

Technical Assessment Report: Displacement Roads in Upper Clapton Area.

September 2017

1. Introduction.....	2
Scope	2
Parking Issues	2
Related Policies	2
2. Survey Methodology & Terminology	3
Survey Schedules	3
Available Kerb-side Space & Potential Parking Capacity	3
Occupancy Levels & Parking Stress	3
3. Survey Results	4
Occupancy Levels & Parking Stress	4
Type of parking demand: locals v visitors	12
4. Potential Consultation Boundaries.....	18
Defining a main consultation area.....	18
Defining a displacement area	18
5. Summary	20
Recommendations	20
6. Appendix: Parking Stress Survey - Methodology	22

1. Introduction

Scope

- 1.1 The purpose of this report is to assess parking stress experienced in the area described as Lea Bridge, which lies north of Parking Zone (PZ) N (Clapton Park and Lower Clapton) and east of Parking Zones R and S. The southern and eastern boundaries are Lea Bridge Road and River Lee Navigation respectively whilst the western boundary is Upper Clapton Road.
- 1.2 The assessment also identifies boundaries for a potential controlled parking consultation in the event that a significant level of parking stress is found and it is determined that Stage 1 consultation should take place.

Parking Issues

- 1.3 This area is likely to suffer from three main sources of parking stress; high levels of residential vehicle ownership, incoming commuters and displaced local residents and business vehicles from the nearby controlled areas (Zones N, R and S).
- 1.4 This area is predominantly residential (92% addresses) and contains a few large housing estates including; Beecholme Estate, Jack Watts Estate and Radley Square Estate. None of these estates currently have a parking scheme in operation and some have limited parking spaces available on them.
- 1.5 There is a small commercial presence concentrated on or close to Upper Clapton Road (some businesses located at the top section of Southwold Road and Mount Pleasant Lane close to Upper Clapton Road).
- 1.6 There is a major over ground rail station located in the area on Upper Clapton Road (Clapton Station) which has direct links to London Liverpool Street. There is also a large public park (North Millfields Recreational Park) in the area.
- 1.7 There is one primary schools in the area (Southwold Primary School). The vast majority of roads are public highway, with low proportion of roads in the area being private roads. These are mainly situated within the estates in the area.
- 1.8 The roads in the area (north of Lea Bridge road) have not previously been consulted before as only a low number of requests for parking controls have been received from the area before now.
- 1.9 However, since the introduction of controls in some of the roads located in nearby Zone N, R and S displacement area in May 2017, the Council has received a high number of requests and petitions for parking controls to be introduced.

Related Policies

- 1.10 Parking Services aims to meet the requirements of all road users, while discouraging long-term commuter parking. As the amount of available kerb space is finite, the Parking Enforcement Plan (PEP) has determined a hierarchy of parking need, prioritising residents over business users within Controlled Parking Zones.

1.11 However, the Service is also keen to ensure support of the local economy by creating a balance of residential and business permit parking, along with residents' visitor provision and short-stay spaces for shoppers or other commercial customers.

2. Survey Methodology & Terminology

Survey Schedules

- 2.1 Several survey sessions are carried out on each survey day, depending on the issues of a particular area:
- **Overnight** – this provides information about vehicles parked late in the night from the previous day before the working day begins and therefore assumed to be local, belonging to nearby residents or businesses. In an uncontrolled area, local vehicles cannot be identified through permit records.
 - **Midday** – this provides a snapshot of the commuters, shoppers, and residential and commercial visitors using the area for parking; these are identified as new vehicles that were not previously observed parked during the early morning session.
 - **Evening** – this later session captures evening visitors in areas where a night-time economy is active.
- 2.2 Each road is surveyed on three separate occasions, at least a day apart, so that any unusual parking demand on a particular day would not skew the results. Average data across the three days is presented. Two weekdays and a Saturday were included in the survey days and analysed separately to ensure that a complete picture of stress suffered during a whole week is captured by the surveys.
- 2.3 For further details of the methodology see Appendix 2.

Available Kerb-side Space & Potential Parking Capacity

- 2.4 'Available kerb-side space' is the amount of on-street space per road that can be used for safe parking. It is established by taking the length along each kerb, excluding 5m each side of a junction (to allow for double yellow line 'junction protection'), 1m either side of an access cross-over and any existing double yellow lines, bus stops, pedestrian crossings, and school restrictions. Existing single yellow lines are excluded only when the session took place during its operational hours.
- 2.5 The 'potential parking capacity' of a road (number of parking spaces) is calculated by dividing the 'available kerb-side space' by 5m – the average length required by a parked vehicle; for example, 20m of available kerb-side space would provide parking space for 4 average-sized vehicles. This is an estimate as Parking Services does not, in general, mark out individual spaces for guidance where parking restrictions exist. In practice, vehicles may park more closely than this and larger types would take up more space.

Occupancy Levels & Parking Stress

- 2.6 Occupancy levels are determined by comparing the number of vehicles observed parked on-street against the road's potential parking capacity. Occupancy can occasionally be higher than 100% as vehicles may be observed in areas not deemed safe for parking and so excluded from the 'available kerbside space' calculation - parking in such spaces creates an obstruction, limits driver visibility or inhibits safe pedestrian access.
- 2.7 Parking stress is defined as occupancy of or exceeding 80% of a road's potential parking capacity.

3. Survey Results

- 3.1 Nationwide Data Collection carried out parking stress surveys on behalf of Parking Services between the 26th and 31st January 2017.
- 3.2 Although vehicles observed between Evening and Overnight are assumed to be 'local' under standard stress survey methodology, anecdotal evidence from residents suggests that some vehicles displaced from nearby PZs are being parked long-term basis in this uncontrolled area and so would have been included in the early morning parked vehicle and occupancy level figures.

Occupancy Levels & Parking Stress

Area wide

- 3.3 There are approximately 6432.8m of available kerb-side space in the Upper Clapton displacement area (excluding existing yellow lines, dropped kerbs and disabled bays) which, taking into account small lengths that are not long enough to accommodate a vehicle, equates to an overall potential parking capacity of 1096 spaces.
- 3.4 Table 1 indicates that the average early morning parking occupancy is 67% i.e. just over half all parking spaces are occupied. This suggests that overnight parking stress is a problem in this area and residents returning home late at night or early in the morning are experiencing some difficulty in finding parking space in some areas.
- 3.5 At midday on weekdays, occupancy slightly dips to 62%. The occupancy however increases to 64% on weekday evenings. This is concurrent with the residential nature of the roads in this area – any visitors are likely to be non-commercial and using spaces vacated by those residents that use their vehicles to commute. This also suggests that the parking stress in the area is mainly caused by residents or displacement from nearby parking zones.
- 3.6 On weekends, occupancy is slightly lower in the early morning (63%) and remains roughly at the same levels at midday and in the evening (from 59% to 62% respectively). This is also concurrent with the residential nature of the roads in this area – as the fall is from less commuter parking in the area over the weekend.

Street Level

- 3.7 However, there are some clusters where parking stress appears to be an issue. Of the 17 public roads surveyed, 5 roads (Gunton Road, Cleveley Road, Theydon Road, Mundford Road and Dudlington Road) were observed to have significant levels of parking stress (80% occupancy or above) at certain times of the day on weekdays. These can be identified in red on Table 1 below.
- 3.8 Some of these roads are close to Clapton train station as well as the estates in the area. The source of parking stress on the roads is likely to be parking from commuters using the train station due to the significant increase in parking stress between the early morning surveys and midday surveys as well as displacement parking from nearby parking zones.
- 3.9 The stress experienced in these roads are highest overnight or early in the morning.

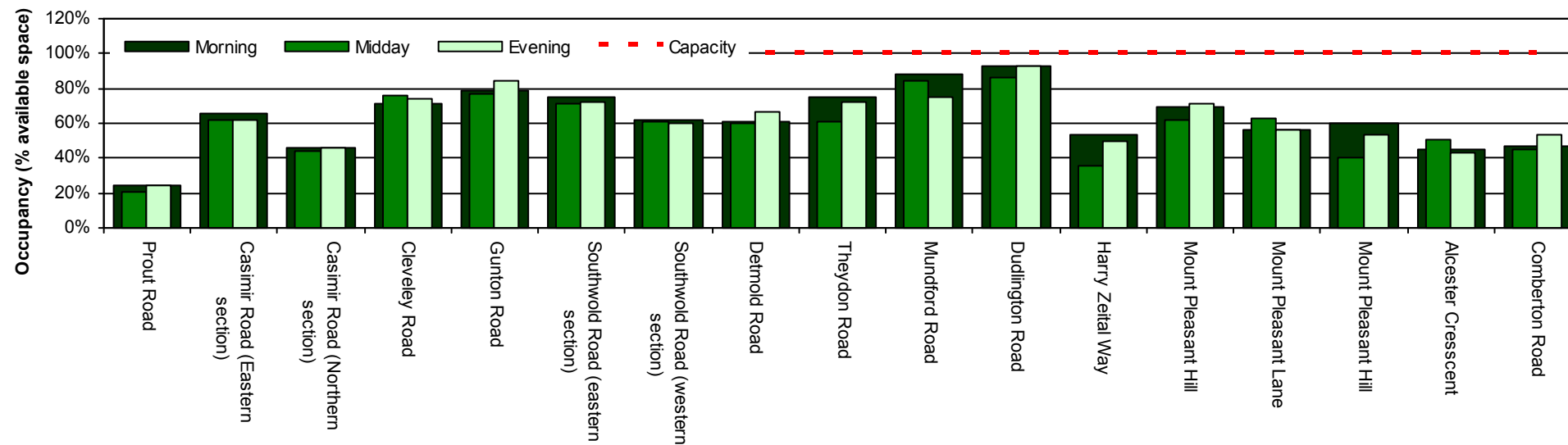
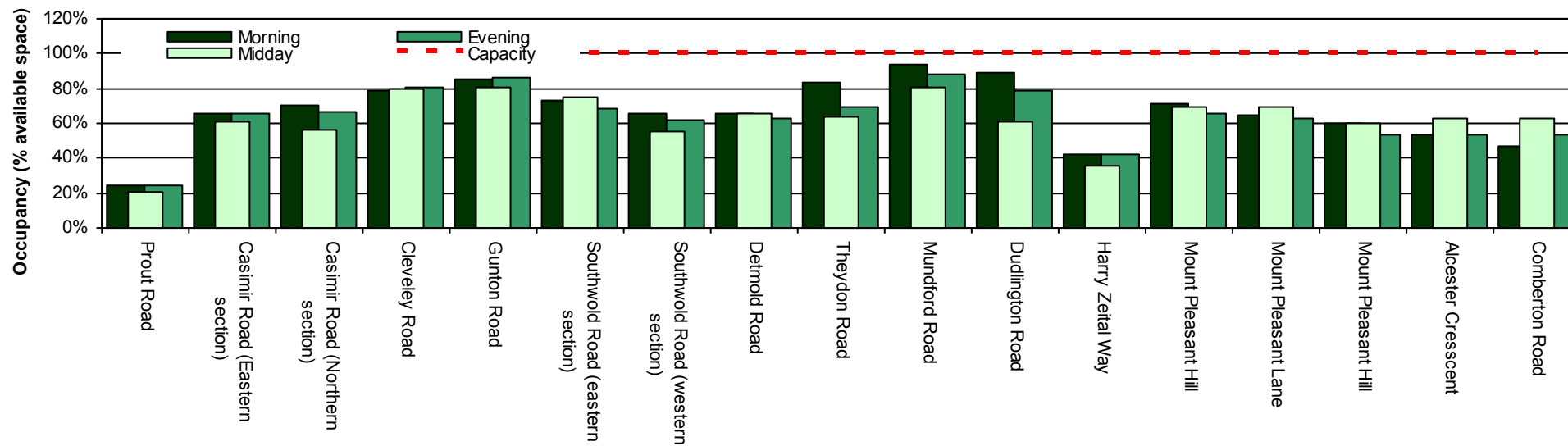
3.10 In addition to the above Gunton Road may also suffer additional parking stress due to their close proximity to the businesses on Upper Clapton Road.

3.11 Gunton Road, Mundford Road and Dudlington Road also suffer from very high parking stress at weekends. The level of parking stress was highest at overnight and evenings periods.

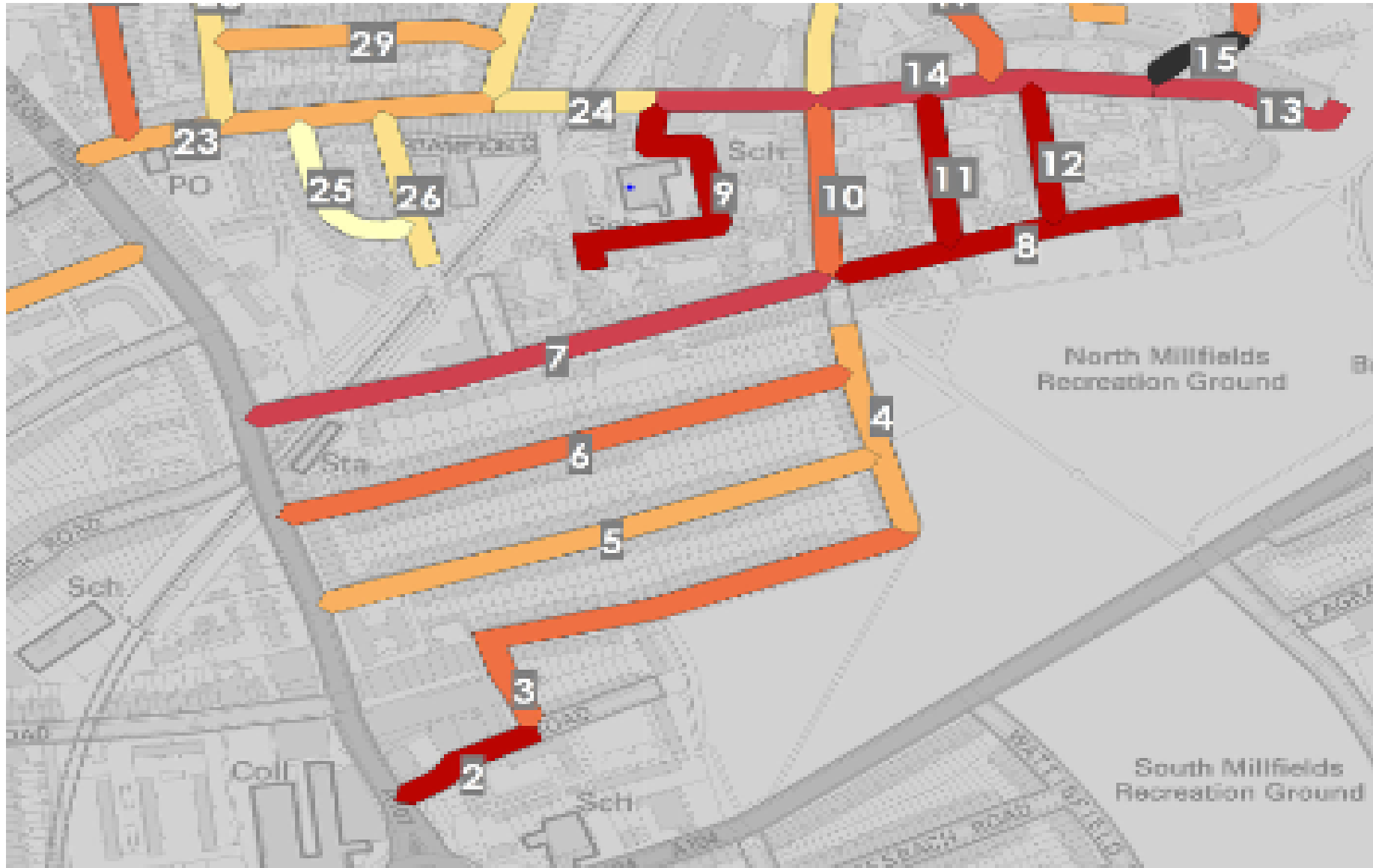
3.12 Table 1: Road occupancy as a percentage of its potential parking capacity (parking stress indicated by red type).

Road Name	Spaces	Weekdays			Saturday		
		Overnight	Midday	Evening	Overnight	Midday	Evening
Prout Road	33	24%	21%	24%	24%	21%	24%
Casimir Road (Eastern section)	125	66%	61%	66%	66%	62%	62%
Casimir Road (Northern section)	54	70%	56%	67%	46%	44%	46%
Cleveley Road	127	79%	80%	81%	71%	76%	74%
Gunton Road	129	85%	81%	86%	79%	77%	84%
Southwold Road (eastern section)	92	73%	75%	68%	75%	71%	72%
Southwold Road (western section)	77	66%	55%	62%	62%	61%	60%
Detmold Road	67	66%	66%	63%	61%	60%	67%
Theydon Road	36	83%	64%	69%	75%	61%	72%
Mundford Road	32	94%	81%	88%	88%	84%	75%
Dudlington Road	28	89%	61%	79%	93%	86%	93%
Harry Zeital Way	36	42%	36%	42%	53%	36%	50%
Mount Pleasant Hill	90	71%	69%	66%	69%	62%	71%
Mount Pleasant Lane	68	65%	69%	63%	56%	63%	56%
Mount Pleasant Hill	15	60%	60%	53%	60%	40%	53%
Alcester Crescent	49	53%	63%	53%	45%	51%	43%
Comberton Road	38	47%	63%	53%	47%	45%	53%

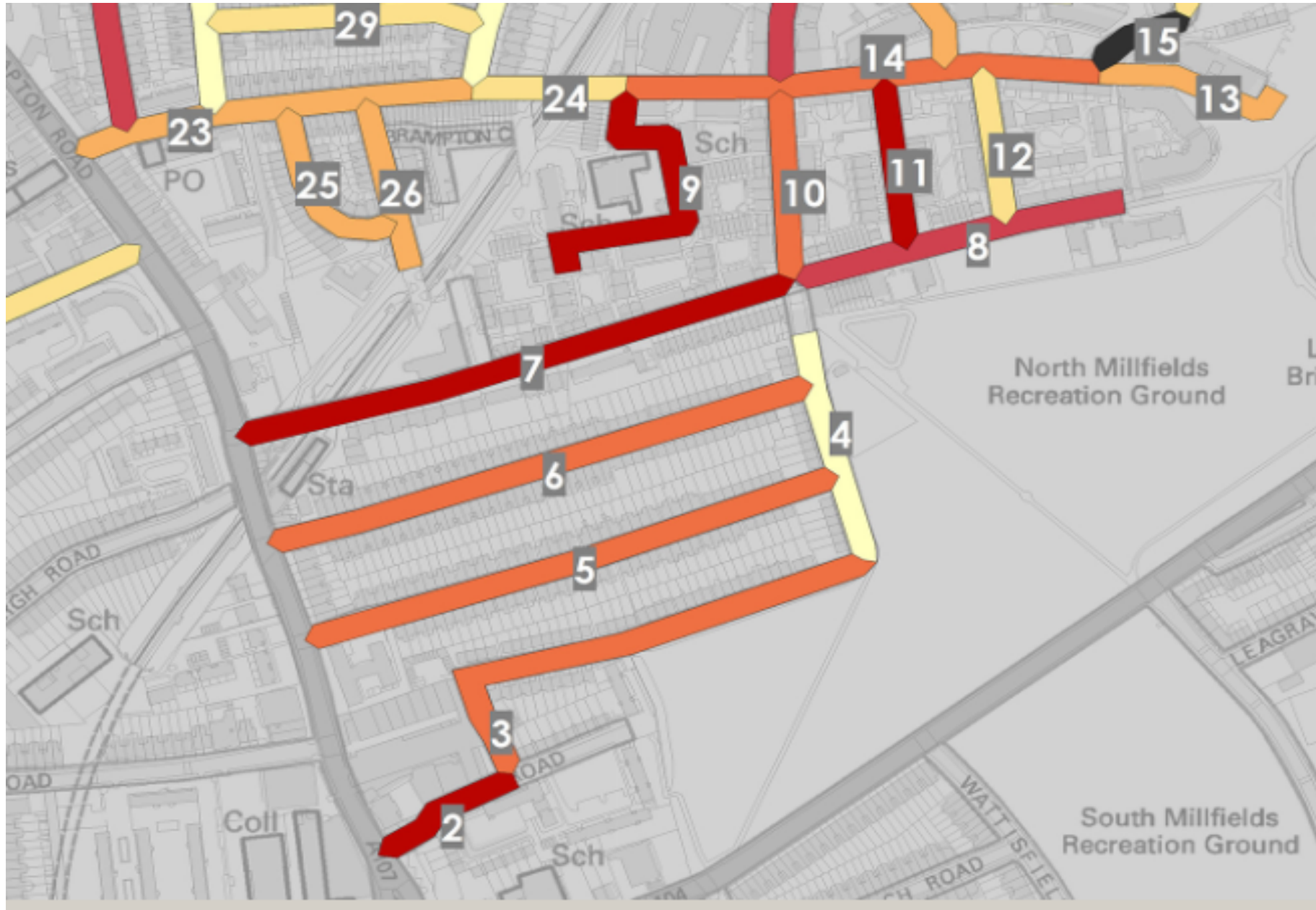
Figures 1 and 2: Occupancy levels by time of day – weekdays (above) and weekends (below)



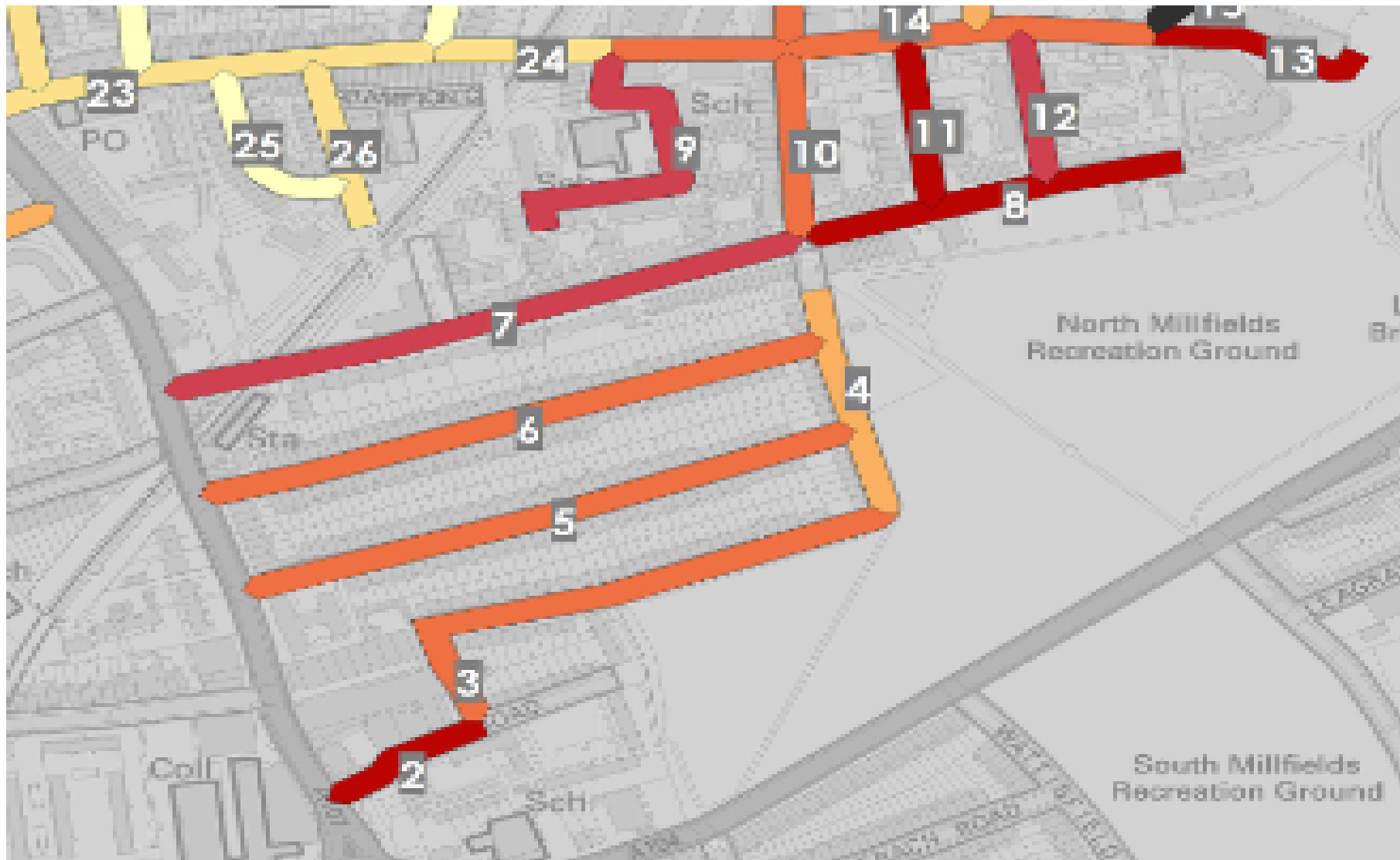
Map 1: Occupancy levels on weekday mornings (Overnight)



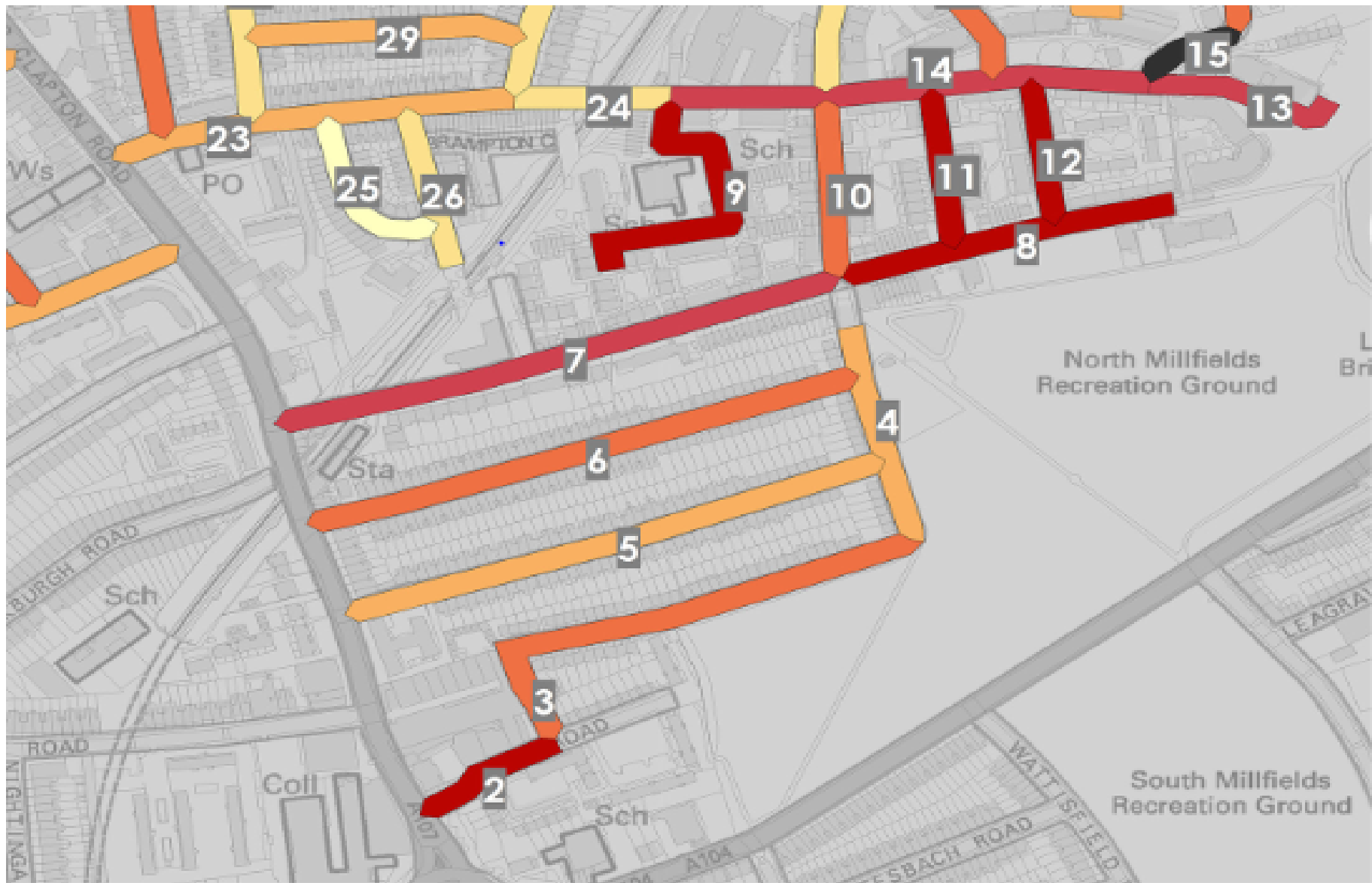
Map 2: Occupancy levels at weekday midday (12:30pm - 2:00pm)



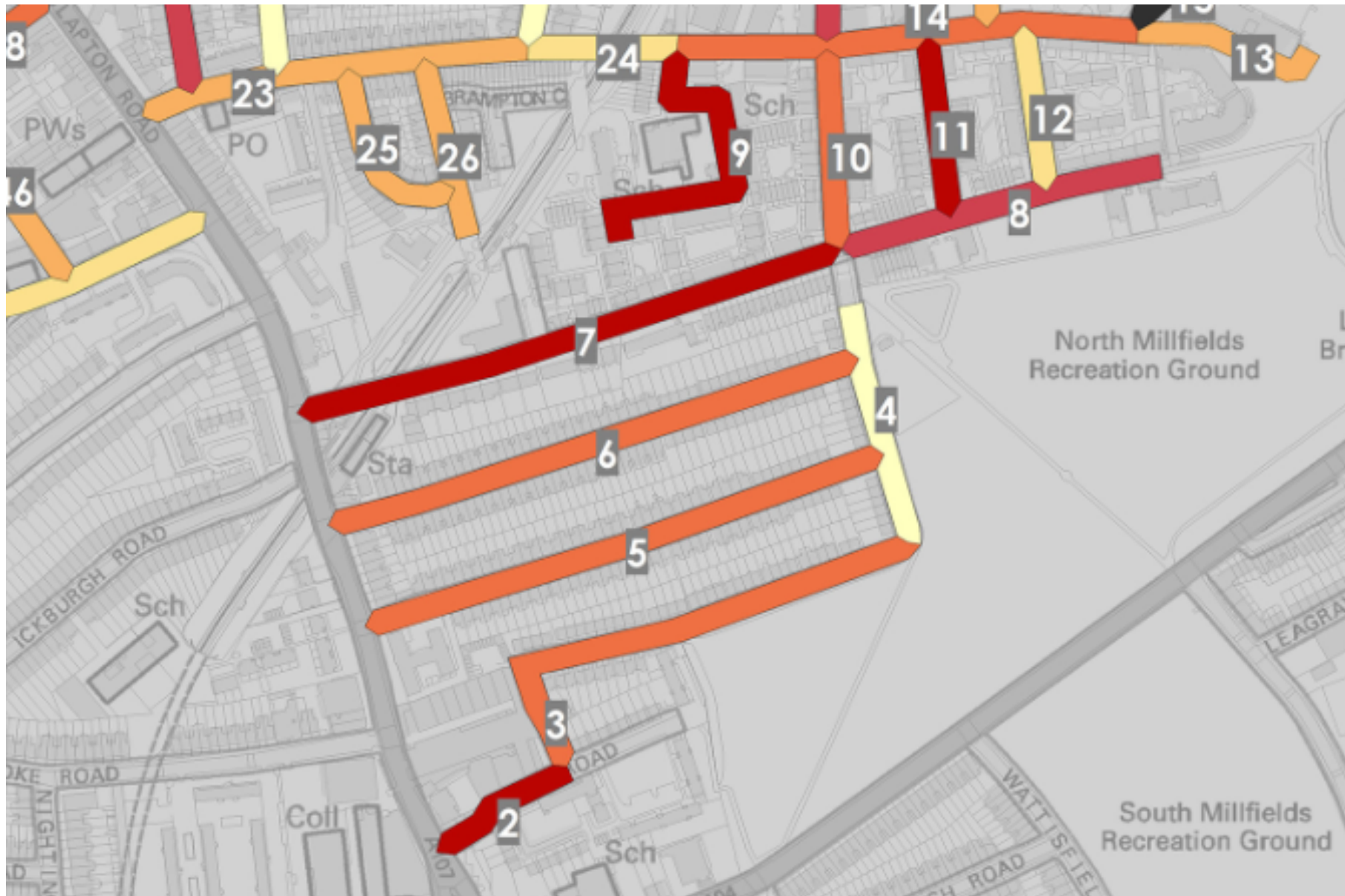
Map 3: Occupancy levels on weekday evenings (8:00pm – 10:00pm)



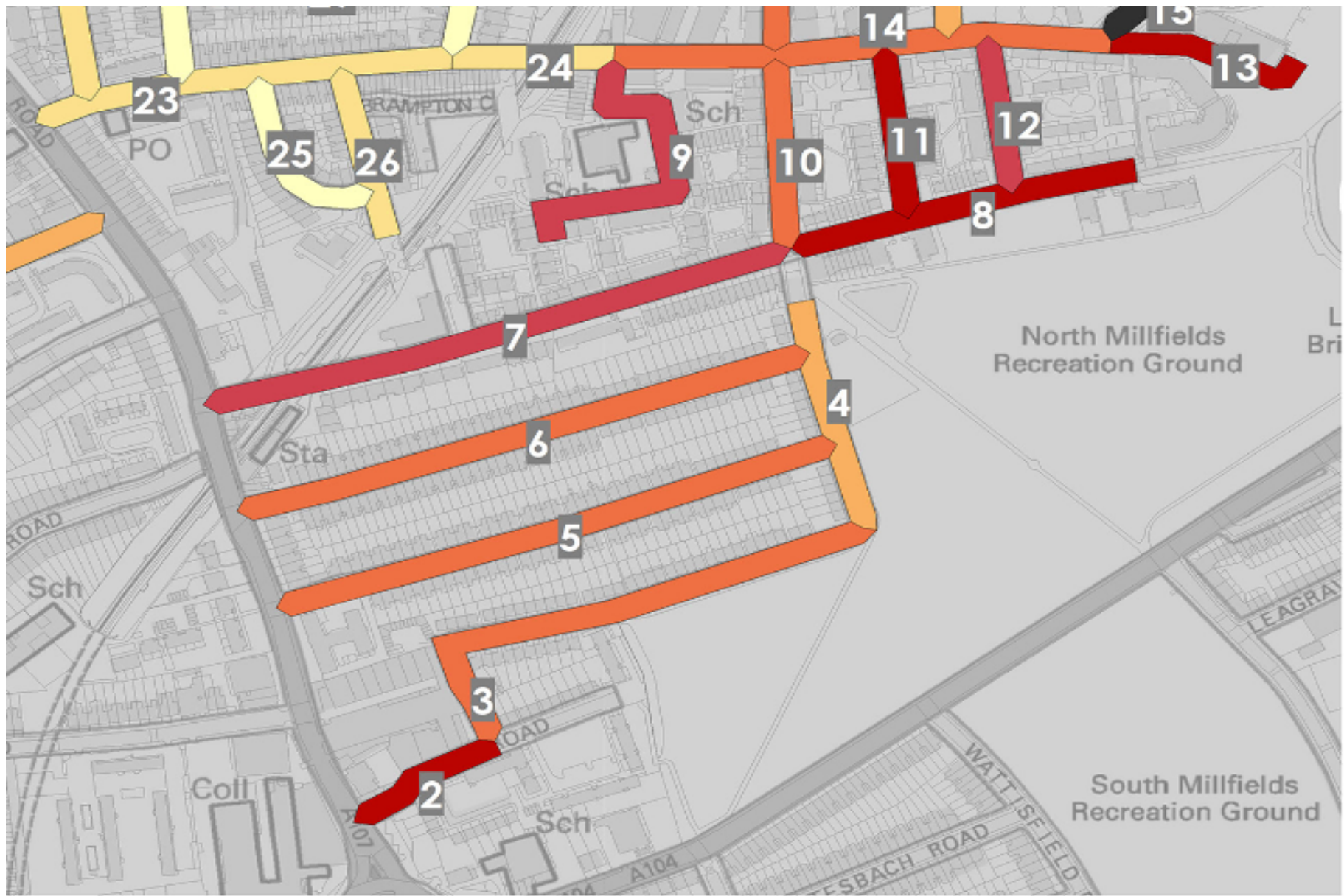
Map 4: Occupancy levels on Weekday (Overnight)



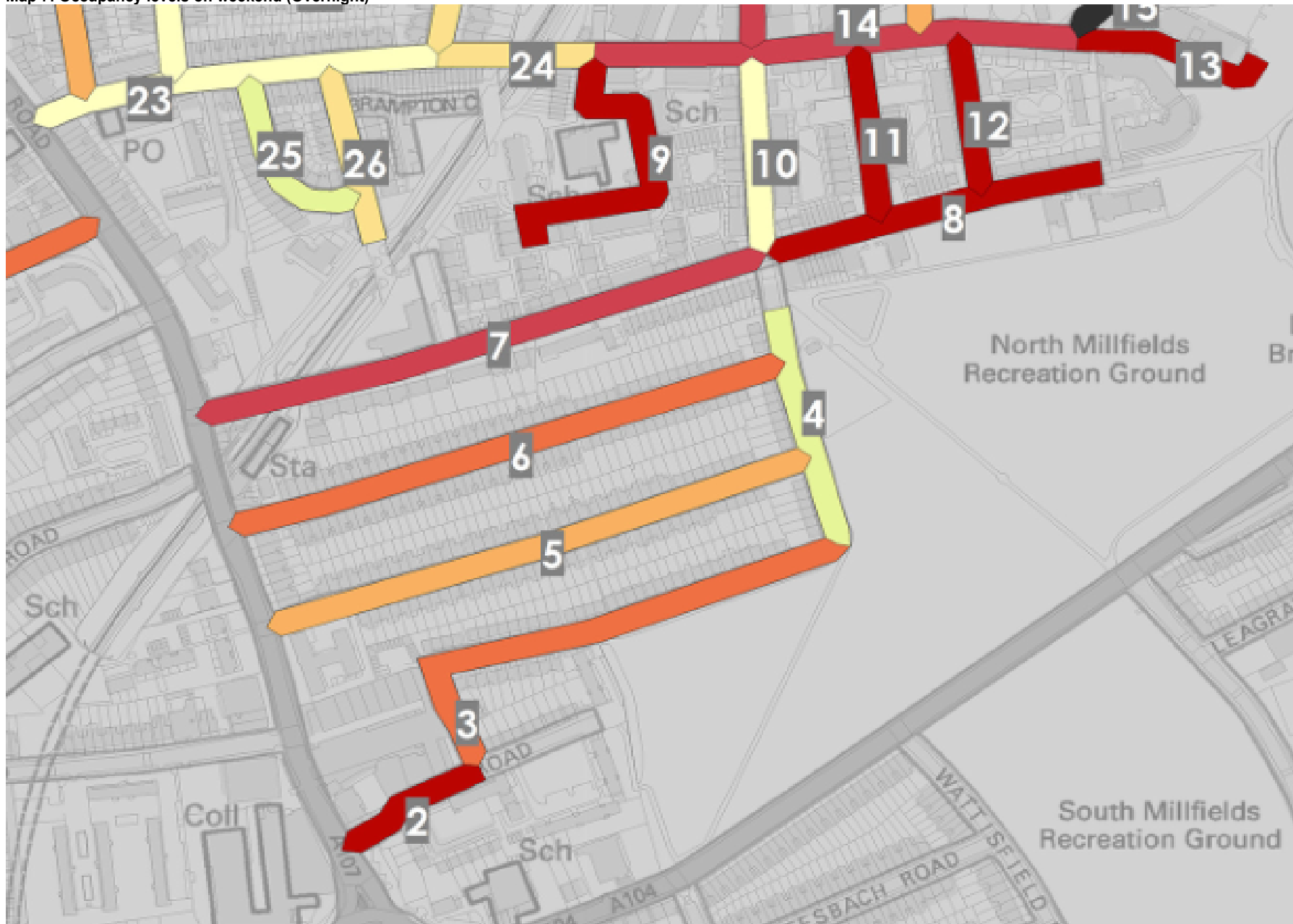
Map 5: Occupancy levels at weekday midday (12:30pm - 2:00pm)



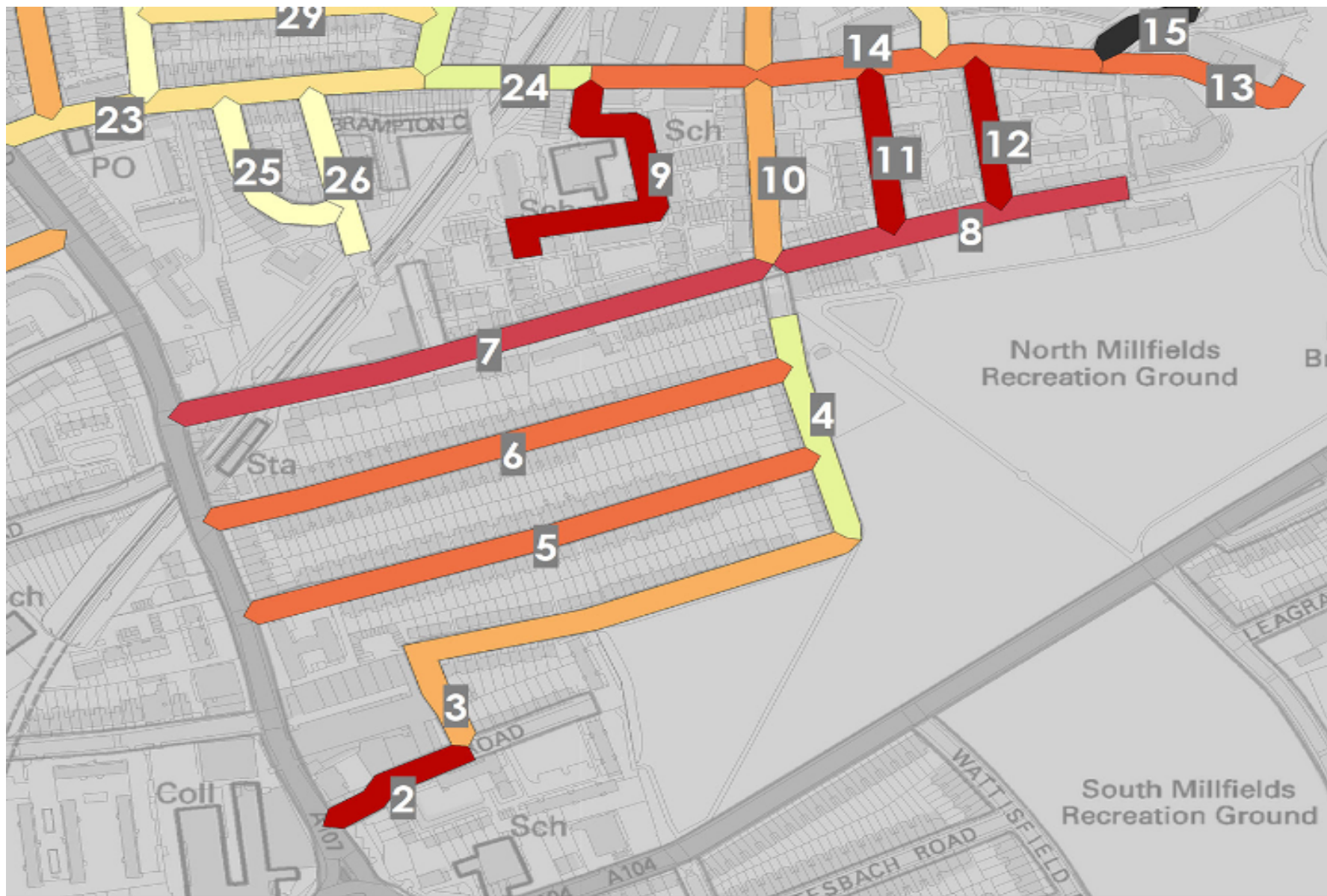
Map 6: Occupancy levels on weekday evenings (8:00pm – 10:00pm)



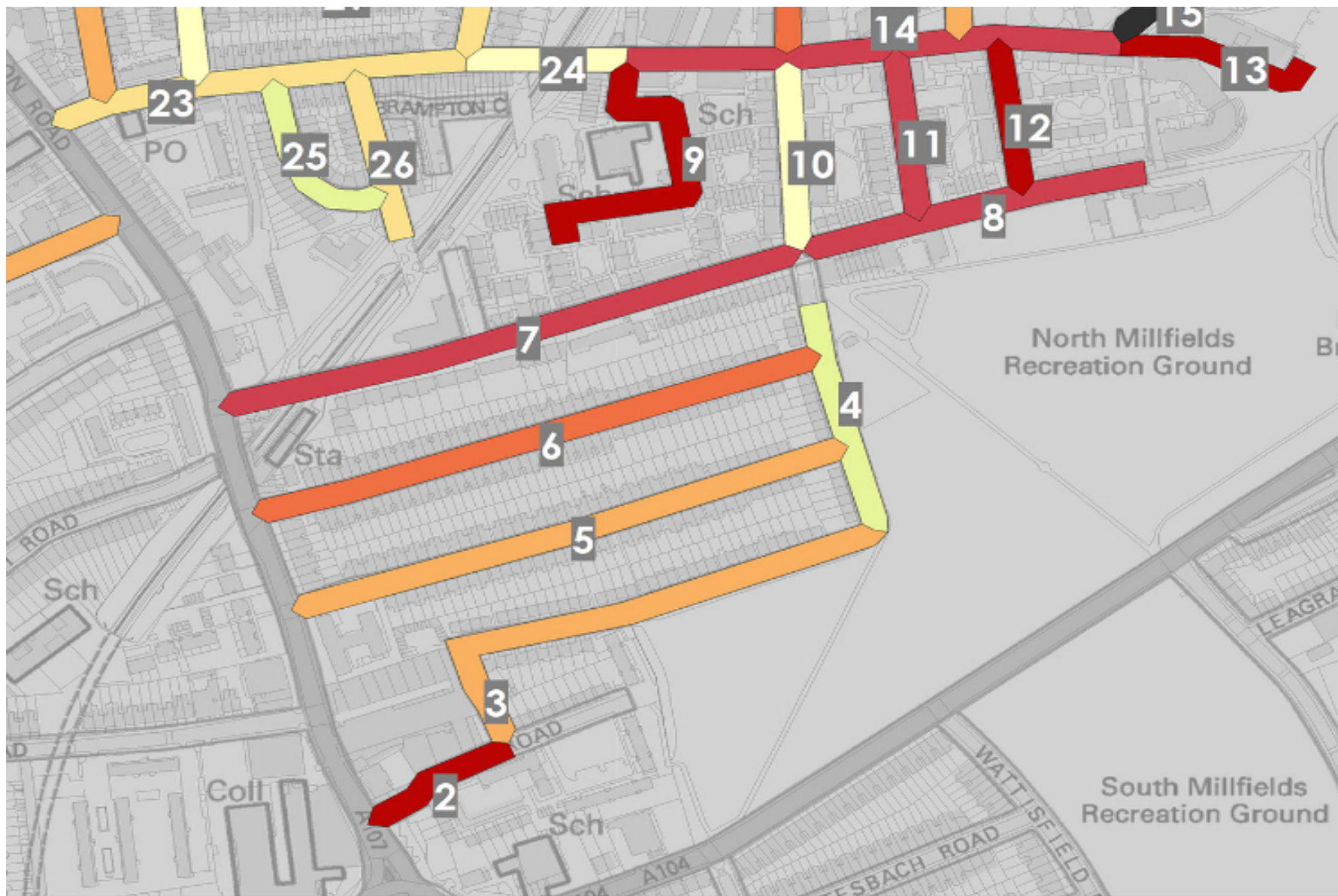
Map 7: Occupancy levels on weekend (Overnight)



Map 8: Occupancy levels on weekend midday (12:30pm - 2:00pm)



Map 9: Occupancy levels on weekend evening (8:00pm - 10:00pm)



Type of parking demand: locals v visitors

Area wide

- 3.13 Examining the proportion of visitors parked in a street gives an idea of the causes of parking stress and how it can be managed. In the event that parking controls are introduced, this type of analysis can also highlight the potential numbers of vehicles that may transfer to other nearby uncontrolled areas i.e. displacement parking.
- 3.14 Table 2 shows that visitor parking is moderate to high in the area on weekdays when compared to the overall parking stress suffered in the area. Visitor parking is at its greatest at lunchtime during the week.
- 3.15 Some roads within were recorded from suffering from very high parking stress (33% or more of the vehicles parked in the road). These include; Detmold Road, Mount Pleasant Hill, Mount Pleasant Lane, Alcester Crescent and Comberton Road. These roads are closest to the businesses on Upper Clapton Road and may suffer from visitors to the businesses.
- 3.16 Majority (8 out of 17 roads) of the remaining roads were recorded to suffer from moderate parking stress (over 20%) at midday on week days.
- 3.17 Visitor parking in the area equates to 27% of all parked vehicles belonging to non-residents. This is significantly reduced on weekday evenings and weekends (17% and 15% respectively).
- 3.18 Incoming visitors represent around a quarter of vehicles parked in the area on weekdays. The number of visitors in the area is however reduced significantly on weekday evenings and weekends as the stress caused is less than 10%.

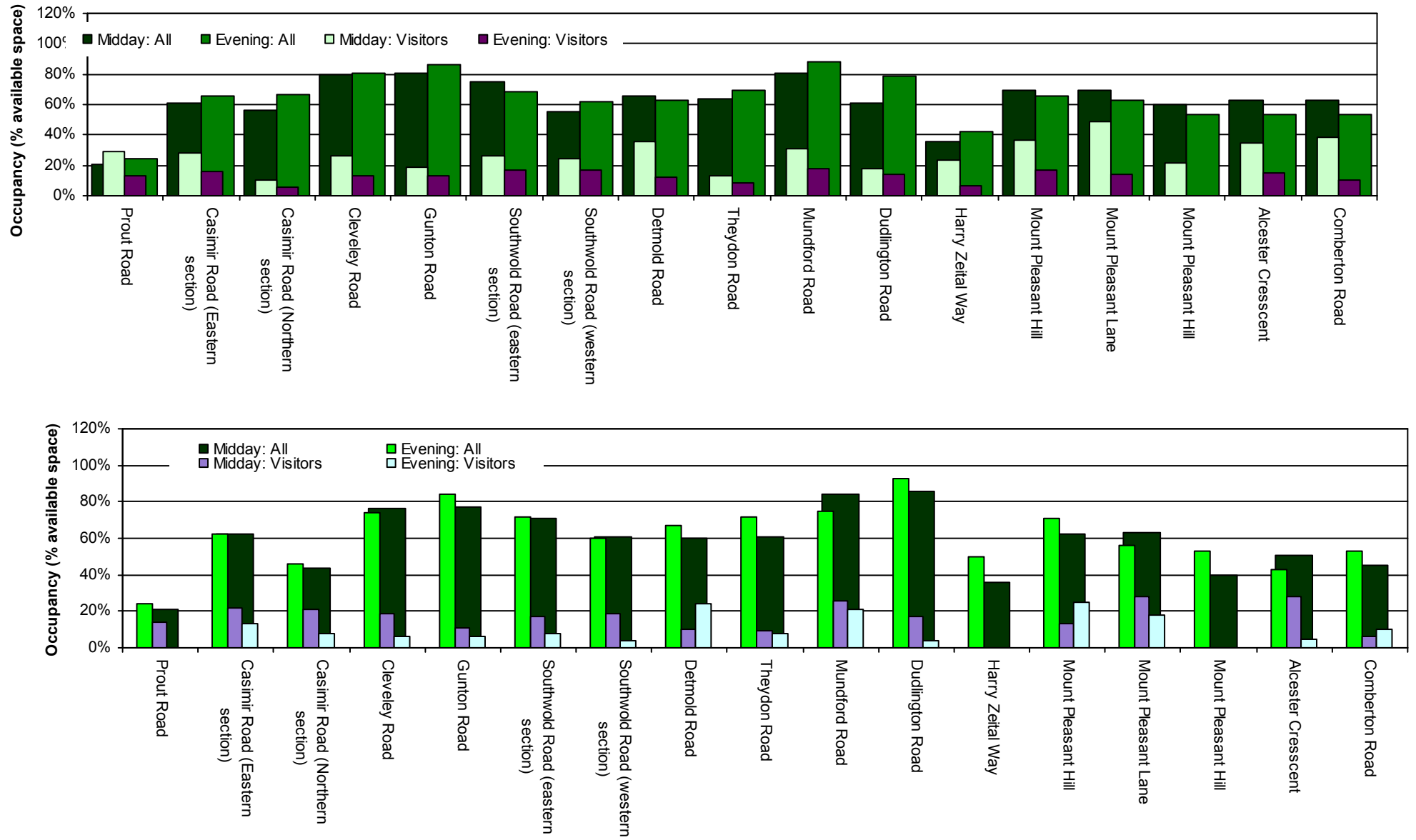
Street level

- 3.19 During the working week, 5 public highway roads surveyed were observed to have significant levels of visitor parking at midday – 33% or more of all parked vehicles. Majority of the roads did however suffer from moderate visitor stress (between 20% and 29%). The road recorded with the highest visitor parking stress were Comberton Road and Mount Pleasant Lane (section closest to Upper Clapton Road). These can be identified on Table 2 below.

Table 2: Visitor parking demand – visitor vehicles as a percentage of all vehicles parked (proportions 30%+ in red).

Road Name	Weekdays		Saturday	
	Midday	Evening	Midday	Evening
Prout Road	29%	13%	14%	0%
Casimir Road (Eastern section)	28%	16%	22%	13%
Casimir Road (Northern section)	10%	6%	21%	8%
Cleveley Road	26%	13%	19%	6%
Gunton Road	19%	13%	11%	6%
Southwold Road (eastern section)	26%	17%	17%	8%
Southwold Road (western section)	24%	17%	19%	4%
Detmold Road	36%	12%	10%	24%
Theydon Road	13%	8%	9%	8%
Mundford Road	31%	18%	26%	21%
Dudlington Road	18%	14%	17%	4%
Harry Zeital Way	23%	7%	0%	0%
Mount Pleasant Hill	37%	17%	13%	25%
Mount Pleasant Lane	49%	14%	28%	18%
Mount Pleasant Hill	22%	0%	0%	0%
Alcester Crescent	35%	15%	28%	5%
Comberton Road	38%	10%	6%	10%

Figure 3: Parking demand by vehicle type – weekdays (above) and weekends (below)



4. Potential Consultation Boundaries

Defining a main consultation area

- 4.1 Where a cluster of streets display parking stress of 80% or greater occupancy, as demonstrated by the stress survey, a boundary for consultation on the possible implementation of parking controls can be determined with reference to logic and natural geographical boundary points such as:
- Red routes
 - Railway lines
 - Existing or proposed CPZ either intra or inter borough.
 - Open spaces – Parks, industrial estates, waste lands.
- 4.2 Where any of the above exists the proposed boundary must be drawn with reference to them irrespective of whether or not initial parking stress results appear to necessitate their inclusion.
- 4.3 This 'hotspot' area is the minimum for where a Stage 1 'in principle' consultation should be undertaken. Should the residents and businesses there show majority support for the introduction of controls, a substantial proportion of visitors that currently park within the hotspot area are very likely to displace to the nearest uncontrolled streets.
- 4.4 For the displacement area, the hotspots in this area are mainly to the north of the current Zone N and east of Zone R; Casimir Road, Gunton Road and Cleveleys Road. These are also the roads closest to Clapton Park station. Parking stress in these streets remains high at most times of day and is likely to be causing residents frequent parking difficulties.

Defining a displacement area

- 4.5 As the influx of displaced visitors to nearby roads is likely to raise their parking occupancy in some instances to 80% or greater of its full capacity, creating a 'displacement area' around the hotspot, the additional requirement of consulting these residents and businesses also becomes a necessity. Therefore opinion on parking controls in the displacement area is only taken into account in defining a PZ boundary once a majority endorsement is reached in the hotspot.
- 4.6 To define the extent of this displacement in streets immediately outside the hotspot area, the remaining capacity after taking into account the number of vehicles already observed parked is calculated. Assuming limited visitor parking provision in the controlled area, the visitor numbers observed from these roads during the stress survey are distributed among the left-over space in the displacement area, working outwards from the controlled area as streets reach capacity. Factors such as additional distance to walk, geographical layout, and ease of access are also taken into account in deciding which streets the displaced visitors might choose.
- 4.7 As the displacement area is consulted with reference to the consultation results in the main proposed PZ, as noted above, support in this area is assessed on a street by street or cluster/grid basis. The proposed PZ may be made larger due to the inclusion of streets from

the displacement area, included into neighbouring PZ (if applicable), or rezoned into a new distinct PZ. Furthermore, the consultation findings from the displacement area will not affect the results of the proposed PZ in the hotspot area.

- 4.8 It is important to note that in the event that parking controls are implemented in the streets nearest the PZ boundary, visitors that currently park there will seek the nearest uncontrolled roads instead – the ‘secondary displacement area’.
- 4.9 Implementation of parking controls in the hotspot is likely to cause displacement parking in the roads directly north. However, due to the low daytime occupancy in most other roads, displaced vehicles should be able to find new spaces nearby and it is doubtful that the displacement area would become extensive.

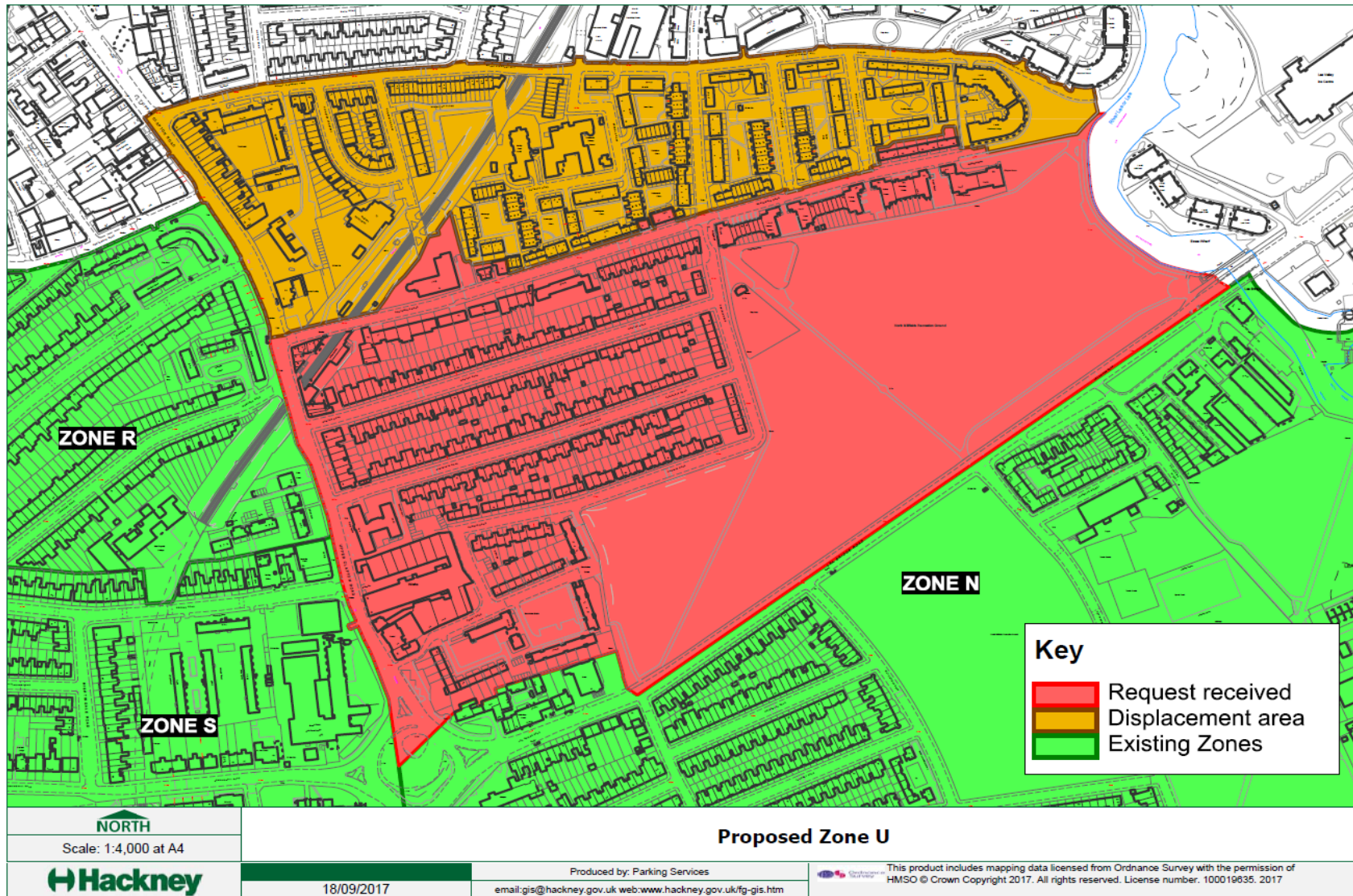
5. Summary

- 5.1 The area directly north of Parking Zone N and east of Parking Zones R and S is exhibiting a degree of parking stress mainly in the evenings and overnight. However, this hotspot experiences its highest occupancy levels overnight and in the early morning, suggesting that it is the number of vehicles owned by local residents as well as displacement parking from the nearby controlled areas that are causing parking difficulties rather than high levels of commuters and shoppers.
- 5.2 Parking stress in the area as a whole has not reached significant levels – 80% or greater occupancy.
- 5.3 Parts of the area (Comberton Road, Alcester Crescent and Mount Pleasant Lane) also appear to attract a substantial number of daytime visitors. Some will be parking in order to use the public services (such as nearby Clapton Station) as well as visiting the local businesses on Upper Clapton Road.
- 5.4 In the event that parking controls are introduced these roads, displaced vehicles are likely to be displaced further north and east to uncontrolled roads beyond the boundary.

Recommendations

- 5.5 Conduct a 'combined' Stage 1 and 2 consultation on roads in the area from Leabridge Road in the south to Mount Pleasant Hill and Mount Pleasant Lane in the north and Upper Clapton Road in the west to River Lea Navigation in the east. (Map 9).
- 5.6 Continue to monitor parking stress levels in this area, particularly in respect to new housing and educational developments.

Map 5: Recommended consultation boundary and addition survey area



6. Appendix: Parking Stress Survey - Methodology

- 6.1 Several survey sessions are carried out on each survey day, depending on the issues of a particular area:
- **Overnight** – this provides information about vehicles parked before the working day begins and therefore assumed to be local, belonging to nearby residents or businesses. In an uncontrolled area, local vehicles cannot be identified through permit records.
 - **Midday** – this provides a snapshot of the commuters, shoppers, and residential and commercial visitors using the area for parking; these are identified as new vehicles that were not previously observed parked during the early morning session.
 - **Evening** – this later session captures evening visitors in areas where a night-time economy is active.
- 6.2 Each road is surveyed on three separate occasions, at least a day apart, so that any unusual parking demand on a particular day would not skew the results. Average data across these three days is presented. To ensure that all the stress at all points of the week is captured and due to the area's close proximity to Upper Clapton Road, both weekdays and Saturdays were included in the survey days and analysed separately.
- 6.3 Full Vehicle Registration Numbers (registration plates) are recorded, along with type of vehicle (e.g. private car, HGV, taxi), any displayed disabled or borough parking permits, and existing parking restrictions (e.g. disabled person bay, single yellow line).
- 6.4 A comparison of the vehicle registration plates obtained during the early morning and from midday was then conducted; firstly, to obtain the overall number of vehicles parked on-street at each time of day, and secondly, to discover the proportion of local and non-local visitor parking.
- 6.5 All vehicle registration plates noted during the early morning were assumed to belong to local residents. These same plates were then looked for again amongst the vehicles parked at midday and were categorised as 'local' where they matched, while those vehicles that were not seen during the day's earlier survey were labelled as 'visitor'.