Highways Maintenance Challenge Fund VfM Pro-Forma

The pro-forma should be filled in with as much of the 'specific data' as possible - with supporting data / information included where possible.
Not all elements will be relevant for every bid - however we would expect for most bids 'specific data' will be available for at least rows 1 and 2.
In the 'Specific Data' Column - please supply the information in the units/format requested.
The 'Other Supporting Data' column should be used to provide salient details not captured under 'Specific Data' and/or further supporting information.
Please add any further information on scheme benefits either at the end of this pro-forma or within the body of the main bid (or annexes)

Input data	Specific Data	Other Supporting Data / Information (either input directly or provide reference to supporting information reported elsewhere)	Information requested
Length of Scheme	(Km)	**12.165km of urban highway and footways on both sides of highway resurfaced on several key local strategic routes incorporating 6.941km of 'A' road sections and 5.224km of 'B' road sections. In addition to this, 2.7km length of cycleway on A341 Queen Anne Drive / A341 Magna Road to be constructed.**	*Provide length of route covered by the scheme - if an area wide scheme then provide total route length covered by scheme.*
Number of vehicles (or users) on affected section (split by vehicle type if possible)	(Total Vehs - AADT)	**17,136 average on the 'A' Road sections 15,249 average on the 'B' Road sections**	*Provide an estimate of the traffic flow on the section of route covered by the scheme - also provide details of the data used to support that estimate (e.g. age, type and duration of count, etc.).* **Average 2016 traffic data obtained from automatic traffic counters located on all road sections, except for section B3068/888 where data was provided from a manual count which was factored into a 24 hour count and adjusted to match an automatic traffic counter on a nearby section of Old Wareham Road.**
	(Cars - AADT)	**14,347 average on the 'A' Road sections 12,918 average on the 'B' Road sections**	
	(LGV - AADT)	**2,004 average on the 'A' Road sections 1,805 average on the 'B' Road sections**	
	(HGV - AADT)	**784 average on the 'A' Road sections 526 average on the 'B' Road sections**	
Details of required restrictions/closures if funding not provided (e.g. type of restrictions; timing/duration of restrictions; etc.)	(restriction type - text description)	**A341 Magna Road / A341 Queen Anne Drive - Road closures caused by flooding.**	*Provide details of any future restrictions. E.g. If restrictions to particular vehicle types will be needed in the do minimum (i.e. without funding) provide details of why they are required, what vehicle types are covered and when such restrictions will come into place.*
	(start date of restriction - MM/YY)	**A341 Magna Road / A341 Queen Anne Drive - Without funding, road closures caused by flooding are estimated to arise each winter with the next closure arising in Winter 2017. Over the past 5 years there have been on average 3 closures per year, each lasting on average 48 hours.**	
Length of any diversion route, if closure is required (over and above existing route)	(Km)	**The A341 Magna Road / A341 Queen Anne Drive is a diversion route for the Strategic Road Network [A31] (NOTE: this is for the section of the A31 between Canford Bottom Roundabout and Merley). Hence, when the A341 is being used as a diversion route (generally occurs during poor weather due to increased likelihood of accidents on A31) and it needs to be closed, the diversion route for A31 traffic over and above the existing route is 7.6km.** **For local traffic, when the A341 is closed, the diversion route is 16.7km long which is 9.5km over and above the existing route. Plans showing the aforementioned diversion routes have been provided.** **Please see 'Diversion Routes' tab for mapping and photographs.**	*Provide estimate of the length of diversion route over and above existing route. It would be helpful to support this with some mapping to demonstrate this.*
Average extra time per vehicle on diversion route (over and above existing route)	(mins)	**A341 Magna Road / A341 Queen Anne Drive closure leads to a 10 minute diversion over and above the existing route for local traffic (assuming route is clear of congestion), however, the reality is that when this route is closed the extra time per vehicle on the diversion route is normally 20 minutes.** **When the A31 is diverted onto the A341 and the A341 is closed, the additional journey time on the diversion route for vehicles from the A31 is 40 minutes (according to TomTom Route Planner during a typical peak period). During major disruption, this increases to in excess of 60 minutes.**	*Provide estimate of the average extra time vehicles would spend on the diversion route over and above existing route. It would be helpful to support this with details of any data used/assumptions made (e.g. source of speed data used in any calculations).*
Regularity/duration of closures due to flooding: (e.g. number of closures per year; average duration of closure (hrs); etc.)	(number of closures/year)	**3 (A341 Magna Road)**	*Provide estimates of closures / durations /delay and provide details of the data used to support those estimates (e.g. number of years of data etc.).*
	(duration of closure - hrs)	**48hrs (A341 Magna Road)**	
	(length of diversion - Km)	**16.7km (A341 Magna Road)**	
	(extra time in using diversion - mins)	**20 minutes (A341 Magna Road)**	
Number and severity of accidents: both for the do minimum and the forecast impact of the scheme (e.g. existing number of accidents and/or accident rate; forecast number of accidents and or accident rate with the scheme)	(DM Total Accidents/yr)	**59.80**	*Provide estimates of accidents (split by severity if possible) or accident rates for the without scheme (DM) case and the with scheme case (DS). Provide details of the data and assumptions/analysis used to support these estimates (e.g. number of years of data, etc.).* **The figures are based on five years worth of collision data, from 1st November 2011 to 31st October 2016.** **It has been assumed that these measures will (on average) reduce 40% of cycle accidents and 25% of all other types of accidents. These benefits have, however, not been included within this bid as the focus of the works is to improve the carriageway condition.**
	(DM Slight Accidents/yr)	**49.60**	
	(DM Serious Accidents/yr)	**10.20**	
	(DM Fatal Accidents/yr)	**0.00**	
	(DM Accident Rate - PIA/MVKm)	**17.34**	
	(DS Total Accidents/yr)	**43.35**	
	(DS Slight Accidents/yr)	**35.19**	
	(DS Serious Accidents/yr)	**8.16**	
	(DS Fatal Accidents/yr)	**0.00**	
	(DS Accident Rate - PIA/MVKm)	**12.53**	
Number of existing cyclists; forecasts of cycling usage with and without the scheme (and if available length of journey)	**Without the scheme, cycling will not grow as quickly as it has done within the Borough owing to the fact that existing facilities will not be maintained and a new facility (Magna Road) will not be constructed. In the case of Magna Road (see below) it is anticipated that there will be a 20% increase as this is the Dorset-wide growth rate between 2003/4 and 2009/10, measured by the Bournemouth, Poole and Dorset LTP3.**		
	A341 Magna Road only		
	(DM cyclists/day)	**129**	*Provide estimates of the number of cyclists (and if possible trip length) for the without scheme (DM) case and the with scheme case (DS). Provide details of the data and assumptions/analysis used to support these estimates.* **The DM cyclists/day figure is obtained from the DfT's Traffic Count Site No. 77962 from 2015. This site is on the A341 Magna Road, located between the junctions with Canford Magna and King John Avenue. The DS cyclists/day is calculated by applying a 20% increase to the DM value, as 20% is the average cycle growth rate in Dorset, measured between 2003/4 and 2009/10 (sourced from Bournemouth, Poole and Dorset Local Transport Plan 3). This is a considered to be a conservative growth rate.**
	(DM av trip length - Km)	**10**	
	(DS cyclists/day)	**155**	
	(DS av trip length - Km)	**11**	
Other salient information for the VfM Case	***Do minimum situation (what would happen without Challenge Fund Investment):*** **The sections of highway and footways covered by the maintenance schemes will continue to deteriorate. The deterioration of the highway surface, in particular, will lead to an increase in the number and extent of expensive reactive maintenance to potholes and patches required to make it safe. The Council will draw on limited capital resources and DfT Maintenance Block to undertake these cost-ineffective repairs in order to maintain each route in the minimal of serviceable conditions. Frequent regimes of reactive maintenance also have the added impact of causing increased congestion on the occasions that the highways are visited for repair. This is due to lane closures and implementation of Temporary Traffic Regulation Orders.** **The Borough's highway maintenance backlog will continue to grow. The current backlog is estimated as £68.5M. Based on Poole's current annual allocation of £880,000 (Borough of Poole is third worst funded Local Authority in the country), it would take at least 78 years to undertake the backlogged maintenance without even considering the interim future deterioration of the highway.** **In the case of the A341 Magna Road / A341 Queen Anne Drive (the diversion route for Strategic highway network A31), during periods of prolonged rainfall the highway will continue to flood due to surface runoff and be impassable. Flooding will damage the highway leading to further deterioration and increased journey unreliability for users.** ***Do something (what would happen with Challenge Fund Investment):*** **The proposed sections of highways and footways would be attended to, restoring and prolonging the life of key strategic local routes connecting residential areas, commercial centres and regeneration sites. The provision of improved transport infrastructure will support greater accessibility to the Port of Poole and Town Centre, which are regeneration sites as stipulated by the Poole Town Centre Supplementary Planning Document (2015). The Dorset LEP Strategic Economic Plan (SEP) forecasts that 4,600 jobs could be created within these sites by 2021. The local highway network has been identified as a barrier to growth by the SEP, which also states that improvements to major local arterial routes are vital for bringing forward this growth. Indirectly, the additional maintenance investment could indirectly support the construction of almost 7,000 dwellings, contributing to the Poole Core Strategy's target of 10,000 dwellings up to 2026. The scheme will deliver the following to improve the local highway network:** **- Preventative maintenance (12.310km of highway safeguarded from further deterioration by resurfacing leading to significant savings on reactionary pothole and patch repairs); - Create / maintain a more attractive environment for residents and businesses in Poole; - Reduce the number of accidents on Poole's highway network; - Maintain existing local strategic transport routes both within the conurbation and to the Strategic Road Network (A31); - Maintain and provide additional sustainable transport links by complementing works with DfT Local Growth Fund, Integrated Transport Block, Maintenance Block and CIL funding to maximise the impact of the maintenance funding (works include construction of cycleway); and - Ensure that the sections of highway in Poole that form the designated diversion route for the Strategic Road Network (A31) are structurally sound and rid of regular flooding.**	*A description of the do-minimum situation (i.e. what would happen without Challenge Fund investment). Details of significant monetised and non-monetised costs and benefits of the scheme.*
	Present Value of Benefits (£k)	**£11,703**	
	Present Value of Costs (£k)	**£1,788**	
	Net Present Value (£k)	**£9,915**	
	Benefit Cost Ratio	**6.55**	
	In line with WebTAG guidance, these results exclude valuations relating to the GVA uplift from jobs and embedded carbon.		