Appendix One - Additional information related to the condition of the Boroughs Highway Network

1. Sandwell's Classified Carriageway Network

Sandwell's roads are part of a national asset and as such there are national datasets for the classified road network.

The condition of the Classified carriageway network is currently assessed annually by SCANNER surveys with skid resistance measured annually on our principal roads ('A' roads) only using Griptester.

A summary of proportion of classified roads in red risk condition performance covering the period 2015/16 to 2023/24 is shown in Table 1 below.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
A Roads (130-01)	8%	4%	2%	2%	3%	3%	2%	2%	2%
B & C Roads (130-02)	7%	4%	2%	2%	2%	3%	3%	2%	2%

 Table 1: - Percentage of Sandwell Classified Road Network in Red Risk

 Condition

These are also OFLOG Measures enabling national comparison.

Sandwell's relative performance compared to other English Local Authorities is shown in Figure 1 below:



Figure 1: - A summary of Sandwell Road Condition compared to Other English Local Authorities – OFLOG Data.

A more detailed analysis confirms continued improvement in the condition of the Borough's classified roads, with class A roads decreasing from 2.4% red risk to 1.9%, B's from 3.2% to 2.9% and C's from 1.5% to 1.3 % see Table 2 below:

	2023/24	2024/25		
Red	2.4%	1.9%		
Amber	20%	19.8%		
Green	77.6%	78.3%		
	2023/24	2024/25		
B Ro	ad SCANNER Performance Indica	tors		
	2023/24	2024/25		
Red	3.2%	2.9%		
Amber	25.1%	24.8%%		
Green	71.7%	• 72.3%		
	ad SCANNER Performance Indica	tors		
C Ro		1		
C Ro	2023/24	2024/25		
C Ro Red	2023/24 1.5%	2024/25 1.3%		

Table 2: Detailed Performance Data for Sandwell's Classified Road Network

In summary, it can be seen that after a period of improvement in the period 2015-2017, the condition of our classified road network has remained stable at this good level of condition, that compares well on a national basis.

2. Sandwell's Unclassified Carriageway Network

A summary of carriageway condition performance for our unclassified roads covering the period 2015/16 to 2023/24 is shown in Table 3 below.

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Unclassified Roads	14%	15%	16%	15%	15%	17%	18%	19%	22%

Table 3: - A summary of Sandwell Unclassified Road Network condition

Figure 2 below illustrates the actual and predicted effect of maintaining current budgets based on the lifecycle analysis for unclassified roads.

The light blue trend from 2009 to 2011 shows rapid deterioration of unclassified carriageway from 7% to 15% in red risk condition.

The darker blue trend from 2012 to 2019 shows the success of the greater reliance in the preventive maintenance approach. Red risk condition was stabilised for 7 years.

The green trend from 2020 to 2023/24 indicates the start of the escalating erosion of budgets in real terms as a consequence of capital grants not increasing in line with the construction inflation index. Red risk condition has deteriorated from 15% to 22% in 4 years. This is broadly in line with predicted deterioration as shown within the red dashed lines.

The immediate impact of the severe winters in 2015/15 and 2017/18 can be seen.

The dashed black line shows the effect of the recommended Council capital funding provision to stabilise the red risk condition at 20%.

The red lines indicate the envelope of deterioration that can be expected without additional capital support.

Sandwell have used the data collected on carriageway condition over many years to develop a sophisticated set of lifecycle modelling and deterioration tools. These tools enable different capital maintenance scenarios to be modelled to determine which provides the best long-term outcome that will deliver the objective of stabilising the proportion of carriageway at red risk condition. This modelling has determined a capital requirement of £8.604M for carriageways.

Figure 2: Trend Anaysis for Red Risk Condition Unclassified Roads



3. Sandwell's Footway Network



Table 4: - A summary of Sandwell Footway Condition

The latest FNS assessment of footway condition suggests 70% of Sandwell's footway network falls into the worst two categories, being Functionally Impaired or Structurally Unsound.

This represents a sustained improving trend over a six-year period, comparable figures for the previous six years being: 70%, 71%,77%; 82%; 84% and 87% and validates the Councils Asset Management approach of targeting amber risk footways to try to prevent further deterioration to red risk.

Preventative maintenance is reducing the number of footways in amber risk condition (69% to 45% over the period) but there is still a gradual upward trend in red risk condition (18% to 25% over the period).

As for carriageways, Sandwell have used the data collected on footway condition over many years to develop a sophisticated set of lifecycle modelling and deterioration tools. These tools enable different capital maintenance scenarios to be modelled to determine which provides the best long-term outcome that will deliver the objective of stabilising the proportion of footway at red risk condition. This modelling has determined a capital requirement of £3.31M for footways to arrest the gradual increase in footways in red risk condition.

4. Sandwell's Bridge Network

		Valuation Dashbo	bard				
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n across the stock SClav Histogram	Condition Davidhis of exact	Valuation results per structure type) No Plantana	000	000	000 #	Valuation by Structure Type
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Figure 3: Summary of the Condition of Sandwell's Bridges and Structures

The estimated replacement cost of the Councils bridges and structures is £702.5M.

A programme of bridge inspections identifies maintenance and repairs needed to prolong the life of these assets.

The application of the Structures Asset Management principles and the outcome from the programme of bridge inspections has resulted in a capital need of c \pm 1,489,000 in 2025/26 to maintain Borough's bridge stock in good condition.

In the period since the previous assessment was undertaken in 2022 there has been a slight improvement in the condition of the Council's bridge and structures stock. Sandwell has no structures in very poor or red risk condition. The number of structures in poor condition has reduced from 5 to 4, and the number of structures in fair condition has reduced from 53 to 51. This reflects a gradual improving trend for the Borough's bridge stock, reflecting the success in securing additional external funding.

The recent externally funded bridge repair work at Scott Bridge illustrated that the extent of structural deterioration can be significantly worse than had been observed and reported in bridge inspections. This led to prolonged temporary road closures and additional costs of more than $\pounds500,000$. The implementation of the required work was made possible by the provision of DfT grant funding and that was supplemented by $\pounds500,000$ of Council capital funding in 2022/23. The completion of this

bridge strengthening work will use £150,000 of the Council capital allocation in 2023/24 (approved in November 2022).

A failing bridge at Station Road, Old Hill also generated an unfunded pressure of £350,000 and has closed this important classified road for 12 months causing significant disruption to the local community and businesses. The Council's planned work to Station Road bridge is now complete although The Canals and Rivers Trust plan some future work adjacent to this bridge.

Sandwell were successful in securing a DfT Grant of £1,221,912 allocated in 2021/22 for Dudley Street Bridge which will be completed this year.

Dudley Port Bridge carries the A461 over the Birmingham Canal. An historic inspection identified a number of structural faults to the bridge, and at that time the highway alignment was altered from a dual 2 lane carriageway to a dual single lane carriageway to reduce the loading on the bridge.

More recent inspections have identified additional deterioration and in 2023, following a programme of structural investigations, a structural assessment was caried out which identified that the assessed capacity of the structure is sub-standard.

As part of a wider West Midlands plan to improve the A461, a feasibility study has been carried out in order to replace or strengthen the structure, whilst also exploring the feasibility of accommodating safe space for cyclists and pedestrians and to have increased usable carriageway width.

A discussion on the bridges currently the maintenance responsibility of The Canal and River Trust (CRT):

Gilberts Bridge – Crosses the canal on Britannia Street Tividale.

This bridge is historically a CRT 'occupation bridge'. CRT's liability is a load carrying capacity of 3 Ton. Currently it is signed at 7.5 Ton. CRT have written to SMBC a number of times to transfer the liability. The likelihood is that at some point CRT will raise issue with the assessed capacity and want to reduce the signage to 3 Ton. Sandwell could accept that. Alternatively, if SMBC wish to keep it 7.5 Ton (or improve it), we would need to do so at SMBC's cost and take on the liability. This would result in a significant 'one-off' capital requirement of between £2-3M. Brasshouse Lane – Smethwick.

This is one of the pair of canal bridges that cross the two canal cuts on Brasshouse lane. Originally a narrow masonry arch bridge, it has been widened historically on each side with steel beams. CRT have reported that the arch bridge is assessed at full capacity, but the extensions are 18 Ton. CRT are currently managing it. However, the risk is again that at some point the structure will deteriorate and CRT may be forced to apply a weight restriction, which we would not welcome. As per Gilbert Street above, if SMBC wanted a better capacity – the Council would have to take on liability and fund the upgrade. This would be a significant cost, estimated at up to £5M.

Great Bridge Bridge (on Great Bridge St – Tipton)

CRT claim that this structure should already have been transferred to SMBC. This bridge is relatively new and is in good condition. However, if we take liability we again need to include on the inspection/structural review programme and maintain it, with the associated future liabilities.