Highways Infrastructure Asset Management Plan 2025

Section 5 – Lifecycle Planning & Maintenance Strategy / Plans

Coventry City Council

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Document Control

Version	Description	Date	Officer	Role	Approval
1.0	Minor general updates	August 2016	DCR	Asset Management Engineer	-
1.1	Minor general updates	June 2019	DCR	Asset Management Engineer	Cabinet
2.0	Creation of LCP methodology and incorporation into the HIAMP	May 2025	AC	Asset Management Engineer	Strategic Lead for Highway Operations & Delivery

5. Lifecycle Planning & Maintenance Strategy / Plans

5.1. Lifecycle Planning Approach

Lifecycle planning/plans (LCP) is essential in anticipating the future change in asset condition and therefore determine future resource requirements and compare to current resource. As with data collection different levels of details are required for different asset types based on importance, value etc. For example, detailed deterministic data modelling is not required on low value, low importance assets such as street furniture.

The results of LCPs performed will be used later in this document to outline maintenance plans for key assets.

5.1.1. Lifecycle Planning – Regional Method

Coventry have developed a region-wide agreed upon LCP methodology encompassing assets generally funded capitally via national/regional government grant funding:

- Carriageways
- Footways
- Structures
- Drainage
- Street Lighting
- Other Assets (including verges)
- Cycleways (included with carriageways and footways)

This method was originally developed in 2024 to support a region-wide business case by TFWM (Transport for West Midlands) for additional funding from 2027 onwards. However as a byproduct of this business case a lifecycle planning tool developed by Coventry and coded in VBA was developed that can be used for future lifecycle planning. The model is a mix of probabilistic and deterministic processes depending on asset type and level of detail. As opposed to tradition LCPs, red/amber/green bands are represented by structural treatment required/surface treatment required and no treatment required rather than the less accurate red/amber/green condition scores from national indicators.

The full details of the process have been combined into a technical note for future-proofing.

5.1.2. Carriageway Lifecycle Plans

For carriageways deterioration was determined using the following inputs:

- Total asset life & treatment life/treatment intervals
    - Derived from a mix of national guidance (the RSTA), local knowledge (experienced Highway Engineers) and detailed year-on-year data (primarily from Coventry)
- Inventory (total length and m² of carriageway by asset group/road class)
- Current condition (in the form of current extents/% of treatment needed by asset group/road class)
- Treatment rates (regional average used for the business case, but the ability to overwrite on an individual basis).

Annual deterioration (e.g. how much the red/amber condition bands) increases year-on-year was determined for multiple categories:

- NRD (Natural Red Deterioration), aka the amount of the network that will require resurfacing each year based on asset lifespan (e.g. 1/40 of A&B roads, 1/48 of C roads etc.)
- ARD (Accelerated Red Deterioration), as the carriageway network is not starting off in ‘perfect’ condition, along with the natural increased in the red condition band, further deterioration will currently occur due to the presence of sections of the network in amber condition. The NRD is ‘accelerated’ by multiplying by 1+(%amber), e.g. a NRD of 1% on a network with 30% of roads

in amber condition will become and ARD of 1.3%, increasing each year of the model (if the amber % increases)
- AAI (Annual Amber Increase), aka the amount the 'amber' (requiring surface treatment) amount of the network increases by annually. This has been developed by analysing the condition of the network across multiple years and the amount of preventative maintenance performed. This figure is the previous year % of green/no treatment divided by a factor of 14.5.

5.1.3. Footway Lifecycle Plans

The methodology for footway lifecycle plans is functionally the same as for carriageway with differences in the deterioration factors.

5.1.4. Structures Lifecycle Plans

The structures lifecycle planning methodology is less a model of deterioration and more a financial need assessment.

- Structures are a difficult to quantify asset, e.g. £x does not do x amount of work as each bridge/structure is unique
    - Compared to carriageway where an easily quantifiable figure of £x resurfaces xm of xm² of road

However, using national standard methodologies and an assumed renewal need of 1% annually, a figure can be returned.

5.1.5. Drainage Lifecycle Plans

As with structures, drainage assets are also difficult to quantify as they're generally constructed 'within' other assets so individual replacement of purely drainage assets is uncommon. A rough financial need approach has been adopted based on Coventry's data; in 24/25 the drainage budget was much larger than previous years. This figure has been adopted as the annual need.

5.1.6. Street Lighting Lifecycle Plans

Although under a PFI at Coventry, we have still developed a lifecycle planning methodology to be used by other West Midlands LAs. This is a simple model based on renewing a certain proportion of assets annual based on expected life (1/40 lamp columns, 1/15 lanterns etc.). However as not a key asset at Coventry the results will not be presented in this document.

5.1.7. Other Asset Lifecycle Plans

Although not strictly necessary a simple methodology has been used for VRS (safety barriers) and verges (two assets with capital programmes each year). This is a simple formula based on a value per classified road extent (VRS) and per footway m² (verges).

5.2. Funding/Financial Information

Before any maintenance plans can be compiled, it is essential to know (as much as possible) what future finances for the Highway Network may look like. Funding can very year-on-year so the level of detail within maintenance plans will need to suit. The more certain the funding; the more detailed the plan. For the purpose of this document the detail will be based upon past budgets and an assumed trend for the future based on predicted budgets and LCP results.

5.2.1. Financial History & Predictions

Even before accounting for inflation, excluding successful bid funding in 2024/25 we received less money for planned highway maintenance than in the previous 14 years.

In 2010/11 we received a total of £6.6m in maintenance funding via a combination of government (DfT) and internal funding. Adjusted for inflation this is £9.9m; without inflation this is 1.54x more received than in 2024 and with inflation this is 2.3x more.

Figure 5.1 (below) shows the change in funding from standard government/DfT grants and internal contributions form 2010-2024.

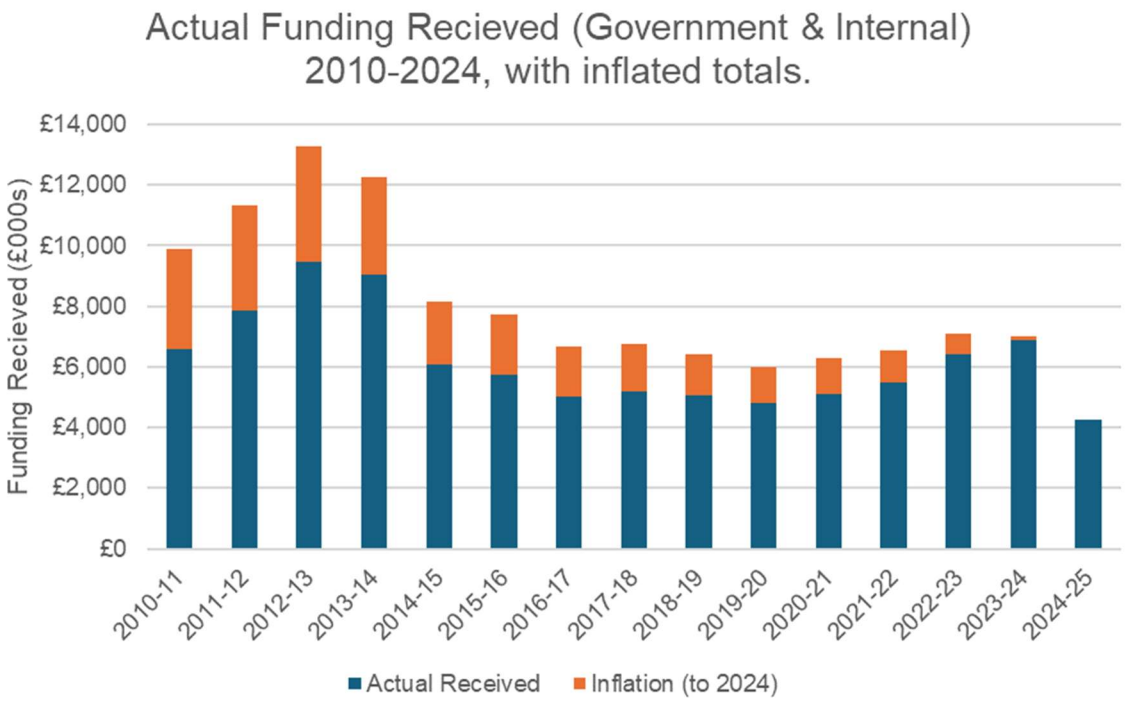


Figure 5.1. Funding Received via Government Grants and Internal Contributions for Highway Maintenance (2010-2024)

The inflated total combines to £26.69m, in 2024 terms this is equivalent to:

- 593,000m² / 74km of carriageway resurfacing / 8.35% of the road network
  OR
- 205,000m² / 103km of footway reconstruction / 7.12% of the footway network

Additionally, if this funding was received in previous years, the treatment lengths/extents would be much greater.

For future years the only confirmed funding is the CRSTS (City Region Sustainable Transport Settlement) grant (from central government via way of WMCA), this equates to £4.06m annually; this is planned for review from 2027 onwards, however due to the level of uncertainty at present, the WMCA are using this figure indicatively until 2031/32. Figures 6.2 (page 7) and 6.3 (page 8) show worst-case scenario funding (without and with inflation respectively) and figures 6.4 (page 9) and 6.5 (page 10) show best-case scenario funding (confirmed plus Network North grant) without and with inflation respectively. Actual inflation figures are used for past years and for future years 2.5% annually has been estimated.

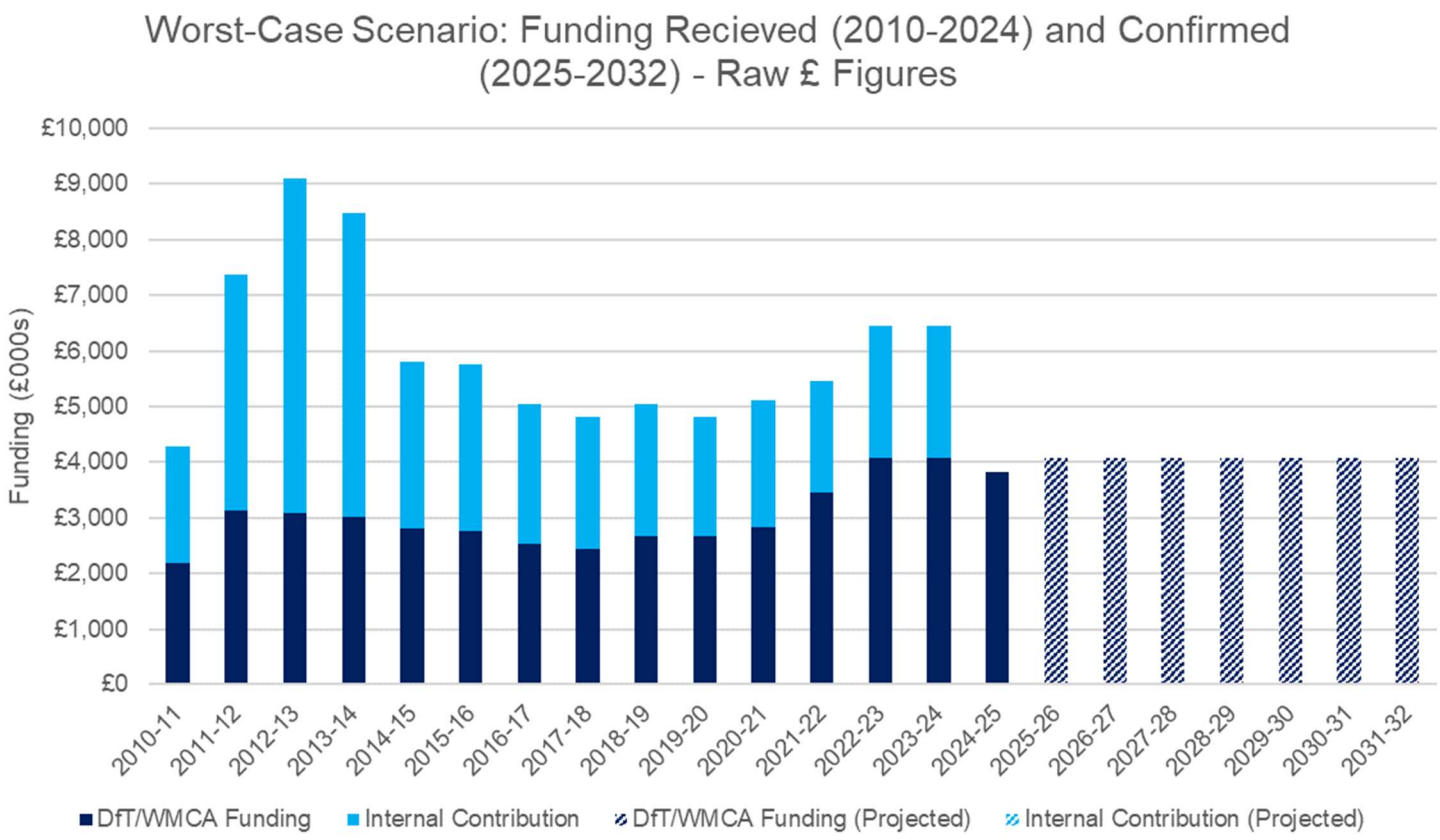


Figure 5.2. Worst-Case Scenario: Actual Funding Received (2010-2024) vs Confirmed Funding (2025-2032)

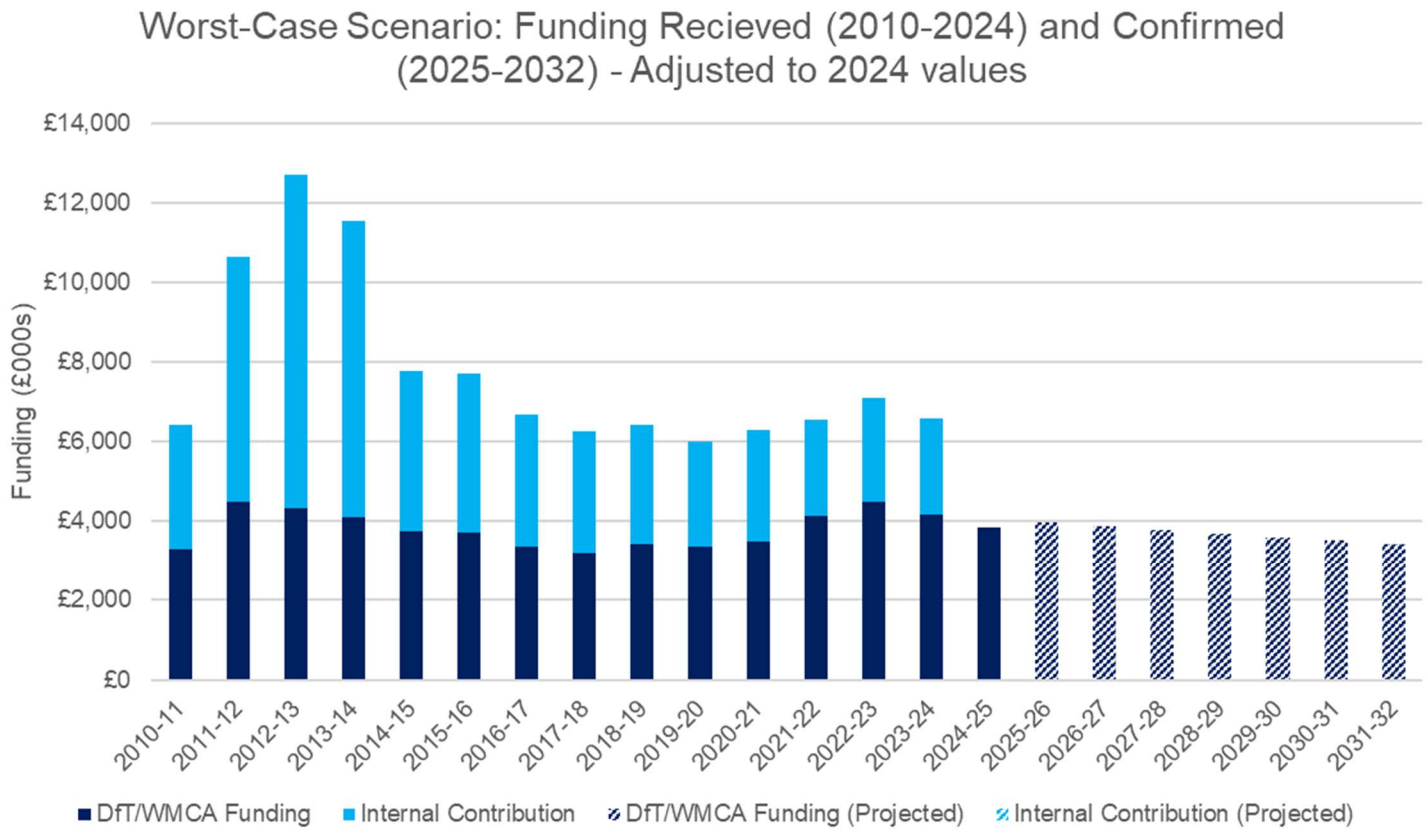


Figure 5.3. Worst-Case Scenario: Actual Funding Received (2010-2024) vs Confirmed Funding (2025-2032), adjusted to 2024 values.

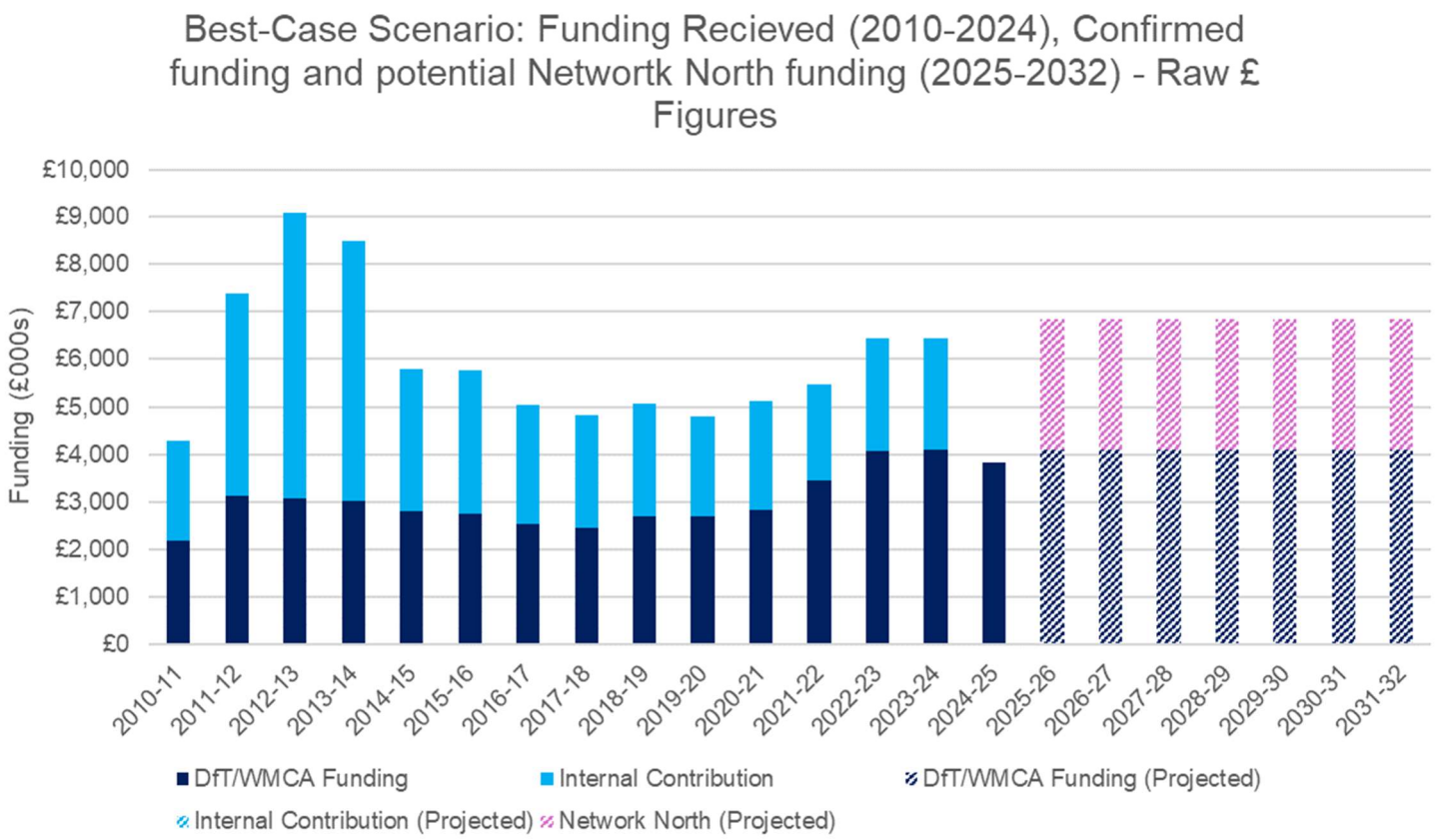


Figure 5.4. Best-Case Scenario: Actual Funding Received (2010-2024) vs Confirmed CRSTS Funding and Projected Network North Funding (2025-2032)

Note:

Since this document was compiled in 2024 the Network North funding has been superseded by another fund. This is only confirmed for 2025-26 and is over £1.2m / 47% less than previously projected. This change does severely impact the best-case scenario; however, models will not be re-created at this stage as it does not impact the results of the 'Asset Plans'

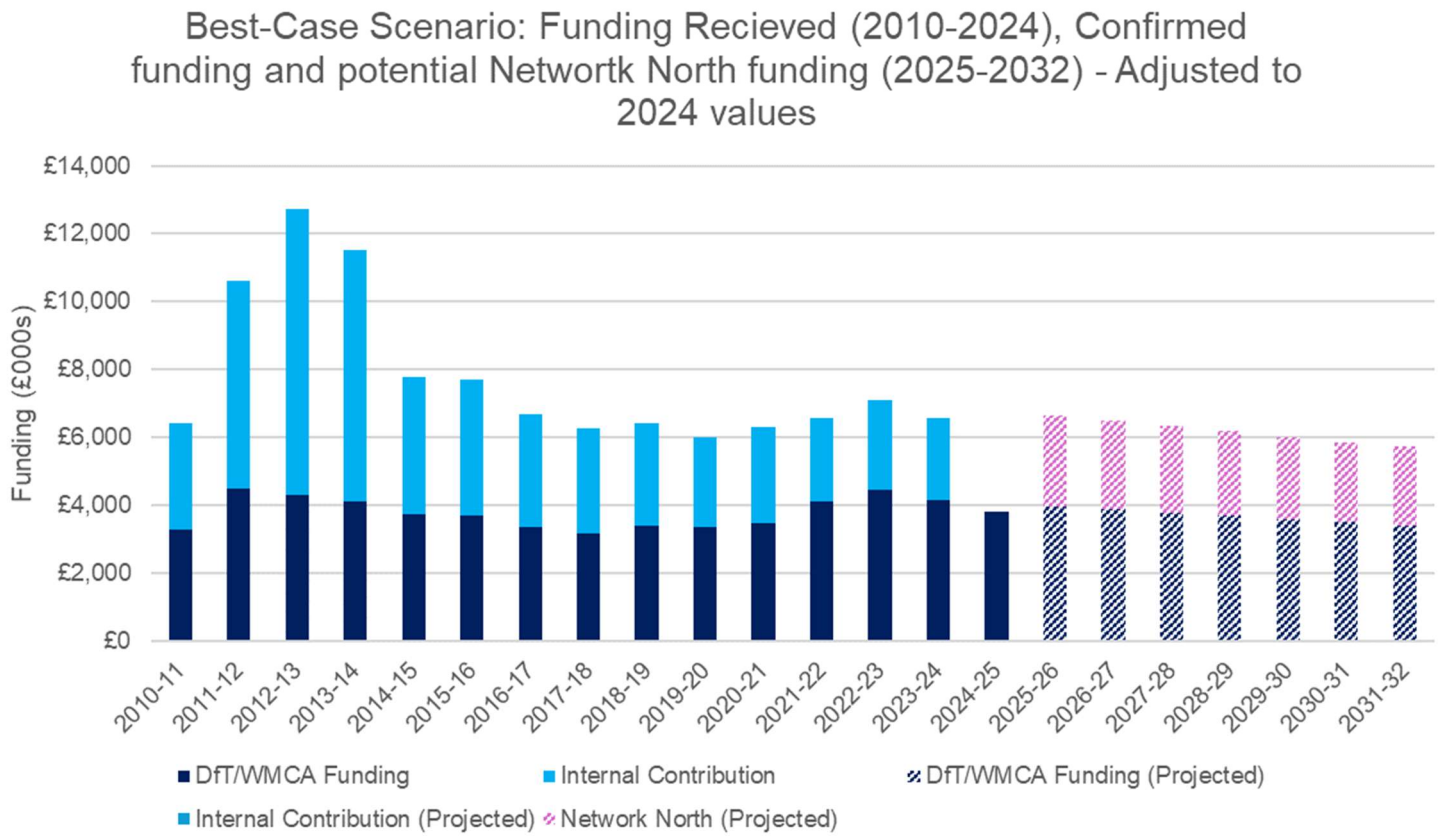


Figure 5.5. Best-Case Scenario: Actual Funding Received (2010-2024) vs Confirmed CRSTS Funding and Projected Network North Funding (2025-2032), adjusted to 2024 values

Note:

Since this document was compiled in 2024 the Network North funding has been superseded by another fund. This is only confirmed for 2025-26 and is over £1.2m / 47% less than previously projected. This change does severely impact the best-case scenario; however, models will not be re-created at this stage as it does not impact the results of the 'Asset Plans'

5.2.2. Other Future Financial Impacts

There is scope for other financial impacts on the predictions made in the previous section; both positive and negative. These may include (but are not limited to):

- Success of the region-wide business case (+ve)
- A very large spike in inflation (as seen in 2022, -ve)
- Reduction/removal of network north funding (-ve)
    - Since initially compiling this document this has been confirmed to have been reduced by 47% in 2025/26 and not confirmed for future years
- New/emergent treatment methods/technology (e.g. preservatives & rejuvenators, +ve)
- Successful bids (+ve)

We are always exploring new technologies and additional funding streams where available however due to intermittent opportunities these cannot be predicted with any useful level of detail.

5.2.3. Budget Splits Across Asset Types

As part of good asset management practises, total budget splits across asset types can vary year-on-year depending on asset need. However for the purpose of lifecycle planning a set split will be assumed based on a five-year average are shown in Figure 5.6 (below):

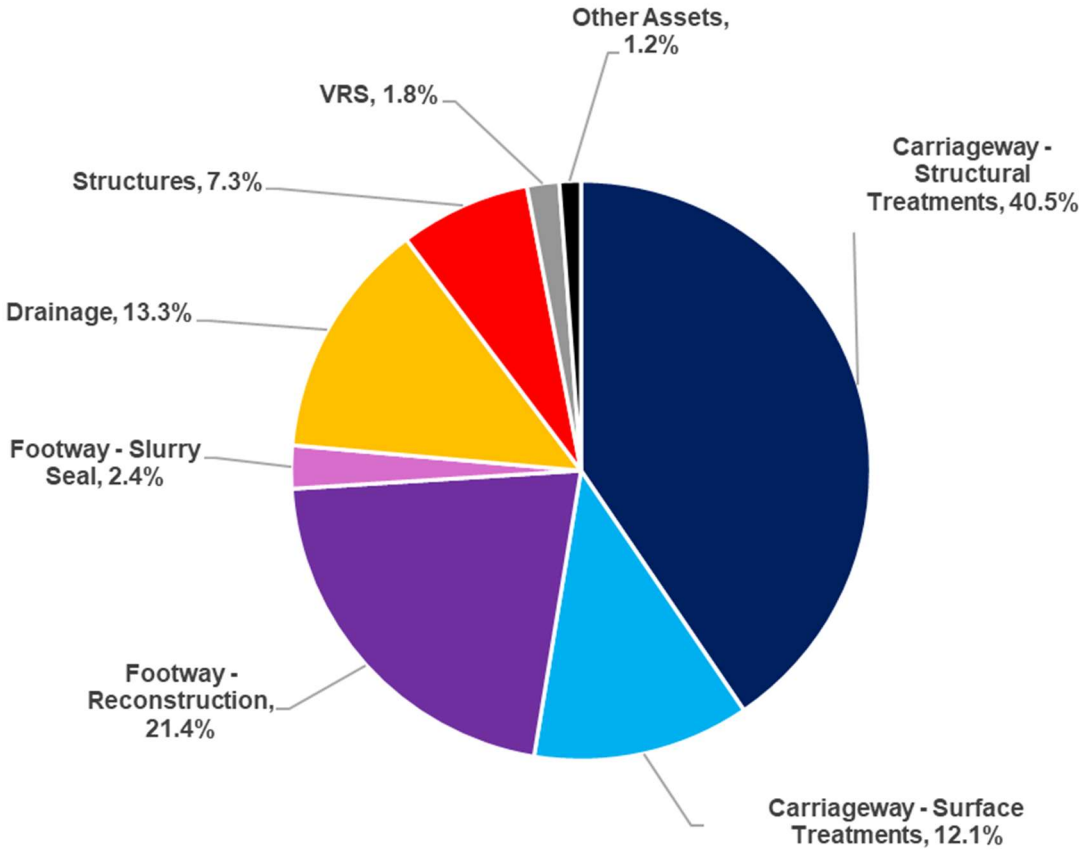


Figure 5.6. Budget Splits used for LCPs (five-year average)

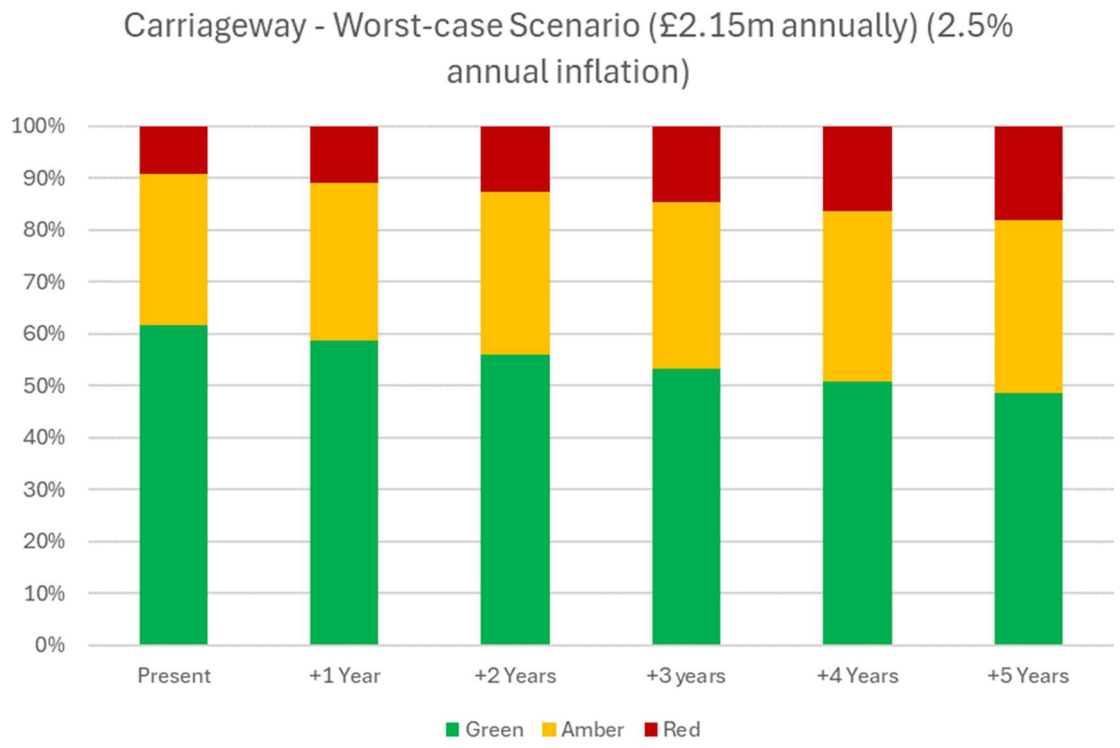
5.3. LCP Results and Asset Plan (Carriageway)

Using the assigned budgets in section 6.2.3. and the scenarios in section 6.2.1. a worst-case scenario (projected figures with inflation) and a best-case scenario (projected figures with network north funding – zero inflation) have been produced, in addition to two hypothetical scenarios.

5.3.1. Carriageway Scenario 1 (Worst-Case)

- Annual investment: **(£4.086m** * 52.6%) - adjusted for predicted inflation annually
  - Total carriageway investment: **£2.15m** annually
  - Structural maintenance investment: **£1.65m** annually
  - Surface treatment investment: **£0.5m** annually
  - **TOTAL INVESTMENT: £10.75m**

Backlog at start of period: **£46.4m**



Backlog at end of period: **£75.5m**

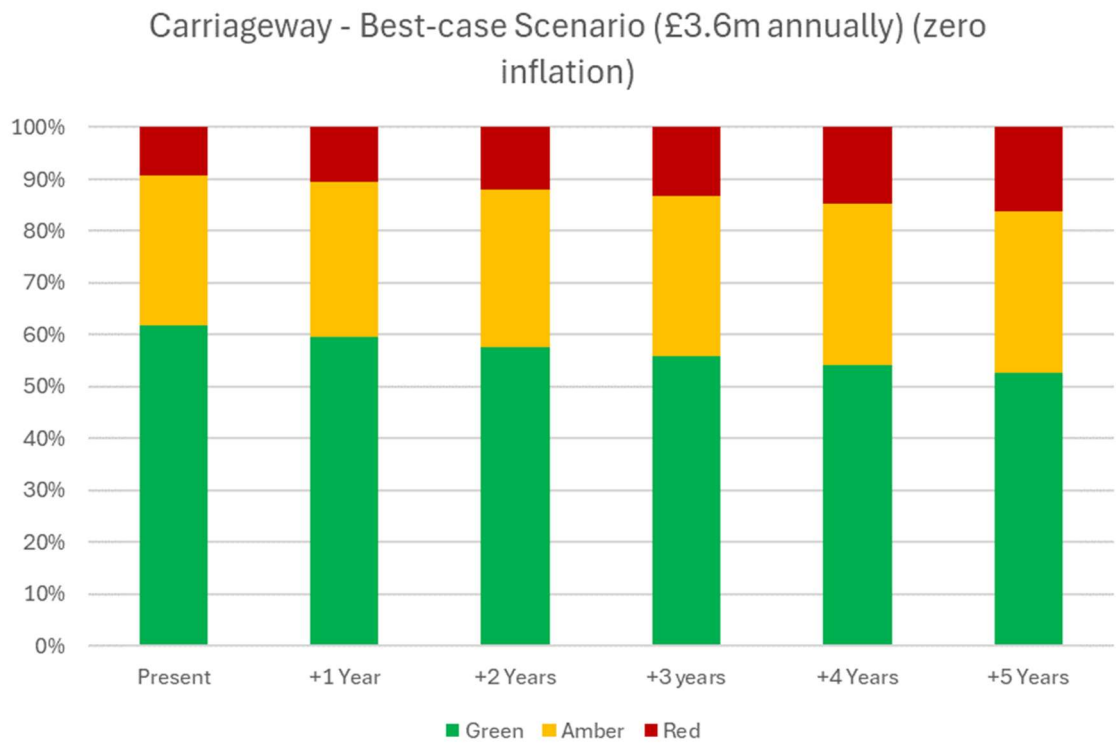
In this scenario a £2.15m annual / £10.75m total investment will lead to **9.03% / 634,000m / 79km** more carriageway structural treatments required in five years time.

For every £1 spent, 63p worth of deterioration occurs, leading to each initial £1 invested being worth 37p.

5.3.2. Carriageway Scenario 2 (Best-Case)

- Annual investment: **(£6.839m** * 52.6%) – zero inflation
  - Total carriageway investment: **£3.598m** annually
  - Structural maintenance investment: **£2.77m** annually
  - Surface treatment investment: **£0.828m** annually
  - **TOTAL INVESTMENT: £17.99m**

Backlog at start of period: **£46.4m**



Backlog at end of period: **£67.97m**

In this scenario a £3.598m annual / £17.99 m total investment will lead to **6.89% / 484,000m / 61km** more carriageway structural treatments required in five years time.

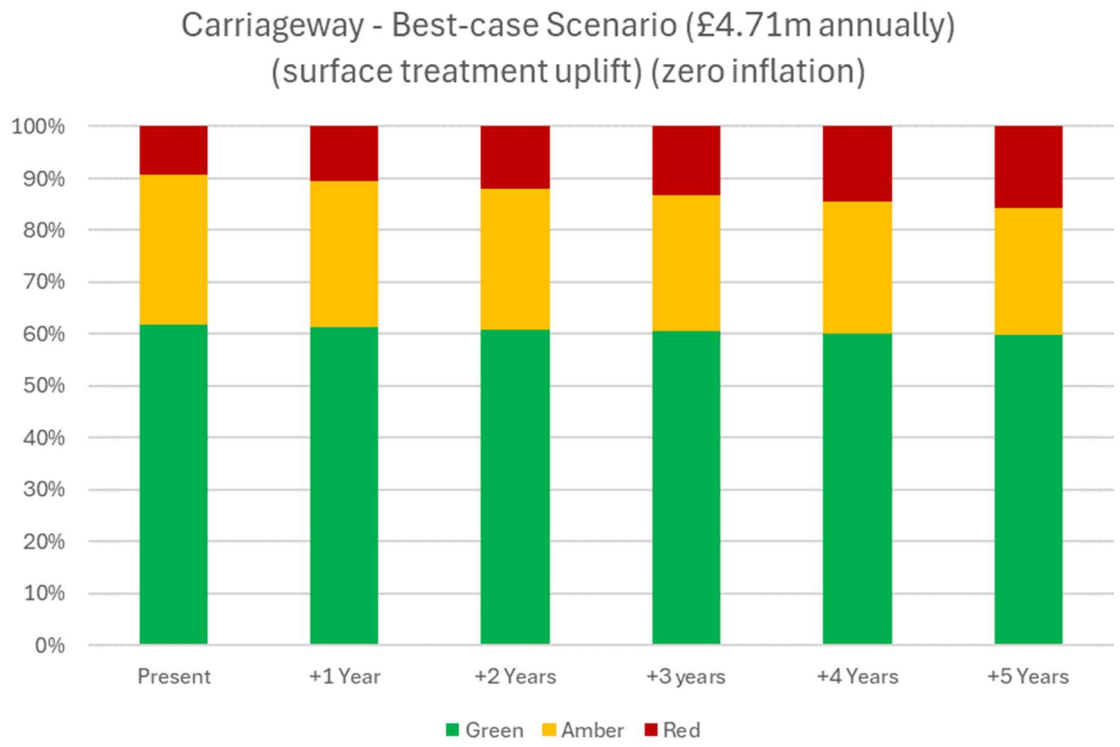
For every £1 spent, 50p worth of deterioration occurs, leading to each initial £1 invested being worth 50p.

5.3.3. Carriageway Scenario 3 (Best-case Scenario w/Increased Preventative Maintenance)

Currently, due to available budgets and network needs the amount of preventive maintenance required on the network cannot be performed. Using whole-life analysis techniques the ratio of preventative/surface treatments to structural treatments needed is a ratio of 1:1.43. This ratio has been applied to the best-case scenario model with the structural treatment investment (£2.77m) remaining static but the surface treatment investment increased to £1.937m (from £0.828m).

- Total carriageway investment: **£4.707m** annually
- Structural maintenance investment: **£2.77m** annually
- Surface treatment investment: **£1.937m** annually
- **TOTAL INVESTMENT: £23.535m**

Backlog at start of period: **£46.4m**



Backlog at end of period: **£62.53m**

In this scenario a £4.707m annual / £23.535 m total investment will lead to **6.63% / 465,000m / 58.5km** more carriageway structural treatments required in five years time.

For every £1 spent, 33p worth of deterioration occurs, leading to each initial £1 invested being worth 66p.

Notably in this scenario, despite no additional resurfacing being performed, less resurfacing is required by the end of the period since a proportion of carriageway in the 'amber' condition has been prevented from deteriorating to 'red'. An additional investment of £5.725 has resulted in a backlog of £5.44m less than scenario 2. The additional investment made in surface treatments has resulted in a positive return (+5%; as £ value 'held within the asset').

5.3.4. Carriageway Scenario 4 (Fund to Design Life)

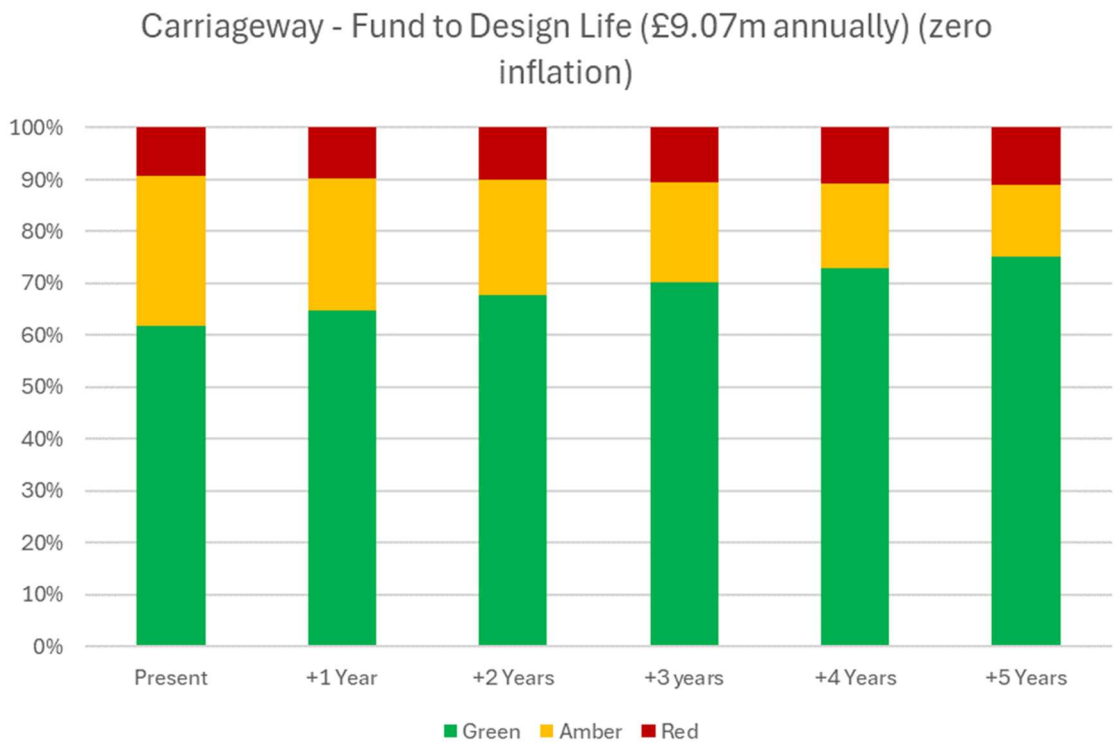
Using robust estimates, the model can be input with the figures required to treat the carriageway network to 'design life'; this is:

- 40 year structural life for A&B roads (with 3 surface treatments over the life)
- 48 year structural life for C roads (with 3 surface treatments over the life)
- 60 year structural life for Unclassified Roads (with 3 surface treatments over the life)
- 80 year structural life for cul-de-sacs (with 3 surface treatments over the life)

Financially, these total:

- **£5.343m** / **16.2km** needed annually for structural treatments
- **£3.725m** / **48.56km** needed annually for surface treatments
- TOTAL: **£9,068** needed annually for carriageway maintenance

Backlog at start of period: **£46.4m**



Backlog at end of period: **£41.32m**

It is worth noting that deterioration does still occur (in the 'red' band) even though funding is provided for design life; this is because of the starting backlog. The design life funding accounts for the amount of 'red' that occurs naturally each year, not the accelerated red deterioration from the current presence of carriageway in the amber band,

For every £1 spent, 11p worth of deterioration is prevented, in this scenario an overall return of investment occurs (held as value 'within' the asset); meaning each £1 invested is worth £1.11.

5.3.5. Carriageway Asset Plan

Under both best and worst-case scenarios there is an inevitable deterioration in carriageway condition. Using the design life scenario annual carriageway needs are ~£9m; £3m more annually than is projected to be received in the best-case scenario to be used across **ALL** asset types.

Under both scenarios the only feasible option on an overall network level is a managed decline (unless annual funding requirements in table 5.1 are met). We will aim to minimise the impacts as best as possible using efficient asset management practices and the continued use of preventive maintenance and the exploration of emerging treatments and technologies. Table 5.1 (below) outlines the criteria needed for different asset plans:

Table 5.1. – Criteria for Carriageway Asset Plans

Asset Plan	Treatment	Annual Funding Requirement (2024) (£millions)	Annual Treatment Requirement (km)	Annual Treatment Requirement (network %)
Managed Decline / Outperform National Average	Structural Treatment	<£5.343	<16.2	<1.83%
	Surface Treatment	<£3.725	<48.56	<5.47%
Design Life / Steady State	Structural Treatment	£5.343	16.20	1.83%
	Surface Treatment	£3.725	48.56	5.47%
Improvement in Condition	Structural Treatment	>£5.343	>16.2	>1.83%
	Surface Treatment	>£3.725	>48.56	>5.47%

However, although condition is declining on our carriageway network we remain in a much better position than a lot of local authorities. The English LA with the worst condition unclassified roads has 47% in the ‘red’ condition band. At Coventry our figure for 2024/25 is 12% and the national average is 17%. Therefore under our current budgets our carriageway asset plan is to **‘outperform the national average’.**

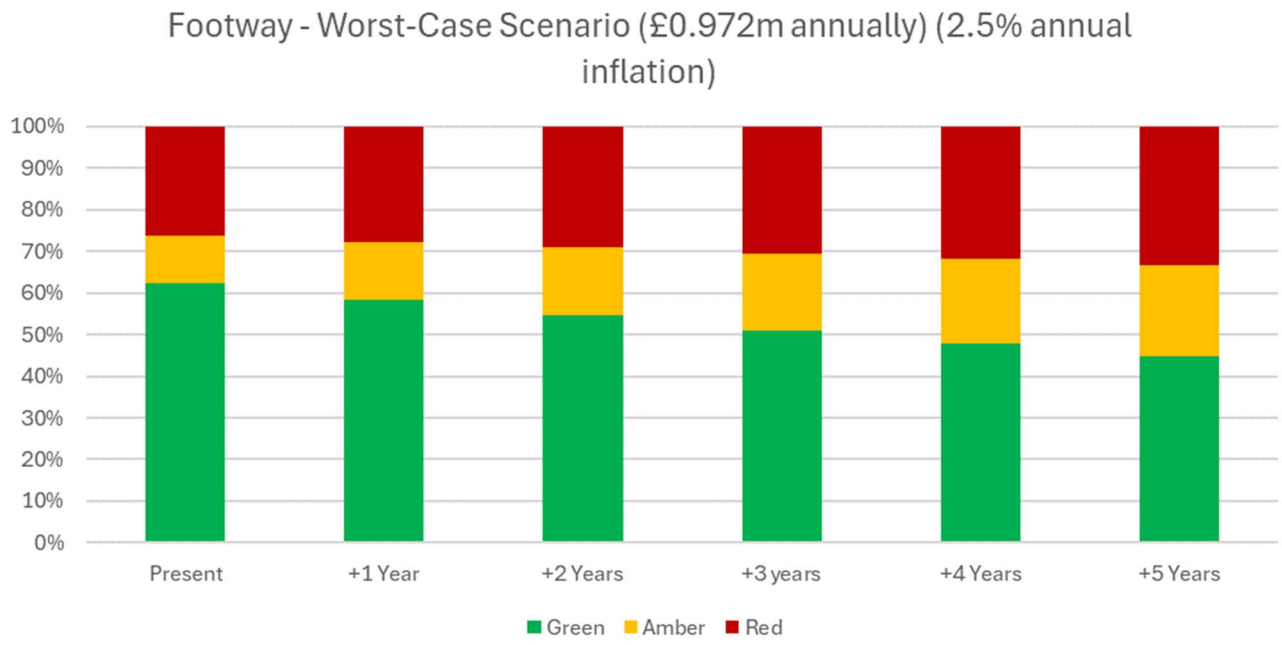
5.4. LCP Results and Asset Plan (Footway)

As with the carriageway LCPs, a best and worst-case scenario has been produced along with hypothetical scenarios based on increased preventative maintenance and design life need.

5.4.1. Footway Scenario 1 (Worst-Case)

- Annual investment: **(£4.086m** * 23.8%) - adjusted for predicted inflation annually
  - Total footway investment: **£0.972m** annually
  - Reconstruction investment: **£0.874m** annually
  - Slurry seal investment: **£0.098m** annually
  - **TOTAL INVESTMENT: £4.86m**

Backlog at start of period: **£102.6m**



Backlog at end of period: **£131.2m**

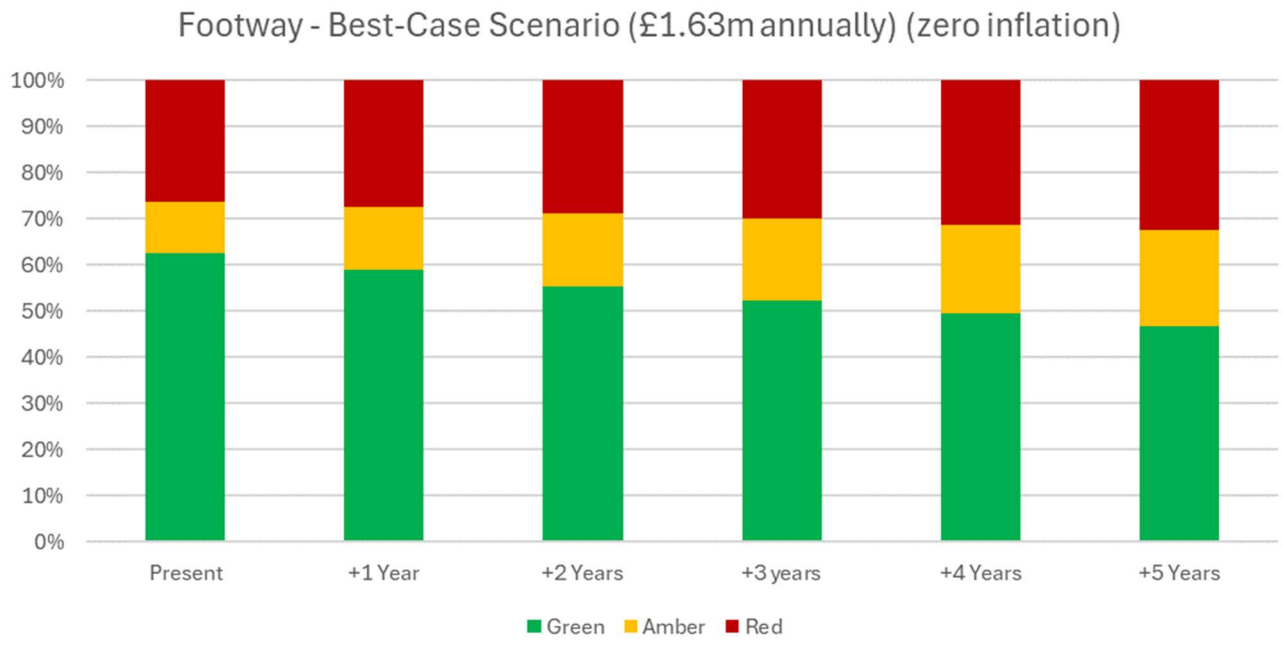
In this scenario a £0.972m annual investment will result in **7.2% / 206,000m² / 105.5km** more footway requiring reconstruction across the network in five years time than at present.

For every £1 spent, 83p worth of deterioration occurs, leading to each initial £1 invested being worth 17p.

5.4.2. Footway Scenario 2 (Best-Case)

- Annual investment: **(£6.839m** * 23.8%) - adjusted for predicted inflation annually
  - Total footway investment: **£1.63m** annually
  - Reconstruction investment: **£1.46m** annually
  - Slurry seal investment: **£0.17m** annually
  - **TOTAL INVESTMENT: £8.15m**

Backlog at start of period: **£102.6m**



Backlog at end of period: **£127.7m**

In this scenario a £1.63m annual investment will result in **6.16% / 180,000m² / 92.6km** more footway requiring reconstruction across the network in five years time than at present.

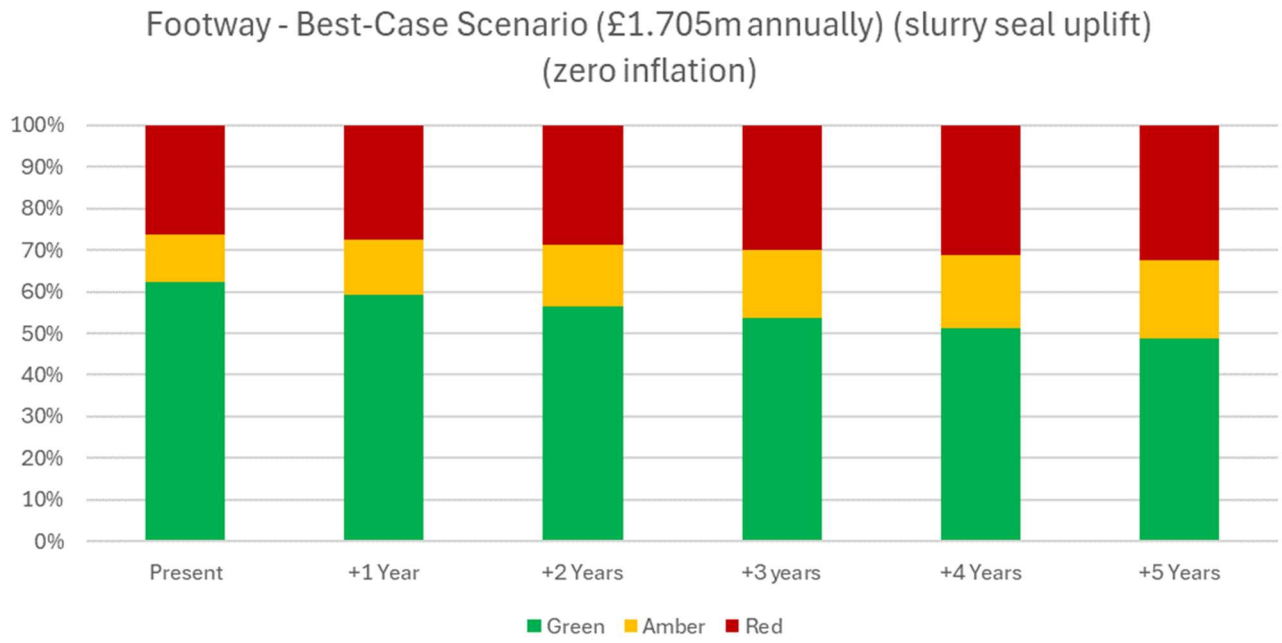
For every £1 spent, 80p worth of deterioration occurs, leading to each initial £1 invested being worth 20p.

5.4.3. Footway Scenario 3 (Best-case Scenario w/Increased Preventative Maintenance)

As with the similar carriageway LCP, this will take the best-case scenario and uplift the preventative maintenance (slurry seal). The ratio of slurry to reconstruction required has been calculated at 1:5.75

- Total footway investment: **£1.705m** annually
- Reconstruction investment: **£1.46m** annually
- Slurry Seal treatment investment: **£0.254m** annually
- **TOTAL INVESTMENT: £8.525m**

Backlog at start of period: **£102.6m**



Backlog at end of period: **£127.1m**

In this scenario a £1.705m annual / £8.525 m total investment will lead to **6.1% / 179,000m / 91.7km** more footway reconstruction required in five years time than at present..

In this scenario (vs scenario 2) only an addition £375k has been invested, but the backlog at the end of the five year period is £600k less. The value/efficiency of this extra investment in preventative maintenance is worth £1.60 (held in asset value) for every £1 invested.

5.4.4. Footway Scenario 4 (Fund to Design Life)

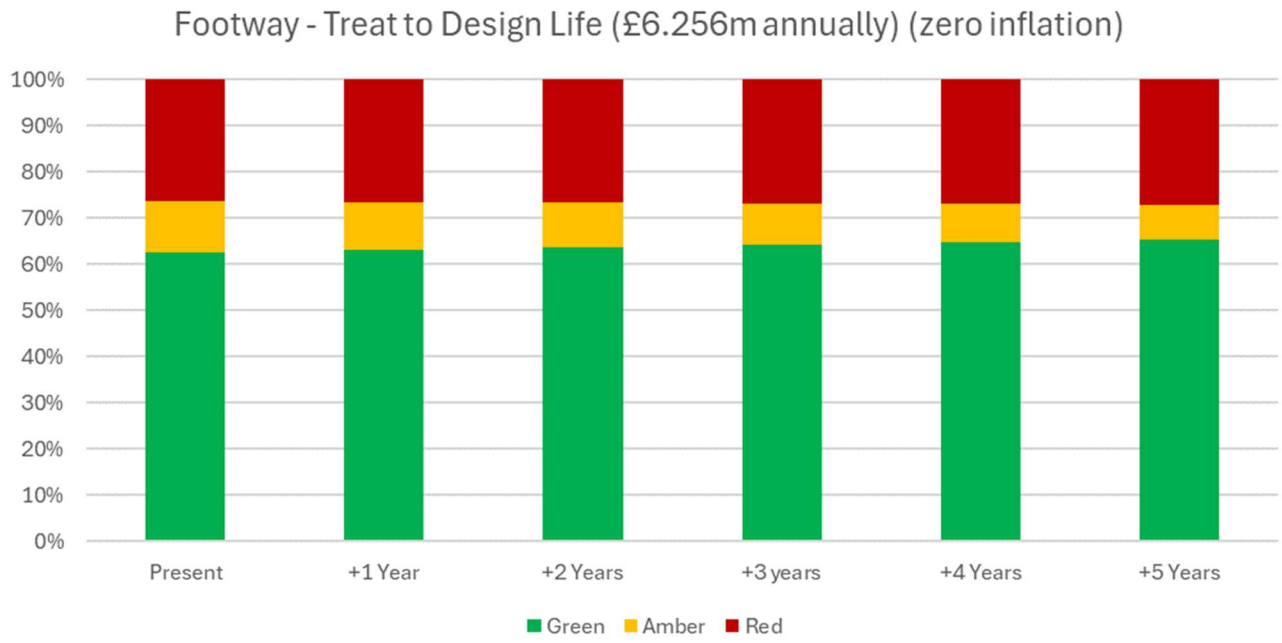
As with carriageways the footway design life has been calculated:

- 40 year structural life for hierarchy 1 footways (with 0 slurry seals over the life as H1 footways are primarily modular)
- 50 year structural life for hierarchy 2 footways (with 4 surface treatments over the life)
- 60 year structural life for hierarchy 3 footways (with 3 surface treatments over the life)
- 75 year structural life for hierarchy 4 footways (with surface treatments over the life)
- 80 year structural life for remote footways (with 3 surface treatments over the life)

Financially, these total:

- **£5.329m** / **21.02km** needed annually for reconstruction
- **£0.927m** / **79.25km** needed annually for slurry seal
- TOTAL: **£6.256** needed annually for footway maintenance

Backlog at start of period: **£102.6m**



Backlog at end of period: **£104.5m**

Due to the current existing extents of poor footways, treating to design life will still result in a (marginally) larger backlog than at the start of the period. Compared to the carriageway network, the footway network has a much higher proportion of structural treatment required compared to preventative maintenance. Every £1 invested in this scenario is worth 93p at the end of the five-year period.

5.4.5. Footway Asset Plan

Under both best and worst-case scenarios there is an inevitable deterioration in footway condition. Using the design life scenario under the best-case funding scenario it is *technically* feasible to fund footways to design life, however in reality this would result in **£6.256m / £6.839m (91.5%)** of all maintenance funding assigned to footways with only **8.52%** assigned to **ALL** other works/assets.

Under all scenarios the only feasible option is a **'managed decline'**; minimising the impacts as best as possible using efficient asset management practices and the continued use of preventive maintenance and the exploration of emerging treatments and technologies. Table 5.2 (below) outlines the criteria needed for different asset plans:

Table 5.2. – Criteria for Footway Asset Plans

Asset Plan	Treatment	Annual Funding Requirement (2024) (£millions)	Annual Treatment Requirement (km)	Annual Treatment Requirement (network %)
Managed Decline	Reconstruction	<£5.329	<21.02	<1.83%
	Slurry Seal	<£0.927	<48.56	<5.47%
Design Life / Steady State	Reconstruction	£5.329	21.02	1.83%
	Slurry Seal	£0.927	48.56	5.47%
Improvement in Condition	Reconstruction	>£5.329	>21.02	>1.83%
	Slurry Seal	>£0.927	>48.56	>5.47%

As opposed to carriageways very little national footway condition data is available, primarily due to no national returns existing around footway condition. However in contrast to carriageways we can make some assumptions regarding footways in Coventry. As we have a much larger proportion of modular footways compared to other West Midlands authorities we can derive that our footways are in worse condition than the regional average.

5.5. LCP and Asset Plan (Structures)

The structures model is a financial need assessment rather than a deterioration model, using the assumption that 1% of all structures value/stock requires annual renewal. The GRC (Gross Replacement Cost) of replacement of the structure stock in Coventry currently stands at **£508.66m**; 1% of this is a need of **£5.0866m annually.**

Figure 5.7 (below) shows total funding received and total investment need to renew 1% of Coventry's structures stock. Notably in 2024-25 we received less in grant funding to be used across all asset types than is just required to fund the maintenance need on structures.

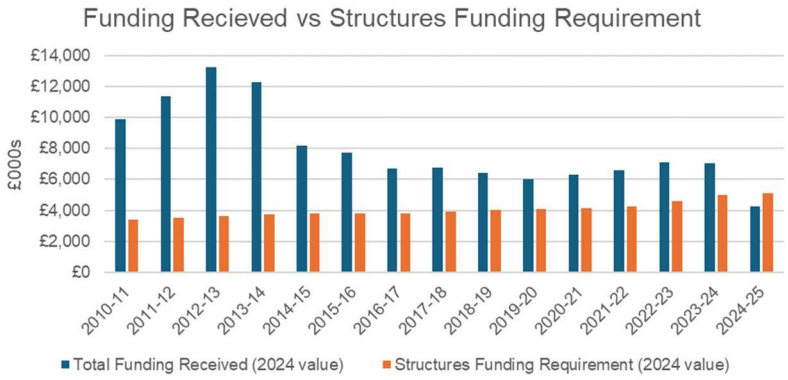


Figure 5.7. Funding Received vs Structures Design Life Need (2010-2024)

As with footways this is a technically achievable investment under best-case projections; however this would results in **74.4%** of all funding being assigned to structures, leaving all other asset types seriously neglected.

Previous bids for funding for structures has been successful so larger structure schemes (such as Swanswell Viaduct) may be undertaken in the future if funding is secured. However, using only the currently available information on future funding the only feasible option is a **managed decline.** Table 5.3 (below), shows the criteria for different structure asset plans.

Table 5.3. – Criteria for Structures Asset Plans

Asset Plan	Annual Funding Requirement (2024) (£millions)	Annual Structure Stock Renewal (network %)
Managed Decline	<£5.0866	<1%
Design Life / Steady State	£5.0866	1%
Improvement in Condition	>£5.0866	>1%

5.6. LCP and Asset Plan (Drainage)

As drainage inventory is embedded in other assets and difficult to quantify, the drainage LCP/financial need is based on estimates from local engineer knowledge. For Coventry the need has been set at **£1.1m** annually or **16p/m²** for the purpose of other local authorities using this methodology.

As with structures, Figure 5.8 (below), shows funding received and drainage funding requirements:

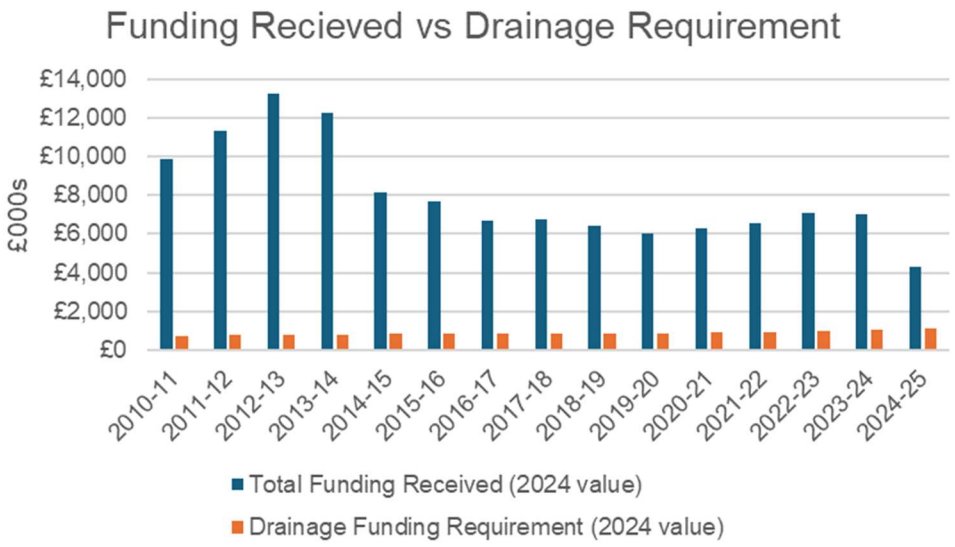


Figure 5.8. Funding Received vs Drainage Requirements

Compared to all other asset types, funding drainage need is more feasible. Therefore where 13.3% of total budget is equal to £1.1m is where a 'steady-state' in drainage condition can be achieved. The resulting figure is where total budget is equal to or exceeds £8.27m; then drainage can be funded to steady state. Table 5.4 (below), shows this more clearly:

Table 5.4. – Criteria for Drainage Asset Plans

Asset Plan	Annual Drainage Budget Requirement (2024) (£millions)	Annual Total Maintenance Budget Requirements (2024) (£millions)
Managed Decline	<£1.1	<£8.27
Steady State	£1.1	£8.27
Improvement in Condition	>£1.1	>£8.27, with increased proportion assigned to drainage

Under best-case scenario projections a **managed decline** is projected, however the difference between asset need and funding with drainage is considerably less than other asset types. Only a **20.9%** increase on best-case scenario projection is required to achieve steady state for drainage assets.

Note:

Since this document was compiled in 2024 additional funding has been secured for drainage for the 2025/26 financial year (£1.6m total). So a sound assumption can be made that the overall conditional of Coventry's drainage assets will **improve** within this financial year.

5.7. Other Assets (VRS & Verges)

VRS needs have been calculated at 80p/linear metre of classified road and verge needs have been calculated at 12p/m² of footway inventory.

- VRS Need: £0.176m annually
- Verge Need: £0.391m annually

As non-key assets an asset plan is not necessary to develop.

5.8. Summary of Asset Needs

Using the figures derived from the LCPs and Asset Plans a robust value can be presented for asset need and compared to historical and predicted future funding. Table 5.5 (below) shows financial need across all asset groups:

Table 5.5. Financial Need Across All Asset Groups (2024 Values)

Asset	Treatment	Annual Funding Requirement (2024 values) (£millions)	%of Total
Carriageway	Structural Treatments	£5.343	24.28%
	Surface Treatments	£3.725	16.93%
Footway	Reconstruction	£5.329	24.21%
	Slurry Seal	£0.927	4.21%
Structures	-	£5.087	23.11%
Drainage	-	£1.100	5.00%
VRS	-	£0.176	0.80%
Verges	-	£0.391	1.78%
TOTAL		£22.008	

This can be plotted by best and worst-case scenario projected budgets in Figure 5.9 (below):

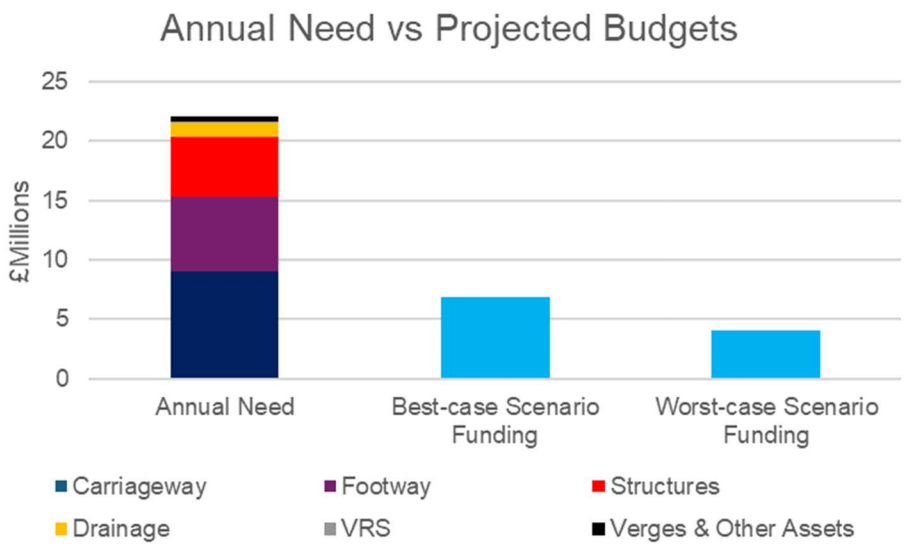


Figure 5.9. Annual Need Across all Asset types vs Projected Budgets

5.8.1. Dealing with a Managed Decline

As shown in all financial projections/LCPs/asset plans, all assets are currently having to be dealt with using an approach to **managed decline** unless funding significantly increases (5.4x the worst-case and 3.3x the best-case scenarios). With currently existing treatments and technology asset condition with continue to deteriorate unless budgets are significantly increased. By 'scaling down' the asset needs using the ratio needed with current methods, a criteria for treatment rates per treatment type can be determined. Table 5.6. shows the cost new treatments would need to be to efficiently manage the network or under current treatment rates, how long a treatment would need to last:

Table 5.5. Hypothetical Treatment/Renewal Rates Required to Achieved Steady State under Best-Case Scenario Projected Budgets

				OR	
Asset	**Treatment**	**Current Treatment Rate**	**Treatment Rate under Best-Case scenario to achieve design life**	**Unit**	**Treatment Lifespan (Years)**
Carriageway	Structural Treatments	45.00	13.94	£/m²	187
	Surface Treatments	9.00	2.79	£/m²	47
Footway	Reconstruction	130.00	40.27	£/m²	235
	Slurry Seal	6.00	1.86	£/m²	49
Structures	-	£5.087m	£1.58m	£/1% renewal	-
Drainage	-	£1.1m	£0.34m	£ required for steady state	-
VRS	-	£176k	£54.52k	£ required for steady state	-
Verges	-	£391k	£121k	£ required for steady state	

As shown in Table 5.5, treatments would have to last an unrealistic amount of time before renewal or be unrealistically inexpensive to halt deterioration of the network under the BEST case scenario. Any developments in technology are extremely unlikely to create a structural carriageway treatment that lasts 187 years.

It is essential to manage resources effectively when funding received is so much lower than network needs. The next section of the HIAMP (Section 7 - Forward Works Programme and Prioritisation) outlines our data-driven approach to selecting the right planned maintenance schemes. Even with a robust prioritisation matrix, it is essentially to be open and honest with the condition of highway assets: **all assets across the highway network will continue to deteriorate without a significant increase in funding.**