

Maudsley and Lambeth Hospitals

Accessibility Study

For

South London and Maudsley NHS Foundation Trust





Document Control Sheet

Accessibility Study

Maudsley Hospital and Lambeth Hospital

South London and Maudsley NHS Foundation Trust (SLaM)

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1.0 Introduction

- 1.1 Motion has been appointed to provide highways and transportation advice in relation to the proposed relocation of services from Lambeth Hospital to Maudsley Hospital and Bethlem Royal Hospital.
- 1.2 This accessibility study has been undertaken to assess the accessibility of the accessibility by foot, cycle and public transport of the South London and Maudsley NHS Trust sites at Lambeth, Maudsley and Bethlem Royal Hospital sites.
- 1.3 This accessibility study relates to the relocation of inpatient services from Lambeth Hospital to the Maudsley and the small proportion of outpatient services that are moving from Lambeth to the Maudsley. The vast majority of outpatient activity at Lambeth will be relocated to one of three community hubs in line with the Lambeth Alliance Living Well Strategy.
- 1.4 In addition, the study considers the change in patient journey as a result of the proposed relocation of services from Lambeth to Bethlem Royal Hospital. As such, the study comprises the following sections:
 - Section 2 this section outlines the baseline conditions at Lambeth Hospital with regard to the local highway network, public transport network and accessibility by foot and cycle.
 - Section 3 this section outlines the baseline conditions at Maudsley Hospital with regard to the local highway network, public transport network and accessibility by foot and cycle.
 - Section 4 this section outlines the baseline conditions at Bethlem Royal Hospital with regard to the local highway network, public transport network and accessibility by foot and cycle.
 - Section 5 this section compares the relative accessibility of each site before considering the effect of the move on journey times for both outpatients and inpatients with reference to postcode data.
 - Section 6 this section provides a summary of the findings of this accessibility study.



2.0 Baseline Conditions – Lambeth Hospital

2.1 Lambeth Hospital is located to the south of Landor Road and is approximately 450 metres to the east of Clapham North underground station and High Street. Brixton underground station is approximately 950 metres to the south east of the site whilst nearby bus services operate from stops adjacent to the site access on Landor Road. The site location in relation to the surrounding area is shown in Figure 2.1.

Local Highway Network

Access to the site is taken from Landor Road at the northern boundary. Landor Road is a two-way carriageway subject to a 20mph speed limit in the vicinity of the site which operates between the A3, Clapham Road, to the west and the A203, Stockwell Road, to the east. As such, the site is easily accessible by vehicle with connections to south west London, south London and central London from either the A3 or A203.

Local Pedestrian Network

- 2.3 Footways are provided on both sides of Landor Road connecting the site to nearby public transport opportunities, residential areas and other shops and services. To the west a signalised pedestrian crossing is provided at the junction of Landor Road and Bedford Road creating a safe and convenient route to Clapham North underground station.
- 2.4 Footways are further provided along nearby residential streets including Hargwyne Street, Pulross Road, Ferndale Road and Brixton Road forming a continuous network to Brixton underground station. Signalised pedestrian crossings operate across Brixton Road for safe and convenient access to the station.
- 2.5 The local pedestrian network provides access to the site from a range of locations within a 60-minute walking time including Battersea, Wandsworth Common and East Dulwich. Drawing 1907042-SK04A attached at Appendix A provides isochrones comprising walk times of 15, 30, 35, 40, 45 and 60 minutes from the site.

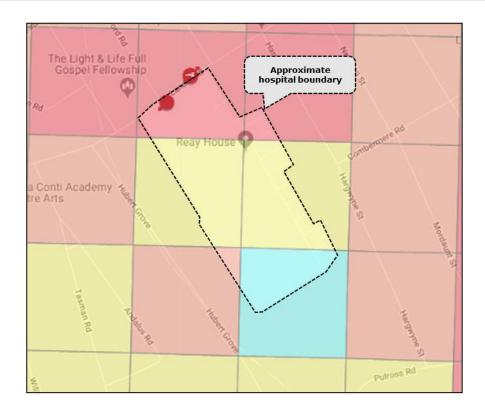
Local Cycle Network

- 2.6 The site is well located with regard to the local cycle network with a range of cycle routes in the immediate vicinity of the site. The local routes include signed routes along Stockwell Road, recommended routes along Landor Road and Hargwyne Street as well as access to cycle superhighway route 7 which can be joined on Clapham Road to the west. CS7 operates between Merton and central London via Tooting, Stockwell and Elephant & Castle.
- 2.7 The local cycle network provides access to the site from a range of locations within a 10-kilometre radius including Barnes, Chalk Farm, Deptford and Thornton Heath. Drawing 1907042-SK05A attached at Appendix B provides isochrones comprising cycle distances of 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 kilometres from the site.

Public Transport Accessibility Level

- 2.8 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest.
- 2.9 The Lambeth Hospital site has a PTAL of part 2, part 4 and part 6a. The figure below from the TFL WebCAT tool highlights the various PTAL values across the site whilst the full PTAL reports for each area are attached at Appendix C. In addition, Drawing 1907042-SK06A attached at Appendix D provides isochrones comprising public transport travel times of 15, 30, 45, 60, 65 and 90 minutes from the site.





- 2.10 The lowest PTAL of 2 is found at the south east of the site demonstrating a poor level of access to public transport opportunities. In this section of the site, the public transport opportunities within the PTAL parameters comprise one bus service (route 322) and London underground services from Clapham North station.
- 2.11 The central area of the site has a PTAL rating of 4 demonstrating a good level of access to public transport opportunities. From this part of the site eight additional bus services can be accessed within the PTAL parameters alongside the London underground services from Clapham North station.
- 2.12 The northern area of the site has a PTAL rating of 6a demonstrating an excellent level of access to public transport opportunities. Alongside the bus and underground services that are accessible from the centre of the site, London underground services at Brixton station can be accessed within the PTAL parameters.

Local Bus Services

- 2.13 The nearest bus stops to the site are located on Landor Road adjacent to the site access. These stops are served by route 322 which operates between Crystal Palace and Clapham Common. Additional bus services operate from Stockwell Lane approximately 550 metres to the north west and from Union Road approximately 600 metres to the north west.
- 2.14 Two of the routes that operate within the vicinity of the site are provide 24-hour services. Route 345 operating between Peckham and the Natural History Museum with services every 30 minutes between 0100 and 0400 with more frequent services operating outside of these hours. Route 88 operating between Parliament Hill and Clapham Common with services running every 30 minutes between 0100 and 0500 with more frequent services outside of these hours.
- 2.15 A summary of all of the local bus services is provided in Table 2.1.



		Devite		Frequency	requency		
		Route	Mon-Fri	Saturday	Sunday		
Landor Road	322	Crystal Palace Bus Station – Tulse Hill Station – Brixton Station – The Pavement	11-14 mins	10-14 mins	15-20 mins		
	2	Marylebone Station – Vauxhall Bus Station – Brixton Academy – Norwood Bus Garage	6-10 mins	7-11 mins	9-13 mins		
Stockwell	Route Mon-Fri Saturday Sundar	20-30 mins					
Lane	333		ation – Norwood Junction Station mins mins mins Broadway Station – Oval Station – 9-12 mins mins mins Ington Road – Elephant & Castle mins mins mins Bus Station – Clapham Junction mins mins mins Bus Station – Clapham Junction mins mins mins mins Bus Station – Clapham Junction mins mins mins mins Bus Station – Clapham Junction mins mins mins mins Bus Station – Thornton Heath Station – 10-13 12-13 20-25				
	345	· ·					
	50						
Union	88	Crystal Palace Bus Station – Tulse Hill Station – Brixton Station – The Pavement mins mins mins mins Marylebone Station – Vauxhall Bus Station – Brixton Academy – Norwood Bus Garage mins mins mins Elephant & Castle – Vauxhall Park – Herne Hill Station – Norwood Junction Station mins mins mins Tooting Broadway Station – Oval Station – Kennington Road – Elephant & Castle mins mins mins Peckham Bus Station – Clapham Junction – Cheyne Walk – Natural History Museum mins mins mins mins Park Street – Thornton Heath Station – Streatham Station – Stockwell Station mins mins mins mins Parliament Hill Fields – Piccadilly Circus – Westminster Station – Clapham Common mins mins mins mins Tooting Broadway – Balham Station – Clapham North – Elephant & Castle mins mins mins mins mins mins mins mins					
Road	155						
	P5	,		10-14 mins min 7-11	15-20 mins		

Table 2.1 Local Bus Services

Local Rail and Underground Services

- 2.16 The nearest underground station to the site is Clapham North station located approximately 450 metres to the west. Clapham north station is located on the northern line providing access to central London destinations such as Bank and Charing Cross, as well as High Barnet and Edgware to the north whilst to the south it connects to South Wimbledon and Morden. Services from Clapham North operate every 2-4 minutes during the day to both the north and south. In addition, night tube services operate every 10-12 minutes during Friday and Saturday nights.
- 2.17 Brixton underground station is located approximately 1 kilometre to the south east of the site and is located on the Victoria Line. The Victoria line operates between Brixton and Walthamstow Central via Vauxhall, Victoria, King's Cross St Pancras and Tottenham Hale. Services from Brixton operate every 2-3 minutes during the day. In addition, night tube services operate every 10 minutes during Friday and Saturday nights.
- 2.18 Clapham High Street station is located approximately 650 metres to the west of the site and provides access to London Overground services. Trains operate between Clapham Junction station and Dalston Junction station with services running every 15 minutes.

Summary

2.19 The above review demonstrates that Lambeth Hospital is well located with regard to the local highway networks as well as benefitting from access to a range of more sustainable transport opportunities including a good pedestrian network, cycle network and access to a range of public transport options.



3.0 Baseline Conditions – Maudsley Hospital

3.1 Maudsley Hospital is located to the east of the A215, Denmark Hill and is to the immediate north of Denmark Hill over ground station. Brixton underground station is located approximately 1.3 kilometres to the south west while the nearest bus stops are located adjacent to the site boundary on Denmark Hill. The site location in relation to the surrounding area is shown in Figure 3.1.

Local Highway Network

3.2 Vehicular access to the site is taken from Denmark Hill at the west of the site and is a two-way carriageway subject to s 20mph speed limit in the vicinity of the site which operates between the A202, Camberwell New Road to the north and the A205, South Circular, to the south. As such, the site is easily accessible by vehicle with connections to south west London, south London and central London from the A202 and A205.

Local Pedestrian Network

- 3.3 Footways are provided on both sides of Denmark Hill connecting the site to nearby public transport opportunities, residential areas, shops and services. To the west of the site, a signalised pedestrian crossing is provided connecting the hospital to bus stops and other services on the western side of Denmark Hill.
- In addition to local footways, a pedestrianised network is provided through the hospital site connecting directly to Denmark Hill station located at the southern boundary of the site.
- 3.5 The local pedestrian network provides access to the site from a range of locations within a 60-minute walking time including Pimlico, New Cross Gate and Sydenham Hill. Drawing 1907042-SK01A attached at Appendix E provides isochrones comprising walk times of 15, 30, 35, 40, 45 and 60 minutes from the site.

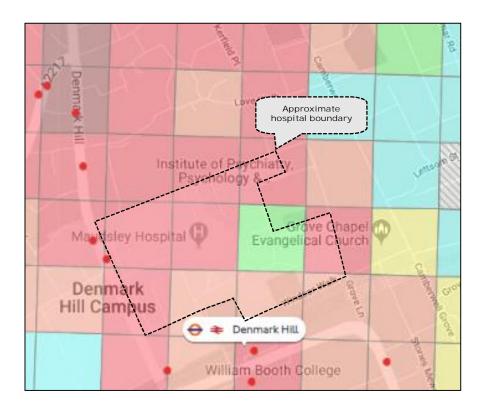
Local Cycle Network

- 3.6 The site is well located with regard to the local cycle network with a range of cycle routes in the immediate vicinity of the site. The local routes include signed routes along Grove Lane at the eastern boundary of the site, recommended routes along Camberwell Grove as well as access to cycle superhighway route 7 which can be joined on Clapham Road to the west. CS7 operates between Merton and central London via Tooting, Stockwell and Elephant & Castle.
- 3.7 The local cycle network provides access to the site from a range of locations within a 10-kilometre radius including Putney, Holloway Road, Blackheath and Selhurst. Drawing 1907042-SK02A attached at Appendix F provides isochrones comprising cycle distances of 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 kilometres from the site.

Public Transport Accessibility Level (PTAL)

- 3.8 As outlined in the previous section, Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest.
- 3.9 The Maudsley Hospital site has a PTAL of part 3, part 5 and part 6a. The figure below from the TFL WebCAT tool highlights the various PTAL values across the site whilst the full PTAL reports for each area are attached at Appendix G. In addition, Drawing 1907042-SK03A attached at Appendix H provides isochrones comprising public transport travel times of 15, 30, 45, 60, 65 and 90 minutes from the site.





- 3.10 The lowest PTAL of 3 is found at the east of the site demonstrating a moderate level of access to public transport opportunities. From this part of the site, four bus services can be accessed (484, 176, 40 and 185) as well as rail services from Denmark Hill.
- 3.11 At the south of the site, there is a PTAL rating of 5 demonstrating a very good level of access to public transport opportunities. From here, alongside the services above, four additional bus services are accessible within the PTAL parameters.
- 3.12 To the north and west of the site, there is a PTAL rating of 6a demonstrating an excellent level of access to public transport opportunities. From here, alongside the bus and rail services listed above, four additional bus services are accessible within the PTAL parameters.

Local Bus Services

- 3.13 The nearest bus stops to the site are located on Denmark Hill at the western site boundary. These stops are served by a range of routes including a night bus service (N68) which offers services every 30 minutes between the hours of 0100 and 0530.
- 3.14 Additional bus services operate from Denmark Hill station to the south of the site including routes to Dulwich, Tottenham Court Road and Victoria Station. Furthermore, route 176 which operates via Denmark Hill station offers 24-hour services with buses every 15-20 minutes between the hours of 0000-0900.
- 3.15 A summary of all of the local bus services is provided in Table 3.1.



		Devite		Frequency	
		Route	Mon-Fri	Saturday	Sunday
	42	East Dulwich – Herne Hill – Tower Bridge – Liverpool Street Station – Appold Street	10-14 mins	11-13 mins	15-20 mins
Denmark	68	West Norwood Station – Waterloo Station – Holborn Station – Euston Bus Station	7-11 mins	10-14 mins	11-13 mins
Hill	42 Liverpool Street St. 48 West Norwood Stati 468 Coombe Road - Clift Castle - Book N68 Old Coulsdon - Tu Green - Holborn Station - Blackfrians 40 Dulwich - Denma Station - Blackfrians 176 Penge - Sydenham - Charing Cross - T 185 Lewisham Station Lewisham Station	Coombe Road – Clifton Road – Elephant & Castle – Borough Road	7-11 mins	9-13 mins	10-15 mins
	N68	Old Coulsdon – Tulse Hill – Camberwell Green – Holborn Station – Drury Lane	30 mins	30 mins	30 mins
	40	Dulwich – Denmark Hill – Southwark Station – Blackfriars – Farringdon Station	6-10 mins	9-12 mins	15-20 mins
Denmark Hill 468 - Holborn Station – Euston Bus Station Coombe Road – Clifton Road – Ele Castle – Borough Road N68 Old Coulsdon – Tulse Hill – Camber Green – Holborn Station – Drury Dulwich – Denmark Hill – South Station – Blackfriars – Farringdon – Station – Blackfriars – Farringdon – Charing Cross – Tottenham Coulstand – Charing Cross – Tottenham Coulstand – Station – Vauxhall – Victoria Station – Vauxhall – Victoria Station – Brockley St	Penge – Sydenham Station – Heber Road – Charing Cross – Tottenham Court Road	7-10 mins	9-12 mins	10-13 mins	
	185	Lewisham Station – Dulwich – Oval Station – Vauxhall – Victoria Station	6-10 mins	7-11 mins	11-14 mins
	484	Lewisham Station – Brockley Station – Rye Hill Park – Denmark Hill Station	10-13 mins	11-13 mins	15-20 mins

Table 3.1 Local Bus Services

Local Rail and Underground Services

3.16 The nearest station to the site is Denmark Hill, located at the southern boundary of the site. The station provides access to Thameslink services to destinations including London Victoria, London Blackfriars and Clapham Junction. A summary of the overground services is provided in Table 3.2.

Destination	Deute	Frequency				
Destination	Route	Mon-Fri	Saturday	Sunday		
Dalston Junction	Denmark Hill – Surrey Quays –	15	15	15		
	Rotherhithe – Hoxton – Dalston Junction	mins	mins	mins		
London Victoria Denmark Hill – London Victoria 15 30 mins mins		30 mins				
Gravesend	Denmark Hill – Peckham Rye – Blackheath	30	30	No direct		
	– Dartford – Greenhithe – Gravesend	mins	mins	service		
London	Denmark Hill – Elephant & Castle –	10-15	30	30		
Blackfriars	London Blackfriars	mins	mins	mins		
Clapham	Denmark Hill – Clapham High Street –	15	15	15		
Junction	Wandsworth Road – Clapham Junction	mins	mins	mins		
Sevenoaks	Denmark Hill – Catford – Shortlands –	30	30	30		
	Shoreham – Otford – Sevenoaks	mins	mins	mins		
Kentish Town	Denmark Hill – City Thameslink – London	30	No direct	No direct		
	St Pancras – Kentish Town	mins	service	service		
Orpington	Denmark Hill – Nunhead – Bellingham –	30	No direct	No direct		
	Bromley South – Petts Wood – Orpington	mins	service	service		
Dover Priory	Denmark Hill – Swanley – Longfield –	60	No direct	No direct		
	Chatham – Faversham – Dover Priory	mins	service	service		

Table 3.2 Local Overground Services

3.17 Brixton underground station is located approximately 1.3 kilometres to the south west of the site and is located on the Victoria Line. The Victoria line operates between Brixton and Walthamstow Central via Vauxhall, Victoria, King's Cross St Pancras and Tottenham Hale. Services from Brixton operate every 2-3 minutes during the day. In addition, night tube services operate every 10 minutes during Friday and Saturday nights.



Summary

3.18 The above review demonstrates that Maudsley Hospital is well located with regard to the local highway networks as well as benefitting from access to a range of more sustainable transport opportunities including a good pedestrian network, cycle network and access to a range of public transport options.



4.0 Baseline Conditions – Bethlem Royal Hospital

4.1 Bethlem Royal Hospital is located to the west of Monks Orchard Road and is approximately 1.3 kilometres to the south of Eden Park station. Nearby bus services operate from stops adjacent to the site access on Monks Orchard Road. The site location in relation to the surrounding area is shown in Figure 2.1.

Local Highway Network

4.2 Vehicular access to the site is taken from Monks Orchard Road. Monks Orchard Road is a two-way carriageway which operates between the A232, Wickham Road, to the south and the A214, Links Way, to the north. As such, the site is easily accessible by vehicle with connections to the south east London, central London and Surrey from the A214 and A232.

Local Pedestrian Network

- 4.3 Footways are provided on both sides of Monks Orchard Road connecting the site to nearby public transport opportunities, residential areas and other shops and services. To the south, a series of signalised pedestrian crossings are provided at the junction of Monks Orchard Road and Wickham Road creating a safe route towards nearby shops as well as West Wickham Station.
- 4.4 Footways are further provided along Links Way to the north creating a continuous pedestrian link to Eden Park station. A zebra crossing is provided across the A214 for safe and convenient access to the station.
- 4.5 The local pedestrian network provides access to the site from a range of locations within a 60-minute walking time including West Wickham, Eden Park, Beckenham and Addington. Drawing 1907042-SK14 attached at Appendix I provides isochrones comprising walk times of 15, 30, 35, 40, 45 and 60 minutes from the site.

Local Cycle Network

- 4.6 The site is well located with regard to the local cycle network with a range of cycle routes in the immediate vicinity including Monks Orchard Road forming a section of the nearby signed cycle routes. The local signed routes provide onward connections to Croydon, Sutton and Farnborough as well as to Route 21 of the London Cycle Network operating towards Lewisham.
- 4.7 The local cycle network provides access to the site from a range of locations within a 10-kilometre radius including the sites listed within a 60-minute walk, along with Bromley, Sydenham, Gravel Hill and West Norwood. Drawing 1907042-SK15 attached at Appendix J provides isochrones comprising cycle distances of 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 kilometres from the site.

Public Transport Accessibility Level

4.8 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 6b is the highest score and 1 is the lowest. The Bethlem Royal Hospital site has a PTAL of 1b. The figure below shows the PTAL score in the vicinity of the site based on the TfL We4bCAT tool and the full PTAL report is attached at Appendix K. In addition, Drawing 1907042-SK16 attached at Appendix L provides isochrones comprising public transport travel times of 15, 30, 45, 60, 65 and 90 minutes from the site.





Local Bus Services

- 4.9 The nearest bus stops to the site are located on Monks Orchard Road adjacent to the site access. These stops are served by route 356 which operates between Sydenham Hill and Wickham Road every 20-30 minutes.
- 4.10 Additional bus stops are located approximately 500 metres to the south of the site near the junction of Monks Orchard Road and Wickham Road. These stops are served by route 119 operating between Bromley North station and Croydon Airport every 10-13 minutes, as well as route 194 which operates between Bell Green and West Croydon bus station every 10-12 minutes.

Local Rail Services

4.11 The nearest station to the site is Eden Park station located approximately 1.3 kilometres to the north. Services from here operate to Hayes every 20 minutes as well as London Charing Cross and London Cannon Street every 30 minutes.

Summary

4.12 The above review demonstrates that the Bethlem Royal Hospital has limited accessibility by public transport and achieves a PTAL rating of 1b with the nearest rail station approximately 1.3 kilometres from the site. However, there are some bus services in the vicinity of the site which provide access to local areas and a connection to the train services.



5.0 Journey Impact Analysis

- 5.1 This section considers the impact on journeys as a result of the proposed moving of services from Lambeth Hospital to Maudsley Hospital.
- 5.2 As demonstrated in the previous sections, both the Lambeth Hospital and Maudsley Hospital sites are accessible by a wide range of transport opportunities including rail, underground, cycle and foot. The information presented in Sections 2 and 3 of this report indicate that the Maudsley Hospital site benefits from a higher PTAL level than the Lambeth site, indicating a greater level of accessibility by public transport.
- 5.3 Drawing 1907042-SK06 attached at Appendix D shows isochrones from public transport journey times to the Lambeth Hospital site travel times of 15, 30, 45, 60, 65 and 90 minutes from the site. and Figure 5.1 below shows isochrones in the local vicinity of the site

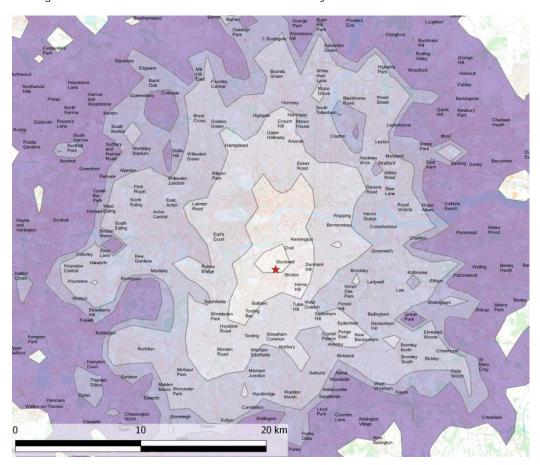


Figure 5.1 – Lambeth Hospital Public Transport Accessibility Isochrones

5.4 Drawing 1907042-SK06 attached at Appendix H shows isochrones from public transport journey times to the Maudsley Hospital site travel times of 15, 30, 45, 60, 65 and 90 minutes from the site. and Figure 5.2 below shows isochrones in the local vicinity of the site.



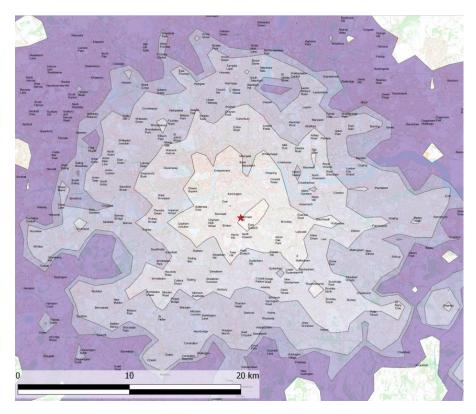
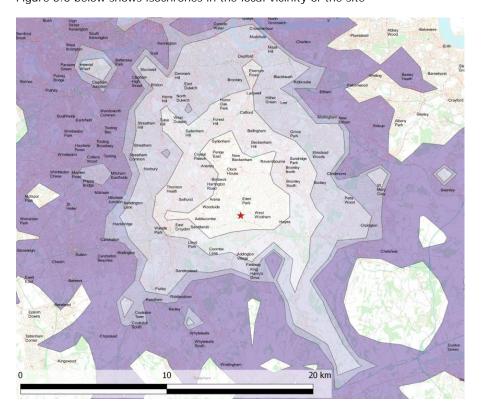


Figure 5.2 – Maudsley Hospital Public Transport Accessibility Isochrones

5.5 Drawing 1907042-SK16 attached at Appendix L shows isochrones from public transport journey times to the Bethlem Royal Hispital site travel times of 15, 30, 45, 60, 65 and 90 minutes from the site. and Figure 5.3 below shows isochrones in the local vicinity of the site





- In order to provide a comparison of a typical journey time catchment area to each of the sites, Drawing 1907042-SK07, attached at Appendix I, provides a comparison of the areas accessible within a 45-minute public transport journey of each of the Lambeth and Maudsley Hospital sites.
- 5.7 The comparison shows that there are some areas to the west of the sites which are currently within a 45-minute journey time of the Lambeth site but would be in excess of a 45-minute journey time of the Maudsley site. In comparison there are larger areas to the east of the sites, including around Lewisham, Kidbrooke, Charlton and Bromley which are current in excess of a 45-minute journey of Lambeth Hospital but within a 45-minute journey of the Maudsley site.
- In order to provide a comparison of a typical journey time catchment area to each of the sites, Drawing 1907042-SK17, attached at Appendix I, provides a comparison of the areas accessible within a 45-minute public transport journey of each of the Lambeth and Bethalm Hospital sites.
- 5.9 The comparison shows that the areas around central, western and southern London are within a 45-minute travel time of the Lambeth site, whilst areas within a 45-minute travel time of the Bethlem site include areas south-east of London such as Beckenham, West Wickham and Hayes. There is limited overlap of the 45-minute catchment with only areas around Sydenham and Penge with a 45-minute travel time of both sites.

Postcode Data

- 5.10 The South London and Maudsley NHS Foundation Trust has provided Motion with partial postcode data for a sample of inpatient and outpatients and this data has been plotted onto the 45-minute public transport comparison isochrone.
- 5.11 Drawing 1907042-SK18, attached at Appendix O, presents the plotted postcodes of outpatients to the Trust. An extract is presented at Figure 5.3 below and this demonstrates that the majority of outpatients are within a 45-minute journey time of both the Lambeth and Maudsley Hospital sites. For the Bethlem Royal site, only a small proportion of outpatients postcode zones are within a 45-minute journey.



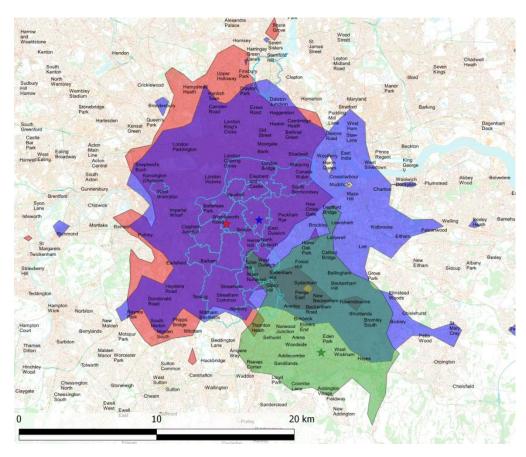


Figure 5.3 – Outpatient Postcode Analysis

5.12 Drawing 1907042-SK19, attached at Appendix P, presents the plotted postcodes of outpatients to the Trust. An extract is presented at Figure 5.4 below and this demonstrates that around 82% of inpatient postcodes provided by the Trust are within a 45-minute journey time of Lambeth Hospital and around 90% of inpatient postcodes are within a 45-minute journey time of the Maudsley Hospital site.



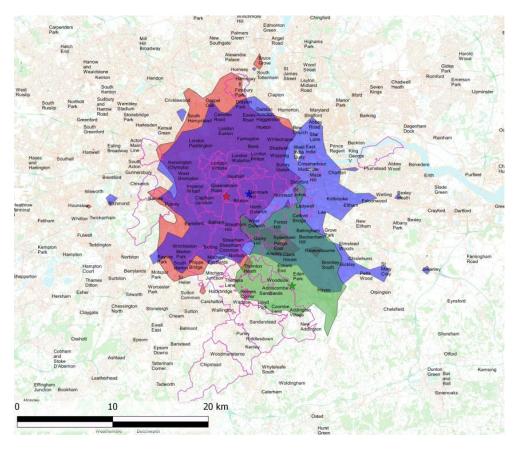


Figure 5.4 – Inpatient Postcode Analysis

- 5.13 It is note that, in particular, there are areas to the south of London around Purley, Croydon and Addington where there are inpatient postcodes but which are outside a 45minute travel time of both the Lambeth and Maudsley Hospital sites.
- 5.14 Drawing 1907042-SK20, attached at Appendix Q, presents the plotted postcodes of both outpatients and inpatients to the Trust. An extract is presented at Figure 5.5



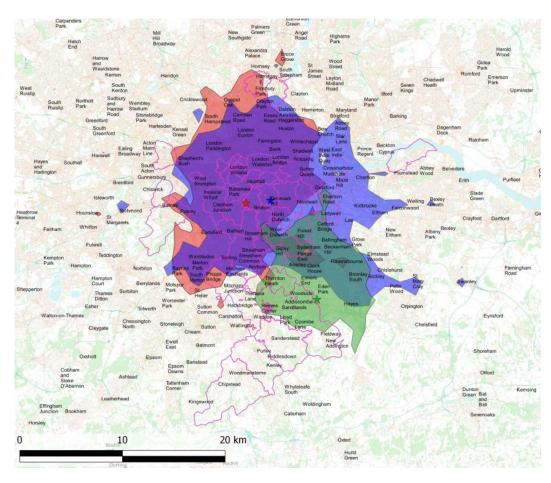


Figure 5.5 – Outpatient and Inpatient Postcode Analysis



5.15 Consideration has been given to the number of users after the change to services. Table 5.1 below summaries the information provided by the Trust on the service changes and the impact to service users.

Name of Service	Current Location	Proposed Location	Number of Users Affected*	Of which Disabled Users
Inpatient				
Bridge House	Lambeth Hospital	DBH	14	TBC
Forensic Ward in community	Lambeth Hospital	Bethlem Royal	13	TBC
Eden Ward	Lambeth Hospital	DBH	11	TBC
Luther King Ward	Lambeth Hospital	DBH	18	TBC
Rosa Parks Ward	Lambeth Hospital	DBH	18	TBC
Nelson Ward	Lambeth Hospital	DBH	18	TBC
Tony Hillis Unit	Lambeth Hospital	DBH	15	TBC
Outpatient				
Orchard House	Lambeth Hospital	DBH	75	TBC
Optima	Lambeth Hospital	DBH	-	TBC

Table 5.1 Affected Users

- Based on Attendance between dates provided by SLaM
- 5.16 In addition to the postcode mapping, an analysis of the expected journey time from postcode zones to each of the Lambeth and Maudsley Hospitals has been undertaken. The origin destination for each postcode zone has been based on the approximate centre point of each zone and journey times have been calculated using TRACC. Table 5.2 and 5.3 below provide a summary of the journey times to Lambeth and Maudsley Hospitals, along with the expected change in journey times for both outpatients and inpatients.

_	Journey Time	Journey Time	Change in	Co-ordinate	s of Postcode
Postcode Zone	to Lambeth Hospital (mins)	to Maudsley Hospital (mins)	Journey Time (mins)	Easting	Northing
N16	48	57	+9	533076	186976
RG30	81	94	+13	470248	173483
SE1	23	20	-3	531869	179427
SE11	17	25	+8	531348	177981
SE16	32	17	-15	535596	178674
SE19	37	34	-3	533176	170846
SE21	24	32	+8	533196	172317
SE24	24	9	-15	532559	175617
SE27	25	24	-1	531789	172519
SE5	29	12	-17	532351	177667
SW12	22	31	+9	529180	173778
SW16	27	38	+11	530019	172701
SW2	17	30	+13	530767	174534
SW4	15	23	+8	528747	175256
SW8	14	26	+12	530731	177208
SW9	13	27	+14	531155	176465



Table 5.2 Outpatient Journey Time Analysis

	Journey Time	Journey Time	Change in	Co-ordinate	s of Postcode
Postcode Zone	to Lambeth Hospital (mins)	to Maudsley Hospital (mins)	Journey Time (mins)	Easting	Northing
CR0	81	75	-6	539052	162028
CR2	58	59	+1	533144	162715
CR4	35	36	+1	528947	169557
CR5	55	57	+2	529983	158838
CR7	45	52	+7	531185	167833
CR8	63	59	-4	531703	161632
N4	46	51	+5	531605	188249
SE1	23	20	-3	531869	179427
SE11	17	25	+8	531348	177981
SE13	47	24	-23	538629	175288
SE14	33	18	-15	535741	176906
SE15	31	17	-14	534257	177086
SE18	37	34	-3	533176	170843
SE21	24	32	+8	533196	172317
SE23	55	32	-23	535668	173448
SE24	24	9	-15	532559	175617
SE25	47	50	+3	533924	168718
SE26	52	36	-16	535929	171896
SE27	25	24	-1	531789	172519
SE28	69	51	-18	545754	179495
SE5	29	12	-17	532351	177667
SW1	19	15	-4	529150	179131
SW11	23	21	-2	527588	175552
SW12	22	31	+9	529180	173778
SW13	45	44	-1	521713	176218
SW15	38	39	+1	523544	175404
SW16	27	38	+11	530019	172701
SW2	17	30	+13	530767	174534
SW4	15	23	+8	528747	175256
SW8	14	26	+12	530731	177208
SW9	13	27	+14	531155	176465
W12	49	52	+3	521913	181180

Table 5.3 Inpatient Journey Time Analysis



6.0 Summary

- 6.1 This accessibility study has provided a review of the transport opportunities surrounding both Lambeth Hospital, Maudsley Hospital and Bethlem Royal Hospital sites. It is noted that whilst the Lambeth and Maudsley Hospital Sites are well located with regard to the surrounding transport network, Maudsley Hospital benefits from a slightly higher PTAL level demonstrating a greater level of accessibility by public transport. The Bethlem Hospital is less well served by public transport and achieves a PTAL rating of 1b.
- 6.2 Public transport journey time analysis shows that there are some areas to the west of the sites which are currently within a 45-minute journey time of the Lambeth site but would be in excess of a 45-minute journey time of the Maudsley site. In comsparison there are larger areas to the east of the sites, including around Lewisham, Kidbrooke, Charlton and Bromley which are current in excess of a 45-minute journey of Lambeth Hospital but within a 45-minute journey of the Maudsley site.
- 6.3 A comparison of the Lambeth and Bethlem sites shows that the areas around central, western and southern London are within a 45-minute travel time of the Lambeth site, whilst areas within a 45-minute travel time of the Bethlem site include areas south-east of London such as Beckenham, West Wickham and Hayes
- An analysis of outpatient postcode information has indicated that the majority of outpatients are within a 45-minute journey time of both the Lambeth and Maudsley Hospital sites. An analysis of inpatient postcode information demonstrates that around 82% of inpatient postcodes provided by the Trust are within a 45-minute journey time of Lambeth Hospital and around 90% of inpatient postcodes are within a 45-minute journey time of the Maudsley Hospital site.



Figures



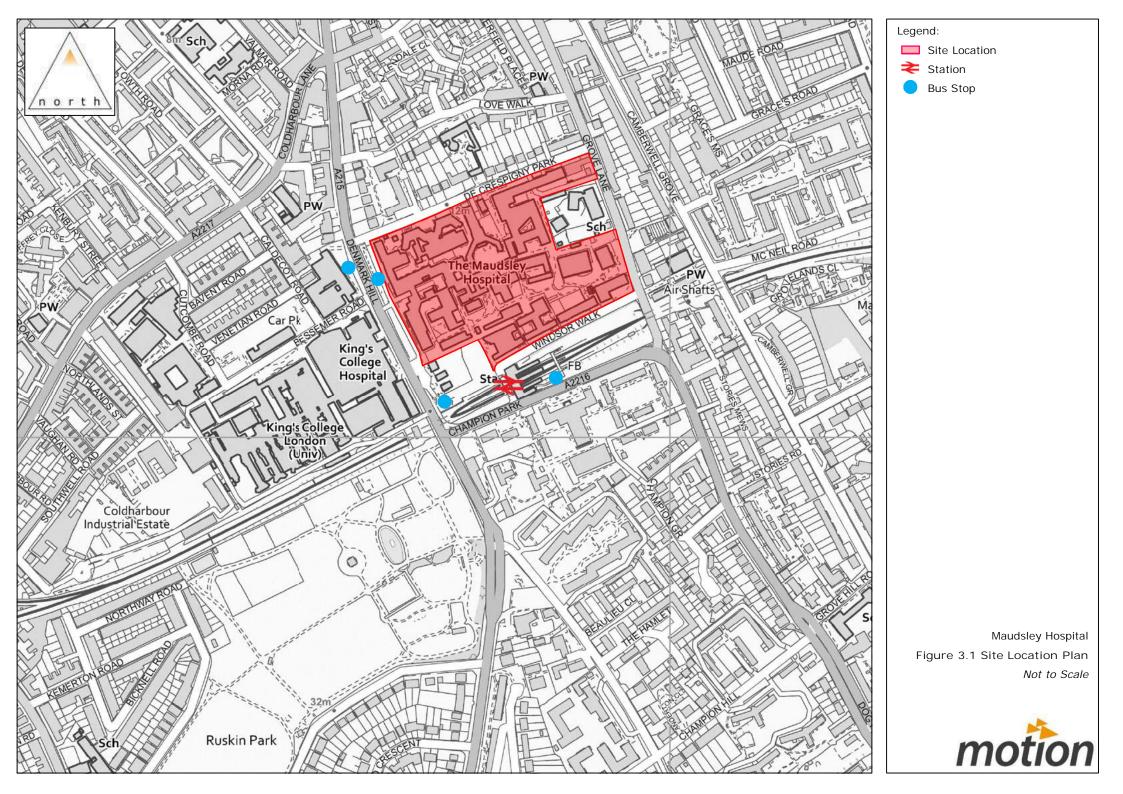
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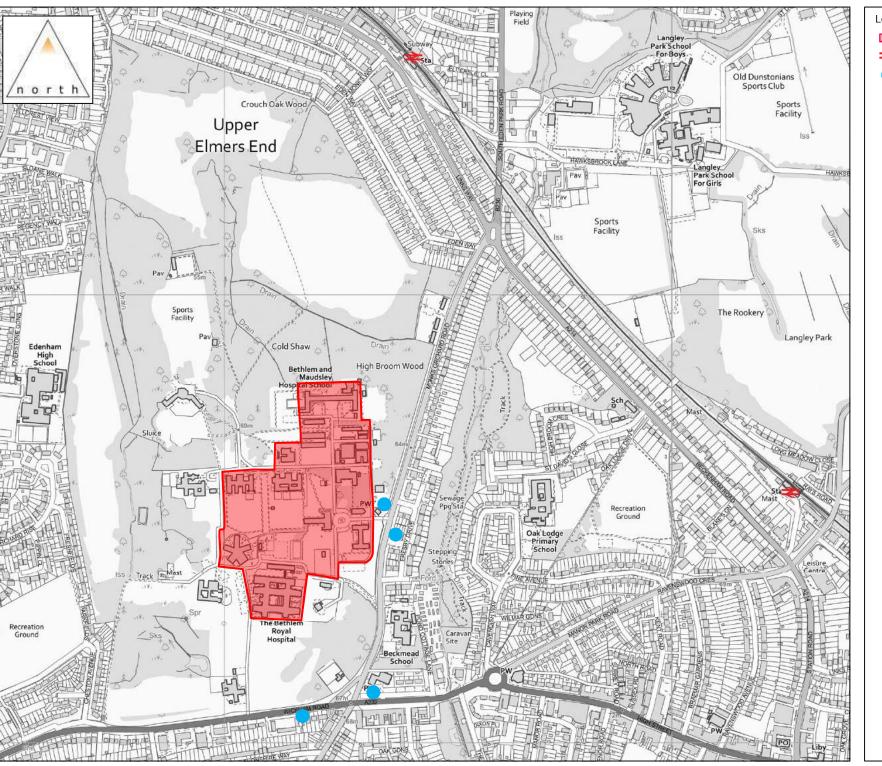
☐ Site Location

Station
Bus Stop
Underground Station

Lambeth Hospital
Figure 2.1 Site Location Plan
Not to Scale







Legend:

Site Location



Bus Stop

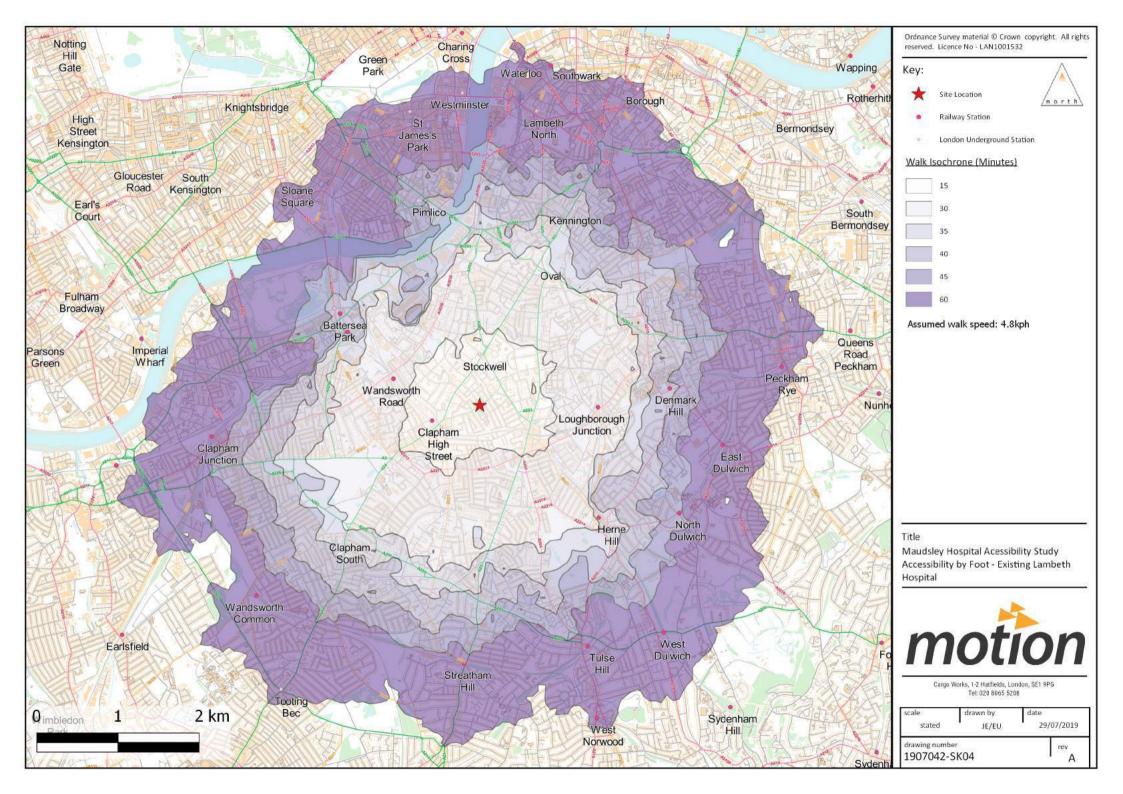
Maudsley Hospital
Figure 4.1 Site Location Plan
Not to Scale





Appendix A

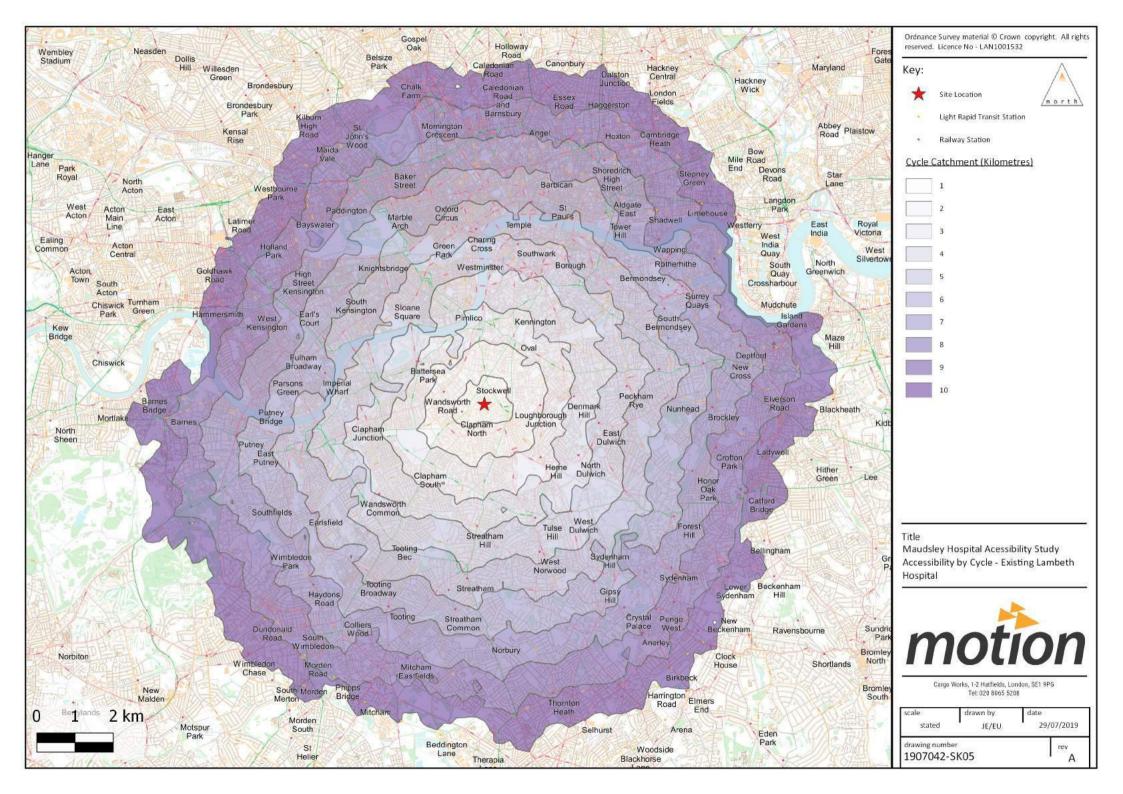
Walking Isochrones – Lambeth Hospital





Appendix B

Cycling Isochrones – Lambeth Hospital

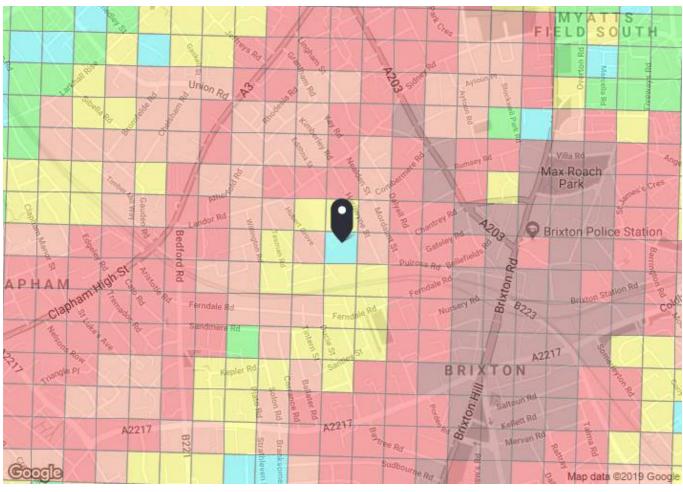




Appendix C

PTAL Report – Lambeth Hospital



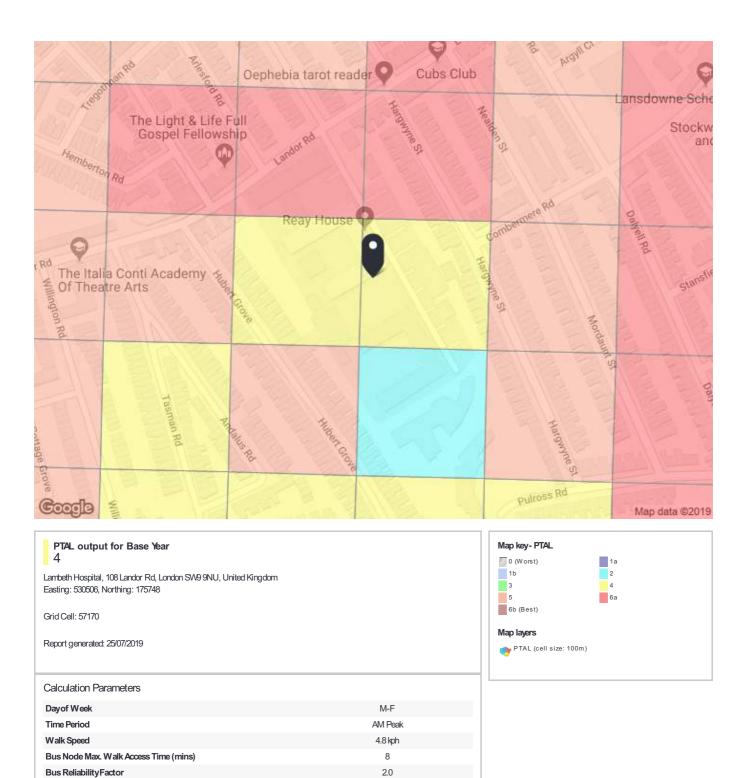


PTAL output for Base Year Unnamed Road, London SW9, UK Easting: 530552, Northing: 175652 Grid Cell: 56676 Report generated: 25/07/2019 Calculation Parameters Dayof Week M-F Time Period AM Peak Walk Speed 4.8 kph Bus Node Max. Walk Access Time (mins) 8 Bus ReliabilityFactor 2.0 LU Station Max. Walk Access Time (mins) 12 LU ReliabilityFactor 0.75 National Rail Station Max. Walk Access Time (mins) 12 National Rail ReliabilityFactor 0.75



Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	LANDOR RD/HARGWYN STREET	322	302.02	5	3.78	8	11.78	2.55	1	2.55
LUL	Clapham North	'Edgware-Morden'	735.87	9	9.2	4.08	13.28	2.26	0.5	1.13
LUL	Clapham North	'Morden-HighBarnet'	735.87	14.67	9.2	2.79	11.99	2.5	1	2.5
LUL	Clapham North	'Morden-MillHillE'	735.87	4	9.2	8.25	17.45	1.72	0.5	0.86
LUL	Clapham North	'Morden-Edgware'	735.87	4.67	9.2	7.17	16.37	1.83	0.5	0.92
LUL	Clapham North	'HighBarnet-Morden'	735.87	0.33	9.2	91.66	100.86	0.3	0.5	0.15
LUL	Clapham North	'MillHill-Morden'	735.87	1.67	9.2	18.71	27.91	1.07	0.5	0.54
									Total Grid Cell Al:	8.65





LU Station Max. Walk Access Time (mins)

National Rail Station Max. Walk Access Time (mins)

LU ReliabilityFactor

National Rail ReliabilityFactor

12

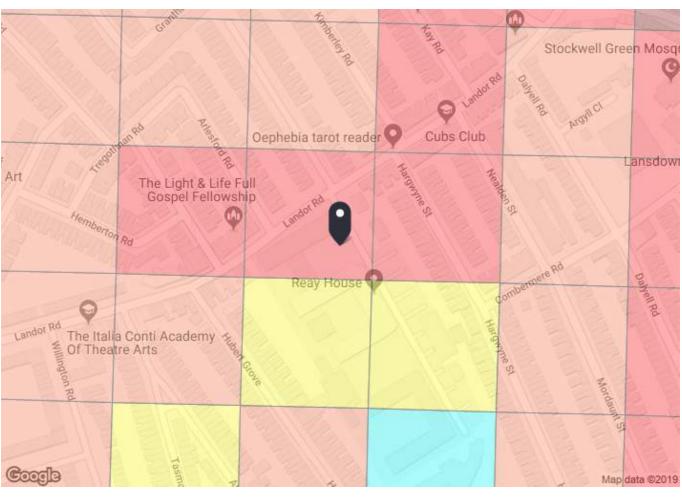
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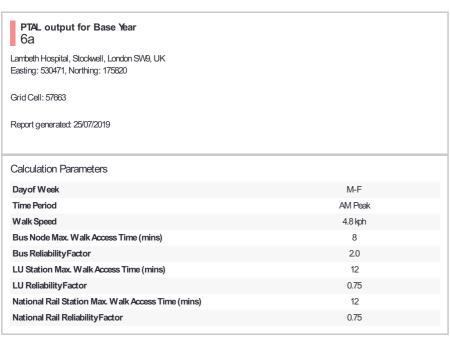
12

0.75

Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	Al
Bus	CLAPHAM ROAD UNION ROAD	50	638.95	5	7.99	8	15.99	1.88	0.5	0.94
Bus	CLAPHAM ROAD UNION ROAD	88	638.95	9	7.99	5.33	13.32	2.25	0.5	1.13
Bus	CLAPHAM ROAD UNION ROAD	P5	638.95	4	7.99	9.5	17.49	1.72	0.5	0.86
Bus	CLAPHAM ROAD UNION ROAD	155	638.95	7.5	7.99	6	13.99	2.14	0.5	1.07
Bus	STOCKWELL LANE	345	595.53	8	7.44	5.75	13.19	2.27	0.5	1.14
Bus	STOCKWELL LANE	2	595.53	9	7.44	5.33	12.78	2.35	0.5	1.1
Bus	STOCKWELL LANE	333	595.53	6	7.44	7	14.44	2.08	0.5	1.0
Bus	STOCKWELL LANE	196	595.53	5	7.44	8	15.44	1.94	0.5	0.9
Bus	LANDOR RD/HARGWYN STREET	322	204.1	5	2.55	8	10.55	2.84	1	2.8
Rail	Clapham High Street	'LNDNBDC-VICTRIC 2N05'	908.75	2	11.36	15.75	27.11	1.11	1	1.1
Rail	Clapham High Street	'VICTRIC-LNDNBDC 2N04'	908.75	2	11.36	15.75	27.11	1.11	0.5	0.5
LUL	Clapham North	'Edgware-Morden'	637.96	9	7.97	4.08	12.06	2.49	0.5	1.2
LUL	Clapham North	'Morden-HighBarnet'	637.96	14.67	7.97	2.79	10.77	2.79	1	2.7
LUL	Clapham North	'Morden-MillHillE'	637.96	4	7.97	8.25	16.22	1.85	0.5	0.9
LUL	Clapham North	'Morden-Edgware'	637.96	4.67	7.97	7.17	15.15	1.98	0.5	0.9
LUL	Clapham North	'HighBarnet-Morden'	637.96	0.33	7.97	91.66	99.63	0.3	0.5	0.1
LUL	Clapham North	'MillHill-Morden'	637.96	1.67	7.97	18.71	26.69	1.12	0.5	0.5







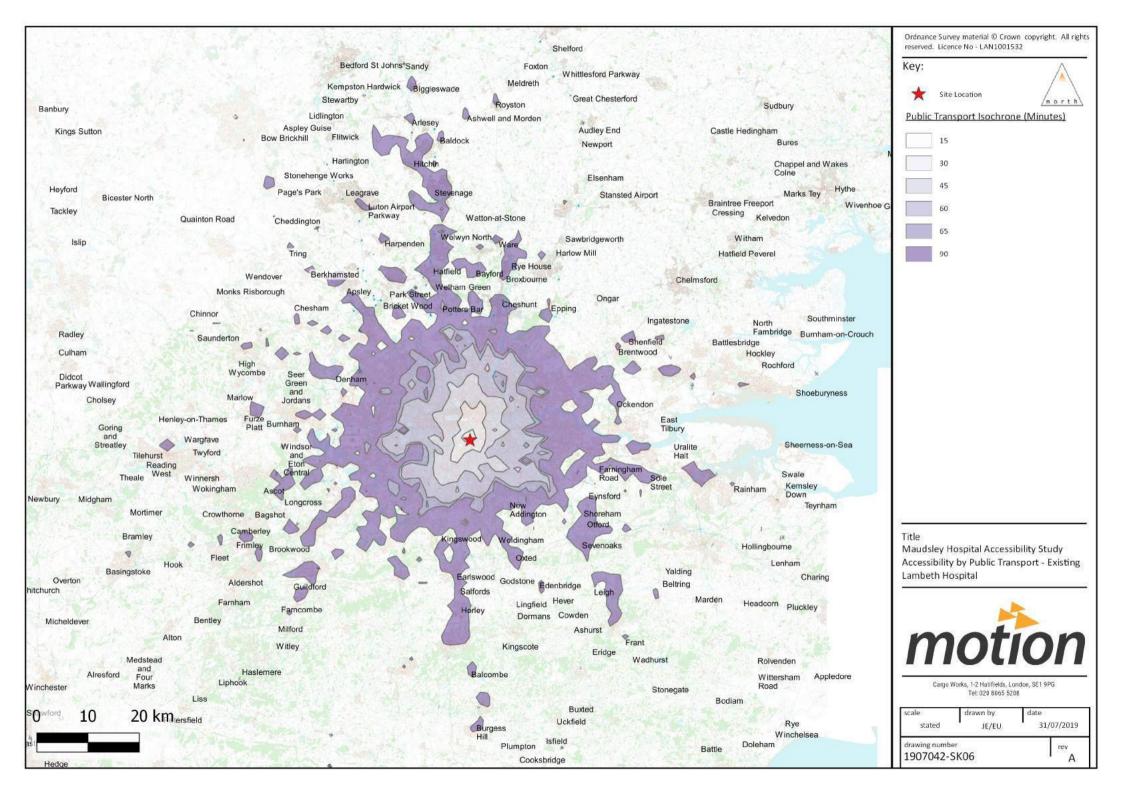


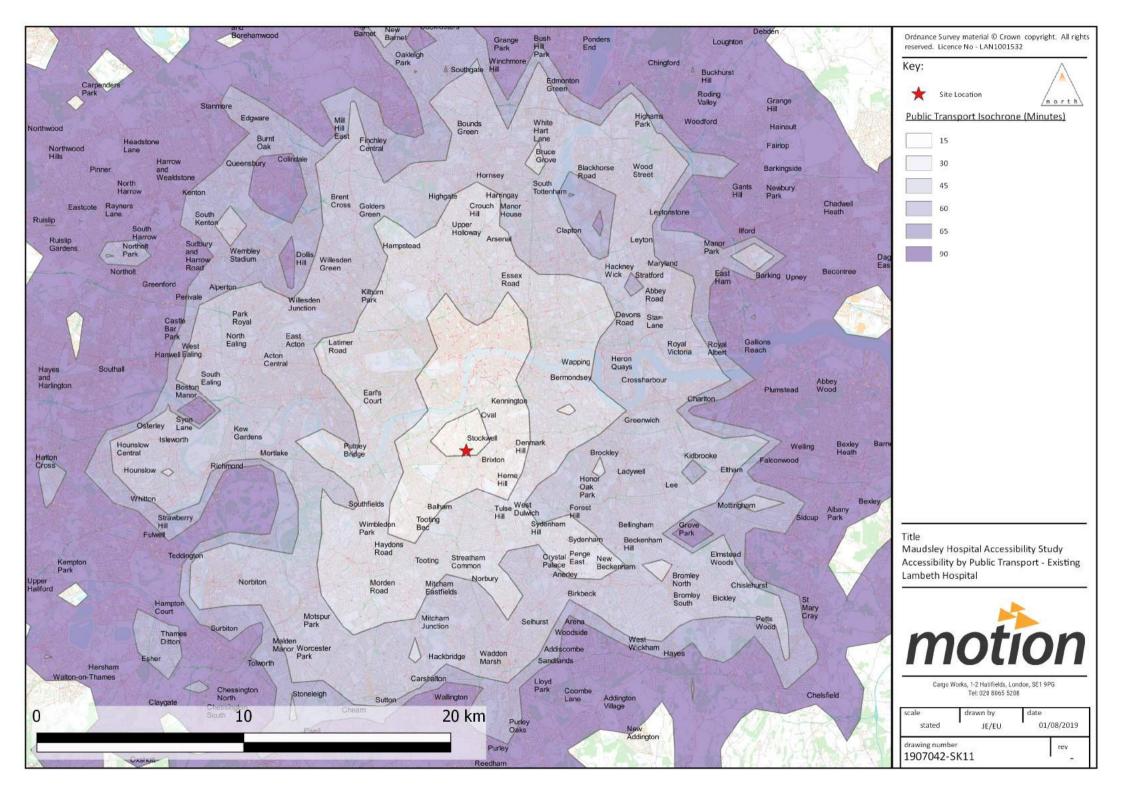
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	Al
Bus	STOCKWELL LANE	345	469.12	8	5.86	5.75	11.61	2.58	0.5	1.29
Bus	STOCKWELL LANE	2	469.12	9	5.86	5.33	11.2	2.68	0.5	1.34
Bus	STOCKWELL LANE	333	469.12	6	5.86	7	12.86	2.33	0.5	1.17
Bus	STOCKWELL LANE	196	469.12	5	5.86	8	13.86	2.16	0.5	1.08
Bus	LANDOR RD/HARGWYN STREET	322	77.68	5	0.97	8	8.97	3.34	1	3.34
Bus	CLAPHAM NTH STN LANDOR ${\sf R}$	50	476.47	5	5.96	8	13.96	2.15	0.5	1.07
Bus	CLAPHAM NTH STN LANDOR \ensuremath{R}	88	476.47	9	5.96	5.33	11.29	2.66	0.5	1.33
Bus	CLAPHAM NTH STN LANDOR \ensuremath{R}	P5	476.47	4	5.96	9.5	15.46	1.94	0.5	0.97
Bus	CLAPHAM NTH STN LANDOR \ensuremath{R}	155	476.47	7.5	5.96	6	11.96	2.51	0.5	1.25
LUL	Stockwell	'Brixton-WalthamstowC'	861.43	15.67	10.77	2.66	13.43	2.23	0.5	1.12
LUL	Stockwell	'SevenSisters-Brixton'	861.43	11.67	10.77	3.32	14.09	2.13	0.5	1.08
Rail	Clapham High Street	'LNDNBDC-VICTRIC 2N05'	737.43	2	9.22	15.75	24.97	1.2	0.5	0.6
Rail	Clapham High Street	'VICTRIC-LNDNBDC 2N04'	737.43	2	9.22	15.75	24.97	1.2	0.5	0.6
LUL	Clapham North	'Edgware-Morden'	466.64	9	5.83	4.08	9.92	3.03	0.5	1.51
LUL	Clapham North	'Morden-HighBarnet'	466.64	14.67	5.83	2.79	8.63	3.48	1	3.48
LUL	Clapham North	'Morden-MillHillE'	466.64	4	5.83	8.25	14.08	2.13	0.5	1.07
LUL	Clapham North	'Morden-Edgware'	466.64	4.67	5.83	7.17	13.01	2.31	0.5	1.15
LUL	Clapham North	'HighBarnet-Morden'	466.64	0.33	5.83	91.66	97.49	0.31	0.5	0.15
LUL	Clapham North	'MillHill-Morden'	466.64	1.67	5.83	18.71	24.55	1.22	0.5	0.61
Rail	Brixton	'BCKNHMJ-VICTRIE 2D12'	940.38	1	11.75	30.75	42.5	0.71	0.5	0.35
Rail	Brixton	'ORPNGTN-VICTRIE 2D14'	940.38	2.33	11.75	13.63	25.38	1.18	0.5	0.59
Rail	Brixton	'BROMLYS-VICTRIE 2D20'	940.38	0.67	11.75	45.53	57.28	0.52	0.5	0.26
Rail	Brixton	'ORPNGTN-VICTRIE 2D28'	940.38	0.33	11.75	91.66	103.41	0.29	0.5	0.15
Rail	Brixton	'VICTRIE-ORPNGTN 2M14'	940.38	3.67	11.75	8.92	20.68	1.45	1	1.4
Rail	Brixton	'VICTRIE-ORPNGTN 2M20'	940.38	0.33	11.75	91.66	103.41	0.29	0.5	0.15
									Total Grid Cell Al:	27.



Appendix D

Public Transport Isochrones – Lambeth Hospital

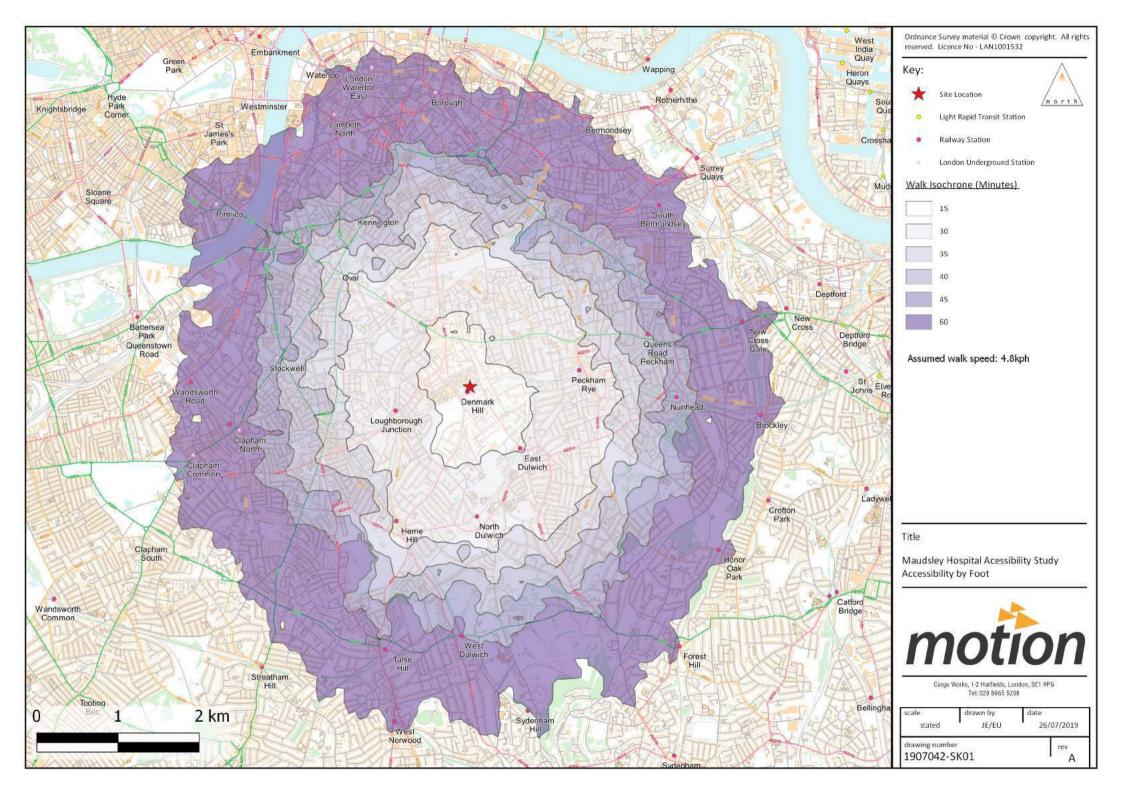






Appendix E

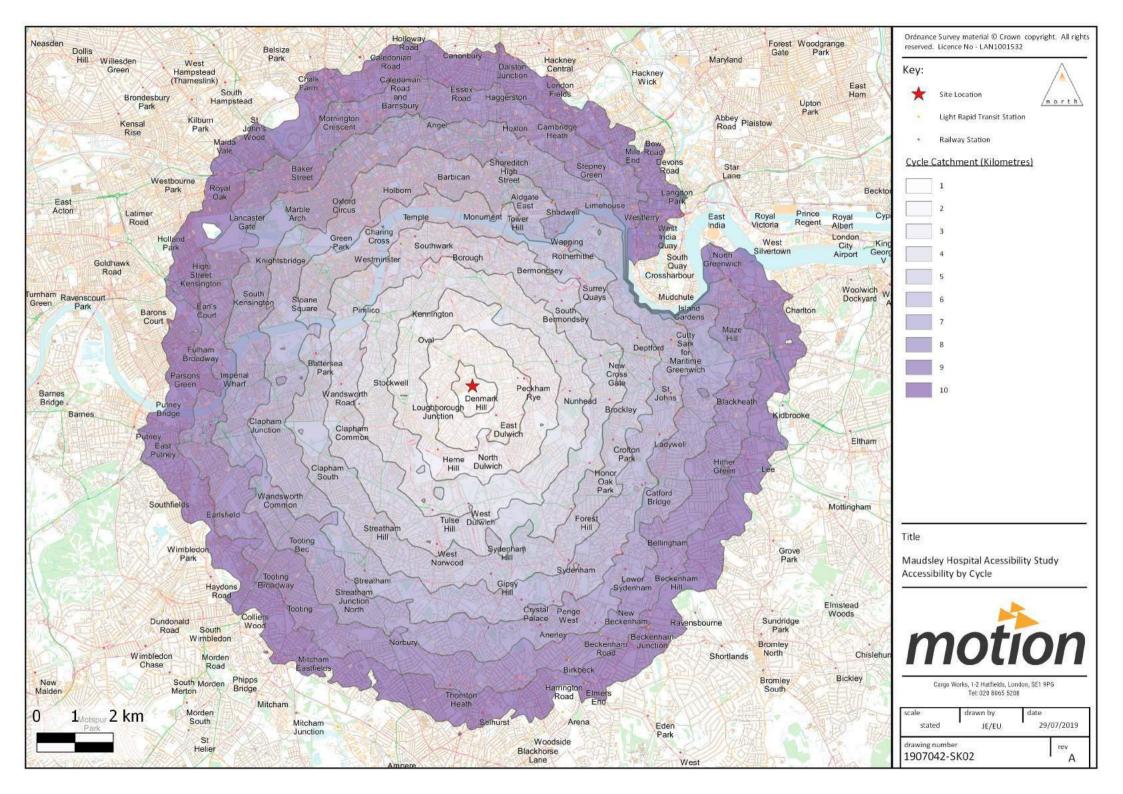
Walking Isochrones – Maudsley Hospital





Appendix F

Cycling Isochrones – Maudsley Hospital

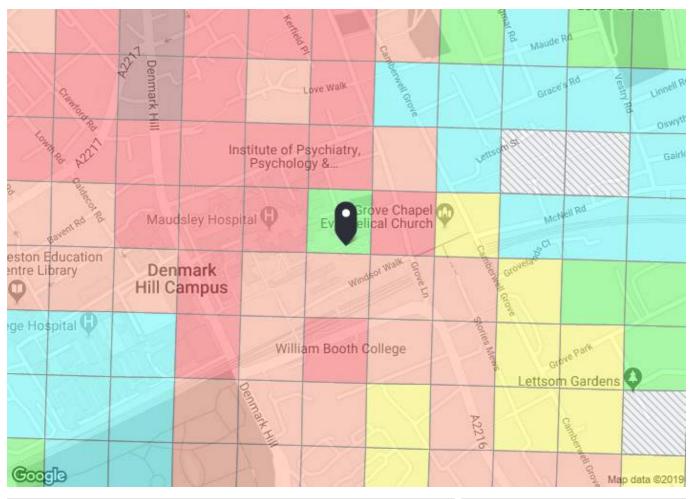




Appendix G

PTAL Report – Maudsley Hospital



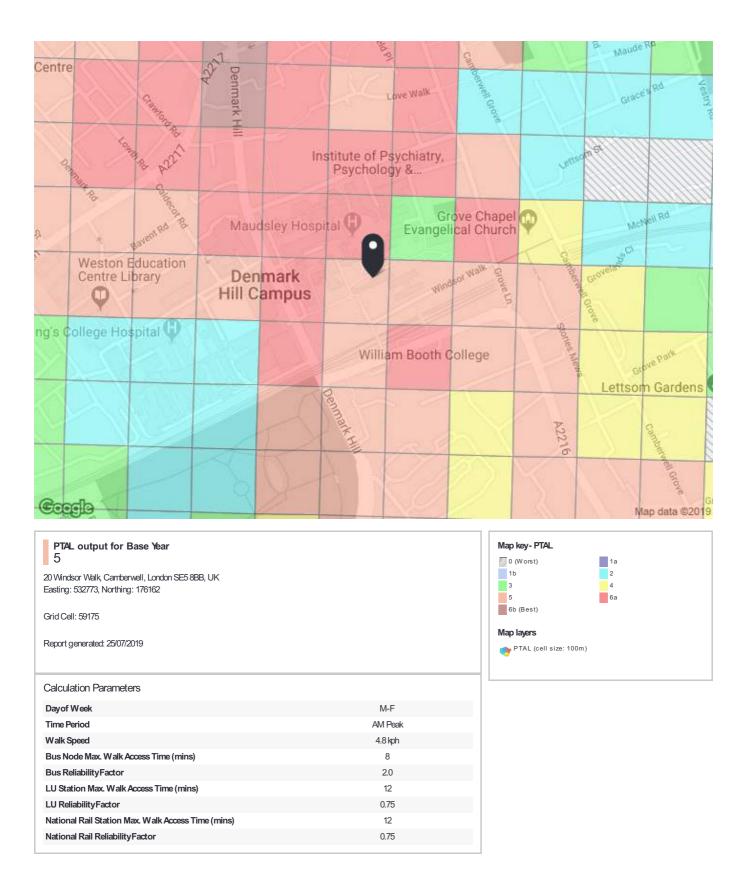


PTAL output for Base Year MRC SGDP (Social and Genetic Developmental Psychiatry Centre), Camberwell, London SE5, UK Easting: 532860, Northing: 176205 Grid Cell: 59674 Report generated: 25/07/2019 Calculation Parameters Dayof Week M-F AM Peak Time Period Walk Speed 4.8 kph Bus Node Max. Walk Access Time (mins) 8 Bus Reliability Factor 2.0 LU Station Max. Walk Access Time (mins) 12 LU ReliabilityFactor 0.75 National Rail Station Max. Walk Access Time (mins) 12 National Rail ReliabilityFactor 0.75



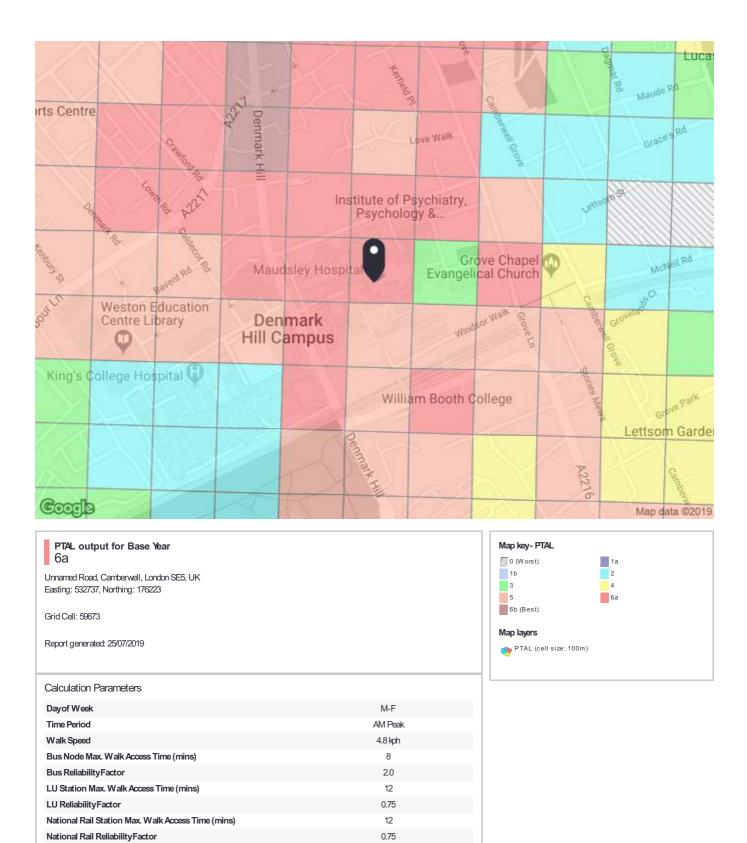
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	DENMARK HILL STATION	484	385.36	6	4.82	7	11.82	2.54	0.5	1.27
Bus	DENMARK HILL STATION	176	385.36	8.5	4.82	5.53	10.35	2.9	1	2.9
Bus	DENMARK HILL STATION	40	385.36	7.5	4.82	6	10.82	2.77	0.5	1.39
Bus	DENMARK HILL STATION	185	385.36	7.5	4.82	6	10.82	2.77	0.5	1.39
Rail	DenmarkHill	'LNDNBDC-VICTRIC 2N05'	419.07	2	5.24	15.75	20.99	1.43	1	1.43
Rail	DenmarkHill	'BEDFDM-SVNOAKS 1E62'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'BEDFDM-BROMLYS 1E83'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'BEDFDM-ORPNGTN 1L60'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'STALBCY-SVNOAKS 2E11'	419.07	1	5.24	30.75	35.99	0.83	0.5	0.42
Rail	DenmarkHill	'BEDFDM-SVNOAKS 2E19'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'LUTON-SVNOAKS 2E21'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'STALBCY-SVNOAKS 2E95'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'SVNOAKS-BEDFDM 1E69'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'BROMLYS-BEDFDM 1E82'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'SVNOAKS-STALBCY 2E59'	419.07	0.67	5.24	45.53	50.76	0.59	0.5	0.3
Rail	DenmarkHill	'SVNOAKS-LUTON 2E61'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'SVNOAKS-WHMPSTM 2E63'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'SVNOAKS-KNTSHTN 2E65'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'SVNOAKS-KNTSHTN 2E67'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'BROMLYS-LUTON 2E93'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'ORPNGTN-LUTON 2L59'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'ORPNGTN-KNTSHTN 2L65'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'VICTRIC-LNDNBDC 2N04'	419.07	2	5.24	15.75	20.99	1.43	0.5	0.71
Rail	DenmarkHill	'GLNGHMK-VICTRIE 2K60'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'VICTRIE-DARTFD 2U12'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'VICTRIE-DARTFD 2U16'	419.07	1.33	5.24	23.31	28.54	1.05	0.5	0.53
Rail	DenmarkHill	'DARTFD-VICTRIE 2U54'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'BRNHRST-VICTRIE 2U56'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15
Rail	DenmarkHill	'DARTFD-VICTRIE 2U58'	419.07	1.67	5.24	18.71	23.95	1.25	0.5	0.63
Rail	DenmarkHill	'SLADEGN-VICTRIE 2U90'	419.07	0.33	5.24	91.66	96.9	0.31	0.5	0.15





Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	A
Bus	DENMARK HL CHAMPION HILL	42	389.18	6	4.86	7	11.86	2.53	0.5	1.26
Bus	DENMARK HL CHAMPION HILL	468	389.18	10	4.86	5	9.86	3.04	0.5	1.52
Bus	DENMARK HL CHAMPION HILL	68	389.18	9	4.86	5.33	10.2	2.94	0.5	1.4
Bus	DENMARK HL CHAMPION HILL	X68	389.18	4	4.86	9.5	14.36	2.09	0.5	1.0
Bus	DENMARK HILL STATION	484	209.83	6	2.62	7	9.62	3.12	0.5	1.5
Bus	DENMARK HILL STATION	176	209.83	8.5	2.62	5.53	8.15	3.68	1	3.6
Bus	DENMARK HILL STATION	40	209.83	7.5	2.62	6	8.62	3.48	0.5	1.7
Bus	DENMARK HILL STATION	185	209.83	7.5	2.62	6	8.62	3.48	0.5	1.7
Rail	DenmarkHill	'LNDNBDC-VICTRIC 2N05'	92.97	2	1.16	15.75	16.91	1.77	1	1.7
Rail	DenmarkHill	'BEDFDM-SVNOAKS 1E62'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'BEDFDM-BROMLYS 1E83'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'BEDFDM-ORPNGTN 1L60'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'STALBCY-SVNOAKS 2E11'	92.97	1	1.16	30.75	31.91	0.94	0.5	0.4
Rail	DenmarkHill	'BEDFDM-SVNOAKS 2E19'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'LUTON-SVNOAKS 2E21'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'STALBCY-SVNOAKS 2E95'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'SVNOAKS-BEDFDM 1E69'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'BROMLYS-BEDFDM 1E82'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'SVNOAKS-STALBCY 2E59'	92.97	0.67	1.16	45.53	46.69	0.64	0.5	0.3
Rail	DenmarkHill	'SVNOAKS-LUTON 2E61'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	Denmark Hill	'SVNOAKS-WHMPSTM 2E63'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'SVNOAKS-KNTSHTN 2E65'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'SVNOAKS-KNTSHTN 2E67'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'BROMLYS-LUTON 2E93'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'ORPNGTN-LUTON 2L59'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'ORPNGTN-KNTSHTN 2L65'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'VICTRIC-LNDNBDC 2N04'	92.97	2	1.16	15.75	16.91	1.77	0.5	0.8
Rail	DenmarkHill	'GLNGHMK-VICTRIE 2K60'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'VICTRIE-DARTFD 2U12'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'VICTRIE-DARTFD 2U16'	92.97	1.33	1.16	23.31	24.47	1.23	0.5	0.6
Rail	DenmarkHill	'DARTFD-VICTRIE 2U54'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'BRNHRST-VICTRIE 2U56'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1
Rail	DenmarkHill	'DARTFD-VICTRIE 2U58'	92.97	1.67	1.16	18.71	19.88	1.51	0.5	0.7
Rail	Denmark Hill	'SLADEGN-VICTRIE 2U90'	92.97	0.33	1.16	91.66	92.82	0.32	0.5	0.1



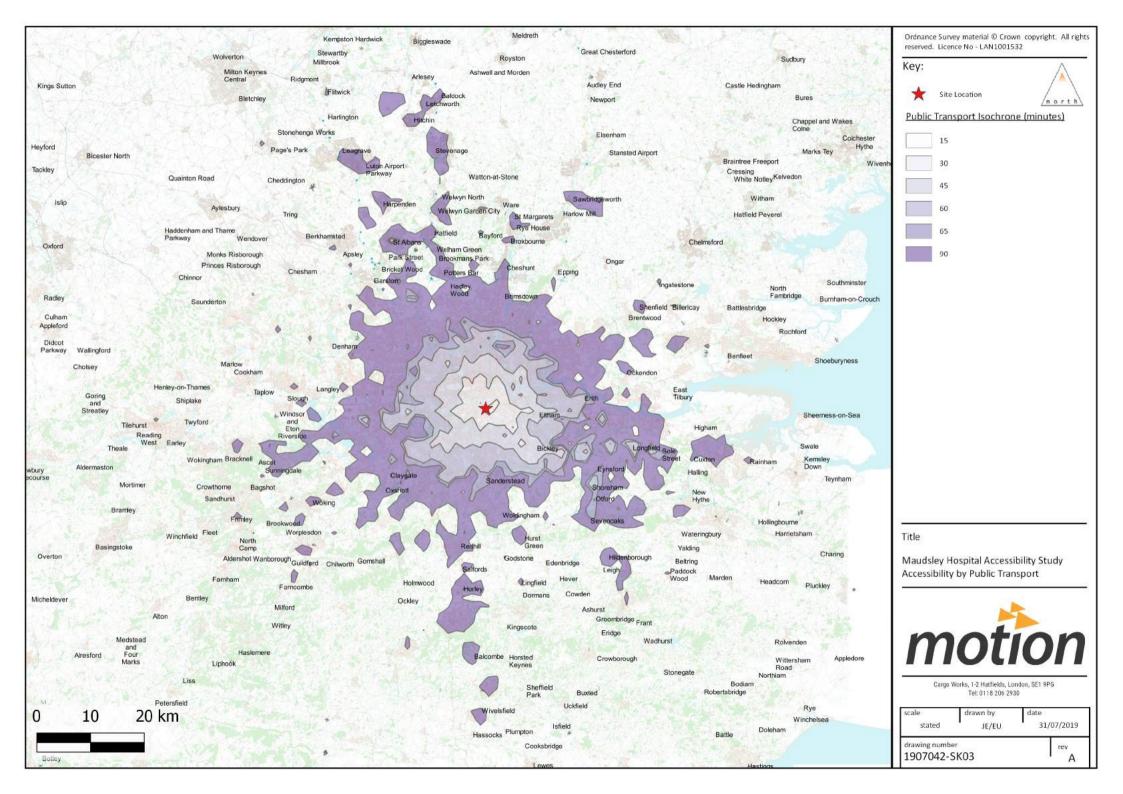


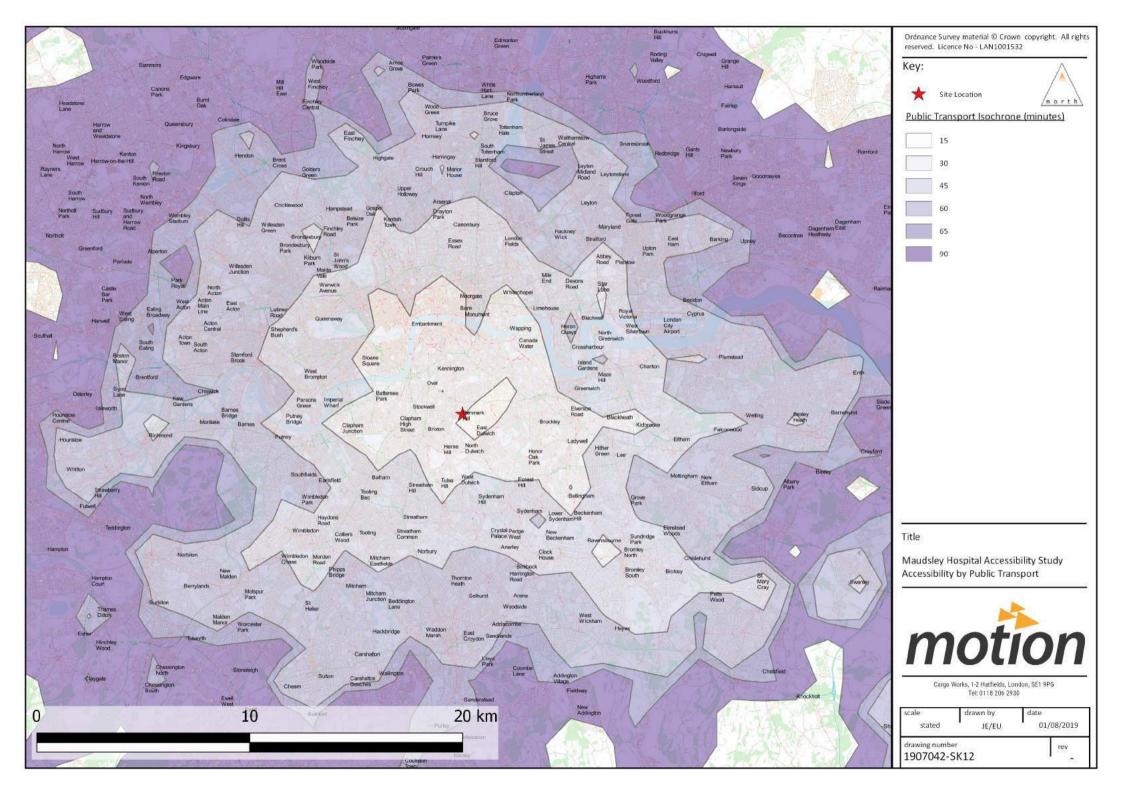
Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	Al
	CAMBERWELL GN DENMARK HL	148	584.76	8	7.31	5.75	13.06	2.3	0.5	1.15
Bus	COLDHARBOUR LN DENMARK H	345	547.29	8	6.84	5.75	12.59	2.38	0.5	1.19
Bus	COLDHARBOUR LN DENMARK H	45	547.29	7	6.84	6.29	13.13	2.29	0.5	1.14
	COLDHARBOUR LN DENMARK H	35	547.29	6	6.84	7	13.84	2.17	0.5	1.0
Bus	KING'S COLLEGE HOSPITAL	484	290.06	6	3.63	7	10.63	2.82	0.5	1.4
Bus	KING'S COLLEGE HOSPITAL	42	290.06	6	3.63	7	10.63	2.82	0.5	1.4
Bus	KING'S COLLEGE HOSPITAL	176	290.06	8.5	3.63	5.53	9.16	3.28	0.5	1.6
Bus	KING'S COLLEGE HOSPITAL	468	290.06	10	3.63	5	8.63	3.48	1	3.4
Bus	KING'S COLLEGE HOSPITAL	68	290.06	9	3.63	5.33	8.96	3.35	0.5	1.6
Bus	KING'S COLLEGE HOSPITAL	X68	290.06	4	3.63	9.5	13.13	2.29	0.5	1.1
Bus	KING'S COLLEGE HOSPITAL	40	290.06	7.5	3.63	6	9.63	3.12	0.5	1.5
Bus	KING'S COLLEGE HOSPITAL	185	290.06	7.5	3.63	6	9.63	3.12	0.5	1.5
Rail	DenmarkHill	'LNDNBDC-VICTRIC 2N05'	642.17	2	8.03	15.75	23.78	1.26	1	1.
Rail	Denmark Hill	'BEDFDM-SVNOAKS 1E62'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'BEDFDM-BROMLYS 1E83'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'BEDFDM-ORPNGTN 1L60'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'STALBCY-SVNOAKS 2E11'	642.17	1	8.03	30.75	38.78	0.77	0.5	0.3
Rail	DenmarkHill	'BEDFDM-SVNOAKS 2E19'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'LUTON-SVNOAKS 2E21'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'STALBCY-SVNOAKS 2E95'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'SVNOAKS-BEDFDM 1E69'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'BROMLYS-BEDFDM 1E82'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'SVNOAKS-STALBCY 2E59'	642.17	0.67	8.03	45.53	53.55	0.56	0.5	0.2
Rail	Denmark Hill	'SVNOAKS-LUTON 2E61'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'SVNOAKS-WHMPSTM 2E63'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'SVNOAKS-KNTSHTN 2E65'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'SVNOAKS-KNTSHTN 2E67'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'BROMLYS-LUTON 2E93'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'ORPNGTN-LUTON 2L59'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	Denmark Hill	'ORPNGTN-KNTSHTN 2L65'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'VICTRIC-LNDNBDC 2N04'	642.17	2	8.03	15.75	23.78	1.26	0.5	0.
Rail	DenmarkHill	'GLNGHMK-VICTRIE 2K60'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'VICTRIE-DARTFD 2U12'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'VICTRIE-DARTFD 2U16'	642.17	1.33	8.03	23.31	31.33	0.96	0.5	0.4
Rail	DenmarkHill	'DARTFD-VICTRIE 2U54'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'BRNHRST-VICTRIE 2U56'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.
Rail	DenmarkHill	'DARTFD-VICTRIE 2U58'	642.17	1.67	8.03	18.71	26.74	1.12	0.5	0.5
Rail	DenmarkHill	'SLADEGN-VICTRIE 2U90'	642.17	0.33	8.03	91.66	99.69	0.3	0.5	0.1
									Total Grid Cell Al:	25.



Appendix H

Public Transport Isochrones – Maudsley Hospital

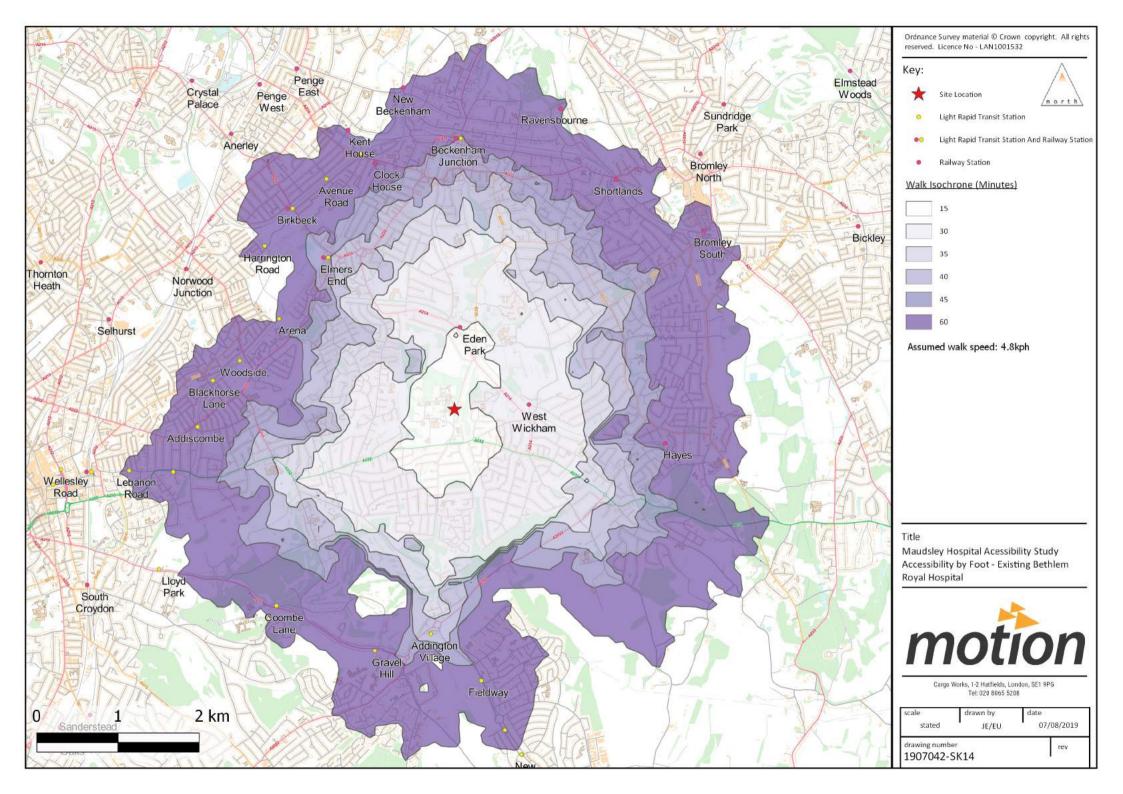






Appendix I

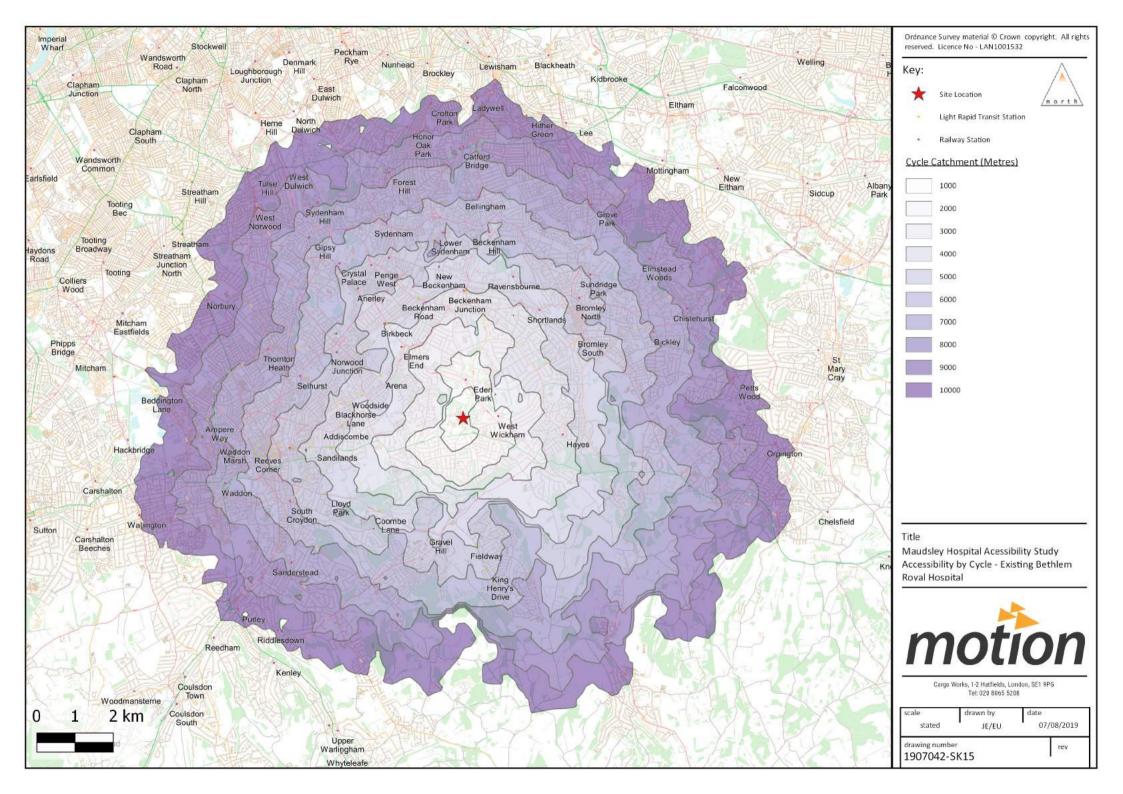
Walking Isochrones - Bethlam Royal Hospital





Appendix J

Cycling Isochrones - Bethlam Royal Hospital

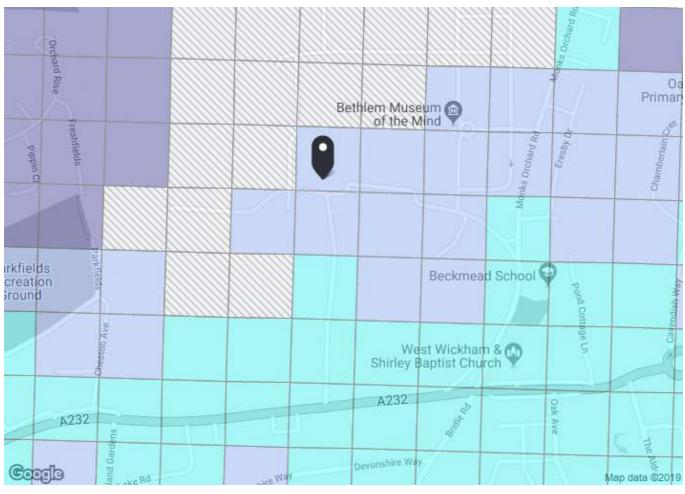




Appendix K

PTAL Report - Bethlam Royal Hospital





PTAL output for Base Year 1b	
Unnamed Road, Beckenham BR3 3BY, UK Easting: 537040, Northing: 166409	
Grid Cell: 19965	
Report generated: 12/08/2019	
Calculation Parameters Dayof Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus ReliabilityFactor	2.0
LU Station Max. Walk Access Time (mins)	12
LU ReliabilityFactor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail ReliabilityFactor	0.75

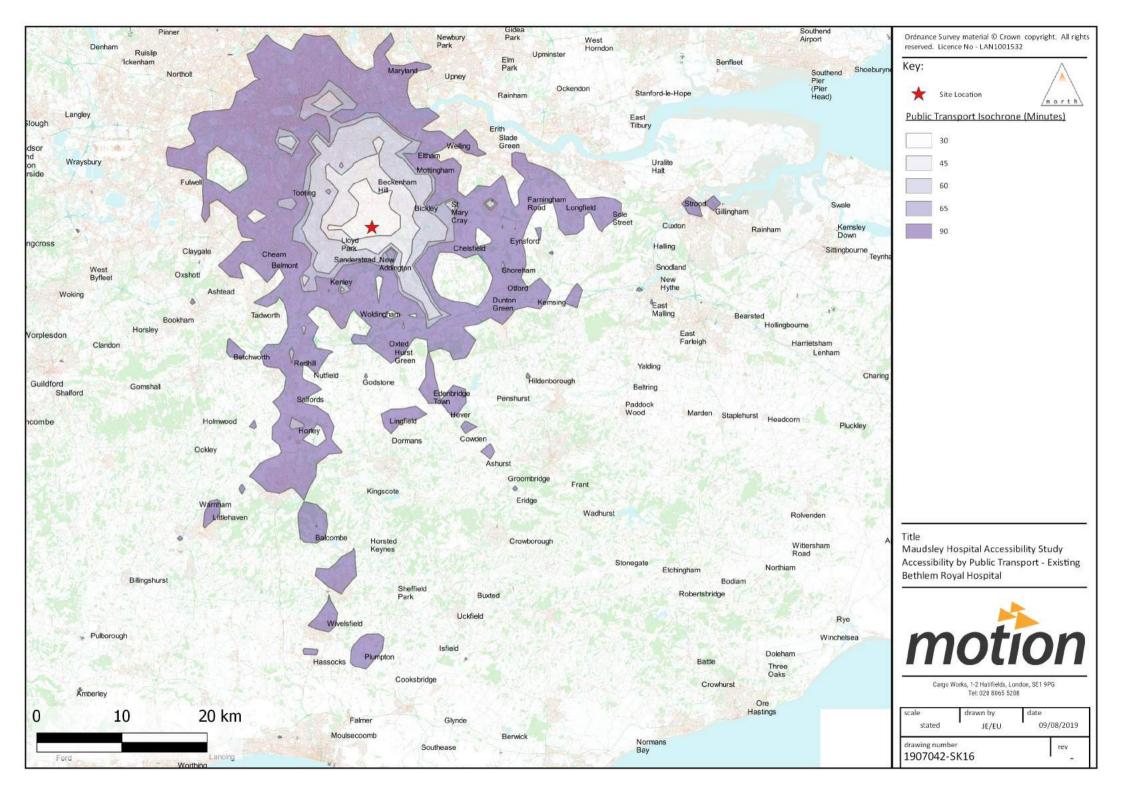


Calculation data												
Mode	Stop	Route	Distance (metres)	Frequency(vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	А		
Bus	WICKHAM R PAST BRIDLE RD	198	588.63	6	7.36	7	14.36	2.09	0.5	1.04		
Bus	WICKHAM R PAST BRIDLE RD	119	588.63	6	7.36	7	14.36	2.09	1	2.09		
									Total Grid Cell Al:	3.13		



Appendix L

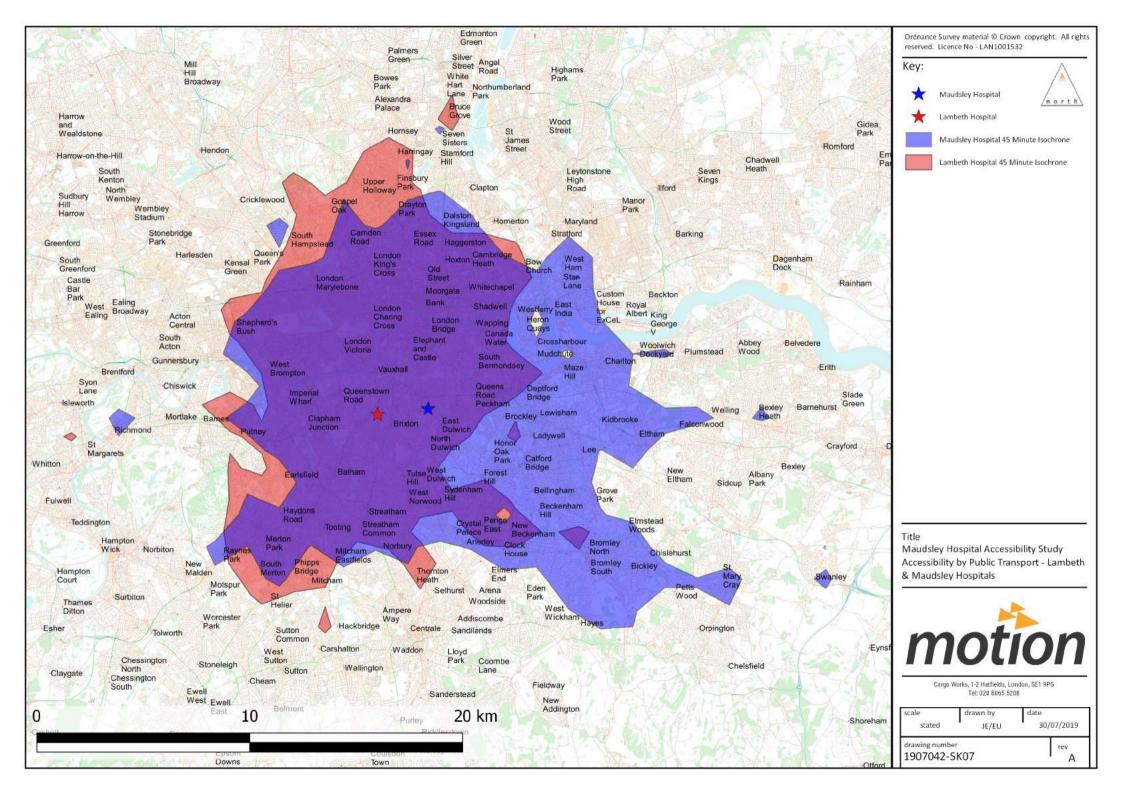
Public Transport Isochrones - Bethlam Royal Hospital





Appendix M

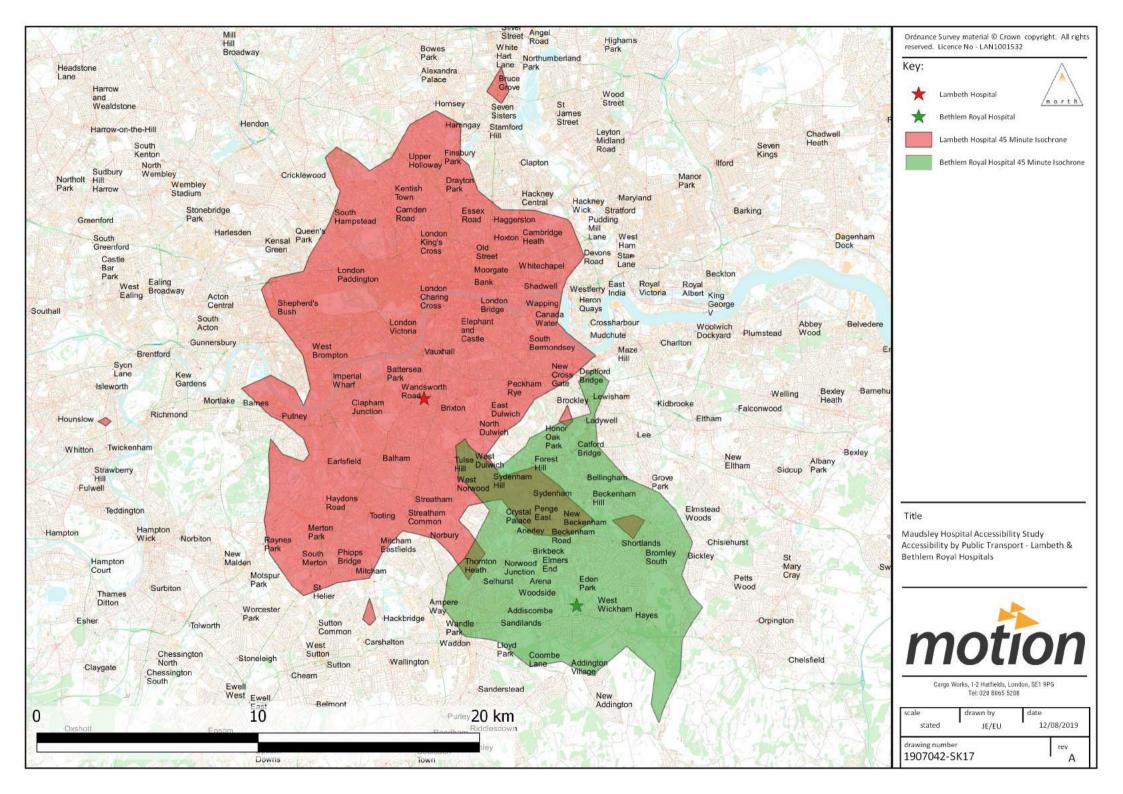
Comparison Accessibility Lambeth and Maudsley





Appendix N

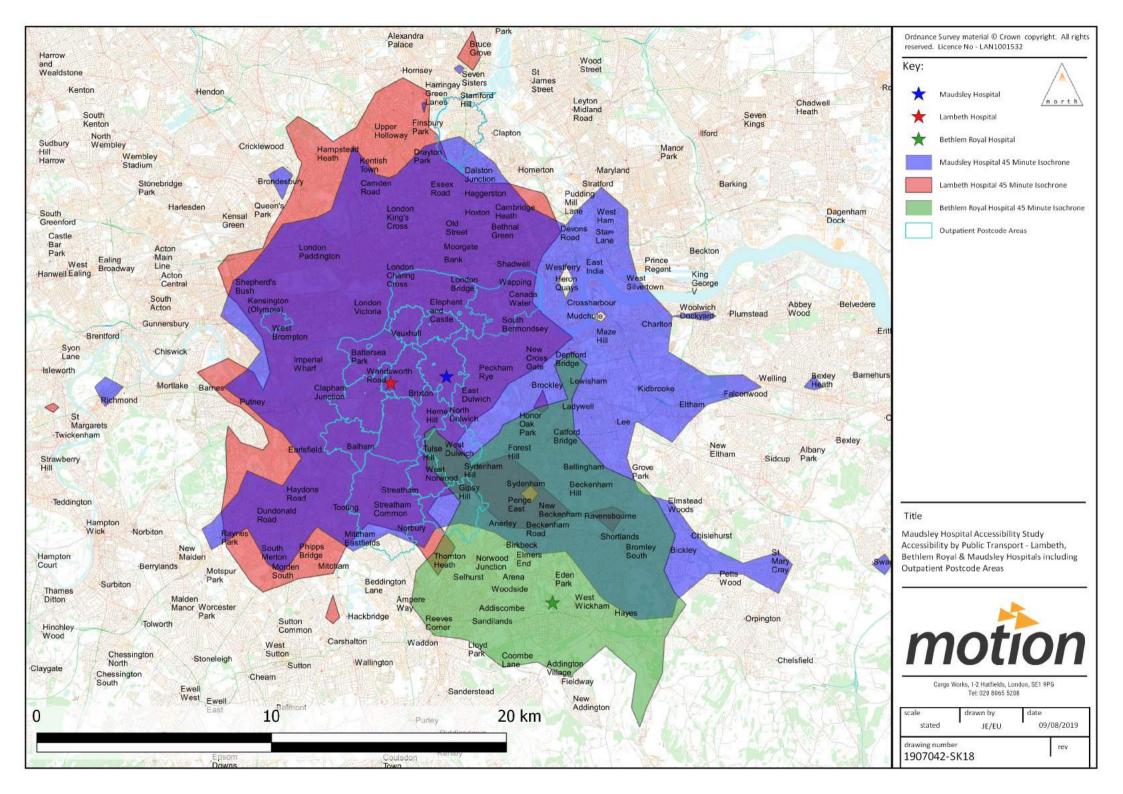
Comparison Accessibility Lambeth and Bethlam Royal





Appendix O

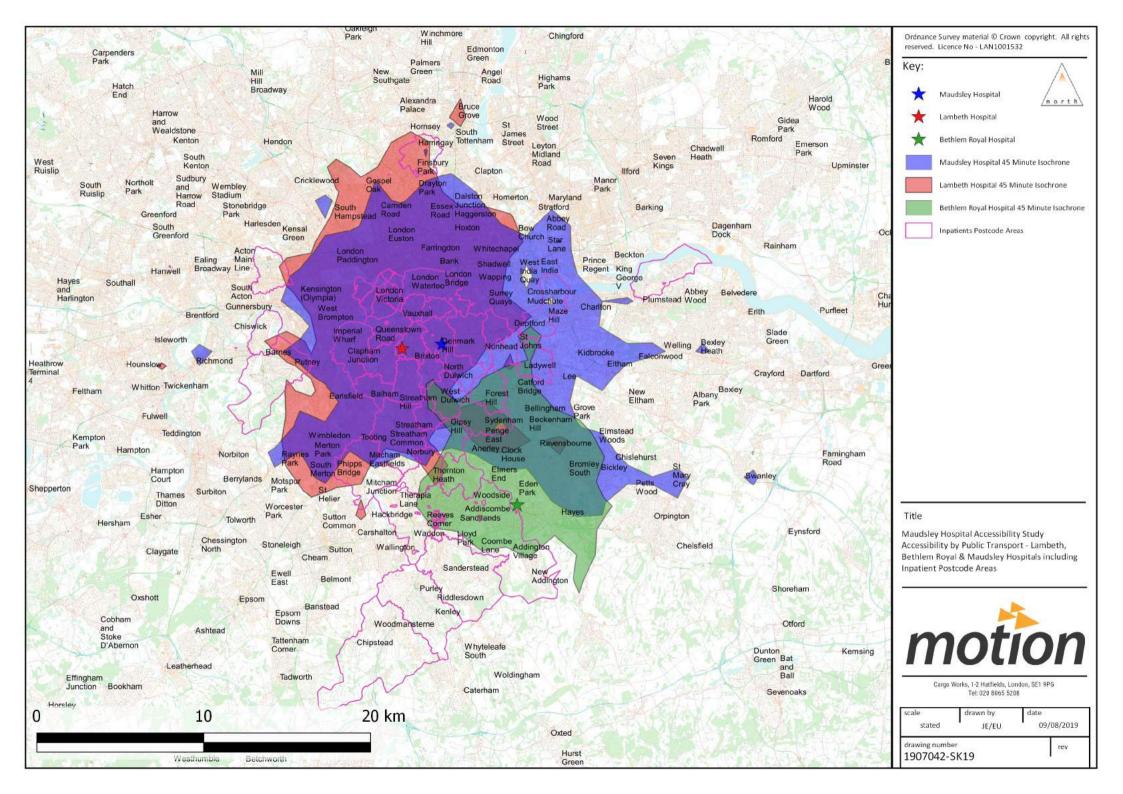
Outpatient Postcode Analysis





Appendix P

Inpatient Postcode Analysis





Appendix Q

All patient Postcode Analysis

