kept below		<20%

Strategies

The strategy for street lighting comprises of the repair of faults together with ongoing capital investment in column replacement.

Repair of Faults

Faults are identified via inspection or from user notification.

Column Renewals

The council will continue to undertake structural column testing following GN22. At the end of 2022/23 there were 1,000 columns which were identified as to be planned for removal. It is estimated that up to 160 columns could require immediate removal annually over the period of this plan. During the first phase of this plan the quantity of columns which are renewed will be those identified as requiring immediate removal from the test result. If the testing result identify more columns than there is funding the replace then there may also be a need to remove some columns for safety reasons and not replace them instantly.

Lantern Renewals

The oldest LED lanterns have been installed for almost 10 years. There are currently no identified issues with these lanterns. A need for bulk replacement of lanterns is not anticipated during the period of this plan.

Cable Renewals

There will be no cable renewals in the first phase of this plan. Cable faults will be repaired when identified.

Works

The strategy detailed above is expected to require the following amounts of works to be undertaken.

Reactive Repair

It is expected that current levels of faults will continue during the first phase of the plan. These are typically around 5 critical faults, 10 safety faults and 1,500 maintenance faults.

Planned Maintenance

It is estimated that the following approximate annual quantities of treatments will be carried out during the period of the plan.

Strategy	Quantity
Programme of Column Renewals	160 columns

Funding Assumptions

To enable the amounts of works detailed above to be carried out the funding shown will be required:

Works Type	Annual Funding Required
Planned	£320k
Energy	£990k
Reactive	£100k

7. Highway Structures

The strategy for highway structure comprises of the targeted refurbishment of structures in a very poor or poor condition combined with a regime of routine maintenance.

Standards

Safety

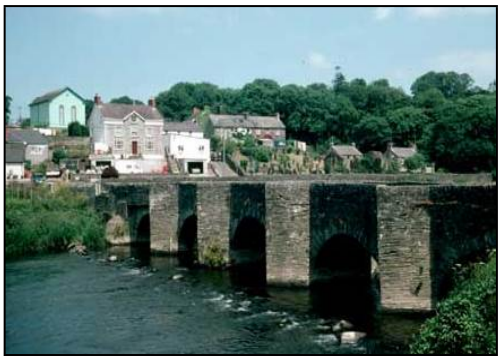
Measured By	Standard
Critical defects shall be made safe within	2 hours

Condition

		Standard
Percentage in a poor condition; the percentage of structures with a BCIcrit of very poor kept below		2%
Percentage that should be "considered for maintenance"; the percentage of structures with a BCIcrit of poor kept below		10%

Strategies

- The Council has 7 structures in a very poor condition and a further 45 structures in a poor condition that require refurbishment works.
- The strategy is to target addressing the works required on structures in a very poor first
- Routine maintenance will be undertaken on 20% of the structures every year.
- Reactive maintenance will be undertaken when required
- All works required on the Flintshire Bridge will be completed.



Works

The strategy detailed above is expected to require the following works to be required

Reactive Repair

The strategy requires the deployment of work gangs/other agencies on reactive repairs and emergency make safe response.

Planned Maintenance

Structure Type	Indicative No of Structures for Refurbishment Works / Year		
	2024/25	2025/26	2026/27
Road Bridges	3	1	1
Culverts and Subways	1	1	1
Footbridge	1	0	0

Funding Assumptions

To undertake the amounts of works detailed the following amounts of estimated funding will be required annually.

Works Type	2024/25	2025/26	2026/27
Reactive	£20k	£20k	£20k
Routine	£35k	£35k	£35k
Planned	£50k	£50k	£50k
Flintshire Bridge	£120k	£20k	£37k

8. Traffic Signals

The strategy for traffic signals is to carry out reactive and routine repairs required to keep the signals operating and replace them when they become obsolete or unreliable.

Standards

Safety

Measured By	Target Standard
Critical defects shall be rectified or made safe within	2 hours
Safety Defects	4 hours

Condition

Maintenance Defects	Standard
Maintenance defects (high priority) shall be rectified within	24 hours
Maintenance defects (low priority) shall be rectified within	7 Days

Strategies

- The aim of the traffic signals maintenance strategy is to ensure that all traffic signals are operating 99% of the time and all equipment remains in a safe condition.
- There are currently 6 traffic signals that are assessed as ‘poor’ or ‘failing’. These sites will be renewed within the first 3 years of the plan.

Works

Reactive Repair

It is expected that current levels of faults will continue during the first phase of the plan. This will include 12 critical faults, 180 safety faults and 180 maintenance faults.

Planned Maintenance

It is estimated that the following approximate annual quantities of treatments will be carried out during the period of the plan.

Strategy	Quantity
Programme of Traffic Signal Renewals	2 traffic signals

Funding Assumptions

To enable the amounts of works detailed above to be carried out the funding shown will be required:

Works Type	Annual Funding Required
Planned	£150k
Energy	£100k
Reactive	£40k

9. Other Assets

Other assets that form part of the highway require maintenance as described below.

Road Marking

Faded road marking is identified by highway inspectors during routine inspections. In 2021/22 a road marking condition survey identified that more than 20% of road markings were not visible.

It is planned to complete the remark of the markings which were identified as not visible during 2024/25. From 2025/26 an annual remarking contract will be undertaken with the aim or eliminating road markings that are not visible. Faded markings that are still visible will still be present but will be remarked before they become illegible. A cyclic remarking regime will be developed once the data is gathered to determine the appropriate remarking interval.

To enable the amounts of works detailed above to be carried out the funding shown will be required:

Work Type	Annual Funding Required		
	2024/25	2025/26	2026/27
Remark Marking not visible to motorist	£180k		
Routine Marking		£180k	£180k

Traffic Signs

Traffic signs that become illegible are when identified by routine highway inspection. It is expected that new signs will be required annually within the period of the plan.

To enable the amounts of works detailed above to be carried out the annual funding will need to be reviewed in response to an asset survey.

Drainage

The strategy for managing drainage assets is:

Gullies are cleaned once per year. Some gullies require replacement when they are damaged. A gully with a missing grate is considered a 'critical' defect and requiring a 2-hour response.

Rural drainage is managed reactively where highway inspectors identify issues on routine inspections and members of the public report issues to the council. Most work requires the clearing of materials.

The council investigates all highway drainage issues where water ponds on private property and on the road.

The annual work required to maintain the drainage assets is typically:

- 10 - 15 incidents of drainage issues requiring a critical response
- 40,000 – 42,000 gullies are cleaned
- 20 - 30 gullies require replacing
- 1,000 – 1,200 rural drainage assets require reactive clearing

To enable the amounts of works detailed above to be carried out the annual funding shown will be required:

Work Type	Annual Funding Required
Reactive Repair	£20k
Gully Cleansing	£100k
Rural Drain Clearing	£50k
Drainage Asset Replacement	£20k

Street Furniture Assets

Street furniture assets include pedestrian barriers, vehicle restraint systems, benches, bins

The strategy for managing these assets is reactive with highway inspectors identifying defects as part of their routine inspections. It is expected that there will be a range of repairs required from full replacement to minor repairs.

Typically, between 100 and 150 street furniture assets will require some form of repair every year.

The annual funding which will be required to undertake this work is £50k.

10. Risks to the Plan

The risks that could prevent achievement of the standards specified in this plan are:

Plan Assumption	Risk	Action If Risk Occurs
The plan is based upon winters being normal	Adverse weather will create higher levels of detects and deterioration than have been allowed for.	Budgets and predictions will be revised, and this plan updated if abnormally harsh winters occur.
The plan is based upon normal seasonal weather conditions	Adverse weather (storm events) will create higher levels of detects and deterioration than have been allowed for.	Budgets and predictions will be revised, and this plan updated if abnormally adverse weather (e.g. flooding) occur.
Available budgets have been assumed as shown in sections 5 to 9	External pressures mean that the funding available for roads is reduced	Target service standards will be revised to affordable levels
Construction inflation will remain at level like the last 5 years.	Construction inflation will increase the cost of works (particularly oil costs as they affect the cost of road surfacing materials)	Target service standards will be revised to affordable levels.
Levels of defect and deterioration are based on current data which is limited for some assets (e.g. unclassified roads and footways)	Assets deteriorate more rapidly than predicted and the investment required to meet targets is insufficient.	Split between planned and reactive maintenance budgets will be revised.

Flintshire County Council:

Highway Maintenance Manual:

(including Policy for Highway & Car Park Inspection and Repair)

Document Control

Version Number	Amendments Made	Date
v1	Nil – Original	September 2024
Next Review Due		September 2026

Council Approval

Version Number	Council Committee	Date
v1	§	October 2024

Responsibility for the Manual

The responsibility for the delivery of and updating of this plan are shown below

Council Officer	Responsible for
Highway Network Manager	Ensuring compliance with the manual and updating of the manual

1 Introduction

Purpose

The purpose of this manual is to document how the council manages highway maintenance. The manual shows how the council aims to meet its duties as the highway authority. It documents the methods used to ensure that the risk to users is appropriately monitored and managed.

Version 1 of the manaul details inspection and repair regimes. Future updates of the manual will detailm the methods used for other aspects of maintenance.

Scope

The manual describes how the council maintains the road network under its control. It details the procedures used to plan and execute all works and functions associated with the management, operation and maintenance of the highway asset including how the activities are monitored to ensure compliance with council policies.

Legal Requirements

As the Highway Authority the council has a duty to meet the requirement of the following legislation:

- **The Highways Act 1980:** This places a duty upon Highway Authorities to maintain highways, adopted as maintainable at public expense, and to keep them safe for public use
- **New Roads and Street Works Act 1991:** This places a duty upon Highway Authorities to co-ordinate all works in the highway for the purposes of ensuring safety, minimising inconvenience to highway users, and protecting the highway and apparatus in it.
- **The Traffic Management Act 2004:** This places a duty on Highway Authorities to ensure the expeditious movement of traffic on their road network and networks of surrounding authorities.

National Guidance

To assist authorities in meeting their duties the following National Guidance is provided. The methods adopted in this manual are based upon the contents of the following:

- "Well-Managed Highway Infrastructure: A Code of Practice, UK Roads Liaison Group, 2016"
- "Risk Based Approach: Method", 2019, CSSW, 2019
- CSSW Highway Asset Management Recommended Practices

Relevant Council Plans and Documents

This manual is part of a suite of documents that support the councils approach to managing the highway asset. These include; Highway Asset Management Plan, Highway Data Improvement Plan and Annual Status Reports.

2 Roles, Responsibilities and Competencies

The roles, responsibilities and competencies required of those involved in managing the council's highway asset are defined below.

Roles and Responsibilities

Role	Responsibility
Councillors	Approve the use of this document as council policy.
Highway Network Manager	Develop the policy and standards, ensure their effective implementation, monitor the results and undertake an annual risk assessment update.
Operational Area Managers	Responsible for the implementation of the policy in terms of ensuring that Section 58 inspections are carried out; ensures inspections are carried out to the specified standard by suitably accredited staff.
Area Co-ordinators	Carry out inspections as per the inspection regime, recording the appropriate data for input into the AM system.
Service Delivery Highway Teams	Carrying out repairs as per the repair regime and record the required data for input into the AM system.
Contractors	Carry out repairs as instructed as instructed and record the required data for input into the AM system.

Competencies and Training

CSS Wales manages a competency confirmation schemes covering highway and bridge inspection. Relevant FCC staff will be accredited under these schemes to demonstrate their competency in these tasks.

CSS Wales is currently developing a Capability Building Scheme (2024) to assist aiuthorities to develop their capability in highway management. FCC staff will partake in relevant modules of this scheme.

The council maintains registers of those staff who are accredited under the CSSW competency schemes and those who have completed CSSW HAMP capability scheme training modules.

3 Asset Register and Inventory

The asset register defines the roads that belong to and are maintained by the council. The inventory of the highway assets is based on the asset register and contains the detailed information required to manage the asset. The information includes amount, size, construction material, current condition etc. where such data is available.

Asset Register

The National Street Gazetteer is the definitive dataset of public roads and streets that highway authorities are responsible for maintaining. The part of the National Street Gazetteer covering Flintshire is included in the Council's Mayrise Asset Management System.

Inventory

Inventories of the Council's highway assets are held in multiple asset management systems. Information is updated when changes to the assets occur. The assets are held on the following management systems:

- Carriageways and Footways - Mayrise
- Structures - AMX

Data and System Improvement

The quality of the inventory details held is reviewed annually. A plan for improvements to data and the highway asset management system are recorded in the Highways Asset Data Management Plan.

4 Risk Management

The risks associated with maintaining the highway are managed using the methods described below. This includes how the methods comply with the risk based approach required by the Code of Practice.

Code of Practice

A revised Code of Practice (the code) for Highways "Well Managed Highway Infrastructure" was published in October 2016 providing guidance that authorities are expected to follow and may rely upon when defending themselves against third party claims. The CoP recommends the use of a risk based approach to all aspects of highway maintenance.

CSSW developed a method in response to the code that it recommendeds authorities adopt. The method includes development of Hierarchy, Inspection Regime and Repair Regime for the highway assets, along with recommended minimum standards for inspection and defect repair.

Use of the CSSW Risk-Based Approach

The CSSW Method has been used to define the inspection and repair regime used in this manual/policy. Documents setting out the CSSW Minimum Standards and the rationale for their adoption are set out in documents supplied with this manual.

A review of hierarchy using the method has not been undertaken as the levels of traffic in Flintshire are not sufficiently different to national averages to provide significant benefit in the review. This may be undertaken at a future date. The details of the asset hierarchy, inspection and repair regimes adopted by the council and where they differ from (exceed) the CSSW recommended standards is detailed later in this document.

Flintshire County Council Corporate Risk Management

The council manages risk via the 'Flintshire County Council Risk Management Framework'. An electronic copy of this document can be found at: Risk Management Framework (flintshire.gov.uk)

5 Network Hierarchy

The highway assets have been divided into network hierarchy categories that reflect use and function. This enables the inspection and repair regimes to be related to their associated risk.

Network Hierarchies

The following network hierarchies have been adopted and are used as the basis for the inspection and repair regimes.

Carriageways		
Category	**Classification**	**Detail**
2	Class A – Strategic Route	Routes for fast-moving, long-distance traffic with few frontages or pedestrian traffic.
3(a)	Class B – Main Distributor	Routes between strategic routes and linking urban centres.
3(b)	Class C – Secondary Distributor	Routes carrying mainly local traffic with large numbers of frontages and junctions.
4(a)	Unclassified – Link Road	Routes linking main/secondary distributors and local access roads, many frontages and junctions.
4(b)	Unclassified – Local Access Road	Routes serving properties only with limited access traffic.

Footways		
Category	**Definition**	**Detail**
1(a)	Prestige	Very busy main town centre shopping areas
1(b)	Primary	Busy urban shopping and business areas
2	Secondary	Medium usage routes local shopping centres
3	Link footway	Linking local access footways, busy rural footways
4	Local access footway	Low usage estate road footways

Cycleways		
Category	**Definition**	**Detail**
A	Integral	Cycle lane forming part of the carriageway
B	Dedicated	A highway route for cyclists not contiguous with the public footway or carriageway

Car Parks		
Category	**Definition**	**Detail**
A	Chargeable	Car parks with parking charges
B	Non-chargeable	Car parks without parking charges

Structures	
Category	**Description**
A	Highway Structures
B	Highway Retaining Walls

Update and Review

The hierarchies are reviewed when significant changes to the asset or changes in use happen (e.g. large changes in traffic volume). As a minimum the hierarchy should be reviewed and confirmed every 2 years. Any resultant recommended changes to the hierarchy are proposed to council and their approval recorded.

6 Inspection Regime

To monitor the condition and repair needs of the asset the council deploys a regime of inspections of varying types and frequencies.

Types of Inspection

The council undertakes the following types of inspection:

1. **Reactive Inspections/Response:** inspections undertaken in response to the notification to the authority of potential defects by other sources (council employees, members of the public, emergency services etc.).
2. **Planned/Routine Inspections:** A regime of planned inspections the purpose of which is to identify defects that have the potential to cause harm to users and to identify defects that require repair in order to prevent escalation of deterioration and increased (avoidable) maintenance needs.
3. **Condition Surveys:** A regime of condition surveys that record the condition of components of the asset such that a programme of renewal/replacements can be derived. Condition surveys can be visual or machine based and may include testing where such is appropriate for the asset type.

Planned routine inspections are a combination of:

- **Driven Inspections**: inspections of the carriageway undertaken with a driver and a Highway

Inspector, carried out from a slow-moving vehicle at a speed appropriate to the road conditions.

- **Walked Inspections:** inspections undertaken by a Highway Inspector on foot at a walking pace on the footway, where the footway and carriageway are assessed.

Inspection Frequencies

Reactive Inspections

Where a "safety" defect is notified to the council by a third party an inspection of the defect will take place within 2 Hours and action will be taken as per the Council's repair regime. (see section 14 repair regime for details of safety defect criteria).

Where a "maintenance" defect is notified to the council by a third party an inspection of the defect will take place within 7 Days and action will be taken as per the Council's repair regime. (see section 14 repair regime for details of maintenance defect criteria).

Routine Inspection Frequencies

Routine Inspection frequency is based on the Network Hierarchy. It has been determined using the CSSW Highway Asset Risk Review Method and is reviewed every 2 years. The frequency of routine inspections is shown in below along with the CSSW minimum recommended standards.

Carriageway: Routine Inspection Frequencies#

Category	Classification	Inspection Interval	Inspection Method	CSSW Recommended Minimum
2	Class A – Strategic Route	1 month	Driven	Monthly
3(a)	Class B – Main Distributor	1 month	Driven	Monthly
3(b)	Class C – Secondary Distributor	1 month	Driven	Every 3 Months
4(a)	Unclassified – Link Road	3 months	Driven	Every 6 Months
4(b)	Unclassified – Local Access Road	6 months	Driven	Annually (poor or unknown condition) Every 2 years (good condition)

The carriageway inspections are carried out by Streetscene Area Coordinators from a vehicle, driven as slowly as road conditions will allow. The Area Coordinator will be a passenger in the vehicle, which will be driven by a second member of the Streetscene & Transportation workforce.

Footway Routine Inspection Frequencies#				
Category	**Definition**	**Inspection Frequency**	**Inspection Method**	**CSSW Recommended Minimum**
1(a)	Prestige	1 week	Walked	Monthly
1(b)	Primary	1 month	Walked	Monthly
2	Secondary	3 months	Walked	Every 3 Months
3	Link footway	6 months	Walked	Every 6 Months
4	Local access footway	6 months	Walked	Annually (poor or unknown condition) Every 2 years (good condition)

Cycleway Routine Inspection Frequencies#			
Category	**Definition**	**Inspection Frequency**	**Inspection Method**
A	Integral	As adjacent carriageway	Driven
B	Dedicated	6 months	Walked

#Where adjacent carriageways and footways are inspected during the same inspection the higher frequency level is applied.

Car Park Routine Inspection Frequencies#			
Category	**Definition**	**Inspection Frequency**	**Inspection Method**
A	Chargeable	6 months	Walked
B	Non-chargeable	Annually	Walked

Condition Assesments

Carriageway

The SCANNER and SCRIM assessments are undertaken at the following frequencies

Carriageway Annual Inspection Coverage		
Road Class	**SCANNER**	**SCRIM**
A Roads	100% (one direction)	100% (both direction)
B Roads	100% (one direction)	100% (both directions)
C Roads	25% (one direction)	10% (both directions)

Visual condition assessments are undertaken on all roads every 5 years using AI technology

Footway

Visual condition assessments are undertaken on all roads every 5 years using AI technology

Structures

Condition assessments are undertaken at the following frequencies.

Inspection Type	Survey Coverage
General Inspection	100 % Every 2 Years
Principal Inspection	100 % Every 6 Years

Inspection Schedule

Inspection routes in compliance with the regime above are held in the council's asset management system, Mayrise. The Mayrise asset management system contains details of the inspection regimes, the inspections undertaken and the date of the next scheduled inspection. Inspections to be undertaken are provided to the inspectors at the beginning of each week. The use and character of a road will be considered when scheduling inspections, for example to avoid periods with higher numbers of parked vehicles. Best endeavours will be made to ensure that the timing of the inspection enables defects to be identified effectively.

Inspected Assets

The assets inspected during the routine inspection include (but are not limited to) the following:

- Carriageways
- Footways
- Covers, Gratings & Frames (inc Statutory Undertakers apparatus)
- Kerbs, Edgings and Channels
- Drainage
- Guardrails, Fencing and Restraint Systems
- Verge, Trees and Hedges
- Road Studs and markings
- Signage
- Street Lighting
- Traffic Systems, Controlled Crossings, Illuminated Bollards and Cabinets
- Cleanliness and Weed Growth

Recording of Inspection Records

Records of the inspection and the resulting observations are recorded in real time on the Mayrise system via mobile devices.

Condition Assessments

The council undertake the following condition assessments on their highway assets. The frequency of condition assessment is given in Appendix B.

Carriageways

i. SCANNER (Surface **Condition Assessment** of the National Network of Roads)

SCANNER is a machine condition survey undertaken from a vehicle moving at traffic speeds. The results of the survey are held offsite by WDM and accessed via the WDM / WIP online interface.

The SCANNER survey is undertaken at the following frequencies

Carriageway Annual Survey Coverage	
Road Class	**SCANNER**
A Roads	100% (one direction)
B Roads	100% (one direction)
C Roads	50% (one direction)

ii. SCRIM (Sideway-force Coefficient Routine Investigation Machine)

The SCRIM data measuring wet road skidding resistance results are held offsite by WDM and accessed via the WDM / WIP online interface.

The SCRIM survey is undertaken at the following frequencies

Carriageway Annual SCRIM Coverage	
Road Class	**SCRIM**
A Roads	100% (both directions)
B Roads	100% (both directions)
C Roads	10% (both direction)

iii. Visual Condition Assessment (using AI)

A visual condition survey of all roads was undertaken in 2022 using video survey technology. The condition of carriageways, footways and road marking has been assessed by AI (artificial intelligence) to produce coarse visual inspection data. The data is held offsite by the supplier and accessed via an online interface. It is proposed to repeat the survey in every 4/5 years.

SCANNER and SCRIM surveys are arranged via a central contract managed by the Welsh Government. The contract covers A, B and C Roads. SCANNER surveys are not undertaken on the unclassified road network.

Footways

Visual Condition Assessment

i. Visual Condition Assessment (using AI)

See details in Carriageway Section

Structures

Visual Condition Assessment

Structures are inspected using two levels of inspection:

i. General Inspections (GIs'); GIs are visual inspections, possibly with some hands-on and basic assessment e.g. hammer tapping and measurements.

ii. Principal Inspections (PIs); PIs are a more detailed visual inspection, with hands-on assessment of most/all elements plus detailed assessment e.g. hammer tapping, half-cell, chloride measurements etc.

A General Inspection involves recording the extent and severity of observed defects on a form the data from which is subsequently entered into the council's Bridge Management System, AMX.

A Principal Inspection involves the creation of a detailed report along with the data recorded on the form. The results of these inspections are also entered into the council's Bridge Management System, AMX.

7 Repair Regime

Repairs identified via inspection or by 3rd party notification, are prioritised for repair based upon the risk that they pose to users. The methods used to do this are set out below.

Defect Categories and Response Times (Carriageways)

The data recorded during inspections is used to determine defect categories. Defect categories prioritise repairs using the defect response times adopted by the council and shown below.

Defect Categories	Description	Response Time
Critical Defect	A situation where the inspecting officer considers the risk to safety high enough to require immediate action,e.g. Collapsed cellar, missing utility cover, fallen tree, unprotected opening, ➢ Requiring an immediate response to make the site safe	2 Hours#
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	By end of Next Working Day (Hierarchies 2, 3(a), 3(b)) Within 5 Working Days (Hierarchies 4(a), 4(b))
Maintenance Defect	Defects that warrant treatment to prevent them deteriorating into a safety defect prior to the next scheduled inspection, ➢ Requiring a response to prevent them becoming a safety defect	1 month (Hierarchies 2, 3(a), 3(b)) 3 months (Hierarchies 4(a), 4(b))
Programmed Repairs	Defects that warrant treatment, in order to prevent them deteriorating to such an extent that additional works or costs are incurred.	As per the local works programme

response time for critical defects refers to the time to attend site, make safe or repair will then be asap thereafter

Defect triggers on CH5 roads are to be considered an **investigatory level. An investigatory level does not automatically trigger a response. It will be incumbent upon the inspector to assign an appropriate response to each defect based upon its type, size, location and the level of use of the road. CH5 roads are low use roads and defects will frequently present low risk to users and can be responded to accordingly.

Defect Categories and Response Times (Footways)

The data recorded during inspections is used to determine defect categories. Defect categories prioritise repairs using the defect response times adopted by the council and shown below.

Defect Categories	Description	Response Time
Critical Defect	A situation where the inspecting officer considers the risk to safety high enough to require immediate action,e.g. Collapsed cellar, missing utility cover, fallen tree, unprotected opening, ➢ Requiring an immediate response to make the site safe	2 Hours#
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	By end of Next Working Day (Hierarchies 1(a), 1(b), 2) Within 15 Working Days (Hierarchies (3, 4)
Maintenance Defect	Defects that warrant treatment to prevent them deteriorating into a safety defect prior to the next scheduled inspection, ➢ Requiring a response to prevent them becoming a safety defect	1 month (Hierarchies 1(a), 1(b), 2) No set response time (Hierarchies (3, 4)
Programmed Repairs	Defects that warrant treatment, in order to prevent them deteriorating to such an extent that additional works or costs are incurred.	As per the local works programme

response time for critical defects refers to the time to attend site, make safe or repair will then be asap thereafter

Defect Types and Intervention Levels

Details of the defect types identified and the intervention levels that have been prescribed for each defect category are provided in Appendix C.

"24 Hour" Emergency Cover

The Council operates an emergency service via an out of hours Contact Centre that operates from 5 pm until 8:30 am daily and at other times when the main offices are closed. The Contact Number is 01267 224911. Incidents are reported to the contact centre who forward them to the Duty Officer and emergency response is provided if required.

This service provides where necessary an immediate and co-ordinated response to maintain highway safety at all times. Hazards dealt with include problems such as flooding, ice and snow, unsafe street works,

abandoned vehicles, traffic signal failure, electrical danger at street lighting installations, and clearing of the highway following a road traffic accident.

An incident log is produced by the Contact Centre for every out of hours period. When action can be safely deferred, this log is used to initiate any additional action required in respect of particular incidents on the next working day.

Works Ordering

Works orders are generated automatically using the council's asset management system, Mayrise, following the input of the inspection records.

Recording of Repair Records

On completion of the repair the works representative record details of the type of work undertaken, the materials used and the dimensions of the repair via a tablet into the Mayrise asset management system.

The defect will only be deemed 'fully repaired' once all records have been entered into the asset management system.

Defect Types and Intervention Levels

The following is a list of defect types and intervention levels used within the authority.

Critical Defects

Asset Type	Defect	Magnitude	Hierarchy	Road Character	Response Time
All	A situation where the inspecting officer considers the risk to safety high enough to require immediate action, typically include items such as; Carriageway / footway / cycleway collapse with high risk of accidents / loss of control; Critically unstable overhead wires, trees or structures; Exposed live wiring; Isolated standing water with high risk of loss of control; Missing or seriously defective ironwork with high probability of injury to highway users.	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size	All	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size	2 hours

the response time for a critical defect is the time until the site is made safe, this may be achieved by closing all or part of the road or coning off the hazard. In some instance a repair may be immediately possible but in many instances the repair will occur later

Safety Defects

Asset Type	Defect Type	Hierarchy	Dimensional Criteria		CSSW National Minimum Standard	
			Depth/Height	Extent	Depth/Hieght	Extent
Carriageways	Pothole	2, 3(a), 3(b)	>50mm	Maximum horizontal dimension greater than 150mm	> 50mm	Maximum horizontal dimension greater than 150mm
	Pothole	4(a), 4(b)	>75mm	Maximum horizontal dimension greater than 150mm	>75mm	Maximum horizontal dimension greater than 150mm
Footways	Pothole	All	>40mm	Maximum horizontal dimension greater than 75mm	> 40mm	Maximum horizontal dimension greater than 75mm
	Trip	All	>40mm	Maximum horizontal dimension greater than 75mm	> 40mm	Maximum horizontal dimension greater than 75mm
	Rocking Slabs	All	>40mm	Maximum horizontal dimension greater than 75mm	> 40mm	Maximum horizontal dimension greater than 75mm

**Defect triggers on CH5 roads are to be considered an investigatory level.

Maintenance Defects

Asset Type	Defect Type	Hierarchy	Dimensional Criteria		CSSW National Minimum Standard	
			Depth/Height	Extent	Depth/Hieght	Extent
Carriageways	Pothole	2, 3(a), 3(b)	>40mm	Maximum horizontal dimension greater than 150mm	> 40mm	Maximum horizontal dimension greater than 150mm
	Pothole	4(a), 4(b)	>50mm	Maximum horizontal dimension greater than 150mm	> 50 mm	Maximum horizontal dimension greater than 150mm
	Crowning / Depression	All	>100mm	< 2M Length	> 100mm	< 2M Length
Footways	Pothole	All	25mm – 40mm	Maximum horizontal dimension greater than 75mm	25mm - 40mm	Maximum horizontal dimension greater than 75mm
	Trip	All	25mm – 40mm	Maximum horizontal dimension greater than 75mm	25mm - 40mm	Maximum horizontal dimension greater than 75mm
	Rocking Slabs	All	25mm – 40mm	N/A	25mm - 40mm	N/A
	Badly cracked or damaged ironwork	All				

The standards in the preceding tables are a guide only. It is an essential part of the authorities' inspection regimes that inspectors are appropriately trained. In doing so inspectors are able to complement application of the standard with their own assessment of individual defects, which may result in a different response time.

Extract from highways Act 1980

As the highway authority the council is subject to legal requirements that include:
The 1980 Highways Act,

- Section 41; to maintain those roads, footways and cycle tracks that are '*Highways maintainable at public expense'*.
- Section 58 ; states that a statutory defence against third party claims is provided where the Highway Authority can establish that reasonable care has been taken to 'secure that the part of the highway to which the action relates' to a level commensurate with the volume of ordinary traffic such that it 'was not dangerous to traffic'.

Section 58 : Special defence in action against a highway authority for damages for non-repair of highway.

(1)In an action against a highway authority in respect of damage resulting from their failure to maintain a highway maintainable at the public expense it is a defence (without prejudice to any other defence or the application of the law relating to contributory negligence) to prove that the authority had taken such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic.

(2)For the purposes of a defence under subsection (1) above, the court shall in particular have regard to the following matters:—

a) the character of the highway, and the traffic which was reasonably to be expected to use it;

b) the standard of maintenance appropriate for a highway of that character and used by such traffic;

c) the state of repair in which a reasonable person would have expected to find the highway;

d) whether the highway authority knew, or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highway;

e) where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed;

but for the purposes of such a defence it is not relevant to prove that the highway authority had arranged for a competent person to carry out or supervise the maintenance of the part of the highway to which the action relates unless it is also proved that the authority had given him proper instructions with regard to the maintenance of the highway and that he had carried out the instructions.

The New Roads & Street Works Act 1991 imparts a duty on Statutory Undertakers to maintain their apparatus in the Highway, but it has been established in Case Law that they can rely on the Highway Authority's Safety Inspection regime to some extent when defending Claims.

The Council can avoid being held jointly liable for defective apparatus by issuing a Section 81 Notice - New Roads & Street Works Act 1991 to the Utility Company whenever a defect is identified by the Authority within the Highway.

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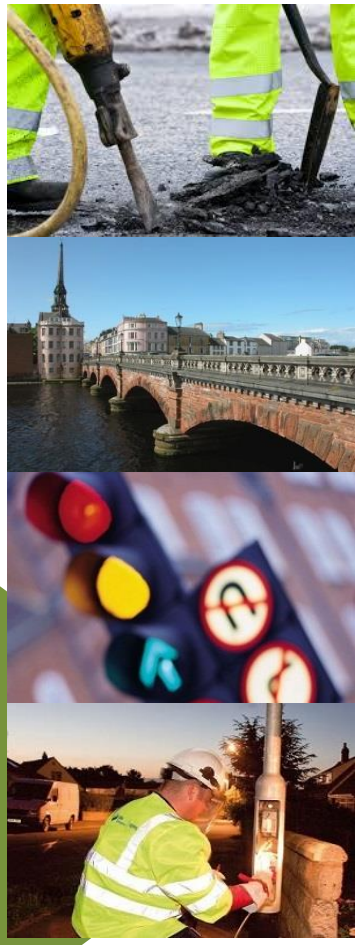
Highway Asset Management Planning:

Risk Based Approach:

Method Summary



Document Information

Title	CSSW Highways Asset Management Planning – Risk Based Approach: Method Summary
Author	exp consulting ltd
Description	This document contains a summary of the risk-based approach to highway asset management as recommended by CSSW as part of the HAMP framework.

Document History

Version	Status	Date	Author	Changes from Previous Version
1.0	Draft	Oct 19	exp consulting	NA, based on previous request for CSSW approval of the method

Document Control

Version	Status	Date	Authorised for Issue by CSSW HAMP Steering Committee
1.0	Final	Oct 19	Approved by CSSW Main Group Meeting September 2019

1. Purpose and Context

Purpose

CSSW commissioned the development of a nationally consistent response to the Code of Practice (2016) to developed under the CSSW HAMP project. This document summarises the results of that work, specifically the method recommended by CSSW.

Background

A new code of practice for highways was published in October 2016. The code contains 37 recommendations. Some of these are covered by existing CSSW HAMP guidance, others relate to aspects of highway management beyond the scope of the HAMP project.

The most significant change from the previous code is a recommendation that authorities adopt a risk-based approach. The code is explicit in this requirement but silent on the how it may be achieved. The CSSW response focuses on the risk-based approach recommendation.

Scope

The risk-based approach distils into a need to address the following:

1. Establishing a Network Hierarchy
2. Establishing an Inspection Regime
3. Establishing a Repair Regime
4. Using Risk to influence budget allocation

Most authorities have standards and practices in place for each of these. The method is to review these and to demonstrate that the methods used are explicitly risk-based.

Adoption and Use

The benefit of adopting a national standard will only be achieved if authorities adopt and use the method. The method has been approved by CSSW at the Main Group meeting in September 2019.

2. Current Practices

To inform the development of the method a current practice was undertaken and revealed

Variation in Existing Practices

Authorities apply a range of standards for inspection regimes and repairs. There is commonality between many authorities but there are variances. If a nationally consistent approach is to be adopted some or all authorities may need to change their standards.

Use of Risk in Current Practices

Arguably current practices are “risk based” with many using a “risk matrix” approach. However, these rely upon inspectors to assess risk of defects. It is unclear what risks the inspector is supposed to assess and how; the risk of a fatality, of an injury to a user, of damage to property? Each of these has a different probability of occurring and different level of impact. Current methods rely almost solely on an individual’s judgement and are insufficient to demonstrate the application of a risk-based approach.

Evidence to Support Current Standards

Current standards have evolved over time with little evidence of how they came into being. They are mainly based on reference to the existing code but are the result of judgement rather than rational analysis.

3. Alternative Responses to Risk Based Management

Alternative Approaches

It is acknowledged that there are 2 approaches to a risk-based approach to determine defect categorisation and repair timescales:

- A fact/data-based approach; using high level risk assessment by management to set intervention criteria and target timescales (the approach adopted by this guidance) and
- A dimensionless approach; using a dimensionless system and relying on the judgement of inspectors to determine the category of defect and the required repair timescale based on a risk assessment of the individual defect (an approach adopted in some other areas of the UK)

Fact/Data Driven Approach

The approach adopted in this guidance utilises high level risk assessment. It uses asset data to determine criteria at which intervention is recommended as a minimum. It is designed to be used in

conjunction with inspector's judgment. An inspector will always be able to increase the assigned response if they feel an individual defect warrants such action. The risk assessment at a high level treats all defects as being in the worst position. This method is expressly intended to create consistency and to allow risk assessments to be updated over time using the data collected.

The CSSW HAMP Risk-Based Approach method has been consciously constructed to be fact based. It is a deliberate objective of the method to reduce the reliance on individual's judgement and to use asset data as the basis for decision making.

Dimensionless Approach

The dimensionless approach places a higher burden on the inspectors. It requires inspectors to carry out a risk assessment of each observed defect. It requires a higher level of record keeping. It is an option that some authorities may wish to adopt. Should an authority wish to adopt it a higher level of competence for the inspectors will be required. Authorities adopting this approach should make their own provision for recording how inspectors carry out their individual defect risk assessments and how the competence of their inspectors is demonstrated.

Hybrid Approach

There may be options for a hybrid approach where an authority may wish to use the intervention criteria in this guidance as an investigatory level and would carry out an on-site risk assessment of any defect meeting this level. This approach could be applied to all or any of the hierarchy categories. This approach would carry with it the same need for demonstrating inspector competence as the dimensionless approach.

4. CSSW Recommended Risk Based Approach

Outline of the Method

The recommended method of responding to the code is to **carry out a risk review every 2 years**. The risk review collates appropriate data and uses it to inform refinements to hierarchy, inspection and repair regimes. It is expected that after the initial review subsequent reviews would involve refinement to the regimes rather than fundamental changes, as such the subsequent reviews should be able to be carried out with considerably less resource input than the initial review will require. The review comprises of:

Network Hierarchy

A method has been created to enable hierarchies to be established. Applying this method will provide the authority with a documented evidence of how the hierarchy was arrived at.

A key element of the hierarchy method is reference to use. Traffic volumes are used as the basis for the carriageway hierarchy reflecting the fact that the risk associated with a road carrying 20,000 vehicles a day is different to one carrying 500.

Banding have been chosen that if applied will create consistency nationally. The banding adopted are detailed in the "CSSW HAMP Risk-Based Approach – Method".

Inspection Frequencies

Based upon the levels of hierarchy recommended an analysis has been undertaken to provide a rationale for a regime of inspections. The analysis is based upon levels of use and the resulting risk exposure. Using the levels of use associated with each level of hierarchy it is possible to compute the inspection interval that would result in the same risk exposure across the network. This provides a basis for the different frequencies of inspection.

It results in roads and footways that are used more requiring more frequent inspection than the lesser used ones. However rather than basing the interval upon perception this method uses data as the basis for creating a recommended regime. The recommended frequencies are as shown the "CSSW HAMP Risk-Based Approach – Method".

Repair Regime

A similar approach has been taken to create a recommended risk-based repair regime. The regime is predicated upon using an average 24-hour response to a potentially hazardous defect as a starting point and considering the comparative risk exposure of lesser defects.

The ability to carry out this analysis is constrained by the limited amount of detailed data available, however a rationale has been arrived at to create the minimum standard repair regime as shown in the Minimum Standards document

Budget Allocation

Reporting the output from the risk review to the appropriate management forum or committee within the council, along with the relevant annual status and options report, will provide evidence of using risk to influence budget allocation and is considered an appropriate initial step in complying with the code.

Data Limitations

The aspiration of the method is that data will be used as the basis for all risk assessments. There are, however, current limitations on the extent to which this can be applied.

Improvements to the level of traffic data available and the detail recorded for defects will greatly enhance the extent to which future risk assessments can be fact based.

5. Resource Produced to Assists Authorities

The following resources have been made available via the CSSW HAMP project to assist authorities to apply the recommended method:

Tools

To enable practice RP1 to be completed the following resources are available:

1. **RP1 –Highway Asset Risk Review**: A spreadsheet that authorities are recommended to use to record a risk review.
2. **Risk Based Approach: Method:** A document providing a detailed description of the approach to accompany the spreadsheet RP!.
3. **Template Maintenance Manual Content:** A template document that authorities can use to record hierarchy and inspection and repair regimes derived using the risk-based approach and their methods of updating the same.
4. **Highway Inspection Defect Recording Manual:** A manual designed to give guidance to inspectors on what defects to record and what records should be taken about each defect. Intended to be used as the reference document for inspector training.
5. **Committee Paper Template/Report of Outcome of Highway Risk Review**
    a. A template initial paper that advises the new method, references the CoP and recommends changes to hierarchy, inspection and repair regimes.
    b. A template report paper for subsequent reviews that focuses on reporting changes to risk and resultant recommended changes to hierarchy, inspection and repair regimes
6. **National Minimum Standards:** A statement of minimum standards recommended by CSSW for intervention level and associated response times for defects.

6. Recommendation

CSSW recommends the following actions (as the CSSW HAMP Risk -Based Method) be used to demonstrate initial compliance with the Code of Practice:

1. Complete a risk review and use the output to:
    a. **Confirm Network Hierarchy**; this will result in a documented hierarchy for each road, footway, structure etc. along with a record of how the hierarchy was arrived at
    b. **Confirm Inspection Regime;** comparison of the current regime with the recommended national regime, will result in a confirmed risk-based inspection regime that will either comply with the national regime or document where variance from it are to be used. (nb Where the variance is a **lesser** standard it is recommend that the authority documents its

own risk assessment to detail why they believe this variance is appropriate in their locality/council)

c. **Confirm Repair Regime:** comparison of the current regime with the recommended national minimum standard will result in a confirmed risk-based repair regime that will either comply with the national regime or document where variance from it are to be used. (nb Where the variance is a **lesser** standard it is recommend that the authority documents its own risk assessment to detail why they believe this variance is appropriate in their locality/council)

d. **Report Outcome of Risk Review**: report the outcome of the risk review to the appropriate committee or management forum within the authority along with the annual status report and the options report

e. **Confirm Data Improvement Actions**: review data used in the risk review and where necessary identify where improvements are desirable and ensure that use data and defects records will enable fact-based risk assessment to be used in future risk reviews. This is essential if future standards are to be genuinely risk-based rather than just a revised judgement by a different individual.

The method has been explained and presented to attendees at the CSSW HAMP workshops during 2017 and 2018. Every authority has been visited by the project consultants for 2 days. During this visit the risk review activity was explained and initiated. Authority HAMP personnel should already be familiar with the method set out above as a result of this work.

Cymdeithas Syrfewyr Sirol Cymru
County Surveyors' Society Wales

Highway Asset Management Planning:

Risk Based Approach:

Method




Document Information

Title	Risk Based Approach: Method
Author	exp consulting
Description	This document is a detailed description of the method proposed by CSSW for a nationally consistent risk review method in response to the 2016 Code of Practice “Well Managed Highway Infrastructure”

Document History

Version	Status	Date	Author	Changes from Previous Version
1	draft	May 19	exp	NA
2	draft	Oct 19	exp	Formatting updated
1	Final	Oct 19	exp	NA.

Document Control

Version	Status	Date	Authorised for Issue by CSSW
1	Final	Oct 19	CSSW Main Group Meeting Sept 2019

1. Introduction

This document set out CSSW's recommended method of applying a risk-based approach to the management of highway assets. It has been developed under the CSSW highway asset management project and forms part of the HAMP recommended practices. This risk-based approach has been formally approved by CSSW with the expectation that it will be adopted by all Welsh local authorities.

CSSW's HAMP recommended practices have been updated to incorporate a requirement to carry out an annual highway asset risk review as Task 4a. This includes:

1) **RP1 –Highway Asset Risk Review**: A spreadsheet that authorities are recommended to use to record a regular risk review (Minimum 2 Yearly).
2) **Risk Based Approach: Method**: Document providing a description of the approach to accompany the spreadsheet RP1. (This Document)
3) **Risk Based Approach: Summary of Method:** Document providing a summary explanation of the method intended for use by authorities to brief managers and members
4) **Template Maintenance Manual/Policy Statement:** Template document that authorities can use to record their hierarchy, inspection and repair regimes
5) **Highway Inspection Defect Recording Manual:** A manual on what defects to record and what records should be taken about each. A reference document for inspector training
6) **Committee Paper Template/Report of Outcome of Highway Risk Review**
   a) A template initial paper that advices the new method, references the CoP and recommends changes to hierarchy, inspection and repair regimes.
   b) A template report paper for subsequent reviews that focuses on reporting changes to risk and resultant recommended changes to hierarchy, inspection and repair regimes
7) **National Minimum Standards:** A statement of minimum standards for investigatory level and associated response times for defects.
8) **Rationale Behind the Approach:** Sets out the rationale that was adopted in developing that approach.

2. Implementation

The method requires asset data to be used increasingly to support the risk assessment process. It will allow authorities to move away from a reliance on officer judgement to a process where decisions can be justified by reference to data. The data required to fully implement the risk assessment process may not be available initially. To accommodate this a staged implementation is proposed.

Initial Risk Based Regime

The initial regime should be based upon existing data. Upon implementing the initial regime, it is expected that authorities should instigate appropriate data collection procedures to ensure that the data required to implement the risk review using the risk-based method is available for future use. To deliver consistency regionally and nationally it is recommended that initial hierarchy and inspection and repair regimes are reviewed in consultation with neighbouring authorities.

It is recommended that authorities report an initial risk review to council along with any associated changes to current hierarchies and inspection and repair regimes.

Risk Based Regime (2 Yearly Review)

The method proposed is based upon 2 yearly reviews of risk. It is expected that improving data will enable the regime to be subject to ongoing refinement. Updates of relevant asset data should be used to update risk assessments (at least 2 yearly) and make adjustments to the regime where appropriate. It is recommended that the process of consultation with neighbouring authorities is repeated when any changes are made to the hierarchy category and /or inspection and repair regime applied on roads that cross boundaries.

It is expected that authorities will report the results of their risk review to council annually along with any proposed changes to hierarchies and inspection and repair regimes.

Data Improvement

A fully developed risk-based approach should be supported by analysis of asset data. This will enable the authority to review the efficacy of its operation and to direct resources to the areas of greatest risk. It is recommended that this data is collected electronically during inspection and repair. This removes manual data entry exercises, which can offset the cost of any new technology required.

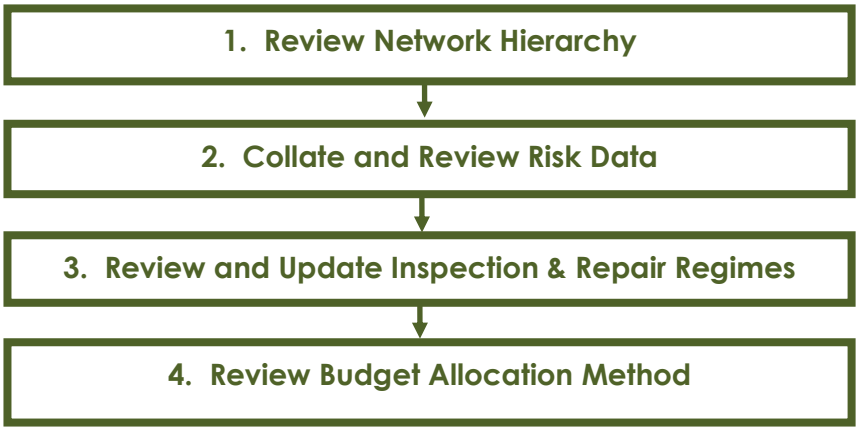
3. Method Overview

Highway Asset Risk Review (CSSW HAMP; RP1)

It is recommended that authorities a 2-yearly review of the risks associated with managing their highway assets using the method set out in this document. The results of the review should be reported to an appropriate management/member forum within the council. The purpose of the review is to ensure that those tasked with the establishment of standards and with allocation of budgets are able to undertake these tasks with appropriate information available to them about risk.

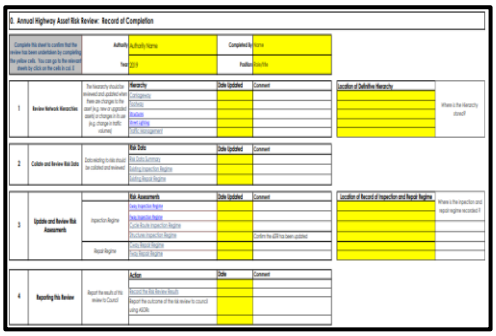
Risk Review Steps

The risk review should include completing the following steps:



Recording the Review

A spreadsheet tool "RP1- Highway Asset Risk Review" has been provided to enable authorities to record their risk reviews. The sheet comprises of sections matching the steps above. Within each step are a number of individual sheets that authorities are recommended to complete. Authorities should complete the sheet labelled "risk review record" to provide an audit trail that the review has been completed.



Reporting the Results of the Review

It is recommended that the results of the review are reported to the appropriate management/member forum in the council in the form of a committee report. (A template report has been provided).

Risk Review Method

Step 1: Review and Update Network Hierarchy

Authorities should review and update their network hierarchy by completing the asset specific hierarchy worksheets provided in RP1

Review Network Hierarchies	*The hiearchy should be reviewed and updated when there are changes to the asset (e.g. new or upgraded assets) or changes in its use (e.g. change in traffic volumes)*	**Hierarchy**
		Carriageway
		Footway
		Structures
		Street Lighting
		Traffic Management

The same generic steps are required for all asset groups:

1. Enter Network/Asset Details
2. Assess the use and Refine the Hierarchy (including making any local specific adjustments)
3. Check for Regional Consistency
4. Confirm and Record Final Hierarchy

Enter Network/Asset Details to Assign Initial Hierarchy Category

All assets are assigned an initial hierarchy category based upon a specified rule; e.g. initial carriageway hierarchy is based upon road class. This can be done automatically in the spreadsheet using data exported from a relevant asset inventory database.

Assess Use to Refine Hierarchy; Local Specific Adjustments

The hierarchy assigned to an asset can be adjusted following an assessment of local specific factors. This exercise should be undertaken in formal consultation with a group of local officers (and if appropriate members) that may include representatives of:

- Head of Service
- Highways Services Manager
- Operations Manager
- Planning division
- Highway Structures
- Street Lighting
- Streetworks Manager
- Network Management
- Asset Management
- Road Safety
- Passenger Transport Unit
- Transport Strategy

A record should be kept of all decisions made by this group that includes the reasons for the decisions/amendments made. This can be done using the spreadsheet and noting the reason for where sections of road have their hierarchy changed from the initial hierarchy as a result of the use assessment.

Check for Regional Consistency

Upon completion of a proposed hierarchy consultation with neighbouring authorities should take place to consider and review regional consistency.

Where there are differences the reason for these should be discussed and if possible, resolved to a standard that is regionally consistent. If this is not possible each authority should record the reason for the adoption of differential standards.

Confirm and Record the Hierarchy

The output from the above should be a record of the hierarchy in the form of a completed spreadsheet using the template provided with this guidance. The resulting hierarchy should be entered into any systems that rely upon it e.g. maintenance management system used for inspections and repairs. The maintenance manual and or data management plan should record where the definitive record of the hierarchy that applies to any highway asset can be found. The initial establishment of the hierarchy and any updates should be confirmed in a report to an appropriate council committee and formal acceptance/approval as council policy.

Record the Review and Update

It is recommended that the hierarchy is reviewed and updated regularly this can be done throughout the year or at a minimum 2 yearly interval. This should involve reporting to the stakeholder group shown above. The report should focus on providing details of:

- any assets that have substantially changed in character and
- any assets where the risk assessments undertaken in support of the inspection and repair regime indicate that the originally allocated hierarchy level may be inappropriate

A formal procedure should be developed and adhered to for recording the review and any changes made to the hierarchy. It should include recording the reasons for the changes made.

A detailed description of how to use the "RP1 Highway Asset Risk Review" to review and update the asset hierarchies is attached as appendix (i)

Step 2: Collate and Review Risk Data

In order to undertake a review of existing inspection and repair regimes it is necessary to first record the existing regimes and to record the performance as a consequence of those regimes. This information can be used to provide context when assessing the appropriateness of the current regimes.

Compile a Risk Data Summary

For each asset group annually complete a current performance return in relation to:

- Safety – Number of safety defects (Cat 1), No. or % of the asset in a poor condition, No. of Injury Incidents, etc.
- Maintenance – Number of maintenance defects (Cat 2), No. or % of asset to be considered for maintenance works, etc.
- Financial – No. of 3rd party claims, number of claims lost and the reason, and value of pay out.

Asset	Category			Data	Year 1	Year 2	Year 3	Year 4	Year 5	Trend	Interpretation
Carriageways	Safety			Number of Cat 1 Defects Identified by Routine Inspection							
				Number of Cat 1 Defects Identified by Reactive Inspection							
				% Cat 1 Defects repaired / made safe within standard							
				% of A Roads in poor condition (red, scanner)							
				% of B Roads in poor condition (red, scanner)							
				% of C Roads in poor condition (red, scanner)							
				% of U Roads in poor condition (red, scanner) and or visual							
				KSI (where road condition was a contributory factor)							
				Number of claims received relating to personal injury							
				% of routine inspections completed to standard							
				% of reactive inspections completed within response time							
	Maintenance Liability			Number of Cat 2 defects identified by routine inspections							
				Number of Cat 2 defects identified by reactive inspection							
				Number of Cat 2 defects not repaired (repair backlog)							
				Number of Cat 2 defect that became Cat 1 defects before they were repaired							
				(% of roads to be considered for maintenance A roads (red and amber)							
				(% of roads to be considered for maintenance B roads (red and amber)							
				(% of roads to be considered for maintenance C roads (red and amber)							
				(% of roads to be considered for maintenance U roads (red and amber)							
				% of the asset for which current# condition surveys data is held (less than 1 year old)							
	Financial Loss			Value of payout of 3rd party claims							
				Number of claims received relating to property damage							
				Number of claims received							
				Number of claims lost due to not adhering to inspection and repair regime							
				Number of claims lost for other reasons							

The risk data input should be reviewed in order to assess where problems are occurring such that the council's targets and standards for the management of the highway asset are not being met. Thus, prompting the adjustment of the management regimes to attempt to correct this.

This could take the form of an increasing level of safety defects leading to a reassessment of inspection regimes, or defect reaction times not being met leading to a reassessment of repair regimes etc.

Step 3: Review and Update Inspection and Repair Regimes

Record the Existing Inspection Regime

For each asset group identify your existing inspection regime.

Asset Type	Category of Inspection	Road Class	Hierarchy	Type of Inspection	Coverage	Frequency	Walked or Driven
Carriageways	Routine Inspection	Complete relevant column					
		A	Strategic	Routine Inspection	100%	Monthly	Both
		A	Main Distributor		100%	Monthly	Both
		B	Secondary Distrib		100%	Monthly	Walked
		C	Link Roads		100%	3 Monthly	Walked
		U	Local Access Roc		100%	6 Monthly	Walked
	Reactive Inspection				Criteria	Response Time	
				Response to 3rd party notification of defect	Emergency Response	2 hours	
					Cat 1	48 hours	
					Cat 2Ha	10 working days	
					Cat 2Hb	30 working days	
					Cat 2L	12 months	
	Condition Survey						
		A		SCANNER Machine	50%	Annuallly	
		B			50%	Annually	
		C			25%	Annually	
		U			0		
		A		Visual Condition Assessment (CSSW Method)		ad hoc	
		B				ad hoc	
		C				ad hoc	
		U			100%	ad hoc	

Compare Inspection Regime Against CSSW Minimum Standard

For each asset group compare your existing inspection regime against the CSSW recommended minimum standard.

Comparison of Footway Routine Inspection Intervals between Authority and CSSW Minimum								
Hierarchy	Authority Inspection Interval (days)	CSSW Minimum Inspection Interval (days)	Difference (days)	Comparison	Authority REI (k pa)	CSSW Minimum REI (k pa)	Difference in REI (k pa)	Insert reference to authority risk assessment undertaken where standard does not meet CSSW Minimum
FHVHU	30	30	0	Equals CSSW Minimum	465	465	0	
FH1	30	30	0	**Equals CSSW Minimum**	310	465	155	
FH2	60	90	30	**Exceeds CSSW Minimum**	305	465	160	
FH3	365	180	-185	**Does not Meet CSSW Minimum**	366	465	99	A risk assessment was undertaken on the 15 April 2019 using authority data collected over the past 5 years, full details of the RA can be found at .....
FH4 (Condition poor ur unknown)	365	365	0	**Equals CSSW Minimum**	183	465	282	
FH4 (Good Condition)	365	730	365	**Exceeds CSSW Minimum**	0	465	465	
FH5	365	Reactive	N/A	**Exceeds CSSW Minimum**	37	465	428	

Identify any differences in the standards and record what they are. Where the authority standard does not meet the CSSW minimum detail the location of the risk assessment undertaken to confirm that the standard is appropriate.

Compare Repair Regime Against CSSW Minimum Standard

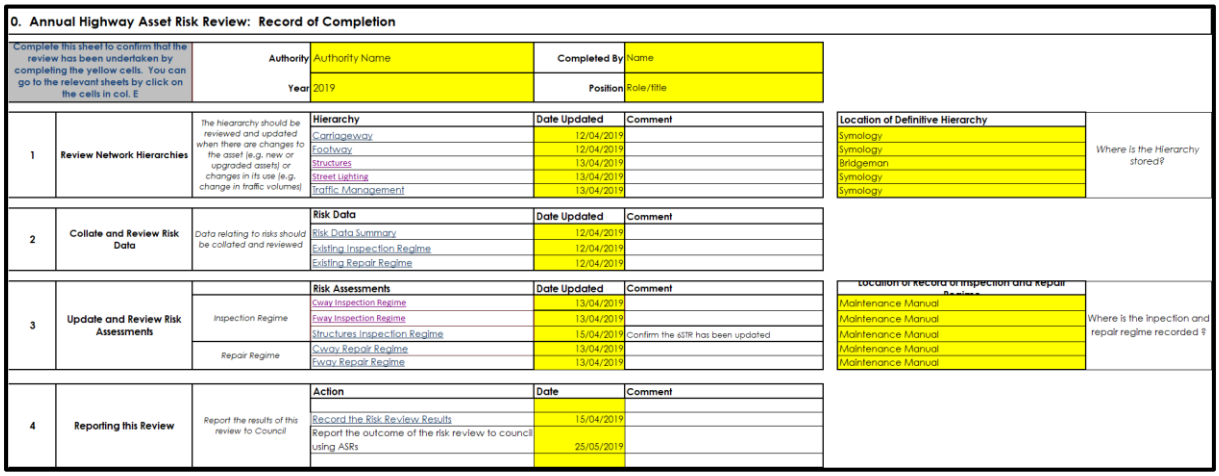
For each asset group identify your existing repair regime and compare this against the CSSW recommended minimum standard.

CSSW National Minimum Standard							Authority Standard in Comparison to National Minimum	Difference from National Minimum Standard	Reason for lower Standard and location of Authority Risk Assessment undertaken (Where applicable)
Asset /Defect Category	Description	Defect	Dimensional Criteria		Hierarchy	Response Time			
			Depth/Height	Extent				Insert Here the differences between the authority regime and the CSSW minimum standard	
All									
Critical Defect	Defect that poses an immediate or imminent risk of injury to road users, e.g. Collapsed cellar, missing utility cover, fallen tree, unprotected opening	**Examples:** Major debris or spillage on the Highway: Carriageway / footway / cycleway collapse with high risk of accidents / loss of control:Critically unstable overhead wires, trees or structures: Exposed live wiring: Isolated standing water with high risk of loss of control: Missing or seriously defective ironwork with high probability of injury to highway users	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size	Any	2 hours#	**Adopted National Standard**		
Carriageways								Insert Here the differences between the authority regime and the CSSW minimum standard	Reason for differing Standard (Risk Assessment Undertaken?)
Safety Defect	Service requests or defects requiring a response as soon as possible to remove a potential risk of injury to users	Pothole	> 50mm	Maximum horizontal dimension greater than 150mm	CHSR, CH1 and CH2	By end of next working day	**Adopted National Standard**		
			>75mm		CH3, CH4 and CH5**	Within 5 working days	**Improved Standard**	**All hierachies use the 50mm and next working day intervention criteria**	
Maintenance Defects (High)	Other defects that warrant treatment, in order to prevent them deteriorating into a safety defect prior to the next scheduled inspection	Pothole	> 40mm	Maximum horizontal dimension greater than 150mm	CHSR, CH1 and CH2	1 month	**Adopted National Standard**		
			> 50mm		CH3, CH4 and CH5**	3 months	**Improved Standard**	**All hierachies use the 40mm and 1 month intervention criteria**	
		Crowning / Depresssion	> 100mm	< 2M length	Any	3 months	**Adopted National Standard**		

Identify any differences in the standards and record what they are. Where the authority standard does not meet the CSSW minimum state a reason for this and detail the location of the risk assessment undertaken to confirm that the standard is appropriate.

Step 4: Update Risk Review Record

After having undertaken each of the above stages the risk review record should be updated to record their completion.



0. Annual Highway Asset Risk Review: Record of Completion

Complete this sheet to confirm that the review has been undertaken by completing the yellow cells. You can go to the relevant sheets by click on the cells in col. E

		Authority	Authority Name	Completed By	Name		
		Year	2019	Position	Role/title		
1	Review Network Hierarchies	The hierarchy should be reviewed and updated when there are changes to the asset (e.g. new or upgraded assets) or changes in its use (e.g. change in traffic volumes)	Hierarchy	Date Updated	Comment	Location of Definitive Hierarchy	Where is the Hierarchy stored?
			Carriageway	12/04/2019		Symology	
			Footway	12/04/2019		Symology	
			Structures	13/04/2019		Bridgeman	
			Street Lighting	13/04/2019		Symology	
			Traffic Management	13/04/2019		Symology	
2	Collate and Review Risk Data	Data relating to risks should be collated and reviewed	Risk Data	Date Updated	Comment		
			Risk Data Summary	12/04/2019			
			Existing Inspection Regime	12/04/2019			
			Existing Repair Regime	12/04/2019			
3	Update and Review Risk Assessments		Risk Assessments	Date Updated	Comment	Location of Record of Inspection and Repair Regime	Where is the inpection and repair regime recorded ?
		Inspection Regime	Cway Inspection Regime	13/04/2019		Maintenance Manual	
			Fway Inspection Regime	13/04/2019		Maintenance Manual	
			Structures Inspection Regime	15/04/2019	Confirm the 6STR has been updated	Maintenance Manual	
		Repair Regime	Cway Repair Regime	13/04/2019		Maintenance Manual	
			Fway Repair Regime	13/04/2019		Maintenance Manual	
4	Reporting this Review	Report the results of this review to Council	Action	Date	Comment		
			Record the Risk Review Results	15/04/2019			
			Report the outcome of the risk review to council using ASRs	25/05/2019			

Step 5: Report Results of Risk Review

Following the completion of the risk review the results of the review and any changes made should be reported to the appropriate council body for approval. This can be done within or as an appendix to the Annual Status Report (ASR) or using the template report document provided (Committee Paper Template/Report of Outcome of Highway Risk Review).

Appendix (i) – Detailed Description of Hierarchy Review using RP1

Carriageway Hierarchy

Use Network/Asset Details to Assign Initial Hierarchy

Import network details (USRN, Road Name, Road Number (A, B, C, U), Section Number and Existing Hierarchy) from the NSG. Enter the data into the spreadsheet provided:

NETWORK/ASSET DETAILS								
a. Enter network data in here from the street gazeteer						*b. Identify strategic routes*		Initial Proposed Road Hierarchy will populate here based on road class
USRN	Road Name	Road Number (A,B,C,U)	Section Number	Speed Limit (mph)	Existing Hierarchy	Is Road a Strategic Route?	For strategic routes state the reason for considering it strategic	1. Initial Proposed Road Hierarchy
2500123	London Road	A	10	70	Strategic Route	Yes	Route between cities	CHSR
2500124	High Street	A	10	60	Main Distibutor	No		CH1
2500125	Main Street	B	10	40	Secondary Disributor	No		CH2
2500126	Broad Avenue	C	10	30	Link Road	No		CH3
2500127	Normal Close	U	10	30	Local Acces Road	No		CH4
2500128	Narrow Lane	U	10	30	Back Lane	No		CH4

All road sections will be assigned an initial category based as follows:

Identify Strategic Routes (CHSR); Identify routes that are of a regional importance as a strategic route. It is expected that these will be a small number of roads that provide the primary routes between towns and cities. It is anticipated that this will be a manual exercise undertaken by appropriate officers from within the authority. Appropriate reference should be made to other networks that are already defined for network management/traffic management, winter maintenance, local transport plans and the like.

Initial Hierarchy: An initial hierarchy based on road classification (A, B, C or U) will be automatically applied **f**or all non-strategic roads the initial road hierarchy can be matched to the road classification as shown below:

- A roads → CH1
- B roads → CH2
- C roads → CH3
- U roads → CH4

(n.b. Speed limit is included for reference purposes only and does not feed into the initial hierarchy setting criteria)

It may be appropriate to add additional categories below local access roads to account for Minor Roads, Back Lanes, Green Lanes etc. as part of stage 2. The initial allocation is automated in the spreadsheet provided (it reads the road number and allocates an initial hierarchy for all roads except those identified as strategic).

Use Assessment to Refine Hierarchy: Local Specific Adjustments

It is expected that for many authorities there will be some roads within the network where the matching of road class to a hierarchy level is not appropriate. This may be due to reasons of local importance. Or, more likely, it will be due to the traffic volumes not being commensurate with the banding, invariably this will be able to be evidenced by reference to traffic volumes and/or composition. An arterial road from a town may be a B classification but carries the same level of traffic and local importance as a nearby A road. Such a road may need to be elevated in the hierarchy to the same level as the A road. The converse could equally apply where the use of a road is less than the banding. A fixed method of dealing with these exceptions is not suitable. It is appropriate that local knowledge is brought to bear upon this task but that the output and rationale for the decisions made are recorded.

The use assessment should consider where individual roads (or sections of roads) should be allocated a different hierarchy level based upon factors that may include:

USE ASSESSMENT										
c. Review assumed traffic flow band, does it appear a reasonable assumption?			*Insert traffic count figures used. These may be actual or extrapolated or estimated*			*d. Does this road carry levels of HGV that warrant different inspection and repair?*	A recommendation as to whether a review should be undertaken will populate here based on the primary considerations	*e. Is this section of road part of a major designated diversion route (e.g. for pre-planned diversion for motorway or trunk road closures) such that it warrants different inspection and repair*	A recommendation as to whether a review should be undertaken will populate here based on the secondary considerations	*Insert the Road Hierarchy you have decided upon based on your review of secondary considerations*
Primary Consideration: Traffic Volumes/Use								**Secondary Considerations**		
Is the assumed traffic flow within the band indicated below?			**AADT (Insert actual where known.) (Insert extrapolated / estimated where it is not within the assumed traffic flow band)**	**State the source of Traffic Data quoted in col M (actual count, extrapolated or estimated)**	**Basis of Estimate**	**Does the road have a large volume of HGVs?**	**Consider reviewing the Road Hierarchy?**	**Is this part of a major "designated" diversion route? (e.g. for pre-planned diversions for motorway or trunk road closures)**	**Does the Road Hierarchy need reviewing?**	**2. Reviewed Road Hierarchy**
> 20,000	Yes					No	No	No	No	
10,000 - 20,000	Yes					No	No	No	No	
5,000 - 10,000	No	No	12000	Traffic Count	N/A	No	Yes	Yes	Yes	CH1
1,000 - 5,000	Yes					No	No	No	No	
200 - 1000	Yes					No	No	No	No	
200 - 1000	No	No	100	Estimated	Local Knowledge	No	Yes	No	No	CH5

It is expected that changes to hierarchy made during the use assessment will be justified by reference to one or all of the considerations below:

Primary Considerations:

- **Volume of traffic:** Increased traffic levels are the major contributor to an increased risk level for carriageway use. In order to assess this risk CSSW has adopted the following bandings of expected traffic volumes for each carriageway hierarchy. Where an initial hierarchy has been allotted to a road the amount of traffic using that road on a daily basis should be assessed against these traffic volumes.

Hierarchy Level	Traffic Banding (AADT)
CHSR	>20,000
CH1	10,000 - 20,000
CH2	5,000 - 10,000
CH3	1,000 - 5,000
CH4	200 - 1000
CH5	< 200

  It is expected that authorities will make adjustment to the allocated hierarchy level based upon where traffic volumes are known to not be in, or near to, the ranges used above. A road may move between categorisations due to having a higher or lower level of traffic volume than other roads in this category. An initial estimated traffic volume based on officer knowledge may prompt the changing of hierarchy for a particular road, but this should, where possible, be verified using actual traffic count data.

- **Traffic Composition:** the composition of the traffic may also be a driver to moving a road from one category to another. This may include:
  - HGV “routes” - roads with especially large volumes of HGVs, thus more rapid deterioration may also be moved for the same reason.
  - Bus Routes – although not explicitly assessed at this stage where roads that are bus routes experience a more rapid deterioration it may be appropriate to prompt their allocation to a higher hierarchy category to ensure a higher frequency of inspection or enhanced repair regime.

Secondary Considerations:

- **Major Designated Diversion Route:** It may be appropriate to adjust the hierarchy if the road is part of a pre-planned diversion for motorway or trunk road closures if that means that it warrants different inspection and repair regimes.

Tertiary Considerations:

The code of practice lists many factors that authorities may consider when establishing their hierarchy (ref). CSSW has decided that it is appropriate for the tertiary considerations listed below to be discounted from the risk review, for the reasons stated. It is recommended that where authorities have reinstated these considerations as part of a local risk assessment that they document these and explain why they have been reintroduced.

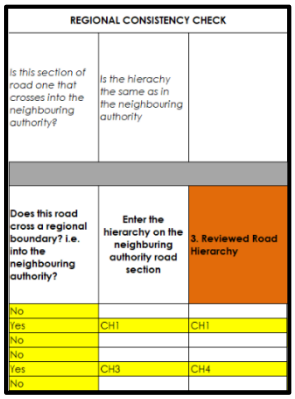
The following items from the CoP are considered to be unnecessary for inclusion in the CSSW recommended hierarchy review process.

- Adjacent Important Facilities: *it may be appropriate to move a road from one hierarchy category to another due to the presence of important adjacent facilities (Hospitals, schools, shopping centres, care homes, public building etc.) WHERE A RISK ASSESSMENT DEMONSTRATES A NEED TO GREATER /HIGHER HIERARCHY).* – This is considered to be something which may drive a higher level of use, and should be considered when estimating usage levels but will not automatically trigger any particular hierarchy level
- Adjacent Pedestrian Use – *roads where adjacent use means that the carriageways are frequently used by pedestrians (This may not result in a hierarchy change but may prompt consideration of making walked inspections in conjunction with footway inspections)*
- Accidents – *routes with greater than normal incidents of accidents. [Again, risk assessment will be required to show that inspection and repair regime adjustment are required rather than a change in hierarchy]*
- Proposed usage – *proposed usage is uncertain, and any forecast will contain many unknowns it has therefore been decided that review of hierarchy should be undertaken following any significant changes to usage rather than before*.
- Routes to important local facilities and to the strategic network – *it is believed that this aspect has been covered in the traffic volume and traffic make-up already considered in Step 2*.
- Designation as a traffic sensitive route – *this is considered to be a network management issue which is unlikely to affect the functional hierarchy of the carriageway*.
- Special characteristic of certain assets, e.g. historic structures – *it is not felt that this will have any bearing on changes to the functional hierarchy as they will already have been picked up by the items above*.
- Potential for use as a diversion route - *it is not considered possible to predict where a temporary diversion may be used as a result of an incident (rta, spillage, etc) and as such adjusting the hierarchy to take into account what may be a very short duration change is not considered appropriate. Where planned maintenance works (or other works) results in the use of a diversion for an extended period consideration will be given to changing the allocated functional hierarchy*

category of the diversion route to take account of its amended usage (i.e. increased traffic volumes and changed composition HGV increase etc.) during this period.

- Ceremonial routes and special events – *any changes to the inspection or repair standards for these will be dealt with as a temporary exception and will not affect the ongoing functional hierarchy of the carriageway*.

Consultation with Neighbouring Authorities



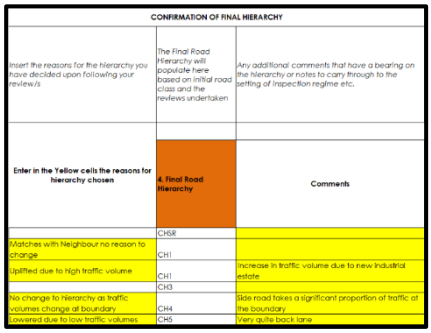
REGIONAL CONSISTENCY CHECK		
Is this section of road one that crosses into the neighbouring authority?	Is the hierachy the same as in the neighbouring authority	
Does this road cross a regional boundary? i.e. into the neighbouring authority?	Enter the hierarchy on the neighbouring authority road section	3. Reviewed Road Hierarchy
No		
Yes	CH1	CH1
No		
No		
Yes	CH3	CH4
No		

Upon completion of the Use Assessment a consultation should be undertaken with neighbouring authorities. A subset of the hierarchy data should be extracted for the roads that cross into adjacent authorities. Authorities should exchange this data and compare the level of hierarchy assigned to the roads that cross regional boundaries. Where there are differences the reasons for them should be determined. Each authority must then decide if any differences that exist are acceptable.

Where the hierarchy changes when it crosses a regional boundary, this should be noted by both authorities in their records and the rationale for accepting the difference clearly stated.

Confirm and Record the Hierarchy

Following completion of the consultation exercise the final hierarchy should be recorded. This can be done by formalising a final version of the spreadsheet with the reasons for the adjusted hierarchy clearly stated.



CONFIRMATION OF FINAL HIERARCHY		
Insert the reasons for the hierarchy you have decided upon following your review/s	The Final Road Hierarchy will populate here based on initial road class and the reviews undertaken	Any additional comments that have a bearing on the hierarchy or notes to carry through to the setting of inspection regime etc.
Enter in the Yellow cells the reasons for hierarchy chosen	4. Final Road Hierarchy	Comments
	CHSR	
Matches with Neighbour no reason to change	CH1	
Uplifted due to high traffic volume	CH1	Increase in traffic volume due to new industrial estate
	CH3	
No change to hierarchy as traffic volumes change at boundary	CH4	Side road takes a significant proportion of traffic at the boundary
Lowered due to low traffic volumes	CH5	Very quite back lane

The final hierarchies decided should be council approved. It is likely to be appropriate to do this in conjunction with the formalising of inspection and repair regimes. (Template committee report provided)

Footway Hierarchy

Use Network/Asset Details to Assign Initial Hierarchy

Import network details (USRN, road name, section number, existing hierarchy and footway number) from the NSG. Enter the data into the spreadsheet provided:

All footway sections are to be assigned an initial hierarchy category. The category should be established by answering a series of questions in the RP1 spreadsheet that relate to its level of use as illustrated below.

NETWORK/ASSET DETAILS										
Enter network data in here from the street gazeteer, or another suitable database containing detail of all highways					*Would the location / use of this footway lead to it having the highest level of inspection / repair*	*Would the location / use of this footway lead to it having the higher than normal levels of inspection / repair*	*Would the location / use of this footway lead to it having the a higher level of inspection / repair*			*Initial Proposed Footway Hierarchy will populate here based on location / use*
USRN	**Road Name**	**ESU (Section Number)**	**Existing Hierarchy**	**Footway Number**	**Is the footway in a very busy area of a major city (central business district or main shopping area)**	**Is the footway in a busy area of town (main shopping area, local authority premises etc.)**	**Is the footway outside busy public building such as train/bus stations, hospitals,schools and colleges or small parade of shops etc**	**Does the footway link housing estates and industrial estates to other centres /routes**	**Is the footway little used rural footway**	**1. Initial Footway Hierarchy**
2500123	London Road	10	N/A	N/A	No	No	No	No	No	FH4
2500124	High Street	10	N/A	N/A	Yes					FHVHU
2500125	Main Street	10	N/A	N/A	No	Yes				FH1
2500126	Broad Avenue	10	N/A	N/A	No	No	Yes			FH2
2500127	Normal Close	10	N/A	N/A	No	No	No	Yes		FH3
2500128	Narrow Lane	10	N/A	N/A	No	No	No	No		FH4
2500129	Country Road	10	N/A	N/A	No	No	No	No	Yes	FH5

Use Assessment to Refine Hierarchy: Local Specific Adjustments

The use assessment should consider where individual footways (or sections of footway) should be allocated a different hierarchy level based upon the pedestrian usage:

Primary Considerations:

It is expected that most changes to hierarchy made during the use assessment will be justified by reference to the consideration below:

CSSW Footway Hierarchy	Footfall Level (indicative)
FHVHU	> 10,000 (15,000 used for calculations)
FH1	5,000 - 10,000
FH2	1,000 - 5,000
FH3	500 - 1,000
FH4	< 500

FH5	< 100

- **Volume of pedestrian traffic:** a footway may move between categorisations due to having a higher or lower level of footfall than other footways in this category. An initial assessment based on officer knowledge may prompt the move, but this should be verified using actual pedestrian count data where possible.

USE ASSESSMENT			
Review assumed pedestrian traffic flow band, does it appear a reasonable assumption?		*A recommendation as to whether a review should be undertaken will populate here based on the considerations*	*Insert the Footway Hierarchy you have decided upon based on your review of the considerations*
Primary Consideration			
Is the assumed pedestrian daily traffic flow within the band indicated below?		**Consider reviewing the Footway Hierarchy?**	**2. Reviewed Footway Hierarchy**
< 500	Yes	No	
> 10,000	Yes	No	
5,000 - 10,000	Yes	No	
1,000 - 5,000	Yes	No	
500 - 1,000	No	Yes	FH3
< 500	Yes	No	
< 100	Yes	No	

Tertiary Considerations

The code of practice lists many factors that authorities may consider when establishing their hierarchy (ref). CSSW has decided that it is appropriate for the tertiary considerations listed below to be discounted from the risk review, for the reasons stated in the rationale document. It is recommended that where authorities have reinstated these considerations as part of a local risk assessment that they document these and explain why they have been reintroduced.

The following items from the CoP are considered to be unnecessary for inclusion in the CSSW recommended hierarchy review process.

- Pedestrian Composition: the composition of the pedestrian traffic may also be a driver to moving a footway from one category to another. This may include:
    - *Use by the aged or infirm – authority workshop discussions indicate that areas of footway near facilities for the aged or infirm do not experience noticeably higher levels of defect related accidents or claims. As such they do not warrant the application of a different hierarchy to their surround footways. If during analysis of accident or claim data a trend of increased incidents near such a facility is identified, authorities should review the data to establish the significance of any issues and adjust their hierarchy accordingly*
- Current usage and proposed usage – *Current usage is reflected in the Primary and secondary considerations above; Proposed usage is uncertain and any forecast will contain many unknowns it has therefore been decided that review of hierarchy should be undertaken following any significant changes to usage rather than before*.
- Contribution to the quality of public space and streetscene –*this aspect is covered during the initial setting of hierarchy, within the identification of primary footways*.
- Designation as a traffic sensitive pedestrian route – *this is a network management issue which will be primarily based on level of use and is unlikely to affect the functional hierarchy of the footway* .

- Special characteristic of certain assets, e.g. historic structures – this is not considered to be an issue for footway hierarchy
- Accident and other risk assessment - *this item is appropriate for consideration when adjusting inspection and maintenance regimes rather than for setting footway hierarchy.*
- Character and traffic use of adjoining carriageway - *this item is not considered to be appropriate for setting* ***footway*** *hierarchy as a high use carriageway adjacent to a low use footway would not warrant increasing the hierarchy level of the footway and a high use footway next to a low use carriageway would have its hierarchy set based on its use.*

Consultation with Neighbouring Authorities

Upon completion of the use assessment a consultation should be undertaken with neighbouring authorities. A subset of the hierarchy data should be extracted for the footways that cross into adjacent authorities. Authorities should exchange this data and compare the level of hierarchy assigned to the footways that cross regional boundaries. Where there are differences the reasons for them should be determined. Each authority must then decide if the differences that exist are acceptable.

Where the hierarchy changes when it crosses a regional boundary, this should be noted by both authorities in their records and the rationale for accepting the difference should be clearly stated.

REGIONAL CONSISTENCY CHECK			CONFIRMATION OF FINAL HIERARCHY		
Is this section of footway one that crosses into the neighbouring authority?	*Is the hierachy the same as in the neighbouring authority*	*Insert the Footway Hierarchy you have decided upon based on your review of the considerations*	*Insert the reasons for the hierarchy you have decided upon following your review/s*	*The Final Footway Hierarchy will populate here based on initial hierarchy and the reviews undertaken*	*Any additional comments that have a bearing on the hierarchy or notes to carry through to the setting of inspection regime etc.*
Does this footway cross a regional boundary? i.e. into the neighbouring authority?	**Enter the hierarchy of the neighburing authority footway section**	**3. Reviewed Footway Hierarchy**	**Enter in the Yellow cells the reasons for hierarchy chosen**	**4. Final Footway Hierarchy**	**Comments**
Yes	FH2	FH4	Pedestrian traffic changes at boundary	FH4	Moves from a built up area to a rural area
No				FHVHU	
No				FH1	
No				FH2	
No			Pedestrian volumes are only slightly lower than the band	FH3	The hierarchy is in keeping with the surrounding area
No				FH4	
No				FH5	

Confirm and Record the Hierarchy

Following completion of the consultation the final hierarchy should be recorded along with the reasons for the chosen hierarchy. This can be done by formalising a final version of the spreadsheet.

The final agreed hierarchy should be council approved in conjunction with the formalising of inspection and repair regimes.

Structures Hierarchy

Structures hierarchy bands have been defined as below:

1. **Vital:** a structure that is vital to the network i.e. if restricted or out of service it would cause a very significant adverse effect such as major traffic delays with the potential to affect other important services or community severance
2. **Important:** a structure that is important to the functioning of the network, i.e. if restricted out of service would have an adverse effect on the operation of the network
3. **Standard:** all other structures

Use Network/Asset Details to Assign Initial Hierarchy

Import Structure Details (Structure Number, Name, Type, Existing Hierarchy [if known]) from the Structures database. Import network details (Road Name, Road Number, Road Hierarchy, Footway Number and Footway Hierarchy) from the NSG or another source. Enter the data into the spreadsheet provided:

All structures will automatically be assigned an initial hierarchy category based on the hierarchy of the road or footway that the structure carries or crosses. The initial structure hierarchy is based on the table below using the highest hierarchy for either carriageway or footway.

Road Bridges, Culverts, Retaining Walls etc	
Carriageway Hierarchy	**Initial Structure Hierarchy**
CHSR	**Important Structure**
CH1	
CH2	
CH3	**Standard Structure**
CH4	
CH5	

Footbridges

For footbridges and other structures that are solely associated with a footway or footpath the initial structure hierarchy is based on the table below by relating it to the footway hierarchy of the adjacent footway

F-way Hierarchy	Structure Hierarchy
FHVHU	1. Important structures
FH1	
FH2, FH3, FH4, FH5	2. Standard Structure

n.b. At this stage the rating of a **Vital Structure** is not used and is only populated following the assessment of other relevant considerations. (Use Assessment)

STRUCTURE DETAILS			NETWORK DETAILS						
Enter Structure Details Here			*Enter network data in here from the street gazeteer, or another suitable database containing detail of all highways*			*Enter footway network data for those structures that are associated with a footway only*		*Enter the existing structure hierarchy if known*	*Initial Proposed Structure Hierarchy will populate here based on road or footway hierarchy*
Structure Number	Structure Name	Asset Type	Road Number	Road Name	Road Hierarchy	Footway Number	Footway Hierarchy	Existing Structure Hierarchy (If known)	1. Initial Structure Hierarchy
654	Big Bridge	Road Bridge	2500123	London Road	CHSR				Important Structure
655	Old Bridge	Road Bridge	2500124	High Street	CH1				Important Structure
656	New Bridge	Road Bridge	2500125	Main Street	CH2				Important Structure
657	Small Bridge	Road Bridge	2500126	Broad Avenue	CH3				Standard Structure
658	Old Culvert	Culvert	2500127	Normal Close	CH4				Standard Structure
659	New Culvert	Culvert	2500128	Narrow Lane	CH5				Standard Structure
660	Shopping parade brid	Footbridge				4400321	FHVHU		Important Structure

It is expected that most authorities will need to adjust the hierarchy of some structures as part of the use assessment to adequately reflect the network importance of individual structures.

It is also probable that individual structures will need to be allocated hierarchies that may not fit the initial “rule” shown above.

Use Assessment to Refine Hierarchy: Local Specific Adjustments

The use assessment should consider where individual structures should be allocated a different hierarchy level based upon factors that may include:

Primary Considerations:

It is expected that most changes to hierarchy made during the use assessment will be justified by reference to the considerations below:

- **Major Traffic Disruption –** would closure or works on the structure be likely to cause major traffic disruption (e.g. city centre bridge)
- **Sole Access -** Is the structure a sole access route to a community or facility that would be cut off if the structure were closed.
- **Major Diversion Route –** would closure or works on the structure require a lengthy diversion route.

- **Other Reasons for Reviewing Hierarchy –** there may be other reasons for reviewing the hierarchy of the structure such as:
    - **Susceptible to Rapid Failure Mode –** could this structure fail in a rapid manner causing a significant safety risk? (based on structure type and material)
    - **Significant adverse social or economic impact -** Would restriction or closure of this structure have a significant adverse social or economic impact? (e.g. structure is on the route to a major industrial facility)
    - **Structure of Local Significance -** Is this structure of local significance? (e.g. an individual iconic local structure, scheduled monument)

Following completion of the use assessment the spreadsheet will prompt a review of the hierarchy and populate a suggested hierarchy based on the ruleset in the following table*.

Rule	Suggested Hierarchy
Sole Access to community	Vital Structure
Both major traffic disruption **and** lengthy diversion route	Vital Structure
Either major traffic disruption **or** lengthy diversion route	Important Structure
Susceptible to rapid failure	Important Structure
Significant social or economic impact	Important Structure
Structure of local significance	Important Structure

*n.b. As approved by CSSW.

USE ASSESSMENT							
Review if a closure or works on this structure would lead to major traffic disruption	*Review if this structure serves as the only access to a community or facility*	*Review if a lengthy diversion route would be required if this structure were out of service*	*Is there a reason you would consider reviewing the hierarchy of this structure? (e.g. an individual iconic local structure, closure would have an adverse social or economic impact or the structure could fail without warning)*		*A recommendation as to whether a review should be undertaken will populate here based on the considerations*	*A recommendation as to what the hierarchy should be will populate here based on the considerations*	*Insert the Structure Hierarchy you have decided upon based on your review of the considerations*
Primary Considerations					**Consider reviewing the Structure Hierarchy?**	**Suggested Hierarchy**	**2. Reviewed Structure Hierarchy**
Is closure or works likely to cause Major Traffic Disruption (e.g. city centre bridge)	**Is the structure a Sole Access to Community**	**Would closure or works require a Lengthy Diversion Route**	**Is there a reason you would consider reviewing the hierarchy of this structure?**				
Yes	No	Yes			Yes	Vital Structure	Vital Structure
No	Yes	No			Yes	Vital Structure	Vital Structure
No	Yes	Yes			Yes	Vital Structure	Vital Structure
No	No	Yes			yes	Important Structure	Important Structure
No	No	No			No		
No	No	No			No		
No	No	No			No		

Tertiary Considerations

The code of practice lists many factors that authorities may consider when establishing their hierarchy (ref). It is recommended that where some of these have been discounted as not being appropriate that this is recorded. It is expected that this may be appropriate for many of the tertiary considerations listed below, for the reasons stated.

It is recommended that authorities document those items listed in the CoP that have been discounted and explain why they have been discounted: e.g. *The following items from the CoP have been considered but have not resulted in specific adjustment to the structures hierarchy*

- *type of asset, e.g. bridge, tunnel, retaining wall, earth structure, the relative importance of an asset in term of the impact of its potential failure is not a function of asset type*
- *obstacle crossed, bridge span, retained earth height; a bridge crossing another road presents the same risk as one crossing a river*
- *critical asset, historic structure, permanent weight, height, width or swept path restriction;*
- *construction material, e.g. concrete or steel bridge, arch, slab or beam/girder bridge, concrete or stone walls, etc.*

These factors are important considerations in establishing an inspection frequency but are not relevant in determining the hierarchy

Consultation and Other Considerations

Upon completion of the use assessment a consultation should be undertaken with neighbouring authorities. A subset of the hierarchy data should be extracted for the structures that are shared with adjacent authorities. Authorities should exchange this data and compare the level of hierarchy assigned to the structure that crosses regional boundaries. Where there are differences the reasons for them should be determined. Each authority must then decide if the differences that exist are acceptable.

Where the hierarchy changes when it crosses a regional boundary, this should be noted by both authorities in their records and the rationale for accepting the difference clearly stated.

Local authority officers may have an additional local reason for adjusting the hierarchy of a structure, where this is the case it should be noted on the sheet and the reason for changing the hierarchy documented.

REGIONAL CONSISTENCY CHECK				STAGE FOUR FINAL HIERARCHY		
Is this Structure shared with a the neighbouring authority?	*Is the hierachy the same as in the neighbouring authority*		*Insert the Structure Hierarchy you have decided upon based on your review of the considerations*	*Insert the reasons for the hierarchy you have decided upon following your review/s*	*The Final Structure Hierarchy will populate here based on initial hierarchy and the reviews undertaken*	*Any additional comments that have a bearing on the hierarchy or notes to carry through to the setting of inspection regime etc.*
Secondary Considerations						
Does this Structure cross a regional boundary? i.e. into the neighbouring authority?	**Enter the hierarchy of the neighburing authority structure**	**Are there any other reasons to change the structure hierarchy?**	**3. Reviewed Structure Hierarchy**	**Enter in the Yellow cells the reasons for hierarchy chosen**	**4. Final Structure Hierarchy**	**Comments**
Yes	Vital Structure	No	Vital Structure	As recommended	Vital Structure	
				As recommended	Vital Structure	
				As recommended	Vital Structure	
				As recommended	Important Structure	
					Standard Structure	
					Standard Structure	
Yes	Important Structure	No	Important Structure	As recommended	Important Structure	

Confirm and Record the Hierarchy

Following completion of regional consistency check the final hierarchy should be recorded along with the reasons for the chosen hierarchy. This can be done by formalising a final version of the spreadsheet. **The final agreed hierarchy should be council approved, in conjunction with the formalising of inspection and repair regimes.**

Street Lighting Hierarchy

Street lighting hierarchies differentiate between primary and secondary lighting. It is expected that where an authority is adopting a part night lighting and/or dimming regime that such a hierarchy will be introduced as the means of deciding which lights can be turned off or dimmed. A sheet has been provided within RP1 Highway Asset Risk Review, where this information can be inserted. Inspection and repair regime may be dictated by the nature of the defect rather than by hierarchy considerations.

Traffic Management Systems Hierarchy

Use Network/Asset Details to Assign Initial Hierarchy

Import Traffic Management Systems details from the TM database and location details (Road Number, Name and Hierarchy) from the NSG or Carriageway hierarchy spreadsheet. Enter the data into the spreadsheet provided:

All traffic management assets will be assigned an initial category based on the hierarchy of the road where it is located as per the table below. For junctions that serve more than one road hierarchy the highest hierarchy should be used:

Carriageway Hierarchy	Traffic Management Hierarchy (As per highest Carriageway hierarchy)
CHSR	Primary Junction
CH1	
CH2	Secondary Junction
CH3	Local Junction
CH4	

All other traffic management assets (including pedestrian crossings) will initially be assigned the hierarchy of local.

NETWORK/ASSET DETAILS					
Enter asset data in here from the Traffic Management database or other suitable records		*Enter network data in here from the street gazeteer, or another suitable database containing detail of all highways*			Initial Proposed TM Hierarchy will populate here based on Road / Footway Hierarchy
Junction Number	**Junction Name**	**Road Number**	**Road Name**	**Road Hierarchy**	**1. Initial Traffic Management Hierarchy**
25	London Road	2500123	London Road	CHSR	Primary Junction
26	High Street	2500124	High Street	CH1	Primary Junction
27	Main Street	2500125	Main Street	CH1	Primary Junction
28	Broad Avenue	2500126	Broad Avenue	CH3	Local Junction
29	Normal Close	2500127	Normal Close	CH4	Local Junction
30	Narrow Lane	2500128	Narrow Lane	CH5	Local Junction

Use Assessment to Refine Hierarchy: Local Specific Adjustments

The use assessment should consider where individual traffic management installation should be allocated a different hierarchy level based upon local factors e.g. size of junction, number of legs etc.

USE ASSESSMENT		
Are there any considerations you would take into account that might affect the inspection and or repair regime of the asset and which therefore might affect the hierarchy. If so insert them below.	*Insert whether the considerations on the left have prompted a review of the hierarchy*	*Insert the TM Hierarchy you have decided upon based on your review of the considerations*
Primary Considerations	**Consider reviewing the Traffic Management Hierarchy?**	**2. Reviewed Street Traffic Management Hierarchy**
N/A		
N/A		
N/A		
Four way junction with access to Station	Yes	Secondary Junction
N/A		
N/A		

Consultation

Upon completion of the use assessment a consultation should be undertaken with neighbouring authorities. A subset of the hierarchy data should be extracted for the junctions that are shared with adjacent authorities. Authorities should exchange this data and compare the level of hierarchy assigned to the junction that crosses regional boundaries. Where there are differences the reasons for them should be determined. Each authority must then decide if the differences that exist are acceptable.

Where the hierarchy changes when it crosses a regional boundary, this should be noted by both authorities in their records and the rationale for accepting the difference clearly stated.

REGIONAL CONSISTENCY CHECK			CONFIRMATION OF FINAL HIERARCHY		
Is this section of road one that crosses into the neighbouring authority?	*Is the hierachy the same as in the neighbouring authority*	*Insert the Footway Hierarchy you have decided upon based on your review of the considerations*	*Insert the reasons for the hierarchy you have decided upon following your review/s*	*The Final Footway Hierarchy will populate here based on initial hierarchy and the reviews undertaken*	*Any additional comments that have a bearing on the hierarchy or notes to carry through to the setting of inspection regime etc.*
Does this junction form a regional boundary? i.e. into the neighbouring authority?	**Enter the hierarchy of the neighburing authority junction**	**3. Reviewed Traffic Management Hierarchy**	**Enter in the Yellow cells the reasons for hierarchy chosen**	**4. Final Traffic Management Hierarchy**	**Comments**
No				Primary Junction	
No				Primary Junction	
No				Primary Junction	
No			Upgrade to secondary junction due to size of junction	Secondary Junction	Access to station car park and 4 legs
No				Local Junction	
No				Local Junction	

Confirm and Record the Hierarchy

Following completion of regional consistency check the final hierarchy should be recorded along with the reasons for the chosen hierarchy. This can be done by formalising a final version of the spreadsheet.

The final agreed hierarchy should be council approved, in conjunction with the formalising of inspection and repair regimes.

Two Yearly Review of Asset Hierarchies

A review date should be set following the formal approval of the asset hierarchies. The review should examine the risk review data and any changes made to the assets during the years, new assets added or major improvement schemes completed. The review should also take into account new data that has been collected during the year especially traffic or pedestrian count data that may indicate a need to change the level of hierarchy assigned to an asset (or section thereof).

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Cymdeithas Syrfewyr Sirol Cymru

County Surveyors' Society Wales

Highway Asset Management Planning:

National Minimum Standards:

Inspection and Repair Regimes 2019

Document Information

Title	National Minimum Standards: Inspection and Repair Regimes
Author	exp consulting
Description	This document provides information to supports the completion of Task 4 Performance and Risk Review of the CSSW HAMP Recommended Practices. It provides recommended National Minimum Standards for inspection and repair regimes

Document History

Version	**Status**	**Date**	**Author**	**Changes from Previous Version**
1.0	DRAFT	June 2019	exp	n/a
2.0	draft	Oct 2019	exp	Formatting Updated
1	Final	Oct 2019	exp	NA

Document Control

Version	**Status**	**Date**	**Authorised for Issue by CSSW HAMP Steering Committee**
1	Final	Sept 2019	CSSW Main Group Meeting Sept 2019

Associated Documents

The following document are associated with this standard

1. **RP1 –Highway Asset Risk Review**: A spreadsheet that authorities are recommended to use to record a risk review.
2. **Risk Based Approach: Method:** A document providing a detailed description of the approach to accompany the spreadsheet RP1.
3. **Risk Based Approach: Method Summary:** A document providing a summary explanation of the method intended for use by authorities to brief managers, members, risk managers etc.
4. **Template Maintenance Manual Content:** A template document that authorities can use to record hierarchy and inspection and repair regimes derived using the risk-based approach and their methods of updating the same.
5. **Highway Inspection Defect Recording Manual:** A manual designed to give guidance to inspectors on what defects to record and what records should be taken about each defect. Intended to be used as the reference document for inspector training.
6. **Committee Paper Template/Report of Outcome of Highway Risk Review**
    a. A template initial paper that advises the new method, references the CoP and recommends changes to hierarchy, inspection and repair regimes.
    b. A template report paper for subsequent reviews that focuses on reporting changes to risk and resultant recommended changes to hierarchy, inspection and repair regimes
7. **National Minimum Standards:** A statement of minimum standards recommended by CSSW for intervention level and associated response times for defects.
8. **Rationale Behind the Approach:** Sets out the rationale that was adopted in developing that approach.

1. Minimum Standards

Purpose

To provide national minimum standards for inspection and repair regimes for local authority highways.

CSSW Recommended Risk-Based Approach

CSSW has developed a recommended risk-based approach in response to the Code of Practice for Highways (2016). The approach is detailed in the document "CSSW Risk-Based Approach Method, 2019". The method recommends that authorities undertake highway asset risk reviews at least every 2 years. CSSW HAMP Recommended Practices have been updated to include a highway risk review. This document is a reference to be used in that review.

Scope

The risk review method involves evaluation of risk with specific reference to:

- Network Hierarchy
- Inspection Regime
- Repair Regime

Minimum standards for inspection and repair regimes are is included in this document. It is recommended that risk reviews are reported to a management and/or member forum within the council such that decisions about the management of the asset and the funding allocated to maintenance of asset are made with information about the associated risks of such choices in hand.

Adoption of Minimum Standards

It is expected that all authorities will reference the minimum standards contained within this document when carrying out risk reviews. The reason for the adoption of these standards is given in the document "Rational Behind the Approach(9)". Authorities may choose to exceed the standards in some or all areas. If an authority adopts a standard below the recommended minimum it is recommended that they document their own risk assessment to support their choice.

Application of National Standard

Adoption of a national standard will provide a consistent standard for users across Wales, allow ongoing review and refinement via annual updating or risk assessments and assist authorities to manage 3rd party claims by demonstrating consistency of approach

Review and Updating

The CSSW HAMP steering committee will review this method regularly and advice any recommended changes to CSSW for approval.

2. Inspection Regime

Minimum Inspection Regime

The following minimum inspection regime is recommended

Carriageway Hierarchy	Minimum Inspection Interval
CHSR	Monthly
CH1	Monthly
CH2	Every 3 months
CH3	Every 6 months
CH4	Annually (poor or unknown condition) Every 2 years (good condition)
CH5	Reactive

Footway Hierarchy	Minimum Inspection Interval
FHVHU	Monthly
FH1	Monthly
FH2	3 months
FH3	6 months
FH4	Annually (poor or unknown condition) Every 2 years (good condition)
FH5	Reactive

It is expected that in future the inspection regime may be refined by reference to elements of the asset that are known to be in good condition and pose low risk. This approach is already embedded into many authorities' approach to structures inspection. It is therefore recommended that authorities implement the CSSW Visual Assessment Methods that were created for use on carriageways and footways.

Inspection Tolerances

A tolerance should be included to allow for unavoidable incidences such as bad weather, inspector sickness etc. It is recommended that the tolerance applied to each inspection frequency is 50% of the inspection interval or 3 months (whichever is the least).

3. Repair Regime

The following minimum standards are recommended for defect categories, response times and investigatory levels.

Defect Categories and Response Times (Carriageways)

Defect Categories	Description	Response Time
Critical Defect	A situation where the inspecting officer considers the risk to safety high enough to require immediate action, e.g. collapsed cellar, missing utility cover, fallen tree, unprotected opening, ➢ Requiring an immediate response to make the site safe	2 Hours#
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	By End of Next Working Day (CHSR, CH1, CH2)
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	Within 5 Working Days (CH3, CH4, CH5**)
Maintenance Defect	Defects that warrant treatment to prevent them deteriorating into a safety defect prior to the next scheduled inspection, ➢ Requiring a response to prevent them becoming a safety defect	1 month (CHSR, CH1, CH2) 3 months (CH3, CH4, CH5**)
Programmed Repairs	Defects that warrant treatment, in order to prevent them deteriorating to such an extent that additional works or costs are incurred.	As per the local works programme

response time for critical defects refers to the time to attend site, make safe or repair will then be asap thereafter

**Defect triggers on CH5 roads are to be considered an investigatory level. An investigatory level does not automatically trigger a response. It will be incumbent upon the inspector to assign an appropriate response to each defect based upon its type, size, location and the level of use of the road. CH5 roads are low use roads and defects will frequently present low risk to users and can be responded to accordingly.

Defect Categories and Response Times (Footways)

Defect Categories	Description	Response Time
Critical Defect	A situation where the inspecting officer considers the risk to safety high enough to require immediate action, e.g. collapsed cellar, missing utility cover, fallen tree, unprotected opening, ➢ Requiring an immediate response to make the site safe	2 Hours#
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	By End of Next Working Day (FHVHU, FH1, FH2)
Safety Defect	Defects that pose an imminent risk of injury to road users, ➢ Requiring a response as soon as possible to remove a potential risk of injury to users	Within 15 Working Days (FH3, FH4, FH5)
Maintenance Defect	Defects that warrant treatment to prevent them deteriorating into a safety defect prior to the next scheduled inspection, ➢ Requiring a response to prevent them becoming a safety defect	1 month (FHVHU, FH1, FH2) No set response time (FH3, FH4, FH5)
Programmed Repairs	Defects that warrant treatment, in order to prevent them deteriorating to such an extent that additional works or costs are incurred.	As per the local works programme

response time for critical defects refers to the time to attend site, make safe or repair will then be asap thereafter

Critical Defects

Asset Type	Defect Type	Hierarchy	Dimensional Criteria	
			Depth/Height	Extent
All	**Examples:** Major debris or spillage on the highway; Carriageway / footway / cycleway collapse with high risk of accidents / loss of control; Critically unstable overhead wires, trees or structures; Exposed live wiring; Isolated standing water with high risk of loss of control; Missing or seriously defective ironwork with high probability of injury to highway users	All	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size	Not Applicable. Critical defects are defined by their potential to cause immediate injury not by defect size

Safety Defects

Asset Type	Defect Type	Hierarchy	Dimensional Criteria	
			Depth/Height	Extent
Carriageways	Pothole	CHSR, CH1 and CH2	> 50mm	Maximum horizontal dimension greater than 150mm
	Pothole	CH3, CH4 and CH5**	>75mm	Maximum horizontal dimension greater than 150mm
Footways	Pothole, trip, rocking slab	All	> 40mm	Maximum horizontal dimension greater than 75mm

**Defect triggers on CH5 roads are to be considered an investigatory level.

Maintenance Defects

	Defect Type	Hierarchy	Dimensional Criteria	
			Depth/Height	Extent
Carriageways	Pothole	CHSR, CH1 and CH2	> 40mm	Maximum horizontal dimension greater than 150mm
	Pothole	CH3, CH4 and CH5**	> 50 mm	Maximum horizontal dimension greater than 150mm
	Crowning / Depression	All	> 100mm	< 2M Length
Footways	Pothole, trip or rocking slab	All	25mm - 40mm	Maximum horizontal dimension greater than 75mm
	Badly cracked or damaged ironwork	Any		N/A

**Defect triggers on CH5 roads are to be considered an investigatory level.

Programmed Repairs

A national minimum standard has not been prescribed for programmed repairs.

Standards are a Guide

The standards are a guide only. Reference should be made to CSSW Defect Recording Manual. It is an essential part of all authorities' inspection regimes that inspectors are appropriately trained. In doing so inspectors can complement application of the standard with their own assessment of individual defects.

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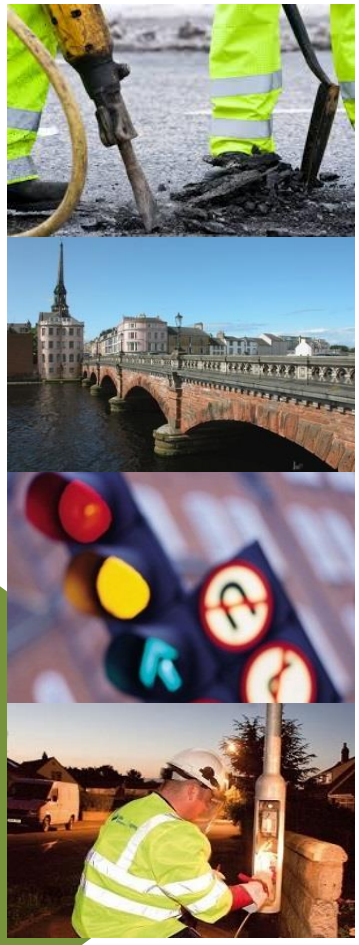
Cymdeithas Syrfewyr Sirol Cymru

County Surveyors' Society Wales

Highway Asset Management Planning:

Risk Based Approach to Highway Management

Rationale Behind the Approach



1. Introduction

CSSW is advocating a nationally consistent approach to the management of local highways. A method has been developed under CSSW's HAMP project designed to allow all authorities to adopt the risk-based approach recommended by the new code of practice (Code of Practice). This paper sets out the rational that was adopted in developing that approach.

Common Needs

The national local road network is varied, ranging from heavily trafficked major routes to barely used rural lanes. There is however commonality between groups of roads and assets. It is appropriate that the travelling public can expect similar standards to apply to roads that are equivalent in their function and level of use nationally. This principle underpins CSSW's desire to create a nationally consistent response to the Code of Practice.

Code of Practice Risk-Based Approach

The new Code of Practice recommends that authorities apply a risk-based approach to highway management. In doing so authorities must acknowledge the fact that risk varies across the asset and between asset groups. Managers have always considered risk in their decision making about inspections, repair priorities and works programming. The new code creates a need to formalise such decision making and to ensure that such decisions are, to the extent that such is possible, fact based.

Current Approach

The current code of practice already advocates the use of risk assessment via the use of a risk matrix as shown. The method is conceptually simple and requires identification of the impact of an event and evaluation of the probability of that event occurring. The difficultly is that the table does not specify to what event it refers. If it refers to the risk of a fatality, then the impact is very high and the probability low. If it refers to the risk of 3rd party property damage the impact is low and the probability considerably higher. Both of these events, and others, are possible as a result of a highway defect. The current method therefore requires highway inspectors to concurrently analyse a range of potential events and a range of probabilities to arrive at an appropriate response to a defect. This would be a difficult task if data were available. Without data on impacts and probability this becomes an exercise in individual judgement alone.

Table 5 – Risk Matrix

Probability →Impact↓	Very low (1)	Low (2)	Medium (3)	High (4)
Negligible (1)	1	2	3	4
Low (2)	2	4	6	8
Noticeable (3)	3	6	9	12
High (4)	4	8	12	16
Response Category	Category 2(L) response	Category 2(M) response	Category 2(H) response	Category 1 response

Proposed Approach

The proposed approach to CSSW's risk-based method is to use asset data to inform risk assessment. The intent is to allow decisions to be supported by factual data. It is possible to acquire and analyse data on the events that occur at defects, to collect data on the type, size and location of the defects themselves and to use this as a reference when establishing the key elements of a highway management approach; setting a hierarchy, setting inspection and repair regimes and using the records collected from these to influence budget allocation.

Annual Risk Review

The method proposed by CSSW has been integrated into the CSSW HAMP recommended practices. The updated HAMP practice now recommends completion of a **risk review at least every 2 years.** The risk review assesses all relevant data to assist authorities to refine their hierarchies, inspection and repair regimes based upon analysis of the records generated from their performance records (PIs and operational performance measures).

Refinement and Improvement

There are many areas where improved data will enable better risk assessment. It is expected that the method will be refined as authorities collect and analyse relevant data and are able to document more refined risk assessments. This process will be managed by CSSW using the national HAMP project.

CSSW's Risk-Based Method:
- **is based on using asset data to enable a fact-based assessment of risk** - **uses available asset data** - **will be refined as better data is collected and analysed** - **uses regular reviews of risk data to inform refinement of hierarchies and inspection and repair regimes.**

The basis upon which the key steps of the method have been created are explained below.

2. Establishing Risk-Based Hierarchies

The requirement to split the asset into hierarchies exists in the current code. It has been retained in the new code but with the onus placed upon authorities to determine how best to apply the risk -principle in determining appropriate hierarchies. The new code states that *"Carriageway hierarchy will not necessarily be determined by the road classification, but by functionality and scale of use."* and provides a table, an extract from which is shown below.

Secondary Distributor	B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions	In residential and other built up areas these roads have 20 or 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network.

This is a reference but does not include the most significant factor that affects risk; use. Roads that carry 10,000 vehicles a day have a much greater potential for an adverse event to occur than ones carrying 500 vehicles a day. Simple fact.

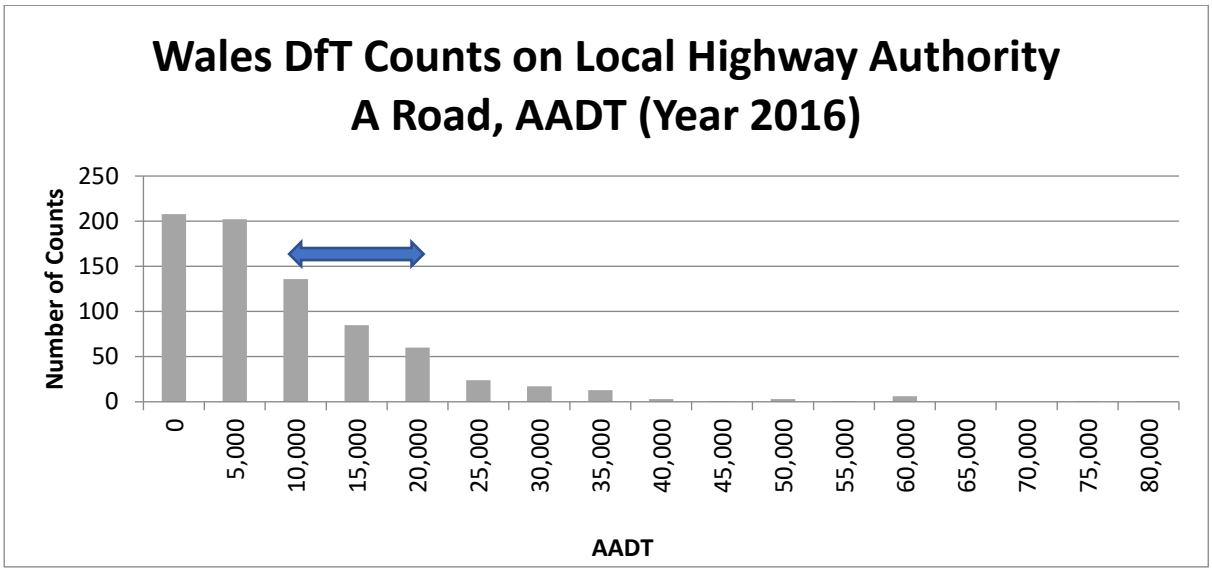
It is possible to estimate use for all roads based upon available traffic count data. CSSW has chosen to recommend that a risk-based hierarchy should be set predominantly based upon use. This does not preclude authorities making necessary adjustment to consider particular local use patterns and issues.

Other Considerations

Additional consideration may influence the choice of hierarchy level. The principle advocated however is that any adjustment is justified by reference to appropriate data.

Road Class

All local roads are already ascribed a class; A, B or C if classified or unclassified. Road class has been used by many authorities to date either as their de facto network hierarchy or as the basis for establishing it. Road class is broadly indicative of use and thus risk. However. There are major variations nationally that means the creation of a hierarchy based solely on road class is not appropriate. The traffic count data collected by the Department for Transport includes 761 counts on local authority managed Welsh A roads. The most recent figures for these sites show a range of average annual daily traffic (AADT) from 83,000 to 431. 29% of the counts fall in the range 10,000 to 20,000 vehicles per day. All authorities except Powys and Anglesey have roads in this usage band. The very heavily trafficked roads are predominantly in areas around Cardiff and are atypically high. The results are shown in the graph below



The graph illustrates the range of traffic volume represented in the DfT data. There are many A roads with volumes in the 10,000 to 20,000 range. There are almost double that with volumes below this. The proposed method of establishing hierarchy is recommending that authorities differentiate between road based on their use and as such should for example adopt a different regime of inspection and repair for roads carrying 15,000 vehicles a day to roads carrying 5,000 a day regardless of whether they are designated as an A road.

To establish a means of referencing hierarchy by traffic volume the following table was developed. The range of 10,000 to 20,000 vehicle per day has been adopted as the starting point. This range was taken to represent a type of busy road that exists in most authorities. These have been allocated as “CH1”. CSSW has adopted a nomenclature for hierarchy based on codes as shown below. This is to avoid potential confusion that could be created from the descriptions used in the code, which are only provided as guidance.

Code of Practice Hierarchy Level Names	**CSSW Hierarchy Level**	**Traffic Volume Band (approx.)**
Strategic Route	CHSR	Based on local importance rather than traffic flow but often in the range >20,000 [30,000 for calculations]
Main Distributor	CH1	10,000 to 20,000
Secondary Distributor	CH2	5,000 - 10,000
Link Road	CH3	1,000 - 5,000
Local Access Road	CH4	200 – 1000
Minor Road	CH5	< 200

a figure of 30,000 has been adopted for calculations later in this method. This represents the busiest level of roads nationally. It is accepted that there are a small number of roads that have volumes that exceed this level. The authorities with these roads shall need to specifically assess the risk associated with these roads to warrant if they require inspection and repair regimes that exceed those ascribed to CHSR.

The risk-based method recommends that authorities document their carriageway hierarchies by considering predominantly traffic volume. Secondary/local considerations can also be applied but should be supported with appropriate justification for variances from table above. In reality factors referred to in the Code, such as access to hospitals, would often be a factor of usage level and should be considered when estimating traffic flows.

CSSW's Risk-Based Method: Carriageway Hierarchy:
- is based predominantly upon use/traffic volumes - can be adjusted to reflect local conditions - is intended to create national consistency - is to be documented with reasons for any variances from the method

Footway Hierarchy

The same principle has been adopted for the establishment of footway hierarchy. There is substantially less data available for footfall. As with carriageways the method uses a benchmark of the most heavily used footways. A "FHVHU" level has been used as the common starting point. It is known that Cardiff, Newport and Swansea may have footway areas in the city centre that fit into this band of use and other authorities may have too. A limited amount of footfall data was available to inform the choice of levels of use. Two footfall counts were available for FH1 level, which is expected to be the smaller towns across Wales e.g. such as Pontypridd (population 33,000), Port Talbot (population 36,000) and Aberdare (population 32,000).

Street	**Town**	**Footfall Count**
Canon Street	Aberdare	6376
Taff Street	Pontypridd	9235
Shopping Centre (Main Entrance)	Port Talbot	7250 –(8am - 6pm)

On the assumption that these locations are representative of many towns around Wales a banding of 5,000 to 10,000 footfall has been assumed for FH1 "Town Centre Pedestrian Area".

Other available data has been used to create the table shown below. CSSW has adopted a code-based nomenclature that relates broadly to the categories used in the code of practice as shown below. The names used in the code are for guidance only and this method does not use them in order to be clear that the primary determinant of hierarchy level is its use. (footfall)

Code of Practice Footway Network Hierarchy Category	CSSW Footway Hierarchy	Footfall Level (indicative)
City Centre Pedestrian Area	FHVHU	> 10,000 (15,000 used for calculations)
Town Centre Pedestrian Area	FH1	5,000 - 10,000
Footway Outside Public Facilities	FH2	1,000 - 5,000
Link Footway (between estates / areas)	FH3	500 - 1,000
Housing Estate Footway	FH4	< 500
Little Used Rural Footway	FH5	< 100

It is expected that officer judgement will be used to estimate footfall for different footways in order to apply the method. It is recommended that where estimates are used authorities should undertake sample surveys to validate their assumptions. Reference can also be made to a range of sample count data undertaken by RCT to inform the bandings. This data is available to authorities via CSSW's HAMP khub website.

Other considerations

The Code of Practice contains a list of a number of criteria that may be relevant to establishing a footway hierarchy including pedestrian composition, proposed usage etc. No evidence was available when developing this guidance to indicate that these factors are habitually associated with increased risk. It has therefore been decided to exclude them from the method unless and until evidence is collected that warrants their inclusion. It is planned to carry out targeted data collection by authorities coordinated by the HAMP project to improve the data available. Such evidence would most likely be in the form of statistical evidence of the increased incidence of adverse events at locations with these features.

CSSW's Risk-Based Method: Footway Hierarchy
- **is based predominantly upon use/footfall volumes** - **can be adjusted to reflect local conditions** - **Is intended to create national consistency** - **to be documented with reasons for any variances from the method**

Structures Hierarchy

Structures require a slightly different approach to carriageways and footways and the hierarchy should be based more on risks to the functionality of the network. Whilst use is a key consideration it is important to consider the consequences of a structure being out of service or restricted (weight or use restrictions introduced). It is possible for example for there to be 3 bridges over a river in a town each on a different road hierarchy road but each equally important in terms of potential traffic disruption. Closure of any of these structures would cause equally significant traffic disruption. It is important that the structures hierarchy is able to include such considerations and to allocate them as equally important.

Some structures on roads at the lower end of the road hierarchy may be on the only route into a rural community while restricted use of others may involve very long diversion routes or impacts on public transport. Closure of the structure would represent a major disruption albeit to a relatively small number of people, they however require managing with this in mind. Structure hierarchy has been defined as below:

1. **Vital:** a structure that is vital to the network i.e. if restricted or out of service it would cause a very significant adverse effect such as major traffic delays with the potential to affect other important services or community severance
2. **Important:** a structure that is important to the functioning of the network, i.e. if restricted or out of service would have an adverse effect on the operation of the network
3. **Standard:** all other structures

To derive the hierarchy all structures are to be assigned an initial hierarchy category based on the hierarchy of the road or footway that the structure carries or crosses. The initial structure hierarchy should be based on the table below using the highest hierarchy for either carriageway or footway. For footbridges and other structures that are solely associated with a footway or footpath the initial structure hierarchy should be based on relating it to the footway hierarchy of the adjacent footway

Road Bridges, Culverts, Retaining Walls etc	
C-way Hierarchy	**Structure Hierarchy**
CHSR, CH1, CH2	Important Structure
CH3, CH4, CH5	Standard Structure
F-way Hierarchy	**Structure Hierarchy**
FHVHU, FH1	Important structures
FH2, FH3, FH4, FH5	Standard Structure

At this stage the rating of a **Vital Structure** is not used and is only populated following the assessment of other relevant considerations as shown below.

Rule	**Suggested Hierarchy**
Sole Access to community	Vital Structure
Both major traffic disruption **and** lengthy diversion route	Vital Structure
Either major traffic disruption **or** lengthy diversion route	Important Structure
Susceptible to rapid failure	Important Structure
Significant social or economic impact	Important Structure
Structure of local significance	Important Structure

Retaining Walls

The method can be applied to retaining walls. It is however acknowledged that many authorities do not hold a full inventory of their retaining walls and as such this cannot be fully applied until the inventory is captured.

CSSW's Risk-Based Method: Structures Hierarchy
- **is based initially on the relevant carriageway or footway hierarchy** - **can be adjusted to identify vital structure the restriction of which has been assessed as having the potential to cause major disruption**

Street Lighting

The function of street lighting can be broadly split into two categories:

- Highway Safety Lighting
- Community Lighting

The risks associated with the existence and operation of street lighting are related to the purpose of the lighting. There are however overarching risks that are largely independent of the category and location of the lighting. Safety risks relate predominantly to critical defects, for example where there is potential for electrocution. In theory the risk like the risk of a carriageway defect is a function of the number of people potentially exposed to the hazard. For lighting however, this is not as directly related to flow as it is for carriageways and footways. A light by the side of a heavily trafficked road with no footway is exposed to a large number of vehicles but the risk of them coming into contact with a unit that has become live is small. The unit may even be behind a safety fence, consequently the response to these is not driven by considerations of use. The risk is considered to be at such a level that as immediate a response as possible is considered appropriate regardless of where the asset is on the network. Safety risks apply equally to each category of lighting.

It is noted that a column that has collapsed would be treated as a carriageway and/or footway hazard and thus the inspection and repair regime for carriageways and footways would apply and set the appropriate response.

The risks associated with an individual light that has failed/gone out is considerably less than a safety defect. If an individual unit fails it is invariably part of a collection of lights in a road and will not create absolute darkness as light from adjacent units will provide some lighting albeit at a reduced level.

At this stage the CSSW method does not promote the use of a street lighting hierarchy as the basis for setting inspection and repair regimes. This may be reviewed when risk data is analysed as part of the required annual risk review.

Hierarchy as the Basis for Part-Night Lighting and Dimming

Where an authority has chosen to adopt a regime of part-night lighting and/or dimming they should have done so after the completion of a risk assessment. This method is consistent with the tenets of the new code of practice and the CSSWs risk-based method. It is recommended that this risk assessment is appropriately referenced in that authority's response to the code and the various sections of the lighting asset, subject to the adopted regime, being identified as the street lighting hierarchy for that purpose.

CSSW's Risk-Based Method: Streetlighting Hierarchy
- **is limited to differentiating between assets under different management regimes i.e. part night lighting and/or dimming** - **will be reviewed as risk data is analysed.**

Traffic Signals

All traffic management assets are to be assigned an initial category based on the hierarchy of the road where it is located based on the table below. For junctions that serve more than one road hierarchy the highest hierarchy should be used:

Carriageway Hierarchy	**Traffic Management Hierarchy (As per highest Carriageway hierarchy)**
CHSR	Primary Junction
CH1	
CH2	Secondary Junction
CH3	Local Junction
CH4	

All other traffic management assets (including pedestrian crossings) will initially be assigned the hierarchy of the adjacent road or footway hierarchy (the highest of the two). Further refinement of the hierarchy should be based upon local factors such as the importance of the junction to traffic management of the town/city it is located in.

Other Highway Assets not covered above e.g. Drainage, Street Furniture

Drainage and street furniture assets have not had separate hierarchies applied to them. They are mainly items that are inspected during routine inspections and as such the appropriate carriageway or footway hierarchy dictates the frequency of inspection and influence the categorisation and response to defects.

3. Risk Data Review

The method is built around a regular reviews of risk data (a minimum of every 2 years is recommended). It is recognised that there is potential for improvement in the data that can be analysed to improve understanding of risk. It is also accepted that risks change over time as the condition and use of the asset changes. The review is therefore the key step of the method from which proposed refinement of hierarchies, inspection frequencies and the repair regime can be made.

The risk review records data that relates to risk categorised as:

- Safety; the risk of user injury
- Maintenance; the risk of escalating maintenance needs (and cost)
- Financial Loss; the risk of incurring avoidable financial loss (e.g. 3rd party claim payout)

Risk Data Summary

Enter Relevant Data									Consider what it may mean	Record Observation on risks
		Enter data items, many of which come from the performance reporting regime						*What is trend of the period?*		*Consider if the data reflects a changing risk profile and thus need to refview the inspection regime*
Asset		**Data**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Trend**	**Interpretation**	**Observations**
Carriageways	Safety	Number of Cat 1 Defects							Increasing number of potential dangerous defects = increasing risk to road users	
		% of A Roads in poor condition (red, scanner)							Roads in poor condition have greater potential for dangerous defects	
		% of B Roads in poor condition (red, scanner)							^"	
		% of C Roads in poor condition (red, scanner)							^"	
		% of U Roads in poor condition (red, scanner) and or visual							^"	Unknown ? !!
		KSI (where road condition was a contributory factor)								
	Maintenance	Number of Cat 2 defects recorded							Escalating levels of minor defects can indicate increasing maintenance needs (now and in the future)	
		Number of Cat 2 defects not repaired (repair backlog)							If increasing numbers of repairs are not being repaired it	
		(% of roads to be considered for maintenance A roads (red and amber)							increasing amount of road requiring maintenance …. Will need to be addressed sometime	
		(% of roads to be considered for maintenance A roads (red and amber)								
		(% of roads to be considered for maintenance A roads (red and amber)								
		(% of roads to be considered for maintenance A roads (red and amber)								
	Financial	Value of payout of 3rd party claims								
		Number of claims received								
		Number of claims lost due to not adhering to inspection regime								
		Number of claims lost for other reasons								

The data collected is based around data that authorities already collect (for example for performance monitoring and reporting) and data that is readily collectable during normal operational activities (during inspections and repairs).

The method requires that the results are reviewed for significant changes and trends in the risk they represent. The data is also an input into risk assessment used to establish inspection and repair regimes.

4. Establishing an Inspection Regime

Risk based establishment of hierarchies is being undertaken predominantly based upon use. This reflects the fact that if a hazard or hazardous feature exists on an asset then the risk is a direct function of the number of users exposed to it. This principle is also applied to the establishment of inspection regimes. To provide a rational basis for establishing an inspection regime the concept of risk exposure has been adopted. Risk exposure is a measure of the exposure of users to a hazard. For carriageways the risk exposure has been calculated based upon the following:

- An individual defect. The exposure is measured based upon the number of people/vehicles exposed to an individual defect. It could have been developed based upon actual historical numbers of defects on different parts of the asset but the data on defects is not reliable enough at present to make this appropriate. Fluctuating numbers of defects would have created a constantly changing exposure making it impossible to derive a regime that could be adopted in practice
- Risk exposure is based upon an assumed response time to a safety defect of 24 hours.
- The inspection frequency for strategic routes (CHSR) have been adopted as the baseline level against which other hierarchy's inspection frequencies are developed from.
- The inspection interval for strategic routes (CHSR) recommended by the previous Code is a monthly regime (hence 30 days). This has been widely accepted as reasonable by Courts as suitable for the highest categories of local authority roads.
- A maximum exposure has been calculated using the maximum time a defect could be present before being repaired and the maximum number of vehicles being exposed to it (the top traffic volume in the band).

Baseline Inspection Frequency

As a baseline from which inspection frequencies for other levels of hierarchy can be derived the strategic route level has been chosen. It has been assumed that these roads carry traffic volumes in excess of 30,000 per day and exist in most authorities. A review of current inspection frequencies revealed that most authorities currently inspect these roads on a monthly basis.

The appropriateness of this has been considered by considering the categories of risk in turn as follows:

Safety Risk; is there evidence that current inspection regimes are providing inadequate protection against safety risk for users?

There is little detailed data available to enable detailed analysis of this question. Some broad analysis is possible which has been used as a reference to the choices of existing levels of inspection as a baseline position.

Data is available on safety outcome in the form of records of KSI (killed and seriously injured). These statistics are published annually by the police and used by councils as an input into their road safety programmes. They can be used to provide an overarching reference for the level of safety provided.

In 2016 there were 4,921 injury accidents recorded in Wales by the police(1). Of these contributory factors were recorded 2,257 times. The contributory factors record the attending police officer's opinion of the factors that contributed to the accident. They include driver error, impairment or distraction etc as well as Road Environment. Road environment includes condition as well as other factors such as alignment etc. It is therefore an over estimate of the effect of condition to include all of these for the calculation that has been made. Road environment was quoted as contributory factor 208 times. A prorate calculation therefore estimates 454 accidents where road environment was a potential contributory factor.

Accident Statistics	Source	Police recorded road accidents in Wales, 2016
Total	4921	29
Contributory Factors (total)	2257	June
Road Environment a CF (very likely or likely)	208	201
With Road Environment as a CF	**454**	**approx. injury per year with road environment as a contributory factor**
Traffic Volume Statistics	Source	Road Traffic in Wales, 2016
Vehicle Km travelled.	18.2	bn vehicle km
	1,000,000,000	bn
	18,200,000,000	vehicle kms
1 injury accident in every	40,131,579	km travelled
1 injury accident in every	40	million vehicle km travelled

Traffic volume statistics(2) show that an estimated 18.2bn vehicle km were travelled on local roads (excluding trunk roads). This means that there was on average 1 injury accident recorded by the police for which road environment was a contributory factor, for every 40 million vehicle km travelled. This indicates that on the whole local roads are reasonably safe. The accident statistics (1) also show there were 95 incidents that resulted in fatalities (representing 1 incident per 2,079million km travelled) and that there were 975 incidents that resulted in killed or serious injury (representing 1 per 203 million km travelled).

These statistics illustrate that overall local roads in Wales have a reasonably good safety record. Furthermore, this evidence does not indicate a large contribution of road condition to the statistics that do exist. As these outcomes are in part a result of the inspection and repair regimes currently employed it is reasonable to assume that current regimes are not fundamentally flawed.

For the purpose of developing a rational differential between different road hierarchies a baseline inspection frequency of monthly inspection on strategic routes (CHSR) has been adopted. This is a frequency which was recommended by the previous Code, is used currently by most authorities for their busier roads and has been generally accepted by Courts as reasonable.

Using the method outlined above the risk exposure has been calculated as shown below. This results in the figure of 930,000 per annum as the Risk Exposure Index (REI). This is the maximum number of vehicles exposed to a safety defect before it would be repaired. Considering the overarching statistics above this has been adopted as a starting point until better data is available.

Hierarchy	AADT	Response Time (days)	Initial Inspection Interval (days)	Initial Exposure Time (days)	**Initial REI (k pa)**
CHSR	30,000	1	30	31	930.0

The inspection intervals for the other levels of hierarchy are calculated by working out what inspection interval delivers the same level of risk exposure across all levels of the hierarchy. As illustrated below this means that minimum inspection frequencies could be as little as once every 12 years theoretically for minor roads. It is recognised that the condition information required to inform proper asset management of the network will be required much more frequently than this, and for the lower hierarchy roads it is considered that condition inspection requirements should drive the inspection regime. While there is little condition data available for the lower hierarchy roads at present, it is considered reasonable that for roads known to be in good condition a two-year inspection interval would be suitable to provide condition information.

Typical Current Inspection Regime						**Routine Inspection Frequency for Safety to provide the same level of risk exposure across all hierarchies**					
Asset Information	**Use Data**	**Time Data**			**REI (k pa)**	**REI (k pa)**	**Time Data**				
Hierarchy	AADT	Response Time (days)	Initial Inspection Interval (days)	Initial Exposure Time (days)	**Initial REI (k pa)**	**Standard REI (K pa)**	Exposure Time (Days)	Inspection Interval (days)	Theoretical Interval to normalise risk exposure (inspections per year)	Safety Inspection Interval for Same Exposure	Comment
CHSR	30,000	1	30	31	930.0	930.0	31	30	12	Monthly	**Baseline interval**
CH1	20,000	1	30	31	620.0	930.0	46.5	46	8	Every 6 weeks	
CH2	10,000	1	60	61	610.0	930.0	93	92	4	Every 3 months	
CH3	5,000	1	180	181	905.0	930.0	186	185	2	Every 6 months	
CH4	1,000	1	365	366	366.0	930.0	930	929	0.4	Every 2 years	
CH5	200	1	365	366	73.2	930.0	4650	4649	0.08	Every 13 years	

The method is recommending a default minimum inspection regime on roads of CH4 and above of two years where condition data is available to show the assets are in good condition and annually if condition data is not

available or the asset is known to be in a poor condition. This means the recommended minimum inspection intervals are as shown below:

Routine Inspections		
Hierarchy	**Theoretical Routine Inspections (CSSW Minm)**	**Recommended Minimum**
CHSR	Monthly	Monthly
CH1	Every 6 weeks	Monthly
CH2	Every 3 months	Every 3 months
CH3	Every 6 months	Every 6 months
CH4	Every 2 years	Every 2 years (good condition), annually poor condition or condition unknown
CH5	Every 13 years	Reactive inspections.

The concept of use has been adopted as the basis for establishing a proposed inspection regime. The regime has focused on what is required to manage basic safety i.e. to discharge the authority's duty of care as the highway authority to maintain a safe highway. In the case of CH5 the theoretical minimum frequency of inspection to provide equivalent risk exposure is so infrequent that it is considered appropriate to only carry out reactive inspections on these roads. This is based on the assumption that this category of road is used predominantly by locals who will report required repair before a regime of inspection would identify them.

There is a logic used to determine an appropriate differential inspection regime based upon use such that an approximately similar level of risk exposure is delivered across the asset.

It is expected that over time in the coming years that data will be increasingly available that will inform refinement of the risk assessment and thus all aspects of this approach can be refined.

Ideally future data will include defect type, size and location and records of resulting adverse outcomes when such occur, for example the accident data references above and other records of adverse safety outcome such as 3rd party claims made for personal injury.

Data that is available indicates that a safety defects are more frequently identified from reactive inspection resulting from a notification by the public or other 3rd party. RCT report 2/3 of their cat 1 defects emanate from reactive inspections, Bridgend report 60% of their Cat 1 (safety) defects are identified from reactive inspection/3rd party notification.

Footways Inspection Regime

To determine an appropriate method of establishing an inspection regime for footways the same method as that above for carriageway has been adopted. For footways however, there is a research paper that provides some very useful references. TRL Report PPR171 "Development of a Risk Analysis Model for Footways and Cycleway, 2006 has been used as outlined below. Footways are rarely the scene of accidents recorded by the police hence the accident data used for carriageways is not relevant.

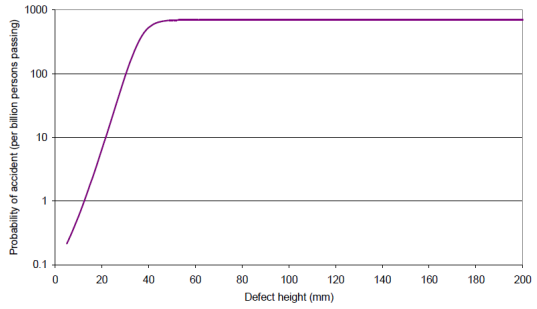


Figure 5 Probability of an accident

PPR171 (3) has however analysed the incidence of accidents based on claims data from a number of local authorities and derived the relationship illustrated below. This output is useful for both the establishment of inspection frequencies and to inform the setting of investigatory levels in the repair regime (see section below).

The graph illustrates that the probability of an accident for a 40mm defect is approximately 1000 per billion persons passing and for a 20mm defect it is approximately 10 per billion. Using these probabilities and the estimated footfall figures for different hierarchies as shown below it is possible to estimate the time between potential accidents on each level of the hierarchy for 20mm and 40mm defects.

Hierarchy	Footfall	Probability of an Accident at 20mm defect	Days between Accidents	Years Between Accidents	Accidents Per Year
FHVHU	15,000	0.00000001	6,667	18	0.055
FH1	10,000	0.00000001	10,000	27	0.037
FH2	5,000	0.00000001	20,000	55	0.018
FH3	1,000	0.00000001	100,000	274	0.004
FH4	500	0.00000001	200,000	548	0.002
FH5	100	0.00000001	1,000,000	2,740	0.000

For a 20mm defect potentially causing an accident the risk that is being managed is equivalent to the probability of 0.05 of accident per year in town centre areas.

Managing 20mm defects is therefore more of an exercise of preventing deterioration to a bigger defect than it is a direct safety management action.

Probability of an Accident Based upon PPR771: 40mm Defect					
Hierarchy	Footfall	Probability of an Accident at 20mm defect	Days between Accidents	Years Between Accidents	Accidents Per Year
FHVHU	15,000	0.000001	67	0	5
FH1	10,000	0.000001	100	0	4
FH2	5,000	0.000001	200	1	2
FH3	1,000	0.000001	1,000	3	0.4
FH4	500	0.000001	2,000	5	0.2
FH5	100	0.000001	10,000	27	0.0

40mm defects are predicted to potentially create 4 accidents per year on FH1 (town centre pedestrian areas) with footfall of 10,000 per day).

Most authorities currently adopt a regime of monthly inspection for these areas, a regime that is 3 times more frequent than the predicted incidence of accidents.

A baseline inspection frequency of monthly inspection on FHVHU (city centre) areas has been adopted based upon the analysis above. This data was considered to be the best available. Using the same method as for carriageways a baseline risk exposure score has been calculated for FHVHU (city centre) footways as shown below.

Asset Information	Use Data	Time Data			REI (k pa)
Hierarchy	Ave Footfall	Response Time (days)	Initial Inspection Interval (days)	Initial Exposure Time (days)	**Initial REI (k pa)**
FHVHU	15,000	1	30	31	465.0

The baseline REI figure has then been used to derive inspection frequencies that would deliver the same level of exposure across the other levels of the hierarchy as shown below:

CSSW Minimum Standard Routine Inspection for Safety											
Typical Current Inspection Regime						Routine Inspection Frequency for Safety to provide the same level of risk exposure across all hierarchies					
Asset Information	Use Data	Time Data			REI (k pa)	REI (k pa)	Time Data				
Hierarchy	Ave Footfall	Response Time (days)	Initial Inspection Interval (days)	Initial Exposure Time (days)	Initial REI (k pa)	Standard REI (K pa)	Proposed Exposure Time (Days)	Proposed Inspection Interval (days)	Theoretical Interval to normalise risk exposure (inspections per year)	Safety Inspection Interval for Same Exposure	Comment
FHVHU	15,000	1	30	31	465.0	465.0	31	30	12	Monthly	**Baseline interval**
FH1	10,000	1	30	31	310.0	465.0	46.5	46	8	6 weekly	
FH2	5,000	1	60	61	305.0	465.0	93	92	4	Every 3 Months	
FH3	1,000	1	180	181	181.0	465.0	465	464	1	Annually	
FH4	500	1	180	181	90.5	465.0	930	929	0.4	Every 2 Years	
FH5	100	1	365	366	36.6	465.0	4650	4649	0.08	Every 13 Years	

As with carriageways this calculation identifies a low level of inspection required on the more lightly used part of the network to manage safety. Following this calculation could mean inspections at intervals of 10 years on minor rural footways and 2 years on housing estate footways. This is considered too infrequent as inspection are required in order to manage maintenance and to plan any renewals required. A minimum inspection frequency is therefore recommended as:

Routine Inspections		
Hierarchy	**Theoretical Routine Inspections (CSSW Minm)**	**Recommended Minimum**
FHV HU	Monthly	Monthly
FH1	6 weekly	Monthly
FH2	Every 3 Months	Every 3 Months
FH3	Annually	Every 6 months
FH4	Every 2 Years	Every 2 years (good condition), annually poor condition or condition unknown
FH5	Every 13 Years	Reactive inspections only

Reactive Inspections

Many authorities rely as much on reactive inspections as they do on their regime of routine inspections. Standards relating to these inspections vary greatly as do the methods by which they are managed. There is insufficient data available to enable analysis of the contribution these inspections currently provide to the management of risk. The limited data that does exist indicates that approximately 2/3 of some authorities' footway safety defects are identified by reactive inspection/3rd party notification. It is proposed that authorities ensure that the same data is recorded for reactive inspections as for routine inspection in future such that the influence of reactive inspection can be analysed and suitable recommendation for applying a risk-based approach subsequently provided.

FH5 footways are very lightly used. So much so that the equivalent inspection regime to meet the risk exposure accepted on other levels of the hierarchy would only require inspection every 13 years. FH5 footways are predominantly used by local residents who will report defects long before a regime of this scale of interval would be able to identify defects. As the risk on these footways is so low it is considered appropriate to specify reactive inspections only as the minimum regime.

5. Establishing a Risk-Based Repair Regime

In order to assess the repair regime attempts were made to review repair data held by authorities. This data was found to lack the detail required to rationally assess the effect of the intervention criteria that are currently being applied.

Authorities typically record the data required in order to demonstrate that defects have been identified, categorised and then subsequently repaired. An inspector will usually record an assessment of a defect as a type (cat 1, cat 2 etc) rather than recording the dimensions of the defect.

The risk-based method is recommending that in future dimension data is recorded for all defects. This will in many instances need to be visually estimated. The subsequent analysis and use of this data will need to recognise this but will allow there to be an assessment of the number, type, location and size of defects against the adverse incidents that occurred as a result of or partially because of the defect.

This is not a big change from current practice as inspections currently require inspectors to assess the size of a defect in order to categorise it.

Current Standards

CSSW's stated wish is to create a nationally consistent approach. To assess how plausible this is a review was undertaken of current standards (defect definitions and response times). The review revealed some variation between authorities but also a high degree of commonality. Many authorities apply the same or similar standards to each other.

The Effect of Current Standards

To assess how well current standards are delivering safety an attempt was made to examine the results of the application of current standards. This involved a very broad assessment of safety outcomes and claims (injury and property damage) as referenced above in inspection section.

Carriageway Safety Outcomes

Accidents that have road environment as contributory factor are statistically rare. 1 injury accident (Slight, serious or fatal) for every 40 million vehicle km travelled.

Footway Safety

The estimated probability of an accident resulting from a 40mm defect (many authorities safety defect investigatory level) is 1000 per billion persons passing (or 1 per million persons passing).

Accidents as a result of a highway defect are rare and this outcome is being achieved from the application of current standards. It has therefore been considered a reasonable place to start to reference current standards when addressing a risk-based approach.

As noted in several places above, once better data is available a more detailed rational assessment of risk can be undertaken, and the results used to refine the method. In the meantime, however, it is considered useful to define a national minimum standard.

National Minimum Standards

CSSW has made previous attempts to define national minimum standards for repair. This project has reinvigorated that work and includes a set of minimum standards. As noted above analysis of data from repairs is not currently detailed enough to support assessment of differing intervention criteria. i.e. it is not possible from this data to determine if defects of a certain size are currently resulting in a higher incidence of injury.

The reasoning behind the standards are as follows:

Safety Defects are those that warrant rapid repair/making safe. Dimensions are provided to guide their identification

For carriageways a depth of >50mm has been defined. A defect of 50mm has deteriorated into the layer below the wearing course. Wearing courses are often in the range of 40-45mm . When the wearing course alone is defective the defect will typically deteriorate comparatively slowly. Once the defect extends into the layer below the risk of it deteriorating more rapidly into a much greater depth and thus risk to users is greater. Inspectors can usually see when inspecting a defect if the hole has developed into the lower layer. In some instances, defects of less than 50mm will just be laminated wearing course layers missing . These are maintenance defects but, in most instances, do not pose an immediate safety risk to users.

The minimum standard is set at a level which all defects exceeding the level should be repaired. It assumes that all defects will be encountered by users regardless of their position in the highway. It does not preclude inspectors using their judgement to assign lesser defects to a higher category if they believe, for example that rapid deterioration is likely.

Footway Defects

The report referenced above in the inspection section provides a useful guide on the risk associated with differing levels of footway defects. PRR171 estimates the probability of an accident at a 20mm and 40mm defect to be 10 in a billion and 1 in a million respectively i.e. it is 100 times more likely that an accident will occur at a 40mm defect than at a 20mm one.

Furthermore, the risk of an accident, according to this report does not increase significantly above 40mm. Using 40mm as intervention still only relates to defects that have a very low probability of causing accidents especially on the lower levels of hierarchy.

The analysis indicates that the process of footway management is largely a preventative one. By identifying and repairing defects at an initial level of deterioration they are prevented from deteriorating into safety defects with a much higher risk to users (albeit still a low risk in absolute terms).

The development of this method has highlighted that the predominant activity is the repair of maintenance defects as opposed to safety defects. The accompanying training material that is being developed to train inspectors uses 3 levels of defect definition as follows:

- **A Critical Defect** is one that the inspector consider the risk to safety high enough to require immediate action. Defects that pose an immediate or imminent risk of injury to road users typically include items such as, a collapsed cellar, missing utility cover, fallen tree, unprotected opening etc. Critical defects should be made safe at the time of the inspection if practicable or attended by the inspector until such time as the defect can be made safe. Making safe may constitute displaying warning notices, coning off or fencing off to protect the public from the defect. CSSW's minimum standard for a critical defect is a response time of 2 hours (to attend and make safe as soon as possible thereafter)
- **A Safety Defect** is one that requires prompt attention because it presents an imminent hazard. Safety defects requiring a response as soon as possible to remove a potential risk of injury to users will typically include items such as particular sizes of potholes, trip hazards, dislodged kerbs etc. If practical safety defects should be made safe at the time of the inspection. This may constitute displaying warning notices, coning off or fencing off to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of the inspection, repairs of a permanent or temporary nature should be carried out within the response time specified. CSSW's minimum standard provides dimension data that can be used as a guide to identifying safety defects for different network hierarchies.
- **A Maintenance Defect** is one that is not a safety defect but requires repair at an appropriate time to guard against further deterioration. They do not present an imminent hazard to users. Maintenance defects should be categorised as higher priority; defects that warrant treatment, in order to prevent them deteriorating into a safety defect prior to the next scheduled inspection and lower priority; other defects that warrant treatment, in order to prevent them deteriorating to such an extent that additional works or costs are incurred.

The carriageway repair regime is focused upon the response to defects once they have been identified. Identification is via the inspection regime. This may be from a routine inspection or from reactive inspection. It

is acknowledged that many defects are notified to the council by a 3rd party, e.g. a request for repair from a member of the public.
The minimum standards for carriageway repair regime have been based upon the application of the risk-based principle used to establish the hierarchy and the inspection regime.

There was no research information available to indicate the outcomes that are associated with differing sizes of defect. Logic dictates that larger defects pose a great risk to user but there are not available reliable studies that quantify this. Current regimes appear to have been based upon accepted practices that have evolved over time. This is not to discredit these regimes. It is a fact that roads are comparatively safe with low and decreasing incidence of injury accidents. This is enabled by regimes of repair that aim to prevent defects becoming dangerous.

The repair regime acknowledges that from time to time, sometimes as a result of external factors, defects may appear that clearly have the potential to cause harm to users. These defects are of a high risk to users and have been categorised as "critical" defects in the regime. It is expected that the response to these defects will be to make it safe as soon as is practical. It is not appropriate to try to define dimensional criteria for such defects. Trained personnel should be able to identify critical defects based on their nature and location without reference to specific "intervention" criteria.

The remaining regime has been based upon the following assumptions:

- The probability of accident occurring at a carriageway defect increases with the size of the defect (as logic would suggest)
- Defects that only affect the wearing course will typically deteriorate slower than defects that extend into the basecourse/beyond the wearing course
- Prevention of further deterioration is a key consideration in determining the response to defects that are at a level that do not pose an immediate hazard of injury to users
- Where the carriageway is habitually used by pedestrians such as defined or likely crossing points footway standards should apply

Determining an Appropriate Threshold

The major determinant in categorising a carriageway defect that is not immediately dangerous is how rapidly it may deteriorate into that state. The regime is designed to provide preventative repair such that defects that are actually potentially dangerous are minimised in terms of injury to users. There is also a need to repair defects that may cause property damage.

Roads that have been designed will invariably have a discreet layer of wearing course typically of a depth of up to 45mm. It is common for repairs to initiate by a hole appearing in the wearing course. Where the layer

below is intact the defect may remain relatively stable in the short term i.e. deterioration into a much larger defect less probable than for a defect that has already extended into the lower layers. For this reason, a threshold between "small defects" and "larger defects" of 50mm has been chosen. A defect that is 50mm in depth will typically be deteriorating at both the wearing course and the subsequent layer and as such is prone to more rapid deterioration. The regime is based upon differentiating between defects either side of this threshold.

Carriageway Repair Regime: Response Times				
Carriageway Hierarchy	**Safety Defect**		**Maintenance Defect**	
CHSR	>50mm	By the end of the next working day	>40mm	1 month
CH1	>50mm		>40mm	
CH2	>50mm		>40mm	
CH3	>75mm	5 days	>50mm	3 months
CH4	>75mm		>50mm	
CH5**	>75mm		>50mm	

** defect triggers on CH5 roads are to be considered an investigatory level rather than an intervention level as on these very low use roads, the risk to road users may vary considerably depending on the nature and location of the route and the individual defect.

Defect Size

The defect sizes chosen for each type of defect and hierarchy reflect the fact that carriageway defects deteriorate more rapidly on more heavily trafficked roads as a result of the volume of vehicles running over it. A defect of 50mm depth on CH2 and above will be subjected to repeated trafficking. All these roads carry >5,000 per day and as such a pot hole could deteriorate rapidly into a much bigger and more hazardous hole if not repaired promptly. For this reason, a differential standard of safety defect size has been adopted for the minimum standard shown above.

Response Times

The proposed response times are also based upon taking into account the different levels of use. The table below shows how risk exposure has been calculated and used to show what response times are required to deliver a consistent level of risk exposure across all levels of the hierarchy.

Safety Defect					
Carriageway Hierarchy	**AADT**	**AADT level for use in calculation**	**Exposure (vehicles exposed to a defect before it is repaired)**	**Response time (days) required to normalise exposure**	**Proposed Minimum Standard**
CHSR	30,000	30,000	30,000	1	same day
CH1	10,000 - 20000	20,000	30,000	2	By end of Next Working
CH2	5,000 -10000	10,000	30,000	3	By end of Next Working
CH3	1,000 - 5000	5,000	30,000	6	5 working days
CH4	200 - 1000	1,000	30,000	30	5 working days
CH5	<200	200	30,000	150	5 working days

Adopting a same day repair response time for busiest roads means that a maximum of 30,000 vehicles would potentially be exposed to the defect before it was made safe or repaired. The response times required to deliver the same level of exposure on the other levels of hierarchy are shown. For example, on CH3 roads a repair response time of 6 days would deliver the same level of exposure to the defect as for 1 day in CHSR.

The same logic has been applied for maintenance defects. A response time of 1 month (28-days) has been adopted for CHSR. This is a standard in common use currently and in the absence of data to the contrary it has been adopted as a reasonable period to repair non-safety defects to prevent them deteriorating to the extent of becoming a safety defect.

Maintenance Defect					
Carriageway Hierarchy	**AADT**	**AADT level for use in calculation**	**Exposure (vehicles exposed to a defect before it is repaired)**	**Response time (month) required to normalise exposure**	**Proposed Minimum Standard**
CHSR	30,000	30,000	840,000	1	1 month
CH1	10,000 - 20000	20,000	840,000	2	1 month
CH2	5,000 -10000	10,000	840,000	3	1 month
CH3	1,000 - 5000	5,000	840,000	6	3 months
CH4	200 - 1000	1,000	840,000	30	3 months
CH5	<200	200	840,000	150	3 months

Footway Repair Regime

The repair regime is focused upon the response to defects once they have been identified. Identification is via the inspection regime. This may be from a routine inspection or from reactive inspection. It is acknowledged that many defects are notified to the council by a 3rd party, e.g. a request for repair from a member of the public.

The minimum standards for footway repair regime have been based upon the application of the risk-based principle used to establish the hierarchy and the inspection regime. Reference has been made to relevant research, specifically the graph below reproduced from “PPR 171 The Development of a Risk Analysis Model for Footways and Cycletracks”. The graph illustrates:

- The probability of accident occurring at a footway defect increases with the size of the defect (as logic would suggest)
- The probability does not increase significantly once that defect is approximately 40mm in depth

- The probability of an accident happening per person passing the defect is less than 1 in a million for a 40mm defect

Unlike carriageway defects footway defects do not typically deteriorate as a function of use. A carriageway defect can deteriorate as a result of vehicles running over it. It would be rare for footfall to be a function of the rate of deterioration of a footway defect {it may be a consideration where the footway is habitually crossed by vehicles or subject to parked vehicles}.

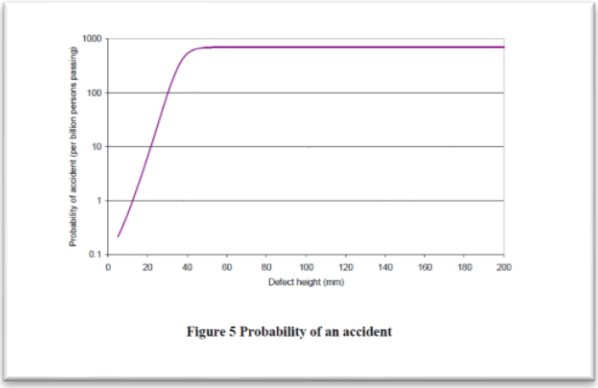


Figure 5 Probability of an accident

Based upon the graph the probability of an accident for a 40mm footway defect has been estimated at 800 per billion persons passing.

This equates to 1 per 1.25 million persons passing.

The table below uses this probability to estimate how the exposure of users to a defect could be normalised such that the number of people exposed to an individual defect before it is repaired is approximately the same across the network.

Footway Hierarchy	Daily Footfall	Footfall level of calculation	Annual Footfall (daily x 365)	Probability of an accident at a 40mm defect = 1 per :	Years between accidents	Accidents per year	Response time (hours) required to normalise exposure		Normalised Response time (days)	Proposed Minimum Standard
FHVHU	>10,000	15,000	5,475,000	1,250,000	0.2	4	24	15,000	1	same day
FH1	5,000 - 10,000	10,000	3,650,000	1,250,000	0.3	3	36	15,000	1.5	By end of Next Working Day
FH2	1,000 - 5,000	5,000	1,825,000	1,250,000	0.7	1	72	15,000	3	By end of Next Working Day
FH3	500 - 1,000	1,000	365,000	1,250,000	3.4	0	360	15,000	15	15 days
FH4	100 -500	500	182,500	1,250,000	6.8	0	720	15,000	30	15 days
FH5	<100	100	36,500	1,250,000	34.2	0	3600	15,000	150	15 days

Using the maximum footfall levels used in the hierarchy bands it is possible to calculate the predicted time between accidents by dividing the probability value (1.25m) by the annual footfall. This illustrates the predicted frequency of accidents. For FH1 footways this equates to approximately 3 accidents per year.

The FHVHU (city centre footway) hierarchy level has been chosen as the baseline. City centre footways are the highest use footways on national footway asset. This is an appropriate level to establish a national

minimum standard regime against. A “same day response” has been adopted as appropriate for these footways with the next busiest level adopting a “by the end of the next working day” standard.

Taking the response time for FHVHU as being a day it is possible to normalise the level of exposure by calculating the repair response times for each level of hierarchy that would result in the same level of exposure i.e. to limit the number of people exposed to a defect to the same level as for FHVU i.e. 15,000. This results in response times as shown below.

Safety Defects			
Footway Hierarchy	**Footfall daily**	**Normalised Response time (days)**	**Proposed Minimum Standard**
FHVHU	>10,000	1	By the end of the next working day
FH1	5,000 - 10,000	1.5	
FH2	1,000 - 5,000	3	
FH3	500 -1,000	15	15 days
FH4 #	100 -500	30	
FH5 #	< 100	150	

It is impractical to use 6 different levels of response. The above regime is based upon averages and estimated volumes and as such it is not considered appropriate to introduce too many different responses.

To create a practical repair regime two minimum standard response times have been adopted next working day and 15 days. The next working day response on town centre footways reflect their higher levels of use. The 15-day response reflects the significantly lower level of use on other categories of footway. In applying a minimum standard like this a workable regime is possible that is at a level of response that is higher (significantly higher for some categories of footway) than is theoretically necessary to manage risk across the footway network equally.

To complete the regime, it is appropriate to consider the risk associated with smaller defects. A value of 25mm has been adopted as the basis for this analysis. PPR 171 illustrates that smaller defects present a much-reduced risk of an accident as logic would dictate.

Using the same graph from PRR171 a probability of accident for a 25mm defect has been estimated as shown below.

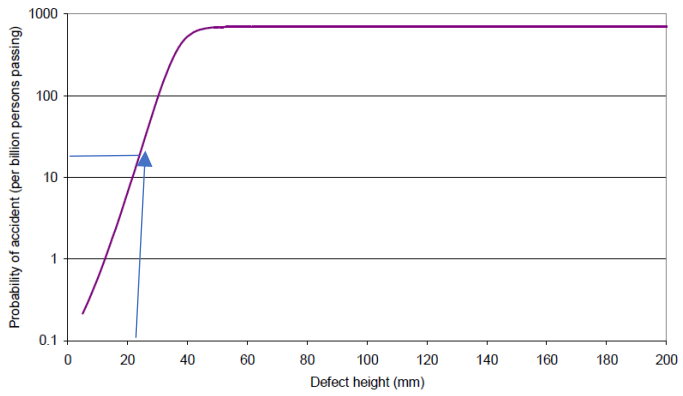


Figure 5 Probability of an accident

Based upon the graph the probability of an accident for a 25mm footway defect has been estimated at 30 per billion persons passing.

This equates to 1 per 33 million persons passing.

To establish a baseline response time for a defect with a lower probability of an accident occurring the probabilities have been contrasted as shown below:

	Probability of an accident 1 per	Response time (days)
40mm defect	1,25 million	1
25mm defect	33.33 million	27

The equivalent response time for a 25mm defect to provide the same predicted probability of an accident to a 1-day response time for a 40mm defect is calculated at 27 days. This is very close to the 28 days used by many authorities already.

It however makes sense to relate the repair regime to the inspection regime and it is therefore recommended that a minimum standard response time for a 25mm defect on a town centre footway is 1 month.

Using the same logic as used for the 40mm defects different response times for different categories of footway can then be derived as shown below.

Footway Hierarchy	Daily Footfall	Footfall level of calculation	Annual Footfall (daily x 365)	Probability of an accident at a 25mm defect = 1 per :	Years between accidents	Accidents per year	Response time (hours) required to normalise exposure	Exposure	Normalised Response time (months)	Proposed Minimum Standard
FHVHU	>15,000	15,000	5,475,000	33,333,333	6	0.164	24	420,000	0.9	
FH1	5,000 - 10,000	10,000	3,650,000	33,333,333	9	0.110	36	420,000	1.3	1 month
FH2	1,000 - 5,000	5,000	1,825,000	33,333,333	18	0.055	72	420,000	2.6	
FH3	500 - 1,000	1,000	365,000	33,333,333	91	0.011	360	420,000	12.9	
FH4	100 -500	500	182,500	33,333,333	183	0.005	720	420,000	25.7	
FH5	<100	100	36,500	33,333,333	913	0.001	3600	420,000	128.6	

As with the 40mm defect a simplified minimum standard is recommended at intervals that far exceed what is theoretically required to normalise risk. Based upon the analysis above the following minimum repair regime standard is proposed.

The analysis above shows that for a 25mm maintenance defect on FH3 footway the predicted frequency of an accident would be one every 91 years and an even less frequency for FH4 and FH5. For this reason it is not considered appropriate to set a minimum response time for defects of this size on those levels of footway hierarchy. This does not preclude an authority deciding to treat them as programmed repair if they so choose.

Footway Repair Regime: Response Times		
Footway Hierarchy	**Safety Defect >40mm**	**Maintenance Defect >25mm**
FHVHU	By end of next working day	1 month
FH1		
FH2		
FH3	15 days	
FH4		
FH5 #		

6. Competencies

The Code of Practice requires authorities to demonstrate the competency of both those involved in developing and those implementing the risk-based approach.

CSSW Accreditation Role

CSSW has recognised that the people most able to manage the competencies of those engaged in managing Welsh local highway assets are the authorities themselves. No one else external to this activity could or should have better knowledge of what is required than the authorities themselves. What is needed in order to meet the requirements of the Code is a systematic way of enabling authorities to evaluate their own level of capability and to address any areas that require strengthening via appropriate training.

CSSW represents all 22 Welsh highway authorities and has already adopted an accreditation role for training for visual condition assessment for carriageways, footways and structures. The training and method of managing accreditation was developed under the HAMP project.

CSSW has decided to use the national HAMP project again and the basics of the method used for visual condition assessment to assist with the following activities:

- Developing a documented definition of the competencies required to apply the risk-based method
- Creating training materials for inspector training
- Creating online training material for ongoing inspector refresher training
- Providing training for highway managers via the CSSW HAMP project

References

1. Police recorded road accidents in Wales, 2016, 29th June 2017, Welsh Government, Statistical First Release, Statistics for Wales
2. Road Traffic in Wales, 2016, 8th November 2017, Welsh Government, Statistical Bulletin, Statistic for Wales
3. Development of a Risk Analysis Model for Footways and Cycle Tracks, Bird, Sowerby and Atkinson, TRL, Report Number PPR171

Highway Asset Mangement Plan (HAMP) Improvement Plan 2024

Asset	Action	Priority	Notes
All Assets	Implement review of Highway & Car Park Inspection Policy and adopt Manintenance Manual in line with CSSW standards	High	
	Procure new asset management system	High	
	Provide training to enable new inspectors to be able to implement the new Highway Inspection Policy	High	
	Provide training to appropriate people on how to use the Maintenance Management System to monitor performance – this should include monitoring defect response compliance and costs. The users should also be able to use the system to identify assets which should be put forward for planned renewal due to large quantities of defects.	High	*1*
Carriageway	Review the matrix used to prioritise carriageway renewal schemes. Currently this favours the classified roads. Condition data states that classified roads are in very good condition. More investment should be used on unclassified roads.	Low	
	Review Heirarchy of highway classifications and consider review of inspection frequency and response time in line with CSSW standards	Low	
Structures	Provide relevant training to the officer responsible for managing the structures asset. The training needs to ensure the officer can use the Asset Management System and knows appropriate action to take from a management perspective eg. section of bridge is damaged which may require technical expertise which may be from an external source.	High	
	Undertake the first stage of the scour assessment	High	
	Undertake the second stage of the scour assessment on structures which meet the criteria	High	
	Complete review of records to identify if 'structural assessments' have been undertaken. If records can not be found undertake an assessment to identify structures which may require strengthening or a weight limit.	High	
	Identify the level of bridge inspection competence of those who undertake the bridge inspections	Medium	
	The total structures workbank seems very low. Maybe this needs reviewing?	Low	
Street Lighting	Obtain an understanding of the column condition information – currently over 1,000 columns require 'immediate removal'.	High	
	Remove all columns which actually require 'immediate removal'	High	
Traffic Signals	Undertake an exercise to obtain the actual installation date for all traffic signal assets. A possible method is to identify any codes on the components which may be able to be linked to an installation date. TMC may be able to do this during inspections	High	
	Develop and implement a replacement strategy for those components which are over 20 years old	High	
Road Marking	Review Gaist Road Marking Condition data and identify those markings which are assessed as Condition 6 and are located at high risk locations	High	
	Develop a strategy for managing the road marking which ensures that the majority of road marking is visible at all times.	Medium	
SCRIM	Implement the CSSW SCRIM Method. FCC currently have a skid resistance policy which they follow. The CSSW SCRIM Method will reduce the quantity of roads tested and ensure more focus can be applied to the higher risk roads ie. those that are high speed and high use.	Low	
Training	Senior Management	Medium	
	Asset Managers	Medium	
	Inspectors & Supervisors	Medium	*1*

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Highway Asset

Annual Status Report

Carriageways, 2023

Carriageways Status Summary Statement

1. **Investment:**
    - At no time in the last 11 years has the level of investment been close to that required to maintain the condition (the steady state value).
    - Council investment in the last two years (excluding government grant monies) in planned maintenance of carriageways has been less than half that required to keep the asset in a steady state.
    - £128k pa is committed to the completion of reactive repairs.
2. **Works**
    - Based on the last 11 years, on average each road gets a new surface every 72 years.
    - Based on the last 5 years on average each unclassified road can expect to be resurfaced once every 131years.
    - 3,506 repairs were completed in 2022/23, equivalent to 18 repairs per working day.
    - Less than 25% of carriageway defects are repaired within the 5 working day target.
3. **Condition:**
    - A large and growing level of defects requiring reactive repair are being identified.
    - The “measured by survey” condition of classified roads over the last 11 years has improved a small amount. The escalating number of minor repairs requires however indicates ongoing deterioration.
    - The condition of A and B roads is comparatively good and reasonably steady due to the direction of available funding towards treatment of these roads.
    - Whilst not as good comparatively as A and B class roads, C roads are in a reasonable condition and are improving over time, in terms of survey measured condition.
    - Unclassified roads are in a comparatively poor condition and are deteriorating.
4. **Backlog**
    - A huge backlog of deferred maintenance exists comprising of:
        - Roads in need of resurfacing £23m
        - Roads in need of surface treatment £10m
        - Areas of road in need of patching £6m
        - Minor defers in need of repair £9m.
5. **Risk Review**
    - The risk posed to user from the condition of the asset is increasing.
    - The “risk” of transferring the cost of todays use of the asset to a future generation to pay for is not a risk it is a fact. It is occurring now.

1. Purpose

This report provides managers and members with an update on the state of council managed roads. It proposes targets for repair, condition and quantities of work (numbers of repairs and lengths of resurfacing and surface treatment) that will be included in a council Highway Asset Management Plan (HAMP).

Status

The report describes the status of the council's carriageway in terms of:

- condition,
- level of defects

Status is reported as of March 2023.

The Asset

Scale

The council manages 1,183km of carriageways,

- Roads range from busy major roads to minor rural lanes and residential streets.
- 58% of roads are unclassified [688km]
- 51% are urban roads and 49% rural.
- 37% are residential streets (urban unclassified [434km])

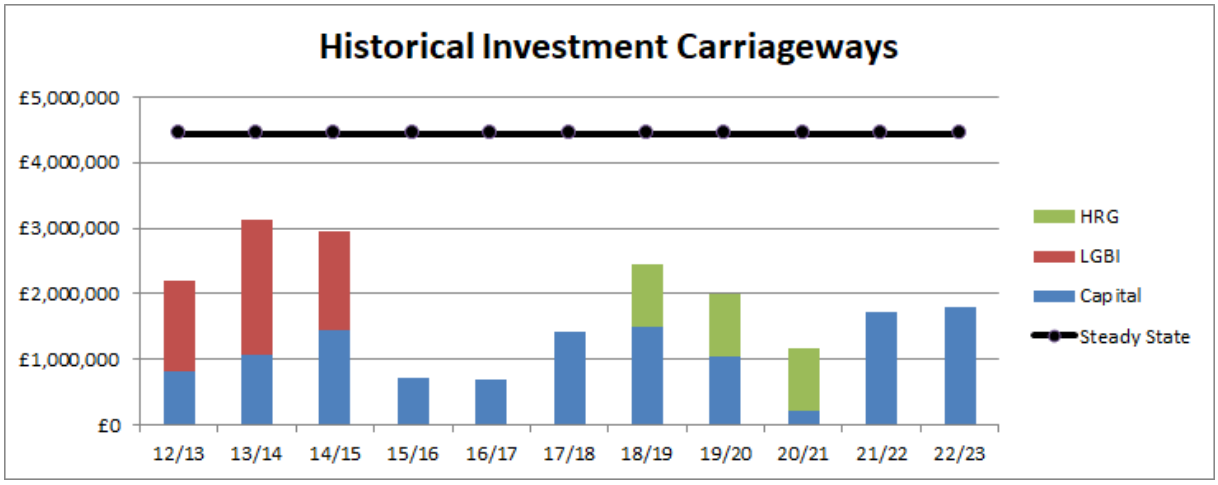
Value

In 2015-16 the gross replacement value of the carriageway asset was estimated at £1,215 million.

2. Investment

Capital Investment

Historical capital investment in carriageway maintenance has been as shown below:



Additional monies were supplied by Welsh Government, between 2012/13 and 2014/15 and 2017/18 and 2020/21. The table below shows the scale of the additional monies supplied.

Investment / Cost Planned Maintenance (£000's)											
£,000's	**12-13**	**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**
Capital	£816	£1,065	£1,449	£706	£700	£1,430	£1,492	£1,046	£210	£1,710	£1,799
Additional (LGBI, WG Grant)	£1,370	£2,050	£1,500				£959	£954	£950		
Total	£2,186	£3,115	£2,949	£706	£700	£1,430	£2,451	£2,000	£1,160	£1,710	£1,799

Average Investment

The average investment in planned maintenance between 2012/13 and 2022/23 was £1.8m pa. Without the monies provided by Welsh Government this would have been £1.1m pa. The estimated sum required to maintain a steady state of current condition is £3.9m pa.

Annual Depreciation Charge (ADC)

In 2022/23 the ADC of the carriageway asset was estimated at £3.3m pa. This value is derived from a nationally prescribed method devised by CSSW. ADC represents an estimate of the average investment in replacement of the asset required each year over its lifespan to keep it in service i.e. it is similar but not the same as the steady state. In provides an alternative view of what is required annually.

- **At no time in the last 11 years has the level of investment been close to that required to maintain the condition (the steady state value).**

In the last two years the council has invested £1.7m and £1.8m, less than half of the steady state figure.

- **Council investment in the last two years (excluding government grant monies) in planned maintenance of carriageways has been less than half that required to keep the asset in a steady state.**

Routine Reactive and Cyclic Maintenance Costs

The annual cost of routine, reactive and cyclic maintenance is approximately £128k. A substantial quantity of reactive repairs are completed each year. This figure includes for the reactive repair of defect on all highway assets (i.e. not just carriageways)

- **£128k pa is committed to the completion of reactive repairs.**

3. Works Undertaken

Planned Maintenance Outputs

The sums invested above have allowed the following amount of works to be undertaken.

Planned Maintenance Works Undertaken by Treatment Type											
	12-13	**13-14**	**14-15**	**15-16**	**16-17**	**17-18**	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**
Surface Treatment (km)	23.2	17.3	15.3	10.2	11.1	6.0	5.5	10.8	0.0	9.4	6.2
Resurfacing (km)	17.9	19.9	19.3	2.4	2.0	7.0	12.7	7.4	8.2	7.8	7.9
% with a new surface (Return Period)	3.5% (29yrs)	3.1% (32yrs)	2.9% (34yrs)	1.0% (94yrs)	1.1% (90yrs)	1.1% (91yrs)	1.5% (65yrs)	1.5% (65yrs)	0.7% (145yrs)	1.5% (69yrs)	1.2% (84yrs)

Over the last 11 years, on average each road gets a new surface every 72 years. Road surfaces do not last this long.

The council uses a risk matrix approach to prioritise resurfacing and surface treatment works. This has meant that work had been focused on classified roads (A, B and C class). The following table provides a breakdown of the works by road class.

Planned Maintenance Works Return Periods (Years) by Road Class						
Road Class	**18-19**	**19-20**	**20-21**	**21-22**	**22-23**	**Average (last 5 years)**
A Road	55	71	66	21	65	46
B Road	16	47	132	53	55	39
C Road	47	35	261	54	49	54
Unclassified Roads	214	53	213	321	145	131

Based on the last 5 years on average each unclassified road cab expect to be resurfaced once every 131years.

Reactive and Routine Maintenance Outputs

The following amount of reactive maintenance works have been undertaken.

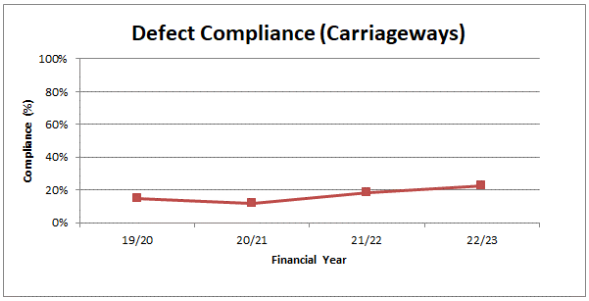
Reactive Maintenance Works Identified and Repaired				
	2019-20	**2020-21**	**2021-22**	**2022-23**
Total Repairs	1,590	2,767	3,343	3,506

In 2022/23 3,506 carriageway repairs were completed. The level of repairs completed equates to 18 repairs per working day. This is a substantial amount of repair. Public dissatisfaction with roads often relates to these sorts of defects, e.g. pot holes.

- **3,506 repairs were completed in 2022/23, equivalent to 18 repairs per working day.**

Defect Repair Compliance

Since October 2018, the council standard has required that all defects be repaired within 5 working days of identification. The chart shows that less than 25% of carriageway defects are repaired within this response time.



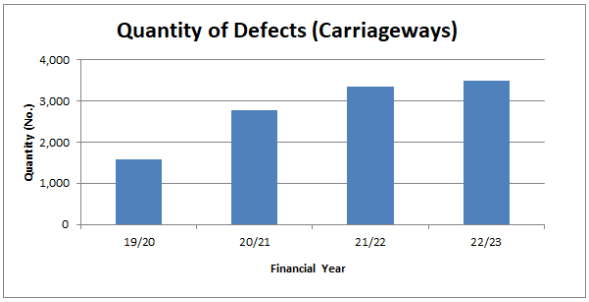
Less than 25% of carriageway defects are repaired within the 5 working day target.

4. Condition

The condition of roads is reflected by the number of defects requiring repair (recorded during inspections) and the lengths of road that require resurfacing (recorded by condition surveys).

Defects

Current standards for defect repair are in the Maintenance Manual. Defects considered potentially hazardous to users are identified for repair. The quantity of defects being identified is large and continuing to increase.



- **A large and growing level of defects requiring reactive repair are being identified.**

It should be noted that the defects recorded via inspection are only those that meet the council's standard for assessment and potential repair. Details of the full extent of defects on the network is given later in this report.

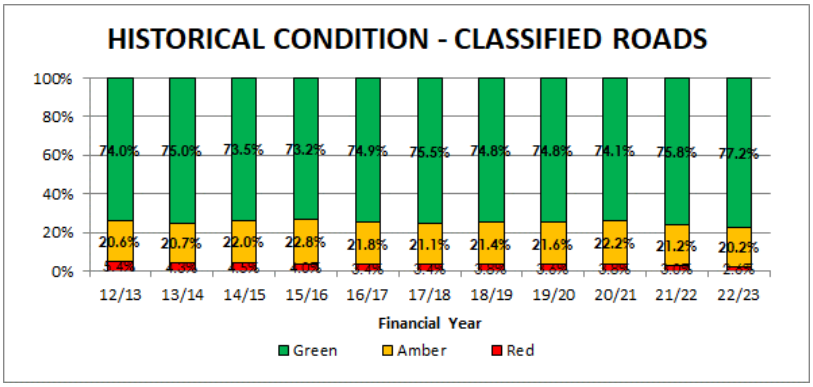
Measured Condition

Classified road condition is measured annually by machine "scanner" surveying. An AI condition survey of all roads was undertaken in 2021/22 using the Gaist system. This survey included unclassified roads which the council had no previous condition information on. The surveys report condition in relation to:

- Poor Condition (red): sections of road in a state where structural maintenance should be considered are reported as red.
- Deteriorating Condition (amber): sections of road in a state where maintenance should be considered, this may be resurfacing (amber 1) or sections of road in the early stages of deterioration where preventative maintenance should be considered (amber 2)

Classified Roads (SCANNER)

Classified roads (A, B and C class roads) make up 42% (495km) of the network. The measured condition of these roads as measured by SCANNER is shown.



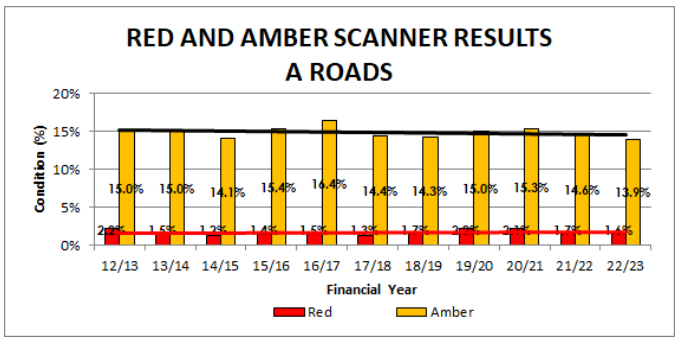
- **The condition of classified roads over the last 11 years has improved a small amount.**

A Roads 155km (13% by length). A class roads are in most cases the council's busiest roads.
Based on % in poor condition current condition is:

- 1.6% (2.5km) in a deteriorated red condition
- Within the HAMP target of 2%
- Ranked 1st nationally (2021/22)
- Ranked 1st out of 10 of semi-rural Welsh authorities (2021/22)

In addition to road in red condition a further 13.9% (21.5km) is in a deteriorating amber condition

Trend in Condition



Poor Condition:

- Decreasing (improving)

Deteriorating Condition:

- Decreasing (improving)

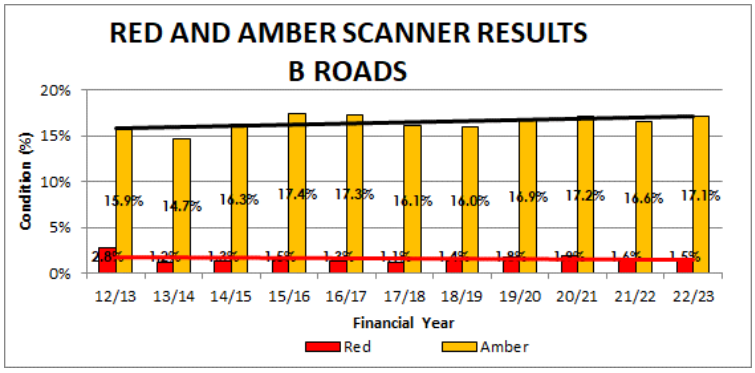
B Roads: 78km (7% of the network by length).

Based on % in poor condition current condition is:

- 1.5% (1.2km) in a deteriorated red condition
- Within the HAMP target of 3%
- Ranked 1st nationally (2021/22)
- Ranked 1st out of 10 of semi-rural Welsh authorities (2021/22)

In addition to road in red condition a further 17.1% (13.4km) is in a deteriorating amber condition

Trend in Condition



Poor Condition:

- Decreasing (improving)

Deteriorating Condition:

- Increasing (getting worse)

.

- **The condition of A and B roads is comparatively good and reasonably steady due to the direction of available funding towards treatment of these roads.**

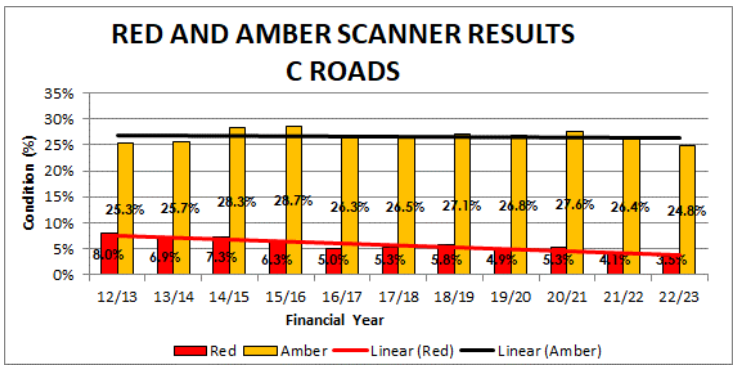
C Roads: 262km (22% of the network by length)

Based on % in poor condition current condition is:

- 3.5% (9.2km) in a deteriorated red condition
- Within the HAMP target of 7%
- Ranked 4thth nationally (2021/22)
- Ranked 4th out of 10 of semi-rural Welsh authorities (2021/22)

In addition to road in red condition a further 24.8% (65.1km) is in a deteriorating amber condition

Trend in Condition



Poor Condition:

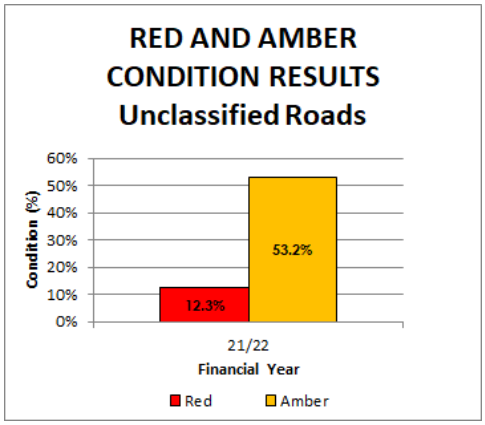
- Decreasing (improving)

Deteriorating Condition:

- Steady
  (approximately the same)

➢ **Whilst not as good comparatively as A and B class roads, C roads are in a reasonable condition and are improving over time.**

Unclassified Roads: 688km (58% by length).



Gaist condition survey of Unclassified Roads in 2021/22 report condition as:

- 12% (76km) in a deteriorated red condition
- 53% (330km) in a deteriorating amber condition

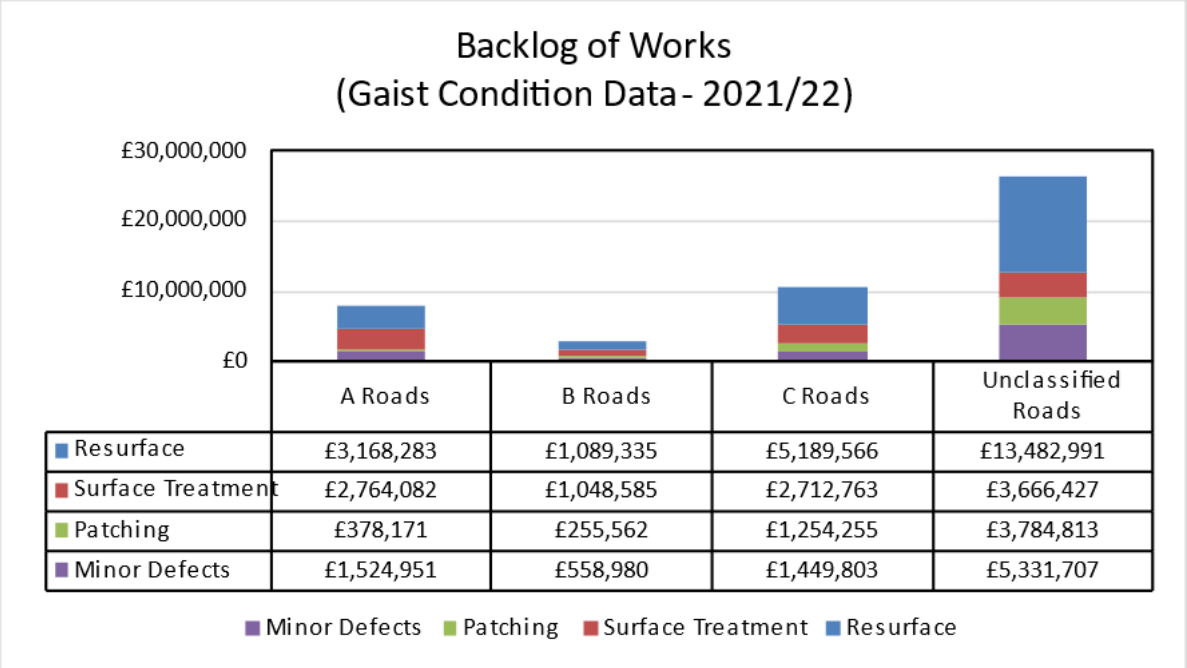
This is the first survey of unclassified roads. There is no data available to show if these roads are deteriorating. The level of replacement is however so low that deterioration will be happening.

➢ **Unclassified roads are in a comparatively poor condition and are deteriorating.**

Backlog

Previous reporting of backlog has been based on SCANNER survey results for the classified roads. This approach reports on the need for resurfacing or surface treatment. The data collected by the GAIST survey provides the ability to report maintenance needs more fully. The following chart shows a backlog of works for each road class and the following work types:

- **Resurface** – Sections of poor condition greater than 100m.
- **Surface Treatment** – Sections of deteriorating road greater than 100m
- **Patching** – Sections of poor condition less than 100m
- **Minor Defects** – All other defects (except fretting, chip loss and vegetation)



- **The total backlog using the above method is £48m.**

This data illustrates that in addition to desirable resurfacing and surface treatment schemes there is a currently unmet need for patching (of small badly deteriorated sections of road not long enough to form a resurfacing scheme). There are also a myriad of minor repairs. At the time of this survey 29,000 minor defect locations (that are not on sites of potential schemes or patching) were identified. Approximately 4,000 defects per year are currently being repaired.

A huge backlog of deferred maintenance exists comprising of:

- **Roads in need of resurfacing £23m**
- **Roads in need of surface treatment £10m**
- **Areas of road in need of patching £6m**
- **Minor defers in need of repair £9m.**

5. Risk Review

The risk posed to user from the condition of the asset is increasing.

The “risk” of transferring the cost of today’s use of the asset to a future generation to pay for is not a risk it is a fact. It is occurring now.

Highway Asset

Annual Status Report

Footways, 2023

Footway Status Summary Statement

1. **Investment:**
    - At no time in the last 10 years has the level of investment been close to that required to maintain the condition (the steady state value).
2. **Works**
    - Based on the last 10 years, on average each road gets a new surface every 336 years.
    - 382 repairs were completed in 2022/23, equivalent to 1 repair for every 2,500m
    - Less than 10% of footway defects were repaired within the 5 working day target in 2022/23
3. **Condition:**
    - A large and growing level of defects requiring reactive repair are being identified
    - 0.07% (630m) of footways have been identified as being in poor condition
4. **Backlog**
    - There is a backlog of £3.1m which would treat all footways in poor or deteriorating condition
5. **Risk Review**
    - The risk posed to user from the condition of the asset is increasing.
    - The “risk” of transferring the cost of today’s use of the asset to a future generation to pay for is not a risk it is a fact. It is occurring now.

1. Purpose

The purpose of this report is to provide managers and elected members with information to enable standards to be set and included in the Highway Asset Management Plan (HAMP).

Status

The report describes the status of the council's footway in terms of

- condition,
- level of defects
- the outputs that are delivered and
- the standards that are being achieved

Status is reported as of April 2023.

The Asset

Scale

The council manages 938km of footways, ranging from predominantly in the urban areas (towns and villages) with a small length of rural footway.

- 99% are bituminous

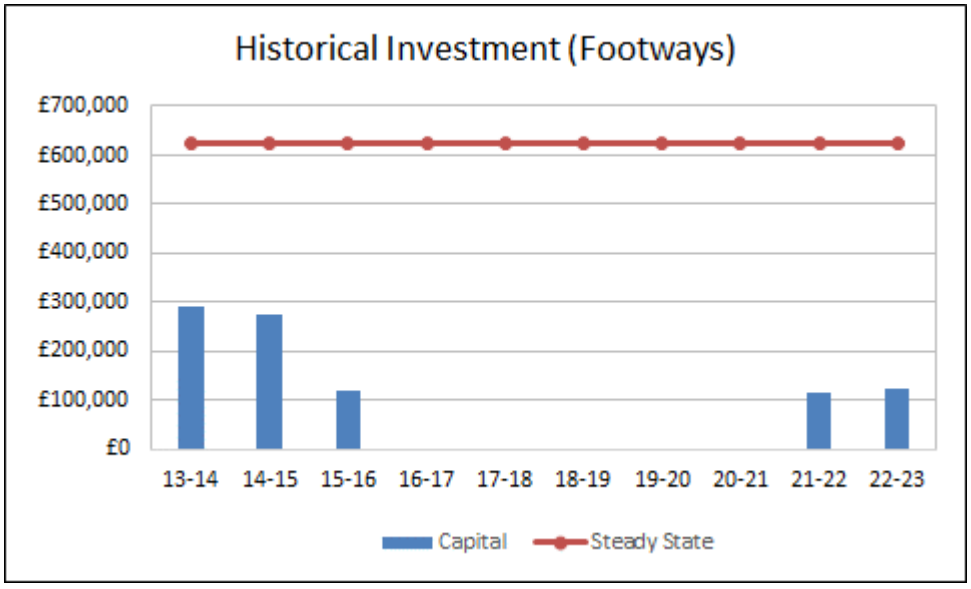
Value

In 2014/15 the total replacement value of the footway asset was estimated at £57 million.

2. Investment

Capital Investment

Historical capital investment in footway maintenance has been as shown below:



Investment / Cost Planned Maintenance (£000's)										
£,000's	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
Capital	£291	£277	£121	£0	£0	£0	£0	£0	£115	£122

Average Investment

The average investment in planned maintenance between 2013/14 and 2022/23 was £93k pa. The estimated level of investment required to maintain a steady state of measured condition is £626k pa.

Annual Depreciation Charge (ADC)

In April 2014 the ADC of the footway asset was estimated at £941k. This value is derived from a nationally prescribed method devised by CSSW to produce a realistic to estimate of the average investment in replacement of the asset required each year over its lifespan to keep it in service. The ADC and steady state cost both provide an indication of the annual cost required to maintain the footway asset.

- **At no time in the last 10 years has the level of investment been close to that required to maintain the condition (the steady state value).**

Routine Reactive and Cyclic Maintenance Costs

The cost of reactive and routine maintenance are reported in the Annual Status Report for Carriageways.

3. Works Undertaken

Planned Maintenance Outputs

The sums invested above have allowed the following amount of works to be undertaken.

Planned Maintenance Works Undertaken by Treatment Type										
	2013-14	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
Surface Treatment (km)	0	0	10.4	0	0	0	0	0	0	8.8
Resurfacing (km)	3.8	3.5	0	0	0	0	0	0	1.3	0.1
% with a new surface (Return Period)	0.41% (247yrs)	0.37% (268yrs)	1.11% (90yrs)	0.00% (N/A)	0.00% (N/A)	0.00% (N/A)	0.00% (N/A)	0.00% (N/A)	0.14% (722 yrs)	0.95% (105 yrs)

The average return period over the last 10 years is 336 years. This means that if this level were continued each footway would have a new surface on average every 336 years. This is not considered to be a sustainable level ….

Reactive and Routine Maintenance Outputs

The following amount of reactive maintenance works have been undertaken.

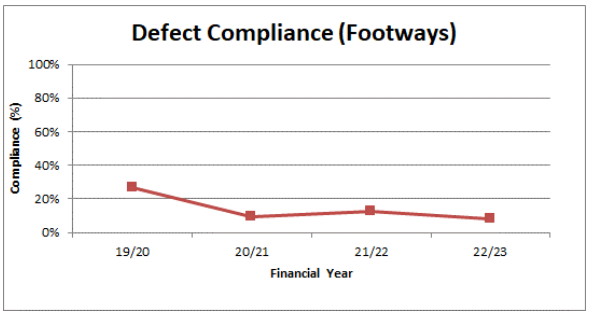
Reactive Maintenance Works Identified and Repaired				
	2019-20	**2020-21**	**2021-22**	**2022-23**
Total Repairs	174	292	352	382

In 2022/23 382 footway repairs were completed. The level of repairs completed equates to 1 repair for every 2,500m.

- **382 repairs were completed in 2022/23, equivalent to 1 repair for every 2,500m**

Defect Repair Compliance

Since October 2018 the council standard has required that all defects are repaired within 5 working days of identification. The chart shows that less than 10% of footway defects were repaired within this response time in 2022/23.



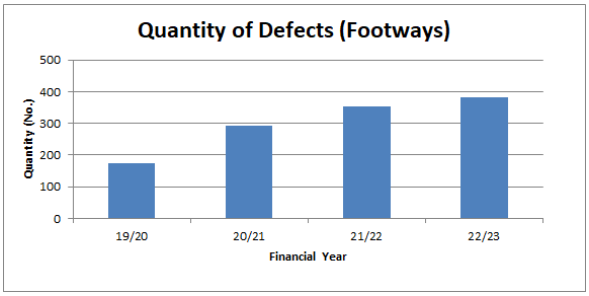
Less than 10% of footway defects were repaired within the 5 working day target in 2022/23

4. Condition

The condition of roads is reflected by the number of defects requiring repair (recorded during inspections) and the lengths of road that require resurfacing (recorded by condition surveys).

Defects

Current standards for defect repair are in the Maintenance Manual. Defects considered potentially hazardous to users are identified for repair. The quantity of defects being identified is large and continuing to increase



- **A large and growing level of defects requiring reactive repair are being identified.**

It should be noted that the defects recorded via inspection are only those that meet the council's standard for assessment and potential repair. Details of the full extent of defects on the network is given later in this report.

Measured Condition

In 2021/22 a condition survey of all footways in Wrexham was undertaken by Gaist. Gaist uses Artificial Intelligence (AI) to identify defects on the footway which are then processed to provide an overall condition indicator. The survey reports condition in relation to:

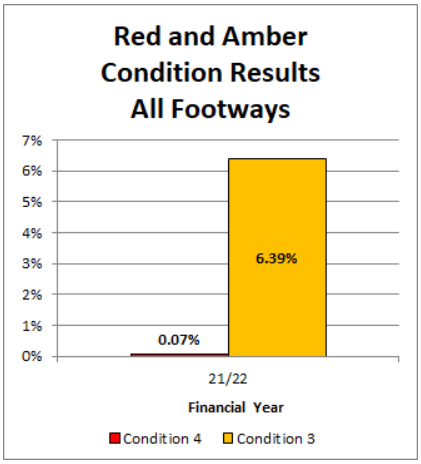
- Poor Condition (red): sections of footway in the worst state are reported as red. Most 'poor' footways are very small in area. The most cost-efficient treatment is to patch the defective areas.
- Deteriorating Condition (amber): sections of footway in a state where maintenance should be considered are reported as amber. The majority of defects on amber footways occur on the surface which can be treated with a resurfacing or relaying of the existing materials including slabs and blocks.

Condition – All Footways

The results of the footway survey are shown in the chart.

The results show that 0.07% (0.63km) of the footway require some patching to be completed.

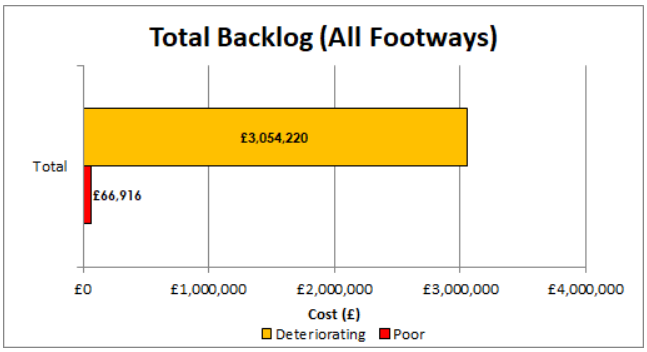
6.51% (61.02km) of the footway requires a new surface. This would include resurfacing of bituminous footways and replacing or relaying materials on slab or block footways.



- **0.07% (630m) of footways have been identified as being in poor condition**

Backlog

The total cost of repairing all the lengths of footway identified as in poor or deteriorating condition is £3.1m.



There is a backlog of £3.1m which would treat all footways in poor or deteriorating condition.

5. Risk Review

The risk posed to user from the condition of the asset is increasing.

The “risk” of transferring the cost of today’s use of the asset to a future generation to pay for is not a risk it is a fact. It is occurring now.

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Highway Asset

Annual Status Report

Structures, 2023

Summary

This report presents the status of the council's structure in terms of condition and investment as of March 2024. The report states:

Investment

- Funds are committed to the 10-year Maintenance Plan for Flintshire Bridge approved in 2021/22.
- The routine budget of £31k in 2023/24 is approximately 20% of the estimated need.
- The average investment in planned maintenance between 2014/13 and 2023/24 is £171k pa. This is less than 1/3rd of the estimated annual depreciation (the average amount required over time to keep the asset in service)

Works

- 24 structures (out of a stock of 390) received works funded by capital investment in 2023/24

Condition

- Condition (inspection results): 7 are currently rated to be in a very poor condition and a further 45 in a poor condition.
- Scour: it is unknown currently if there are structures that are susceptible to scour that may benefit from protection works
- Strengthening: it is unknown if there are structures that are inherently weak on the network.

Backlog

- The estimated cost of repairing all the defects in the structures "workbank" is £2m.
- The estimated cost of refurbishment of structures in a "very poor" or "poor" condition is £655k

Risk

- **The risk of a bridge being damaged by Scour is unknown.** An investigation of this is planned. It may be necessary to update the HAMP if a need for scour protection works is identified.
- **The risk of a bridge being inherently weak is unknown**. An investigation of this is planned. It may be necessary to update the HAMP if the investigation identifies structures that need strengthening.

1. Purpose

This report provides managers and elected members with information to enable standards to be set and included in the Highway Asset Management Plan (HAMP) for highway structures

2. Scope

Status

The report describes the status of the council's highway structures in terms of condition and investment as of March 2024.

3. The Asset

Scale

The council manages 390 Highway Structures, ranging from busy road bridges to small culverts

Structure Type	Number
Road Bridges	73
Footbridges	142
Retaining Walls	25
Culverts	149
Subways	1
Total	**390**

The Flintshire Bridge is a cable-stayed bridge which has its own specific maintenance plan. The bridge is managed in accordance with a 10 year maintenance plan with the budget approved in 2021/22.

Value

In 2015 the total replacement value (gross replacement cost, GRC) of the highway structures asset was estimated at £238m.

4. Condition

Condition of Stock

Structures condition is reported using a bridge stock condition indicator (BSCI). The figures reported are at a stock level i.e. the average for all structures and are:

- $BSCI_{ave}$; the average condition of the stock based upon the rating given to all components of the structures and
- $BSCI_{crit}$; the condition based upon ratings of components of structures that are considered critical to the load carrying capacity of the structure i.e. "critical components" only.

Currently $BSCI_{ave}$ and $BSCI_{crit}$ are not available. The following tables show the quantities of individual structures in each of the BCI Condition Ranges for both BCI_{ave} and BCI_{crit}.

BCI_{ave} Results as of 31 March 2024						
Type	**Quantity**	**BCI Condition Range**				
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Road Bridges	73	22	34	17	0	0
Footbridges	142	57	61	24	0	0
Retaining Walls	25	25	0	0	0	0
Culvert	149	55	78	16	0	0
Subway	1	0	1	0	0	0
Totals	**390**	**159**	**174**	**57**	**0**	**0**

BCI_{crit} Results as of 31 March 2024						
Type	**Quantity**	**BCI Condition Range**				
		Very Good	**Good**	**Fair**	**Poor**	**Very Poor**
Road Bridges	73	29	0	33	10	1
Footbridges	142	46	1	77	15	3
Retaining Walls	25	25	0	0	0	0
Culvert	149	74	0	52	20	3
Subway	1	1	0	0	0	0
Totals	**390**	**175**	**1**	**162**	**45**	**7**

Historical condition information is not currently available so it is not possible to comment on whether the structures stock is improving or deteriorating.

General Inspections are completed on each structure every 2 years. 104 structures require a Principal Inspections which are completed every 6 years.

Strengthening Need

A structure in need of strengthening has typically had a structural assessment completed on it and been identified as being weak. Management of these structures can include monitoring, the use of weight or other use restrictions. It is unknown if assessments have been carried out. A plan to investigate the need for strengthening is appropriate and will enable the risk of structural failure to be better understood and managed.

Refurbishment Need

Stock level indicators are based on figures that include the numbers of structures in a very poor or poor condition. Structures deteriorate slowly over time. Timely routine maintenance can greatly assist to ensure that structures require the minimal amount of the more expensive major refurbishment works but there will come a time in most structures lives when refurbishment is required. Refurbishment usually includes works to several components and will restore it to a good condition.

Structures in Very Poor Condition (based on their BCI_{crit} values)

Structures with a BCI_{crit} value of less than 40 are deemed to be in a very poor condition.

- **7 structures are in a "very poor" condition (including 1 road bridges)**

Structures in a Poor Condition

In addition to the very poor condition structures a further 45 structures are deemed to be in a poor condition with BCI_{crit} values between 40 and 65.

- **45 structures are in a "poor" condition (including 10 road bridges)**

Parapet Upgrading

Parapets provide protection for users to limit the risk of falling from the structures (as a pedestrian or more likely in a vehicle). The parapets on many structures do not meet modern design standards. The risk associated with these parapets is a function of their use, some pose a higher risk than others. There are currently no records available which indicate any of the structures require parapet upgrading.

Scour Protection

it is unknown currently if there are structures that are susceptible to scour that may benefit from protection works. An investigation of this is planned. It may be necessary to update the HAMP if a need for scour protection works is identified

Flintshire Bridge

The Flintshire Bridge is a cable-stayed bridge spanning the Dee Estuary in Flintshire. A 10-year maintenance plan was approved in 2021/22 to ensure the bridge remains in good condition. The cost of the plan is £1.8m over the 10 years. The annual costs vary depending on the programmed inspections or works.

Reactive Maintenance Needs

In addition to the specific deficiencies noted above there is an ongoing need to carry out reactive maintenance, for example where vehicle impact requires repair and routine maintenance. Reactive maintenance needs are unpredictable. They are best predicted by reference to historical costs.

- **Historically reactive maintenance needs have been met from a budget of c£16k**

Routine Maintenance Needs

Routine maintenance works are "good housekeeping", work is small in scale and cost but necessary to prevent more costly repairs being required in the future. Typical works include vegetation removal, drainage cleansing, minor repointing, minor concrete repairs etc. CSSWales* has created an initial model that has been developed to estimate a range of budget levels appropriate for routine maintenance needs. Applying this method of estimating to Flintshire's stock gives an indicative routine maintenance budget need range of £135k to £180k pa.

- **Estimated Total Routine Maintenance needs is in the range of £135k to £180k pa**

(*CSSW = County Surveyors Society of Wales representing the 22 Welsh highway authorities. Under their ongoing national highway asset management project CSSW has created estimating methods for forecasting a broad assessment of routine maintenance needs for structures)

Backlog

Major Refurbishment

7 structures are in a "very poor" condition. The initial estimated cost of refurbishment of these structures is £80.0k.

A further 45 structures are in a "poor" condition. The initial estimated cost of refurbishment of these structures is £575k.

Structures Maintenance Backlog

A structures maintenance backlog has been defined as the cost of addressing identified strengthening# works plus the cost of addressing the refurbishment of structures in a very poor or poor condition

- **Current Structures Maintenance Backlog = £655k**

Workbank

When structures are inspectors the bridge inspector records a budget estimate of the remedial works required to address the defects recorded. These are very broad estimates. The sum of the total of these works is known as the structures "workbank" and give and indication of the scale of works that would be required to repair all the recorded defects on the stock. The current "workbank" is £2m.

Summary:

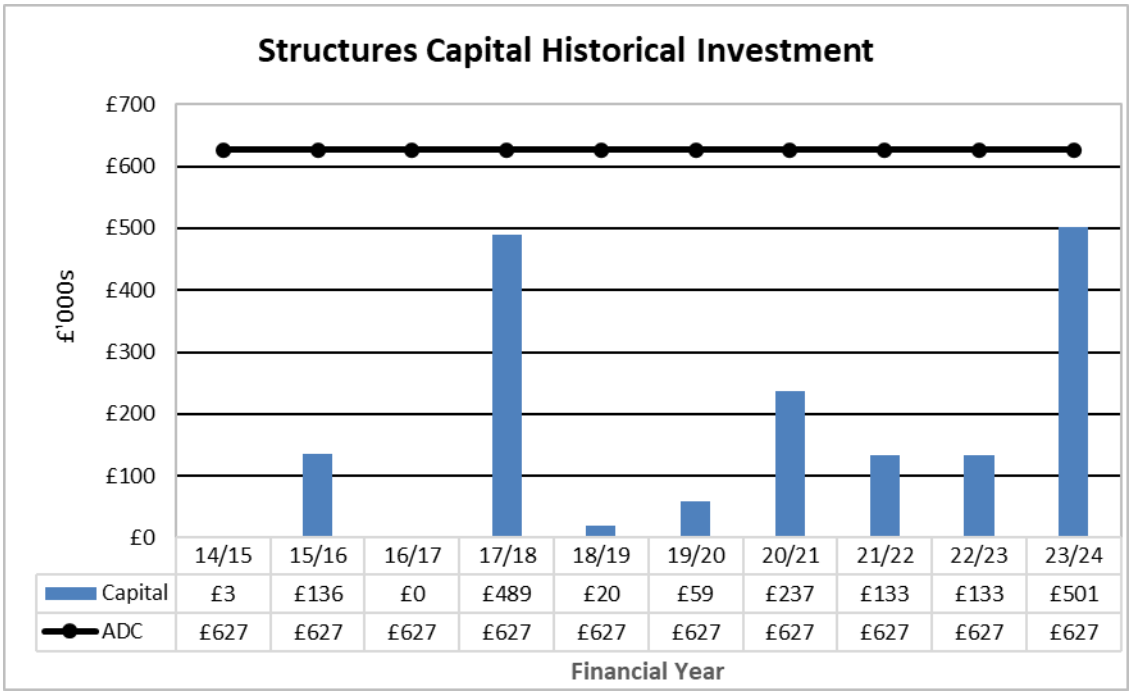
- A maintenance backlog of £655k has been calculated.

5. Historical Investment

The results above have been achieved from investment over the period reported. The levels of investment made to deliver the standards that have been achieved are reported below.

Capital Investment

Historical capital investment in structures has been as shown below



	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Capital	£3k	£136k	£0k	£489k	£20k	£59k	£237k	£133k	£153k	£153k

Average Investment

The average investment in planned maintenance between 2014/13 and 2023/24 is £171k pa.

Annual Depreciation Charge (ADC)

In 2015 the ADC of the structures asset was estimated at £627k. The ADC represents the average investment in replacement of the asset required each year over its lifespan to keep it in service. It is theoretically additional to the investment required to address the maintenance backlog.

Over the last 11 years investment in planned maintenance has been 27% of the ADC

This level of funding suggests that there may be a need to substantially increase investment in the future to keep the asset in service.

Investment/Cost of Routine, Reactive and Cyclic Maintenance

	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Reactive	Unknown							£12k	£15k	£22k
Routine and Cyclic	£51k	£51k	£53k	£53k	£53k	£53k	£53k	£41k	£38k	£31k
Other	£35k	£35k	£35k	£35k	£35k	£35k	£35k	£35k	£35k	£35k

Costs										

Other costs include licence fees, bridge monitoring, principal inspections, surveys and developer approvals.

The average revenue between 2014/15 and 2023/24 was £87k pa.

The routine budget of £31k in 2023/24 was approximately 20% of the estimated need. Failure to complete routine maintenance may lead to increases in some defect types.

Summary:

- There has been very little spent on routine maintenance
- Over the last 10 years investment in planned maintenance has been 27% of the ADC

6. Works Undertaken

Planned Maintenance Outputs

The sums invested above have allowed works to be undertaken on the following number of structures:

Number of Structures with works funded by Capital	
Financial Year	Number of Structures
2022/23	6
2023/24	24

Reactive and Routine Maintenance Outputs

There are no records available to enable quantities of reactive and routine maintenance to be reported.

Summary:

- 24 structures received works funded by Capital investment in 2023/24

ENVIRONMNT AND ECONOMY OVERVIEW AND SCRUTINY

Date of Meeting	Tuesday, 8th October 2024
Report Subject	Update on the Bus Network Grant and Local Bus Services in Flintshire
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and Transportation
Report Author	Chief Officer (Streetscene and Transportation)
Type of Report	Operational

EXECUTIVE SUMMARY

A report was taken to Scrutiny in March 2024 updating Members on the Welsh Government Bus Network Grant (BNG) which was introduced in April 2024. The BNG allows local authorities to procure commercially non-viable bus routes following the removal of the Bus Emergency Scheme (BES) and the Bus Transition Fund (BTF). A copy of the previous report has been enclosed for reference.

Six months on, the purpose of this report is to further update Members on revenue pressures associated with the Local Bus discretionary budget for 2025/2026 financial year, whilst also informing of an in-year shortfall in BNG funding along with options to mitigate these pressures.

The report highlights available options to address the £270k shortfall for Local Bus, as well as a further £47k to address the regional shortfall of BNG.

RECOMMENDATIONS	
1	For Scrutiny to recognise and support the options within the report.
2	For Scrutiny to be aware that any delays incurred represent budget pressures for Streetscene and the authority in 2025/2026.
3	For Scrutiny to note the requirement to allow 56 days' notice to the Traffic Commission (78 days for services into England) for the change and/or termination of services.

REPORT DETAILS

1.00	EXPLAINING THE BACKGROUND TO BUS SERVICES
1.01	A report was taken to Scrutiny in March 2024 updating Members on the Welsh Government Bus Network Grant (BNG) which was introduced in April 2024. The BNG allows local authorities to procure commercially non-viable bus routes following the removal of the Bus Emergency Scheme (BES) and the Bus Transition Fund (BTF) whilst also supporting increased costs for the running of local bus services. A copy of the previous report has been enclosed for reference **(Appendix 1)**.
1.02	The Bus Network Grant (BNG) was introduced to run alongside the existing discretionary Bus Service Support Grant (BSSG) scheme with funding allocated of £25m for the whole of Wales for financial year 2024-2025. WG will distribute both BSSG (previously £6m for North Wales) and now BNG to the region. The allocation of BNG for North Wales is £5.6m.
1.03	Whilst previously, it had been anticipated that there were likely to be significant changes to the commercial bus network in Wales from April 2024 as a result of inadequate funding, only minor service changes are now required.
1.04	The Region has an allocation of £5.6M for this financial year to procure the commercially non-viable services, however, there is currently a regional shortfall of £187k. Welsh Government has stipulated that there will be no additional BNG available for 2024/2025, and that local authorities need to remain within budget, and as such, Flintshire are required to make savings of £47k this financial year to cover their proportion of the shortfall. Options to reduce this shortfall are as follows:
1.05	**Reduce the X4 Mold to Chester Business Park to one bus** The X4 is funded by BNG at a contract cost of £349,116 per year. Reducing the service to one bus would save up to 50% of contract costs. Potential for 5 months saving of £72k. This option would also reduce the frequency of the service by 50%. Progression of this option would achieve the required cost saving in isolation. **Terminate the X4 Mold to Chester Business Park at Broughton Retail Park** Passengers can utilise onward travel arrangements into Chester and boarding figures show minimal loss to residents. Potential savings for this option are unknown and would involve negotiation with Arriva.

	Terminate the f10 Connah's Quay to Chester Bus Station Sunday service The f10 Sunday Services is funded by BNG at a contract cost of £22,992 per year (potential 5-month saving of £9,580). Progression of this option would not achieve the required cost savings in isolation. **Terminate the f11 Rhyl to Chester Bus Station Sunday service** The f11 Sunday Services is funded by BNG at a contract cost of £20,582 per year (potential 5-month saving of £8,575). Progression of this option would not achieve the required cost savings in isolation.
1.06	**Local Bus Revenue Budget** In March 2024, The Integrated Transport Unit (ITU) reprocured local bus services which saw an increase in costs and a subsequent in year budget pressure of £270k. The effects of the Covid Pandemic and the limited competition within the bus industry has resulted in a sharp rise in contract prices nationally, and as such, Welsh Government (WG) have permitted all local authorities to utilise funding from the BNG this financial year to assist with this immediate pressure. Local authorities need to be mindful, that whilst BNG can be utilised to mitigate local bus contract price increases, utilisation of this funding to mitigate overspends will limit the funding available to support the overall network.
1.07	Whilst the £270k annual pressure has been mitigated for the 2024/2025 financial year (via the use of BNG), it is essential that this reoccurring annual pressure is addressed more sustainably for future years. In order to do this, a review of local bus services has been undertaken for which a proposal to mitigate this overspend for the 2025/2026 financial year and beyond has been presented below.
1.08	**Option to Terminate the Service 5 at the DIP** The Service 5 – Mold to Ellesmere Port forms part of the Core Bus Network. This service was re-procured in March 2024 and the contract cost has risen to £360,000 per annum (£9k per month increase). The cost is high value for the number of passengers utilising the service. (See data enclosed within **Appendix 2** of this report) Although this service forms part of the Core Bus Network, the original plan was for this to terminate at Hooton Train Station for onward travel opportunities into Liverpool, however, this did not happen. The current recharge to Cheshire West & Chester is minimal and initial discussions with CWAC have indicated that an increase in contribution is unlikely to be deemed as costs affective given the limited passenger numbers within Cheshire. It is therefore proposed that the Service 5 is terminated at the Deeside Industrial Park for the reasons outlined below: • Passenger numbers indicate a minimal loss of service for Flintshire residents into Cheshire.

	• Re charges are minimal and CWAC unlikely to increase contribution due to low passenger numbers. • Potential for a decrease in contract costs following the re-procurement of the reduced service. • Potential to increase service frequency to 30 minutes (75mins currently) as a result of reduced journey length - this would meet the needs of employees working shifts on the DIP. • Additional potential to improve access into the DIP (Zone 1 and 2) to offer better access from the Mold and Buckley areas – this will need to be balanced against any frequency improvements. • Possible access to additional funding from Transport for Wales/Welsh Government as a result of improving employment opportunities. • Encourages use of bus travel and would go towards the Council's aims to reduce the carbon footprint. Whilst it would only be possible to determine accurate savings via a retendering exercise, it is thought that savings would be sufficient to mitigate the annual pressure.

2.00	**RESOURCE IMPLICATIONS**
2.01	The review, amendment and implementation of amended services will be undertaken by the Council's in house Integrated Transport Unit (ITU).
2.02	Should recommendations not be taken forward, inadequate budget will exist to run existing committed services resulting in an annual overspend.

3.00	**IMPACT ASSESSMENT AND RISK MANAGEMENT**
3.01	It is not possible to complete the necessary Impact Assessment at this moment in time until approved options are confirmed, however, amendments to services put forward present the lowest impact in terms of passenger numbers effected.

4.00	**CONSULTATIONS REQUIRED/CARRIED OUT**
4.01	Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy
4.02	Consultation with passengers affected by any reductions in services.
4.03	Consultation with transport operators following the outcome of the procurement.

5.00	**APPENDICES**
5.01	Update of Bus Emergency Scheme – Scrutiny Report March 2024.

5.02	Service 5 passenger data.

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	None

7.00	**CONTACT OFFICER DETAILS**
7.01	**Contact Officer:** Katie Wilby, Chief Officer (Streetscene & Transportation) **Telephone:** 01352 704530 **E-mail:** katie.wilby@flintshire.gov.uk **Contact Officer:** Anthony Stanford, Transport Manager **Telephone:** **E-mail:** anthony.stanford@flintshire.gov.uk **Contact Officer:** Helen Telford, Integrated Transport Unit Manager **Telephone:** 01352 704531 **E-mail:** helen.telford@flintshire.gov.uk

8.00	**GLOSSARY OF TERMS** **These are provided corporately on the Infonet (link) and maintained by the Executive Office**
	(1) Bus Emergency Scheme (BES) – Emergency funding provided by Welsh Government to help sustain commercial bus Operators in order to ensure that vital commercial bus services were retained during the Covid 19 pandemic. (2) Bus Transition Fund (BTF) – Grant provided by Welsh Government to replace Bus Emergency Scheme (BES) which commenced in June 2023 and is scheduled to terminate in March 2024. (3) Bus Network Grant (BNG) – Grant provided by Welsh Government to allow local authorities to procure commercially non-viable bus services which will be introduced in April 2024. (4) Bus Service Support Grant (BSSG) – Grant provided by Welsh Government to deliver transport objectives set out in the Welsh Transport Strategy and the National Transport Finance Plan. (5) Commercial Bus Services - motor vehicle designed for carrying more than nine passengers and used for the transportation of persons for compensation. (6) Transport for Wales (TfW) - the body established by Welsh Government to deliver transport priorities in Wales.

	(7)	Integrated Transport Unit (ITU) – The Councils in house transport team.

ENVIRONMENT AND ECONOMY OVERVIEW AND SCRUTINY

Date of Meeting	Tuesday, 5TH March 2024
Report Subject	Update on Bus Emergency Scheme
Cabinet Member	Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy
Report Author	Chief Officer (Streetscene and Transportation
Type of Report	Operational

EXECUTIVE SUMMARY

During the Covid Pandemic Governments across the UK stepped in to provide support to bus companies when passenger numbers on commercial services collapsed. In Wales, the Bus Emergency Scheme (BES) was created to help keep bus companies afloat to ensure that vital commercial bus services were retained throughout the pandemic. The BES was terminated in June 2023 and was replaced by the Bus Transition Funding (BTF) which is scheduled to terminate in March 2024,

The purpose of this report is to provide an update in relation to the funding of commercial services post BTF, whilst also detailing the scope of Welsh Government Bus Network Fund (BNG) which will be introduced in April 2024.

RECOMMENDATIONS	
1	That Scrutiny note how public bus services have been funded during the pandemic, the impact on service levels / passenger numbers / bus companies themselves and future proposals.

REPORT DETAILS

1.00	EXPLAINING THE BACKGROUND TO THE BUS EMERGENCY SCHEME
1.01	During the Covid Pandemic, Governments across the UK stepped in to provide support to bus companies when passenger numbers on commercial services collapsed. In Wales, the Bus Emergency Scheme (BES) was created to help keep bus companies afloat to ensure that vital commercial bus services kept running throughout the pandemic.
1.02	In February 2023, Welsh Government (WG) confirmed that the BES funding was to be removed and whilst this was originally scheduled to end in March 2023, a further extension was provided until June 2023. The

	three month extension provided by WG was intended to give the industry the short-term stability required while plans for reviewing and developing the bus network continued to better suit the new travel patterns seen since the end of the pandemic. This also ensured that there was no disruption to school transport journeys on public transport services by extending to the end of the school year.
1.03	Regional Planning Teams (bus services) supported by Transport for Wales (TfW) were then established to understand the impact of the removal of BES on commercial services and to resolve the network issues that were likely to arise from the change in funding regime, thus helping to optimise the network and to maintain as much reach and access as possible.
1.04	BES was then replaced by The Bus Transition Fund (BTF) on 24 July 2023; this was developed collaboratively with Local Authorities, Welsh Government, Transport for Wales and the bus industry. The purpose of BTF was to provide immediate financial support to bus operators in Wales so that those vital commercial services could continue.
1.05	In order to understand what funding was required to maintain the current commercial network across North Wales, operator costs were obtained and submitted to Welsh Government and on the 24th September 2023, 'minor changes' to some services were introduced with very minor impact on passengers – mainly being efficiencies through good housekeeping.
1.06	Given BTF is due to end March 2024, Operators were asked to inform the council of those commercial services that will no longer be financially viable (without BTF support). Those services that were highlighted as not being commercially viable are in the process of being procured by local authorities.
1.07	That said, following meetings with operators in November 2023, it was clear that North Wales would not have the capacity or time available to procure the post BTF services in time to start 1st April 2024.
1.08	It was therefore suggested that to 'buy time', approval was given for North Wales Authorities to instigate emergency contracts with operators which would allow the continuation of those non-viable commercial services until such time as the procurement exercise had been completed. The process of procurement is currently underway in Flintshire where it is anticipated that costs for those services will be obtained at the end of March this year.
1.09	With regards to the future regional allocation of funding, WG have announced that a new discretionary grant (to replace the existing BTF) is to be introduced from April 2024. The name of the new funding stream is called The Bus Network Grant (BNG).
1.10	This new scheme, unlike BTF, will provide Local Authorities with funding to tender for bus services that will not operate commercially when BTF comes to an end. The new scheme will run alongside the existing discretionary Bus Service Support Grant (BSSG) scheme with funding allocated of £25m for the whole of Wales for financial year 2024-2025. WG will distribute both BSSG (previously £6m for North Wales) and now

	BNG to the region. Although it has yet to be confirmed officially, it is understood that the allocation of BNG for North Wales is £5.6m.
1.11	The estimated £5.6m will not necessarily be distributed evenly amongst North Wales Authorities, but rather, each region will be required to meet to agree how the funding will be distributed according to individual local authority need. This will depend on the number of former commercial services requiring procurement by each authority, the costs of these routes and the priority of the route in question.
1.12	Given it is highly unlikely that North Wales will be able to afford to continue to fund every element of the current network, a prioritisation (RAG) exercise will need to be undertaken independently by TfW, who will be analysing information received from operators and will rank services based on patronage levels and impact on passengers.
1.13	Despite the financial support detailed above, recent experience has demonstrated that bus operators are finding it increasingly difficult to maintain the commercial viability of some bus services. Passenger numbers on public transport have declined significantly over the last three years, which is impacting on the sustainability of bus services across Wales. As such, we have observed a reduction in the number of bus operators over recent years, which is an issue across Wales. As a result, the current competition in the bus industry is extremely limited which has the potential to increase contract prices.
1.14	We continue to face challenges ahead with the consumer price index for transport services in the UK indicating that, since January 2015, prices in the transport sector have increased by over 27%. Governments and Local Authorities are keen to address the decline in bus use that has been experienced over the years and making bus services more attractive is key to achieving this.
1.15	WG recognise the need for an effective public transport network to ensure economic recovery and that communities are connected, car dependency and congestion is reduced, active travel is promoted, as well as ensuring that carbon emissions and climate change, air quality and health, social inequalities are tackled.
1.16	That said, despite WG's commendable aspirations for an improved public transport network, the potential for inadequate funding, as a result of the BNG prioritisation exercise, is likely to result in significant changes to the bus network in Wales from April 2024. Should any non-viable commercial services not continue because of the procurement / prioritisation exercise, alternative transport would need to be provided for eligible pupils for the duration of their school attendance. This may have an impact on the School Transport Budget given alternative transport arrangements may be more expensive than a current bus pass utilised on commercial services.

1.17	Operators have also raised concern with regards to increased journey times because of the recently implemented 20mph legislation change. As such, WG are working with operators to understand the cause of potential disruption and how this can be overcome.

2.00	**RESOURCE IMPLICATIONS**
2.01	The procurement of the non-viable commercial services will be undertaken by the Council's in house Integrated Transport Unit (ITU).
2.02	Should any non-viable commercial services not continue because of the procurement / prioritisation exercise, alternative transport would need to be provided for eligible pupils for the duration of their school attendance. This may have an impact on the School Transport Budget given alternative transport arrangements may be more expensive than a current bus pass utilised on commercial services.

3.00	**IMPACT ASSESSMENT AND RISK MANAGEMENT**
3.01	Whilst it is anticipated that there will be a negative impact on bus services because of market price rises and a reduced regional budget, it is not possible to complete the necessary Impact Assessment at this moment in time until funding for Flintshire has been confirmed and once the required procurement and prioritisation exercise has been undertaken.

4.00	**CONSULTATIONS REQUIRED/CARRIED OUT**
4.01	Deputy Leader of the Council and Cabinet Member for Streetscene and Regional Transport Strategy
4.02	Consultation with Transport for Wales and regional Authorities during the evaluation, prioritisation and allocation of funding.
4.03	Consultation with passengers affected by any reductions in services.
4.04	Consultation with transport operators following the outcome of the procurement / prioritisation exercise.

5.00	**APPENDICES**
5.01	None

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**
6.01	None

7.00	CONTACT OFFICER DETAILS
7.01	**Contact Officer:** Katie Wilby, Chief Officer (Streetscene & Transportation) **Telephone:** 01352 704530 **E-mail:** katie.wilby@flintshire.gov.uk **Contact Officer:** Helen Telford, Integrated Transport Unit Manager **Telephone:** 01352 704531 **E-mail:** helen.telford@flintshire.gov.uk

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Passenger Numbers f5 Mold to Ellesmere Port

Looking at one year's worth of data and considering known boarding and alighting, here is a split of various passenger movements expressed as percentages:

		Percentage	
A	Internally within Flintshire	62%	
B	Internally within Cheshire	17%	
C	Boarding Flintshire to Cheshire	17%	17 + 4 = 21% crossing boundary
D	Boarding Cheshire to Flintshire	4%	

Note that there is understandably a high proportion of boarders who tap on only (network tickets, concessionary travel passes) and therefore whose destination is unknown. It is highly likely that these passengers follow the same pattern. However, you may be interested in these data, for boarding only:

		Percentage
E	Boarding in Cheshire (all destinations incl unknown)	21%
F	Boarding Flintshire (all destinations incl unknown)	78%

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