ENVIRONMENT OVERVIEW & SCRUTINY

Date of Meeting	Tuesday 17 October 2017
Report Subject	Highway Maintenance and Emergency Repairs.
Cabinet Member	Cabinet Member for Streetscene & Countryside
Report Author	Chief Officer – Streetscene & Transportation
Type of Report	Operational

EXECUTIVE SUMMARY

Environment Overview and Scrutiny requested an update on the processes used to identify resurfacing programmes and the preferred methods of repairing and maintaining the highway network.

This report outlines the approach to defect identification, including the inspection regime and the intervention levels operated by the Council. The report also provides details on capital expenditure and investment levels on the various highway assets, the preferred treatment option for carriageways such as patching, surface dressing or resurfacing and the cost benefit of temporary pot holes repairs.

RECOMMENDATIONS	
1	That Scrutiny notes the information contained within this report.

REPORT DETAILS

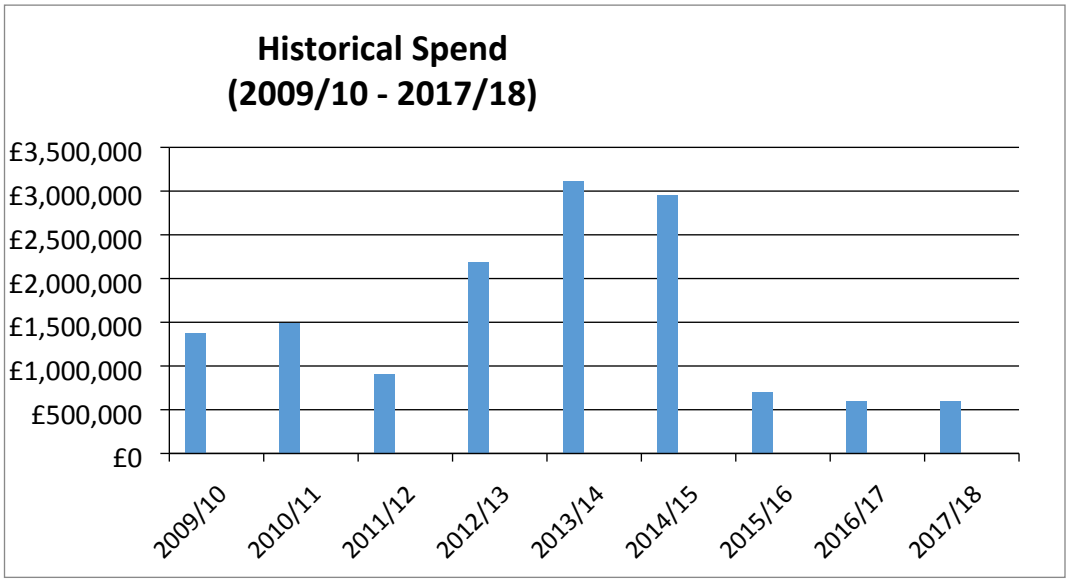
1.00	BACKGROUND OF HIGHWAY MAINTENANCE AND REPAIR REPORT
1.01	Flintshire County Council as Highway Authority has responsibility for the maintenance of all adopted highways (except Trunk Roads) within the County. The Council has a statutory duty to maintain the highway and may be responsible for any claims which result from injury or loss to members of the public who may use them.
1.02	The Gross Replacement Cost for the highway network in 2015/16 was estimated at £1,215,359,000.00 (£1.215bn) and remains the most valuable asset in the Councils ownership.
1.03	Flintshire County Council receives numerous claims from highway users

	following trips, falls or personnel loss/damage to property and vehicles on the public highway. The Authority endeavours to ensure that the highway network is in a fit-for-purpose and safe condition, which then provides the Council with a defence against any claims it may receive.
1.04	By virtue of Section 58 of the Highways Act 1980 (England and Wales), if an Authority can prove it had in place adequate policies and procedures to maintain the highway, and that the policies and procedures were being followed - providing there was no prior knowledge of 'the defect' before the incident date, a claim for damages against the Authority as a result of a trip, fall or personnel loss can be repudiated.
1.05	Regular safety inspections are therefore carried out on all elements of the network which involve visiting each section of the highway infrastructure at an approved frequency. During the visit any defects present are noted and the required maintenance repair work arranged. Safety inspections are carried out on all carriageways (roads), footways and cycle-ways and on all publically accessible car parks operated by the Council.
1.06	The Councils "Policy for Highway and Car Park Safety Inspections, Intervention Criteria and Response times" adopted in September 2016, contains the frequency of inspections that will be undertaken in respect of each road classification. The frequency is based on a risk assessment of each classification and by reference to the recommendations contained in the National Guidance document "Well Maintained Highways – A Code of Practice for Highway Maintenance Management (July 2005)".
1.07	The National Guidance document has been updated in 2017, and the recommendation is that the revised guidance should be adopted in existing local policies by September 2018. The Council reviews its inspection policy every 2 years and it is the intention that a revised "Policy for Highway and Car Park Safety Inspections, Intervention Criteria and Response times" will be submitted for Cabinet approval by July 2018.
1.08	From the policy, the following table sets out the inspection frequency for carriageway inspections:

Description	**National Guidelines Category**	**Code Frequency**		**FCC Freq.**
Strategic Route – Class A	2	1 month		1 month
Main Distributor – Class B	3(a)	1 month		1 month
Secondary Distributor – Class C	3(b)	1 month		1 month
Link Road – U/C	4(a)	3 months		3 months
Local Access – U/C	4(b)	1 year	Urban	6 months
			Rural	6 months

1.09	During the carriageway inspection any defects are identified by the

	Streetscene Area Coordinator. The defect will fall into one of the following categories: 1. A situation with potential to cause serious injury or accident. 2. Defect above 40mm (above/below the mean level of the carriageway) 3. Defect below 40mm
1.10	Defects which are considered to require urgent attention are corrected or made safe at the time of the inspection - if reasonably practicable to do so. In this context, making safe may constitute displaying warning notices, coning off or fencing off the area to protect the public from the defect. If it is not possible to correct or make safe the defect at the time of inspection, repairs of a permanent or temporary nature should be carried out as soon as possible afterwards.
1.11	Defects that do not represent an immediate hazard or risk are programmed for repairs within the times defined within the policy set out in the table below: **Defect** — **Response Time** A situation with potential to cause serious injury or accident — Immediate or closure Defect above 40mm — Rectify within 3 working days Defect below 40mm — Review at next inspection
1.12	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.
1.13	The Highway Assets within Flintshire requiring capital investment and preventative maintenance are as follows: • Carriageways – 1056kms • Footways – 938kms • Street lighting – ~23,000 units • Bridges, Culverts and Retaining walls, Subways – 300 units • Gullies - ~30,000 units • Traffic Signals – 99 locations • Signs & bollards • Road markings
1.14	Historical Spend on Planned Highway Maintenance is as follows:

	 Note: The graph shows the increase in investment from 2012/13 for a 3 year period due to the Local Government Prudential Borrowing Initiative (LGPBI) funding.
1.15	Investment in the highway network has been a priority for the Council over the past 5 years and as a result independent data, which was arranged by Welsh Government, on the condition of the Councils classified network (A, B & C roads) - ranks Flintshire's highways as the best maintained in Wales..
1.16	This is measured by the condition of the classified network however this position can very quickly worsen, particularly after a severe winter period.
1.17	As difficult decisions on the reducing finances available to the Council have been made, due the period of austerity in recent years, the level of investment has reduced and this has impacted significantly on road condition and led to an increasing backlog of deteriorating roads across the network, notably unclassified roads in both urban, and particularly, rural areas.
1.18	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, which was calculated in 2016, was £2,745,680 per year. This level of investment would simply maintain the condition of the carriageways at the current level. Given the current financial climate this position is not possible to invest at this level and the current level of Capital Funding received for all planned highway maintenance operations across all assets types is £600k per year.

1.19	When considering the annual resurfacing programme, Area Coordinators provide a Condition Visual Inspection (CVI) score for each road which is rates the condition of every road between 1 and 10. Those roads with the highest scores (i.e. worse condition) are consistency checked by the Streetscene Technical team and added to the previously approved Matrix, which also considers the surrounding infrastructure and strategic importance of the road. This includes considerations for any hospitals, schools, retail, business and bus routes which are on or adjacent to the road.
1.20	Cost estimates for the most appropriate repair works necessary on each of the highest scoring roads are then produced by the Streetscene service. By comparing the cost estimates to the available budget, the overall resurfacing programmes and patching programmes for each year are developed. Resurfacing schemes are funded through capital allocations.
1.21	Filling potholes is the cheapest option to remove defects and provide a defence against any claims, and the work is funded through maintenance (revenue) budgets. The costs comprise of mainly of labour (FCC employees) and a small amount of materials used to fill the potholes.
1.22	The Council is also required to continue to respond to defects reported on the network either following the Area Coordinator safety inspections or reports from members of the public. This requirement demands that maintenance (revenue) budgets remain available for reactive works of this nature.
1.23	Potholes repairs are an effective option to immediately deal with defects on the network and they are undertaken to remove the hazard in the most expedient manner. This reduces the risk of damage and injury to third parties and protects the Authority against litigation and damages.
1.24	Potholes are most prevalent during the winter period and this coincides with the time of year when it is least suitable to undertake structural maintenance work, such as patching and resurfacing work. Therefore pothole work is often the only option to remove the hazard and in many cases, even if the repair is undertaken as effectively as possible, the repair often fails and a repeat visit is required.
1.25	There is a clear link between investment in planned maintenance operations and reactive maintenance. The more that is invested in resurfacing and full patching operations, the less potholes will form and therefore less will be spent on reactive pot hole filling. If the potholes are not filled then the Council is liable for third party claims and this expenditure further reduces the funding available for resurfacing.

2.00	**RESOURCE IMPLICATIONS**
2.01	Capital Budgets for Highway Maintenance – FY 2017/18 - £600k
2.02	The cost of pothole repairs to the Authority can be averaged to approximately £4k per week, and this is based on 2 teams of 2 operatives with plant and machinery to repair potholes working 37 hours per week. The service operates for approximately 8 months of the year at an approximate

	cost of £128k. A single road could cost £10 - £20k to patch and up to £50 - £100k to resurface depending on the size and location of the road.

3.00	**CONSULTATIONS REQUIRED / CARRIED OUT**
3.01	Not applicable

4.00	**RISK MANAGEMENT**
4.01	The highway maintenance service has undertaken various risk assessments on the provision of road surface treatments.
4.02	Good highway asset management aligns with the principles of the Future Generation and Well Being Act.

5.00	**APPENDICES**
5.01	None

6.00	**LIST OF ACCESSIBLE BACKGROUND DOCUMENTS**	
6.01	**Contact Officer:** **Telephone:** **E-mail:**	Stephen O Jones – Chief Officer – Streetscene & Transportation 01352 704700 Stephen.o.jones@flintshire.gov.uk

7.00	**GLOSSARY OF TERMS**
7.01	**Financial Year (FY):** the period of 12 months commencing on 1 April
7.02	**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.
7.03	**HAMP:** Highway Asset Management Plan.