Turning South London Orange

Atkins assessment of housing and jobs potential

Final

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Introduction

This report provides technical inputs from Atkins Ltd for the Turning South London Orange project. The report provides an assessment of the development potential (both homes and jobs) that we anticipated could come forward as a result of proposals to transform south London suburban rail lines on a model based on the London Overground network.

The assessment set out in this report provides supporting evidence to the Centre for London report *Turning South London Orange: Reforming suburban rail to support London's next wave of growth*.

1. Methodology

Introduction

1.1. This chapter sets out the methodology used for assessing development potential in the Turning South London project (TSLO).

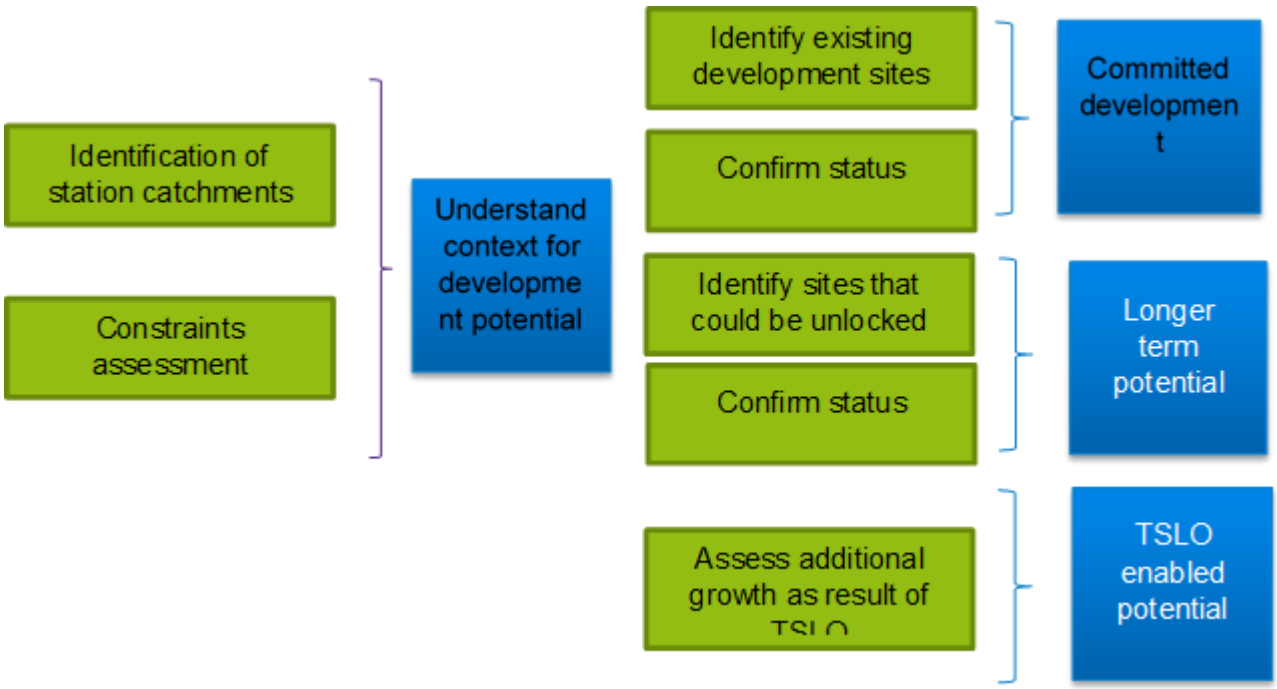
Study Area

1.2. The study area includes those rail stations on South Central set of lines in the 'Croydon' and 'Lewisham' groupings that are located on rail lines served by London Victoria and London Bridge (see Table 3 for full list). Stations are located in south London and Surrey (in Epsom & Ewell and Reigate and Banstead). London Victoria and London Bridge as large hub stations with a wide range of rail services, are unlikely to realise any significant uplift in development potential as a result of an upgrade to Overground services. As such for the purposes of our work it was agreed to exclude both London Victoria and London Bridge. There are 51 stations in total that have been assessed. In addition we have also considered the potential at several new stations and interchanges, with the exception of a new station at Tooting St Georges the development potential at these locations has already been picked up by the catchments at other TSLO stations.

Approach to defining housing development potential

1.3. As set out in Figure 1-1 below the study has included two key stages to establish the housing growth potential in study area: the first is understanding the context for the development potential of the study area; and the second is assessing the development growth potential.

Figure 1-1 Study Methodology



1.4. The following provides details of how the consultants have undertaken each of the above tasks:

Stage 1: Understanding development context

1.5. **Identification of station catchments** – it was assumed that the effective catchment for each station would be a 1km walk from the station. GIS mapping was used to identify a 1km buffer around each station, and the boundary of this was taken as the extremity of where additional development impacts from the TSLO upgrade would be felt. Where sites fell on the edge of the catchment (i.e. they were only partially within the catchment) they were included in the assessment. In many cases there are over lapping catchments due to the proximity of stations to each other. In these cases opportunities are attributed to the nearest station (to avoid double counting any potential).

1.6. **Constraints assessment** – A constraints assessment was undertaken to map the policy constraints that would impact on development potential. Constraints mapped include: Listed buildings; conservation areas; ecological designations (Sites of Special Scientific Interest, Sites of Importance for Nature Conservation); Green Belt and Metropolitan Open Land and Strategic Industrial Land. Local Plan policy constraints were also considered but were not mapped as GIS layers were not available.

Stage 2: Assessing development potential

1.7. In order to assess the development potential that the TSLO upgrades could have we have looked at three scenarios:

Scenario 1: Committed development

1.8. **Identify existing development opportunities** – scenario 1 is the development that would occur in each location regardless of whether the TSLO upgrade occurs or not. These are sites that are likely to have a high degree of certainty and can be termed committed development. To develop the committed development scenario Atkins took the London Strategic Housing Land Availability Assessment (SHLAA) data and mapped this onto the station catchments. Sites outside the catchments were sifted out, whilst those that are within the catchment were attributed to the nearest station. The attribute data (units, density etc.) for the SHLAA sites was used to define the level of potential at each site.

1.9. **Confirm Status** – Atkins undertook an exercise to check the status of each of the SHLAA sites to understand if there were sites that had already been completed or were currently under construction (these sites were sifted out – and are not included in scenario 1).

Scenario 2: Longer term development potential

1.10. **Identify development opportunities that could be unlocked** - scenario 2 is the development that could potentially be unlocked as a result of TSLO upgrade. To develop scenario 2 Atkins used the SHLAA Potential Sites from the SHLAA and mapped these onto the station catchments. Sites outside the catchments were sifted out, whilst those that are within the catchment were attributed to the nearest station. The attribute data for the SHLAA Potential sites was used to define the level of housing potential at each site.

1.11. In addition to this Atkins also undertook a thorough search of the catchment areas to identify sites that could potentially be redeveloped for housing. This has considered opportunities such as remodelling of residential estates, redevelopment of industrial areas[1], redevelopment of other land uses such as car parks, shopping parades etc. A number of sites have been identified through this process. The development potential for these sites has been derived by considering the site location (suburban, urban or central), considering whether the site is in a town centre (District, Major or Metropolitan) and the existing and future Public Transport Accessibility Levels

[1] It should be noted only one site in designated SIL is identified. No LSIS sites are identified.

(PTALs)[2] in order to derive an appropriate density based on the Density Matrix included in the London SHLAA (2013) see Tables 1-1 and Table 1-2 below.

Table 1-1 Standard Density Assumptions (dwellings per hectare)

PTAL	Suburban	Urban	Central
0	40	46	46
1	40	56	64
2	56	91	132
3	64	109	158
4	76	123	238
5	97	174	301
6	115	225	355

Source: Mayor of London, London Plan SHLAA (2013)

Table 1-2 Town Centre Density Assumptions (dwellings per hectare)

PTAL	Suburban	Urban	Central
0	70	86	98
1	72.5	90.5	104
2	76	136	192
3	85.5	153	216
4	104	208	324
5	117	234	364.5
6	130	260	405

Source: Mayor of London, London Plan SHLAA (2013)

1.12. **Confirm Status** – the consultants undertook an exercise to check the status of each of the sites to understand if there were sites that had been already been completed or were currently under construction (these sites were sifted out – and are not included in scenario 2 or 3).

Scenario 3: TSLO enabled development potential

1.13. Scenario 3 is the maximum housing development that could potentially be unlocked as a result of TSLO upgrades. The sites that were identified in scenario 2 are taken forward into scenario 3. However, the development potential is maximised, by considering what impact the TSLO upgrades would have on PTALs at each station. The upgrade in PTAL at each location has been applied to establish how much **additional** potential could be achieved in the TSLO study area over and above the potential identified in Scenario 2.

Establishing jobs growth

1.14. Atkins have also considered the level of jobs growth that is envisaged in the TSLO area. This has been established through two key stages:

Stage 1: Establish existing jobs in the TSLO station catchments.

1.15. The Lower Layer Super Output Areas (LSOAs) for each station catchment were identified. Atkins applied a best fit match (given that LSOAs do not match exactly to the station catchments) to identify the LSOAs that make up each station catchment. In many cases station catchments overlap, to ensure that LSOAs are only counted once in our analysis where station catchments overlap they have been grouped together. Data from the Business Register and Employment

[2] Based on a review of TfL Webcat tool at the time of writing for 2011 and 2031.

Survey (BRES) for employment[3] was then extracted from NOMIS for each station catchment grouping. Employment data was extracted by employment sector, and is then aggregated to Borough level, to provide an existing jobs figure for the TSLO study area (i.e. jobs within the TSLO station catchments for each Borough).

Stage 2: Establish future jobs growth in TSLO station catchments.

1.16. To establish future jobs growth in the TSLO catchment, Atkins made use of Oxford Economics 2015 London Baseline forecasts (Atkins have extrapolated forecasts from 2030 to 2035), to establish the Borough level jobs growth in the TSLO study area for the periods 2015-2025 and 2025–2035 for each employment sector (it is assumed TSLO will not be in place until 2025). The Borough jobs growth levels (2015-2025) for each employment sector were then applied to the current TSLO jobs (identified in stage 1 above) to establish TSLO jobs at 2025. Then the Borough jobs growth levels (2025-2035) for each employment sector were then applied to the TSLO jobs at 2025 to establish the TSLO jobs for 2035. No forecast data is available for Epsom and Ewell and Reigate and Banstead and therefore these districts are not included in the jobs growth analysis

[3] BRES 2014

2. Summary of Key Findings

Introduction

This chapter identifies the key findings from the assessment of development potential. This includes assessment of housing potential in the study area, and assessment of potential jobs growth in the study area.

Housing potential

Table 2-1 shows development potential in the study area under each scenario by station, Table 2-2 shows the development potential within the study area under each scenario by Borough.

Under the committed development scenario, there are only 18 stations out of the 51 stations assessed that currently have no committed housing potential (no allocated or approved housing sites). It is worth noting that this does not mean that no housing development is committed in these locations or likely to come forward, some small sites may have consents in these areas. However, the committed development scenario does provide a good indication of the overall scale of housing development in each location that is likely to come forward in the period up to 2025, i.e. before TSLO upgrades are implemented. Overall there are currently 20,351 units committed (with permission or allocations) in the catchment areas of stations in the study area. The stations with the greatest level of committed development include West Croydon, East Croydon, Battersea Park, Peckham Rye, Sutton and Catford Bridge, each of these station catchments have in excess of 1,000 residential units that could come forward.

When considered at the Borough level (i.e. aggregating the potential at stations located in a particular Borough), the Boroughs with the greatest committed potential are Croydon (5,893 units), Southwark (5,486 units), Wandsworth (3,117 units) and Lewisham (2,679 units). This reflects large scale developments that are currently under way or in the pipeline in locations such as Croydon town centre, Battersea and Clapham junction, Old Kent Road and Surrey Quays and Lewisham town centre.

The longer term development potential scenario identifies that the majority of stations in the study area do have some further potential for housing development over and above that identified in the committed development scenario. In total there is some 12,894 units that could come forward across 196 development sites. Those stations with the greatest longer term development potential include Brixton (2,260 units), Denmark Hill (1,530 units), and Peckham Rye (1,025 units).

When considered at the Borough level (i.e. aggregating the potential at stations located in a particular Borough), the Boroughs with the greatest longer term development potential are Lambeth (4,575 units), Southwark (3,341 units) and Lewisham (2,203 units), all of which have in excess of 2,000 units across the stations that could potentially be upgraded through the TSLO programme. All the Borough's in the study area (with the exception of Epsom & Ewell) have longer term development potential around the TSLO stations.

The level of development potential identified in this scenario is compliant with both London Plan housing densities and with policy constraints in place in these locations. It could be argued that the longer term development potential in the TSLO study area could be considerably higher than currently identified, if a more permissive approach to planning is followed. This would include: a revision (upwards) of London Plan densities, a relaxation of protection over open space and industrial areas such as SIL and LSIS (where appropriate), and a more radical approach to densifying low density suburbs. However, in order to provide a realistic view of development potential that could come forward in the TSLO area, Atkins have not considered the development potential from this more relaxed approach to planning policy protection.

Some of the housing capacity identified in the longer term development potential scenario would come forward without the implementation of the TSLO programme. However, further investment in transport infrastructure in these locations (the TSLO study area) that generates a better quality service, and faster journey times facilitating travel to both central London and to other locations in outer London does have the potential to both unlock the identified sites more quickly and will help to make locations in the TSLO area more attractive to both investors and people looking for a home.

The work completed by Jonathan Roberts has helped to identify the likely increase in PTALs across the station catchments in the TSLO study area. Any increase in PTAL would enable housing to be developed at greater densities and as such it is possible to define the TSLO enabled development potential i.e. the level of housing development generated over and above the development that the longer term development potential scenario identifies. The TSLO enabled scenario identifies there are an additional 3,102 units that could come forward across the 196 development sites as a result of the TSLO improvements. This is an uplift of 24% on the capacity identified in the longer term development potential scenario. Those stations with the greatest additional potential enabled by TSLO include: Denmark Hill (656 units), Brixton (647 units), and West Norwood (580 units).

When considered at the Borough level (i.e. aggregating the potential at stations located in a particular Borough), the Boroughs with the greatest TSLO enabled potential are Lambeth (1,384 units) and Southwark (803 units), although all the London Boroughs in the study area (with the exception of Sutton) would see an uplift in housing potential enabled by TSLO.

Table 2-1 Development potential by station in the TSLO study area

Station	Development Potential		
	Committed	Longer term potential	TSLO enabled
Annerley	0	71	104
Balham	54	117	5
Banstead	0	0	0
Battersea Park	1,257	121	67
Beckenham Junction	66	125	12
Belmont	273	0	0
Birkbeck	0	50	71
Brixton	295	2,260	647
Brockley	0	49	10
Carshalton	0	20	0
Carshalton Beeches	0	0	0
Catford Bridge	1,031	244	29
Cheam	0	0	0
Clapham Junction	967	54	76
Crystal Palace	33	55	0
Denmark Hill	268	1,530	656
East Croydon	2,589	0	52
East Dulwich	132	122	39
Epsom	380	0	0
Epsom Downs	0	74	0
Ewell East	0	0	0
Forest Hill	71	417	11
Gipsy Hill	0	189	0
Hackbridge	474	21	0
Honor Oak Park	0	0	0
Ladywell	108	255	0
Lewisham	626	458	0

Station	Development Potential		
	Committed	Longer term potential	TSLO enabled
Mitcham Eastfields	145	406	154
Mitcham Junction	134	0	0
New Cross Gate	721	477	0
Norbury	27	243	21
North Dulwich	0	0	0
Norwood Junction	0	59	24
Nunhead	40	0	0
Peckham Rye	1,124	1,025	49
Penge West	0	117	17
Queens Road Peckham	790	448	58
Selhurst	0	116	12
South Bermondsey	3,132	217	0
Streatham	0	734	102
Streatham Common	29	299	56
Streatham Hill	0	582	0
Sutton	1,114	215	0
Sydenham	122	304	60
Thornton Heath	0	361	53
Tooting*	0	300	79
Tulse Hill	96	68	0
Waddon	20	206	20
Wallington	117	225	0
Wandsworth Common	839	119	10
West Croydon	3,257	0	24
West Norwood	20	442	580
Total	**20,351**	**12,894**	**3,102**

Source: Atkins. Note: Data on commitments for Epsom & Ewell and Reigate & Banstead is unavailable. *new station at Tooting St Georges.

Table 2-2 Development potential by Borough in TSLO study area

Borough	Development Potential		
	Committed	Longer term	TSLO enabled
Bromley	99	417	204
Croydon	5,893	984	207
Lambeth	440	4,575	1,384
Lewisham	2,679	2,203	111
Merton	279	406	234
Southwark	5,486	3,341	803
Sutton	1,978	481	0
Wandsworth	3,117	411	158
Epsom & Ewell	380	0	0
Reigate & Banstead	0	74	0
Total	**20,351**	**12,681**	**3,102**

Source: Atkins

2.1. The above analysis has shown that there is a considerable amount of housing development that is already underway in the TSLO study area and there are approximately 20,000 units already committed in the study area. In the longer term (2025 onwards) there is potential for a further 13,000 units in the TSLO study area. Some if this potential could and will come forward without the TSLO programme. However, the service upgrades envisaged through TSLO have the potential to unlock this housing potential more quickly than otherwise would be achieved and to create a more attractive environment for investment in housing development. In addition to the longer term potential for 13,000 units, the TSLO upgrades have been shown to have a 24% uplift on this potential with a further 3,000 units directly attributable to the increased densities that TSLO would unlock.

2.2. It is worth noting that the latest London Plan monitoring report identifies that 50% of total units approved are above the density range set out in the London Plan, and in all but one of the past 8 years 50% to 60% of units have been above the density ranges. As there is no data available to say by how much over the density range schemes are it is not possible to calculate what impact this might have on the capacity that Atkins have identified for each site in the longer term development potential scenario and the TSLO enabled scenario. However, it does clearly point to the likelihood that the number of units that will come forward will be greater than we have identified in both the longer term development potential scenario and the additional housing development in the TSLO enabled scenario.

Jobs growth

2.3. Table 2-3 Jobs growth between 2025 and 2035 (i.e. following implementation of TSLO) in the TSLO catchment areas is anticipated to be 34,000 jobs. The TSLO stations in Croydon and Southwark have the greatest anticipated jobs growth in the period 2025-35 with 6,000 additional jobs each.

2.4. The jobs growth identified is a demand forecast and no assessment of the potential that each station catchment location has to accommodate these jobs has been undertaken. But what this does show is there is a significant amount of jobs growth forecast both within the Boroughs that are served by the TSLO network and in the TSLO station catchments. As such the TSLO

upgrade also has an important part to play in supporting jobs growth as well as supporting housing delivery.

Table 2-3 Jobs growth in TSLO study area

Borough	Jobs (Borough) 000s			Jobs (TSLO catchments) 000s		
	2025	2035	Growth 2025 - 35	2025	2035	Growth 2025 - 35
Bromley	133	157	25	22	23	2
Croydon	144	155	11	83	89	6
Lambeth	196	212	17	60	65	5
Lewisham	96	103	7	60	65	5
Merton	119	130	12	11	12	1
Southwark	275	309	34	50	56	6
Sutton	95	102	8	60	65	5
Wandsworth	156	168	12	56	60	4
Total	**1,213**	**1,337**	**125**	**402**	**436**	**34**

Source: Atkins based on Oxford Economics London 2030 baseline forecasts

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