

Transport Assessment



Issue and revision record

Revision 1	Date 07/02/2014	Originator CE	Checker DC	Approver DD	Description Standard Draft v1
2	16/03/2014	CE	DC	DD	Draft v2
3	29/05/2014	CE	DD	EM	Final issue

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it..



Contents

Chapter	Title	Page
1	Introduction	1
1.1	Introduction	1
1.2	Approach	
1.3	Document structure	
2	Transport Strategy Methodology	5
2.1	Introduction	5
2.2	Our Approach	5
2.3	Data Collection	10
2.4	Consultation	17
2.5	Summary	17
3	Anfield Stadium – Context and History	18
3.1	Setting the scene	18
3.2	Strategic and Local Accessibility	18
3.3	Planning history	22
3.4	Summary	24
4	Transport Policy Framework	26
4.1	Introduction	26
4.2	National Planning Policy Framework (March 2012)	
4.3	The Development Plan	27
4.4	"A Plan for Liverpool" Liverpool's Unitary Development Plan	27
4.5	Emerging Development Plan	28
4.6	Transport Related Strategies and Guidance	30
4.7	Summary	33
5	Future Developments	34
5.1	Overview	34
5.2	Liverpool Waters	34
5.3	Great Homer Street Regeneration	34
5.4	Anfield Comprehensive UTC	36
5.5	Anfield Spatial Regeneration Framework	
5.6	Future Developments Summary	40
5.7	Merseyside Transport Trends	40
5.8	Summary	41
6	Benchmarking and Best Practice	42
6.1	Introduction	42
6.2	Door to Turnstile Report	
6.3	Case Studies	
6.4	Summary	



7	Existing Stadium	46
7.1	Introduction	46
7.2	Stadium Facilities	46
7.3	Seating Allocations	48
7.4	Hospitality Arrangements	48
7.5	General Admission	48
7.6	Employees and Staffing	49
7.7	Season Tickets and Supporter Catchments	49
7.8	Match Day Attendance	52
7.9	Match Day Traffic Management Plan	53
7.10	Football Match Parking Zones (FMPZs)	57
7.11	LFC Match day Car Parking	59
7.12	Outside Broadcast Units	60
7.13	Accident Review	60
7.14	Summary	
8	Match Day Stadium Accessibility	63
8.1	Introduction	
8.2	Car	
8.3	Taxis	
8.4	Coaches and minibuses	
8.5	Train travel	
8.6	Soccerbus	
8.7	City Centre Express Bus (917)	
8.8	Scheduled bus services	
8.9	Walking	
8.10	Cycling	
8.11	Motorcycles	
8.12	Summary	
0	Possiling Model Splits and Travel Characteristics	101
9	Baseline Modal Splits and Travel Characteristics	101
9.1	Introduction	101
9.2	Data analysis	
9.3	Survey response rate	
9.4	Travel Characteristics	
9.5	2013 Baseline Modal Split	
9.6	2013 Baseline Modal Split – Weekday	
9.7	2013 Baseline Modal Split – Weekend	
9.8	Comparison of 2013 weekday and weekend (all ticket types)	
9.9	Vehicle occupancy	
9.10	Number of vehicles and parking locations	
9.11	Comparison of 2013 to 2008	
9.12	Summary	113
10	Proposed Development	115

Liverpool Football Club Stadium Expansion Transport Assessment



10.1	Overview	115
10.2	Proposed Development Characteristics	
10.3	Interaction with SRF	116
10.4	Road closures	116
10.5	Match day traffic management plan	
10.6	Parking	
10.7	Servicing	121
10.8	Outside broadcast units	121
10.9	Pedestrian circulation and accessibility	121
10.10	Summary	121
11	Phase 1 Modal Movements	122
11.1	Overview	122
11.2	Calculations Methodology	
11.3	Phase 1 demand and capacity review	
11.4	Post-match travel	
11.5	Phase 1 Summary	
12	Proposed Interventions and Strategy	138
12.1	Introduction	138
12.2	Previous Intervention Measures	
12.3	Proposed Intervention Measures	
12.4	Measure 1: Formalisation of Walton Breck Road road closure TRO	
12.5	Measure 1.1: Sleepers Hill taxi drop off/pick up area	
12.6	Measure 1.2: Oakfield Road taxi drop off/pick up area	
12.7	Measure 1.3: Arkles Lane taxi drop off/pick up area	
12.8	Measure 1.4: Anfield Road 'Taxi One' drop off area	
12.9	Measure 1.5: Various locations for Taxi Pick Ups	
12.10	Measure 1.6: Robson Street Bus Stands	
12.11	Measure 1.7: Existing bus stop signage to diversion routes	158
12.12	Measure 1.8: Traffic Management Personnel	160
12.13	Measure 2.0: Route Diversions for scheduled bus services during period of road closures	
12.14	Measure 3.0: Extension to coach parking facilities	168
12.15	Measure 4.0: Structure to City Centre express services before and after matches	170
12.16	Measure 5.0: Improved Soccerbus Service to / from Sandhills	172
12.17	Measure 6.0: Disabled drop off area and disabled parking	174
12.18	Measure 7.0: Extension to parking restriction along Walton Breck Road at the junction of Evertor Road	
12.19	Measure 8.0: Additional cycle parking facilities	178
12.20	Measure 9.0: Pedestrian Access Improvements in vicinity of stadium	178
12.21	Measure 10.0: Walk route to City Centre	181
12.22	Measure 11.0: Walk route to Sandhills	
12.23	Measure 12.0: Walk route to Kirkdale	185
12.24	Measure 13.0: Integrated match day ticketing	187
12.25	Measure 14.0: Marketing Strategy for Transport Access Options	188
12.26	Measure 15.0: Dwell Time Initiatives	189
12.27	Measure 16.0: Staff Travel Plan	190



12.29 Post Consultation (Stage D) measures 193 13 Phase 2 Modal Movements 194 13.1 Overview 194 13.2 Calculations Methodology 194 13.3 Demand and Capacity Review 197 13.4 Target Modal Splits 199	12.28	Scheme 17.0: Transport Working Group	191
13.1 Overview 194 13.2 Calculations Methodology 194 13.3 Demand and Capacity Review 197 13.4 Target Modal Splits 199 13.5 Vehicle summary 206 13.6 Target Mode Splits application 208 13.7 Phase 2 Summary 209 14 Summary 211 Appendices 214 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 5.1: Scope of the SRF 39 Figure 7.2: Season Ticket Postcode Plot 55 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 55 Figure 7.7: Accident locations 2008-2013 66 Figure 8.1: Main vehicle routes to the stadium	12.29		
13.1 Overview 194 13.2 Calculations Methodology 194 13.3 Demand and Capacity Review 197 13.4 Target Modal Splits 199 13.5 Vehicle summary 205 13.6 Target Mode Splits application 208 13.7 Phase 2 Summary 209 14 Summary 211 Appendices 214 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 5.1: Scope of the SRF 39 Figure 7.2: Season Ticket Postcode Plot 55 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 55 Figure 7.7: Accident locations 2008-2013 66 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations </td <td></td> <td></td> <td></td>			
13.2 Calculations Methodology 194 13.3 Demand and Capacity Review 197 13.4 Target Modal Spitts 199 13.5 Vehicle summary 205 13.6 Target Mode Spits application 208 13.7 Phase 2 Summary 209 14 Summary 211 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 5.1: Scope of the SRF 20 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Scope of the SRF 39 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.5: Post-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 8.1: Major Off Street Parking Locations 66 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Scheduled bus	13	Phase 2 Modal Movements	194
13.3 Demand and Capacity Review 197 13.4 Target Modal Splits 199 13.5 Vehicle summary 205 13.6 Target Mode Splits application 208 13.7 Phase 2 Summary 209 14 Summary 211 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure 2.1: Transport Strategy Approach 5 Figure 3.2: Local Context 19 Figure 5.1: Scope of the SRF 39 Figure 7.2: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentations of supporters by ward 51 Figure 7.5: Post-match Traffic Management Plan 55 Figure 7.6: FMPZ boundary 58 Figure 7.7: Main vehicle routes to the stadium 64 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Major Off Stre	13.1	Overview	194
13.4 Target Modal Splits 199 13.5 Vehicle summary 205 13.7 Phase 2 Summary 208 13.7 Phase 2 Summary 209 14 Summary 211 Appendices 214 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure 8.1: Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Pre-match Traffic Management Plan 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Main vehicle routes to the stadium 64 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Koy walking routes	13.2	**	
13.5 Vehicle summary	13.3		
13.6 Target Mode Splits application	13.4	Target Modal Splits	199
13.7 Phase 2 Summary	13.5		
Appendices	13.6		
Appendices 214 A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figures Figures 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.5: Scheduled b	13.7	Phase 2 Summary	209
A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figures Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 55 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81	14	Summary	211
A. Scoping Report (as agreed by LCC) 215 B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figures Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81 99			
B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure S. Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.2: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.6: Key walking routes 97 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 118 Figure 12.1: Plan of previous measures 140 Figure	Appendic	es	214
B. Letters of support from transport operators 216 C. Draft Traffic Management Plan 217 Figure S. Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.2: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.6: Key walking routes 97 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 118 Figure 12.1: Plan of previous measures 140 Figure	A.	Scoping Report (as agreed by LCC)	215
Figures 5 Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.2: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.5: Post-dent locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.7: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: <	B.		
Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 118	C.	Draft Traffic Management Plan	217
Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 118			
Figure 2.1: Transport Strategy Approach 5 Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Maior Off Street Parking Locations 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 97 F	Figures		
Figure 3.1: Strategic Context 19 Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.6: Key walking routes 97 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 99 Figure 12	J	Transport Strategy, Approach	E
Figure 3.2: Local Context 20 Figure 5.1: Scope of the SRF 39 Figure 7.1: Existing Anfield Stadium layout 47 Figure 7.2: Season Ticket Postcode Plot 50 Figure 7.3: Concentrations of supporters by ward 51 Figure 7.4: Pre-match Traffic Management Plan 55 Figure 7.5: Post-match Traffic Management Plan 56 Figure 7.6: FMPZ boundary 58 Figure 7.7: Accident locations 2008-2013 61 Figure 8.1: Main vehicle routes to the stadium 64 Figure 8.2: Major Off Street Parking Locations 66 Figure 8.3: Station locations and walk routes 74 Figure 8.4: Soccerbus route 81 Figure 8.5: Scheduled bus services and bus stops 91 Figure 8.6: Key walking routes 97 Figure 8.7: Regional Cycle Route 81 99 Figure 10.1: Plan of Highway Closures 118 Figure 12.2: Proposed pre-match traffic management plan 144	•		
Figure 5.1: Scope of the SRF	•		
Figure 7.1: Existing Anfield Stadium layout	•		
Figure 7.2: Season Ticket Postcode Plot	-	·	
Figure 7.3: Concentrations of supporters by ward	-		
Figure 7.4: Pre-match Traffic Management Plan	-		
Figure 7.5: Post-match Traffic Management Plan	-		
Figure 7.6: FMPZ boundary	-	· · · · · · · · · · · · · · · · · · ·	
Figure 7.7: Accident locations 2008-2013	-		
Figure 8.1: Main vehicle routes to the stadium	•		
Figure 8.2: Major Off Street Parking Locations	•		
Figure 8.3: Station locations and walk routes	0	Mainr Off Street Parking Locations	0 - 66
Figure 8.4: Soccerbus route			
Figure 8.5: Scheduled bus services and bus stops	-		
Figure 8.6: Key walking routes	•		
Figure 8.7: Regional Cycle Route 81	O		
Figure 10.1: Plan of Highway Closures	•		
Figure 12.1: Plan of previous measures	•		
Figure 12.2: Proposed pre-match traffic management plan	-		
Figure 12.3: Proposed post-match traffic management plan			
Figure 12.4: Proposed Informal Taxi waiting, pick up and drop off area – Sleepers Hill 147	•		
	-	• • •	



Figure 12.6:	Proposed Informal Taxi waiting, pick up and drop off area – Arkles Lanes	151
	Anfield Road 'Taxi One' drop off/pick up area	
	Additional Taxi Pick-Up locations	
Figure 12.9:	Robson Street Bus Stands	157
Figure 12.10):Walton Breck Road existing bus stop signage	159
Figure 12.11	:Existing Bus Routes (drawings A-C)	162
Figure 12.12	2: Proposed Diversions for Bus Routes (drawings A-C)	165
Figure 12.13	B: Extension to Coach Parking facilities	169
Figure 12.14	4: Proposed City Centre Express Route	171
Figure 12.15	5: Improved Soccerbus Route	173
Figure 12.16	S:Disabled drop off / pick up areas	175
Figure 12.17	7:Extension to parking restriction along Walton Breck Road at the junction of Everton Valley Road $_$	177
Figure 12.18	3: Pedestrian Access Improvements	180
Figure 12.19	P: City Centre Walk Route	182
Figure 12.20):Walk route to Sandhills	184
Figure 12.21	:Walk route to Kirkdale	186
Tobloo		
Tables		
Table 1.1:	Transport Assessment Structure	3
Table 2.1:	Supporter Travel Survey Questions	12
Table 2.2:	Train Occupancy criteria	15
Table 7.1:	Seating Schedule	48
Table 7.2:	Postcode Analysis – Season ticket holders	49
Table 7.3:	2012/13 fixtures	
Table 7.4:	Current LFC Controlled Match Day Parking	59
Table 8.1:	Observed Average Taxi Occupancy	71
Table 8.2:	Number of services per hour at each station	75
Table 8.3:	Train occupancy criteria	77
Table 8.4:	Weekday spare capacity by direction and hour	78
Table 8.5:	Weekend spare capacity by direction and hour	79
Table 8.6:	Spare capacity review of trains by people numbers	79
Table 8.7:	Average time in between departures	
Table 8.8:	Average time in between departures post-match	85
Table 8.9:	Total number of people using Soccerbus pre and post-match	
Table 8.10:	Average time in between departures	88
Table 8.11:	City Centre Express Spare Capacity	90
Table 8.12:	Services in the vicinity of Anfield Stadium	92
Table 8.13:	Bus Services per hour serving Anfield Stadium weekdays (both directions)	93
Table 8.14:	Bus Services per hour serving Anfield Stadium Saturdays (both directions)	
Table 8.15:	Bus Services per hour serving Anfield Stadium Sundays (both directions)	
Table 8.16:	Accident analysis for pedestrians on match days	
Table 9.1:	Survey responses by ticket type	
Table 9.2:	Journey Origins Summary (all ticket types)	
Table 9.3:	Modal split for a weekday (all ticket types, weighted)	
Table 9.4:	Modal split for a weekend (all ticket types, weighted)	
Table 9.5:	Average occupancy of vehicles	
Table 9.6:	Number of vehicles and parking location	
Table 9.7:	Estimated number of taxi trips	112

Liverpool Football Club Stadium Expansion Transport Assessment



Table 9.8:	2008 Mode Split (AS3)	113
Table 10.1:	Capacity by scenario	115
Table 10.2:	Match day LFC controlled parking close to the stadium	119
Table 10.3:	Match day LFC controlled parking remote from the stadium	120
Table 11.1:	Absolute baseline capacities by mode (no. people) for a weekday	124
Table 11.2:	Absolute baseline capacities by mode (no. people) for a weekend	
Table 11.3:	Existing spare capacity in 2013 (Weekday)	125
Table 11.4:	Existing spare capacity in 2013 (Weekend)	125
Table 11.5:	Stadium capacity by seat numbers	126
Table 11.6:	Baseline 2013 modal splits by ticket type applied to Phase 1 capacity	
Table 11.7:	Phase 1 additional movements - weekday	128
	Phase 1 additional movements - weekend	
	No. additional private vehicles for Phase 1 (Weekday)	
	No. additional private vehicles for Phase 1 (Weekend)	
	No. of additional taxi movements for Phase 1 (Weekday)	
	No. of additional taxi movements for Phase 1 (Weekend)	
	Net change in vehicle/trip numbers for Phase 1 (Weekday)	
	Net change in vehicle/trip numbers for Phase 1 (Weekend)	
	Movement profile of proposed taxi users (no. vehicle trips) for Phase 1	
	Weekday number of people by mode summary – Phase 1	
Table 11.17:	Weekend number of people by mode summary – Phase 1	137
Table 12.1:	Summary of previous measures	139
Table 12.2:	Proposed interventions overview	141
Table 12.3:	Staff Travel Plan Actions	190
Table 13.1:	Maximum capacity review (weekday)	196
Table 13.2:	Maximum capacity review (weekend)	196
Table 13.3:	As Existing demand capacity review for Phase 2 (weekday)	197
Table 13.4:	As Existing demand capacity review for Phase 2 (weekend)	198
Table 13.5:	As Existing Phase 2 scenario number of vehicles summary	
Table 13.6:	Phase 2 proposed modal movement ranges (weekday)	203
Table 13.7:	Phase 2 proposed modal movement ranges (weekend)	203
Table 13.8:	Summary of numbers of people for Phase 2 by mode share for both scenarios (weekday)	204
Table 13.9:	Summary of numbers of people for Phase 2 by mode share for both scenarios (weekend)	204
Table 13.10:	Review of spare capacity by mode (Target Split, weekday)	204
Table 13.11:	Review of spare capacity by mode (Target Split, weekend)	205
Table 13.12:	Summary of numbers of cars for Phase 2 (weekday)	205
Table 13.13:	Summary of numbers of cars for Phase 2 (weekend)	206
Table 13.14:	Summary of number of taxis for Phase 2 (Weekday)	207
Table 13.15:	Summary of number of taxis for Phase 2 (Weekend)	207
Table 13.16:	Phase 1 Target Mode Splits (weekday)	208
Table 13.17:	Phase 1 Target Mode Splits (weekend)	209
Table 13.18:	Phase 2 weekday summary numbers of people	210
Table 13.19:	Phase 2 weekend summary numbers of people	210
Charts		
Chart 5.1:	Traffic Growth in Merseyside	
Chart 7.1:	Changing profiles of match days for 5 previous 5 full seasons	
Chart 8.1:	Observed Taxi Arrival Profile by Vehicle for a Saturday Game	70

Liverpool Football Club Stadium Expansion Transport Assessment



Chart 8.2:	Number of people alighting by station for match and non-match days pre-match	76
Chart 8.3:	Number of people boarding by station for match and non-match days post-match	77
Chart 8.4:	Number of Soccerbus Services Pre-match	82
Chart 8.5:	Number of People Arriving by Soccerbus	83
Chart 8.6:	Average Number of People Departing Per Soccerbus	84
Chart 8.7:	Number of People Leaving by Soccerbus	85
Chart 8.8:	Number of City Centre Express (917) Bus Services Prior to Game	88
Chart 8.9:	Total Number of People Arriving by Bus Service 917	89
Chart 9.1:	Journey origin on match day of survey respondents by ticket type	104
Chart 9.2:	Weekday arrival profiles	107
Chart 9.3:	Weekend arrival profiles	107
Chart 9.4:	Weekday and Weekend (all ticket types) mode split comparison	110
Chart 11.1:	Change in vehicle numbers 2008 to 2013 to Phase 1 (Weekend)	132
Chart 13.1:	Comparison of number of vehicles 2008 – Phase 2	206



1 Introduction

1.1 Introduction

- 1.1.1 Liverpool Football Club and Athletics Grounds Ltd (LFC) has appointed Mott MacDonald to prepare this Transport Assessment (TA) in support of the proposal to expand their existing stadium in Anfield to increase seating capacity from c.45,000 to c.60,000.
- 1.1.2 The expansion will be focused on the Main and Anfield Road stands, with the development proposed to be undertaken across two phases:
 - Phase 1 providing an additional c.8,300 seats (approximately 55% for Hospitality tickets and the remainder for General Admission) through the redevelopment of the Main stand (detailed planning application); and
 - Phase 2 providing a further c.4,800 seats all for General Admission tickets through the redevelopment of the Anfield Road stand (outline planning application).
- 1.1.3 In addition to this TA report, a separate Interim Staff Travel Plan (TP) (ref. C3/3) has been prepared in relation to employees of LFC located at Anfield Stadium and this is available as a separate stand-alone document.
- 1.1.4 A shorter, summary version of this TA document, focusing on the key points, has also been prepared and is called the Transport Strategy (ref. C1/3).
- 1.1.5 This report comprises the transport assessment of the proposal, and includes assessment and information on the following topics:
 - The operation of the existing stadium;
 - How supporters travel to the stadium on match days currently and in the future;
 - What is proposed to change at the stadium and in the surrounding area;
 - How the transport network may need to change to allow additional spectators to travel safely to the stadium (the formulation of a transport strategy);
 - The interventions that will be needed to help realise the transport strategy for the improved stadium; and
 - The effective baseline position in respect of previous planning permissions and interventions implemented.

1.2 Approach

- 1.2.1 The focus of this TA has been to ensure that a modal choice can be provided to supporters and that sustainable modes of transport are attractive and accessible to reduce reliance upon private vehicles for match day travel.
- 1.2.2 To ensure this can be achieved, a baseline understanding of existing travel patterns was required, as well as extensive engagement and consultation with key stakeholders to ensure that the proposals in terms of transportation are realistic, achievable and feasible.



- 1.2.3 Importantly, no numerical junction or traffic impact assessment is to be undertaken as part of this TA, and no area-wide modelling is considered to be required. The following points are worthy of note and highlight the reasons that no wide-scale traffic impact assessment should be required as part of this application:
 - Car parking spaces facilitated by the club will not be substantially changing, with parking
 provided by the club restricted to certain users (generally hospitality ticket holders,
 disabled and some season ticket holders) and not available to the majority of supporters;
 - The existing Football Match Parking Zones (FMPZ's) around the stadium complex are
 effective at deterring match day parking, with a reduction in those travelling to the stadium
 by car recorded since their implementation in 2008;
 - No new highway capacity improvements are planned for the area such as modifications to junctions or widening of strategic roads;
 - There are a range of public transport options available for travel to the site providing supporters with a modal choice, reducing reliance upon the car;
 - Junction improvements or other capacity increasing measures would only be required for a short time on a less than weekly basis which would only serve to encourage additional traffic, providing additional capacity on non-match days which may make car travel to the area more attractive.
- 1.2.4 This approach has been agreed with Liverpool City Council (LCC) through a scoping strategy report which was issued and approved early into the process (and is provided in Appendix A).
- 1.2.5 The methodology which has been followed makes the best use of existing transport networks, and seeks to enhance the quality, safety and accessibility of these, making the prospect of sustainable travel more attractive in relation to that of the private car.
- 1.2.6 In general, the intervention measures proposed to mitigate against the impact from an increase in supporters are designed to maximise the efficiency of the systems in place in order to ensure that access to the stadium is achieved with the least overall impact upon the network and the stadium's immediate neighbours.
- 1.2.7 The key information driver behind the transport strategy for the proposed stadium expansion is the establishment of the existing modal split of the stadium, and its projection into the future with the additional seating capacity operational. The methodology for the definition of the modal split is given in later sections and this takes into account the expected impact of the proposed mitigation measures.

1.3 Document structure

1.3.1 This document has been prepared in close consultation with a wide range of key stakeholders, and as will be discussed later in this report, the TA also draws upon the significant amount of historic work which has been undertaken as part of previous planning permissions for changes to Anfield Stadium including its proposed re-location to Stanley Park.



1.3.2 It is presented in a format which helps to tell the story of the stadium, and present the proposed development, its impact and the mitigation measures in a logical manner, which is briefly outlined below:

Table 1.1: Transport Assessment Structure

Cha	Chapter Outline		
Cna	pter	Outline	
2	Transport Strategy Methodology	The proposed methodology devising the Transport Strategy and how it intends to facilitate the additional supporters. The methodology behind our data collection exercises is also presented here.	
3	Anfield Stadium – Context and History	Sets the scene outlining the vicinity and setting of the stadium and provides an overview of previous planning application for a new stadium in Stanley Park and the implications of these.	
4	Transport Policy Framework	Outlines relevant policy documentation relative to the stadium areas.	
5	Future Developments	Presents other substantial developments which are proposed or committed and the impact these may have upon the stadium.	
6	Benchmarking and Best Practice	This chapter outlines the impact that travel planning mitigation measures have had at other locations.	
7	Existing Stadium	Summarises how the stadium currently operates the facilities it provides on match and non-match days.	
8	Match Day Stadium Accessibility	Provides a breakdown by mode of how the stadium can be accessed on match days.	
9	Baseline Modal Splits and Travel Characteristics	The 2013 baseline modal splits are presented, together with information on travel characteristics' such as vehicle occupancies.	
10	Proposed Development	Presents an overview of the expansion proposal for the stadium.	
11	Phase 1 Modal Movements	Building upon the baseline modal splits, the capacity of the transport network is reviewed in the context of it accommodating the additional supporters for Phase 1, as per the existing modal splits.	
12	Proposed Interventions	Summary of the proposed strategy and interventions to mitigate and accommodate the additional capacity.	



Cha	pter	Outline
13	Phase 2 Modal Movements	As Existing and Target mode split scenarios are assessed to ensure that Phase 2 can be accommodated and the full capacity of the stadium post development can be accommodated by the transport network.
14	Summary	A summary of this Transport Assessment is provided, highlighting the key points.



2 Transport Strategy Methodology

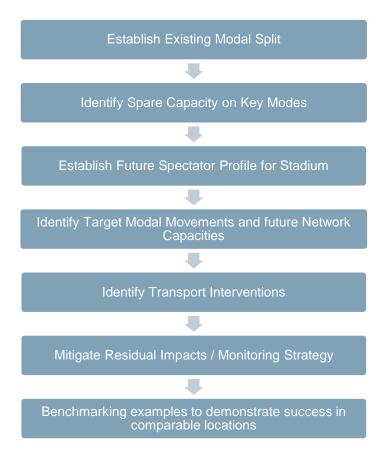
2.1 Introduction

- 2.1.1 This TA builds upon previous work undertaken for historical planning applications with regards to LFC's stadium and makes use of this data (where appropriate). This is supplemented with new data collection where necessary to begin to understand how the proposed additional capacity at the stadium will travel to matches and be accommodated upon the transport network.
- 2.1.2 How the additional supporters will be facilitated is set out in a Transport Strategy which will provide a framework for ensuring impacts are identified and minimised.

2.2 Our Approach

2.2.1 The approach that has been adopted for this strategy is intended to be robust and transparent, so that it is evident on how decisions have been made in developing it for the improved stadium. Consultation on this approach was undertaken at several stages with Liverpool City Council. The framework for this approach is summarised below.

Figure 2.1: Transport Strategy Approach





Establish existing modal split

- 2.2.2 Baseline modal splits have been established which will feed into the strategy and be developed upon to understand and determine future travel patterns as outlined later in Chapter 9.
- 2.2.3 These were derived from undertaking travel surveys with home supporters.
- 2.2.4 The surveys differentiated between Hospitality and General Admission spectators, and also provided an understanding of vehicle occupancies and arrival profiles into the vicinity of the stadium.

Identify spare capacity on key modes

- 2.2.5 The location of the stadium, just to the north of the City Centre of Liverpool and its accessibility to the city's transport network means that there is a wide variety of ways people can travel to and from the stadium. This allows a modal choice to the supporters but it is the sustainable modes which will need to work harder to accommodate the additional supporters which the expanded stadium will generate. Where insufficient capacity on these modes to accommodate additional demand was identified, then other travel opportunities have been explored and intervention measures implemented to enable the additional capacity to be accommodated.
- 2.2.6 To help identify existing capacities by modes of travel, the following surveys / observations were undertaken in addition to the supporter travel surveys:
 - The occupancy of trains arriving at Sandhills and Kirkdale before kick-off, and departing after final whistle;
 - The usage of Soccerbus before and after the match;
 - The usage of the 917 bus service to and from the City Centre;
 - The usage of taxis;
 - Occupancy of match day off-street car parks;
 - Occupancy numbers and origins of home supporter coaches;
 - The usage and locations of on-street parking, within and external to the controlled parking zones;
 - The main pedestrian walk routes from the wider area and identification of significant barriers to movement;
 - Taxi routes; and
 - Turn-arounds, drop-off and pick up points.
- 2.2.7 The methodology for these is outlined later in this chapter with the outputs presented in detail in Chapters 8 and 9 and also survey observations drawn upon for calculations later in the TA.



Establish future spectator profile for the stadium

- 2.2.8 The improved stadium will not only increase spectator capacity, but it will also be improving the facilities which will be available to spectators within and around the stadium complex. The composition of seating type will also improve when compared to existing, with the numbers of Hospitality seats increasing.
- 2.2.9 A review of current and future proposed seating composition at Anfield for Phase 1, followed by Phase 2, enables the identification of a spectator profile which the transport strategy seeks to accommodate.
- 2.2.10 It is accepted practice that for Phase 1, following a review of capacity and in recognition of the short timescales for realising change, the existing modal splits would still be applicable and extrapolated forwards to accommodate the additional capacity proposed in this phase. This approach assumes that the current trends for travel will continue and be unaffected by the proposed intervention measures, in recognition of the 'bedding in' time these will require before they begin to have a positive effect.
- 2.2.11 For Phase 2, a further review of capacity is undertaken with a modal share (%) range presented for each mode, highlighting an 'As Existing' and a 'Target' approach, with the actual modal share able to fall anywhere within these two figures to ensure the strategy is effective.
- 2.2.12 To recognise that the interventions may have begun to have an effect following phase 1, prior to the commencement of phase 2, an overview of the target mode splits against the phase 1 capacity is also presented.
- 2.2.13 A precedent with regards to this approach of calculating future demand in line with existing capacity was set by the recently approved Liverpool Waters development which used the same methodology, and similarly to this application, despite the size of the development, did not advocate any major traffic or junction alterations.

Development of the strategy

2.2.14 The Transport Strategy, devised to deliver the necessary interventions presented in this TA, are based upon the facilitating of mode shift away from private car use, with a key objective to not increase the proportions of car use for match day travel for Phase 1 and seek to reduce these proportions for Phase 2.



- 2.2.15 Proposed interventions are presented within this TA to improve supporter travel options, facilitate the additional capacity and mitigate against the impact of the expansion. These interventions will be split by phase of development, and will be a combination of:
 - Physical measures;
 - Operational measures:
 - Road safety measures; and
 - Promotional measures.
- 2.2.16 The interventions are organised within a series of five sub-strategies which include:
 - Traffic Management;
 - Public Transport;
 - Parking:
 - Pedestrians; and
 - Marketing and promotion.
- 2.2.17 These interventions will influence the behaviour of how supporters will travel to the stadium, impacting modal shares particularly for Phase 2, enabling the target modal shares to be developed as part of the overall transport strategy, with performance being reviewed going forwards.
- 2.2.18 The package of interventions has been developed in consultation with LCC and stakeholders to help ensure consensus in practicality and deliverability.
- 2.2.19 These are identified and discussed in Chapter 12.

Identify target modal movements for Phase 2

- 2.2.20 For Phase 2, the baseline (and Phase 1) modal splits presented by ticket type will be taken forward with a series of target modal splits calculated based upon identified spare capacity, modal flexibility and the ability to influence supporter travel through the proposed interventions building upon recognised achievements at other stadiums (outlined in Chapter 6), and demonstrating the ability of measures to influence travel behaviour.
- 2.2.21 The capacity review of each mode is mindful of the need to also accommodate non-match day users so a series of assumptions are applied to ensure the actual capacity available for supporters is not over estimated.
- 2.2.22 Certain modes are defined as having an unlimited capacity such as walking. Other modes have an undefinable capacity (such as car and dropped off). However we are not seeking to increase the proportions of the use of these modes, for example through providing additional car parking, recognising that there would be no benefit to supporters or the surrounding residential areas in promoting greater proportional use of unsustainable modes.



- 2.2.23 The capacity of taxi's as a mode to move supporters is also difficult to quantify due the influence of a range of factors, for example journey type, number of vehicles operating of the occupancy of the vehicles. For that purpose, so as to not overburden the mode, no increase in proportional use has been assumed, although this will result in an absolute increase in vehicles numbers. Discussions with the taxi operator representatives have revealed that this increase can be catered for with the existing vehicle fleet which serves Anfield on match days, so not actually increasing the number of vehicles in the area, but utilising more efficiently those which are already there.
- 2.2.24 The review of capacity of all modes needed to take into consideration the existing supporters already using the modes, and also for certain modes, such as buses, non-match day travellers who further reduce the capacity.
- 2.2.25 This review provides an understanding of existing capacity by mode over the build-up to the match and quantifies the number of additional supporters which could be moved by each mode during this period for Phase 2. This was supplemented by the data collection exercises which are outlined later in this chapter.
- 2.2.26 Once the number of supporters by mode is established and applied against the maximum capacity of each mode, a target modal share can be established. This exercise highlights areas of over-capacity to be addressed through the interventions to change or influence the demand and ensure that the modes can continue to operate within capacity.
- 2.2.27 This exercise is presented in Chapter 13.

Mitigate Residual Impact / Monitoring Strategy

- 2.2.28 The Transport Strategy has been developed to provide spectators with credible options for travelling to and from the stadium on match days in a way that minimises the wider impact of their travel. There are likely to be some residual impacts of the increased numbers travelling to the expanded stadium and appropriate mitigation is proposed to minimise the impacts.
- 2.2.29 To review these potential impacts and to ensure that the preferred transport strategy is as effective as envisaged, a suite of mitigation measure have been proposed, the achievements of which will be monitored by a Transport Working Group through the initiation of a Monitoring Strategy. This is presented in Chapter 12.

Benchmarking

2.2.30 Within Chapter 6, we will illustrate the success of several interventions (similar to those proposed) at comparable locations, to highlight their effectiveness and to demonstrate their ability to deliver either additional capacity or to support modal shift. The formation of a Transport Working Group has been recommended to undertake monitoring exercises to ensure the strategy is performing as anticipated.



2.3 Data Collection

- 2.3.1 This TA and the Transport Strategy contained herein has been compiled drawing upon a range of data sources and through conducting match day observations at several home matches on both weekdays and weekends within the 2013/14 season.
- 2.3.2 The observations, surveys, counts and data collection were undertaken at the following matches:
 - Weekday Wednesday 4th December 2013, LFC vs. Norwich City. Kick off was at 19:45;
 and
 - Weekend Saturday 7th December 2013, LFC vs. West Ham United. Kick off was at 15:00.
- 2.3.3 The attendance figures for the matches on these two days were:
 - 44,541 supporters at the weekday match; and
 - 44,781 supporters at the weekend match.
 - These represent 98.3% and 98.9% respectively of the current total stadium capacity (45,296).
- 2.3.4 It should be noted that assessing impacts of away supporters has been agreed with LCC as being not required since the nature of their travel is very varied, influenced by many variables such as the distribution of the away supporter fan base and the location of the away team.
- 2.3.5 The following data sets have been collected on these day (unless otherwise specified) to inform the baseline understanding of how travel to the stadium is currently undertaken.

Supporter Travel Surveys

- A series of travel surveys were undertaken with home supporters at the two home matches noted above in December 2013. This approach was favoured over telephone, online or postal surveys with registered season ticket holders (or other databases of LFC supporters). Registered season ticket holders were discounted as a reliable sample source due to the complexities of shared season ticket ownership and the under-representation of general admission ticket purchases.
- 2.3.7 The survey methodology is fully compliant with the Market Research Society (MRS) Code of Conduct. We used a mixed method approach to collect travel behaviour information from both season ticket holders, general admission home supporters and corporate/hospitality members.
- 2.3.8 A series of questions were asked to home supporters and their responses recorded and analysed to produce a baseline modal split.



- 2.3.9 The travel surveys were undertaken by one of three methods:
 - Face to face surveys undertaken by an experienced travel consultant to home supporters outside the stadium up to 3 hours prior to kick off, with the responses within 2 hours of kick off being undertaken from within the stadium itself, once supporters had entered through the turnstiles.
 - Information cards with details of a website where supporters could undertake the same survey online were issued to those who were unwilling or unable to complete the survey face to face to boost response rates. This survey remained open for participation for one week following each match.
 - Finally, self-completion paper surveys were distributed on the hospitality tables for hospitality ticket holders to complete by hand.
- 2.3.10 Professional market research interviewers were used due to their training and experience in gaining and undertaking interviews with the general public. Furthermore, their professional approach to administering survey questions in an unbiased, balanced manner increases the credibility and robustness of the survey data.
- 2.3.11 Interviewers were positioned in key strategic areas inside the stadium to ensure a representative spread of supporter types. Conducting interviews inside the stadium increased the credibility of the survey, distinguishing the survey from marketing activities outside the stadium. Conducting interviews with an audience already inside the stadium also helped improved response rates and provided a secure environment for interviewers and support.
- 2.3.12 We believe this approach, whilst complex and labour intensive was absolutely necessary to ensure the final sample size was robust, the data collected to the highest quality standards and collected for a reasonably representative sample of home supporters by ticket type.
- 2.3.13 Once the respondent confirmed they were a home (LFC) supporter they were eligible to participate in the survey.
- 2.3.14 Each of the travel surveys for the three methods of collection contained the same questions, which are outlined in the following table:



able 2.	1: Supporter	Supporter Travel Survey Questions		
No.	Who asked	Question		
1	All	At what time did you arrive in the vicinity of Anfield stadium?		
2	All	Where did you start your journey to Anfield Stadium today? Home Hotel Airport Ferry Terminal Work Other (please specify)		
3	All	How did you travel to Anfield Stadium today? Respondents required to list all modes used in order of use from start to stadium		
Depend of mode		last mode used before walking to the stadium, the following questions were asked for their choice		
		Car driver / passenger • How many people, including the driver, were in the vehicle?		
	e:	Car driver / passenger How many people, including the driver, were in the vehicle? Where was the vehicle parked? (One response permitted) On-street Off-street car park		
of mode	Car driver/	Car driver / passenger How many people, including the driver, were in the vehicle? Where was the vehicle parked? (One response permitted) On-street		
of mode	Car driver/	Car driver / passenger How many people, including the driver, were in the vehicle? Where was the vehicle parked? (One response permitted) On-street Off-street car park I was dropped off		
of mode	Car driver/ passenger only Taxi user	Car driver / passenger How many people, including the driver, were in the vehicle? Uhere was the vehicle parked? (One response permitted) On-street Off-street car park I was dropped off Taxi (including Taxi One) How many passengers were in the taxi? (excluding the driver) Where did you get your taxi from? (One response permitted) City Centre		
of mode	Car driver/ passenger only Taxi user	Car driver / passenger How many people, including the driver, were in the vehicle? On-street Off-street car park I was dropped off Taxi (including Taxi One) How many passengers were in the taxi? (excluding the driver) Where did you get your taxi from? (One response permitted) City Centre Elsewhere		

Elsewhere

How many people were in the group travelling with you today?



No.	Who asked	Question	
NO.	Wilo askeu	Train	
7	Train user only	Where did you get off the train? (One response permitted)	
8	Soccerbus user only	Soccerbus • How many people were in the group travelling with you today?	
9	All	What type of ticket do you have for today's match? (One response permitted). Corporate / hospitality ticket Season ticket General admission ticket – purchased as a 'Member' General admission ticket – purchased as a 'Fan Club Card Holder' General admission ticket – purchased as through a supporters club General admission ticket – purchased another way	
2.3.15	•	raw for 4 x non-match day Anfield VIP Experience Day tickets was offered as an to all those who completed the survey, to maximise the participation rate.	
2.3.16	Those who wanted to be entered into the prize draw were asked to provide contact details. As part of quality assurance, the contact details for a small sample (10% of the respondents who were surveyed face to face) were used to re-contact them a week later to check the accuracy of the recording of their response.		
2.3.17	In total almost 3,000 travel surveys were completed over the two fixtures (1,329 were completed during the weekday (evening) fixture with 1,608 completed during the weekend fixture). These raw responses were factored up against the group size of the respondent to take account of how the whole group travelled and provide overall response rates of 1,708 for weekday and 2,884 for the weekend match.		
2.3.18	A total raw sample size of circa 1,500 per fixture allows for a robust analysis of the data when segmented by variables such as mode, parking type and socio-demographics etc. This level of returns means a confidence interval of +/- 2.5% applies to each fixture, allowing for a high degree of confidence in the data.		
2.3.19	Given the sample size and representativeness of the travel survey data, the survey estimates (such as mode split) can be scaled up to the capacity of home supporters with an acceptable degree of confidence, in the context of the two 'typical' fixtures times and seasonality.		

2.3.20

The results from this exercise are outlined in detail in Chapter 9.



Rail Station Passenger Counts

- 2.3.1 Passenger counts were carried out on both weekday (4th December) and weekend (7th December) games on the platforms at Kirkdale and Sandhills Stations for a period of 4 hours prior to kick off and from 1.5 hours after kick off (to capture any supporters that left early) for a further 1.5 hours. These surveys were repeated on corresponding non-match days for the same time periods to enable a comparison between match and non-match days.
- 2.3.2 Lime Street was not included within this analysis firstly because it would not be possible to definitely determine which passengers were associated with the match and secondly supporters would be required to undertake a further leg of their journey to reach the stadium from this station, the mode of which they use for this being how they are defined within the modal split calculations. For example, someone who travelled into Lime Street then got the bus to Anfield is classified under the bus category. The exception to this are those who walked from Lime Street o the stadium directly who have been classified as walking from the City Centre so as not to distort the rail capacity reviews on the local Merseyrail network at Sandhills and Kirkdale.
- 2.3.3 The counts covered trains in both directions and captured:
 - Arrival time of service;
 - End destination of service;
 - Number of carriages on the train;
 - No of people alighting the service before kick-off and boarding after the match; and
 - Estimated occupancy of the service upon arrival.
- 2.3.4 Observations were also made as to the likely make up of passengers, in term of if they were supporters or not associated with the match (such as commuters and other train users). From this it is however impossible to precisely quantify the numbers of users specifically travelling to and from a match, however an indication has been provided. A quantification of match day travel by train was captured in the supporter travel surveys.
- 2.3.5 The occupancy of each train service was estimated using an A-F referencing system as detailed below. Each reference was then assigned a percentage occupation based upon the train capacity at arrival enabling calculation of the number of occupants, the percentage of occupants alighting the train and the percentage of spare capacity for each service.



Table 2.2: Train Occupancy criteria

Reference	Criteria	Percentage Occupation
Α	Some seats occupied	30%
В	Most seats occupied	50%
С	All seats occupied	70%
D	All seats occupied and standing area up to half occupied	80%
Е	All seats occupied and standing area almost full	90%
F	Train completely full and passengers unable to board	100%

- 2.3.6 These calculations have been made on the assumption that 70% of the train's capacity can be seated with the remaining 30% available for standing passengers.
- 2.3.7 A non-match day analysis was conducted on Wednesday 11th December 2013 and Saturday 25th January 2014 (delay due to Everton matches and festive period making comparison unrepresentative) using the same methodology to enable a comparison between match and non-match day use of the train. This allowed us to establish how much of an impact match day travel has upon rail services by comparing use on match days to non-match days.
- 2.3.8 The results from these observations are presented in Chapter 8.

Soccerbus Observations

- 2.3.9 Passenger counts were carried out for a period of 2 hours prior to kick-off and from 1.5 hours after kick off (to capture any supporters that left early) until the service ends (typically around 1 hour after the final whistle) at the point of Soccerbus pick up. These time periods ensured all Soccerbus services were recorded for both match days.
- 2.3.10 Pre-match counts were undertaken outside Sandhills Station with post-match counts on Walton Lane for both survey days for the Soccerbus service which recorded the following:
 - Number of people on the bus when it departed;
 - Confirmation of bus size (e.g. single or double decker);
 - Time of departure; and
 - Vehicle registration to determine the number of vehicles in use and the number of trips each.
- 2.3.11 The results from this exercise are presented in Chapter 8.

City Centre Express Service

2.3.12 Pre-match counts were undertaken for the 917 City Centre Express bus service for a period of 3.5 hours prior to kick-off on both a weekday (4th December) and a weekend (7th December). This was further supported through video footage of St Johns Lane pre-match to observe boarding and waiting behaviour.



- 2.3.13 No analysis was undertaken post-match as the stacked units generally leave as soon as they are full, with access to the bus controlled by the driver.
- 2.3.14 The counts recorded:
 - Number of people on the bus when it leaves;
 - Confirmation of bus size (e.g. single or double deckers);
 - Time of departure; and
 - Vehicle registration.
- 2.3.15 The results from these observations are presented in Chapter 8.

Taxi Occupancy Observations

- 2.3.16 Use of taxis was observed on the original survey days (4th and 7th December) with the decision made to capture occupancy rates on Saturday 8th February to provide a 'health check' on vehicle occupancies against the results procured through the supporter travel surveys. This data set was collected through observation of passing taxis outside the stadium (to ensure they were associated with the match), noting the number of passengers within these.
- 2.3.17 The results from these observations are presented in Chapter 8.

Taxi One Observations

- 2.3.18 A video of St Johns Road was used to understand usage of the Taxi One and 917 services pre-match. From the footage, the occupancy of the vehicles and their departing frequency was observed.
- 2.3.19 The results from these observations are presented in Chapter 8.

Coach Occupancy Observations

- 2.3.20 Information on the origins of coaches was collected for the two observation days, together with the maximum capacity of the coaches and their number of passengers to establish an understanding of occupancy. This information was collected by talking to the coach drivers as they waited during the match on Priory Road.
- 2.3.21 The results from these observations are presented in Chapter 8.



2.4 Consultation

- 2.4.1 A range of meetings were held with stakeholders to inform this TA with their feedback and support sought where necessary in line with proposed changes or enhancements to existing operations. These included:
 - Liverpool City Council Highways and Parking Services;
 - Merseyside Police;
 - Merseytravel;
 - Merseyrail;
 - Bus operators Arriva and Stagecoach;
 - Taxi representatives; and
 - Taxi One.
- 2.4.2 Outputs from this exercise are referenced at the appropriate points within this TA.
- 2.4.3 This consultation is valuable and ensures that the transport strategy will work in reality, be deliverable and will be acceptable to key stakeholders.
- 2.4.4 A series of public consultation events were also conducted, with the proposed development and transport measures set out in this document presented to local residents.

2.5 Summary

- 2.5.1 This chapter has outlined the approach we have taken to developing the Transport Strategy, presenting some of the basic principles applied, such as not increasing the proportional use of car as a mode for match day travel and ensuring that sufficient capacity exists or can be provided on each mode to accommodate the additional supporters, without compromising travel options for non-match day users.
- 2.5.2 This approach was agreed with the City Council and provides a solid understanding of the baseline position. Analysis from both a weekday and a weekend match enable good comparisons to be drawn and allow for changes between the two to be determined.
- 2.5.3 The data collection methodology has also been presented with the individual outputs from these exercises presented in Chapters 8 and 9 and then drawn upon for calculations in Chapter 11 and 13.



3 Anfield Stadium – Context and History

3.1 Setting the scene

3.1.1 Anfield Stadium has been the home of Liverpool Football Club (LFC) since its formation in 1892 and is positioned within the residential area at Anfield, approximately three kilometres north of Liverpool City Centre. Before that, since 1884, the site was used as a football venue by Everton Football Club.





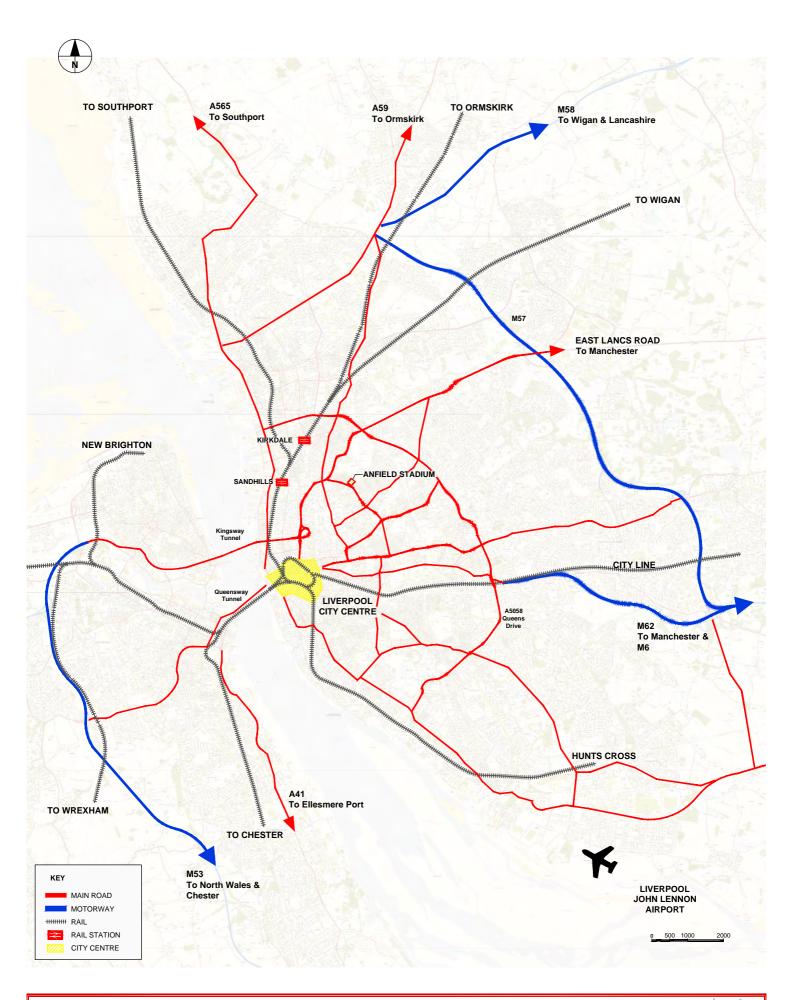


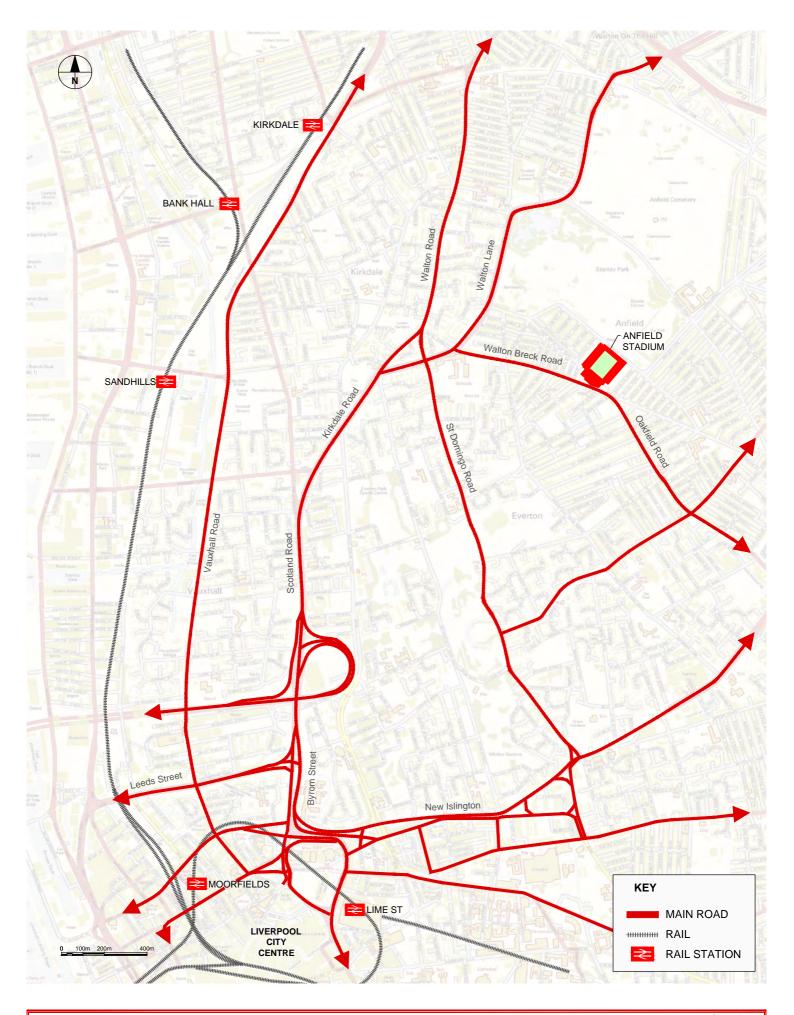
Source: Mott MacDonald

- 3.1.2 Since this time the stadium has evolved to meet the needs of the Club. In its current form, the stadium provides seating for around 45,000 supporters in four individual stands the Kop; the Main; Anfield Road; and the Centenary with the latter being the latest stand to be improved.
- 3.1.3 At its peak, Anfield Stadium could accommodate more than 60,000 supporters, but as a result of the findings of the Taylor report commissioned following the Hillsborough Disaster in 1989, the stadium was converted to all-seater in time for the start of the 1993 / 94 season to be in its current form.
- 3.1.4 The stadium has grown up as a pivotal point of its community in the pre-car era, and is one of the few major football stadiums outside London still to retain this type of locality. It is in the middle of a complex network of interconnected streets that form the fabric of North Liverpool.

3.2 Strategic and Local Accessibility

- 3.2.1 The strategic context of the stadium is shown in Figure 3.1 and the local context in 3.2, with the following text providing some background commentary to these figures.
- 3.2.2 On match days a wide range of modes of transport are used to gain access to the stadium, and the nature of Liverpool fan base means that many travel from outside the local area. This means that home matches at Anfield become major events where supporters are prepared to travel significant distances and stay in Liverpool for much longer than just the extent of the match.
- 3.2.3 Consequently, gateways such as: Holyhead Harbour on Anglesey; Liverpool John Lennon Airport; Manchester Airport and Liverpool Lime Street rail station are important means of access for supporters.







- 3.2.4 Liverpool also has excellent road accessibility, with the strategic highway corridors of the M6, M62, M58, M53 and the M56 giving access to the wider region and the nation.
- 3.2.5 The stadium is bounded by Anfield Road to the north east, Skerries Road to the south east, Walton Breck Road to the south west and Lothair Road to the north west.
 - Anfield Road This is a predominantly residential street which runs alongside Stanley Park, connecting from Walton Lane, through to Walton Breck Road, to the east of the stadium. It also connects to Arkles Lane and has several smaller residential streets running from it, including Lothair Road and Skerries Road. Anfield Road currently runs right alongside the Anfield Road Stand, with the access points opening directly onto the road. The Hillsborough Memorial is located on Anfield Road and access to the food court/family zone area is also from here. There are footways on both sides of the road and away from the immediate vicinity of the stadium (where double yellow lines are in place on both sides of the road), there are residential parking bays.
 - Skerries Road A one-way (southbound) residential street with footways and residential parking bays located on both sides. It connects from Anfield Road to Walton Breck Road with neighbouring residential streets providing the reverse northbound movement.
 - Walton Breck Road Walton Breck Road (A5089) has a mixed frontage with some residential as well as small retail and food outlets close to the stadium. It is a busy two way road providing an east-west connection from Walton Lane on to Oakfield Road to the east of the stadium, with Walton Breck Road continuing past Oakfield Road as a minor residential street connecting on to the A580. The A5089 is a bus route and has pedestrian crossing points along it, with footways on both sides. There are some residential and free parking bays to serve both residents and customers to the shops and businesses.
 - Lothair Road A residential street which currently operates one-way northbound, with footways and residential parking bays on both sides. The road connects from Rockfield Road to Anfield Road. The properties along this road are in the process of being renovated as part of the Anfield Regeneration Scheme.
- 3.2.6 The surrounding area is predominately residential dwellings, with a number of small retail units and food outlets along Walton Breck Road. The majority of the residential dwellings surrounding the site, with exception to those along Skerries Road, are currently unoccupied and marked to be demolished as part of the Anfield Regeneration Scheme, with some properties on streets adjacent to the stadium having already been demolished.
- 3.2.7 To the north of the stadium lies Stanley Park which is a grade II listed park and supports a large surface car park which is leased from LCC by the club for use on match days. The car park can accommodate approximately 1,000 vehicles and is accessed from Priory Road, with a pedestrian connection to Arkles Lane to provide access to the Stadium.
- 3.2.8 The City Centre of Liverpool is an important resource for helping supporters travel to and from the stadium, but also as a place to stay, eat and drink before and after a game. It is commonly known that when Liverpool plays at home, available hotel rooms in the city are few and far between, supported through the on-going expansion of the hotel offer within the city.



- 3.2.9 Transport operators have recognised the importance (and the revenue generating potential) of the City Centre on match days, and there is a constant stream of taxis and buses travelling to and from Anfield before and after a match.
- 3.2.10 The full implementation and the enforcement of the FMPZ in the residential areas surrounding the stadium has had a significant influence on the way people travel to and from the stadium. Historically, pre-FMPZ, the vast majority of people travelled to the ground by car, and parked as close as they could to the stadium to the significant inconvenience of local residents.
- 3.2.11 As will be discussed later in this report, our surveys have shown a major modal shift away from travel by car, and the effectiveness of the FMPZ in protecting the amenity of residents. As such, the FMPZ is generally supported by residents in the area as not only does it protect parking for residents, it remove extraneous parking, helping to improve traffic flow.
- 3.2.12 The area surrounding the stadium is experiencing significant change with a number of schemes underway / completed to help regenerate the locality. The current guiding initiative is 'The Anfield Project', which is a partnership between the City Council, LFC, and Your housing group and focuses upon:
 - Anfield Village and Rockfield housing refurbishment;
 - New build housing;
 - The Walton Breck Road corridor;
 - New public space and Village Square;
 - The completion of Stanley Park; and
 - LFC's preferred option to expand their stadium.
- 3.2.13 Significant extents of new housing have already been constructed to the south of the stadium, and other adjacent areas have been cleared to be ready for redevelopment. To the west and north of the stadium some housing has already been cleared in the preparation for the next phase of development.
- 3.2.14 Also to the west of the stadium in the Rockfield area, plans are being progressed for the upgrade / refurbishment of the housing stock.
- 3.2.15 In support of the 'The Anfield Project', a Spatial Regeneration Framework (SRF) for Anfield has been prepared, and this is discussed further in Chapter 5.

3.3 Planning history

3.3.1 There is a history of previous planning applications in relation to Anfield Stadium and proposed improvements to it, which have been submitted over the last years, including its expansion and relocation to Stanley Park.



- 3.3.2 The 'original' application (AFL designed scheme), for the development of a 60,000 seater stadium on Stanley Park (a relocation of the existing stadium) was granted permission on 11th April 2006 (LPA Ref: 03/3214). This application provided two Access Strategy reports, AS1 and AS2 which essentially were in place of a Transport Assessment and presented how supporter travel would be managed to facilitate the new stadium. These documents were reliant upon a Park and Ride solution for moving additional supporters to and from Anfield.
- 3.3.3 The 'recent' application (KKS designed) also for a 60,000 seater stadium on Stanley Park was granted permission on 19th June 2008 (LPA Ref: 07F/2192) and included Access Strategy 2 (AS2), which was later updated post application in 2008 to Access Strategy 3 (AS3) to consider the implications of a 73,000 seat stadium. Within AS3, modal splits for supporter travel from 2008 are identified and these have been extracted and used within this TA to assess change in supporter travel from 2008 to 2013.
- 3.3.4 Further details of the planning history can be found in the separate Planning and Access Statement report, but in summary LFC received full planning approval for a circa 60,000 seat stadium on two separate occasions (2006 and 2008).
- 3.3.5 Many of the pre-commencement conditions listed in the S106 agreement were formally discharged on each of these permissions; however only the original scheme was formally implemented and is therefore 'live' in perpetuity.
- 3.3.6 The latest development proposal covered by this TA will still deliver a circa 60,000 seat stadium (albeit in an adjacent location to that which has permission) and as such much of the transport works related to the previous access strategy that has already been constructed will remain valid and of significant benefit to this latest application.
- 3.3.7 For reference, the most notable of these works are listed below:
 - The funding for the implementation of 17 Football Match Parking Zones around the stadium;
 - Environmental, highway works and street furniture improvements on Priory Road and Utting Avenue. This included the coach lay-by along a large section of Priory Road and the footway works along Utting Avenue;
 - The signalisation of the junction of Priory Road / Utting Avenue, incorporating controlled pedestrian crossings;
 - A new signal controlled pedestrian crossing on Walton Lane near Tetlow Street. An important function of this crossing was to aid the walk route to Kirkdale rail station;
 - The funding for variable message signs on key approach routes. Many of these signs have been positioned around the area on the assumption that a new stadium would be constructed in Stanley Park, and are therefore perhaps not ideally placed for improving the stadium in its existing location;
 - Significant up-grade to an area off St Domingo Road for use as a home supporter coach park. These works have been completed, but under this application it is very unlikely it will



- ever be used as a coach park, and it will continue under its current function as an offstreet match day car park under the control of the club;
- Funding for the implementation of traffic signals at the Walton Breck Road / Everton Valley junction. This is currently one of the most important local gateways to the stadium area to and from the City Centre. The improvement also included controlled pedestrian crossing facilities, which in part aid the walk route to Sandhills rail station;
- New traffic signals at the Stanley Road / Lambeth Road junction. On match days this significantly reduces delays for the Soccerbus service running to and from the Sandhills rail station before and after a match;
- Implementation of a signed walk route between the stadium and Sandhills rail station;
- Funding for the provision of Select Vehicle Detection at up to six sites.
- 3.3.8 Overall, it can be seen that LFC has already invested significantly in the local area to not only improve conditions for visitors to the stadium, but also to the benefit of neighbouring residents.
- 3.3.9 In connection with the FMPZ planning condition was a matrix which restricted the seating capacity of the new stadium to the number of (Football Match Parking) zones which had been implemented against the number of park and ride spaces provided.
- 3.3.10 All the FMPZ's have been implemented which based on the matrix allows the Club to operate a stadium with a seating capacity of up to 51,900. Pre-application discussions with the Council have confirmed that this situation is still valid for this application and transport strategy.
- 3.3.11 This together with the discharged conditions will allow a capacity of 51,900 supporters at the stadium with no further work by the Club, which meets 97% of the proposed Phase 1 capacity. However it is the intention of this transport assessment to provide a robust assessment for the full 53,586 capacity for phase 1, rather than just the 3% difference between the two figures.

3.4 Summary

3.4.1 The stadium is surrounded by residential streets with some small retail and food outlets located along Walton Breck Road. In terms of transport and accessibility, Anfield Stadium is very much 'facing' the City Centre, and this link is the focus for a significant proportion of people arriving and leaving the stadium area, as was discovered through the supporter surveys (covered later in this report).







Walton Breck Road - Towards the City Centre

Arkles Lane - Away from the City Centre

- 3.4.2 This is very much evidenced which the level of 'busyness' between the City Centre and non-City Centre sides of the stadium, and as well as historically being the case, it is the situation now, and is likely to continue to be the case following the expansion proposals.
- 3.4.3 This fact gives supporters a real means of choice in travel to not only the stadium, but also into the city of Liverpool via high quality transport hubs such as Liverpool Lime Street and Liverpool John Lennon Airport. Local transport operators recognise that this is the case, and are increasingly focusing on meeting this travel demand to and from the City Centre on match days.
- 3.4.4 Aside from the Anfield Stadium proposal there are a large number of regeneration initiatives which are transforming the Anfield area to become a visitor destination in its own right. Works already completed in Stanley Park have resulted in a major improvement to the area; residential redevelopment is bringing housing to modern day standards; and the Spatial Regeneration Framework will be coordinating and promoting future improvements.
- 3.4.5 Transport improvements which the Club has funded have already had a large influence on how supporters are choosing to travel to and from the stadium on match days. In particular, the completion and enforcement of the FMPZ's has significantly reduced the desirability of travelling directly to the stadium by car, which again increases the importance of the City Centre as an accessible transport hub.
- 3.4.6 These are all issues which the transport strategy for the proposed stadium improvement will be building upon.



4 Transport Policy Framework

4.1 Introduction

4.1.1 This chapter reviews current national, regional and local policy guidance and examines how the proposed stadium expansion accords with the policies therein.

4.2 National Planning Policy Framework (March 2012)

- 4.2.1 The National Planning Policy Framework (NPPF) sets out the Government's policies on planning for England; it states how it expects these to be applied and provides a framework for local councils and people to work within whilst still reflecting the needs of the local community.
- 4.2.2 The purpose of the planning system is to contribute to the achievement of sustainable development and therefore there is a presumption in favour of sustainable development, in economic, social and environmental terms, within the NPPF. It is recognised however that proposals must still be considered against the latest Local Plan and be approved where they fall in line with it or refused if they conflict (unless other material considerations indicate otherwise).
- 4.2.3 Chapter 4 of the NPFF discusses the important role that transport plays in facilitating sustainable development and contributing towards wider sustainability and health objectives. It states that the "transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel" (paragraph 29)
- 4.2.4 In this Chapter the NPPF requires that "all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment." This assessment should take account of whether "the opportunities for sustainable transport modes have been taken up", that "safe and suitable access... can be achieved" and that "improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. ... Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe"
- 4.2.5 The development should be located where "the need to travel will be minimised and the use of sustainable transport modes can be maximised" with "access to high quality public transport facilities." Furthermore where practical it should "give priority to pedestrian and cycle movements." and "create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians."
- 4.2.6 The proposed development of Anfield Stadium complies with the policy guidance set out in the NPPF being in an area well served by public transport; there are frequent bus services and three rail stations within 1.5 miles which connect with Northern Line services to Liverpool City Centre, Southport, Ormskirk and Kirkby.



4.2.7 The Transport Strategy presented in this TA seeks to address any issues of potential conflict between traffic and sustainable transport options. The Interim Staff Travel Plan that accompanies this document also sets out the measures that will be implemented to ensure that staff at the stadium have a choice of mode of travel to promote the use of more sustainable modes of transport.

4.3 The Development Plan

4.3.1 The Regional Spatial Strategy for the North West was revoked on 20th May 2013 and is no longer part of the development plan for the area.

4.4 "A Plan for Liverpool" Liverpool's Unitary Development Plan

- 4.4.1 The UDP was adopted in November 2002 and is a statutory document which provides the planning framework for the city, Its waste policies have now been replaced through the adopted Joint Merseyside and Halton Waste Local Plan with remaining policies to be replaced by the Liverpool Local Plan which is currently in preparation and scheduled to be adopted late 2015/early 2016.
- 4.4.2 The aims of the plan, with respect to transportation issues, are covered under General Policy 6 (GEN6). These are to provide a balanced transport infrastructure which is accessible to everyone, specifically one that "meets the needs of those economically or socially disadvantaged protects and enhances the environment through reducing the reliance on the private car..... promotes investment in the public transport network... improves facilities for cyclists and pedestrians and reduces the availability of car parking facilities which would attract car borne commuters".
- 4.4.3 At Chapter 11 of the plan it is recognised that the promotion of transport modes other than the private car is paramount given the relatively low level of car ownership in the city. This would provide environmental benefits, both locally and globally, through reducing congestion and vehicle exhaust emissions.
- 4.4.4 Of particular relevance to this study is Policy C7 which refers specifically to Liverpool and Everton Football Clubs and covers Community Facilities, stating "the plan aims to promote the satisfactory provision and distribution of community facilities including recreational, leisure, health, education and social facilities for all the City's residents."
- 4.4.5 In Chapter 12 the plan recognises the important role played by the city's football clubs and indicates that the City Council will assist the clubs in progressing their development proposals so long as these do not adversely affect residential amenity.



- 4.4.6 A number of solutions are proposed in the plan to 'provide effective solutions to remedy those problems and maintain and enhance residential amenity in the area', with the aim of minimising the number of supporters travelling by private car; namely;
 - the implementation of traffic management schemes;
 - extension of the resident's parking scheme;
 - better public transport services;
 - increased car parking where appropriate;
 - better facilities for walking and cycling; and
 - traffic calming and the closure of streets to through traffic.
- 4.4.7 The plan also makes reference to the council's concern of increased activity at the stadium in the evenings, not as a result of match nights but due to other functions or visitors to the Anfield Museum. The need to protect residential amenity at these times is emphasised, and recognised by this TA which also undertakes a review of the impact on non-match days.

4.5 Emerging Development Plan

Liverpool Draft Core Strategy 2012

- 4.5.1 The review of the Liverpool Unitary Development Plan commenced in 2002. Subsequent changes in planning law and guidance led the Council to commence preparation of a Core Strategy as part of the then Local Development Framework system; that document reached submission draft stage in 2012.
- 4.5.2 The Submission Draft Core Strategy places considerable emphasis on North Liverpool and seeks to focus new development to regenerate it and similar 'Urban Core' areas of the City.
- 4.5.3 The Anfield ward falls within the Urban Core and is highlighted as one of the most deprived areas in the country but one with "enormous potential for sustainable economic and residential growth".
- 4.5.4 The Draft Core Strategy has identified eight objectives; with the aim of 'More Sustainable Access' of relevance to transportation:
 - More Sustainable Accessibility by supporting the improvement of the City's transport infrastructure and ensuring that all new development is highly accessible by sustainable modes of transport.
- 4.5.5 Strategy Policy 3: Delivering Economic Growth makes specific reference to the city's football clubs and indicates that their development "will be supported where they are of an appropriate scale, and subject to other relevant planning policies."



4.5.6 Chapter 6 recognises the football clubs' significant role as tourist and visitor centres and their important role in the economy of the City. Whilst the council's support for the redevelopment is repeated, the need to ensure that the proposals are "carefully managed to protect amenity for those living in nearby areas and to minimise adverse impacts arising from the construction and operation of new development" is highlighted. (paragraph 6.66)

Local Plan

4.5.7 Following the publication of the NPPF in March 2012, the Council has resolved to prepare a Local Plan. This single document will take forward the principles of the Core Strategy, which will be updated to take account of this new guidance, the changed economic climate and emerging corporate priorities. It will also include strategic policies, site allocations and development management policies for the City. Initial consultation is underway with adoption anticipated in late 2015/early 2016.

Anfield Spatial Regeneration Framework (SRF)

- 4.5.8 The Anfield SRF has been subject to public consultation and will be adopted on 24th April by LCC Cabinet.
- 4.5.9 The SRF aims to explore and harness the potential of the area, bringing a number of current live projects and new proposals together in a coordinated and comprehensive manner in order to deliver lasting social, economic and environmental regeneration. In particular it seeks to support the proposed expansion of the stadium; explores opportunities for re-integrating Stanley Park with the surrounding residential areas and for reinvigoration of the 'High Street' through new and improved commercial opportunities to be delivered along Walton Breck Road and Oakfield Road. The SRF also supports any future proposals which seek to ensure the long term conservation and enhancement of the Anfield Cemetery.
- 4.5.10 Further information on this framework is provided in Chapter 6.

Liverpool Local Development Scheme 2013 (LDS)

- 4.5.11 The latest LDS covers the period January 2013 to December 2016 and replaces the Liverpool Local Development Framework.
- 4.5.12 It indicates that Policy C7 of the UDP which covers Community Facilities and the football grounds will be replaced by the Local Plan when it is adopted (anticipated to be summer 2015).



4.6 Transport Related Strategies and Guidance

Ensuring a Choice of Travel Supplementary Planning Document (SPD)

- 4.6.1 This SPD was developed by a collaboration of the Merseyside local authorities and Merseytravel and was adopted in December 2008. It provides guidance on the access and transport requirements for new developments across Merseyside.
- 4.6.2 The SPD Objectives are
 - Ensure a reasonable choice of access by all modes of transport to new development;
 - Reduce the environmental impact of travel choices, by reducing pollution, and improving the local environment;
 - Improving road safety;
 - Promote healthier lifestyles by providing opportunities for people to walk or cycle for work or leisure purposes;
 - Reduce the level of traffic growth and congestion on the strategic and local road network; and
 - Encourage opportunities to improve the quality of development proposals by better use of space through the provision of less car parking spaces where appropriate.
- 4.6.3 Although the stadium is not a new site development, the expansion process is committed to ensuring that accessibility to the stadium is enhanced, with sustainable modes supported.
- 4.6.4 It recognises that good design can contribute to sustainable modes of travel and enhance the environmental quality of a scheme, something which is reinforced through the Transport Strategy in this TA.

Merseyside Local Transport Plan 3 (LTP3)

- 4.6.5 The Merseyside Local Transport Plan 3 (LTP3) became active on 1st April 2011 and has a vision to provide "a city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice."
- 4.6.6 To achieve the vision, six goals have been set which include "ensure the transport system promotes and enables improved health and wellbeing and road safety" and "ensure equality of travel opportunity for all, through a transport system that allows people to connect easily with employment, education, healthcare, other essential services and leisure and recreational opportunities."



4.6.7 The LTP looks forward to 2024 but sets out short term priorities for 2014/15. These include to:

"expand the range of public transport services...continue initiatives such as Neighbourhood Travel Co-ordinators...see the introduction of Statutory Quality Partnerships (SQP) on key bus corridors"

"implement the Active Travel Strategy"

"implement the Low Emissions Strategy"

"increase promotion of sustainable travel and behaviour change and support the Decade of Health and Wellbeing."

"...introduce measures to control excessive speed on the highway network"

- 4.6.8 These priorities will be achieved through continued management of congestion and overcrowding on the highway and public transport network by making targeted investments such as better information systems, vehicle detection, smart cards and selective infrastructure measures.
- 4.6.9 In Chapter 2 Our Vision and Goals, the LTP 3 recognises "We understand that a blanket assumption that public transport is always a better option in terms of reduced carbon emissions is a blunt instrument. We therefore have to create the conditions where use of the networks is maximised and operates most efficiently. Elsewhere ... there may be other public transport options, such as the use of taxis or community transport that are better suited to particular requirements and encourage different sectors to play a role in providing essential services." (paragraph 2.30)
- 4.6.10 And "We believe there are a number of different ways that we can improve access, through better bespoke information, more targeted fares and the use of different types of transport appropriate to need. Again cycling and walking have been shown to be low cost and healthy options to access opportunities." (paragraph 2.33)
- 4.6.11 LTP3 also recognises that work on larger developments is generally completed in phases and requires that "the developer provides a robust schedule of infrastructure development combined with the development phases and the agreed private sector funding. This will need to be supported with a monitoring framework that is capable of allowing the delivery of transport interventions to be varied depending on the actual travel volumes, patterns and modes to and from the development compared to those identified in a monitoring framework agreed between the planning authority and the developer." (paragraph 5.45 (e))



Merseyside Active Travel Strategy (March 2011)

- 4.6.12 The Merseyside Active Travel Strategy (MATS) is included at Appendix 6 of the LTP3 and is concerned with walking and cycling, collectively known as active travel.
- 4.6.13 It seeks "to deliver health, economic, low carbon and social benefits through improving the walking and cycling environment, enabling interventions and targeted marketing to incite behaviour change."
- 4.6.14 Its aims are:
 - (a) Improving the cycling and walking environment by creating a clear route network, infrastructure improvements and facilities that will encourage a greater number of walking and cycling trips;
 - (b) To support adults and children to be able to choose cycling and walking by providing enabling interventions and information; and
 - (c) Behaviour change marketing of active travel modes to raise awareness of, encourage and sustain walking and cycling so that they become the mode of choice for short distance trips.
- 4.6.15 To achieve these aims a number of interventions have been proposed, those which are of particular interest to the Liverpool FC development are:
 - (a) ensuring the road user hierarchy is used to create safe pedestrian and cycle friendly environments in residential areas and centres;
 - (d) providing connections between cycle and pedestrian friendly areas to create routes for active travellers;
 - (I) continuing to provide information in the most relevant and accessible format.

Merseyside Rail Utilisation Strategy (RUS) March 2009

- 4.6.16 This document was prepared by Network Rail to set out their strategic vision for the rail network in Merseyside. It was published in 2009 and concentrates on the ten year period to 2020 although growth over the next 30 years was considered.
- 4.6.17 A number of areas of concern have been highlighted and actions to address these are included in the document. The issues include: overcrowding on services, poor connectivity and journey times in part, insufficient car parking, poor interchanges and capacity problems at City Centre stations, particularly at peak times.
- 4.6.18 A particular issue, pertinent to LFC, is the lack of a train station in close proximity to directly serve the stadium and residents of Anfield. Six options were considered by Network Rail to address this which included different frequencies of train services and additional stations being constructed.

Liverpool Football Club Stadium Expansion

Transport Assessment



4.6.19 The results of the study concluded that the infrastructure needed for these changes could not be justified by the benefits which were expected to be generated. It is however important to note that the existing 3 stations in the vicinity (Sandhills, Kirkdale and Bank Hall) are well used by supporters, demonstrating their accessibility and their distance presenting the advantage of allowing crowds to dissipate across the stations which results in smaller queues for services and reduced wait times on platforms.

4.7 Summary

4.7.1 This chapter has demonstrated that the proposed development would seek to support or fulfil a number of policy guidelines and that the development would be supported by the council so long as it was not to the detriment of local residents. This TA therefore bares this in mind and goes on to ensure that any adverse impacts are mitigated against to ensure that impact upon residential amenities are minimised.



5 Future Developments

5.1 Overview

- 5.1.1 This chapter provides an overview of any access and transport works associated with committed or likely developments, and a review of the transport improvements planned for these which may affect the accessibility of the stadium. these include:
 - Liverpool Waters;
 - Great Homer Street Regeneration; and
 - Anfield Spatial Regeneration Framework (Anfield SRF).
- 5.1.2 The following transport works are of note and of relevance to this application:
 - An application is currently being progressed to provide a formal taxi rank on Walton Breck Road just outside the stadium. This will be for use on non-match days for the many people who visit the stadium; and
 - The City Council are planning to install a large format variable message sign on Everton Valley. This will be used to inform people of match day road closures.
- 5.1.3 The following proposed developments have been identified which may have some transport implications for the stadium expansion.

5.2 Liverpool Waters

- 5.2.1 Liverpool Waters is an approved development of approximately 60 hectares of derelict dockland for a major mixed-use scheme north of the City Centre. The scheme is being promoted by the Peel Group, in consultation with a range of stakeholders.
- 5.2.2 Outlines for the plans have been approved by the City Council, and in March 2013 the Government made a decision not to call a public inquiry into the scheme.
- 5.2.3 The first phase of the works involving the conversion of a former warehouse near Stanley Dock to a hotel has commenced.
- 5.2.4 Although the potential scale of this development is considerable, it is very likely that it will be implemented over a long timeframe. Consequently, the transport impact of this scheme on the proposed stadium development is likely to be negligible in the short to medium term.
- 5.2.5 Despite the scale of the development, as part of the proposal, no major transport infrastructure works were proposed, with instead the focus being on localised upgrades where necessary to support the development.

5.3 Great Homer Street Regeneration

5.3.1 Great Homer Street Regeneration (formerly Project Jennifer) is a major development initiative adjacent to the Scotland Road corridor and north of the City Centre. The scheme has been in



the planning stages for many years but has now gained planning consent with the first phase of work, the construction of a new school for the Notre Dame College, completed.

- 5.3.2 The main works to construct a new district centre, comprising: a food store (with around 900 car parking spaces); a market, offices, health centre and residential are scheduled to commence mid-2014.
- 5.3.3 The combination of the proximity of this development to the stadium and the convenient walk routes to Anfield does offer the potential for the car park to be used by supporters on match day. However, similar to the large ASDA food store off Utting Avenue, this can be managed by limiting the time period which cars can park on-site on match days to 1 hour 45 minutes. This is reflected in the below planning condition for permission 13F/1178.

Condition 25

No part of the development as defined on the Phasing Plan (see condition 3) shall be brought in to use in any phase until a car parking management strategy is submitted to and approved in writing by the local planning authority for that phase. The car parking management strategy shall be implemented as approved and thereafter permanently retained. For the avoidance of doubt, this should include:

- (i) Measures to provide secure car park spaces for short stay purposes in connection with shopping, entertainment and community activities, rather than for all day parking for work, overnight parking, or football match parking.
- (ii) opening and availability of car parking
- (iii) the allocation of car parking spaces for market traders, residents (units provided as part of the Development) and the terms on which such car parking spaces shall be provided.
- Also, as Scotland Road is one of the main access routes to the stadium (particularly for taxis), there will be an overlap of traffic impact of the two schemes on match days. Overall, the impact of this situation should be low as it will occur over a relatively short time frame, and not on a daily basis.
- 5.3.5 A significant outcome of this scheme is that it will bring back activity into this area, and will provide major improvements to the Great Homer Street road corridor. This will be of significant benefit to supporters walking to and from the stadium from the City Centre, making this a much more attractive walking route this item is further discussed in Chapter 8 and 12.



5.4 Anfield Comprehensive UTC

- 5.4.1 It is proposed that this site, located off Priory Road on the former Anfield Comprehensive School site (The Comp site), will support a University Technical College (URC) specialising in logistics and construction. Following public consultation a planning application will be submitted with the ambition, subject to approval, for the site to open in September 2015.
- It is important to note that the site will not impact upon the number of car parking spaces on the Comp site which have been applied within this TA.

5.5 Anfield Spatial Regeneration Framework

- 5.5.1 Running in parallel to this TA is the Anfield Spatial Regeneration Framework (SRF) which is a major initiative of LCC to provide focus to planned improvements in the vicinity of the stadium.
- This is not a committed development and as already outlined (although the document has been approved by the council), however it is felt important to take into account within this TA given its proximity to the stadium and the potential influence on the surrounding area it will have which will in turn impact upon the stadium, with the SRF and the proposed stadium development intended to complement each other.
- 5.5.3 The scope of the SRF is given in Figure 5.1.
- 5.5.4 The SRF has been prepared to support and guide the further regeneration of the Anfield area, and to coordinate the various redevelopment initiatives. Its objective is to help maximise the potential of the area by coordinating a number of live projects and new proposals together to deliver social, economic and environmental regeneration.
- 5.5.5 The SRF was recently adopted as a Supplementary Planning Document by the City Council and will be a material consideration in the determination of planning applications within the area. In connection with the proposal to expand LFC's stadium, the following items are of particular relevance.

SRF 8: Anfield Square Development Site

Potential uses: Offices, Small Scale Food Retail, Residential, Hotel

It is proposed that the site provides, amongst other uses, facilities to support supporter dwell time in the vicinity of the stadium. This would be in the form of small scale food retail and a hotel which would likely have a bar or restaurant area. Public realm would also be created within the plot to ensure it is a pleasant location.

Movement: Pedestrian permeability through the block. Vehicular access can be provided off Walton Breck Road and Gilman Street.



Pedestrians would be able to walk through the block, maintaining access to the surrounding streets, with the side of the development forming an interface with the Avenue connecting to the Main Stand.

SRF 10: The former Anfield comprehensive school and petrol filling station

Potential uses: Commercial, residential, multi-use parking, surface parking.

This application proposes to up-grade the school site for use as match day car parking providing approximately 700 spaces. The site will be improved by re-surfacing and formalising the car parking, and provided with buffer landscaping. [*This to be confirmed*]

Movement: The main access points to the site should be from Priory Road and Utting Avenue.

It is proposed that the only vehicle access will be from Utting Avenue, but that pedestrian access points will be provided on the Priory Road frontage.

SRF 11: Land South of Walton Breck Road

Potential uses: Mixed Use: Food Hub, Residential, Commercial, Retail - non-residential uses should be provided at the ground floor, fronting Walton Breck Road.

Redevelopment and improvement of the properties on Walton Breck Road provides a significant opportunity to revitalise the High Street and increase economic activity in the area.

Movement: Vehicular access to buildings can be from existing streets.

Movement along Walton Breck Road would be preserved with car parking and servicing being limited to that necessary to directly serve the development, and designed and located to minimise the impact of parked vehicles upon the street scene.

SRF 12: Stanley Park

Potential uses: Food hub, riding centre, community sports facilities, surface parking

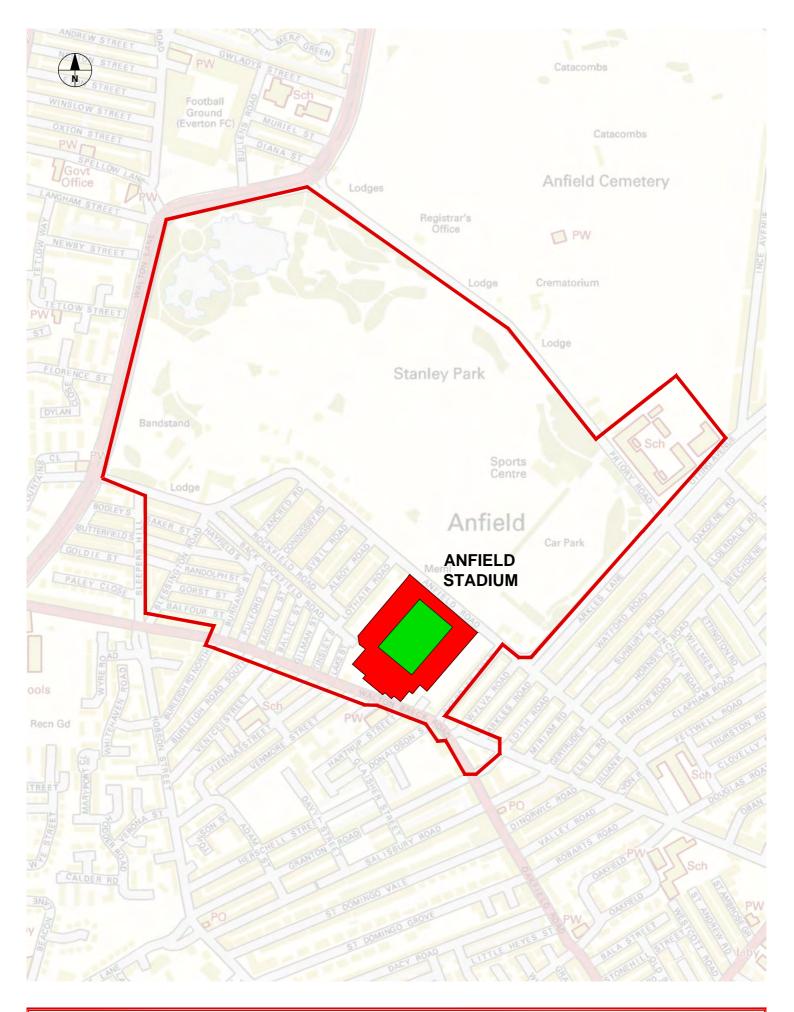
The Vernon Sangster car park is owned by the City Council, and LFC currently lease the facility for use a match day car parking. This application proposes to continue this arrangement.



SRF 13: Anfield Stadium

Movement: Proposals should respond to the pedestrian and traffic requirements on the major surrounding routes. It is expected that the section of Anfield Road closest to the stadium may be reconfigured.

5.5.6 The improvement and expansion of Anfield Stadium will contribute significantly to the objectives of the SRF, and will support and facilitate wider regeneration of the area. This framework therefore supports LFC's redevelopment aspirations for Anfield Stadium.





5.6 **Future Developments Summary**

- 5.6.1 Although several developments are proposed or committed in the Liverpool area, no detrimental impacts are expected due to a combination of timescales and distance from the stadium.
- 5.6.2 There are however benefits from these developments which can be realised by the Stadium expansion, such as improvements along the Great Homer Street corridor which would facilitate a more pleasant and secure walking route to connect between the stadium and the City Centre.

5.7 **Merseyside Transport Trends**

Traffic growth

5.7.1 The following chart gives a measure of how overall traffic flows have been changing in Merseyside on key corridors. From this it can be seen that over recent years, traffic volumes have generally been reducing year on year since 2003, and are now at a level similar to when the data was started to be collected in 1994.

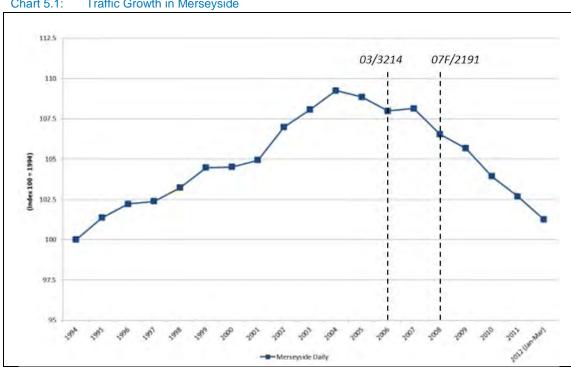


Chart 5.1: Traffic Growth in Merseyside

Source: Travel in Merseyside, 2013



- 5.7.2 The reduction in traffic growth may also in part be due to the initiatives within the Local Transport Plans (1-3) having a positive impact upon volumes of car use, with alternative modes of transport now more accessible and attractive following measures within the plans. The quality of buses has improved, with train services being more reliable and punctual making public transport more viable for travel within the region. The control of parking through pricing also had a positive impact upon demand and capacity.
- 5.7.3 However, importantly, previous assessments (AS1, 2 and 3) investigating the relocation of the stadium on to Stanley Park (*planning applications 03/3214 and 07F/2191*) were undertaken when traffic flows were at their highest in Merseyside. In addition to this, AS3 (the previous transportation access strategy produced following the 2008 permission) worked on the assumption that there would be a continued growth in traffic in the region in the future years with their calculations being based on analysis as far forwards as 2016 (their modelled opening year). This means that even more traffic was taken into account within the future year scenarios than was being experienced in 2008 and in addition to the additional capacity, to take into account of the notion of continue background traffic growth, which as shown in the above chart did not occur.
- 5.7.4 This fact therefore gives confidence that the findings of previous transport assessments and associated Council officers' recommendations remain good.
- 5.7.5 Based on this review, with traffic levels having declined below those previously experienced in 2006 and 2008, no modelling or junction assessments in the vicinity of the stadium have been undertaken as part of this Transport Assessment, as even with the proposed increase in supporters associated with the stadium expansion, the focus on not promoting increased proportions of private vehicle use, together with the noted reduction in traffic on the roads means that the anticipated traffic levels post development will still be lower than those previously experienced, and when previous Access Strategies noted there were no capacity constraints.

5.8 Summary

- 5.8.1 This chapter has demonstrated the following points:
 - There are several proposed and committed developments in the vicinity of the stadium, however none of these are expected to have a detrimental impact upon the proposed development at Anfield.
 - Elements of the developments may be of benefit to the proposed expansion, such as improvements to Great Homer Street which will facilitate this as a walking route to the City Centre.
 - Traffic growth within the area has been shown to be reducing over time, with the majority of the transport assessments being undertaken for the committed developments being undertaken at a time when traffic growth was at its highest. This demonstrates that the assumptions made in AS3 considering the proposed stadium relocation and increase in capacity to 73,000 in 2008, are sound.



6 Benchmarking and Best Practice

6.1 Introduction

- 6.1.1 Measures to mitigate against additional trips, or to improve the associated impacts of trips to a venue are usually instigated in combination, with several measures put in place at one time. This therefore makes it difficult to attribute changes to modal shift to a particular single measure. Furthermore, the nature of stadium locations varies significantly by club with wider issues on the transport network influencing success and travel behaviour.
- As evidence of modal shift at stadiums is usually due to a range of measures and local circumstances, it is not always possible for the venues themselves to quantify the mitigation, or associate it with a particular intervention. General trends and best practice can however be noted, which are presented in this chapter.

6.2 Door to Turnstile Report

- 6.2.1 The 'Door to Turnstile' report¹ is produced by the Campaign for Better Transport charity and is based on analysis of a series of travel surveys with football supporters as well as assessments in terms of the information available on a clubs website and their travel plan arrangements. The surveys asked supporters a range of questions such as how they travel to matches, how much they spend and their opinions on travel options.
- The report placed Newcastle United at the top of its travel table, with LFC coming 7th out of 20, which is a strong score given the relative level of accessibility to the stadium in comparison to others around the country who have increased access options within their vicinities to sustainably move substantial numbers of supporters (such as adjacent train stations).
- 6.2.3 The report presented the following general findings from surveying supporters from all of the football clubs as well as outlining measures which are currently in operation at other clubs to improve travel:
 - Car sharing tends to be higher for away games;
 - Of those who said they would like to use public transport to get to matches, cost was the most common problem mentioned preventing them;
 - Free or discounted travel is provided in Brighton, Newcastle and Sunderland;
 - Specialist football railcards would be welcomed by supporters, which would provide them
 with more affordable fares, and enable flexibility should matches be cancelled or
 rescheduled.
- 6.2.4 Through the interventions outlined as part of this TA, it is possible that LFC could improve their position in this league table in the future. This is the aim of this assessment, rather than

¹ 'Door to Turnstile' report, Campaign for Better Transport, http://www.bettertransport.org.uk/football



perpetuity of the current position. The stadium is well placed to embrace non-car modes, a point proven by the recent modal shift from car use to other modes since 2008.

6.3 Case Studies

6.3.1 The following points represent examples where travel planning measures have helped to improve access to a range of locations. Where the information is available it has focussed on home games at stadiums. These points demonstrate where quantifiable change has been identified as an attribute of a particular measure.

Arsenal Football Club has worked with Transport for London and others to help supporters leave their car at home. Transport planning measures such as increased promotion of public transport mean the percentage of supporters arriving by car has fallen from 30% to 10% since moving to their new stadium in 2006². Given their strong location in relation to public transport options, their Section 106 agreement stated they were required to achieve a target modal split of 88% of supporters travelling by a mode other than the private car. Monitoring of this through matches in the 2006/2007 season showed that the measures had enabled them to achieve this modal split, with average percentage for car use shown to be around 11.5%³. Less than 12% of supporters arrive by car at the Emirates Stadium, more than 60% travel by tube, 12% use national rail services and 5% travel by bus (Islington Council, 2007).

- 6.3.2 **Aston Villa Football Club** has worked in conjunction with Mott MacDonald and Birmingham City Council to produce a Travel Plan and promote the use of sustainable transport modes amongst its supporters. Through various measures they have seen an increase from 26% in 2009 to 36.9% in 2012 of supporters using sustainable modes to travel to the football ground, taking car use down to 63%. Membership of the Supporters Car Share scheme has risen from 54 in 2010 to 218 in 2013 and informal car sharing has also increased significantly. The measures employed include provision of 100 secure cycle parking spaces, Jambusters car share scheme available on the Aston Villa website, 2 charging points for electric vehicles and sustainable travel days for supporters. The controlled parking zone (CPZ) around the stadium is now self-sustaining after initially being funded by the club.
- 6.3.3 **Tottenham Hotspur Football Club** is well served by public transport and has seen a reduction in car use by supporters from 60% in 2003 to 43%⁴. Its website provides Real Time information and regular transport updates with information also provided in match programmes and directly to supporters. Car use is discouraged by the introduction of an

² http://www.bettertransport.org.uk/node/3761; accessed 10/02/2014

³ Emirates Stadium Monitoring Programme 2007/08, Islington Council, 2008 (http://democracy.islington.gov.uk/download/meetings/area/eastareacommittee/4thnov2008/Emirates%20Stadium%2 0Monitoring%2Programme%202007-08.pdf/get.aspx accessed 10/02/2014)

⁴ Tottenham Hotspurs New Stadium Plans, <u>http://www.tottenhamhotspur.com/the-stadium/new-stadium-plans/accessed 10/02/2014.</u>



extended CPZ on match days which brings further benefits to local residents. To reduce demand peaks on the transport network there are new facilities and post-match events to encourage early arrival at the stadium and later departures.

- 6.3.4 The **KombiTicket** initiative was extended to supporters for the 2006 World Cup held in Germany, together with increases in service frequencies and capacities, with a result of 57% of spectators travelling by public transport, and 23% arriving by car which was a positive improvement from previous matches⁵. Match ticket prices were increased by 1 euro and the proceeds given to the regional transport authority. Holders of match tickets then became entitled to free travel on any service controlled by the regional transport authority.
- An estimated 75,000 of the 90,000 crowd at the 2007 FA Cup Final (more than 80%) used the three upgraded rail stations at **Wembley** to access the stadium (London Assembly Transport Committee, 2007). Many of these journeys may have involved formal or informal park and ride.
- 6.3.6 **Newcastle United Football Club** was ranked first in the Campaign for Better Transport's 2013 Premier League Travel Table due to the range of travel options they are able to offer to supporters. The Club encourages the use of sustainable transport to its supporters by initiatives such as the Magpie Mover; a discounted public transport ticket for home supporters, valid for a season and which permits travel on buses, trains, metro and ferry for a period 3 hours before and after a match. It has a dedicated website for supporters providing information on sustainable travel to the ground, a journey planning tool and a car sharing club. It is important to note that Newcastle have the advantage of a metro station in close proximity to the club, which has a big impact upon travel to the stadium, something which is not able to be adopted by LFC.
- As a legacy from the Commonwealth Games, **Manchester City Football Club** promotes a 'City Walk' route from the City Centre to the ground, which is signed and has an off-road section on the approach to the stadium which removes pedestrians from the streets, reducing congestion. This route is publicised on the clubs website and promoted to supporters as a preferred route to connect into the City Centre. As a result, the route is well used, with a large proportion of supporters choosing to walk the route into the City Centre post-match, as an alternative to waiting for public transport, which demonstrates the willingness to walk instead of wait if a clear route is provided.

⁵ Green Goal Legacy Report, 2006 World Cup, http://www.oeko.de/oekodoc/292/2006-011-en.pdf accessed 10/02/2014

⁶ Campaign for Better Transport 2013 Door to turnstile Improving travel choices for football supporters, http://www.bettertransport.org.uk/files/admin/Door to Turnstile CfBT FINAL web.pdf accessed 10/02/3014.



- 6.3.8 A range of other measures were presented as part of the Transport Assessment for the recently approved permission for stadium expansion at the Etihad Stadium. These measures include:
 - Additional Commuter Parking Zones;
 - Promotion of Park and Ride facilities at Metrolink Stations;
 - Increase wayfinding and stewarding or walk routes;
 - Additional cycle parking at the stadium;
 - Combined ticketing initiatives;
 - Improved coach parking facilities; and
 - Increased promotion and marketing of sustainable travel options.
- 6.3.9 Liverpool Football Club has planning permission for a circa 60,000 seat stadium, albeit on the adjacent Stanley Park, rather than an expansion of the existing stadium. In preparation for development, the Club funded works to discharge planning conditions, and many of these works related to the implementation of the approved access strategy. When a comparison is made between the modes supporters used to travel to the stadium before and after the works were implemented, it is clear that there has been a significant change occurring. In particular, it is apparent that much fewer people are travelling close to the stadium by car, and are rather making use of alternative modes of travel such as taxis and the City Centre transport hub through use of the match day City Centre bus. This is evident through changes to modal splits from 2008 to 2013 with a reduction in car use.

6.4 Summary

- 6.4.1 There are numerous Travel Planning, or 'Smarter Choices' initiatives that have successfully been implemented across new stadium developments and / or expansions of existing stadia which have demonstrated the impact that the instigation of softer measures can have upon influencing and positively changing travel behaviour for work, education, shopping and leisure trips.
- 6.4.2 Modal shift has even been demonstrated at LFC, with changes to supporter travel recorded following the implementation of previous measures, which demonstrates the flexibility of supporters to change their travel habits if supported through the provision of suitable alternatives to private vehicles.
- These schemes collectively validate that through the promotion and marketing of sustainable travel, people are able to and hence more likely to make an informed choice on how to travel to a location. This is something which the Club would seek to achieve through improved promotion of sustainable travel to the stadium, journey planning and exploring measures such as integrated ticketing to encourage supporters to leave their cars at home.



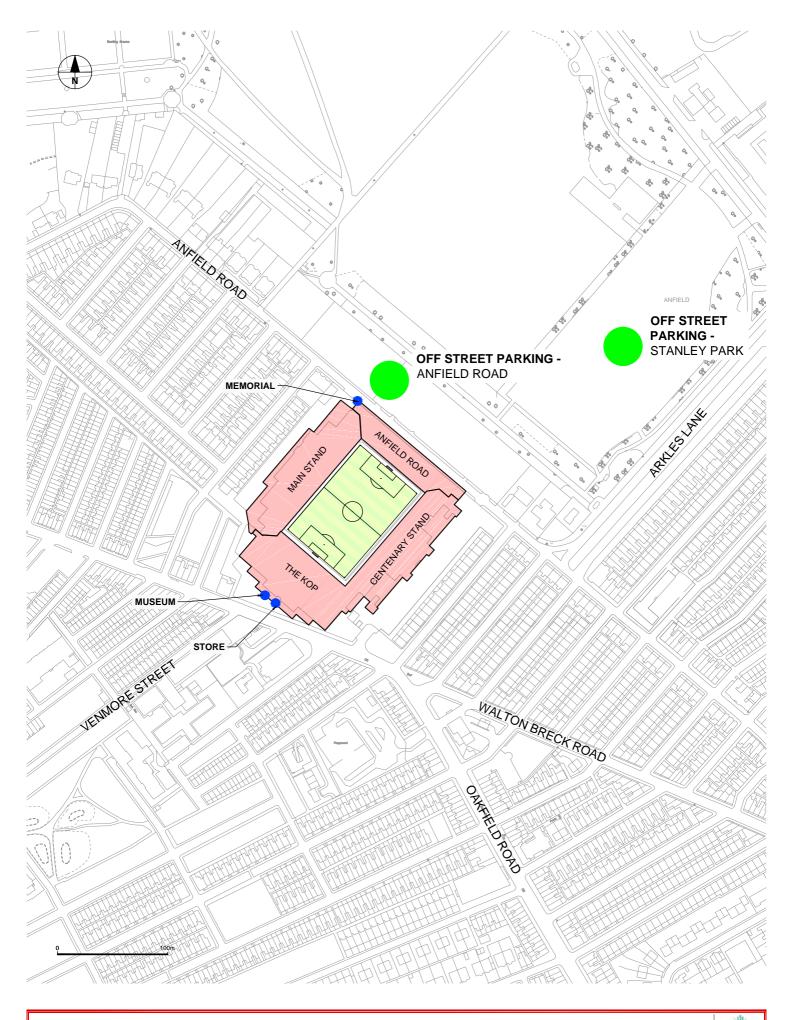
7 Existing Stadium

7.1 Introduction

- 7.1.1 This chapter provides an overview of the current operation and use of the stadium and its adjacent area on match days. Its existing arrangement is given on Figure 7.1.
- 7.1.2 From this figure it can be seen that residential terraced streets are to the east and west, Stanley Park is to the north and Walton Breck Road is to the south. On-site, on match days, there is only limited car parking which is used by players, management and those with the correct hospitality passes. To the north of Anfield Road is an off-street car park for use by hospitality ticket holders and emergency services, and within Stanley Park is a large surface car park which is leased from the City Council with access to it being controlled by LFC.
- 7.1.3 At the south west corner of the stadium is an area of green space, which was formerly terraced streets. This is popular with supporters to congregate before a match.

7.2 Stadium Facilities

- 7.2.1 Anfield Stadium has four stands which accommodate 45,296 seats for a mixture of general admission, hospitality and season ticket holders.
- 7.2.2 Within the stadium there is also a shop, fan zone, a food village, cafe and a museum. The shop is open from 9am to 5pm on Monday Saturdays and 10am to 4pm on Sundays. On match days, the store stays open for the build-up to a match and for one hour after the final whistle.
- 7.2.3 Interactive tours around the stadium and museum are generally operated between the hours of 9.30am and 4pm on all days of the week and require being pre-booked. The cafe is open around these times to provide refreshments to visitors.
- 7.2.4 Based on Anfield Road is Family Park, an area dedicated to both home and away families where activities include live music, penalty shoot outs and the opportunity to meet the Club mascot 'Mighty Red'.
- 7.2.5 There is a memorial in remembrance of the 96 supporters who lost their lives in the Hillsborough Disaster in 1989 which is located on Anfield Road.





7.3 Seating Allocations

7.3.1 Anfield Stadium currently has seating capacity for about 45,000 people across the four stands, and this shared between: general admission; hospitality; press and wheelchair users. The following table gives how this seating is approximately shared between the four stands.

Table 7.1: Seating Schedule

Stand	General Admission	Hospitality Boxes	Hospitality	Wheelchair Users	Totals
Кор	12,379	0	0	30	12,409
Centenary	9,303	320	2,200	0	11,733
Anfield Road	7,937	0	1,192	31	9,160
Main	11,568	0	296	40	11,904
Totals	41,187	320	3,688	101	45,296

Of these about 24,200 are allocated to season ticket holders, with the remainder being for general sale. Also included within these numbers is the allocation for away supporters, which can vary but 3,000 are reserved for Premier League matches.

7.4 Hospitality Arrangements

- 7.4.1 From the above table, it can be seen that about 4,000 seats can be currently allocated for hospitality with their numbers spread between the Centenary, Anfield Road and Main stands.
- 7.4.2 The Anfield Road stand has seating only for hospitality ticket holders, with its associated facilities being off-site (such as the Sandon Pub), or in other stands.
- 7.4.3 The Kop has no hospitality facilities, and the Main stand only has limited numbers.

 Consequently, the Centenary stand is where the greater majority of hospitality facilities are concentrated, such as lounges and dining areas.
- 7.4.4 Most hospitality facilities become available to ticket holders 2.5 to 3 hours before kick-off.
- 7.4.5 Approximately 920 parking permits for Hospitality ticket holders are issued per game to enable parking on Stanley Park by these ticket holders. In addition, currently around 1,500 Club controlled off-street parking spaces are available in the vicinity of the stadium in Stanley Park and Anfield Road.

7.5 General Admission

7.5.1 Around 41,000 seats are allocated to general admission and are split between away and home supporters. For Premier League matches 3,000 of these seats are allocated for away



supporters in the Anfield Road Stand, however for cup games this allocation can vary depending upon the match.

7.5.2 General Admission ticket holders are permitted entry to the stadium from one and a half hours prior to kick-off.

7.6 Employees and Staffing

- 7.6.1 On non-match days there are currently around 100 people employed at the stadium on a full and part-time basis. On match days this increases to around 1,100 people which includes: catering staff, security, crowd marshals and traffic management.
- 7.6.2 Within Liverpool City Centre, the Club has offices which employ about 500 people on a full and part-time basis.
- 7.6.3 A separate Interim Staff Travel Plan accompanies this application reviewing the travel characteristics of LFC staffing specifically at the stadium.

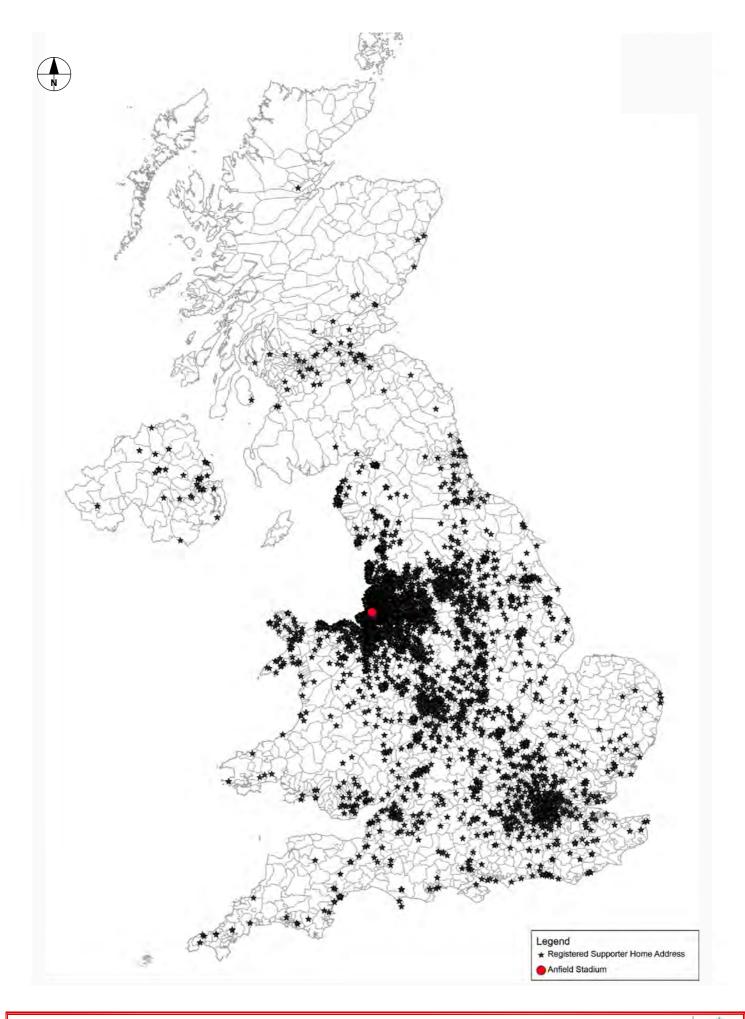
7.7 Season Tickets and Supporter Catchments

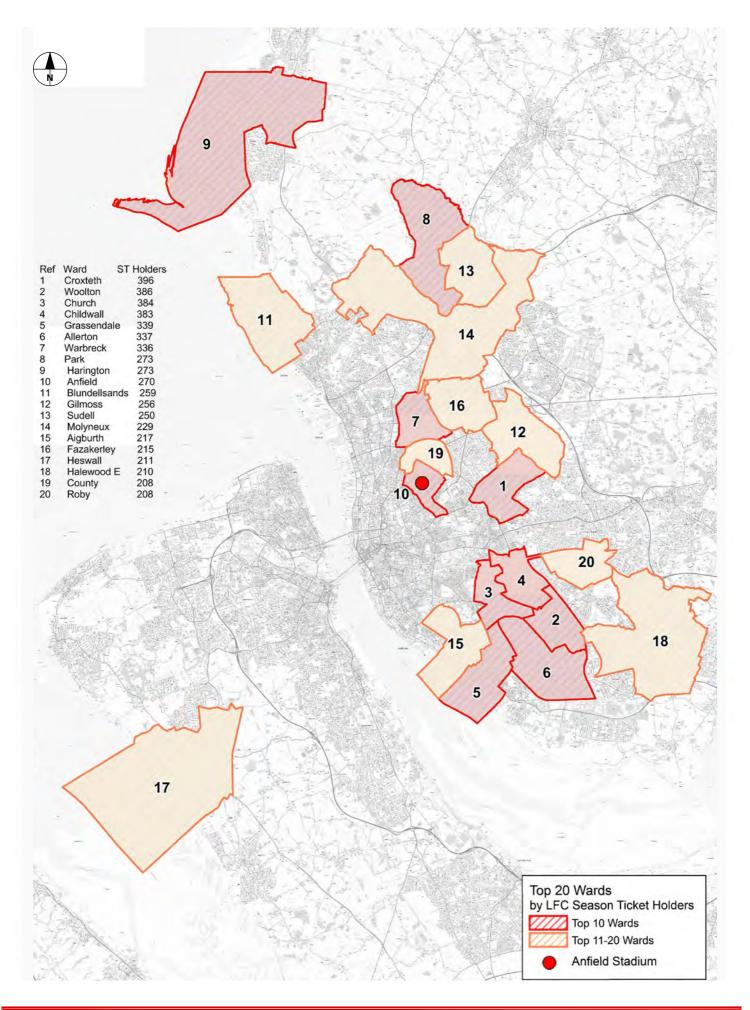
7.7.1 A review of the home postcodes of season ticket holders has been undertaken to understand the distribution of home supporters across the UK, and to determine likely origins of trips to Anfield for matches. A total of 24,243 UK postcodes have been received for analysis and have been plotted in Figure 7.2. They can be summarised as follows.

Table 7.2: Postcode Analysis – Season ticket holders

Area	Proportion of total Season Tickets
Liverpool District	25%
Merseyside	59%
North West	82%

- 7.7.2 The majority of the postcodes analysed (59%) are located in Merseyside (including the boroughs of Liverpool City, Sefton, Wirral, Knowsley and St Helens).
- 7.7.3 There were also notable concentrations outside of the North West in the following locations:
 - Leeds;
 - Birmingham;
 - London; and
 - Bristol.
- 7.7.4 Reviewing the season ticket data more local to the stadium, the following image gives the top ten and top twenty wards in Merseyside in terms of concentrations of season ticket supporters, as shown in Figure 7.3.







7.7.5 From Figure 7.3 it can be seen that there are good numbers of supporters local to the stadium and in particular to the south of the city. These catchments are also in good proximity to important transport corridors giving access to the City Centre and onwards towards the stadium.

7.8 Match Day Attendance

7.8.1 Attendance at matches is recorded for each game and fluctuates depending upon several factors including the type of match (League, Championship), opponent, day of the week and kick off time. A summary of attendance figures from the last full football season (2012/2013) for Premiership matches is shown in the table below.

Table 7.3: 2012/13 fixtures

Opponent	Day and Date	Kick off time	Attendance
Manchester City	Sunday 26 August	16:00	44,942
Arsenal	Sunday 2 September	13:30	44,932
Manchester United	Sunday 23 September	13:30	44,263
Stoke City	Sunday 7 October	15:00	44,531
Reading	Saturday 20 October	15:00	44,874
Newcastle United	Sunday 4 November	16:00	44,803
Wigan Athletic	Saturday 17 November	15:00	44,913
Southampton	Saturday 1 December	15:00	44,525
Aston Villa	Saturday 15 December	15:00	44,607
Fulham	Saturday 22 December	17:30	44,570
Sunderland	Wednesday 2 January	19:45	44,228
Norwich City	Saturday 19 January	15:00	44,901
West Bromwich Albion	Monday 11 February	20:00	44,752
Swansea City	Sunday 17 February	15:00	44,832
Tottenham Hotspur	Sunday 10 March	16:00	44,752
West Ham United	Sunday 7 April	13:30	45,007
Chelsea	Sunday 21 April	16:00	45,009
Everton	Sunday 5 May	13:30	44,991
Queens Park Rangers	Sunday 19 May	16:00	44,752
AVERAGE			44,747
85 th PERCENTILE			44,957

Source: LFC, 2014

7.8.2 From this analysis, we can calculate the 85th percentile and average attendance at the stadium as it stands. This is showing to be 44,957, with the average being 44,747. This demonstrates that the stadium typically operates at over 98% capacity for all Premiership matches.



- 7.8.3 The following findings are also of note:
 - Premiership matches on a weekday are relatively uncommon, with only two being held during this season;
 - The traditional 3pm kick-off on a Saturday is no longer the norm, with many matches being held on a Sunday / early afternoon / early evening; and
 - Matches are very well attended, with the stadium being consistently near to its capacity irrespective of the opponent.
- 7.8.4 A review of historical fixtures over the past 5 years showed that there is trend for more weekend matches in comparison to weekdays. This is clear in the following chart:

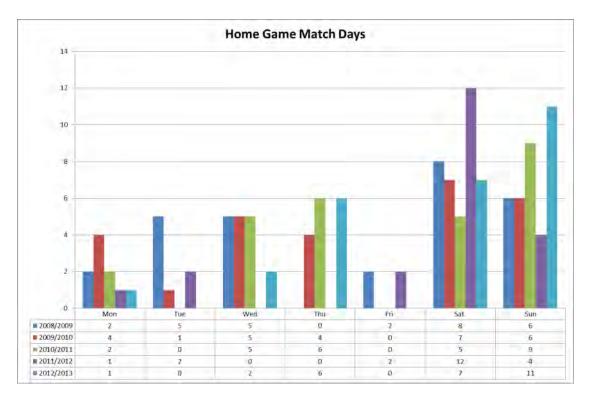


Chart 7.1: Changing profiles of match days for 5 previous 5 full seasons

7.9 Match Day Traffic Management Plan

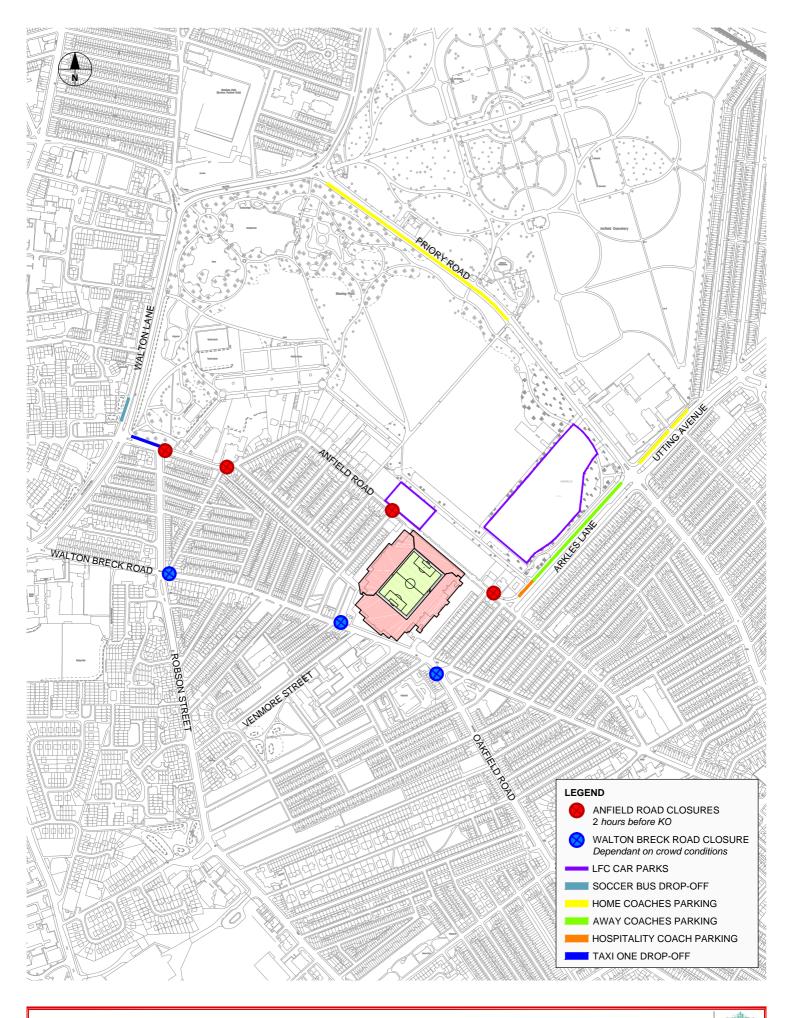
- 7.9.1 In partnership with the City Council and Merseyside Police, LFC operates a traffic management plan in the vicinity of the stadium before kick-off and before final whistle until crowds have dispersed.
- 7.9.2 The purpose of the plan is to help minimise vehicle and pedestrian conflicts, and manage the movements of vehicles (including supporter coaches).

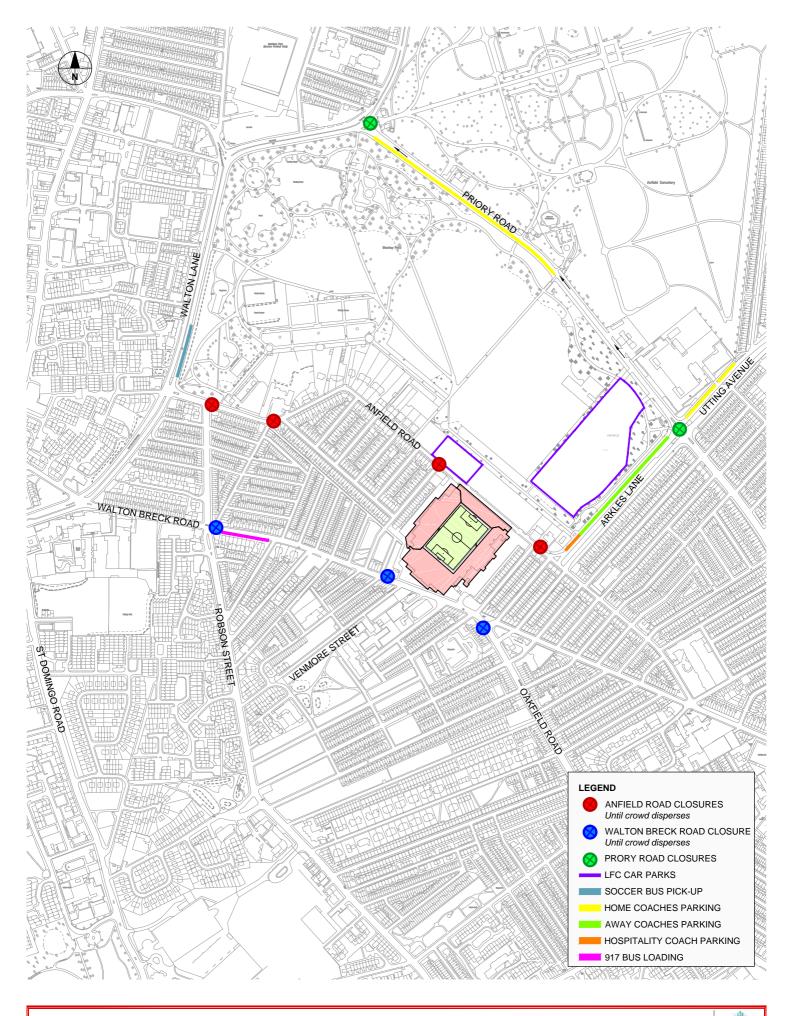
Liverpool Football Club Stadium Expansion

Transport Assessment



- 7.9.3 The key elements of the plan which are in place for the majority of football matches are highlighted in the images below. For special matches the plan can vary with more extensive road closures and alternate coach parking arrangements.
- 7.9.4 The plan is managed by LFC, implemented by a traffic management company and enforced by the Police on match days, and road closures / traffic movements are operated by a combination of police officers and personnel from a traffic management company. In total, around 23 people are needed to implement the traffic management plan for typical matches and this includes 2 to 3 Police Traffic Officers.





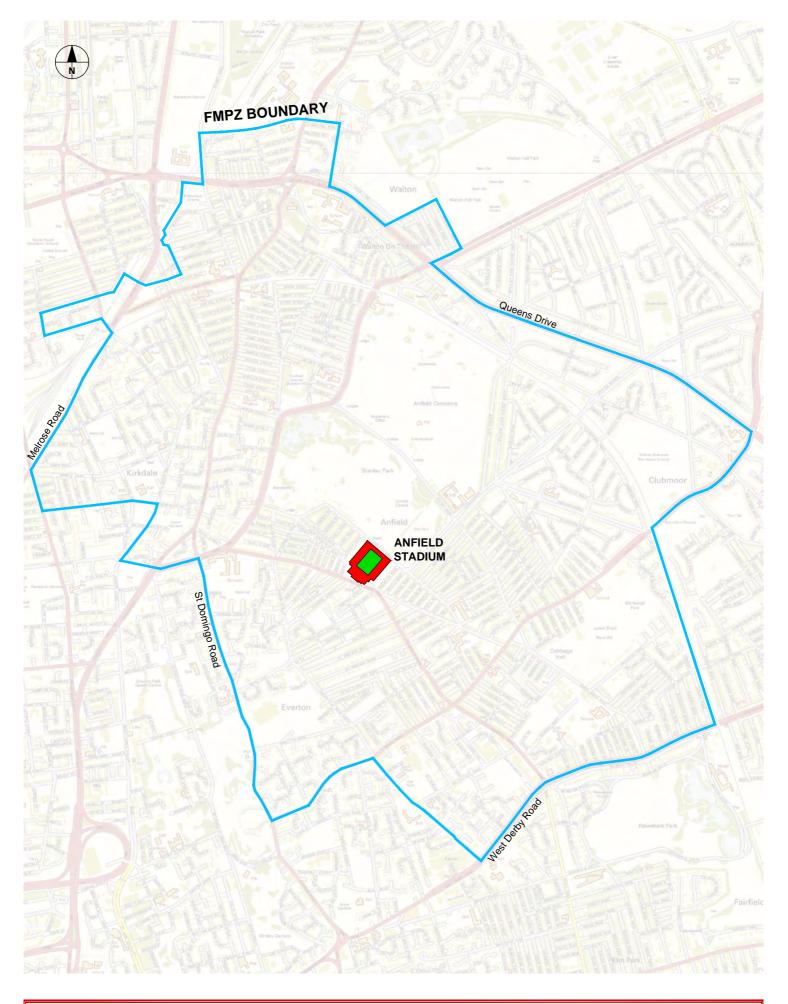


Match Day Accessibility Issues

- 7.9.5 Anfield Road is consistently closed to through vehicles on match days no later than two hours before scheduled kick-off. The points of the closure are managed by at least two stewards who allow permitted vehicles to pass through to reach car parks off Anfield Road and residents of the area.
- 7.9.6 However, Walton Breck Road is only closed before kick-off at the discretion of the traffic management company and / or the Police with no fixed time allocated to the closure. This causes a number of issues including:
 - Bus operators are not able to plan for the road closure and have diversion routes in place. Consequently, when Walton Breck Road is closed buses remain stationary rather than diverting via an alternate route, which results in lengthy delays for passengers and many vehicles to be off-timetable;
 - Walton Breck Road becomes very congested pre-match with much interaction between vehicles and pedestrians. Buses dropping off, taxis turning around, cars dropping off all result in a non-optimal environment for pedestrians;
 - Local residents can be caught up in the congestion as traffic tends to just stop when the closure is in place, with limited or no warning.

7.10 Football Match Parking Zones (FMPZs)

7.10.1 Football Match Parking Zones (FMPZ's) are in operation and enforced on match days in the area surrounding the stadium. The extent of this zone is given in the following figure.





- 7.10.2 Within these zones, on-street parking is split between marked bays for residents, and bays which are free, within which any vehicle can park. Parking within residents bays is only permitted by vehicles which are displaying a valid permit, and the free bays can be occupied by any vehicle, without the requirement to display a permit.
- 7.10.3 If available, the free bays can be used by supporters travelling to the stadium as well as staff working at the stadium. From on-site observations, the main areas of occupation of the free bays on match days are:
 - Utting Avenue;
 - St Domingo's Road; and
 - Robson Street.
- 7.10.4 Enforcement of the FMPZ's is undertaken by the City Council, and around 20 Civil Enforcement Officers are normally deployed to the area on match days. In general, the restrictions are well observed by supporters.
- 7.10.5 Outside of the boundaries of the FMPZ's, on-street parking is available where there are no waiting restrictions.

7.11 LFC Match day Car Parking

7.11.1 On match days, LFC currently control access to the following on and off-site car parks for use by spectators:

Table 7.4: Current LFC Controlled Match Day Parking

Location	Car Park	No. spaces	Disabled
Close Proximity Parking	Centenary Stand	33	-
	Main Stand	12	-
	Anfield Road	40	14
	Stanley Park	970	30
	Sub-total	1,055	44 (4.0%)
	Anfield Comp School	0	-
	Anfield Primary	60	-
Remote Parking	Pinehurst Primary	80	-
	St Domingo's	300	-
	Sub-total	440	-

7.11.2 This exercise shows that in total, on match days the Club currently controls approximately 1,495 car parking spaces – excluding those reserved for players, close relatives and senior officials.



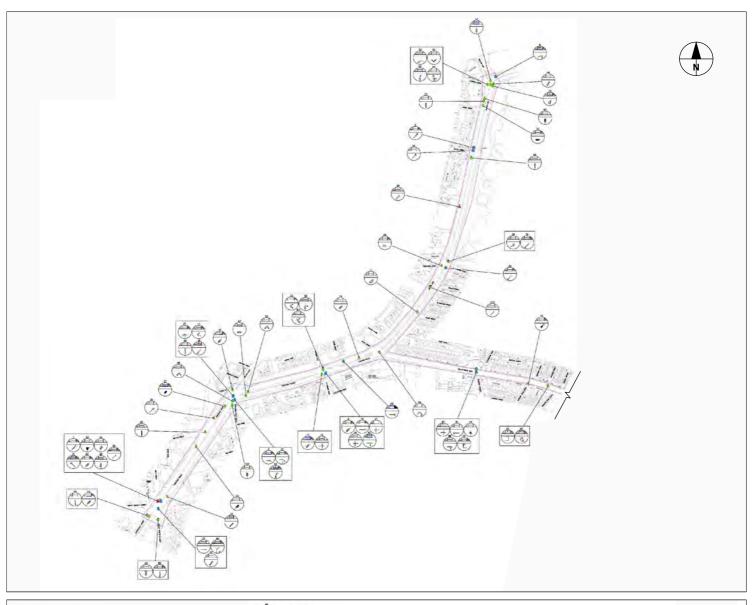
7.11.3 In addition to these car parks which are controlled by the club, there are also several private car parks which operate within the vicinity of the stadium which provide parking for supporters on a first come first served basis.

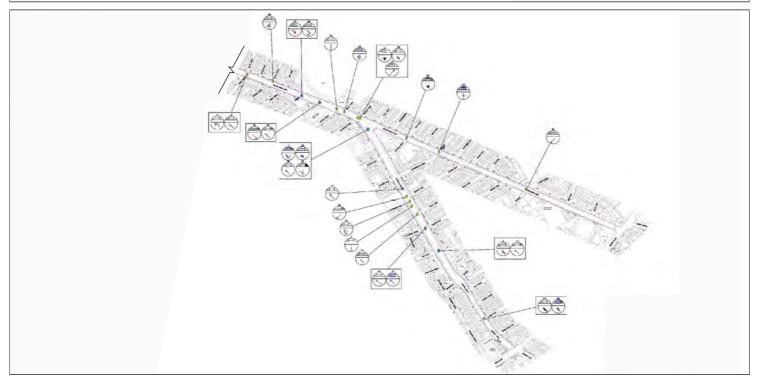
7.12 Outside Broadcast Units

7.12.1 Outside broadcast units and media support vehicles are currently positioned in the surfaced area between Lake Street and the southwest corner of the stadium. The numbers and types of these vehicles can vary significantly depending upon the nature of the match being held at the stadium, with later stage European matches generating the most. All of these vehicles are in place several days before the start of a match.

7.13 Accident Review

- 7.13.1 A review of accidents which have occurred within the vicinity of the stadium has been undertaken, covering the 5 year period of November 2008- November 2013. Data has been provided for the area covered by A59 Kirkdale Road, from Great Homer Street to its junction with Everton Valley Road, A580 from the A59 to Spellow Lane, A5089 from the A580 to Breck Road and its continuation along Walton Breck Road to Breck Road.
- 7.13.2 This analysis enables an understanding of the surrounding road network and the identification of any 'hotspots' where incidents frequently occur.
- 7.13.3 The following figure shows the distribution of incidents over the 5 year period.
- 7.13.4 Over a 5 year period from 29th November 2008 to 28th November 2013 there have been a total of 103 accidents; 80 producing slight injuries, 21 serious and 2 fatalities. The fatalities both occurred in the autumn but in different conditions and locations, one was a 45 year old pedestrian, one a 37 year old cyclist. 30 of the accidents have involved pedestrians, 7 pedal cyclists and 5 motor cyclists.
- 7.13.5 This analysis shows that there are no notable clusters of incidents in the vicinity of the stadium. Further match day specific analysis has been undertaken for pedestrians and is presented in Chapter 8.







7.14 Summary

- 7.14.1 This chapter has presented the existing operation of the stadium, and presented how this operation has changed over the last years, with an increasing focus on weekend matches.
- 7.14.2 The stadium has been shown to be operated at around 98% capacity on both weekday and weekend matches
- 7.14.3 It has been demonstrated that there has been a reduction in traffic growth in Merseyside over the last few years, and importantly since the previous planning applications. This effectively means that there is less traffic on the roads now than there was in 2008 which indicates:
 - New traffic associated with the development, given in localised and temporary nature will
 not push the levels of traffic above those previously recorded in 2006 and 2008; and
 - Within previous planning permissions, the additional capacity was intending to build upon these high levels of traffic through the addition of new traffic associated with the expansion, which was not considered to be an issue, and as such no junction modifications or network capacity improvements were felt necessary.
- 7.14.4 Walton Breck Road is currently closed before and after matches at the discretion of the Traffic Management Company or the Police, with the timing of this closure varying, meaning vehicles chance the road being open and become stuck behind the closure, causing congestion in the area.
- 7.14.5 This rationale can translate forwards to this application. If the network was considered to be able to operate sufficiently during previous highs of traffic growth as well as accommodate the additional capacity without any modifications, it stands to reason that now lower base levels of traffic are experienced, this same reasoning still applied. In addition to this, measures were previously implemented to accommodate an increased capacity of 51,900 which was not realised.



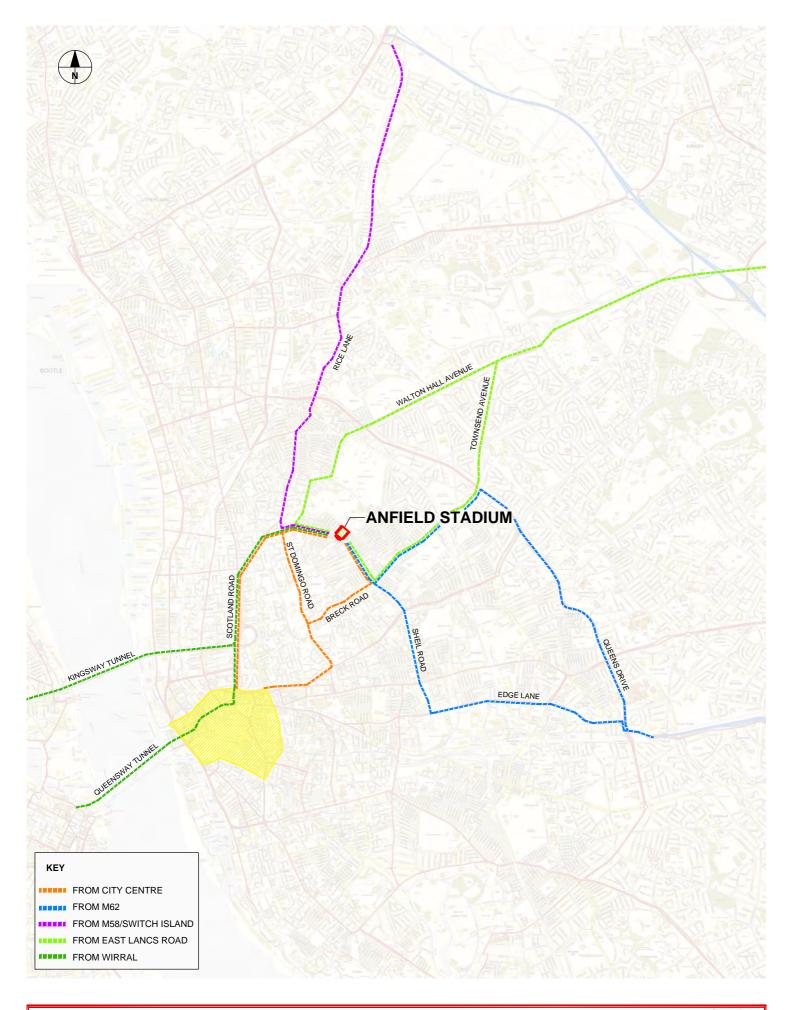
8 Match Day Stadium Accessibility

8.1 Introduction

- 8.1.1 This chapter provides a breakdown by mode of how the stadium and its vicinity can be accessed on match days, with reference also made to non-match day accessibility where applicable.
- 8.1.2 Observations were made over several match days, with passenger counts being undertaken for some modes on Wednesday 4th and Saturday 7th December 2013 to further understand movements and accessibility. These counts were in addition to the passenger travel surveys which quantified use of the modes, the results for which are presented in Chapter 9.

8.2 Car

- 8.2.1 Car is a popular mode of travel to the stadium and is applicable on both match and non-match days. On match days, car parking occurs in the areas surrounding the stadium in a range of different locations, both on and off street.
- 8.2.2 This section is intended to give a snap-shot of the existing situation, and how this changes between weekday and weekend games.
- 8.2.3 The main vehicle routes to the vicinity of the stadium are shown in Figure 8.1:
- 8.2.4 This highlights that the stadium can be accessed from a range of directions, but also demonstrates that it is not directly accessible from strategic routes, with convoluted approaches required which helps to reduce the convenience of arriving by car.



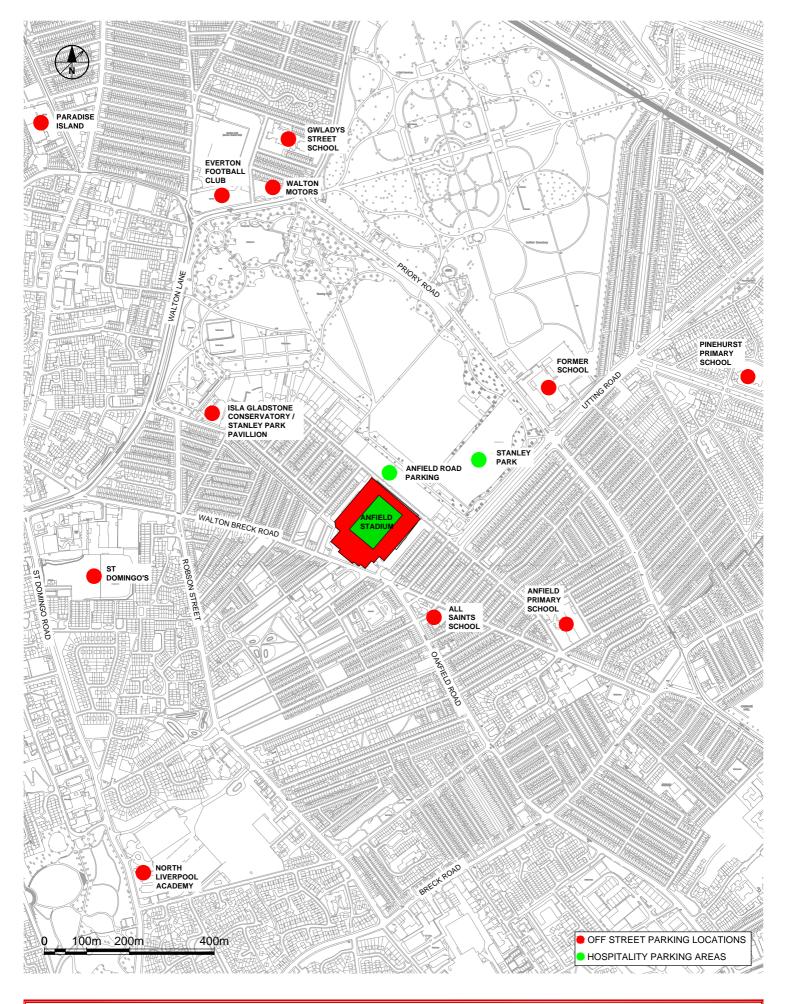


On Street Parking

- 8.2.5 As discussed earlier within this report, a Football Match Parking Zone is in operation and enforced on match days in the area surrounding the stadium, restricting on street parking.
- 8.2.6 Currently, depending on the match type and opponent, between 60 170 penalty charge notices (PCNs) are issued within the FMPZ on match days to vehicle parked without permits. When taken in the context of the number of vehicles associated with the game in the area on match days (c. 10,000), this tends to suggest that overall the FMPZ is working well and supporters are respecting the restrictions.
- 8.2.7 The exception to this is the area of new residential to the south of the stadium where streets and footways have been upgraded, but the signs and marking that are required for parking enforcement have not been re-instated. Consequently, within this area, all on-street parking is currently permitted and many supporters are taking advantage of this free parking so close to the stadium. This is a temporary situation, with restrictions expected to be put in place once the development is complete.
- 8.2.8 Outside of the boundaries of the FMPZ's, on-street parking is available where there are no waiting restrictions. It was noted during site observations that there was significant parking on single yellow lines by Blue Badge holders who are eligible to park on these restrictions for up to 3 hours, which encompasses the timeframe of a match.

Off-street Parking

- 8.2.9 In the vicinity of the stadium there is a range of off-street private car parking facilities available on match days. The vast majority of this parking is solely dedicated to match day parking, and is either not occupied or not operational for other uses on non-match days. The car park is also used by Everton Football Club for parking for their home match games. The exception to this is the parking area on Stanley Park which is mainly used by hospitality ticket holders on match days.
- 8.2.10 Off-street parking can range from the drive-ways of residential properties accommodating one or two cars, to the parking areas and playgrounds of nearby schools and colleges which are able to hold several hundred supporters vehicles. For all of this parking, people are generally required to make a payment to leave their vehicle, typically costing from £5 to £10.
- 8.2.11 The following figure gives the locations of the main sites which are currently being used for off-street parking on match days.





- 8.2.12 From this it can be seen that car parks are generally dissipated in the vicinity of the stadium to the north and east, with clusters along the main approach routes. This is likely to be due to the car parks being operational for both Liverpool and Everton matches, with the optimum location for capitalising on this being north of Anfield, also in the vicinity of Goodison Park.
- 8.2.13 It was observed on match days that for both weekdays and weekends, the car parks were well utilised but not always 100% occupied with capacity remaining in some, particularly those further away from the stadium. Parking in locations close to the stadium was more popular with these reaching capacity, such as outside the Gladstone in Stanley Park.
- 8.2.14 Speculative parking has been available for many years in Anfield and much of this operates legally within the planning system and is outside of the control of LFC. This leads to a fluid parking provision with car parks opening, closing and evolving of their own accord, however there is limited opportunity for significant parking provisions to be made within the vicinity of the site due to existing land uses.

Hospitality Parking

- 8.2.15 In addition to the above, a limited amount of parking is located close to the stadium on Stanley Park which is controlled by the Club on home match days and mainly used by those with hospitality tickets. The parking is also used on match days by members of the press, Police vehicles and some staff of the Club. Only those with a permit are allowed to park in this location.
- 8.2.16 Hospitality parking areas include:
 - Parking adjacent to the stadium off Anfield Road this facility has recently been closed and will not be re-instated in its current form following the development, however it is proposed that undercroft parking will be provided within the expanded Anfield stand.
 - Parking within Stanley Park between Anfield Road and Priory Road which provides about 1000 parking spaces (some marked). The parking at Stanley Park is uncontrolled on non-match days and freely available for use.
 - Parking to the north of Priory Road at the junction with Arkles Lane on the site of the former Comprehensive School, which provides in the region of 700 informal spaces.

Drop offs

- 8.2.17 Drop-off and pick-up is a car-based mode of travel which negates the need to find a parking space and was observed as being undertaken on match days.
- 8.2.18 There is currently no dedicated drop-off or pick-up point at the stadium on match days, with the practice on non-match days tending to happen informally on Walton Breck Road, directly outside the KOP stand.



- 8.2.19 Drop-off on match days tends to occur outside the stadium on Walton Breck Road, on Oakfield Road, on Arkles Lane to the rear of the stadium as well as further afield. At busy match times, cars compete with taxis for kerb space at these locations, particularly on Walton Breck and Oakfield Roads. Another key issue in common with taxis is that drop-off and pick-up journeys generate two trips, assuming the return journey is the same, doubling the impact for every person or group using this mode.
- 8.2.20 On match days, drop-off at the front of the stadium on Walton Breck Road is complicated by the closure of Walton Breck Road to vehicles as and when Police deem necessary. The irregular timing of the closure on match days means that it is not clear when the closure will come into force meaning vehicles chance that it will still be open. Closure then results in congestion at either end as cars change their route and try to drop off as close as possible to the stadium.
- 8.2.21 Pick-ups are not able to occur on Walton Breck Road after the match as it is closed to vehicles to enable the crowd to disperse for about 15 minutes after final whistle.
- 8.2.22 On non-match days, Walton Breck Road is not closed and as such, pick-ups and drop offs along this road occur without much concern.

8.3 Taxis

- 8.3.1 Taxis are a popular mode to reach the stadium on match days. Within this TA, the term taxi incorporates hackney carriages, mini-cabs and the Taxi One service, however each is analysed in turn below.
- 8.3.2 The taxi economy is strong due to a range of factors such as limited parking provisions in the vicinity of the stadium, timings of public transport not currently catering for some supporters arrival profiles, the use of taxis to undertake linked trips from the City Centre and other local attractions (to include catering establishments) and the proportion of non-Liverpool visitors travelling in from neighbouring local authorities.

Hackney carriages

8.3.3 Liverpool has the lowest per capita provision of hackney carriages compared with other major UK authorities⁷. This means that Liverpool has a very good provision of hackney carriages in relation to the region's population. Consultation with representatives from the taxi industry confirmed that the majority of journeys to the stadium by taxi originate in the City Centre with the main pick up points being the taxi ranks at Williamson Square, Hanover Street, Great Charlotte Street and Lime Street Station. Taxis make multiple trips between the City Centre and the stadium before a game, regularly as many as 7-8 each in the four hour period before

⁷ Liverpool Hackney Carriage Demand Study, LCC, 2011



kick-off (with an average of 2 round trips per hour). Within the City Centre these operations work well with no major issues observed or concerns received from the police of public transport operators.

- 8.3.4 Mersey Cabs operate around 360 black cabs, the majority share of the 1,426 licensed hackneys in Liverpool. The cabs are controlled centrally taking bookings as well as picking up on street. Mersey cabs work at approximately 80% capacity pre-game with key pick up points being Lime Street Station, Liverpool John Lennon Airport and large hotels such as Travelodge and Hilton.
- 8.3.5 Before a game, taxis drop off outside the stadium on Walton Breck Road. When the road is closed, taxis will drop off as close to the road closure as possible, for instance on Oakfield Road and the westward end of Walton Breck Road and Walton Lane, causing increased congestion at these points.
- 8.3.6 During the game, taxis queue outside the stadium on Walton Breck Road to cater for those leaving the match early; however, they are required to move before final whistle as the road closes to allow supporters to disperse post-match.
- 8.3.7 There is no designated place for taxis to pick people up post-match; therefore, they tend to drift around the surrounding streets until hailed or until the road closure is lifted and they can return to Walton Breck Road.
- 8.3.8 Mersey Cabs do not take bookings straight after the game for this reason; there is no designated place that they can direct people to wait to be picked up. The earliest post-match booking Mersey Cabs will take is 1.5 hours after the game. In addition, this lack of formalised set up discourages some taxi drivers from serving Anfield directly post-match.

Taxi One

- 8.3.9 Taxi One operates as a bus service but using black hackney cab taxis. It provides a direct service from St Johns Lane, situated directly opposite Lime Street Station in Liverpool City Centre, to Walton Breck Road. The service begins 3 hours prior to kick-off; each taxi takes five passengers, charging £1.90 per adult, and departs when full. No return service is provided.
- 8.3.10 Taxi One's pick up location is adjacent to the 917 bus service (covered in more detail below) which also provides a direct service to Anfield at a charge of £2 per person.

Mini-cabs

8.3.11 Private hire mini-cabs is an increasing mode of travel to the ground on match days. Based upon a Saturday match day observation, Chart 8.1 demonstrates the current split between black cab and private hire vehicles and provides an indicative profile of taxi arrivals. As can be



observed, private hire taxis comprise about a third of the overall taxi cohort serving the stadium on match days.

8.3.12 With mobile phones, private hire cabs are easy to pre-book and the cost tends to be less expensive than Hackney cabs.

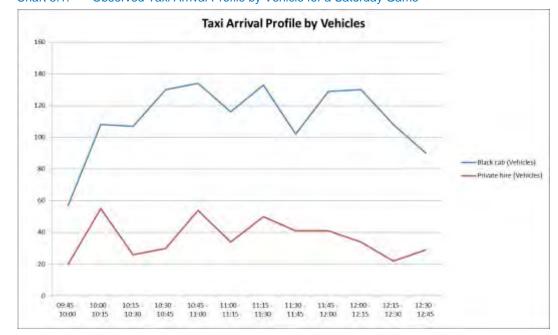


Chart 8.1: Observed Taxi Arrival Profile by Vehicle for a Saturday Game

Source: Mott MacDonald site observations, 2013

- 8.3.13 Note that the above chart is only a snapshot of taxi usage recorded at two locations. Total taxi usage is therefore significantly higher.
- 8.3.14 Whilst the majority of black cab journeys to the stadium originate from the City Centre, journeys made by private hire taxis are likely to originate from a wider, more diverse area across Liverpool and the City Region. For this reason it is not possible to quantify the number of vehicles which are available to meet demand on match days.
- 8.3.15 The observed arrival profile highlights that the number of private hire vehicles serving the stadium for a weekend match plateaus and declines in the hour before kick-off. The number of black cabs serving the ground remains higher for longer. This could relate to a surge in last minute trips to the ground from the City Centre as opposed to private hire journeys that tend to be planned and booked further in advance.
- 8.3.16 Table 8.1 shows the observed average occupancy of hackney carriages and private hire taxis for a weekend game.



Table 8.1: Observed Average Taxi Occupancy

Тахі Туре	Observed Average Occupancy
Hackney Carriage	3
Private Hire	2

- 8.3.17 A difference of one in this average level suggests that a slightly higher number of people occupy each Hackney vehicle, compared with private hire taxis, however both vehicle types are not operating at full capacity in most cases (that is, 5 seats for Hackney vehicles and standard private hire capacity of 4 seats).
- These figures are on a par with the occupancy figures derived from the supporter travel surveys which are presented in Chapter 9.
- 8.3.19 Designated taxi pick up points would enable a more efficient and effective use of this mode post-match, decreasing traffic movements and congestion in the vicinity of the stadium. Their implementation could also encourage more taxis to directly serve the area after a game, potentially increasing capacity of this mode.

8.4 Coaches and minibuses

- 8.4.1 Home supporters travel from across the UK to Anfield, including a considerable proportion from Ireland, Wales and the Midlands, making coaches ideal and cost effective for group travel.
- A significant amount of match day coaches combine the trip with a visit to Liverpool City Centre, allowing the supporters to make use of leisure and retail facilities prior to the match. They tend to drop people off in the City Centre, wait within or close to the City Centre for a couple of hours and then pick the supporters up again to arrive at Anfield in time for kick-off.
- 8.4.3 During the match, home supporter coaches and minibuses park along Priory Road. They point northwards to enable easy departure after the match, when Priory Road becomes one-way northbound to allow coaches and traffic from adjacent car parks to exit smoothly and without undue delay. Approximately 35 coaches can locate on Priory Road, with additional coaches over spilling onto Utting Avenue. Away coaches park on Arkles Lane.
- 8.4.4 The Club also makes use of off-site hotels for off-site hospitality entertainment, and for those located in the city centre coaches are provided to transport guests to and from the match. This is typically 4-6 coaches, and they park on Arkles Lane closest to the stadium.





Coaches parking on Priory Road

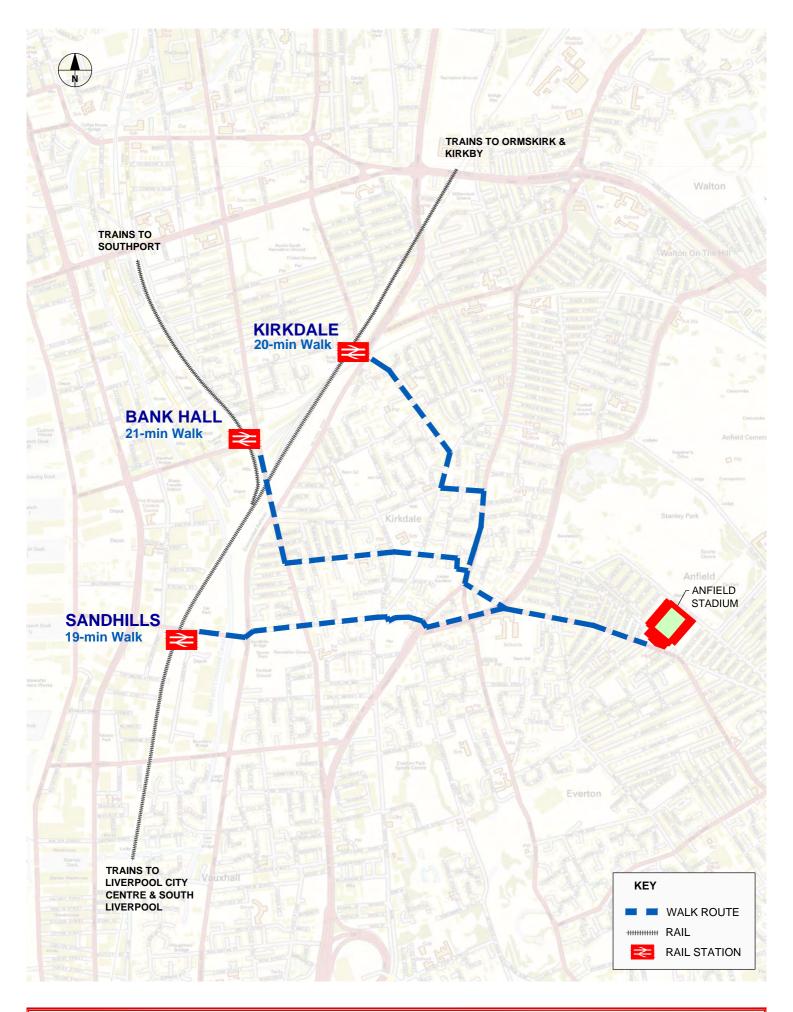
- 8.4.5 Observations showed for home supporters that 20 coaches and 13 minibuses were parked during the weekday match and 33 coaches and 7 minibuses during the weekend with an overspill of 2 coaches onto Utting Avenue.
- 8.4.6 Hospitality coaches and away supporter park on Arkles Lane northbound. This stretch can accommodate approximately 15 coaches and is intended to ensure some segregation between home and away supporters, particularly following a match.
- 8.4.7 Both Priory Road and Arkles Lane are a short walk from the rear of the stadium, either through Stanley Park or along Arkles Lane to Anfield Road. However, it is observed that some coaches drop supporters off on Walton Breck Road before parking up. This creates increased traffic congestion in front of the ground and is not encouraged or supported by the club or police.
- 8.4.8 Observations revealed that average capacities for a minibus and a coach were 22 and 53 persons respectively for a weekday game with an average occupancy across the two of 86%.



This highlights some capacity within current coach and minibus usage which could be capitalised upon through promotions in conjunction with supporters clubs. There is also capacity within coach and mini-bus parking on a weekday; however, a weekend sees current allocated coach and mini-bus parking frequently close to capacity.

8.5 Train travel

- 8.5.1 There are three rail stations located at a similar distance to Anfield Stadium and served by the Merseyrail Northern Line rail service:
 - Sandhills Station is served by trains running to all three Northern Line northbound end destinations (Southport, Ormskirk and Kirkby) from Hunts Cross in South Liverpool via Liverpool Central in the City Centre. The Station is 1.3 miles walk from the Stadium and is served by the Soccerbus which runs a shuttle service between Sandhills and the Stadium both before and after a match, on match days only.
 - Kirkdale Station is served by trains running to Ormskirk and Kirkby from Liverpool Central and is 1.4 miles walk from the Stadium.
 - Bank Hall is served by trains running between Southport and Hunts Cross via Liverpool Central in the City Centre and is 1.4 miles walk from the Stadium. Sandhills Station is on the same line as this station and is closer to the stadium for walking, therefore this has not been observed to be a particularly popular station for supporters to travel to and from.
- 8.5.2 The Northern Line interchanges with the Wirral Line at Liverpool Central and Moorfields Stations providing access to the Wirral as well as Liverpool Lime Street Station which facilitates national services to destinations such as Warrington, Manchester, Crewe, Birmingham and London via the City Line.
- 8.5.3 Figure 8.3 shows the location of these stations and the most direct walk routes between them and the stadium.





8.5.4 Table 8.2 details the number of services per hour northbound and southbound at each of the three nearby stations. Service frequencies do not alter for match and non-match days.

Table 8.2: Number of services per hour at each station

Day	Sandhills		Kirkdale		Bank Hall	
Day	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
	12	12	8	8		
Weekday	10	9	6	5		
&	(from 19:29)	(from 19:03)	(from 19:27)	(from 19:06)	4	4
Saturday	8	6	4	4		
	(from 20:44)	(from 21:16)	(from 20:42)	(from 21:19)		
Sunday	6	6	4	4	2	2

- 8.5.5 Taking the lower number of services which operate through Sandhills (which also serve Kirkdale and Bank Hall), based on a standard 12 services per hour (bi-directional) at a minimum 3 car capacity of 576 passengers, this equates to an overall minimum total people capacity of 6,912 people per hour, which would increase (potentially double) if 6 car services were operated.
- 8.5.6 Once alighted at these stations the main options for travel to the Stadium are:
 - Walk;
 - Taxi;
 - Cycle (with bicycles permitted on Merseyrail services); and
 - Soccerbus (from Sandhills Station only and on match days only).
- 8.5.7 Observations at the stations showed that the train is currently being used by some supporters on match days but it is not a well-used mode of transport for accessing the stadium in comparison to other modes. This is likely due to the limited routes directly available from nearby stations (Merseyrail Northern Line only) and the number of changes required if coming from elsewhere. For example, if arriving by train into Liverpool Lime Street, to continue your journey to the stadium by train requires:
 - A change at Lime Street to access the Merseyrail underground network;
 - A second change at Liverpool Central to access the Northern Line; and
 - Once at Sandhills, either changing for the Soccerbus or walking 15 minutes to the stadium.

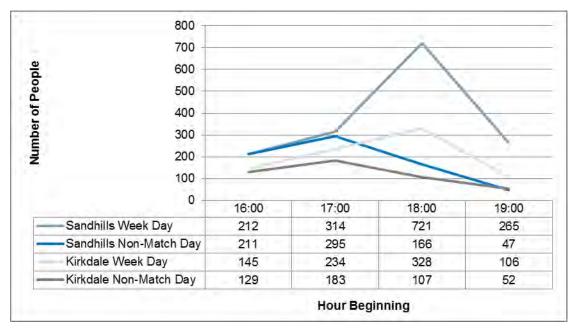
Passenger Counts at Sandhills and Kirkdale Stations

8.5.8 The surveys collected data to provide an understanding of the numbers of people alighting from these stations on match days, with a comparison then made between match and non-match days.



- As previously outlined, on the weekday match, the kick off time was 19:45 with final whistle at approximately 21:30, with the weekend kick off at 15:00 and final whistle approximately 16:45.
- As expected, the total numbers of people alighting are higher throughout the four hour period prior to kick off on a match day compared to a non-match day. The biggest difference arises during the hour of 18:00 with the majority of people alighting during the hours of 16:00 and 17:00 representing the usual evening non-match day peak at both stations.
- 8.5.11 Of all of the nearby stations, Sandhills experience the greater use both before and after a match, aided by its marginally better proximity to the stadium and the Soccerbus shuttling supporters to and from the stadium.

Chart 8.2: Number of people alighting by station for match and non-match days pre-match



Source: December 2013 observations

700 600 Number of People 500 400 300 200 100 0 21:00 21:30 22:00 22:30 Sandhills Week Day 11 244 631 66 Sandhills Non-Match Day 7 15 27 28 Kirkdale Week Day 3 28 208 19 Kirkdale Non-Match Day 2 0 Half Hour Beginning

Chart 8.3: Number of people boarding by station for match and non-match days post-match

Source: December 2013 observations

Spare Capacity

8.5.12 As part of the passenger counts undertaken at Sandhills and Kirkdale Stations, the occupancy of each train service was estimated (using an A-F referencing system as outlined in Chapter 2) to enable both the usage and spare capacity of the services on match and non-match days.

Table 8.3: Train occupancy criteria

Reference	Criteria	Percentage Occupation
Α	Some seats occupied	30% occupied
В	Most seats occupied	50% occupied
С	All seats occupied	70% occupied
D	All seats occupied and standing area up to half occupied	80% occupied
Е	All seats occupied and standing area almost full	90% occupied
F	Train completely full and passengers unable to board	100% occupied

8.5.13 There is spare capacity on the trains serving Sandhills and Kirkdale on match days in the build-up to a match as well as post-match. In particular the southbound services have space that can be utilised to transport more people to the vicinity of the Stadium by train.



- 8.5.14 The capacities of the trains are considerable, with a standard 3 carriage Merseyrail service accommodating 576 passengers, with some services actually operating with a 6 coach formation which doubles this service capacity.
- As outlined earlier, the lowest number of services are experienced on Sundays, when 6,912 people can be moved per hour. Over a three hour period this equates to 20,736 people. It is recognised that there would be a need to ensure non-match day users remain able to be accommodated upon the services, and this has been taken into consideration in later capacity analysis.
- 8.5.16 The percentages presented below represent the percentage of spare capacity observed, by adding the total capacity of the services within the hour together, to take into account variations between service capacities (i.e. 3 or 6 coaches) and the frequencies and then subtracting the number of people observed (which included existing supporters and non-match day users).

Table 8.4: Weekday spare capacity by direction and hour

Period	(Half) Hour Beginning	Sandhills Northbound	Sandhills Southbound	Kirkdale Northbound	Kirkdale Southbound
	15.00	17%	50%	50%	57%
	16.00	23%	53%	36%	63%
Pre-match	17.00	11%	58%	18%	60%
	18.00	25%	56%	52%	60%
	19.00	50%	66%	55%	67%
	21:00	50%	70%	50%	70%
Post-match	21:30	48%	43%	50%	70%
Post-match —	22:00	13%	38%	25%	70%
	22:30	50%	60%	50%	70%

8.5.17 An analysis of weekend train usage demonstrates that spare capacity is available at each station which should be able to accommodate additional supporters choosing to travel by this mode.



Table 8.5: Weekend spare capacity by direction and hour

Period	(Half) Hour Beginning	Sandhills Northbound	Sandhills Southbound	Kirkdale Northbound	Kirkdale Southbound
_	11.00	54%	38%	52%	52%
Dro motob	12.00	59%	23%	39%	58%
Pre-match	13.00	36%	25%	28%	63%
	14.00	36%	41%	28%	56%
	16:30	24%	38%	30%	41%
Post-match	17:00	12%	41%	50%	25%
	17:30	14%	53%	67%	22%

- 8.5.18 It should be noted that at Sandhills Station following a match, supporters are delivered to the station in discrete groups by the Soccerbus causing a surge of supporters, however given the frequency of services and the multiple directions and destinations available, these appear to easily disperse onto services without causing concern.
- The following table summarises spare capacity in terms of number of people spaces, derived from the percentages presented above for each movement.

Table 8.6: Spare capacity review of trains by people numbers

Scenario	Period	Northbound from Sandhills	Southbound from Sandhills	Northbound from Kirkdale	Southbound from Kirkdale
	Pre-match (3 hour build up)	5,357	12,902	9,619	5,299
Weekday	Post-match (2 hours post- match)	2,152	1,962	1,210	864
	Pre-match (3 hour build up)	12,096	8,179	12,211	6,509
Weekend	Post-match (2 hours post- match)	5,069	6,048	3,168	5,069

8.5.20 This table demonstrates that there is considerable spare capacity on the local rail network to accommodate additional supporters, as the capacity noted above is 'spare', having already accounted for both exiting match day and non-match associated travel which make up the calculated reserved or utilised capacity.

City Centre Stations

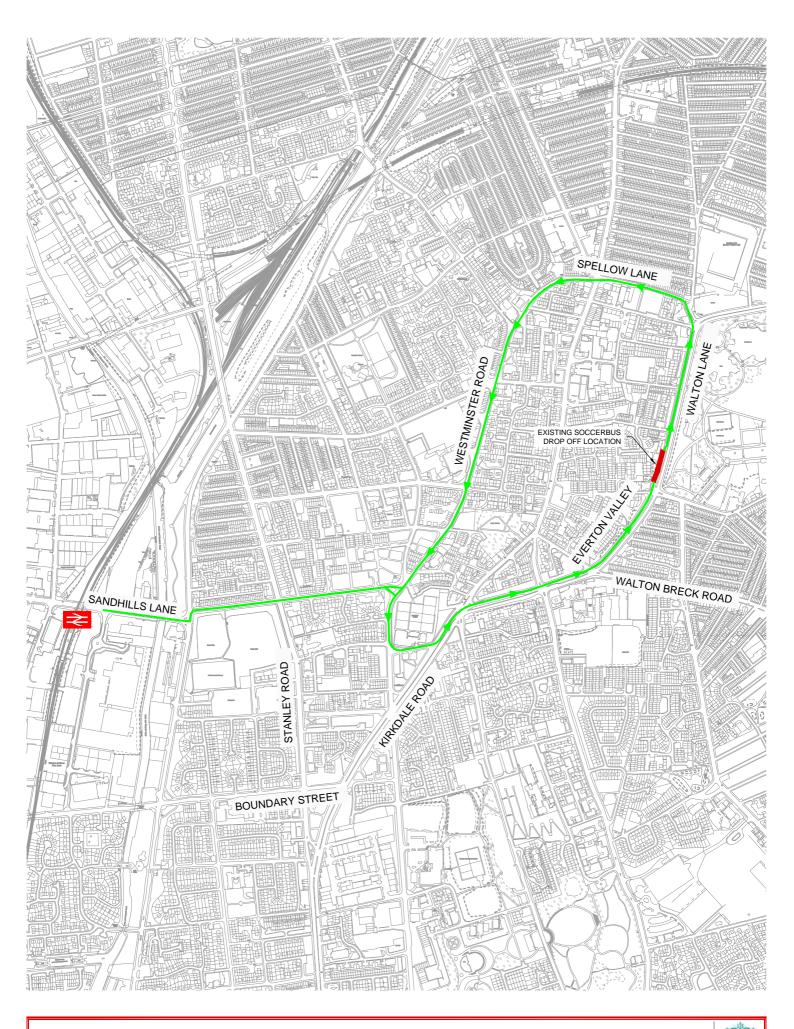
8.5.21 In addition to the stations in close proximity to the stadium, there is also Lime Street station in the City Centre which is important for providing regional and long-distance travel options to Liverpool, with supporters then changing onto an alternative mode of transport to complete their journey to the stadium, typically taxi or bus.



- 8.5.22 Especially at the weekends, there is likely to be a break in the journey for these rail users who may spend some time in the City Centre, for example shopping, eating, drinking or staying overnight before then making their way to Anfield.
- 8.5.23 The location of Lime Street helps to reinforce the importance of the City Centre as a hub from which shorter shuttles operate to the stadium, either by bus or taxi, and influences the proportion of journeys which originate from the City Centre, highlighting this as a critical catchment.

8.6 Soccerbus

- 8.6.1 The Soccerbus provides a bus service from Sandhills Station to Anfield Stadium on match days only. It runs for 2 hours before each match with the last bus from Sandhills station departing approximately 15 minutes before kick-off. It then provides a return service for 50 minutes after the final whistle with the pickup point being on Walton Lane (where passengers are dropped off before the match).
- 8.6.2 The service is fully accessible. It costs £1.40 return if the passenger adds the Soccerbus journey on to their train ticket at the beginning of the journey or £1.70 single or return if buying a ticket on the bus. The service is free for people with valid Trio, Solo and Saveaway tickets and Concessionary Travel Passes.
- 8.6.3 The service is currently operated by demand rather than to a fixed schedule, with buses generally departing when full. Each bus has the ability to complete 2 round trips to the stadium per hour, which over a 2 hour operating period and with 6 vehicles mean 24 round trips, or capacity to move 2,160 supporters.
- 8.6.4 The current route of the Soccerbus is shown in the following figure.



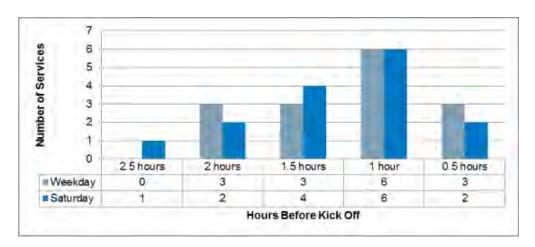


Pre-Match Survey Findings

Number of Services

- A total of 15 Soccerbus services ran prior to the match on both match days. After the match 10 services ran on the weekday and 9 on the weekend. On each day, these services were delivered using 6 double decker buses, with each bus having a capacity of approximately 90 passengers.
- 8.6.6 Chart 8.4 shows how many services ran per half hour in the lead up to both games. As can be seen from the graph the highest number of services ran between 1 and 0.5 hours before kick-off.

Chart 8.4: Number of Soccerbus Services Pre-match



8.6.7 This change in frequency is reflected in Table 8.7 showing the average time in between bus departures. Pre-match the first three buses to depart completed 3 full services with the last three to depart completing 2 full services.

Table 8.7: Average time in between departures

Hours before Kick Off	Weekday	Saturday
2 hours	00:14	00:11
1.5 hours	00:09	00:08
1 hour	00:04	00:04
0.5 hours	00:08	00:09

8.6.8 The departure times recorded during the surveys indicate that at peak times a Soccerbus can run a full service, load passengers and depart for a second service in half an hour. Therefore, it can be assumed that with 6 vehicles in use the maximum number of services that can



depart within any one hour period is 12. Based on this assumption, the Soccerbus was running a peak service during the 1 - 0.5 hour period prior to each game surveyed.

Observed Usage

- 8.6.9 Chart 8.5 shows the number of people arriving by Soccerbus on the surveyed weekday and Saturday. Numbers using the Soccerbus were broadly similar for the two days with a total of 919 people using it on the Wednesday compared to 902 on the Saturday. Based on the maximum potential of the service to transport 2,160 people over the 2 hour operating period, this indicates that there is 58% spare capacity on the service on weekdays.
- 8.6.10 The highest concentration of people used the Soccerbus to access the Stadium 1 0.5 hours before kick-off. The number of people arriving by Soccerbus in this half hour period was more than double the number arriving by this mode in the previous half hour (1.5 1) hour prior to kick-off) and quadruple the number arriving less than 0.5 hours before the match.

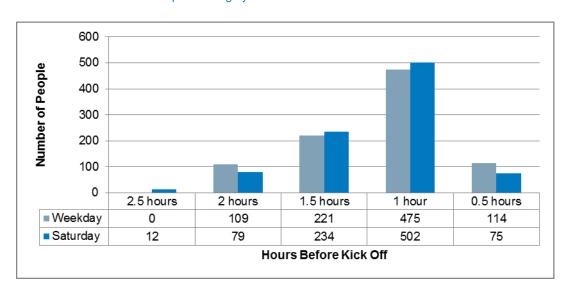


Chart 8.5: Number of People Arriving by Soccerbus

8.6.11 Chart 8.6, showing the number of people using the Soccerbus each half hour averaged across the number of Soccerbus services provided, confirms that the service frequency is stimulated by demand and that the Soccerbus service has the capability to meet current peak demand.

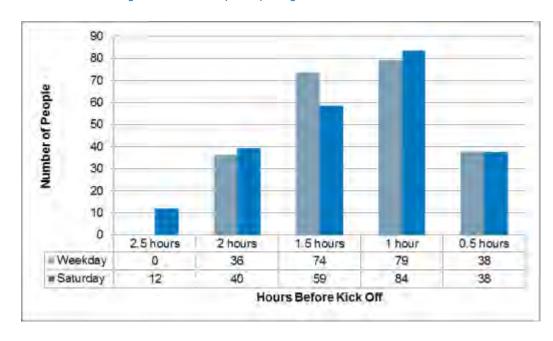


Chart 8.6: Average Number of People Departing Per Soccerbus

Post-Match Survey Findings

- 8.6.12 Post-match the Soccerbus departs from Walton Lane returning passengers to Sandhills Station. On the days surveyed, 10 Soccerbus services ran on the weekday and 9 on the Saturday after the match.
- 8.6.13 During the first half hour the maximum number of 6 services ran on both days indicating a high level of immediate demand. The number of services reduced in the second half hour and no services ran an hour after the game finished on either day. As can be expected this indicates a much shorter window of demand for the Soccerbus post-match compared to prematch, however capacity remains available for use to facilitate future increases in demand.
- 8.6.14 Chart 8.7 shows the number of people departing by Soccerbus on the weekday and Saturday surveyed. The highest concentration of people used the service in the half hour after the game. During this period the Soccerbus ran a peak service to accommodate demand, with each bus carrying an average of 85 passengers, out of a capacity of 90, which represents 94%.

600 525 497 500 Number of People 400 258 300 174 200 100 0 0 - 0.5 hours 0.5 - 1 hours Hours Post Match ■ Weekday
■ Saturday

Chart 8.7: Number of People Leaving by Soccerbus

8.6.15 The average time in between departures lay at 2 minutes and 3 minutes on the Wednesday and Saturday respectively. This increased to 6 and 7 minutes in the second half hour as demand lessened and the number of services to depart reduced.

Table 8.8: Average time in between departures post-match

Hours Post-match (final whistle)	Weekday	Saturday
0 - 0.5 hours	00:02	00:03
0.5 - 1 hours	00:06	00:07

8.6.16 Post-match the first three or four buses to depart completed two full trips, with the last two or three buses completing one full service.

Spare capacity

- 8.6.17 The total number of people leaving by Soccerbus was approximately 20% lower than the total number of people arriving by Soccerbus on both days surveyed. Slightly higher numbers of people used the Soccerbus on the Weekday compared to the Saturday.
- 8.6.18 As noted previously, the service has the ability to accommodate 2,160 passengers during its current 2 hours operating period. When reviewed against current usage, the used capacity can be calculated and hence the spare capacity identified from this.



Table 8.9: Total number of people using Soccerbus pre and post-match

Trip		Weekday	Saturday
	No posplovajna	919	902
A main since the Connection	No. people using	(43% of capacity used)	(42% of capacity used)
Arriving by Soccerbus	Chara Canasity	1,241	1,258
	Spare Capacity	(57% spare)	(58% spare)
	No contractor		699
Departing by Conserbus	No. people using	(35% of capacity used)	(32% of capacity used)
Departing by Soccerbus	Spore Consoity	1,450	1,461
	Spare Capacity	(65% spare)	(68% spare)
Difference in use from arrival to departure		18% less people used for return journey	23% less people used for return journey

8.7 City Centre Express Bus (917)

- 8.7.1 The 917 bus is a dedicated match day only service operated by Stagecoach running between Liverpool City Centre and Anfield Stadium. Pre-match, buses depart from St Johns Lane, opposite Queens Square Bus Station in Liverpool City Centre and in close proximity to Liverpool Lime Street Station. Post-match, the buses pick up supporters from Walton Breck Road. The bus fare is £2 each way.
- 8.7.2 The first bus departs 3 hours before kick-off for Saturday and Sunday matches and 1.5 hours before kick-off for mid-week matches. Buses continue to depart at frequent intervals until the last departure which leaves in time to ensure arrival at the ground in time for kick-off. Similarly to the Soccerbus, the service frequency is driven by demand, with vehicles leaving when they have sufficient numbers of supporters aboard.
- 8.7.3 Post-match buses to Liverpool City Centre depart from Walton Breck Road to the west of the stadium from approximately 20 minutes after the final whistle to meet current demand. Buses (generally around 10 double decker units) are stacked along Walton Breck road prior to its closure, facing in a westerly direction.





Buses stacked on Walton Breck Road, post-match

Pre-Match Survey Findings

- 8.7.4 Four vehicles were used to run the 917 route on both the Wednesday and Saturday. On the weekday, only one of the four buses was a double decker, with all four vehicles on the weekend being double decked. These have an occupancy of around 90 people, with single decked units having an occupancy of approximately 55 people.
- 8.7.5 Chart 8.8 shows the number of 917 bus services that ran per half hour in the lead up to both games. As can be seen from the graph, Saturday saw a peak in services 2.5 2 hours prior to kick-off whilst the Wednesday peaked 1.5 1 hours prior to kick-off, the first half hour of service for a weekday.

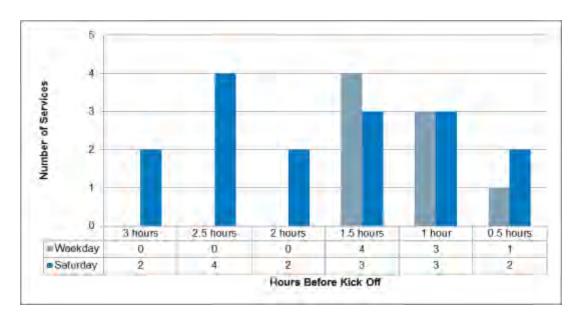


Chart 8.8: Number of City Centre Express (917) Bus Services Prior to Game

- 8.7.6 On the weekday each vehicle completed 2 full services over the 1.5 hour period. On the Saturday each vehicle completed between 3 and 5 full services over the 3 hour period. Departure timings indicate that at peak time, a 917 bus can load passengers complete a full return journey, and depart for its next service within 40 minutes.
- 8.7.7 Table 8.10 details average time in between departures for each half hour, echoing the pattern of services as shown in the graph above. During the busiest periods a City Centre Express bus departed on average every 9 minutes.

Table 8.10: Average time in between departures

Hours before KO	Weekday	Saturday
3 hours	N/A	00:23
2.5 hours	N/A	00:09
2 hours	N/A	00:13
1.5 hours	00:08	00:09
1 hour	00:10	00:09
0.5 hours	00:08	00:12

- 8.7.8 Chart 8.9 shows the number of people arriving by the 917 bus on the surveyed weekday and Saturday. Almost double the amount of people used the bus on the Saturday compared to the weekday, with passenger numbers totalling 873 and 450 respectively.
- 8.7.9 Numbers of people using route 917 to access Anfield Stadium are at their highest between 1.5 and 0.5 hours before kick-off. However, it should also be noted that on the Saturday a



significant number of people used the 917 earlier, between 2.5 and 1.5 hours prior to the game.

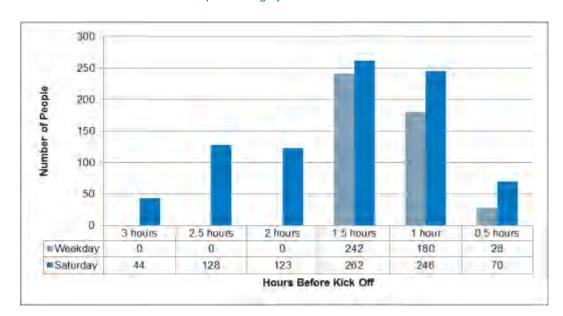


Chart 8.9: Total Number of People Arriving by Bus Service 917

8.7.10 Analysis shows that all buses running from 2 – 0.5 hours prior to the game were over 50% occupied. Alongside the pattern of services provided this indicates that frequency is stimulated by demand and that the 917 bus service has the capability to meet current peak demand as well as facilitating additional supporters.

Spare Capacity

- 8.7.11 For both days surveyed there is only a small amount of spare capacity during the peak period 1.5 0.5 hours before the match, however as this service currently operates to demand, this only seeks to highlight when the demand period is. More than 1.5 hours before the Saturday match there is high percentage of spare capacity that could be utilised, as well as additional capacity created through an increased frequency of the service.
- 8.7.12 It should be noted that on the weekday 3 out of 4 of the buses operating were single deckers. All of the single decker services apart from the last before kick-off (which departed 19:20 for a 19:45 start) were at or near capacity. If all four buses were double deckers (as with the Saturday surveyed) capacity of the 917 weekday service would increase significantly.
- 8.7.13 At the moment, the operator purposely provides just enough capacity to meet demand so as to not waste resources, which is why the existing capacity is more or less in line with demand.



8.7.14 The following table highlights the potential capacity of the service based on its current operation if all double decked vehicles were used and an optimum frequency was achieved or 2 round trips per vehicle per hour. The spare capacity this would result in over its operating period is presented as a comparison to that which was observed.

Table 8.11: City Centre Express Spare Capacity

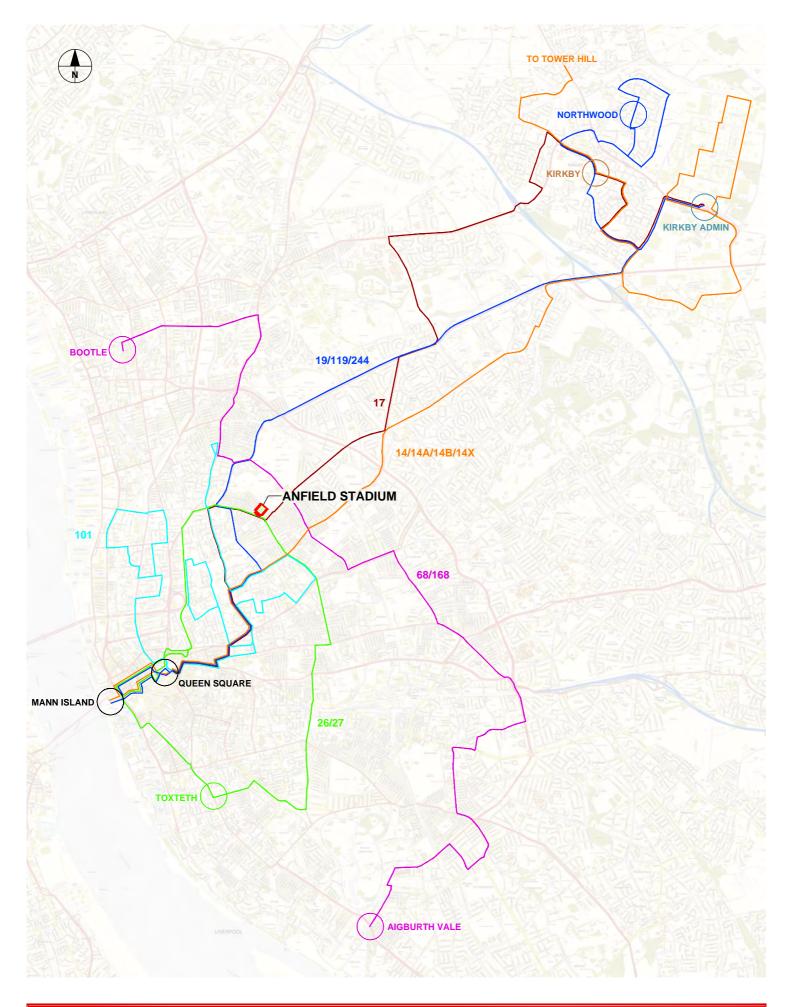
Day	No. users	Service capacity as operated	Spare capacity	Potential service capacity*	Spare capacity
Weekday	450	510	12%	1,080	58%
Weekend	873	1,440	39%	2,160	60%

^{*}Calculations: 2 trips per vehicle per hour, based on 1.5 hour operating period on weekdays and 3 hours on weekends with vehicles with a capacity for 90 passengers.

8.7.15 This demonstrates that even with the existing resources available to the service, there is the potential for it to accommodate more supporters if the demand existed to initiative the increased frequency of the service.

8.8 Scheduled bus services

- 8.8.1 A number of bus services operate in the vicinity of Anfield Stadium, offering a viable non-car mode alternative from a range of origins and destinations across the city and surrounding areas.
- 8.8.2 Bus stops located along Walton Breck Road, Walton Lane, Breck Road and Priory Road are all within walking distance of the stadium and are utilised by supporters attending the match via this mode of transport.





- 8.8.3 The stadium is well connected to the City Centre via bus, with four of the five routes outlined in the table below originating at, or serving, City Centre bus stops
- The following tables outline services which operate to these locations in the period before and after the match, as well as on non-match days:

Table 8.12: Services in the vicinity of Anfield Stadium

Service no.	Operator	Nearest Stop	Route
17	Stagecoach	Walton Breck Road	City Centre – Fazakerley – Kirkby
26/27	Arriva	Walton Breck Road	Liverpool One - Sheil Road Circular
14	Arriva and Stagecoach	Breck Road	City Centre – Croxteth
19/119/244	Stagecoach	Walton Lane	City Centre – Gillmoss – Croxteth – Kirkby
68/168	Arriva	Priory Road	Bootle Bus Station – Aigburth Vale

- 8.8.5 Walton Breck Road, adjacent to the main entrance of the Stadium, is a key bus stop location for access to Anfield, with bus stops in both directions located close to the main gates. The 17, 26 and 27 services call at these stops, providing links with the City Centre, plus wider links with Fazakerley and Kirkby. The 17 service is operated by Stagecoach, whilst the 26/27 services are run by Arriva.
- 8.8.6 On non-match days, there are no disruptions to these services, however on match days, Walton Breck Road is closed prior to kick off and again after final whistle which causes delays to the services using this road which have to wait outside of the closure zone.
- 8.8.7 During core hours of 6am-6.30pm from Monday-Saturday, the 17 provides a service between the City Centre, Fazakerley and Kirkby approximately every 8 minutes in each direction. Outside of core hours, the 17 runs approximately every 15 minutes, with this service pattern shifting to every half hour from 7.30pm. The Sunday service operates approximately every 15 minutes, with a half hour service in operation before 10am and after 4pm.
- 8.8.8 The 26/27 service runs approximately every ten minutes within core hours (6am 6.30pm) from Monday to Saturday, with services reduced to every half hour outside of these hours. On a Sunday, the service runs every 20 minutes during core hours, with a reduced frequency of every half hour in operation outside of this time.
- 8.8.9 Walton Lane, located to the west of the stadium and running along the western perimeter of Stanley Park, has bus stops in both directions which are served by the 19, 119 and 244 services. Operated by Stagecoach, these services offer a link between the City Centre, Gillmoss, Croxteth and Kirkby. The 119 and 244 only run between 5am-10am at a weekend so are not applicable for the purpose of this assessment. The 19 bus runs every 10 minutes from 7am 6.30pm Monday to Saturday, with service frequency reduced to every half hour after 8pm. Sunday service for this route operates every half hour from 10am 6pm, with this reduced to one bus per hour from 6pm.



- 8.8.10 Priory Road has bus stops in both directions which are used by the 68 and 168 services. The 68 is operated by Arriva and Peoples Bus, whilst the 168 is run exclusively by Peoples Bus. These buses provide a link between Bootle and Aigburth, with the route also including Walton, Old Swan, Broadgreen, Childwall, Allerton and Mossley Hill. From Monday to Friday, during core hours (6am-6.30pm) the 68 service runs every 15 minutes, reducing to one bus per hour from 7.15pm. The Saturday service for this route runs every 20 minutes during core hours, reducing to one bus per hour from 6.43pm. Sunday services run every half hour, which again reduces to one bus per hour from 6.43pm.
- 8.8.11 In addition to these roads which are located in the immediate vicinity of the stadium, there are bus stops located in the surrounding area which are served by buses providing connections to other parts of the city and surrounding areas.
- 8.8.12 Breck Road, an adjoining street to Walton Breck Road on which the Stadium is located, has bus stops in both directions which are served by buses running between the City Centre and Croxteth. The 14 is operated by Arriva and Stagecoach. During core hours (6am-6.30pm) from Monday to Friday, the 14 service runs approximately every 3-4 minutes (with both operators running alternate services). Outside of core hours, the service runs every 15 minutes. Saturday services operate approximately every 5 minutes during core hours, reduced to every 15 minutes outside of these hours. Sunday services run approximately every 7-8 minutes during core hours, with both operators running alternate services which increases frequency. Outside of core hours, the 14 service runs approximately every 15 minutes.
- 8.8.13 Walton Lane, which is less than a five minute walk from the stadium, has bus stops in both directions with services which link the City Centre and areas outside of the city such as Skelmersdale. However, the 310/311, 345 and 110 services which call here operate a very infrequent or no service in the two hour timeframe prior to a match; therefore they are not applicable for the purpose of this assessment.
- 8.8.14 The frequencies of the services are presented in the following tables.

Table 8.13: Bus Services per hour serving Anfield Stadium weekdays (both directions)

Service no.	08:00	09:00	10:00	11:00- 16:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
17	16	16	16	16	16	8	8	2	6	4	4	2
26/27	12	12	12	12	12	4	4	4	4	4	4	4
14	30	30	30	30	30	30	14	8	8	8	8	8
19/119 /244	12	12	12	12	12	10	18	8	8	8	8	8
68/168	8	8	8	8	8	8	8	2	2	2	2	2
Total	78	78	78	78	60	52	24	28	26	26	20	78



- This table shows that for the typical 3 hour build up to a weekday kick off (highlighted) there are typically 104 services serving the vicinity of the stadium.
- 8.8.16 Based on an average capacity of 70 people per bus, this equates to 7,280 spaces on bus services which serve the stadium.

Table 8.14: Bus Services per hour serving Anfield Stadium Saturdays (both directions)

Service no.	08:00	09:00	10:00	11:00- 16:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
17	16	16	16	16	16	8	8	2	6	4	4	2
26/27	12	12	12	12	12	4	4	4	4	4	4	4
14	30	30	30	30	30	14	9	8	8	8	8	8
19/119 /244	12	12	12	12	12	10	18	8	8	8	8	8
68/168	8	8	8	8	8	8	8	2	2	2	2	2
Total	78	78	78	78	60	44	47	28	26	26	20	78

- 8.8.17 This table shows that for the 3 hour build up to a weekend Saturday kick off at 15:00 there are 234 services serving the stadium vicinity, or space for 16,380 people based on an occupancy of 70 people.
- 8.8.18 For a later weekend match, say with a 17:45 kick off, this figure would reduce to approximately 12,740 people capacity.

Table 8.15: Bus Services per hour serving Anfield Stadium Sundays (both directions)

Service no.	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00
17	8	8	8	8	8	8	8	8	4	4	4	4
26/27	4	6	6	6	6	6	6	4	4	4	4	4
14	8	16	16	16	16	16	16	16	8	8	8	8
19/119 /244	8	8	8	8	8	8	8	6	2	2	2	2
68/168	2	4	4	4	4	4	4	4	2	2	2	2
Total	30	42	42	42	42	42	42	38	20	20	20	20

- 8.8.19 For a Sunday match, the frequency of the services is slightly reduced, with approximately 126 operating in both directions serving the stadium, which would provide capacity for 8,820 people within a three hour build up to a typical 15:00 kick off match.
- 8.8.20 All capacities noted within this section for scheduled buses represent the overall capacity, and when reviewing in light of capacity for match specific travel, they need to take into account non-match travellers to ensure they can continue to be accommodated.

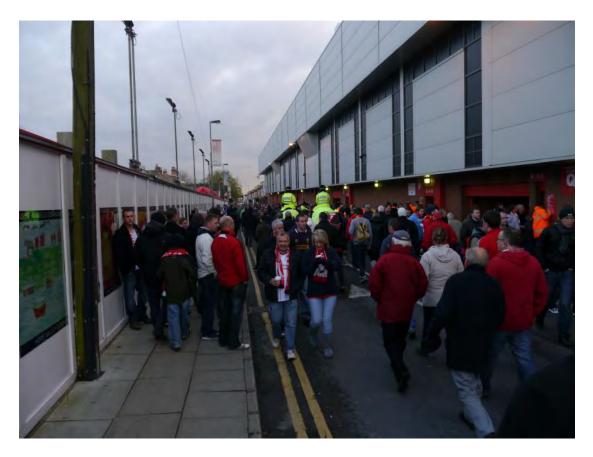


8.8.21 It is evident from Tables 8.13-15 that, there are multiple buses in operation around the stadium in the build-up to a kick off, regardless of the time of day. A higher frequency of bus services is noted on a Saturday afternoon, with 76 buses operating in the two hours prior to a 5pm Saturday kick off. Sunday services, based on a kick off time of 4pm, operate at a frequency of 42 buses in the two hours prior to kick off.

8.9 Walking

- 8.9.1 The only existing designated (signed) walk route to Anfield Stadium runs from Sandhills Train Station. A number of signs directing pedestrians to Anfield, and returning to the train station in the opposite direction, are located along this route (see following figure).
- 8.9.2 Despite a lack of designated walking routes to the stadium, it has been observed that supporters do walk from the City Centre and rail stations to the stadium. Natural flows of crowds provide an indication of preferred routes which are adopted by supporters accessing the stadium.
- 8.9.3 Key walking routes for supporters identified through match day observations are:
 - Oakfield Road onto Walton Breck Road;
 - Everton Valley onto Walton Breck Road;
 - Venmore Street onto Walton Breck Road;
 - From Kirkdale Station;
 - From Sandhills Station; and
 - From the City Centre.
- 8.9.4 The popularity of these particular routes is likely in part to be linked to other modes of transport, such as access from Sandhills train station via Everton Valley, and links to on street car parking outside the FMPZs, including Sheil Road and around Newsham Park (Oakfield Road) and Everton Park (Venmore Street).





Supporters gathering on Anfield Road outside the Stadium

8.9.5 The formal demarcation of these routes, including clear signage, would therefore help to establish these as pedestrian access areas and help to manage pedestrians before and after matches. This may also encourage greater pedestrian access and a modal shift, if routes were publicised and clearly visible.





8.9.6 A review of accident data for a period of November 2008 – November 2013 specifically in terms of pedestrians has revealed that on match days there have been 5 slight incidents involving pedestrians over these 5 years, an average of one per year. The details of these incidents are provided below:

Table 8.16: Accident analysis for pedestrians on match days

Date	Day	Time of Accident	Kick Off	No of Pedestrian Casualties	Location	Severity
16/01/10	Sat	10:43	12:45	1	Walton Breck Road	Slight
28/03/10	Sun	17:50	16:00	1	Great Homer Street	Slight
02/02/11	Wed	18:45	20:00	1	Walton Breck Road	Slight
13/03/12	Tues	22:30	20:00	2	Everton Valley	Slight
15/12/12	Sat	16:20	15:00	1	Oakfield Road	Slight

8.9.7 There were no notable clusters of accidents, indicating there are no 'hotspots' on the network with safety concerns.

8.10 Cycling

- 8.10.1 Currently, there are limited cycling provisions at the stadium and in the area surrounding with a designated area for the storage of 8 cycles located on site in between the Kop and Centenary Stands. Public cycle parking is also provided in the south west corner of Stanley Park at the Isla Gladstone Conservatory.
- 8.10.2 Match day observations indicate that this mode is not at present frequently used by supporters, although it is likely to be more feasible for staff working at the stadium on non-match days.
- 8.10.3 The installation of additional safe and secure cycle parking, along with the promotion of appropriate cycle routes would therefore be essential in encouraging the take-up of this mode as a means of travelling on match-days. Secure cycle parking could help to alleviate security concerns and improve the perception of cycling as a secure mode of transport to the stadium on both match and non-match days.
- 8.10.4 It is possible to carry bicycles on the Merseyrail network making this a viable mode of transport from surrounding stations as an alternative to walking or the Soccerbus.
- 8.10.5 Consideration would need to be given to any potential conflicts between large volumes of pedestrians as experienced on match-days. As such, cycling is likely to be more popular on non-match days as crowds will be smaller making travel right up to the stadium possible.
- 8.10.6 Regional Cycle Route 81 provides a connection between the City Centre and Stanley Park, making it an ideal route for cyclists to connect to the stadium from the south. The route travels



Everton Park, eastwards along Mere Lane to Robson Street, north along Robson Street onto Sleepers Hill and into Stanley Park. A second route runs from Robson Street along St Domingo Grove and then Valley Road/Robarts Road which leads on to Walton Breck Road, south east of the stadium. The following extract demonstrates this route.

Liverpool City Centre to Walton (part of Regional Route 81)

**Common State Hall Control of Regional Route 8

Figure 8.7: Regional Cycle Route 81

Source: Liverpool City Centre to Walton Regional Route 81 –part of the National Cycle Network, Travelwise, Merseyside

8.11 Motorcycles

8.11.1 There is currently no specific provision for motorcycles in the area surrounding Anfield Stadium; that is, no designated parking bays for motorcycles. Based upon match day observations, motorcycles are not widely used to access Anfield Stadium. This was also the case during the 2008 observations presented in AS3.

8.12 Summary

8.12.1 This chapter has provided an overview by mode of how the stadium can be accessed on both match and non-match days, and presented findings from a range of observations which have

Liverpool Football Club Stadium Expansion

Transport Assessment



been undertaken to supplement the supporter travel surveys which are presented in the next chapter.

- 8.12.2 It has demonstrated that there is excellent connectivity between the City Centre and the Stadium on match days with a choice of sustainable modes available for supporters, removing the reliance upon the private car.
- 8.12.3 This analysis has shown that there is spare capacity across the sustainable transport modes (bus, train, walk, cycle) and the potential to increase capacity on these through changes to service operations for public transport and improvements to amenities for other modes such as walking and cycling.
- 8.12.4 This chapter has also shown that there are still good levels of accessibility to the stadium on non-match days with the only services not operating on non-match days being the Soccerbus and the City Centre Express bus service.