



West Winch Housing Access Road (WWHAR)

Sustainable Transport Strategy

Appendix 2 – Multi-Criteria Assessment Framework

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1 Multi-Criteria Assessment Framework

- 1.1.1 A table showing the results of the Multi-Criteria Assessment and ranking of options against the assessment criteria. This has informed the shortlisting of the top 20 options to include in the WWHAR scheme design.
- 1.1.2 We have included a summary of key information shown in this document in an accessible format. However, some users may not be able to access all technical details. If you require this document in a more accessible format please contact westwinchhar@norfolk.gov.uk

Table 1-1 Multi Criteria Assessment Framework (MCAF) for STS

Each scheme has been scored against a number of metrics on a scale from 1 to 5 with 5 being the best fit against that metric. Each scheme has been given a total score and ranked in accordance with the other schemes. The best performing schemes have the highest score and lowest rank.

Ref. No.	Intervention Type	Sub-level Intervention Type	On-line / Off-line	Location	Description	Scale of impact	Fit with climate agenda	Fit with Sustainable Transport Objectives	Supporting housing / employment growth	Improving connectivity to public transport	Improving connectivity to active travel network	Improving connectivity to local services	Reducing Severance across the A10	Encouraging modal shift	Reducing motor vehicle demand on the existing A10	Improved safety for NMUs	Delivery timescale	Public acceptability	Deliverability	Affordability	Flexibility of option	Unweighted Score	Unweighted Rank
Ref.1	Active Travel	New NMU Crossing	Online	A10	New Crossing points on raised tables (with 2m long ramps and 24m length raised table) with signalised crossings to can on the A10	4	4	5	4	5	4	3	5	4	2	4	3	4	5	4	5	65	1
Ref.22	Active Travel	Upgraded NMU Crossing	Online	West Winch Stores	Raised Table and Toucan crossing at or close to West Winch Stores (with 2m long ramps and 24m length raised table)	2	3	5	3	4	3	5	5	4	2	4	5	4	5	5	4	63	2
Ref.38	Bus Improvement	Bus Service Improvement & New Bus Stops	Offline	New Housing Development	Re-routing of existing bus services to serve the new development including new bus stops	4	3	4	5	5	1	5	1	5	5	1	5	4	4	5	4	61	3
Ref.2	Active Travel	New NMU Route	Offline	A10 Layby	Northern NMU connection to Hardwick via residential site behind existing housing connecting to layby and A10 arm of the junction crossing point	4	4	4	5	3	5	4	3	5	3	4	3	4	3	3	3	60	4
Ref.36	Active Travel	Upgraded NMU Route	Online	PRoW FP1 / RB2	Upgrades to FP1 / RB2 including paving and widening to support cyclists	3	3	5	5	2	4	4	2	4	4	5	4	4	4	4	3	60	4
Ref.23	Traffic Calming	Mixed Traffic Calming	Online	A10	Traffic Calming on the A10 - speed bumps, build outs, speed cushions, raised tables	4	3	4	2	1	3	2	5	5	5	4	3	5	5	4	4	59	6
Ref.25	Active Travel	New NMU Route	Online	WWHAR / Southern West Winch	Crossings and NMU Routes on the Southern WWHAR including connection to new school to the south west of West Winch	3	4	5	4	4	5	5	4	4	3	5	2	3	2	3	3	59	6
Ref.3	Active Travel	New NMU Route	Offline	A47 tunnel	Northern NMU connection to Hardwick via residential site behind existing housing connecting to LCWIP route to tunnel under A47 and west to New A149 north arm junction crossing point to Hardwick ind estate north of Hardwick Road.	4	5	5	5	3	5	4	1	5	3	4	3	4	3	2	3	59	6
Ref.34	Active Travel	Upgraded NMU Route	Online	PRoW FP1 / FP2 / RB2	Upgrades to FP1 / FP2 / RB2 including paving and widening to support cyclists	3	3	5	5	2	4	4	2	4	4	5	4	4	3	4	3	59	6
Ref.4	Active Travel	Upgraded NMU Route	Online	A10	East side widening of A10 for a 3 metre NMU path	3	3	4	3	3	4	4	2	5	5	4	4	4	3	4	4	59	6
Ref.52	Traffic Calming	Speed Limit Reduction	Online	A10	A10 speed limit reduction	4	3	4	1	2	2	2	5	4	5	4	5	4	4	5	4	58	11
Ref.39	Bus Improvement	Bus Service Improvement	Online	A10	New fast bus services to Kings Lynn / Watlington	3	2	5	5	5	1	5	1	5	5	1	5	5	3	3	3	57	12
Ref.44	Bus Improvement	Bus Stop Improvement	Online	Area Wide	Bus stop upgrades - shelters, real-time information, raised kerbs	3	3	5	4	5	1	4	2	4	3	2	4	5	4	3	5	57	12
Ref.5	Active Travel	Upgraded NMU Route	Online	A11	West side widening of A10 for a 3 metre NMU path	3	3	4	3	3	4	4	2	5	5	4	4	4	2	3	4	57	12
Ref.64	Mixed-Use	Mobility Hub	Offline	New Housing Development	Mobility hub close to Chapel Lane / heart of West Winch and West Winch Stores, served by bus services, amenities, bike storage facilities and micromobility charging	3	4	4	4	4	4	5	2	4	3	1	3	5	3	3	5	57	12
Ref.50	Active Travel	New NMU Crossing	Offline	Hardwick Roundabout	New NMU route between the development and Hardwick Road.	4	3	4	4	2	4	4	4	4	2	4	3	5	3	3	4	57	12
Ref.16	Active Travel	New NMU Route	Online	Rectory Lane	NMU route between A10 and WWHAR via Rectory Lane	2	4	4	3	4	5	3	1	4	2	4	4	3	4	4	5	56	17
Ref.24	Active Travel	New NMU Route	Offline	West Winch / A47 Tunnel / Fairstead	West Winch Future Corridor - NMU route in the LCWIP from West Winch to Fairstead via tunnel under A47	5	5	5	4	2	5	5	3	5	2	5	1	5	2	1	1	56	17
Ref.40	Bus Improvement	Bus Service Improvement	Online	Area Wide	Changes to existing service patterns - more evening & weekend services	3	3	4	5	5	2	5	1	4	3	1	5	5	3	3	4	56	17

Ref. No.	Intervention Type	Sub-level Intervention Type	On-line / Off-line	Location	Description	Scale of impact	Fit with climate agenda	Fit with Sustainable Transport Objectives	Supporting housing / employment growth	Improving connectivity to public transport	Improving connectivity to active travel network	Improving connectivity to local services	Reducing Severance across the A10	Encouraging modal shift	Reducing motor vehicle demand on the existing A10	Improved safety for NMUs	Delivery timescale	Public acceptability	Deliverability	Affordability	Flexibility of option	Unweighted Score	Unweighted Rank
Ref.41	Bus Improvement	Bus Service Improvement	Online	Area Wide	Increased 7am-7pm frequency on existing services	3	3	4	5	5	2	5	1	4	3	1	5	5	3	3	4	56	17
Ref.26	Active Travel	New NMU Route	Offline	New Housing Development	Northern NMU connection to Hardwick via a new route behind Hunters Rise and Willow Drive and the A10	4	3	5	4	3	5	4	1	5	4	4	2	4	2	2	3	55	21
Ref.30	Active Travel	New NMU Route	Online	Watlington Road / Watlington	NMU Route Between Oakwood Corner Roundabout and Watlington Railway Station	3	3	5	4	5	5	4	3	3	3	5	2	4	2	3	1	55	21
Ref.33	Active Travel	Upgraded Footway	Online	PRoW FP1 / FP2 / RB2	Upgrades to FP1 / FP2 / RB2 with paving to support more pedestrians	2	3	4	4	2	3	4	3	3	3	2	4	4	5	5	4	55	21
Ref.37	Bus Improvement	Bus Priority	Online	Hardwick Roundabout	Bus priority on the approach to Hardwick Roundabout from A10 and Hardwick Road	4	5	5	4	5	2	5	1	4	4	2	3	3	2	3	3	55	21
Ref.43	Traffic Calming	Bus Layby Removal	Online	A10	Convert stops in bus laybys to in-carriageway stops on A10	3	4	5	2	5	1	2	4	5	4	2	4	2	4	3	5	55	21
Ref.65	Active Travel	New NMU route	Online	WWHAR	New NMU route along the proposed WWHAR between the existing A10 southern roundabout and the northern development roundabout.	3	4	5	4	1	5	2	2	3	2	4	3	3	5	4	5	55	21
Ref.9	Bus Improvement	Bus Service Improvement	Online	A10	High frequency bus route on A10 corridor	4	2	4	4	4	1	5	2	5	4	2	4	4	3	4	3	55	21
Ref.35	Active Travel	Upgraded Footway	Online	PRoW FP1 / RB2	Upgrades to FP1 / RB2 with paving to support more pedestrians	2	3	4	4	2	3	4	2	3	3	2	4	4	5	5	4	54	28
Ref.66	Active Travel	New NMU route	Online	A47	New NMU route between the northern development roundabout, alongside the WWHAR, the A47 and across the northern section of the development area to the existing A10 / layby.	3	4	5	4	1	5	2	2	3	2	4	3	3	5	4	4	54	28
Ref.7	Traffic Calming	Modal Filter	Online	A10	NMU Modal filter on existing A10	5	5	5	1	1	3	2	5	5	5	4	3	1	3	4	1	53	30
Ref.8	Bus Improvement	Bus Priority	Online	A10	Bus gate on existing A10	5	4	5	3	4	1	3	4	4	5	3	3	1	3	4	1	53	30
Ref.55	Active Travel	Bike Storage	Online	West Winch Stores	New bike storage at West Winch Stores	1	5	5	2	1	3	4	2	2	2	1	5	4	5	5	4	51	32
Ref.10	Bus Improvement	Bus Service Improvement	Online	A10	BRT / MRT connection between West Winch and Kings Lynn	5	1	5	5	5	1	5	1	5	5	2	1	5	1	1	2	50	33
Ref.42	Bus Improvement	Bus Service Improvement	Online	Area Wide	Increased late bus services	2	1	4	5	5	1	5	1	3	3	1	5	5	3	2	4	50	33
Ref.54	Mixed-Use	Mobility Hub	Offline	New Housing Development	Mobility hub in new housing development with bus services, amenities, bike storage facilities and micromobility charging	5	4	5	5	5	1	5	2	4	3	1	1	5	1	1	2	50	33
Ref.56	Active Travel	Bike Storage	Online	Hardwick Industrial Park	New bike storage at Hardwick Industrial Park	1	5	5	2	1	3	4	1	2	2	1	5	4	5	5	4	50	33
Ref.11	Mixed-Use	New dedicated Bus and Segregated Cycleway	Online	A10	One way route on A10 – Northbound or southbound and use space for bus only and/or segregated cycle lanes	4	3	3	2	3	4	3	4	3	5	4	2	1	1	4	2	48	37
Ref.15	Active Travel	New NMU Route	Online	Rectory Lane	NMU route between West Winch, the new development and North Runcton via Rectory Lane	2	3	4	3	4	5	3	1	3	1	4	3	3	3	3	3	48	37
Ref.20	Active Travel	New NMU Route	Offline	A10	New segregated cycleway and footway parallel to the A10 on the Eastern side	4	5	5	4	1	4	3	1	4	4	5	1	1	2	2	2	48	37
Ref.32	Active Travel	New NMU Crossing	Online	WWHAR	Raised tables / signal crossings at key entry/exit points on WWHAR	2	2	5	1	3	3	2	4	3	1	4	3	3	3	3	5	47	40
Ref.45	Rail Improvement	New Rail Station	Offline	Fen Line	Aspirational	5	3	3	5	5	1	5	1	5	4	1	1	5	1	1	1	47	40
Ref.53	Traffic Calming	Speed Limit Reduction	Online	Area Wide	20 MPH on residential roads across the West Winch area and new housing development	2	1	4	1	2	2	2	3	4	2	4	5	3	4	4	3	46	42
Ref.31	Bus Improvement	Park and Ride	Offline	New Housing Development	New park and ride in housing development for trips to King's Lynn (Via large employment/commercial centres) with regular and buses (Would require a new large car park either within the new development or nearby)	5	2	2	5	5	1	5	2	2	5	1	2	5	1	1	1	45	43

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Ref.61	Active Travel	Junction Improvement	Online	WWHAR	Dutch style roundabouts instead of standard roundabouts along the WWHAR and development accesses on the existing A10	3	4	4	2	1	4	3	1	4	2	5	3	2	2	2	3	45	43
Ref.13	Active Travel	New NMU Route	Online	Rectory Lane / Fair Green / Middleton / Blackborough End	New NMU route between West Winch and local villages such as North Runcton, Fair Green, Middleton and Blackborough End via Rectory Lane	2	3	4	1	3	5	3	1	3	1	5	1	3	3	3	3	44	45
Ref.18	Active Travel	New NMU Crossing	Online	Rectory Lane / WWHAR intersection	Provide Rectory Lane at grade NMU crossing instead of proposed ramp at WWHAR	1	4	4	1	2	5	2	1	2	1	2	4	2	4	5	4	44	45
Ref.6	Bus Improvement	Bus Priority	Online	Hardwick Roundabout	Bus gate at Hardwick roundabout to prioritise buses travelling between King's Lynn and the A10 south of Hardwick roundabout	3	2	3	5	4	1	5	1	4	2	3	2	2	2	3	2	44	45
Ref.62	Active Travel	Signage/Information	Online	Area Wide	Signage strategy across the local highway and PRow networks, identifying local destinations, services and walk/cycle times.	1	2	3	1	2	3	3	2	3	2	1	4	2	5	5	5	44	45
Ref.21	Active Travel	New NMU Crossing	Online	Chequers Lane / WWHAR intersection	Chequers Lane NMU at grade crossing	2	4	4	1	2	2	2	1	2	1	3	4	2	4	5	4	43	49
Ref.12	Active Travel	New NMU Route	Offline	Quarry Freight Rail Lines	NMU on existing freight rail lines (to/from quarries and Bawsey Country Park)	2	3	5	1	1	5	1	1	2	1	5	1	5	3	2	4	42	50
Ref.17	Active Travel	Upgraded Footway	Online	Rectory Lane	Widening along Rectory Lane and/or Chequers Lane for footways	1	4	3	2	3	3	3	1	3	1	5	3	4	2	2	2	42	50
Ref.19	Active Travel	New NMU Crossing	Online	Chequers Lane / WWHAR intersection	Chequers Lane NMU crossing ramp	2	4	5	2	2	2	2	1	3	1	4	2	4	3	3	2	42	50
Ref.46	Rail Improvement	Rail Service Improvement	Online	Fen Line	More frequent rail services on the Fen Line	3	1	4	5	5	1	5	1	4	3	1	1	5	1	1	1	42	50
Ref.57	Micromobility	Micromobility policy	Online	Area Wide	Permit Micromobility (e-bike / e-scooter) area wide	4	3	1	4	1	1	5	3	3	4	1	3	1	1	4	3	42	50
Ref.14	Active Travel	New NMU Route	Offline	East of West Winch	Entirely New active travel route between West Winch, the new development and North Runcton	2	2	5	3	4	5	3	1	3	1	5	1	2	1	1	2	41	55
Ref.60	Active Travel	New NMU Route	Online	RB3	Upgrade to RB3 with paving and widening to support more pedestrians and cyclists	1	3	5	2	1	4	1	1	2	1	3	3	2	4	4	4	41	55
Ref.29	Active Travel	Upgraded NMU Route	Online	Nar Valley Way	Nar Valley way upgrade with paving and widening to support cyclists	3	3	5	2	1	4	1	1	3	2	2	3	3	3	2	2	40	57
Ref.59	Traffic Calming	Speed Limit Reduction	Online	Rectory Lane / Chequers Lane	Lower speed limits on Rectory Lane and Chequers Lane	2	1	4	1	2	2	2	1	2	1	2	5	3	4	5	3	40	57
Ref.48	Active Travel	New NMU route	Online	A47	New NMU route along A47 between Hardwick Roundabout and WWHAR	2	4	5	2	1	5	2	2	2	1	3	2	3	1	2	2	39	59
Ref.49	Active Travel	New NMU route	Online	A47	New NMU route along A47 between Hardwick Roundabout and North Runcton/Fair Green	2	4	5	2	1	5	2	2	2	1	3	2	3	1	2	2	39	59
Ref.28	Active Travel	Upgraded Footway	Online	Nar Valley Way	Nar Valley upgrade with paving to support more pedestrians	2	3	3	1	1	3	1	1	2	1	1	4	4	4	3	3	37	61
Ref.51	Bus Improvement	Bus Priority	online	Hardwick Roundabout	Hardwick Roundabout bus lane	3	2	3	3	5	1	3	1	2	2	1	2	2	2	3	2	37	61
Ref.27	Active Travel	New NMU Route	Offline	West of West Winch	West Winch to Nar Valley Way Active Travel Route	3	3	4	2	1	5	2	1	3	2	2	1	3	1	1	2	36	63
Ref.47	Active Travel	New NMU route	Offline	West of West Winch	New NMU route to Saddle Bow over Fen Line and River Nar	2	4	5	1	1	5	2	1	2	2	3	1	3	1	1	2	36	63
Ref.63	Active Travel	Upgraded NMU Route	Online	Area Wide	Surface upgrades to material suitable for all journey purposes and seasons. Where not possible, alternative routes to be provided.	1	1	3	1	2	3	3	2	2	2	2	3	2	3	3	3	36	63
Ref.58	Micromobility	Micromobility charging	Online	Area Wide	Micromobility charging facilities as key locations area wide	1	3	1	2	1	1	5	2	2	3	1	2	1	3	3	3	34	66