

Appendix F – Schemes Identified for Growth

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The information in this appendix presents the schemes considered in this report and their inclusion or otherwise in the funding model. An explanation of each table is provided below.

Table F 1: Deficit Schemes Excluded from the Funding Model The schemes in this list were not considered appropriate for inclusion in the funding model because they are deficit only items. The decision to exclude schemes from the funding model was made using the evidence base from the EERM, document reviews, and stakeholder consultation.

Table F 2: All Schemes Included in the Funding Model A list of all schemes included in the funding model. This includes those that might only cater for growth, and those that cater for both historic deficit and growth. It contains both existing schemes and those identified by URS.

Table F 3: Changes Made to the EERM Model This describes the changes made to the EERM to reflect the schemes, where this was possible within the limitations of the model.

Table F 4: Deficit Schemes Included in the Funding Model, Including Costs These are the existing schemes, that to some extent cater for deficit, that have been included in the funding model because they will enable growth.

Table F 5: New Schemes Included in the Funding Model, Including Costs These are the new schemes identified by URS that have been included in the funding model.

Table F 1: Deficit Schemes Excluded from the Funding Model

ID	District	Location	Type	Description
S10	Broxbourne	Main Rail Line through Borough of Broxbourne	Rail	Investment in stations and track capacity on the main rail line
S11	Broxbourne	Lea Valley Green Route	Bus	Improve Bus services linking the Lea Valley towns
BR24	Dacorum	Route 2+3 Hemel	Bus	Low floor and peak period freq need standardised. Bus stn & TC facilities may be improved
BR25	Dacorum	Route 4+5 Hemel	Bus	Low floor inconsistent. Disruption from anti-social behaviour. BStn & TC facilities poss imps
H21	Dacorum	Hemel Hempstead	Road	A4147 widening & junction Improvements
S13	Dacorum	Hemel Hempstead	Road	Western/ Northern bypass
S19	Dacorum	Durrants Hill Road Hemel Hempstead	Road	Carriageway widening and Junction improvements
S28	Dacorum	Berkhamsted Rail Station	Rail	Railway Station safe guarded
S30	Dacorum	Apsley Rail Station	Rail	Railway Station safe guarded
S33	Dacorum	Tunnel Fields/ New Road	Road	Tunnel Fields link to new road
S34	Dacorum	A4251 Corridor, Apsley	Road	Safety & Traffic Calming Schemes
S35	Dacorum	Maylands Avenue Industrial Area Lorry Park	Road	Safeguarded
BR20	East Herts	Route 308	Bus	Linked to Hertford, some issues here & turning constraints @ Little B'stead. Some narrow roads.
BR21	East Herts	Route 510	Bus	Infrastructure improvements required. Bish'Stort congestion. Quality Bus Stop programme required.
S219	East Herts	Ware Road	Road	Road Improvement
S220	East Herts	East Hertford	Rail	12 Carriage Trains
S293	East Herts	Junction of Station Road / West Road	Road	Introduce Signals
S294	East Herts	Streets parallel to A1184	Road	Traffic Management
S295	East Herts	Dane Street	Road	2- way
S300	East Herts	A120 Bishops Stortfort	Road	Bypass Dualing
S302	East Herts	Sacombe Pound	Road	Junction Improvements
S304	East Herts	A120	Road	Coach Link
S331	East Herts	A1184 Sawbridgeworth	Road	Improvements
S333	East Herts	A120 Standon	Road	Improvements
S334	East Herts	A414 Gascoyne Way	Road	Improvements
S337	East Herts	Ware Road, Ware	Road	Improvement
S37	East Herts	Bishops Stortford	Rail	Enhancement of services

ID	District	Location	Type	Description
S38	East Herts	Sawbridgeworth	Rail	Enhancement of services
S40	East Herts	A120 Little Hadham	Road	Safety and environmental conditions
S41	East Herts	A120 Standon	Road	Safety and environmental conditions
S42	East Herts	A120 Bishops Stortford	Road	Existing Bypass (Safety)
S43	East Herts	A602 Bragbury End to Watton	Road	Existing Bypass (Safety)
S44	East Herts	A602 Wotton to Tonwell	Road	Existing Bypass (Safety)
S45	East Herts	A602 Tonwell to A10 Ware	Road	Safety
S223	Essex	A120 Stansted to Braintree	Road	General Improvements
BI9	Hertsmere	Potters Bar Stn	Bus	Bus Interchange Improvement
BR6	Hertsmere	Route W7	Bus	Elstree & B'wood Stn access & Shenley Rd operational issues. Potential contraflow in Lower High St
BR7	Hertsmere	Route W9	Bus	Elstree & B'wood Stn access & Shenley Rd operational issues. Potential contraflow in Lower High St
H13	Hertsmere	Stephensons Way	Road	Casualty reduction
S367	Hertsmere	Elstree Way/ Shenley Rd	Road	Safety Programme & Congestion Scheme
S368	Hertsmere	Stirling Corner	Road	Safety Programme plus congestion and pollution reduction measures
S4	Hertsmere	A5183/A411 Elstree CrossRoads	Road	Estree and Borehamwood Package Area, safety, congestion and pollution reduction measures
S415	Hertsmere	Berry Grove roundabout	Road	Casualty reduction
S5	Hertsmere	B556 Harper Lane/A5183 Watling Street	Road	Radlett & Rural Package Area
S6	Hertsmere	Station Road/Allum Lane/ Theobald/ Shenley Road	Road	Estree and Borehamwood Package Area, safety, congestion and pollution reduction measures
S7	Hertsmere	A411 Sparrows Herne/Catsey Lane/ Merry Hill Road	Road	Bushey Package Area
BR17	North Herts	Route 97	Bus	L'worth & Hitchin TC stops disparate. A505 congestion. Broadway-Hitchin Rd needs bus priority.
BR18	North Herts	Route 92	Bus	L'worth & Hitchin TC stops disparate. A505 congestion. Broadway-Hitchin Rd needs bus priority.
BR19	North Herts	Route 94	Bus	L'worth & Hitchin TC stops disparate. A505 congestion. Broadway-Hitchin Rd needs bus priority.
S102	North Herts	Stevenage	Road	Possible Northern Link Road
S104	North Herts	Hitchin	Rail	Partial signalling renewal over 3 years
S105	North Herts	Letchworth	Rail	Letchworth train to terminate at welwyn Garden City
S106	North Herts	A1 (M) Stevenage	Road	Improve East - West Routes as part of the strategic connection with Luton and Stansted corridors

ID	District	Location	Type	Description
S246	North Herts	Letchworth	Rail	DDA Access
S284	North Herts	A1(M)/B197	Road	East/West Distributor road north of Stevenage from A1 (M)/B197
S285	North Herts	A1(M)/A602	Road	Link road between A1(M) and A602 Wymondsley Bypass
S328	North Herts	Hitchin	Rail	Hitchin Fly-over
S355	North Herts	Hitchin	Road	Cadwell Lane/ Grove Road Industrial Estate link
BR11	St Albans	Route 320	Bus	Late and Sunday journeys in doubt, cost. St A congestion, part of St A Bus Punct Imp Partnership.
S232	St Albans	Watford - St Albans	Rail	Abbey Line & Bricket Wood Passing Loop
S361	St Albans	St. Albans	Road	Victoria St/ Marlborough Rd
S363	St Albans	Harpenden	Road	Victoria Rd/ Station Rd
S379	St Albans	St Albans	Bus	St Peters St SCOOT and signal rephasing nad potential traffic ban
S380	St Albans	St Albans	Bus	Holywell Hill signal co-ordination and re-phasing and removal of appropriate parking bays
S381	St Albans	St Albans	Bus	London Rd signal co-ordination and rephasing, parking and loading restrictions, and yellow hatching
S382	St Albans	St Albans	Bus	Victoria St improvements inc. signal co-ordination & re-phasing & moving stop nearest St Peters St
S385	St Albans	St Albans	Bus	City Centre-Station shuttle bus for 5 years
S386	St Albans	St Albans	Bus	Citywide automatic at stop information display
S388	St Albans	St Albans	Rail	Abbey Station accessibility improvements
S50	St Albans	St Albans	Bus	Potential bus priority measure between Hatfield, St Albans City Station and St Albans Abby Station
BR13	Stevenage	Route 100-102	Bus	Conflicting demands. New Stevenage BStn. Hermitage Rd pax environment.
BR28	Stevenage	Route 2+3 Stev	Bus	Review of route may be required to serve changing employment patterns.
BR29	Stevenage	Route SB1	Bus	Unsatisfactory traffic calming in Chells. No turning point at Sainsburys.
BR30	Stevenage	Route 4+5 Stev	Bus	Review of route may be required to serve changing employment patterns.
S311	Stevenage	East Coast Mainline	Rail	Great Eastern Mainline Imps
H11	3 Rivers	Brookdene Av	Road	Traffic calming
H15	3 Rivers	Sarratt Road	Road	Casualty reduction
S2	3 Rivers	Three Rivers - Rickmansworth	Road	Controlled Parking zones to facilitate residents parking throughout Rickmanswoth
S410	3 Rivers	Tolpitt Lane	Bus	Tolpits Lane bus link

ID	District	Location	Type	Description
S412	3 Rivers	Kings Langley	Road	Ovaltine safety and traffic management scheme
BR1	Watford	Route 500	Bus	Pax pressure from Watford Campus & hospitals, Watford congestion, poor on street facilities
BR2	Watford	Route 550	Bus	Pax pressure from Watford Campus & hospitals, Watford congestion, poor on street facilities
BR3	Watford	Route 724	Bus	Long distance timetable vs local demand. Various town centre issues tho can make time up.
BR31	Watford	Route 8	Bus	Cong & stop allocation in Wat TC. Bushey Arches delays. Poss Lower High St contraflow.
BR32	Watford	Route 10	Bus	Cong & stop allocation in Wat TC. Bushey Arches delays. Poss Lower High St contraflow.
BR34	Watford	Route W8/ 10	Bus	Corridor improvements
H12	Watford	Sydney Road	Road	Traffic calming
H14	Watford	North Orbital	Road	Casualty reduction
H16	Watford	Wiggenhall Road	Road	Casualty reduction
H17	Watford	St Albans Road	Road	Casualty reduction
H18	Watford	Lower High St	Road	Casualty reduction
S413	Watford	Bushey Hall Rd/ Bushey Grove Rd	Road	Safety scheme
S414	Watford	South West Herts	Road	VMS on major routes
S416	Watford	Dome Superstore Access	Road	Casualty reduction
S417	Watford	Town Hall roundabout	Road	Casualty Reduction
S419	Watford	Watford	Bus	Automatic Vehicle Location to enhance RTP1
H1	WelHat	A1(M)	Road	A1(M) widening south of J7
S100	WelHat	Digswell	Rail	Key Switch & Crossing renewals
S101	WelHat	Woolmer Green	Rail	Key Switch & Crossing renewals
S69	WelHat	QE2 Hospital, WGC	Bus	Buses to Major Health Facilities
S70	WelHat	Bus Station, WGC	Bus	Improved Information
S71	WelHat	Hunters Bridge Car Park	Road	Car Park - To Improve
S72	WelHat	Howardsgate, WGC	Road	Reduce Short-stay Parking
S73	WelHat	Digswell Road, WGC	Road	Real-time signing for car-parks
S74	WelHat	Bessemer Road / Broadwater Road, WGC	Road	Reconfigure Traffic Signals
S75	WelHat	Shire Park	Road	Install traffic signal controls
S76	WelHat	Howardsgate, WGC	Road	Restrict Traffic Circulation
S88	WelHat	Welwyn Garden City	Bus	Bus real time information system

ID	District	Location	Type	Description
S92	WelHat	Hatfield Rail Station	Rail	Improve signing to rail station
S93	WelHat	College Lane (Near University)	Road	Introduce Controlled Parking Zone(s)
S94	WelHat	Roads around Rail Station	Road	Introduce Controlled Parking Zone(s)
S95	WelHat	The University of Hertfordshire	Bus	Additional park and ride capacity for university
S96	WelHat	A1(M) Junction 4 Tesco Roundabout	Road	Traffic Signal timings
S97	WelHat	Roehyde Way	Road	Traffic Signal timings
S98	WelHat	A1000 Great North Road/A1001 South Way	Road	Create all - movement junction
BR10	Other	Route 301	Bus	No vehicle consistency. Hemel BStn & TC imps. BStn issues @ Wel, Hat and Lister Hosp.
BR12	Other	Route 321	Bus	Impact of M1 delays/ incidents. Congestion in Watford & St Albans. Watford TC cong mgt.
BR16	Other	Route 84	Bus	Single deck capacity restraint. Important school route. P'Bar congestion. Poor L'Colney infra.
BR22	Other	Route 310	Bus	Chase Fm Hospital access being tackled. H'ford BStn & TC affect punctuality. W'Cross BStn capacity.
BR23	Other	Route 311	Bus	Chase Fm Hospital access being tackled. H'ford BStn & TC affect punctuality. W'Cross BStn capacity.
BR26	Other	Route 51-5	Bus	No information available
BR27	Other	Route 51-5	Bus	No information available
BR33	Other	Route W5/ 6	Bus	Corridor improvements
BR4	Other	Route 6	Bus	Congestion thru Watford & St A, severe @ Watford Junc, interchange scheme. Imps thru Rickmansworth
BR5	Other	Route 5	Bus	Congestion thru Watford, severe @ Watford Junction, interchange scheme. Imps thru Rickmansworth
BR8	Other	Route 602	Bus	Heavy school peak. A414 delays. St Albans & B'wood congestion. Developer opposition.
BR9	Other	Route 300	Bus	No vehicle consistency. Hemel BStn & TC imps. BStn issues @ Wel, Hat and Lister Hosp.
H19	Other	A505/ A601/ A1(M)	Road	Corridor junction strategy
H7	Other	M11 J9-J14	Road	Widening
H8	Other	M11 J8-J9	Road	Widening
R10	Other	North London Line	Rail	Redefine to mainly passenger
R8	Other	Crossrail	Rail	Crossrail London
R9	Other	North of Herts	Rail	East-West Rail
S214	Other	Luton	Road	East Luton Corridor

ID	District	Location	Type	Description
S216	Other	Stansted	Road	East/West Bus Links to be improved
S221	Other	Cambridge - Stansted	Rail	12 Carriage Trains in Peak
S247	Other	North of Dunstable	Road	A5-M1 link (Dunstable Northern Bypass)
S248	Other	Hitchin - Cambridge	Rail	Booster Transformers
S305	Other	London Orbital	Road	Orbital Coach Services
S313	Other	Mid Essex	Rail	Rail Route Mid Essex to Stansted
S316	Other	Luton North	Rail	Luton North Station
S318	Other	North of Luton	Road	Luton Northern bypass
S332	Other	A414 - M11	Road	Improvements
S347	Other	M1 Junction 10A Improvements	Road	Upgrade
S352	Other	Luton Airport Parkway Station	Rail	Improvements to train service and frequency

Table F 2: All Schemes Included in the Funding Model

ID	District	Location	Type	Description	Reason Required	Implement
M1						
R2	Other	Brighton-Bedford	Rail	Thameslink Programme	Identified in document review	2021
N15	Other	M1	Road	J6-10 ATM	Relieves significant congestion	2021
M25						
H9	Other	M25 J16-J31	Road	Widening & demand management	Identified in document review	2021
N16	Other	M25 J20	Road	M25/ A41 junction improvements	Reduce delays to traffic accessing the M25 from western Herts	2021
N21	Other	M25 J17-19	Road	J17-19 ATM	Relieves significant congestion	2031
A1(M)/ A1						
R1	Other	East Coast Mainline	Rail	ECML Improvements	Identified in document review	2021
N13	Other	A1(M) J6-8	Road	ATM J6-8	Relieves significant congestion	2021
N25	Other	A1(M) J8	Road	Capacity enhancement	To improve the efficiency of a severe bottleneck	2021
A5						
A10						
R4	Other	WAGN Line	Rail	WAGN Improvements	Identified in document review	2021
H22	North Herts	Royston	Road	Southeast bypass A10-A505	Identified in document review	2021
N22	Other	A10/ A1170	Road	Capacity enhancements	Improvement of local access to the regional road network	2021
A41						
S8	Hertsmere	A41/B462 Hartspring Lane	Road	Hartspring roundabout improvements	Identified in document review	2021
A120						
H2	East Herts	A120 (A1-M11)	Road	A120 Improvements	Identified in document review	2021
H23	East Herts	Little hadham	Road	Bypass	Identified in document review	2021
S296	East herts	A120 Junction	Road	Junction capacity increase	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
S349	East herts	A120 Bishop's Stortford Bypass Dualling	Road	Bypass	Identified in document review	2021
A405						
A411						
N8	Watford	Watford	Bus	East Watford bus corridor	To improve bus movement in southeast Watford and beyond	2021
H10	Watford	Watford town centre	Road	Ring road 2-way operation	Identified in document review	2021
S411	Watford	Bushey Arches	Road	Bushey Arches junction improvements	Identified in document review	2021
A414						
N28	Other	Central Herts	Bus	East-West PT corridor	To fulfil demand not currently provided for effectively	2021
N14	East Herts	Hertford	Road	A414 mitigation	Improve network conditions around southern Hertford	2021
N17	Dacorum	Hemel Hempstead	Road	A4146/ A414 jct (+ N2)	Severe bottleneck	2021
S360	Dacorum	Hemel Hempstead	Road	London Road/ Station Road about improvements	Identified in document review	2021
S393	St Albans	St Albans	Road	SCOOT on the A414 at junctions with M10 and A1081	Identified in document review	2021
A505						
N3	North Herts	Hitchin-Letchworth	Bus	A505 corridor bus priority	To aid bus movement along the congested corridor	2021
N4	North Herts	Hitchin	Bus	A505/ A602 bus priority	To aid bus movement into and out of Hitchin	2021
H3	North Herts	A505 Hitchin-Letchworth	Road	Improvements	Identified in document review	2021
A507						
A602						
S123	Stevenage	Superstore Access on Hitichin Road	Bus	Bus Priority - Selective vehicle detection at signalised junctions	Identified in document review	2021
S124	Stevenage	Monkswood way, Stevenage	Bus	Bus Priority - Selective vehicle detection at signalised junctions	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
S125	Stevenage	Six Hills Way/Lytton Way Roundabout	Bus	Bus Priority - Enhanced Capacity	Identified in document review	2021
S126	Stevenage	Six Hills Way/St George's Way Roundabout	Bus	Bus Priority - Enhanced Capacity to reduce eastbound queues on Six Hills way	Identified in document review	2021
S127	Stevenage	FairLands Way westbound, Stevenage	Bus	Bus Priority - Bus lane on the approach to Lytton way	Identified in document review	2021
S128	Stevenage	Gunnels Wood Road/A602 Broadhall	Bus	Bus Priority - Capacity enhancements/bus priority at junction where both road meet	Identified in document review	2021
H4	East Herts	A602 Ware-Stevenage	Road	Improvements	Identified in document review	2021
N29	Stevenage	A602/ A1072	Road	SB flare for left turners & signalisation of southern approach	To relieve access to/ from A1(M) J8	2021
S336	Stevenage	A602 Gunnells Wood Road Rdbt	Road	Improvement	Identified in document review	2021
S364	Stevenage	Stevenage	Road	A602/Coreys Mill Lane	Identified in document review	2021
A1184						
N10	East Herts	Sawbridgeworth	Bus	Town centre bus priority	Improved inter-urban bus connections	2021
N23	East Herts	Sawbridgeworth	Road	A1184 junctions capacity improvements (+ N11)	Reduce congestion for improved inter-urban travel	2021
A1189						
Broxbourne						
BI11	Broxbourne	Cheshunt Town Centre	Bus	Interchange improvement	Identified in document review	2021
S340	Broxbourne	Broxbourne Essex Road	Road	Improvement	Identified in document review	2021
S359	Broxbourne	Waltham Cross	Road	Waltham Cross Station Links	Identified in document review	2021
Dacorum						
BI1	Dacorum	Hemel Hempstead Bus Stn	Bus	Interchange improvement	Identified in document review	2021
N2	Dacorum	Hemel Hempstead	Bus	Central corridor bus priority	Congestion along existing and growing bus corridor	2021
S12	Dacorum	Tring Rail Station	Rail	Station Improvements (new building)	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
S14	Dacorum	Hemel Hempstead Station	Rail	Station improvements - adjacent land purchased by developer	Identified in document review	2021
H20	Dacorum	Hemel Hempstead	Road	Swallowdale Ln widening & jct improvements	Identified in document review	2021
H24	Dacorum	Water End	Road	Bypass	Identified in document review	2021
N12	Dacorum	Hemel Hempstead	Road	Hemel Hempstead Northern Bypass	Potentially required depending on the location of development around Hemel	2031
S16	Dacorum	Durrents Hill / London Road Junction	Road	Signalisation	Identified in document review	2021
S17	Dacorum	Featherbed Lane/ London Road	Road	Improvements to Junction	Identified in document review	2021
S31	Dacorum	Breakspear Way Hemel hempstead	Road	Junction improvements to increase capacity	Identified in document review	2021
East Herts						
BI12	East Herts	Bishops Stortford Bus Stn	Bus	Interchange improvement	Identified in document review	2021
N9	East Herts	Hertford-Ware	Bus	Corridor bus priority	Facilitates improved inter-urban bus connectivity	2021
S292	East herts	Dunmow Road Crridor	Bus	P & R	Identified in document review	2021
N24	East Herts	Bishops Stortford	Road	Town centre junctions (+ N12)	To relieve the town centre road network from severe congestion	2021
S228	East herts	Sacombe Pound	Road	Junction Improvements	Identified in document review	2021
Hertsmere						
BI4	Hertsmere	Borehamwood Town Centre	Bus	Interchange improvement	Identified in document review	2021
N11	East Herts	Bishops Stortford	Bus	Town centre bus priority	To improve bus network efficiency in the town centre	2021
North Herts						
BI14	North Herts	Letchworth Station potential interchange improvements	Bus	Interchange improvement	Identified in document review	2021
BI6	North Herts	Hitchin	Bus	Interchange improvement	Identified in document review	2021
S353	North Herts	Hlitchin Station	Rail	Hitchin Station Forecourt improvements	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
S243	North Herts	Cadwell Lane, Hitchin	Road	Signallisation	Identified in document review	2021
St Albans						
BI2	St Albans	St Albans Town Centre	Bus	Interchange improvement	Identified in document review	2021
S235	St Albans	Harpenden	Bus	Interchange Improvements	Identified in document review	2021
S383	St Albans	St Albans	Bus	P&R serving St Albans and strategic bus and coach services to e.g. Hatfield, location undertermined	Identified in document review	2021
S384	St Albans	St Albans	Bus	Hatfield Rd bus corridor improvements	Identified in document review	2021
S48	St Albans	Hemel Hempstead M1 junction	Bus	Maylands masterplan, proposal for P+R to serve the business park and town centre	Identified in document review	2021
N18	St Albans	Hemel-St Albans	Road	A4147 corridor junction improvements	To improve east-west connections across the county	2021
N19	St Albans	St Albans	Road	Relief road improvements	To relieve local and sub-regional travel from local congestion	2021
N20	St Albans	Harpenden	Road	Harpenden south junction enhancement	Relief of local congestion for inter-urban travel	2021
S391	St Albans	St Albans	Road	Hatfield/ Clarence/ Camp Roads junction improvements	Identified in document review	2021
S392	St Albans	St Albans	Road	SCOOT around the western orbital route	Identified in document review	2021
Stevenage						
BI5	Stevenage	Stevenage Bus Stn	Bus	Interchange improvement	Identified in document review	2021
S122	Stevenage	Bessemer Drive, Stevenage	Bus	Widening of road, primarily to facilitate bus movement	Identified in document review	2021
S129	Stevenage	Gresley Way, Stevenage	Bus	Signalisation of the Junctions	Identified in document review	2021
S130	Stevenage	The White Way, Stevenage	Bus	Signalisation of the Junctions	Identified in document review	2021
S131	Stevenage	Fairlands Way, Stevenage	Bus	Signalisation of the Junctions	Identified in document review	2021
S132	Stevenage	Mobbsbury Way, Stevenage	Bus	Signalisation of the Junctions	Identified in document review	2021
S134	Stevenage	A1 (M) Stevenage	Road	Passage under or over A1(M) to link the new development to Stevenage to reduce local traffic use o*	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
Three Rivers						
Watford						
N7	Watford	Watford	Bus	North Watford bus corridor	To improve network conditions on the busy bus corridor	2021
S107	Watford	St Albans Road	Other	Watford Junction redevelopment including the Colonial Way link	Identified in document review	2021
S252	Watford	Watford Junction	Rail	Creation of Rail Interchange	Identified in document review	2021
Welwyn Hatfield						
BI7	WelHat	WGC Bus Stn	Bus	Interchange improvement	Identified in document review	2021
BI8	WelHat	Hatfield Rail Stn	Bus	Interchange improvement	Identified in document review	2021
N5	WelHat	WGC spine	Bus	A1000 bus priority (inc. adjacent roads)	To aid bus movement through the congested road network	2021
N6	WelHat	Hatfield	Bus	A1000/ B6426 bus priority	To improve bus network efficiency around the station	2021
S87	WelHat	College Lane onto A1001 Roehyde Way	Bus	Introduce bus priority measures (Bus gates, bus lanes, junction priorities)	Identified in document review	2021
S91	WelHat	Hatfield Rail Station	Rail	Hatfield Station interchange	Identified in document review	2021
S99	WelHat	Hatfield Rail Station	Road	Additional Parking	Identified in document review	2021
Other						
N1	Other	Countywide	Cycle	Implementation of HCC cycling strategy	Requirement to promote sustainable transport	2021
N27	Other	Countywide	Demand Mgt.	Smarter Choices	Essential to reduce pressure on the road network	All
N26	Other	Countywide	Rail	General improvements to rail stations	To improve operational effectiveness and attractiveness to users and potential users	2021
R11	Other	Abbey Line	Rail	Abbey Line passing loop	Identified in document review	2021
R12	Other	Croxley Rail	Rail	Croxley Rail Link	Identified in document review	2021
S321	Other	M11 J7 & J8	Road	Junction Improvements	Identified in document review	2021
S36	Other	M1 Luton	Road	Improve East - West Routes as part of the strategic connection with Stevenage and Stansted corridor	Identified in document review	2021

ID	District	Location	Type	Description	Reason Required	Implement
S47	Other	M11 Stansted	Road	Improve East - West Routes as part of the strategic connection with Luton and Stevenage corridors	Identified in document review	2021

Table F 3: Changes Made to the EERM Model

ID	Description	Improvement	2021	2031
H10	Ring road 2-way operation	2-way operation 1 lane in each direction assume existing junction types. Not modellable	Yes	Yes
H2	A120 Improvements	Too small to model	Yes	Yes
H3	Improvements	Realignment of approaches at A505/ A602, extension of A505 approach flare to 30m. Baldock Rd/ Norton Way South ban right turn from Baldock Rd WB and make 2 lane ahead for existing flare and 2 lanes WB for 15m on eastern side of jct.	Yes	Yes
H4	Improvements	50m flare on eastern approach to A602/ A119 and 2 lanes away from jct to north for 50m, 2 lane circulatory.	Yes	Yes
N12	Hemel Hempstead Northern Bypass	Single carriageway 50mph road from A4146 to Green Lane, r'bouts at A4146/Picotts End Ln B487/ Little Revel End and Cherry Tree Ln/ Green Ln with all approaches having a 20m flare & 2 lane circulatory.	No	Yes
N13	ATM J6-8	Assume 1 additional lane and 50mph	Yes	Yes
N14	A414 mitigation	Signalisation of A414/ A119 r'bout and A119 North Road/ Cross Ln. Signalisation of A414/ B158 r'bout. Both would include bus priority.	Yes	Yes
N15	J6-10 ATM	Assume 1 additional lane and 50mph	Yes	Yes
N16	M25/ A41 junction improvements	Introduction of bus lane to enable interurban bus route. Not modellable.	Yes	Yes
N17	A4146/ A414 jct (+ N2)	Replacement of series of 6 roundabouts with 1 traditional r'bout. 3 lane circulatory. 2 lane approach on all junctions assuming a third lane will be provided as bus priority.	Yes	Yes
N18	A4147 corridor junction improvements	Extend Leverstock Green Way approach to A414 back by 20m. 2 lane approach (WB) to A4147. King Harry Ln r'bout & 2 lane exit WB along A4147.	Yes	Yes
N19	Relief road improvements	Increase A5183/ A4147 r'bout diameter by approx 10m, 20m flare length on all approaches. A1081/ Beech Rd 20m r'bout 2 lane on all approaches 2 lane exit on A1081 SB.	Yes	Yes
N20	Harpenden south junction enhancement	Signalise A1081/ B652 in Harpenden, bus actuated. A1081/ Redbourn Ln 2 lane exit SB, 20m flare on northern approach.	Yes	Yes
N22	J17-19 ATM	Assume 1 additional lane and 50mph	Yes	Yes
N23	Capacity enhancements	20m flare on Stanstead Rd at jct of A414/ A1170. A414 WB approach 50m flare and 3 lane circulatory on southern side of r'bout (A414 to A414)	Yes	Yes
N24	A1184 junctions capacity improvements (+ N11)	Provision of right turn lane from A1184 southbound onto High Wych Rd. Signalisation of A1184. West Rd/ Station Rd to include bus priority and localised bus improvements.	No	Yes
N25	Town centre junctions (+ N12)	Signalisation of A1250/ B1529 and linking of all town centre signalised junctions including bus actuation.	Yes	Yes
N26	Capacity enhancement	SLT from A602 from Stevenage into lane 1 of SB on slip. 1 lane off r'bout to A1(M) SB. 2 lanes onto r'bout from A602 from Stevenage, 2 lane circulatory across face.	Yes	Yes

ID	Description	Improvement	2021	2031
N29	SB flare for left turners & signalisation of southern approach	SB flare for left turners & signalisation of southern approach	Yes	Yes
S134	Passage under or over A1(M) to link the new development to Stevenage to reduce local traffic use o*	Dualling of existing underpass at Meadway and NMU underpass alongside Bessemer Rd. Not in model but both Meadway and Bessemer will become major conduits for development to the east of Stevenage, should they be incorporated.	Yes	Yes
S16	Signalisation	Signalisation linked to S17. Not modellable	Yes	Yes
S17	Improvements to Junction	Signalisation linked to S16. Not modellable	Yes	Yes
S18	New single carriageway Bypass	Single carriageway bypass from A4146/ Picotts End Ln jct of N12 to just north of Water End, bypassing to the west, 60mph. Additional junctions at Potten End Hill (with Nettleden Ln realigning to the junction & rejoining A4146, bypass approaches 20m flare	Yes	Yes
S217	Bypass	As specification tested for HCC	Yes	Yes
S228	Junction Improvements	Too small to model	Yes	Yes
S243	Signalisation	Signalisation, not in model network	Yes	Yes
S296	Junction capacity increase	Not included as not specific enough	Yes	Yes
S31	Junction improvements to increase capacity	2 lane approach on Green Lane.	Yes	Yes
S321	Junction Improvements	Not required in modelling	Yes	Yes
S330	Improvements	South-east bypass from A10 at Flint Hall to A505 between Hydell Hill Farm and Heath Farm	Yes	Yes
S336	Improvement	Signalisation of A1(M) J7 and new access into Glaxo SmithKline site. Signalisation of Gunnalswood Rd/ Broadhall Way r'bout.	Yes	Yes
S340	Improvement	Link road between new bridge over railway and Dinant Link Road, straightening. May not be modellable.	Yes	Yes
S349	Bypass	Dual carriageway A120 70mph from A1250 Dunmow Rd to A1184. All A120 approaches to r'bouts 3 lane.	Yes	Yes
S359	Waltham Cross Station Links	Cycle & Ped links. Not modellable	Yes	Yes
S36	Improve E - W Routes as part of the strategic connection with Stevenage and Stansted corridor	Not modellable	Yes	Yes
S360	London Road/ Station Road rbout improvements	No increase in general capacity, PT improvements (inc bus lanes and potential tidal flow bus lane along London Rd) and Smarter Choices.	Yes	Yes
S364	A602/ Coreys Mill Lane	Junction not in model	Yes	Yes
S391	Hatfield/ Clarence/ Camp Roads junction improvements	Not modellable.	Yes	Yes
S392	SCOOT around the western orbital route	Not modellable.	Yes	Yes
S393	SCOOT on the A414 at junctions	Not modellable.	Yes	Yes

ID	Description	Improvement	2021	2031
	with M10 and A1081			
S411	Bushey Arches junction improvements	Signalisation with bus actuation. Not modellable	Yes	Yes
S47	Improve E - W Routes as part of the strategic connection with Luton and Stevenage corridors	Not modellable	Yes	Yes
S8	Hartspring roundabout improvements	No issue in model so not modellable	Yes	Yes

Table F 4: Deficit Schemes Included in the Funding Model, Including Costs

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
BI1	Dacorum	Hemel Hempstead Bus Stn	Bus	Interchange improvement	£4.0	£0.88	2021	Local HA	2
BI2	St Albans	St Albans Town Centre	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	2
BI4	Hertsmere	Borehamwood Town Centre	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	2
BI5	Stevenage	Stevenage Bus Stn	Bus	Interchange improvement	£4.0	£0.88	2021	Local HA	2
BI6	North Herts	Hitchin	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	2
BI7	WelHat	WGC Bus Stn	Bus	Interchange improvement	£4.0	£0.88	2021	Local HA	2
BI8	WelHat	Hatfield Rail Stn	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	2
BI11	Broxbourne	Cheshunt Town Centre	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	2
BI12	East Herts	Bishops Stortford Bus Stn	Bus	Interchange improvement	£4.0	£0.88	2021	Local HA	2
BI14	North Herts	Letchworth Station potential interchange improvements	Bus	Interchange improvement	£1.5	£0.33	2021	Local HA	1
R11	Other	Abbey Line	Rail	Abbey Line passing loop	£6.0	£1.32	2021	Local HA	2
R12	Other	Croxley Rail	Rail	Croxley Rail Link	£144.5	£144.50	2021	Local HA	2
H2	East Herts	A120 (A1-M11)	Road	A120 Improvements	£2.0	£0.44	2021	Local HA	3
H3	North Herts	A505 Hitchin-Letchworth	Road	Improvements	£5.0	£2.79	2021	Local HA	2
H4	East Herts	A602 Ware-Stevenage	Road	Improvements	£20.0	£4.38	2021	Local HA	3
H10	Watford	Watford town centre	Road	Ring road 2-way operation	£2.0	£0.44	2021	Local HA	3

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
H20	Dacorum	Hemel Hempstead	Road	Swallowdale Ln widening & jct improvements	£1.0	£0.22	2021	Local HA	3
H22	North Herts	Royston	Road	Southeast bypass A10-A505	£19.3	£10.77	2021	Local HA	3
H23	East Herts	Little Hadham	Road	Bypass	£32.0	£32.00	2021	Local HA	4
H24	Dacorum	Water End	Road	Bypass	£17.4	£6.36	2021	Local HA	2
S340	Broxbourne	Broxbourne Essex Road	Road	Improvement	£5.3	£0.00	2021	Other	3
S359	Broxbourne	Waltham Cross	Road	Waltham Cross Station Links	£0.2	£0.04	2021	Local HA	3
S12	Dacorum	Tring Rail Station	Rail	Station Improvements (new building)	£2.0	£0.00	2021	Other	3
S14	Dacorum	Hemel Hempstead Station	Rail	Station improvements - adjacent land purchased by developer	£2.0	£0.00	2021	Other	3
S16	Dacorum	Durrents Hill / London Road Junction	Road	Signalisation	£0.1	£0.02	2021	Local HA	3
S17	Dacorum	Featherbed Lane/ London Road	Road	Improvements to Junction	£0.1	£0.02	2021	Local HA	3
S31	Dacorum	Breakspear Way Hemel hempstead	Road	Junction improvements to increase capacity	£0.1	£0.02	2021	Local HA	3
S360	Dacorum	Hemel Hempstead	Road	London Road/ Station Road about improvements	£0.2	£0.04	2021	Local HA	3
S292	East herts	Dunmow Road Crridor	Bus	P & R	£3.1	£0.68	2021	Local HA	3
S228	East herts	Sacombe Pound	Road	Junction Improvements	£0.1	£0.00	2021	Other	3
S296	East herts	A120 Junction	Road	Junction capacity increase	£0.2	£0.04	2021	Local HA	3
S349	East herts	A120 Bishop's Stortford Bypass Dualling	Road	Bypass	£22.6	£4.96	2021	Local HA	3
S8	Hertsmere	A41/B462 Hartspring Lane	Road	Hartspring roundabout improvements	£0.1	£0.02	2021	Local HA	3
S353	North Herts	Hitchin Station	Rail	Hitchin Station Forecourt improvements	£1.0	£0.00	2021	Rail Op	3
S243	North Herts	Cadwell Lane, Hitchin	Road	Signallisation	£0.7	£0.16	2021	Local	3

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
								PA	
S235	St Albans	Harpenden	Bus	Interchange Improvements	£0.1	£0.02	2021	Local PA	3
S383	St Albans	St Albans	Bus	P&R serving St Albans and strategic bus and coach services to e.g. Hatfield, location undertermined	£3.1	£0.68	2021	Local HA	3
S384	St Albans	St Albans	Bus	Hatfield Rd bus corridor improvements	£0.1	£0.02	2021	Local HA	3
S48	St Albans	Hemel Hempstead M1 junction	Bus	Maylands masterplan, proposal for P+R to serve the business park and town centre	£3.1	£0.00	2021	Other	3
S391	St Albans	St Albans	Road	Hatfield/ Clarence/ Camp Roads junction improvements	£0.0	£0.01	2021	Local HA	3
S392	St Albans	St Albans	Road	SCOOT around the western orbital route	£0.1	£0.02	2021	Local HA	3
S393	St Albans	St Albans	Road	SCOOT on the A414 at junctions with M10 and A1081	£0.1	£0.02	2021	Local HA	3
S122	Stevenage	Bessemer Drive, Stevenage	Bus	Widening of road, primarily to facilitate bus movement	£0.3	£0.05	2021	Local HA	3
S123	Stevenage	Superstore Access on Hitichin Road	Bus	Bus Priority - Selective vehicle detection at signalised junctions	£0.3	£0.05	2021	Local HA	3
S124	Stevenage	Monkswood way, Stevenage	Bus	Bus Priority - Selective vehicle detection at signalised junctions	£0.3	£0.05	2021	Local HA	3
S125	Stevenage	Six Hills Way/Lytton Way Roundabout	Bus	Bus Priority - Enhanced Capacity	£0.1	£0.02	2021	Local HA	3
S126	Stevenage	Six Hills Way/St George's Way Roundabout	Bus	Bus Priority - Enhanced Capacity to reduce eastbound queues on Six Hills way	£0.1	£0.02	2021	Local HA	3
S127	Stevenage	FairLands Way westbound, Stevenage	Bus	Bus Priority - Bus lane on the approach to Lytton way	£0.1	£0.02	2021	Local HA	3
S128	Stevenage	Gunnels Wood Road/A602 Broadhall	Bus	Bus Priority - Capacity enhancements/bus priority at junction where both road meet	£0.1	£0.02	2021	Local HA	3
S129	Stevenage	Gresley Way, Stevenage	Bus	Signalisation of the Junctions	£0.1	£0.02	2021	Local HA	3

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
S130	Stevenage	The White Way, Stevenage	Bus	Signalisation of the Junctions	£0.1	£0.02	2021	Local HA	3
S131	Stevenage	Fairlands Way, Stevenage	Bus	Signalisation of the Junctions	£0.1	£0.02	2021	Local HA	3
S132	Stevenage	Mobbsbury Way, Stevenage	Bus	Signalisation of the Junctions	£0.1	£0.02	2021	Local HA	3
S134	Stevenage	A1 (M) Stevenage	Road	Passage under or over A1(M) to link the new development to Stevenage to reduce local traffic use o*	£18.7	£18.67	2021	Devel oper	3
S336	Stevenage	A602 Gunnells Wood Road Rdbt	Road	Improvement	£5.0	£5.00	2021	Devel oper	2
S364	Stevenage	Stevenage	Road	A602/Coreys Mill Lane	£4.0	£0.88	2021	Local HA	3
S252	Watford	Watford Junction	Rail	Creation of Rail Interchange	£32.5	£32.45	2021	Local PA	3
S107	Watford	St Albans Road	Other	Watford Junction redevelopment including the Colonial Way link	£1.0	£0.22	2021	Local HA	3
S411	Watford	Bushey Arches	Road	Bushey Arches junction improvements	£0.5	£0.11	2021	Local HA	3
S87	WelHat	College Lane onto A1001 Roehyde Way	Bus	Introduce bus priority measures (Bus gates, bus lanes, junction priorities)	£0.4	£0.09	2021	Local HA	3
S91	WelHat	Hatfield Rail Station	Rail	Hatfield Station interchange	£1.2	£0.26	2021	Local HA	3
S99	WelHat	Hatfield Rail Station	Road	Additional Parking	£0.5	£0.11	2021	Local HA	3
S321	Other	M11 J7 & J8	Road	Junction Improvements	£0.0	£0.00	2021	HA	4
S36	Other	M1 Luton	Road	Improve East - West Routes as part of the strategic connection with Stevenage and Stansted corridor	£0.0	£0.00	2021	Local HA	3
S47	Other	M11 Stansted	Road	Improve East - West Routes as part of the strategic connection with Luton and Stevenage corridors	£0.0	£0.00	2021	Local HA	3

Table F 5: New Schemes Included in the Funding Model, Including Costs

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
N1	Other	Countywide	Cycle	Implementation of HCC cycling strategy	£36.0	£12.10	2021	Local HA	4
N2	Dacorum	Hemel Hempstead	Bus	Central corridor bus priority	£1.0	£0.22	2021	Local HA	3
N3	North Herts	Hitchin-Letchworth	Bus	A505 corridor bus priority	£2.0	£0.44	2021	Local HA	3
N4	North Herts	Hitchin	Bus	A505/ A602 bus priority	£1.5	£0.33	2021	Local HA	3
N5	WelHat	WGC spine	Bus	A1000 bus priority (inc. adjacent roads)	£0.5	£0.11	2021	Local HA	3
N6	WelHat	Hatfield	Bus	A1000/ B6426 bus priority	£0.5	£0.11	2021	Local HA	3
N7	Watford	Watford	Bus	North Watford bus corridor	£1.0	£0.22	2021	Local HA	3
N8	Watford	Watford	Bus	East Watford bus corridor	£1.0	£0.22	2021	Local HA	3
N9	East Herts	Hertford-Ware	Bus	Corridor bus priority	£1.0	£0.22	2021	Local HA	3
N10	East Herts	Sawbridgeworth	Bus	Town centre bus priority	£0.5	£0.11	2021	Local HA	3
N11	East Herts	Bishops Stortford	Bus	Town centre bus priority	£1.0	£0.22	2021	Local HA	3
N12	Dacorum	Hemel Hempstead	Road	Hemel Hempstead Northern Bypass	£75.0	£75.00	2031	Local HA	2
N13	Other	A1(M) J6-8	Road	ATM J6-8	£164.0	£0.00	2021	HA	3
N14	East Herts	Hertford	Road	A414 mitigation	£10.0	£2.19	2021	Local HA	2
N15	Other	M1	Road	J6-10 ATM	£89.6	£0.00	2021	HA	3
N16	Other	M25 J20	Road	M25/ A41 junction improvements	£5.0	£0.00	2021	HA	1
N17	Dacorum	Hemel Hempstead	Road	A4146/ A414 jct (+ N2)	£5.0	£1.83	2021	Local HA	2
N18	St Albans	Hemel-St Albans	Road	A4147 corridor junction	£3.0	£0.66	2021	Local	2

ID	District	Location	Type	Description	Cost £m	Existing Funding £m	Implement	Lead	Priority
				improvements				HA	
N19	St Albans	St Albans	Road	Relief road improvements	£1.0	£0.22	2021	Local HA	2
N20	St Albans	Harpenden	Road	Harpenden south junction enhancement	£1.5	£0.33	2021	Local HA	2
N21	Other	M25 J17-19	Road	J17-19 ATM	£39.2	£0.00	2031	HA	2
N22	Other	A10/ A1170	Road	Capacity enhancements	£2.0	£0.44	2021	Local HA	2
N23	East Herts	Sawbridgeworth	Road	A1184 junctions capacity improvements (+ N11)	£1.0	£0.22	2021	Local HA	3
N24	East Herts	Bishops Stortford	Road	Town centre junctions (+ N12)	£2.0	£0.44	2021	Local HA	2
N25	Other	A1(M) J8	Road	Capacity enhancement	£7.0	£0.00	2021	HA	4
N26	Other	Countywide	Rail	General improvements to rail stations	£5.1	£1.12	2021	Local HA	1
N27	Other	Countywide	Demand Mgt.	Smarter Choices	£114.7	£24.53	2021	Local HA	4
N28	Other	Central Herts	Bus	East-West PT corridor	£150.0	£32.89	2021	Local HA	3
N29	Stevenage	A602/ A1072	Road	SB flare for left turners & signalisation of southern approach	£1.0	£0.22	2021	Local HA	2

