

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>	<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Renewal	Plane off old surface and re-surface (Plane and lay)	Replacement of the road surface to varying depths dependent on the extent of deep structural failure in the road	Heavily trafficked roads e.g. A, B, C roads and road surfaces that are at end of life	Not economically viable for every road in city	Between £25-£45 per square metre

Benefit of investing in this type of treatment

Delivers best value for money on the critical road network for the Council, residents and businesses in Brighton and Hove over a 10 year period

Enhances the City's reputation for good quality roads.

Reinstates the structural integrity of roads and prevents severe weather damage.

Improves texture depth and road safety.

Improves the condition of the public highway and supports public safety for all with the potential to reduce public liability claims.

Reduces disruption to traffic on the network as a result of fewer reactive road works. Achieves more reliable journey times and reduces pollution.

Potential risk of not investing in this type of treatment

No- investment results in deterioration of state of roads and may result in unaffordable maintenance costs being passed on to future generations.

Deterioration of the network may have a negative impact on the economic, social and environmental well-being of the city. Poor condition of roads may impact on City's ability to host large events such as the Marathons

Sudden failure may cause major disruption to traffic on the A, B and C roads identified as critical within the Resilient Network.

May result in reduced surface texture depth which may increase risk of skidding.

May increase public liability claims.

Greater need to carry out more frequent reactive repairs increase congestion leading to higher levels of pollution and a negative impact on public transport.

Improves ride quality and appearance of roads which in turn encourages more people to walk and cycle particularly where off road routes are not available.

Improves the value of the asset.

Results in poor condition of roads which is one of the primary factors that deters people from walking and cycling. Evidence from surveys suggests that for cycling this factor is at least as significant as the positive effect of new cycling infrastructure.

Manages the network into a state of decline

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>	<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Preventative (Prolonging lifespan of road)	Microasphalt	Seals the surface of the road and prevent rapid deterioration from water and frost damage	Residential roads and B/C roads (away from junctions) where the level of deterioration is moderate.	Heavily trafficked roads, roads that have already been treated with microasphalt or roads that have structural or extensive deterioration	Between £6-£12 per square metre

Benefit of investing in this type of treatment

Holds back significant decline in condition of the major roads for the next 5-8 years

Enhances the City's reputation for good quality roads.

Ensures the structural integrity of road is maintained for longer and prevents severe weather damage.

Improves texture depth and road safety.

Improves the condition of the public highway and supports public safety for all.

Potential for reduction in liability claims.

Reduces disruption to traffic on the network as a result of fewer reactive road works. Achieves more reliable journey times and reduces pollution.

Potential risk of not investing in this type of treatment

Without preventative maintenance the average cost to sustain the current condition of the network would increase to £3.8M from £2.7M

Deterioration of the network may have a negative impact on the economic, social and environmental well-being of the city, and on the City's ability to host large events such as Marathons

Sudden failure caused by weather damage may cause major disruption to the City's road network

May result in reduced surface texture depth which may increase risk of skidding. Increase in public liability claims.

Greater need to carry out frequent safety repairs resulting in more frequent disruption to the network.

May increase public liability claims.

Greater need to carry out more frequent reactive repairs increase congestion leading to higher levels of pollution and a negative impact on public transport.

Improves ride quality and appearance of roads which in turn encourages more people to walk and cycle particularly where off road routes are not available.

Improves the value of the asset.

Evidence from surveys suggest that poor condition of roads is one of the primary factors that deters people from walking and cycling. For cycling this factor is at least as significant as the positive effect of new cycling infrastructure.

Manages the network into a state of decline

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>		<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Preventative (preserving lifespan of road)	Planned patching	Large patching works that deal with both safety defects and other problems that have not yet reached safety critical		Repairs to localised areas where the road has significant deterioration and poor ride quality	Continued patching to the same stretch of road especially heavily trafficked routes over time.	£50 per square metre.

Benefits of investing in this type of treatment

Prevents localised deterioration of the network in the short term.
Prevents severe weather damage over a short term

Improves the condition of the public highway.

Potential for reduction in liability claims.

Reduces disruption to traffic on the network as a result of reactive road works. Achieves more reliable journey times and reduces pollution.

Improves ride quality and appearance of roads which in turn encourages more people to walk and cycle particularly where off road routes are not available.

Potential risk of not investing in this type of treatment

Non-investment may result in structural deterioration of the carriageway to such an extent that preventative treatments are no longer suitable and renewal is the only option.

Sudden failure caused by weather damage may result in major disruption to the City's road network

Greater need to carry out frequent safety repairs resulting in more frequent disruption to the network.

May increase public liability claims.

More frequent repairs increase congestion leading to higher levels of pollution and impact on public transport.

Evidence from surveys suggest that poor condition of roads is one of the primary factors that deters people from walking and cycling. For cycling this factor is at least as significant as the positive effect of new cycling infrastructure.

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>	<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Preventative (preserving lifespan of road)	Joint and crack sealing and mastic asphalt repairs	Sealing of joints in concrete roads. Repairs to damaged surfaces	Roads where large numbers of defects have been identified in a localised area	Roads with major deterioration or structural failure	11p per square metre

Benefit of investing in this type of treatment

Improves the resistance of the road surface to damage from traffic and weather in the short term and reduces disruption to traffic on the network.

Potential risk of not investing in this type of treatment

Non-investment may result in structural deterioration of the carriageway to such an extent that preventative treatments are no longer suitable and renewal is the only option.

Does not improve the value of the asset but reduces the level of decline.

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>	<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Safety maintenance	Reactive repairs	Repairs defects such as potholes, dips and sunken ironwork	Fixing genuine safety hazards	Addressing or reversing overall decline, deterioration or failure	£60-£100

Benefit of investing in this type of treatment

Maintains the highway to a basic standard and ensures the Council complies with its statutory duty to maintain the highway under section 41 of the Highway Act.

Potential risk of not investing in this type of treatment

The Council will not be able to repudiate liability claims.
Does not improve the value of the asset but reduces the level of decline

<i>Type of treatment</i>	<i>Method</i>	<i>What it does</i>	<i>Suitable for</i>	<i>Not suitable for</i>	<i>Costs</i>
Preventative (Prolonging lifespan of road)	Surface dressing	Seals the surface of the road and prevent rapid deterioration from water and frost damage	Roads with no structural failure or that require high level of surface repairs and rural roads with no parking	Roads that have structural or extensive deterioration and urban roads with parking/lots of traffic movements in different directions	Not applicable as not suitable for our urban environment

