## Annex A Suggested mitigation interventions, costs and delay benefits

	Equivalent change in flow (capacity increase/decrease or vehicle trip increase/decrease) Relative to 2008 Baseline			Impact of LDF Development and Intervention Measures (Cost of Congestion/Delays) Relative to 2008 Baseline			Cost of Intervention up to 2026 (2010 Baseline)			
Intervention							Revenue Cost	Revenue Cost	Capital Cost	Total Cost (2011-2026)
	2016	2021	2026	2016	2021 (inc AYP1)	2026 (inc AYP1)	£m/Year	£m 15 Years	£m	£m
Vehicular Trips am Peak	42604	44950	48398	42604	44950	48398				
Increase in Number of Trips	9%	14%	23%	9%	14%	23%				
Do Nothing - Indicative Cost of Congestion Total £m (2008 Base =£37m)				56	78	104				
Do Nothing - Indicative Cost of Congestion % Increase				54%	113%	183%				
Protection Measures (Residential Areas)				0%	10%	25%	0.0	0.0	1.0	1.0
Access Restraint (City Centre)				0%	5%	10%	0.0	0.0	1.0	1.0
Infrastructure (Capacity Improvements) Basic ORR (Access York Phase 2), James St. Link etc.				-5%	-19%	-31%	0.0	0.0	35.0	35.0
Infrastructure (Capacity Improvements) Enhanced ORR, James St. Link etc.				-5%	45%	-73%	0.0	0.0	100.0	100.0
Access York Phase 1				4%	inc.	inc.	0.0	0.0	25.0	25.0
Infrastructure (Sustainable Travel) Park & Ride, Cycle Network, Bus Priorities	-1%	-2%	-3%	-6%	-12%	-21%	0.1	1.5	30.0	31.5
Use of Peak Shoulders (7:00-8:00, 9:00-10:00, 16:00-17:00, 18:00-19:00)	-3%	4%	-5%	-18%	-24%	-35%	0.1	1.5	0.0	1.5
Smarter Choices (Behavioural Change, Sustainable Travel promotion, bus subsidy etc.)	-2%	4%	-6%	-12%	-24%	42%	0.7	10.5	0.0	10.5
After Mitigatation (No ORR Upgrade)				14%	68%	120%	0.9	13.5	57.0	70.5
After Mitigation (Basic ORR (Access York Phase 2))				9%	49%	89%	0.9	13.5	92.0	105.5
After Mitigation (Enhanced ORR)				9%	23%	47%	0.9	13.5	157.0	170.5
Modelled										
Estimated										
Louingtow	Extent of Works			2016		20	21	20	2026	
Infrastructure (Capacity Improvements) Basic ORR (Access York Phase 2), James St. Link etc.	Upgraded roundabouts Wetherby Road to Strensall			roundabout upgraded with Access diameter					As 2021	
Infrastructure (Capacity Improvements) Enhanced ORR, James St. Link etc.				roundabout upgraded with Access		+ Grade Separated junctions at A19, Millfield Lane & A59. Dual Carriageway from Wetherby Road to Clifton Moor		As 2021		