# 4. Assessment Results

Cluster Group 1: Bromsgrove Station Corridor

4.1 Cluster Group 1 comprises areas along a corridor to the south-east of Bromsgrove built up area. As shown in Figure 4-1, the three clusters are situated:

- **BR03** – south-east of the railway line, close to Bromsgrove Railway Station, with greenfield land north and south of the existing residential area.

- **BR04** – Further south, with greenfield land between Stoke Pound and Stoke Prior. This cluster crosses the rail line which could pose challenges to connectivity potential depending on where growth was located within it.

- **BR05** – South of Stoke Prior, covering more established and recently developed residential land and existing employment, this area presents employment and residential opportunities.

4.2 These clusters have been considered collectively as they present opportunity for moderate scale growth to be focused along a corridor to the south-east of Bromsgrove.

4.3 Bromsgrove Town Centre, providing retail and leisure facilities, is approximately one mile (crow fly) from the rail station. A number of primary and secondary schools are located within the existing built-up area around the town, as well as General Practice surgeries.

4.4 Bus routes close to the clusters are limited and cycle routes even more so. If some or all of these clusters were to come forward improvements in these would form part of the vision.
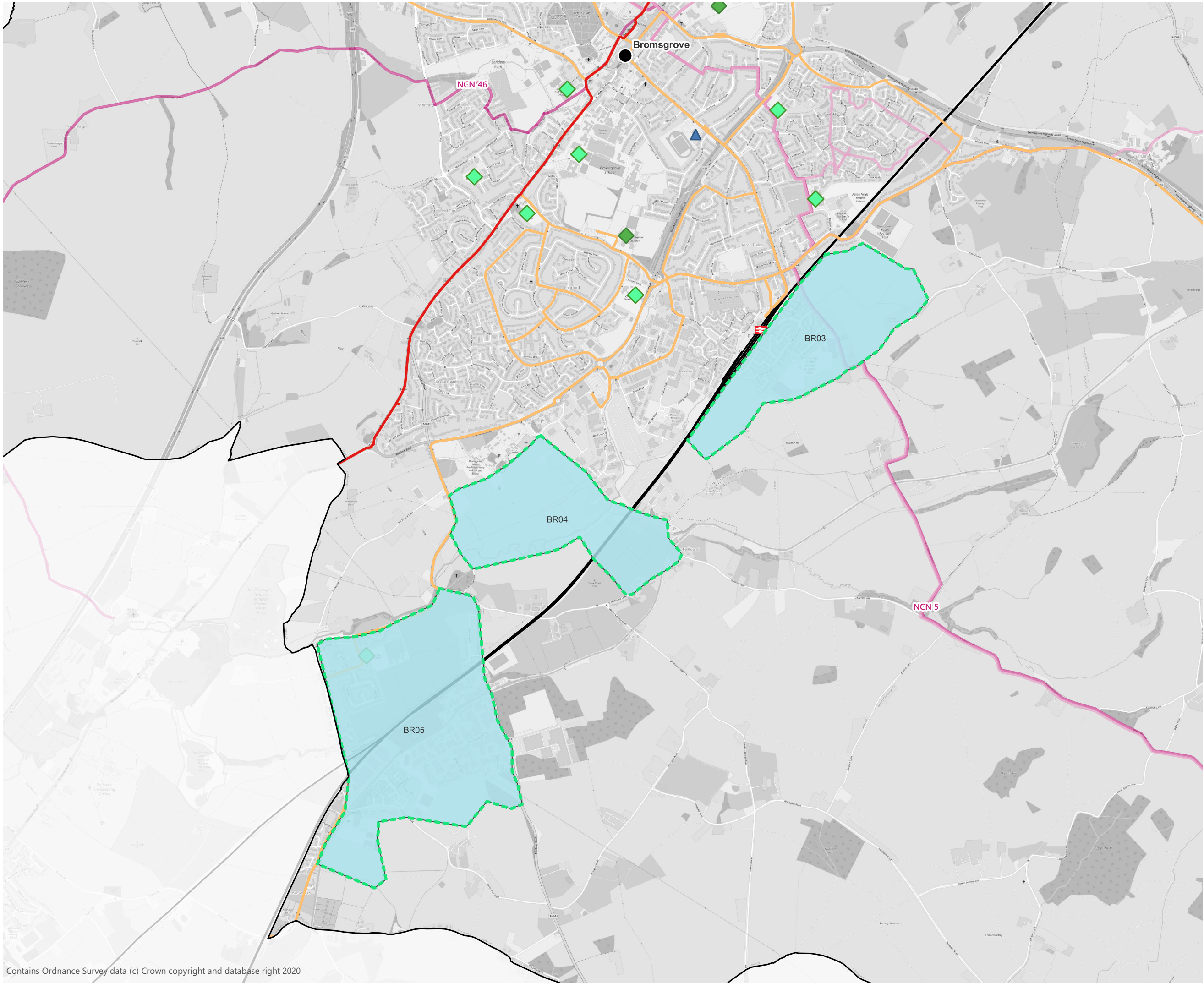
Key

- ☐ Bromsgrove District
- ☐ Cluster 1
- ◇ All Education
- ◆ Secondary / Post16 Education
- ▲ All Healthcare
- ● Local Centre
- —— National Cycle Network (NCN)
- —— Local Cycle route
- ☒ Rail stations
- —— railway line

Bus routes service frequency

- —— 2+ buses per hour
- —— < 2 buses per hour

OSM Standard

itp
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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
Cluster Group 1

Revision
A

Project number
3578

Figure number
Figure 4-1

Date
April 2022

Metric 1: Average commuter travel mode split

4.5   The average drive to work proportion of output areas considered to represent cluster group 1 is 78%, this reflects the regional average and attracts an 'Amber' rating within the framework.

4.6   Within this grouped average, the cluster furthest from the rail station (BR05) shows higher drive to work percentages and as such it is likely that an increased level of investment in sustainable transport will be required in this area to achieve improved outcomes here.

#### Figure 4-2: Cluster Group 1 – Metric 1 – Drive to work (%)
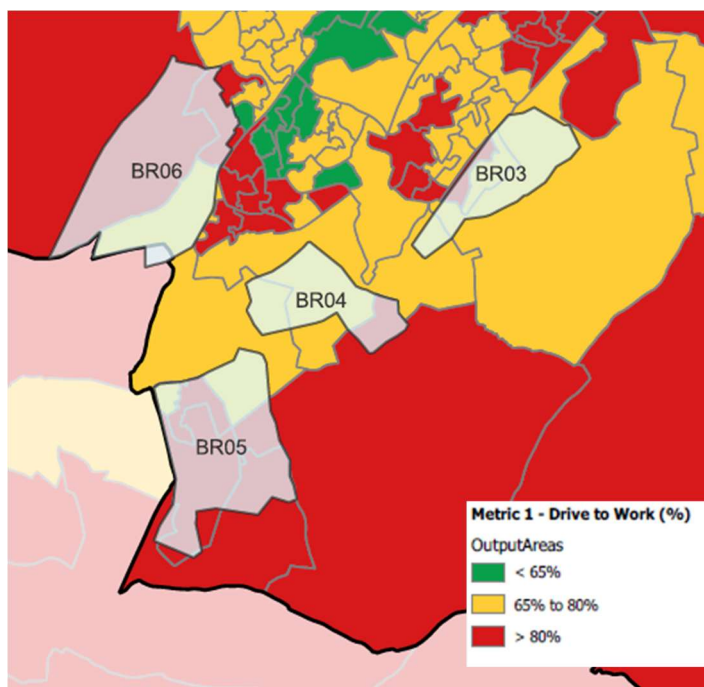
Metric 2: Proximity to current sustainable transport services and infrastructure

4.7   Cluster group 1 has a varied level of sustainable transport provision currently (shown in Figure 4-3 where cluster group 1 is outlined in green), with the group rating as 'amber' collectively.

4.8   Cluster BR03 benefits from being in close proximity to the railway station, high frequency bus provision and cycle routes, and therefore receives a 'green' rating within the framework. An 'amber' rating has been given to BR04, reflecting the relative distance from the rail station and lack of cycle route. BR05 received a 'red' rating in the framework reflecting the limited provision of services beyond low frequency bus.

4.9   All clusters have potential to improve, with bus frequency enhancements and/or route extensions and active mode improvements to enhance access to any new and existing connections.

Figure 4-3: Cluster Group 1 – Metric 2.1
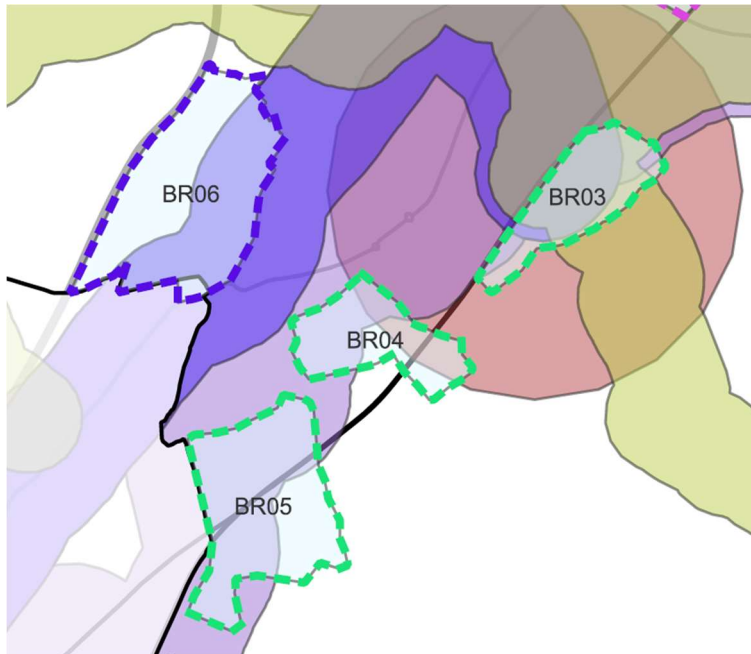
Metric 3: Access to jobs by public transport

4.10   Figure 4-4, Figure 4-5 and Figure 4-6 show the mapped outputs of the analysis for each cluster for this metric, with Table 4-1 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.11   The cluster nearer the station provides access to opportunities along the corridor between Droitwich and Birmingham and out to Redditch. This encompasses key areas of employment at Longbridge, Selly Oak (Birmingham University and Queen Elizabeth hospital), central Birmingham, and Redditch (including Alexandra Hospital). In comparison, connections from BR04 and BR05 do not provide timely access to jobs in areas such as Redditch nor central Birmingham.

Table 4-1: Cluster Group 1 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
BR03	45,318	Amber
BR04	17,728	Red
BR05	20,159	Red
Average – Cluster Group 1	27,735	Red

Key
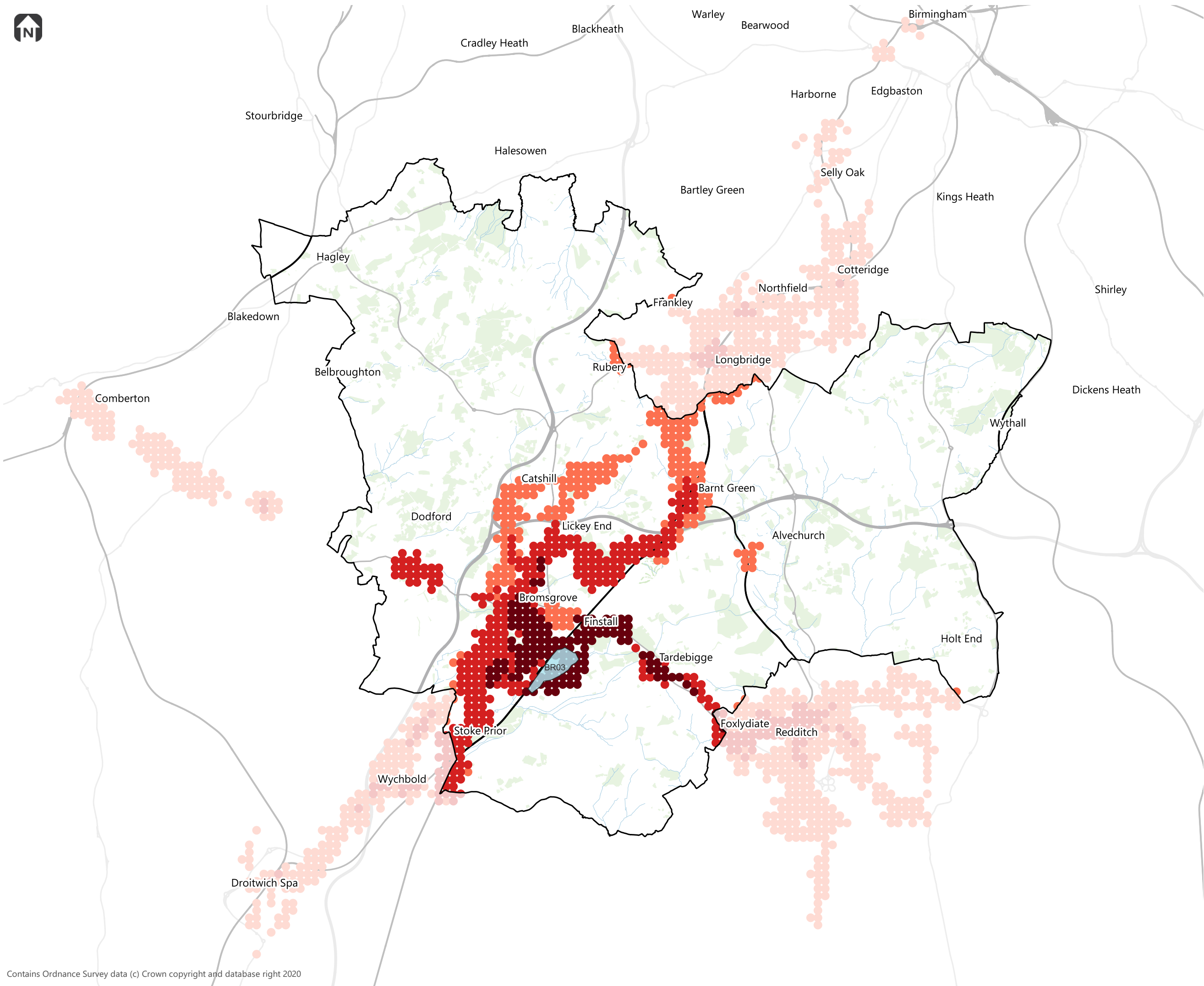
☐ Bromsgrove District

Stage 3b - Sites and Clusters
▢ Cluster1 - BR03

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster01_PT_FROM_BR03

● 1 - 15 minutes

● 15 - 30 minutes

● 30 - 45 minutes

TransportNetwork

— Railway Line

— Strategic Road Network

— Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
BR03 – Metric 3.1 – Public transport access to jobs

Revision
A

Project number
3578

Figure number
Figure 4-4

Date
April 2022

Key
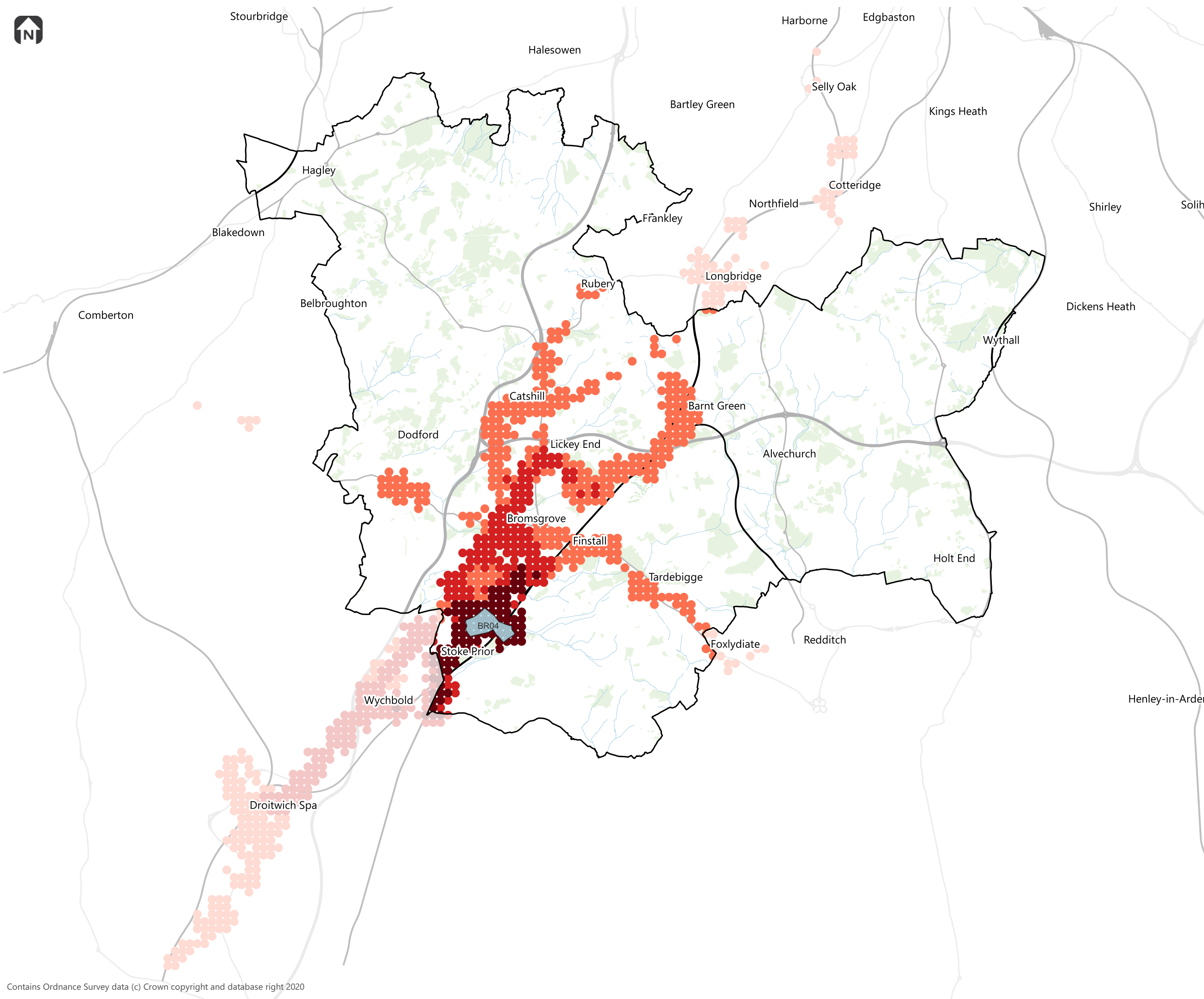
Bromsgrove District

Stage 3b - Sites and Clusters

Cluster1 - BR04

Metric 3.1 - Number of Jobs (PT)

Journey Time Accessibility

Cluster01_PT_FROM_BR04

● 1 - 15 minutes

● 15 - 30 minutes

● 30 - 45 minutes

TransportNetwork

—— Railway Line

—— Strategic Road Network

—— Major Road Network

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Client

Bromsgrove District Council

Project

Bromsgrove DPR Transport
Assessment

Figure title

BR04 – Metric 3.1 – Public
transport access to jobs

Revision   Project number

A   3578

Figure number   Date

Figure 4-5   April 2022

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Key

Bromsgrove District

Stage 3b - Sites and Clusters
Cluster1 - BR05

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility
Cluster01_PT_FROM_BR05
● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
Railway Line
Strategic Road Network
Major Road Network

itp
a company of **Royal HaskoningDHV**

Client
Bromsgrove District Council
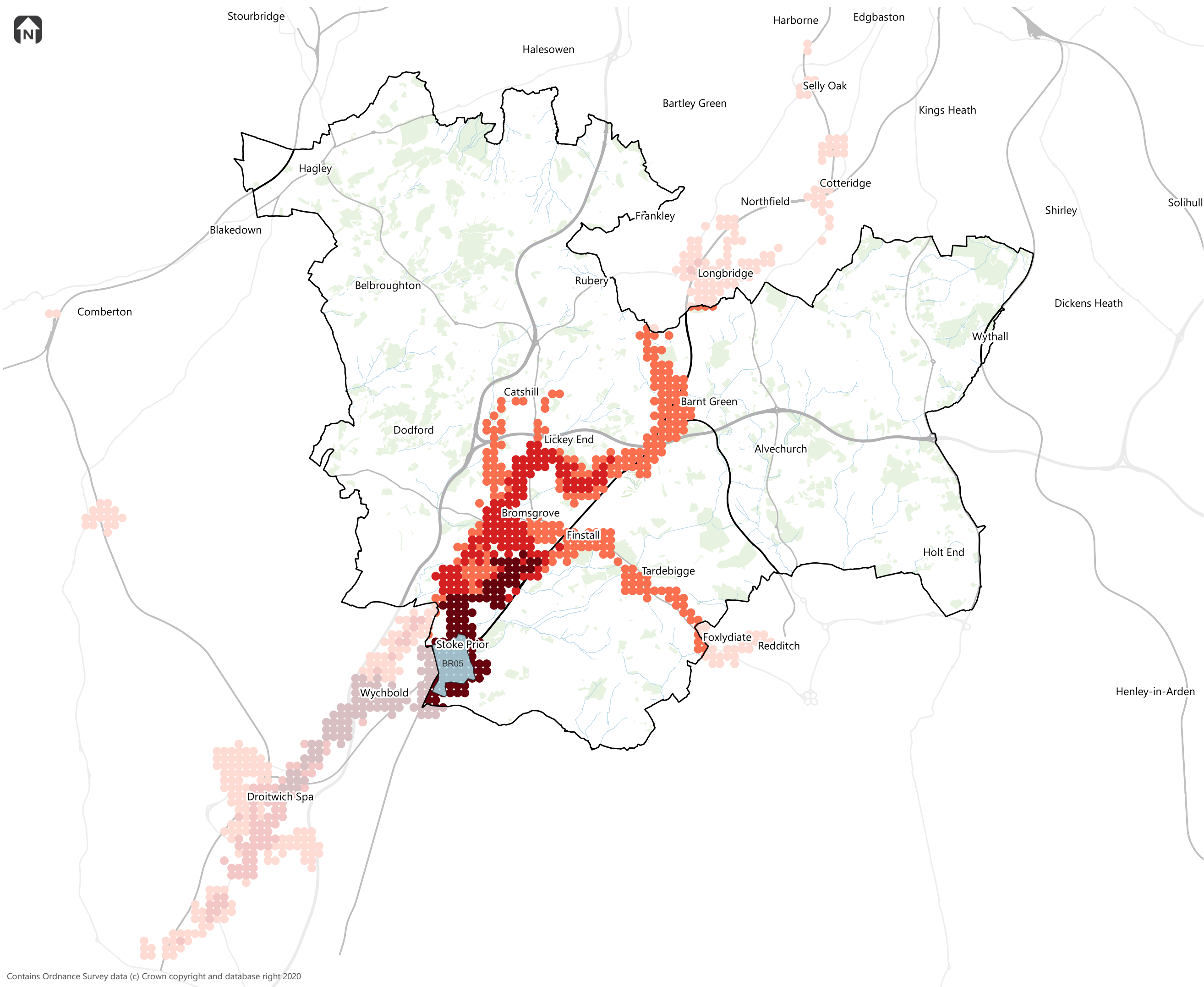
Project
Bromsgrove DPR Transport Assessment

Figure title
BR05 – Metric 3.1 – Public transport access to jobs

Revision
A

Project number
3578

Figure number
Figure 4-6

Date
April 2022

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Metric 4: Access to healthcare

4.12 As shown in Figure 4-1, there are limited healthcare facilities to the south of Bromsgrove. This is highlighted in the higher journey times, and resulting 'Amber' rating, for the two more southern clusters (BR04 and BR05), compared to BR03.

4.13 Depending on the scale of development and the utilisation of existing healthcare in the area, delivering additional facilities within new developments to the south of Bromsgrove could support more internalised trips within a new development. Shorter trips are more easily made by sustainable modes.

Table 4-2: Cluster Group 1 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
BR03	12	Green
BR04	21	Amber
BR05	19	Amber
Average – Cluster Group 1	18	Amber

4.14 The nearest hospital with an A&E department is the Alexandra Hospital in Redditch. The analysis shows that this is only possible to access within 60 minutes by public transport from cluster BR03, with an average journey time of 50 minutes.

Table 4-3: Cluster Group 1 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
BR03	50	Amber
BR04	-	Red
BR05	-	Red
Average – Cluster Group 1	50	Amber

4.15 Comparative drive times to the Alexandra Hospital are presented in Table 4-4. These show the discrepancy between public transport and driving access as well as illustrating the difference in connectivity between BR03 and the other two clusters.

Table 4-4: Cluster Group 1 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
BR03	15	Amber
BR04	21	Red
BR05	21	Red
Average – Cluster Group 1	18	Amber

Metric 5: Access to education

4.16   As shown in Figure 4-1, there are numerous primary schools within Bromsgrove and Stoke Prior First School within the area of cluster BR05. This is reflected in the 'green' rating for BR05.

Table 4-5: Cluster Group 1 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
BR03	13	Amber
BR04	10.5	Amber
BR05	6	Green
Average – Cluster Group 1	8	Green

4.17   A couple of secondary education facilities also exist within Bromsgrove, although these are situated more towards the Town Centre. Comparatively, for this metric BR03 fairs worse than the other two clusters, with journey times reflecting the existing bus routes and potentially illustrating the impact of severance caused by the railway line, limiting connections to the more urban area to the north.

Table 4-6: Cluster Group 1 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
BR03	24	Amber
BR04	18	Green
BR05	19.9	Green
Average – Cluster Group 1	20.5	Amber

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Metric 6: Proximity to planned local transport improvements

4.18   Planned sustainable transports improvements within the vicinity of cluster group 1, that were identified at the time of the study include:

- A38 BREP – a multi-modal corridor improvement
- NEAT5 and NEAT6 – active mode schemes (Link 8 Charford Links and Link 5 Central & Railway Station Links)

4.19   These improvements result in a 'Green' RAG rating for the cluster group, where BR03 and BR04 rate 'Amber' and BR05 is not in the vicinity of any identified improvements and receives a 'Red' rating.

Metric 7: Access to district centres

4.20   Bromsgrove Town Centre is the closest (crow fly distance) identified district centre. However, the TRACC analysis shows that a couple of points within BR03 travel to Redditch as their fastest public transport trip, similarly Droitwich is quicker for some areas of BR05. The availability of public transport connections to Droitwich from the south of Bromsgrove mean that BR05 receives a 'green' rating while the other two clusters receive 'Amber'.

4.21   This analysis focuses on journey times to identified district centres and does not review the relative attractiveness nor retail / leisure offering of the centres in question.

4.22   In comparison, travel to Bromsgrove Town Centre from BR03 represents a walking journey of about 30 minutes[5], illustrating the limited comparative difference in journey times between active travel and public transport at this location.

Table 4-7: Cluster Group 1 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
BR03	24	Amber
BR04	21	Amber
BR05	18	Green
Average – Cluster Group 1	19.9	Green

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[5] Measured from St Godwald's Rd – googlemaps journey time

Summary and recommendations

4.23 Table 4-8 shows a summary of the RAG rating outputs – where 2 is 'Green, 1 is 'Amber' and 0 is a 'Red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-7 shows the number of each category of rating for each cluster.

4.24 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 60%, where a green RAG score for every metric would indicate a 100% score.

4.25 The cluster BR03 scores the highest in the assessment (60%) with no 'red' ratings, indicating that more intervention would be necessary to improve the sustainable travel outcomes at either of the other two locations within this cluster. In comparison BR04 received the fewest 'greens' (totalling a score of 45%) while BR05 has the most 'red' ratings (scoring 35%).

Figure 4-7: Cluster Group 1 Results

4.26 The location of BR03, in close proximity to the train station, could lend itself to higher density development, with enhanced active mode access to public transport to maximise the benefit of the existing connections at this location and reduce the severance impact of the railway line.
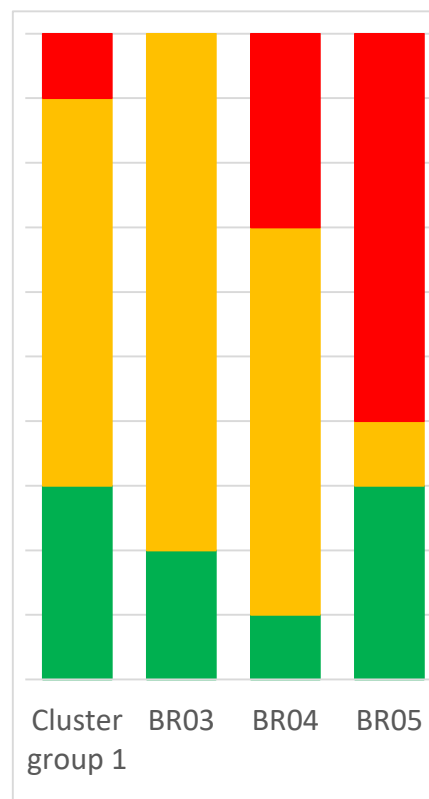
Table 4-8: Cluster Group 1 – Rating summary

		Cluster Group 1						
		1 Bromsgrove Station Corridor		Sub-clusters				
	Metric			BR03		BR04		BR05
% DRIVE TO WORK	1.1	1	78%	1	-	1	-	0	-
	1.2	-						
TRANSPORT SERVICES	2.1	1	-	2	-	1	-	0	-
LABOUR MARKET	3.1	0	27,735	1	45,318	0	17,728	0	20,159
	3.2	-						
HEATHCARE	4.1	1	18	2	12	1	21	1	19
	4.2	1	50	1	50	0	-	0	-
	4.3	1	18	1	15	0	21	0	21
EDUCATION	5.1	2	8	1	13	1	10.5	2	6
	5.2	1	20.5	1	24	2	18	2	19.9
PLANNED IMPROVEMENTS	6.1	2	3	1	-	1	-	0	-
DISTRICT CENTRES	7.1	2	19.9	1	24	1	21	2	18

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Cluster Group 2: Bromsgrove West

4.27 Cluster Group 2 comprises a single area south-west of the Bromsgrove built-up area. As shown in Figure 4-8, BR06 is situated upon existing greenfield land and is bounded by the M5 to the west and the B4094 to the east.

4.28 This cluster has been considered separately from other sites in Bromsgrove to distinguish between growth on different sides of the town. This provides a geographical focus for growth towards the south-western extent of the existing built-up area.

4.29 Whilst a number of primary and secondary schools are located within the existing residential areas south of the town centre, healthcare sites are more limited in number.

4.30 The clusters' eastern boundary is situated along an existing high-frequency bus route and is approximately one mile (crow fly) from its' nearest rail station. Cycle routes are more limited, and should this group come forward, improvements in such could form part of the vision.
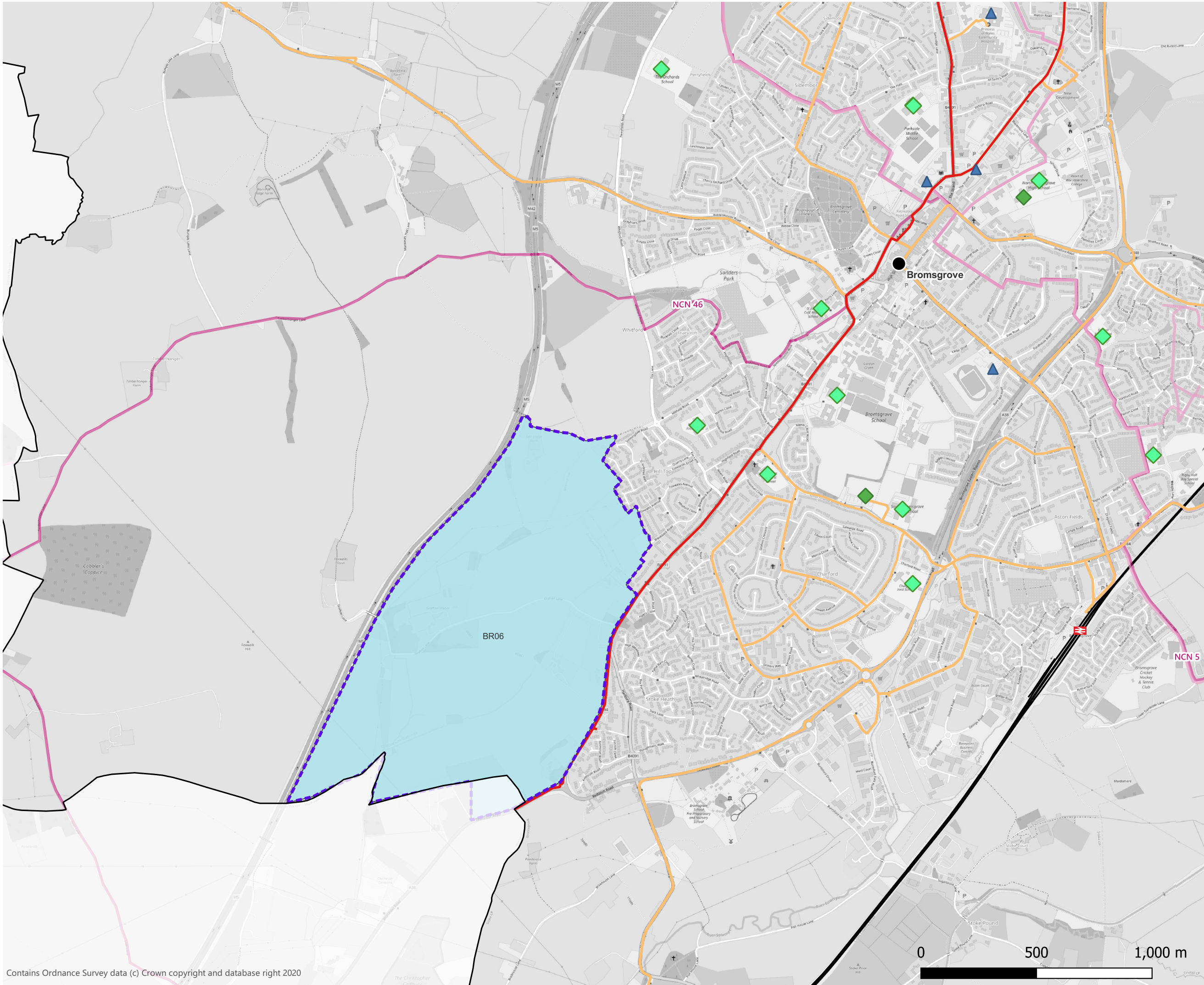
Prepared JP **Reviewed** SN **Date** April 22

Key

- ▭ Bromsgrove District
- ◆ All Education
- ◆ Secondary / Post16 Education
- ▲ All Healthcare
- ● Local Centre
- ▬ National Cycle Network (NCN)
- ▬ Local Cycle route
- ▯ Rail stations
- ▬ railway line

Bus routes service frequency

- ▬ 2+ buses per hour
- ▬ < 2 buses per hour

OSM Standard

Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
Cluster Group 2

Revision A **Project number** 3578

Figure number Figure 4-8 **Date** April 2022

NCN 46

NCN 5

Bromsgrove

BR06

0   500   1,000 m

Metric 1: Average commuter travel mode split

4.31   The average drive to work proportion of output areas considered to represent cluster group 1 is 78%, this reflects the regional average and attracts an 'Amber' rating within the framework. Reviewing the mapping in Figure 4-9, the area towards the south-eastern edge of the cluster area represents this, near the existing built-up area. This is also considered the area that any new development would be more similar to in terms of travel patterns and mode choice characteristics.

Figure 4-9: Cluster Group 2 – Metric 1 – Drive to work (%)
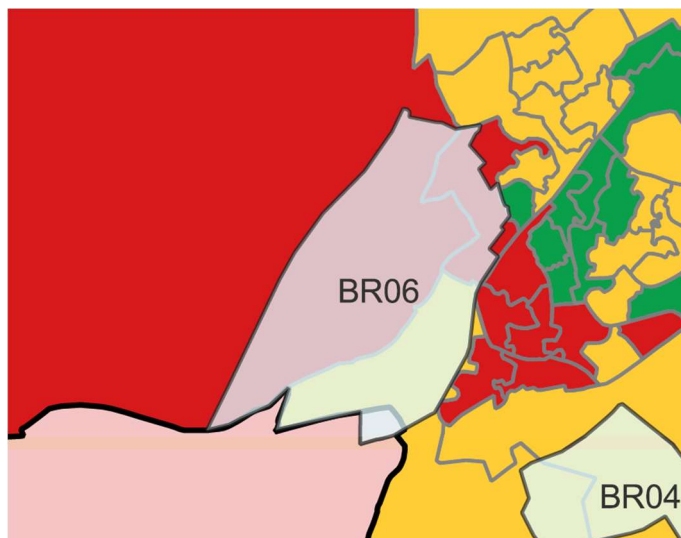
Metric 2: Proximity to current sustainable transport services and infrastructure

4.32   Cluster BR06 has a high frequency bus service to east of site but no other provision closely serving the area, as shown in Figure 4-10. This results in an 'amber' rating for cluster group 2.

4.33   The bus service '144 Salt Road' connects Worcester and Bromsgrove / Upper Catshill roughly every 20 minutes throughout the day[6].

4.34   Build out of this cluster should consider the location of the existing bus route and potential proximity of housing. Homes delivered further west of the cluster area could consider alternative routing options for the existing bus service to enhance attractiveness of the service for residents.

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[6] Compiled from data for the period Fri 09-Sep-2022 to Thu 15-Sep-2022 (First Worcestershire) https://www.traveline.info/

4.35 There is potential to enhance active mode routes, with potential to extend into existing routes to the north, connecting to the town centre and railway station.

Figure 4-10: Cluster Group 2 – Metric 2.1
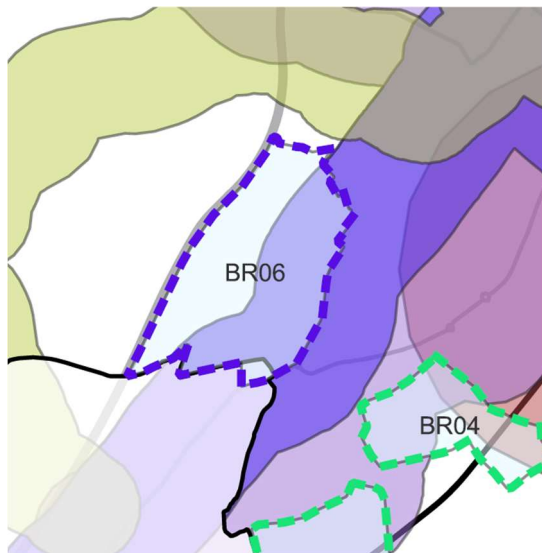
Metric 3: Access to jobs by public transport

4.36 Figure 4-11 show the mapped outputs of the analysis for each cluster for this metric, with Table 4-1 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.37 The cluster provides access to opportunities along the corridor between Droitwich and, to a lesser extent, north to Birmingham (including Longbridge and Selly Oak areas), west to Kidderminster, and the northern outskirts of Redditch. This encompasses key areas of employment around Bromsgrove itself, Stoke Prior, larger nearby towns and the conurbation.

Table 4-9: Cluster Group 2 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
BR06	33,918	Red
Average - Cluster Group 2	33,918	Red
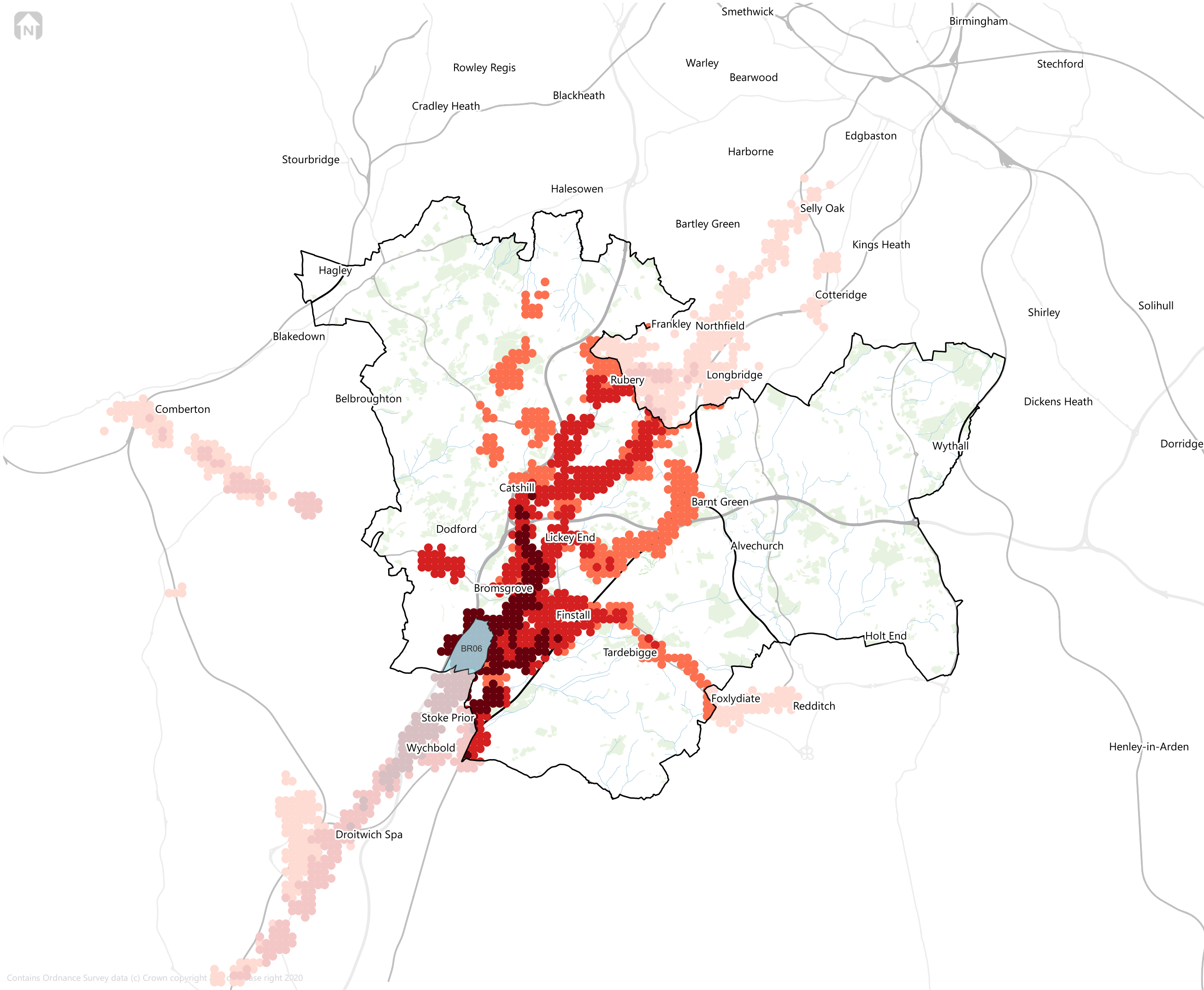
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Metric 4: Access to healthcare

4.38 As shown in Figure 4-8 there are limited healthcare facilities to the south of Bromsgrove, however the high frequency bus service means that journey times to local healthcare facilities are low, resulting 'green' rating for the cluster for metric 4.1.

Table 4-10: Cluster Group 2 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
BR06	11	Green
Average - Cluster Group 2	11	Green

4.39 Access to hospitals is more challenging, with the Queen Elizabeth (QE), Alexandra, and Worcestershire Royal (Worcester) hospitals beyond a 60-minute public transport journey from the cluster. Improved connections to the railway station could enhance travel options, particularly to the QE, and encourage more sustainable travel from this location. Similarly, enhancements in the bus services between south Bromsgrove and the Alexandra Hospital (such as the 52A) could improve connections for this cluster.

Table 4-11: Cluster Group 2 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
BR06	> 60 minutes	Red
Average - Cluster Group 2	> 60 minutes	Red

4.40 Drive times to the Alexandra Hospital and Worcestershire Royal Hospital are estimated to be similar, and are presented in Table 4-12. While 23 minutes journey time is not necessarily considered poor in itself, comparatively this represents a poorer situation than presented by other spatial areas considered in this study; therefore, the cluster receives a 'red' rating.

Table 4-12: Cluster Group 2 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
BR06	23	Red
Average - Cluster Group 2	23	Red

Metric 5: Access to education

4.41 As shown in Figure 4-1, there are numerous primary schools close to the cluster, particularly towards the north. This is reflected in the 'green' rating for BR06 in relation to metric 5.1.

4.42 The journey time output, which represents the average journey time to St Peter's RC First School, sits very close to the 10-minute green-amber threshold, suggesting that public transport improvements to these facilities could be improved.

Table 4-13: Cluster Group 2 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
BR06	9.7	Green
Average - Cluster Group 2	9.7	Green

4.43 South Bromsgrove Community High School is, on average, a 21-minute public transport journey from the cluster location. This results in an 'amber' rating for the metric 5.2. Again, this result sits close to the green-amber threshold, which for this metric is 20 minutes.

4.44 It is worth noting that these journey time results represent access opportunities along the eastern side of the site, and any homes delivered further west may not have such good connections without enhancements.

Table 4-14: Cluster Group 2 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
BR06	21	Amber
Average - Cluster Group 2	21	Amber

Metric 6: Proximity to planned local transport improvements

4.45 The only planned sustainable transports scheme within the vicinity of cluster group 2 identified at the time of the study is the A38 BREP – a multi-modal corridor improvement. This results in an 'amber' rating for the cluster.

Metric 7: Access to district centres

4.46 Bromsgrove Town Centre is the closest identified centre, both as the crow flies and in journey time. This results in a 'green' rating for this option.

4.47 With the town centre, 1 – 1.5 miles away from the cluster, trips between these locations could be made by active travel.

4.48 This analysis focuses on journey times to identified district centres and does not review the relative attractiveness nor retail / leisure offering of the centres in question.

Table 4-15: Cluster Group 2 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average Journey time	RAG Rating
BR06	11	Green
Average - Cluster Group 2	11	Green

Summary and recommendations

4.49 Table 4-16 shows a summary of the RAG rating outputs – where 2 is 'Green', 1 is 'Amber' and 0 is a 'Red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-12 shows the number of each category of rating for each cluster

4.50 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 50%.

4.51 While there is only one cluster location within this 'group' some clear distinction can be seen in the relative connectivity between the eastern and western sides of the cluster. Any build out of this area, and relative densities should bear this in mind, with any delivery towards the western side, considering potential rerouting of existing bus services.
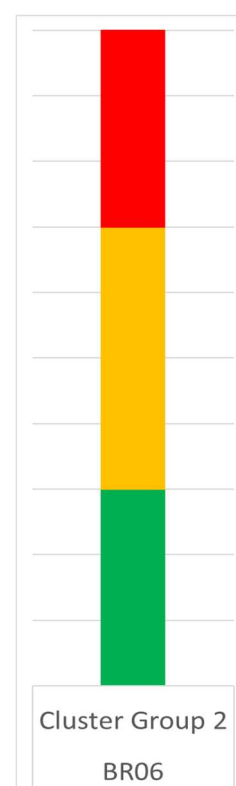
Figure 4-12: Cluster Group 2 Results

Cluster Group 2

BR06

Table 4-16: Cluster Group 2 – Rating summary

| | Metric | Cluster Group 2 | |
		Sub-cluster BR02 Bromsgrove West	
% DRIVE TO WORK	1.1	1	78.4%
	1.2	-	
TRANSPORT SERVICES	2.1	1	-
LABOUR MARKET	3.1	0	33,918
	3.2	-	
HEATHCARE	4.1	2	11
	4.2	0	>60
	4.3	0	23
EDUCATION	5.1	2	10
	5.2	1	21
PLANNED IMPROVEMENTS	6.1	1	1
DISTRICT CENTRES	7.1	2	11

Cluster Group 3: Bromsgrove North

4.52 Cluster Group 3 comprises areas to the north and north-east of the Bromsgrove built-up area. As shown in Figure 4-13, the two clusters are situated:

- **BR01 –** between the M42 (to form its northern boundary) and existing residential areas to the south and east. M42 junction 1 lies at the north-east corner of this cluster to provide access to the SRN.

- **BR02 –** between Burcot Village and north Bromsgrove; predominantly bounded by existing transport infrastructure.

4.53 Due to their collective scale and geographic proximity to each other, these two individual clusters have been considered together. They form opportunity for focused large-scale growth to the north of Bromsgrove with residential and employment opportunities at cluster BR02.

4.54 A number of primary and secondary schools are in close proximity to this cluster group due to their positioning in relation to the existing built-up area around the town. This is similar to the level of healthcare provision.

4.55 There are several bus routes to connect individual clusters within this group to elsewhere in the district and surrounding area, but these offer varied degrees of service frequency.
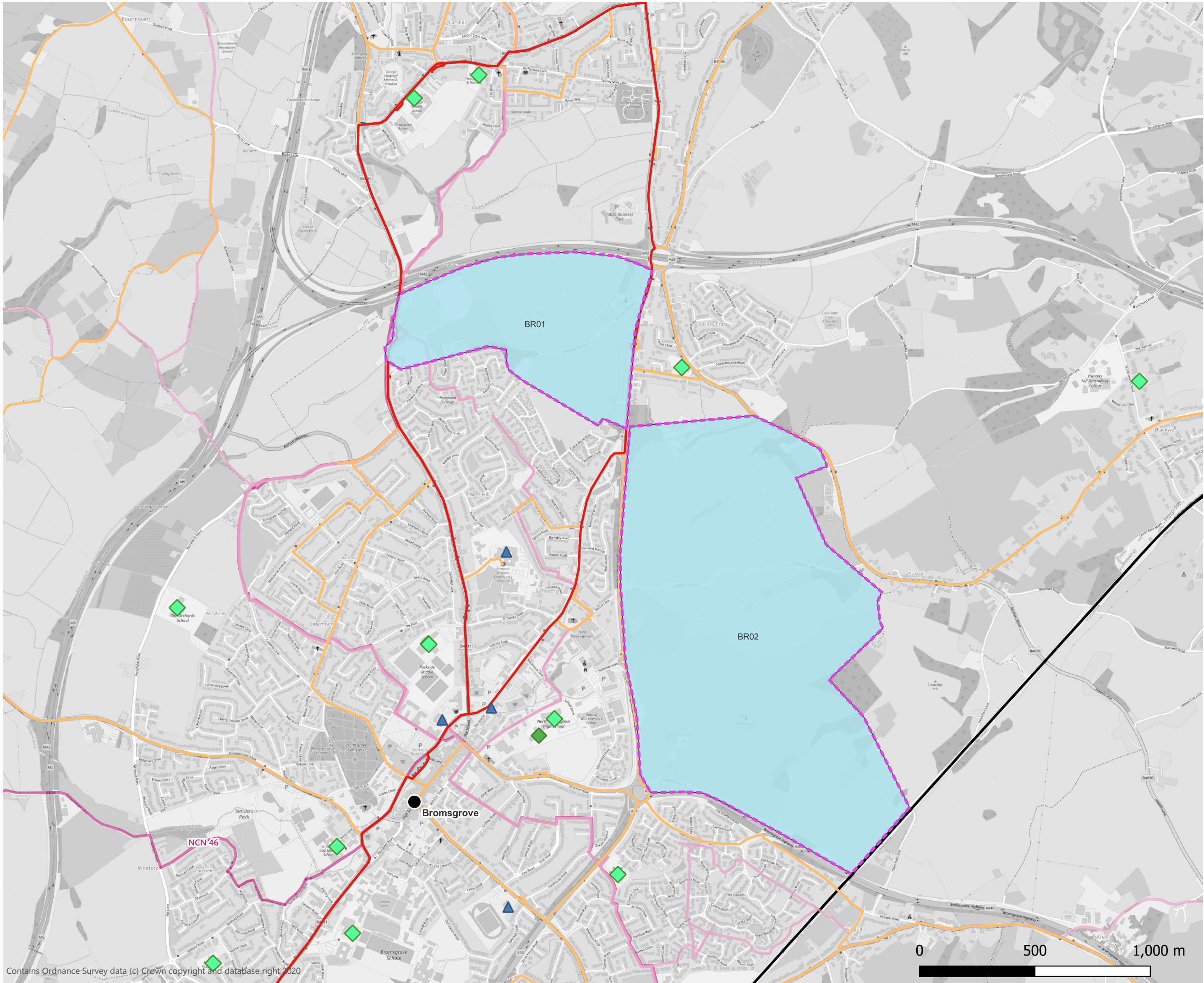
Key

- Cluster 3
- All Education
- Secondary / Post16 Education
- All Healthcare
- Local Centre
- National Cycle Network (NCN)
- Local Cycle route
- railway line

Bus routes service frequency
- 2+ buses per hour
- < 2 buses per hour

OSM Standard

BR01

BR02

Bromsgrove

NCN 46

0   500   1,000 m

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Metric 1: Average commuter travel mode split

4.56 The average drive to work proportion of output areas considered to represent cluster group 3 is 84%, this reflects a proportion above the regional average and thus receives a 'red' rating within the framework.

4.57 Within this grouped average, BR02 receives an 'amber' rating, reflecting the existing travel to work patterns within and in surrounding output areas which any new development would be expected to share similar characteristics to.

Figure 4-14: Cluster Group 3 – Metric 1 – Drive to work (%)
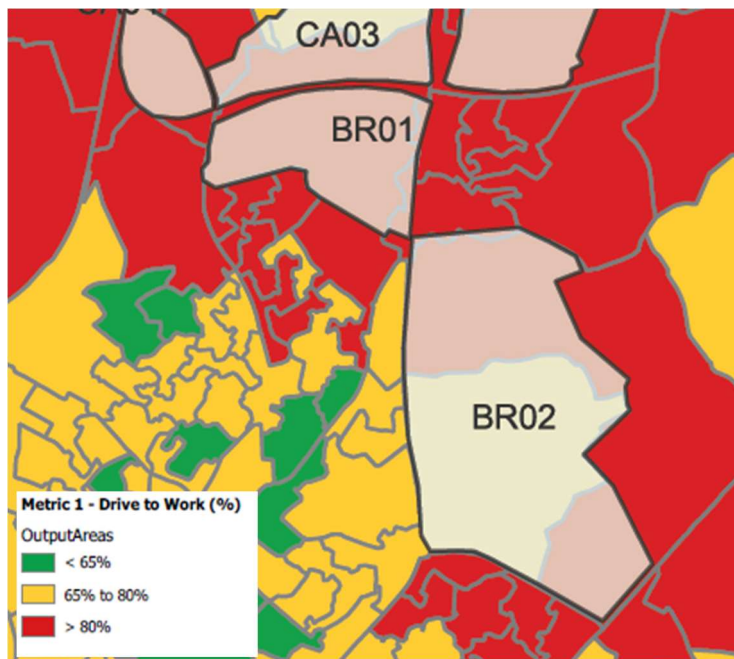
Metric 2: Proximity to current sustainable transport services and infrastructure

4.58 Cluster group 3 has a varied level of sustainable transport provision currently (shown in Figure 4-3 where cluster group 3 is outlined in pink), with the group rating as 'amber' collectively.

4.59 Sub-cluster BR01 benefits from being in close proximity to high frequency bus provision, covering most of the sub-cluster area, and cycle routes, and therefore receives a 'green' rating. An 'amber' rating has been given to BR02, reflecting the relative distance from existing bus corridors and cycle routes across the sub-cluster area.

4.60 All sub-clusters have potential to improve, with bus frequency enhancements and/or route extensions and active mode improvements to enhance access to any new and existing connections.

Figure 4-15: Cluster Group 3 – Metric 2.1
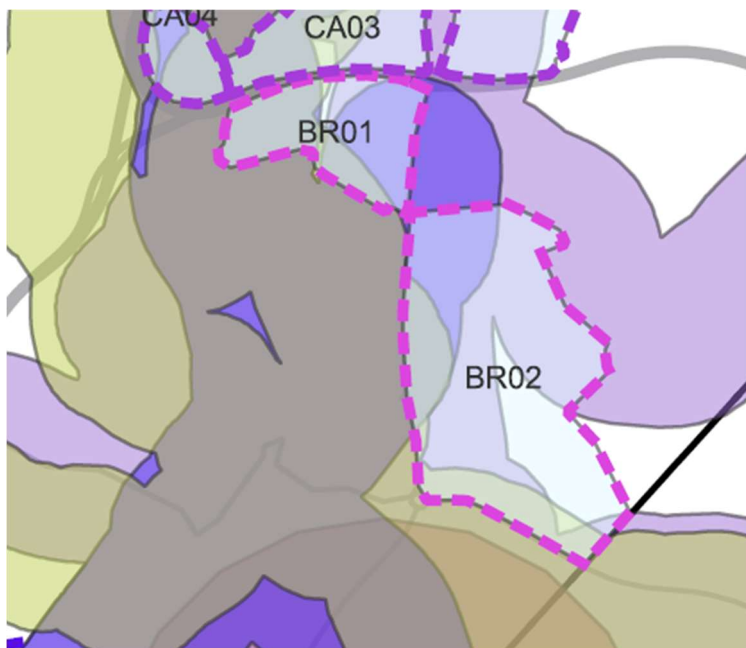
Metric 3: Access to jobs by public transport

4.61   Figure 4-16 and Figure 4-17 show the mapped outputs of the analysis for each sub-cluster for this metric, with Table 4-17 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.62   Each sub-cluster receives a 'red' rating, although BR01 sits close to the 'amber' threshold boundary. This reflects its connections to high frequency bus routes connecting to areas such as Droitwich and Longbridge outside the district. BR02 has better connections with areas around Redditch by public transport.

Table 4-17: Cluster Group 3 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
BR01	39,695	Red
BR02	33,783	Red
Average - Cluster Group 3	36,739	Red

Prepared: JP
Reviewed: SN
Date: April 22

Key

Bromsgrove District

Stage 3b - Sites and Clusters
Cluster3 - BR01

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility
Cluster03_PT_FROM_BR01

- 1 - 15 minutes
- 15 - 30 minutes
- 30 - 45 minutes

TransportNetwork
Railway Line
Strategic Road Network
Major Road Network

itp
a company of Royal HaskoningDHV

Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
BR01 – Metric 3.1 – Public transport access to jobs

Revision: A
Project number: 3578

Figure number: Figure 4-16
Date: April 2022

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Stourbridge

Harborne   Edgbaston

Halesowen

Bartley Green

Hagley   Selly Oak

Kings Heath

Blakedown

Northfield   Cotteridge

Comberton   Shirley

Belbroughton   Frankley

Longbridge   Dickens Heath

Rubery

Wythall

Catshill   Barnt Green

Dodford   Lickey End   Alvechurch

BR02

Bromsgrove

Finstall   Holt End

Tardebigge

Foxlydiate   Redditch

Stoke Prior

Wychbold

Droitwich Spa

Prepared	Reviewed		Date
JP	SN		April 22

Key

☐ Bromsgrove District

Stage 3b - Sites and Clusters
☐ Cluster3 - BR02

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster03_PT_FROM_BR02

● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
── Railway Line
── Strategic Road Network
── Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
BR02 – Metric 3.1 – Public transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-17	April 2022

Metric 4: Access to healthcare

4.63   As shown in Figure 4-13, there are three healthcare facilities to the south/west of the sub-clusters around the centre of Bromsgrove. This results in an 'amber' rating for the group overall, this sits close to the green-amber threshold boundary of 15 minutes.

4.64   BR01 fairs slightly better than BR02, reflecting its proximity to existing residential areas and better bus services, connecting to healthcare facilities.

Table 4-18: Cluster Group 3 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
BR01	13	Green
BR02	19	Amber
Average - Cluster Group 3	16	Amber

4.65   Access to hospitals is more challenging, with both the Queen Elizabeth (QE) and Alexandra Hospitals beyond a 60-minute public transport journey from the BR02 sub-cluster. The analysis shows an average journey time of 58 minutes from BR01, although Figure 3-8 shows that this result reflects journey times from a small area of the sub-cluster.

4.66   Improved connections to the railway station could enhance travel options, particularly to the QE, and encourage more sustainable travel from this location. Similarly, enhancements in the bus services between south Bromsgrove and the Alexandra Hospital (such as the 52A) could improve connections for this sub-cluster.

Table 4-19: Cluster Group 3 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
BR01	58	Amber
BR02	> 60 minutes	Red
Average - Cluster Group 3	58 minutes	Amber

4.67   Comparative drive times to the Alexandra Hospital are presented in Table 4-20. The result for BR01 sits right on the green-amber threshold boundary at 15 minutes. BR02 fairs slightly better, and therefore the overall rating for the cluster group is 'green'.

Table 4-20: Cluster Group 3 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
BR01	15	Amber
BR02	12	Green
Average - Cluster Group 3	13	Green

Metric 5: Access to education

4.68   As shown in Figure 4-13, there are numerous primary schools close to the sub-clusters, both to the south around the town centre, Lickey End First school to the north-east and schools to the south of Catshill.

4.69   Average journey times have been classed as 'amber' ratings for these clusters, and the cluster group, reflecting their comparative performance in relation to other cluster groups in the study.

Table 4-21: Cluster Group 3 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
BR01	11	Amber
BR02	14	Amber
Average - Cluster Group 3	12	Amber

4.70   Some of the public transport journey time results represent travel to schools a further distance away, such as Waseley Hills High School and Sixth Form Centre and Colmers School and Sixth Form College near Rubery. This is likely due to the availability of public transport services to these areas. However, the nearer South Bromsgrove Community High School presents opportunities to encourage active mode travel given its proximity to the clusters of around one mile. Safe cycle and pedestrian routes to these schools, as well as local primary schools, should be considered should any development come forward at these locations.

4.71   It is worth noting that these journey time results represent access opportunities around the edge of the sub-cluster area, particularly for BR02, and any homes delivered further towards the centre of the area may not have such good connections without enhancements to services.

Table 4-22: Cluster Group 3 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
BR01	20.8	Amber
BR02	28	Red
Average - Cluster Group 3	25	Amber

Metric 6: Proximity to planned local transport improvements

4.72   This cluster group has the most planned sustainable transport improvements of any of the areas assessed, resulting in a 'green' rating. Some of these are related to the Perryfields development such as the shared use path adjacent to Perryfields Road and Bromsgrove public realm enhancement scheme. Others include:

- A38 BREP
- Upland Grove Park Bromsgrove Link
- North-East Active Travel (NEAT) links:
  - NEAT 3 – Rubery to Catshill to Bromsgrove Improvement (Link 2 LCN 1 Route Improvements)
  - NEAT 4 – Bromsgrove Improvements (Link 1 NCN 5 North Improvements)
  - NEAT 5 – Link 8 Charford Links
  - NEAT 8 – Redditch – Bromsgrove (Link 4 The Oakhalls & Finstall Link)

Metric 7: Access to district centres

4.73   Bromsgrove Town Centre is the closest identified centre, both as the crow flies and in journey time by public transport. This results in a 'green' rating for this option, and both sub-clusters individually. With the town centre 1 – 1.5 miles away from the cluster group, trips between these locations could also be encouraged by active travel.

4.74   This analysis focuses on journey times to identified district centres and does not review the relative attractiveness nor retail / leisure offering of the centres in question.

Table 4-23: Cluster Group 3 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
BR01	19	Green
BR02	19	Green
Average - Cluster Group 3	19	Green

Summary and recommendations

4.75 Table 4-24 shows a summary of the RAG rating outputs – where 2 is 'Green, 1 is 'Amber' and 0 is a 'Red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-18 shows the number of each category of rating for each sub-cluster.

4.76 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 55%.

4.77 Sub-cluster BR01 scores highest of the two areas, with more 'green' ratings are fewer 'red's than BR02. This indicates that more intervention would be necessary to improve the sustainable travel outcomes at either of the other two locations within this cluster group. However, given their proximity, delivering these two sub-clusters in conjunction with each other (subject to assessment of collective impact on the network) could present opportunity for co-ordinated improvements.

Figure 4-18: Cluster Group 3 Results
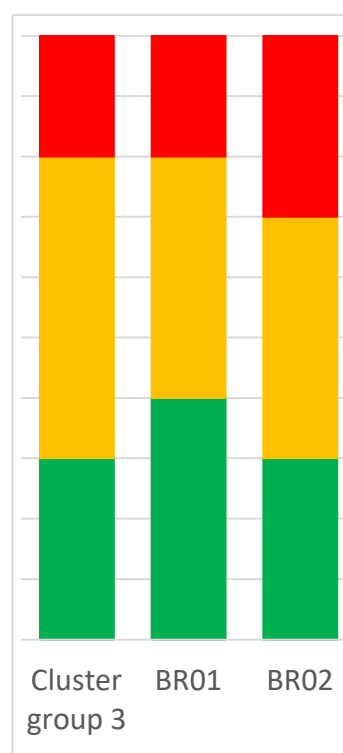
Table 4-24: Cluster Group 3 – Rating summary

	Metric	Cluster Group 3					
		3		Sub-clusters			
		Bromsgrove North		BR01		BR02	
% DRIVE TO WORK	1.1	0	84%	0	-	1	-
	1.2	-					
TRANSPORT SERVICES	2.1	1	-	2	-	1	-
LABOUR MARKET	3.1	0	36,739	0	39,695	0	33,783
	3.2	-					
HEATHCARE	4.1	1	16	2	13	1	19
	4.2	1	58	1	58	0	-
	4.3	2	13	1	15	2	12
EDUCATION	5.1	1	12	1	11	1	14
	5.2	1	25	1	20.8	0	27.7
PLANNED IMPROVEMENTS	6.1	2	8	2	-	2	-
DISTRICT CENTRES	7.1	2	19	2	19	2	19

Cluster Group 4: Catshill South

4.78 Cluster Group 4 comprises areas south of Catshill. As shown in Figure 4-19 the three clusters are situated:

- **CA02 –** in close proximity to M42 Junction 1, with the residential area of Marlbrook to the north.

- **CA03 –** further west, covering some area of established employment. Directly north of the M42, again close to Junction 1, with the cluster bounded by the A38 on the eastern boundary.

- **CA04 –** directly north of the M42 and east of the M5, covering areas adjacent to established residential land.

4.79 These clusters south of Catshill have been grouped together due to their proximity, collective scale and similarities in likely interaction with their surroundings.

4.80 There is potential for CA03 proposals to support both residential and employment growth. Its proximity to the SRN and coverage of existing employment land presents such opportunity.

4.81 There are several bus routes within Catshill, including links of higher frequency service to and from Bromsgrove town centre. The existing cycle network is limited to the National Cycle Network, which intersects cluster CA03.
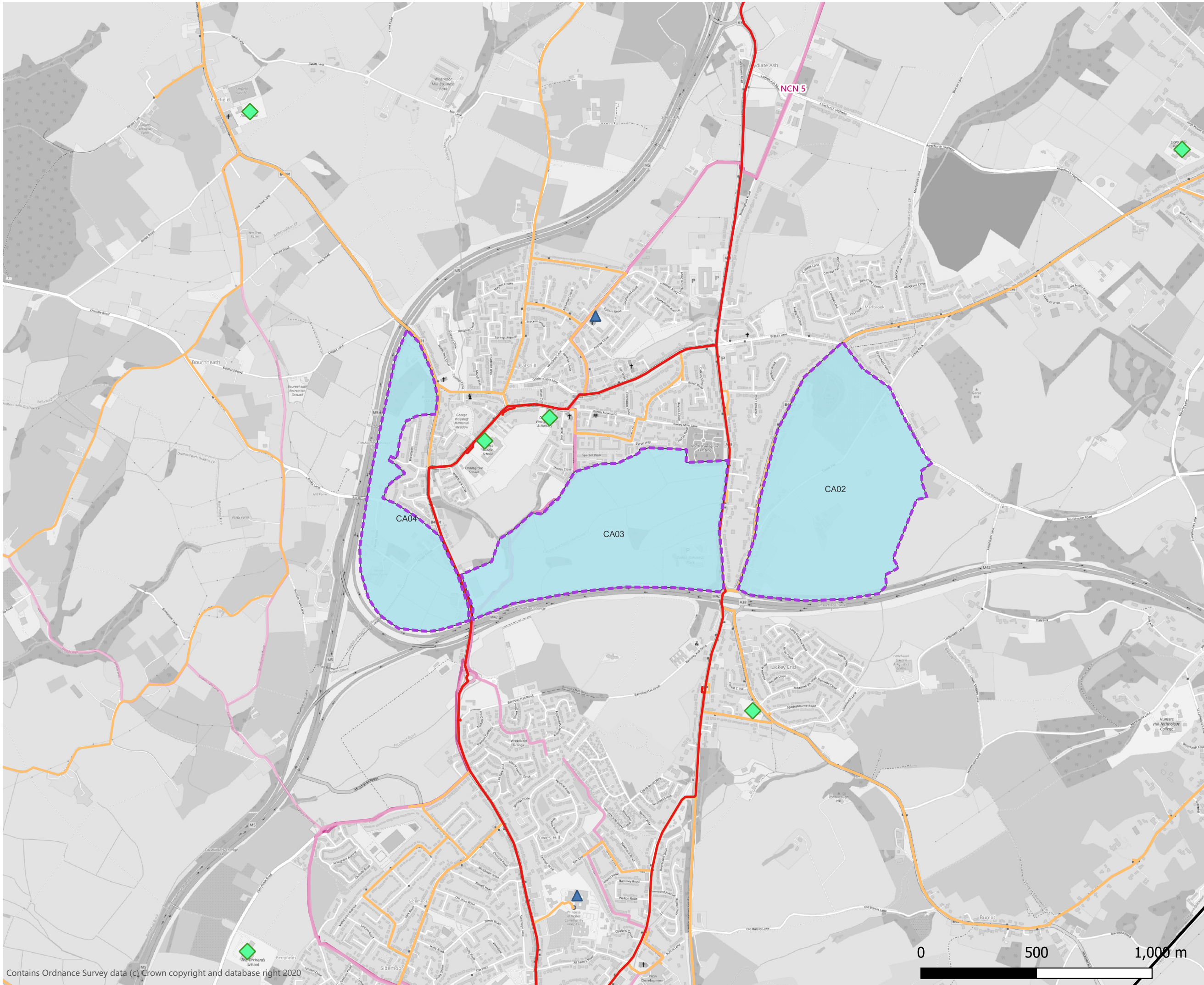
Key

- Cluster 4
- All Education
- All Healthcare
- National Cycle Network (NCN)
- Local Cycle route
- railway line

Bus routes service frequency
- 2+ buses per hour
- < 2 buses per hour

OSM Standard

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
Cluster Group 4

Revision
A

Project number
3578

Figure number
Figure 4-19

Date
April 2022

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0   500   1,000 m

Metric 1: Average commuter travel mode split

4.82   The average drive to work proportion of output areas considered to represent cluster group 4 is 81%, this reflects a proportion above the regional average and thus receives an 'red' rating within the framework.

4.83   Within this grouped average, sub-cluster CA03 receives an 'amber' rating, reflecting the existing travel to work patterns within and in surrounding output areas which any new development would be expected to share similar characteristics to.

Figure 4-20: Cluster Group 4 – Metric 1 – Drive to work (%)
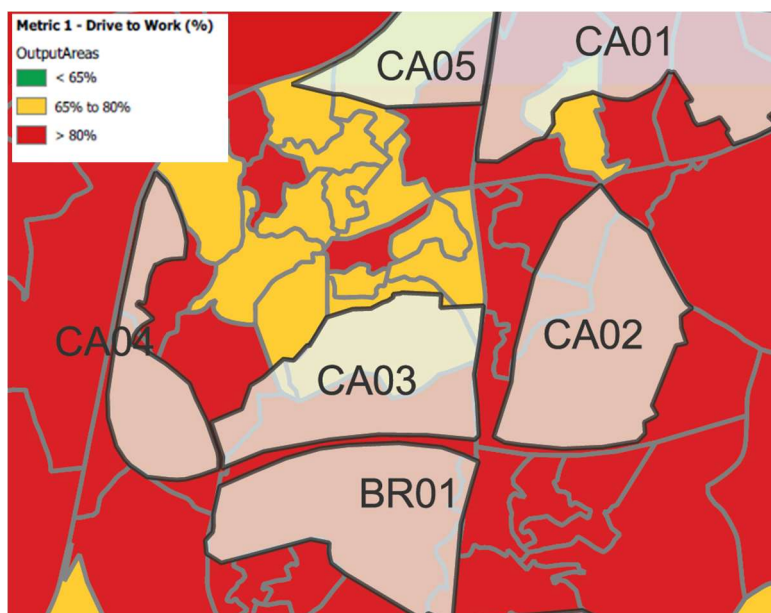
Metric 2: Proximity to current sustainable transport services and infrastructure

4.84   Cluster group 4 has a varied level of sustainable transport provision currently (shown in Figure 4-21 where cluster group 4 is outlined in purple), with the group rating as 'amber' collectively.

4.85   Sub-cluster CA04 benefits from being in in close proximity to a high frequency bus route across its entire area, and therefore receives a 'green' rating for this metric. A 'green' rating is also given to CA03 where high frequency buses serve most of the area, with low frequency bus covering the eastern side and a cycle route through the area. Sub-cluster CA02 has poorer provision, with only a low frequency bus serving the area it receives a 'red' rating.

Figure 4-21: Cluster Group 4 – Metric 2.1
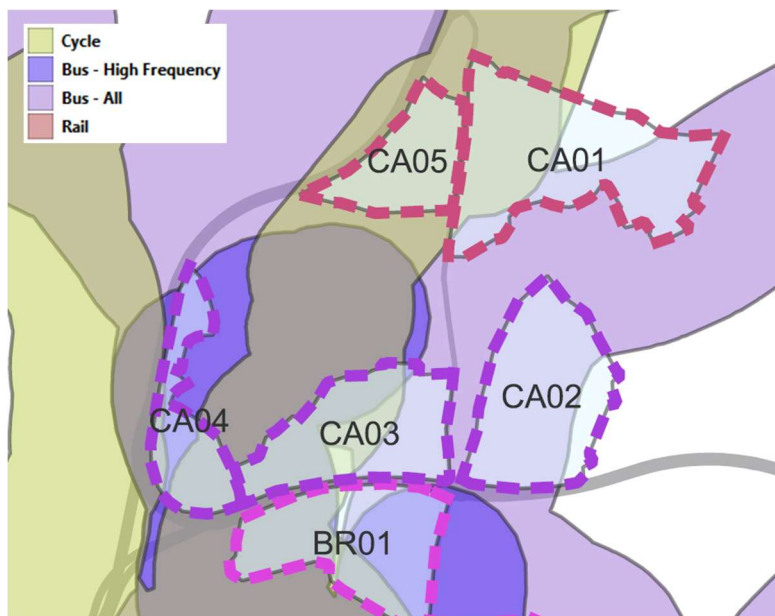
Metric 3: Access to jobs by public transport

4.86   Figure 4-22, Figure 4-23 and Figure 4-24 show the mapped outputs of the analysis for each cluster for this metric, with Table 4-25 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.87   CA03 and CA04 both have over 40,000 jobs accessible by public transport within 45 minutes, resulting in them receiving an 'amber' rating. Significantly fewer jobs are accessible from CA02, reflecting poor existing public transport and resulting in a 'red' rating for the sub-cluster.

Table 4-25: Cluster Group 4 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
CA02	29,802	Red
CA03	43,738	Amber
CA04	49,095	Amber
Average - Cluster Group 4	40,878	Amber
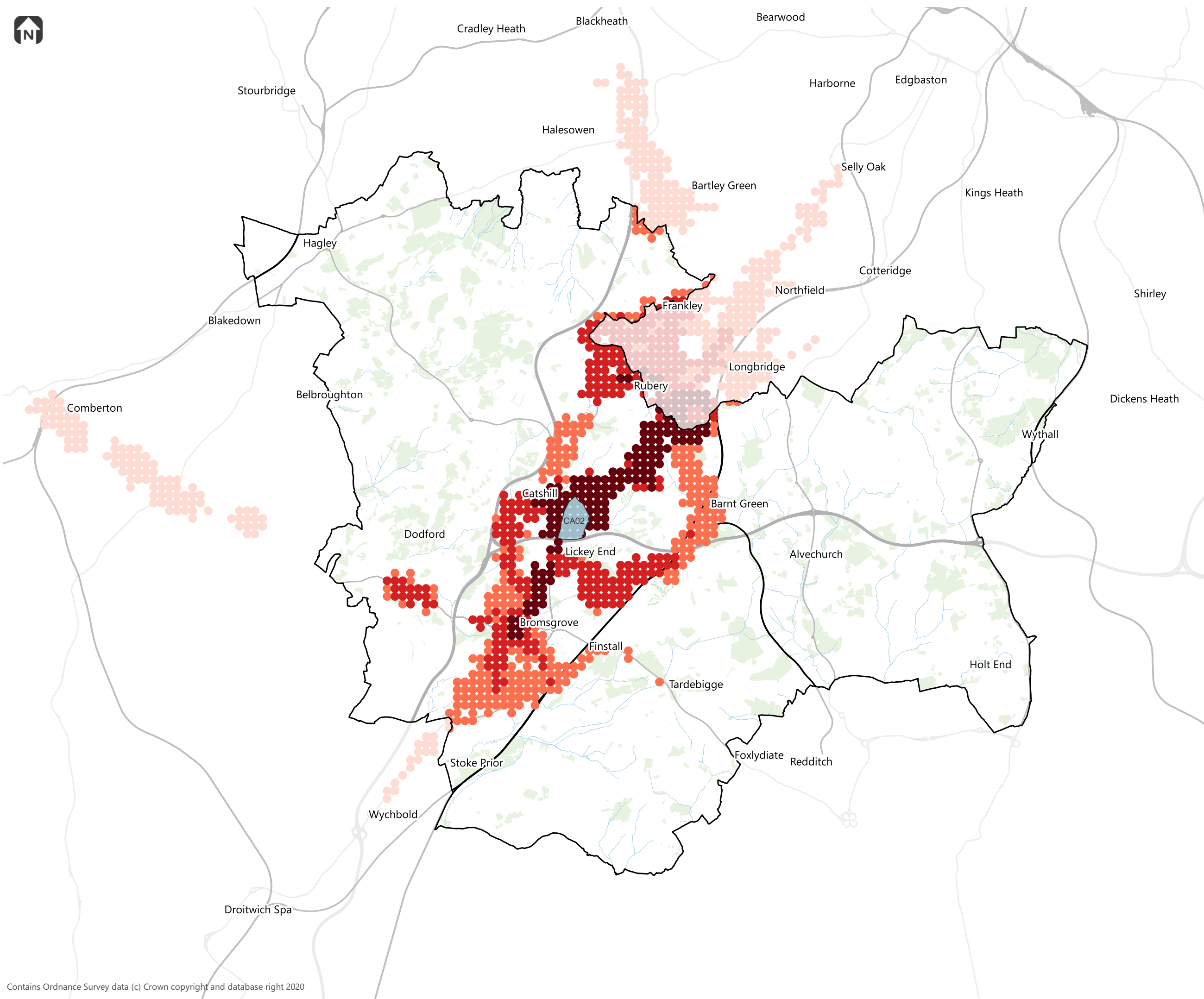
Prepared
JP

Reviewed
SN

Date
April 22

Key

Bromsgrove District

Stage 3b - Sites and Clusters

Cluster4 - CA02

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster04_PT_FROM_CA02

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

TransportNetwork

Railway Line

Strategic Road Network

Major Road Network

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Client

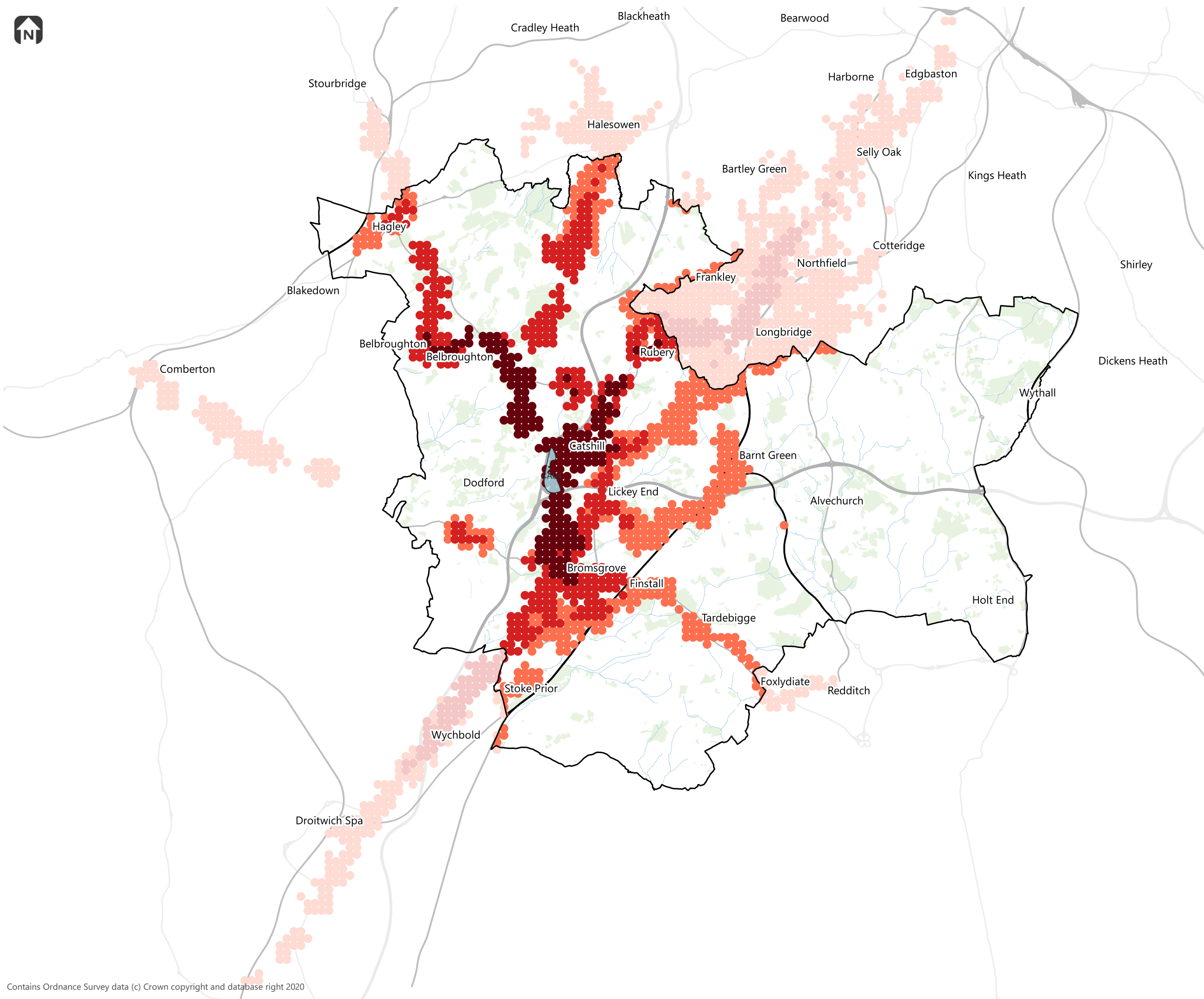Bromsgrove District Council

Project

Bromsgrove DPR Transport
Assessment

Figure title

CA02 – Metric 3.1 – Public
transport access to jobs

Revision

A

Project number

3578

Figure number

Figure 4-22

Date

April 2022

Key
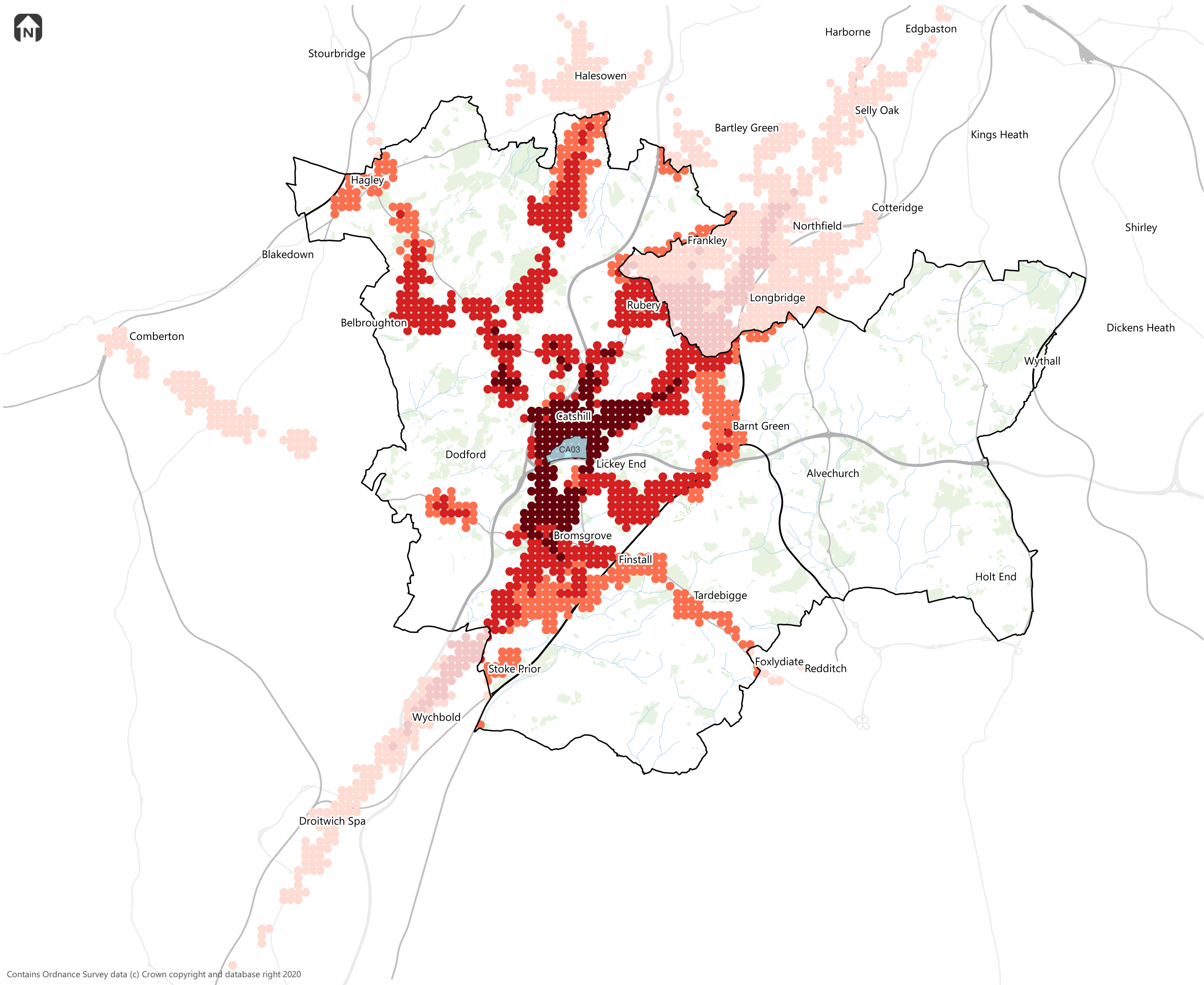
Bromsgrove District

Stage 3b - Sites and Clusters
Cluster4 - CA03

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility
Cluster04_PT_FROM_CA03

● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
— Railway Line
— Strategic Road Network
— Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
CA03 – Metric 3.1 – Public transport access to jobs

Revision
A

Project number
3578

Figure number
Figure 4-23

Date
April 2022

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Blackheath
Cradley Heath
Bearwood
Stourbridge
Harborne
Edgbaston
Halesowen
Selly Oak
Bartley Green
Hagley
Kings Heath
Blakedown
Northfield
Cotteridge
Frankley
Shirley
Belbroughton
Belbroughton
Rubery
Longbridge
Comberton
Dickens Heath
Catshill
Barnt Green
Wythall
Dodford
Lickey End
Alvechurch
Bromsgrove
Holt End
Finstall
Tardebigge
Stoke Prior
Foxlydiate
Redditch
Wychbold
Droitwich Spa

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Metric 4: Access to healthcare

4.88   As shown in Figure 4-19, there is one healthcare facility within Catshill. The cluster group receives a 'green' rating overall, with sub-cluster CA02 and CA04 also 'green'. CA03 shows a slightly higher average journey time, and crosses the 15 minutes threshold, into the 'amber' rating category.

Table 4-26: Cluster Group 4 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
CA02	15	Green
CA03	16	Amber
CA04	10	Green
Average - Cluster Group 4	14	Green

4.89   The nearest Hospital with an A&E department is the Queen Elizabeth Hospital in Selly Oak. The analysis shows that this is not possible to access within 60 minutes by public transport from sub-cluster CA02. The edges of sub-clusters CA03 and CA04 around the B4091 show journeys within 60 minutes. This results in an average journey time of 59 minutes, and an 'amber' rating for the cluster group.

Table 4-27: Cluster Group 4 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
CA02	> 60 minutes	Red
CA03	60	Amber
CA04	59	Amber
Average - Cluster Group 4	59	Amber

4.90   Comparative drive times to the Alexandra Hospital are presented in Table 4-28. These show the discrepancy between public transport and driving, with average journey times by public transport three times longer than the estimated car journey. This analysis found that drive times between Catshill and the Alexandra Hospital in Redditch are lower than to the QE. The cluster group receives an 'amber' rating for this metric.

Table 4-28: Cluster Group 4 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
CA02	22	Red
CA03	18	Amber
CA04	19	Amber
Average - Cluster Group 4	20	Amber

Metric 5: Access to education

4.91 As shown in Figure 4-19, there are two primary schools within Catshill. This is reflected in the 'green' rating for both CA03 and CA04 with journey times below 10 minutes. The level of connectivity by public transport and the direction of the routes close to sub-cluster CA02 mean that the schools that are most quickly accessed by public transport from this sub-cluster are further afield (Lickey End and Rednal), therefore higher journey times and a 'red' rating result.

4.92 These differences in results within the cluster group is reflected in the overall 'amber' rating for this cluster group.

4.93 Depending on the scale of growth delivered at these locations, additional facilities may form part of the masterplan. This can help to support more sustainable travel by creating more trips of a shorter distance, internal to the growth area. Enhancements to create a more permeable environment between the area to the east of the B4096 and existing facilities (such as education and healthcare) west of the A38 would support sustainable outcomes for any growth at CA02.

Table 4-29: Cluster Group 4 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
CA02	17	Red
CA03	9	Green
CA04	7	Green
Average - Cluster Group 4	11	Amber

4.94   There are no secondary nor post-16 education facilities in Catshill, meaning those quickest to access via public transport are further afield, Colmers School and Waseley Hills High School near Rubery. This results in ratings being varied within the cluster group, reflecting their relative connections to these facilities.

Table 4-30: Cluster Group 4 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
CA02	25.1	Red
CA03	24	Amber
CA04	18	Green
Average - Cluster Group 4	**22**	**Amber**

Metric 6: Proximity to planned local transport improvements

4.95   Planned sustainable transports improvements within the vicinity of cluster group 4, that were identified at the time of the study include:

- A38 BREP

- NEAT 2 – Bournheath and Fairfield to Bromsgrove

- NEAT 3 – Rubery to Catshill to Bromsgrove Improvement

4.96   These improvements result in a 'Green' RAG rating for the cluster group, all sub-clusters receive an 'amber' rating.

Metric 7: Access to district centres

4.97   For most areas of this cluster group Bromsgrove is the most quickly accessed district centre by public transport, while for the centre of sub-cluster CA02 the routes that can be accessed within the TRACC assessment mean that Longbridge is the quickest to access. This lengthier journey results in higher average journey times for sub-cluster CA02 and an 'amber' rating.

Table 4-31: Cluster Group 4 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
CA02	22	Amber
CA03	17	Green
CA04	14	Green
Average - Cluster Group 4	18	Green

Summary and recommendations

4.98 Table 4-32 shows a summary of the RAG rating outputs – where 2 is 'Green, 1 is 'Amber' and 0 is a 'Red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-25 shows the number of each category of rating for each sub-cluster.

4.99 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 60%.

4.100 The sub-cluster CA04 scores the highest in the assessment (70%), although CA03 is the only one with no 'red' ratings. This indicates that more intervention would be necessary to improve the sustainable travel outcomes at CA02. However, depending on the scale that could be delivered on a larger site, this could present more transformation opportunities.

Figure 4-25: Cluster Group 4 Results

Cluster group 4   CA02   CA03   CA04
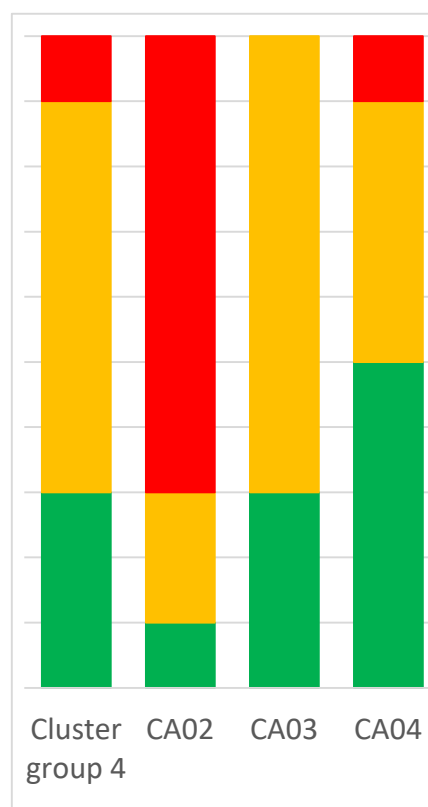
Table 4-32: Cluster Group 4 – Rating summary

Category	Metric	Cluster Group 4							
		4		Sub-clusters					
		Catshill South		CA02		CA03		CA04	
% DRIVE TO WORK	1.1	0	81%	0	-	1	-	0	-
TRANSPORT SERVICES	2.1	1	-	0	-	2	-	2	-
LABOUR MARKET	3.1	1	40,878	0	29,802	1	43,738	1	49,095
HEATHCARE	4.1	2	14	2	15	1	16	2	10
	4.2	1	59	0	-	1	60	1	59
	4.3	1	20	0	22	1	18	1	19
EDUCATION	5.1	1	11	0	17	2	9	2	7
	5.2	1	22	0	25.1	1	24	2	18
PLANNED IMPROVEMENTS	6.1	2	3	1	-	1	-	1	-
DISTRICT CENTRES	7.1	2	18	1	22	2	17	2	14

Cluster Group 5: Catshill North

4.101 Cluster Group 5 considers two individual cluster sites to the north of Catshill, grouped together due to their proximity, collective scale and similarities in likely interaction with their surroundings. As shown in Figure 4-26, these are situated:

- **CA01 –** north of the existing residential area of Marlbrook. Greenfield land bounds the northern extent.

- **CA05 –** further west, bounded by the A38 and the M5. It is situated closely to M5, junction 4 and is north of the existing residential area.

4.102 There are two primary schools within the village, but secondary education provision is more limited. There is also a general practice surgery within a residential area north of the village centre.

4.103 Each individual cluster within this group is intersected by the National Cycle Network (NCN Route 5) and is the only cycle provision in close proximity. Bus routes are concentrated within areas south of the cluster, with a high service frequency serving the A38.
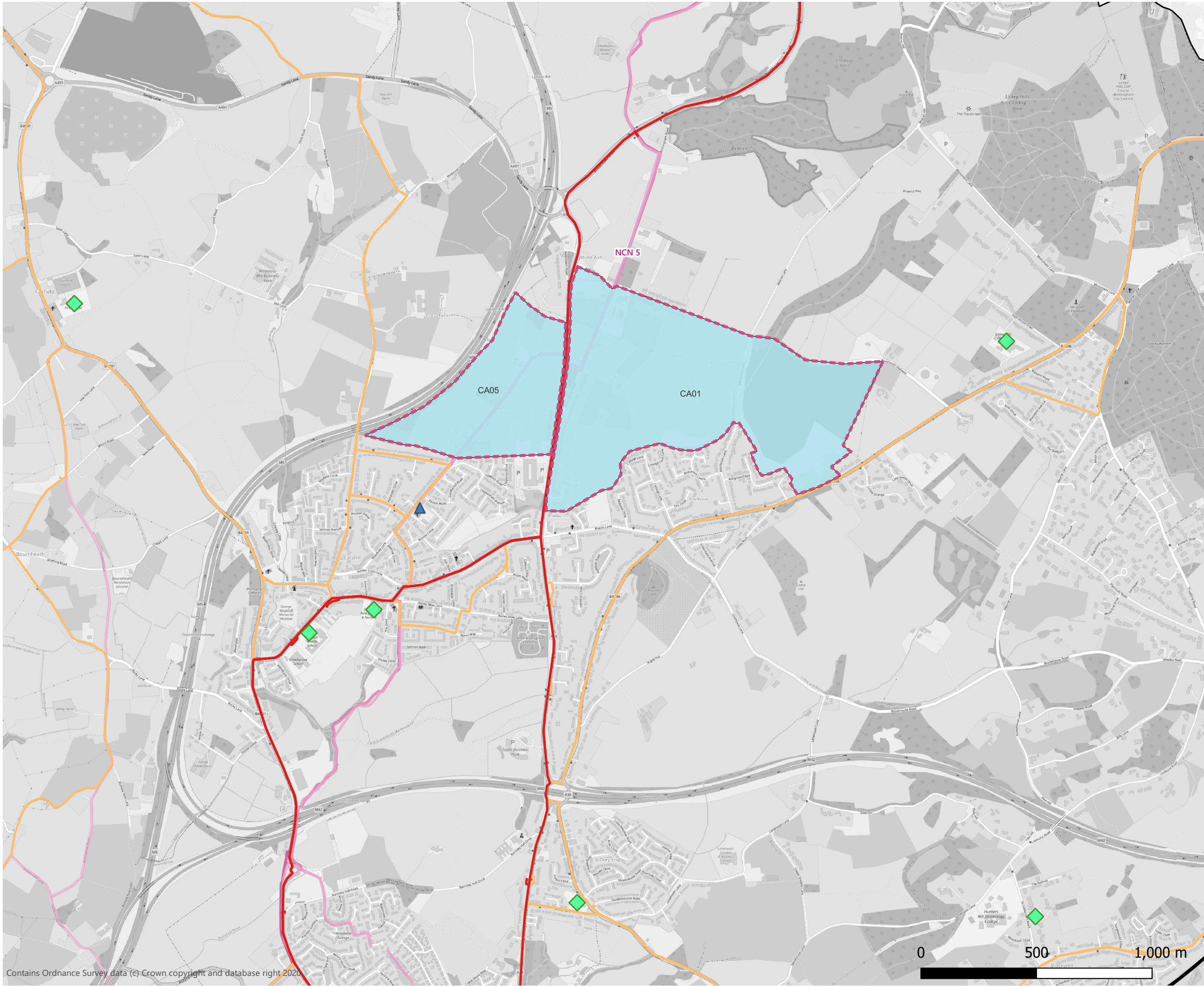
Key

Cluster 5

Bromsgrove District

All Education

All Healthcare

National Cycle Network (NCN)

Local Cycle route

railway line

Bus routes service frequency

2+ buses per hour

< 2 buses per hour

OSM Standard

NCN 5

CA05

CA01

0   500   1,000 m

Metric 1: Average commuter travel mode split

4.104 The average drive to work proportion of output areas considered to represent cluster group 5 is 81%, this reflects a proportion above the regional average and thus receives a 'red' rating within the framework.

4.105 Within this grouped average, sub-cluster CA05 receives an 'amber' rating, reflecting the existing travel to work patterns within and in surrounding output areas which any new development would be expected to share similar characteristics to.

Figure 4-27: Cluster Group 5 – Metric 1 – Drive to work (%)
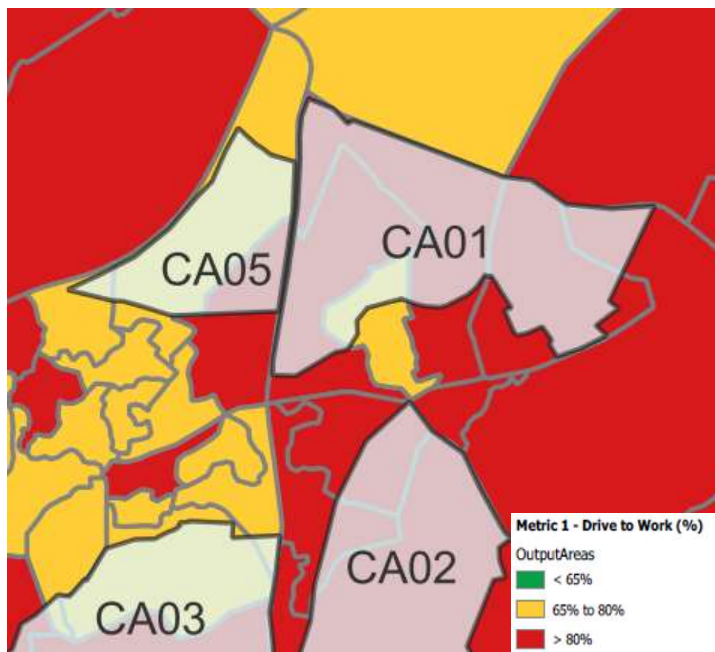
Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

4.106 Cluster group 5 has a variety of sustainable transport provision, as seen in Figure 4-28 where cluster group 5 is outlined in dark pink, with the group rating as 'amber' overall.

4.107 Sub-cluster CA05 receives an 'amber' rating given that low frequency bus and cycle coverage is present throughout the area. Sub-cluster CA01 has poorer provision, with low frequency bus coverage across the site and some cycle provision to the west of the area. As such, it receives a 'red' rating.

4.108 There is the potential to enhance bus frequency from the south and south-west for both sub-clusters and extend the cycle route within CA01 across the site.

Figure 4-28: Cluster Group 5 – Metric 2.1
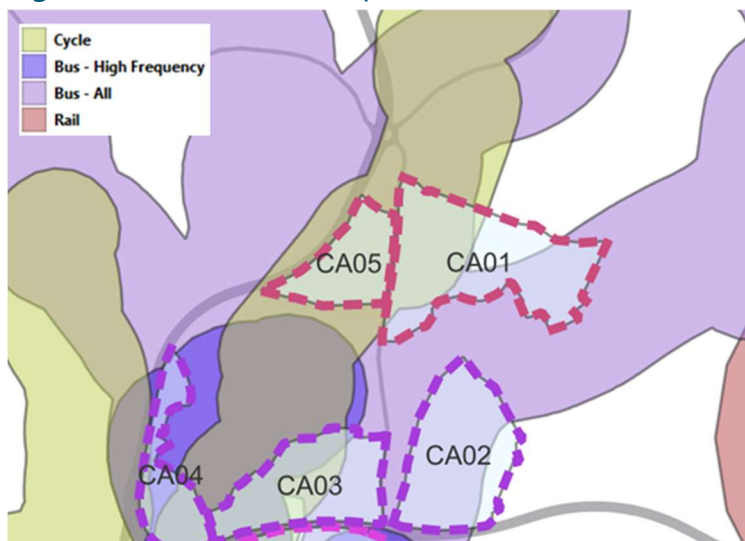
Metric 3: Access to jobs by public transport

4.109 Figure 4-29 and Figure 4-30 show the mapped outputs of the analysis for each sub-cluster for this metric, with Table 4-33 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.110 Both sub-clusters have over 40,000 jobs accessible by public transport within 45 minutes, and therefore are given an 'amber' rating. CA05 has access to a greater number of jobs, reflecting its superior sustainable transport service provision.

Table 4-33: Cluster Group 5 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
CA01	52,681	Amber
CA05	61,510	Amber
Average - Cluster Group 5	57,096	Amber

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Key

☐ Bromsgrove District

Stage 3b - Sites and Clusters
▢ Cluster5 - CA05

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster05_PT_FROM_CA05

● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
— Railway Line
— Strategic Road Network
— Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport
Assessment

Figure title
CA05– Metric 3.1 – Public
transport access to jobs

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Metric 4: Access to healthcare

4.111 As shown in Figure 4-26, there is one healthcare facility within Catshill. Regarding public transport access to healthcare, cluster group 5 receives a 'green' rating overall, with both sub-clusters also 'green', achieving an average journey time of less than 15 minutes.

Table 4-34: Cluster Group 5 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
CA01	13	Green
CA05	9	Green
Average - Cluster Group 5	11	Green

4.112 The nearest hospital with an A&E department is the Queen Elizabeth Hospital in Selly Oak. The analysis shows that on the western edge of CA01 and the north of CA05 it is possible to reach it within 60 minutes by public transport. However, for the southern end of CA05 and the majority of CA01 it is not possible to access in 60 minutes. This results in an average journey time of 55 minutes for CA01, 56 minutes for CA05 and 55 minutes for cluster group 5 overall, and as such all have an 'amber' rating.

Table 4-35: Cluster Group 5 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
CA01	55	Amber
CA05	56	Amber
Average - Cluster Group 5	55	Amber

4.113 For both sub-clusters the nearest hospital for driving access is Alexandra Hospital with comparative drive times presented in the table below. CA01 has an estimated journey time of 20 minutes, thus receiving an 'amber' rating, whilst CA05 and cluster group 5 overall is given a 'red' rating.

4.114 These also show the difference between journey time by car and by public transport, with average journey times for public transport significantly more than double the estimated car journey times.

Table 4-36: Cluster Group 5 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
CA01	20	Amber
CA05	21	Red
Average - Cluster Group 5	21	Red

Metric 5: Access to education

4.115 As shown in Figure 4-26 there are two primary schools within Catshill which lie south-west of sub-clusters CA01 and CA05. In terms of RAG rating, CA01 has a slightly longer average journey time of 12 minutes meaning it rates as 'amber', whilst CA05 is 'green'.

4.116 To reflect the cluster group's comparative performance with other cluster groups in the report, it has been given an 'amber' rating overall.

Table 4-37: Cluster Group 5 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
CA01	12	Amber
CA05	9	Green
Average - Cluster Group 5	10.5	Amber

4.117 For both sub-clusters, Waseley Hills High School is the closest in terms of average journey time for secondary education. Both are within 20 minutes by public transport and therefore receive a 'green' RAG rating.

4.118 There is also a large range of journey times within each sub-cluster. For CA05 this ranges from 11 to 30 minutes and for CA01 between 9 and 39 minutes. This suggests that enhancing the transport connectivity and permeability of the areas for active travel presents an opportunity to improve access across the area.

Table 4-38: Cluster Group 5 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
CA01	18	Green
CA05	19	Green
Average - Cluster Group 5	18	Green

Metric 6: Proximity to planned local transport improvements

4.119 Planned sustainable transports improvements within the vicinity of cluster group 5, that were identified at the time of the study include:

- A38 BREP

- NEAT 3 - Rubery to Catshill to Bromsgrove Improvement

4.120 These improvements result in an 'amber' rating for the cluster group, as well as for both sub-clusters.

Metric 7: Access to district centres

4.121 According to the TRACC analysis, both Bromsgrove and Longbridge can be accessed from CA01 by public transport in under 20 minutes, and the average journey time is 19.8 minutes, giving it a 'green' rating.

4.122 CA05 has a slightly longer journey time giving it at a score of 'amber' alongside the overall cluster group average.

Table 4-39 Cluster Group 5 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
CA01	19.8	Green
CA05	22	Amber
Average - Cluster Group 5	20.8	Amber

Summary and recommendations

4.123 Table 4-40 shows a summary of the RAG rating outputs where 2 is 'green', 1 is 'amber' and 0 is a 'red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-31 shows the number of each category of rating for each sub-cluster and the cluster group overall.

4.124 In summary, the metrics assessed indicate an average level of suitability in sustainable transport terms with the cluster group scoring 50%. The sub-cluster CA05 scores the highest in the assessment (60%) with just 1 'red' rating, whilst CA01 rates 55%.

Figure 4-31: Cluster Group 5 Results
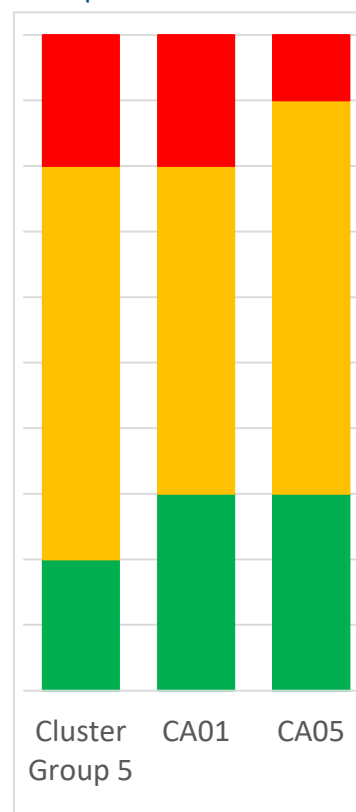
Table 4-40: Cluster Group 5 – Rating summary

	Metric	Cluster Group 5					
		5 Catshill North		Sub-clusters			
				CA01		CA05	
% DRIVE TO WORK	1.1	0	81%	0	-	1	-
	1.2	-					
TRANSPORT SERVICES	2.1	1	-	0	-	1	-
LABOUR MARKET	3.1	1	57,096	1	52,681	1	61,510
	3.2	-					
HEATHCARE	4.1	2	11	2	13	2	9
	4.2	1	55	1	55	1	56
	4.3	0	21	1	20	0	21
EDUCATION	5.1	1	10.5	1	12	2	9
	5.2	2	18	2	18	2	19
PLANNED IMPROVEMENTS	6.1	1	2	1	-	1	-
DISTRICT CENTRES	7.1	1	20.8	2	20	1	22

Cluster Group 6: Barnt Green

4.125 Cluster Group 6 comprises areas in and around Barnt Green. As shown in Figure 4-32 the four clusters are situated:

- **BG01 –** directly west of the railway line, covering a mix of existing residential and greenfield land. Lickey Hills Country Park is situated west of the cluster.

- **BG02 –** directly east of the railway line and north of the existing built-up area of Barnt Green.

- **BG03 –** further south, between the built-up areas of Barnt Green and Alvechurch.

- **BG04** – closest to Barnt Green rail station, with the M42 directly south. Experiences some severance impacts from the Redditch branch of the railway line, creating some disconnect between the cluster and existing local communities.

4.126 These clusters have been considered together and not further spilt as their collective scale and proximity to each other represents opportunity to develop at a scale which would complement sustainable transport outcomes and aid the development of a transport vision for Barnt Green. Notwithstanding this, there would be scope to consider each spatial option individually, or in different combinations, so as to strike an appropriate balance between the scale of potential growth, place-making, and the realisation of more sustainable transport improvements and mode share outcomes.

4.127 There is a primary school and a general practice surgery within Barnt Green village, with the closet middle school provision south of the M42 in Alvechurch.

4.128 Whilst there are a number of bus routes in and around this cluster group, these are of limited frequency. Each of the individual cluster sites is located in close proximity to Barnt Green rail station within a distance of no more than one mile (crow fly). There is no existing cycle route provision within the area so should one or more of these sites come forward, improvements in such would form part of the vision for Barnt Green.
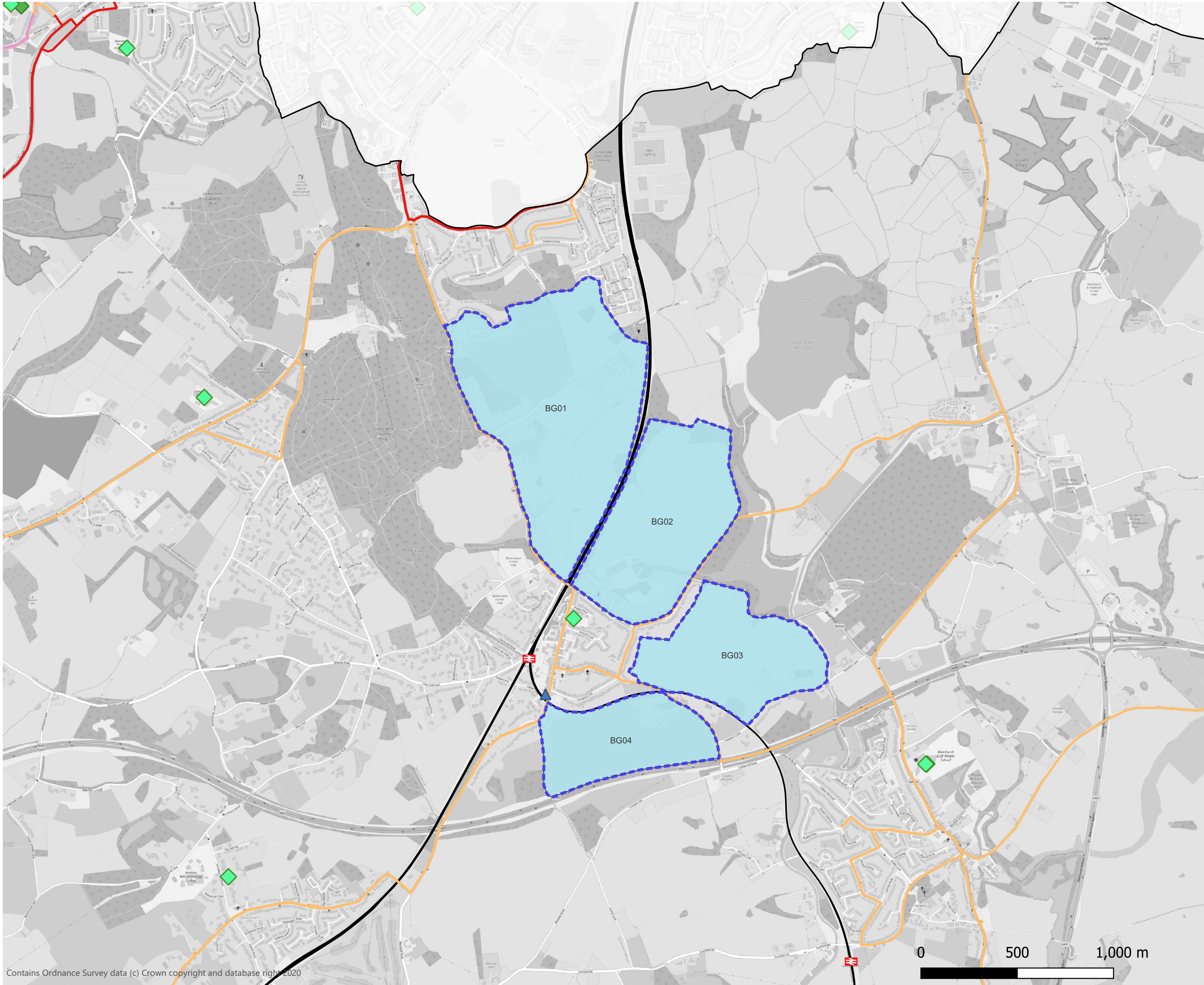
Key

- Cluster 6
- Bromsgrove District
- All Education
- Secondary / Post16 Education
- All Healthcare
- National Cycle Network (NCN)
- Local Cycle route
- Rail stations
- railway line

Bus routes service frequency
- 2+ buses per hour
- < 2 buses per hour

OSM Standard

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
Cluster Group 6

Revision
A

Project number
3578

Figure number
Figure 4-32

Date
April 2022

BG01
BG02
BG03
BG04

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0   500   1,000 m

Metric 1: Average commuter travel mode split

4.129 The average drive to work proportion of output areas considered to represent cluster group 6 is 77%, this reflects the regional average and attracts an 'amber' rating within the framework.

4.130 Within this grouped average, sub-cluster BG01, BG02 and BG03 receive a 'red' rating and BG04 an 'amber' rating, reflecting the existing travel to work patterns within and in surrounding output areas which any new development would be expected to share similar characteristics to.

Figure 4-33: Cluster Group 6 – Metric 1 – Drive to work (%)
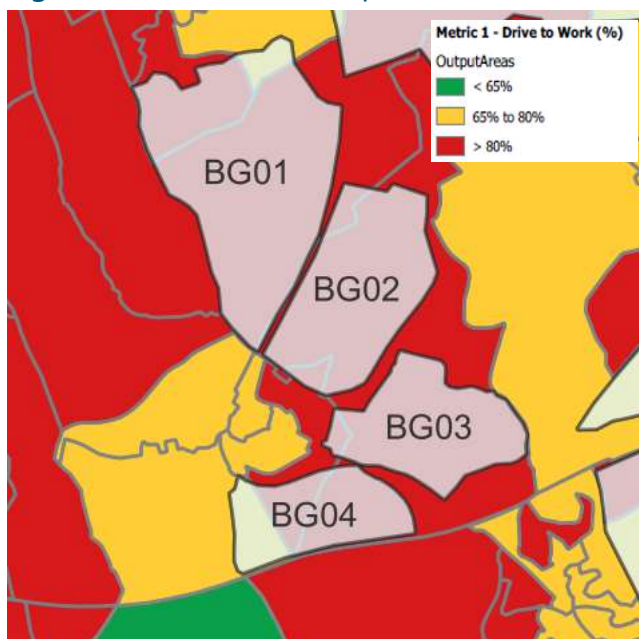
Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

4.131 Bus and rail coverage exist for all sub-clusters within cluster group 6, giving it a 'green' rating overall.

4.132 Sub-cluster BG04 has been designated an 'amber' rating given the impact of the rail line which creates severance from existing communities and key transport connections.

Figure 4-34: Cluster Group 6 – Metric 2.1
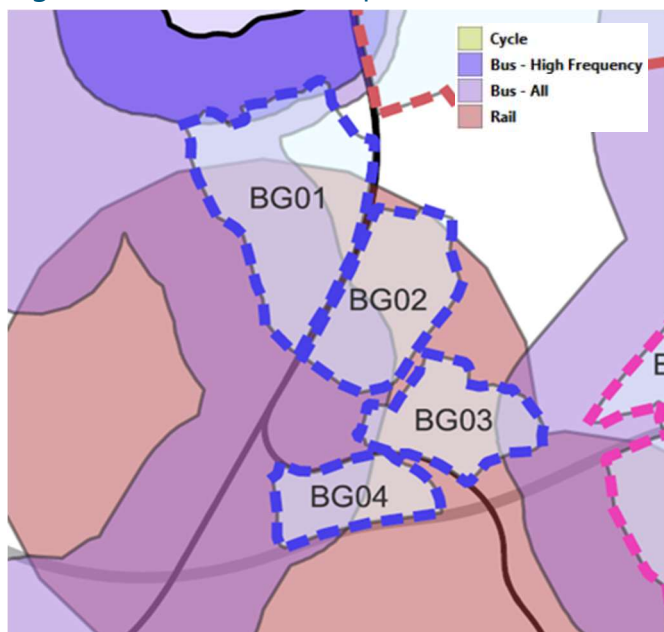
Metric 3: Access to jobs by public transport

4.133 Figure 4-35, Figure 4-36, Figure 4-37 and Figure 4-38 show the mapped outputs of the analysis for each sub-cluster for this metric, with Table 4-41 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.134 All sub-clusters have over 40,000 jobs accessible by public transport within 45 minutes, resulting in them receiving an 'amber' rating.

Table 4-41: Cluster Group 6 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
BG01	53,734	Amber
BG02	42,734	Amber
BG03	42,733	Amber
BG04	48,952	Amber
Average - Cluster Group 6	47,038	Amber

Key
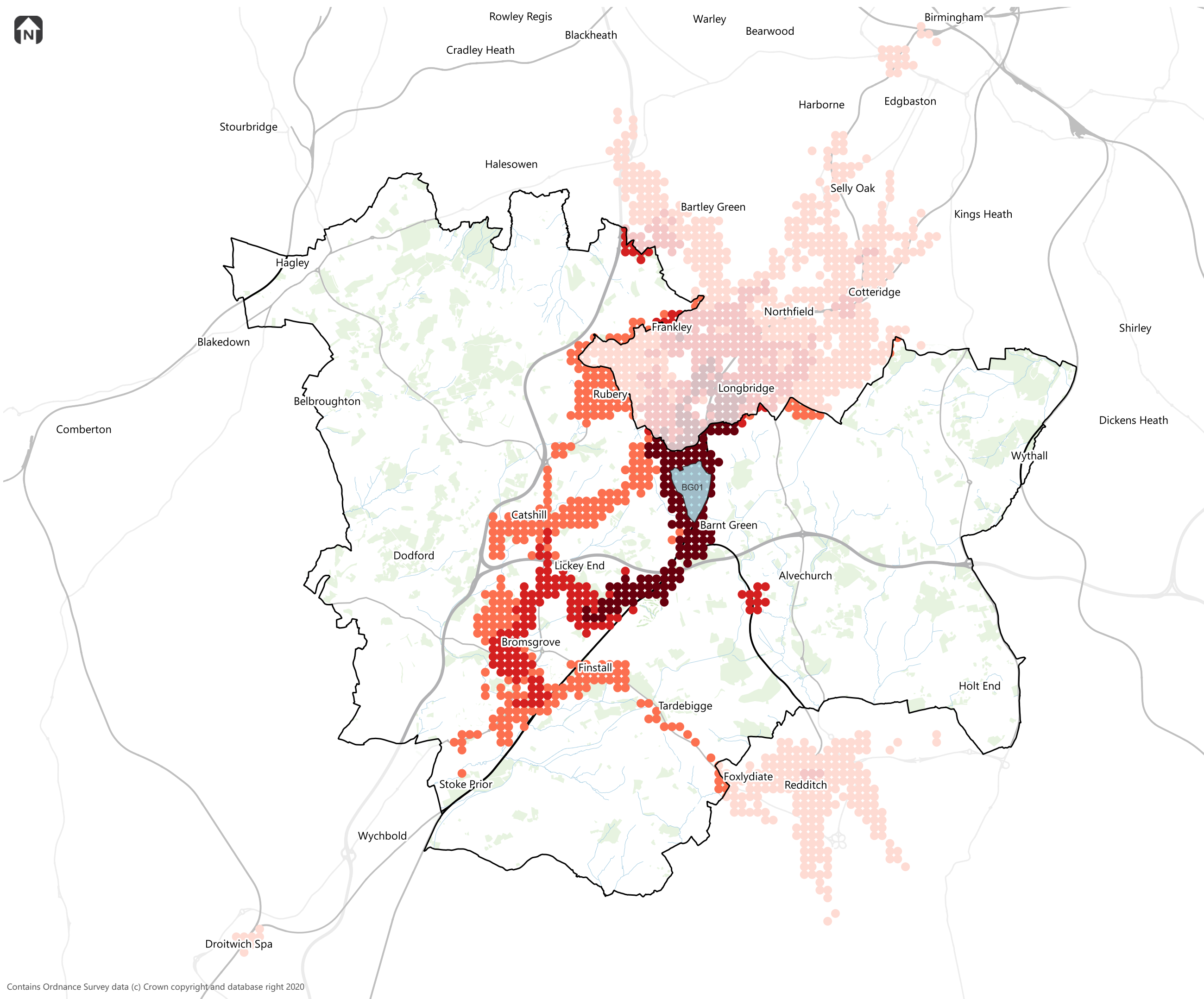
- Bromsgrove District

Stage 3b - Sites and Clusters
- Cluster6 - BG01

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility
Cluster06_PT_FROM_BG01
- 1 - 15 minutes
- 15 - 30 minutes
- 30 - 45 minutes

TransportNetwork
- Railway Line
- Strategic Road Network
- Major Road Network

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Key
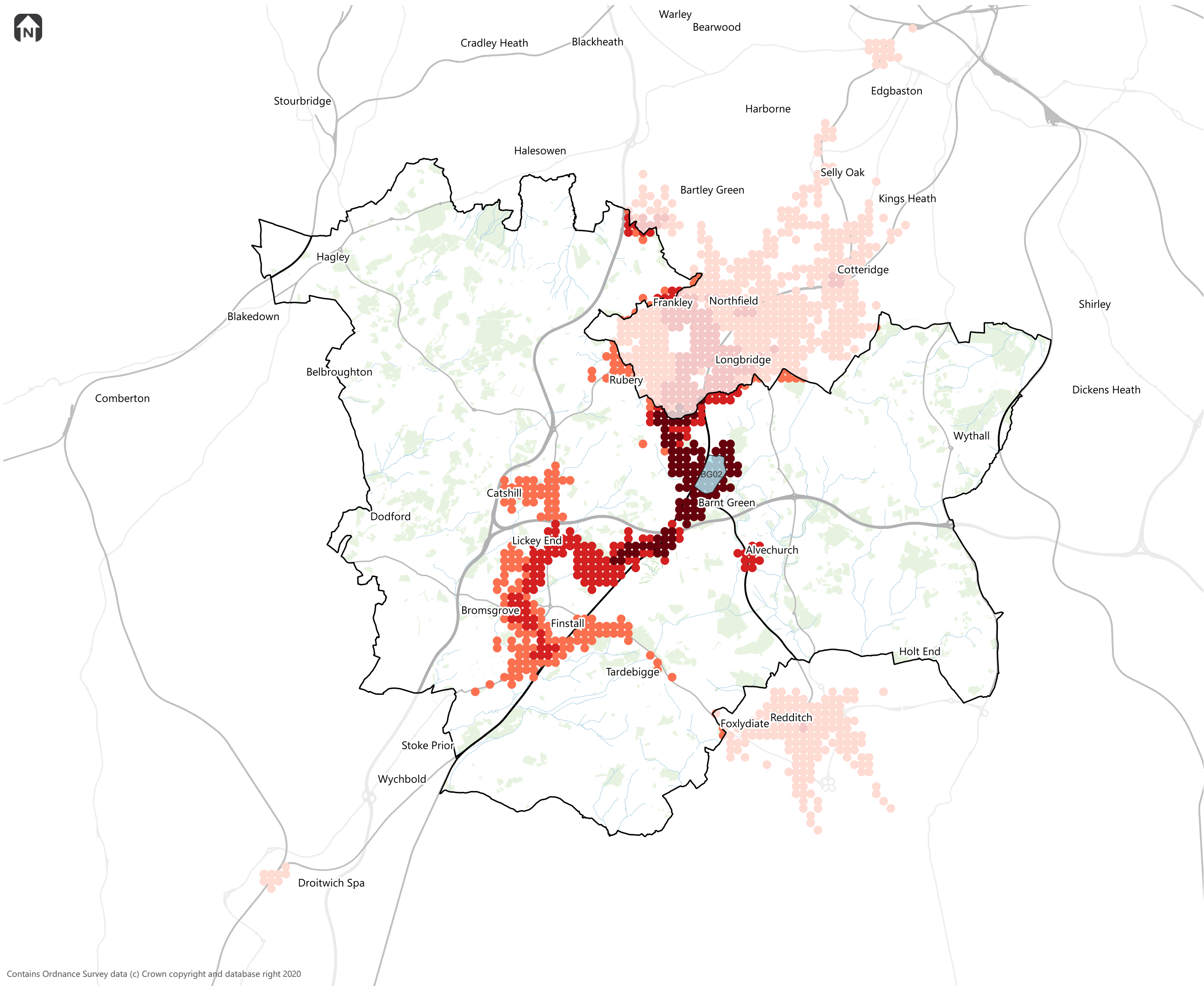
- ▭ Bromsgrove District

Stage 3b - Sites and Clusters
- ▭ Cluster6 - BG02

Metric 3.1 - Number of Jobs (PT)

Cluster06_PT_FROM_BG02
- ● 1 - 15 minutes
- ● 15 - 30 minutes
- ● 30 - 45 minutes

TransportNetwork
- ── Railway Line
- ── Strategic Road Network
- ── Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
BG02– Metric 3.1 – Public transport access to jobs

Revision
A

Project number
3578

Figure number
Figure 4-36

Date
April 2022

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Key

☐ Bromsgrove District

Stage 3b - Sites and Clusters
☐ Cluster6 - BG03

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster06_PT_FROM_BG03

● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
—— Railway Line
—— Strategic Road Network
—— Major Road Network

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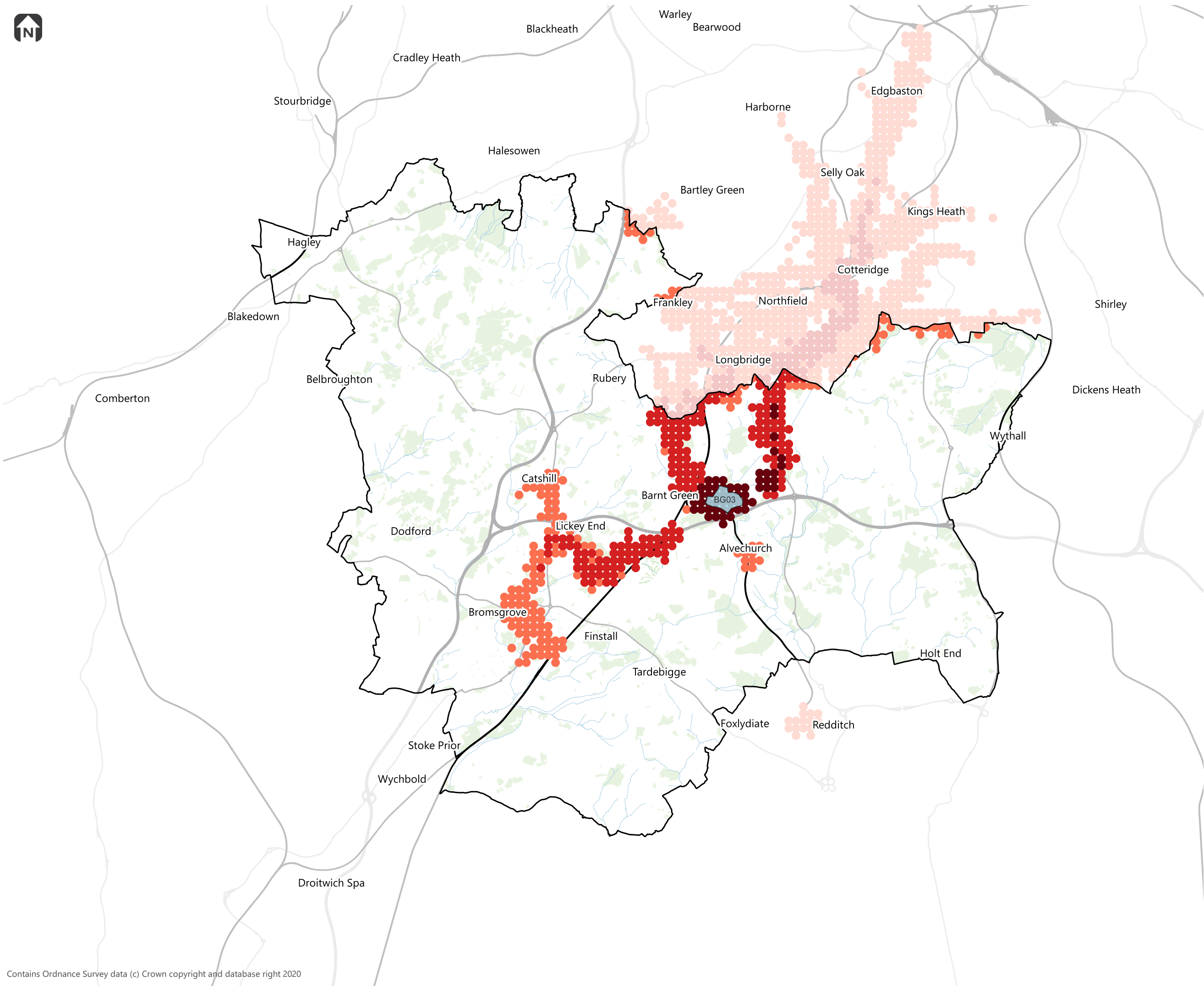
Project
Bromsgrove DPR Transport Assessment
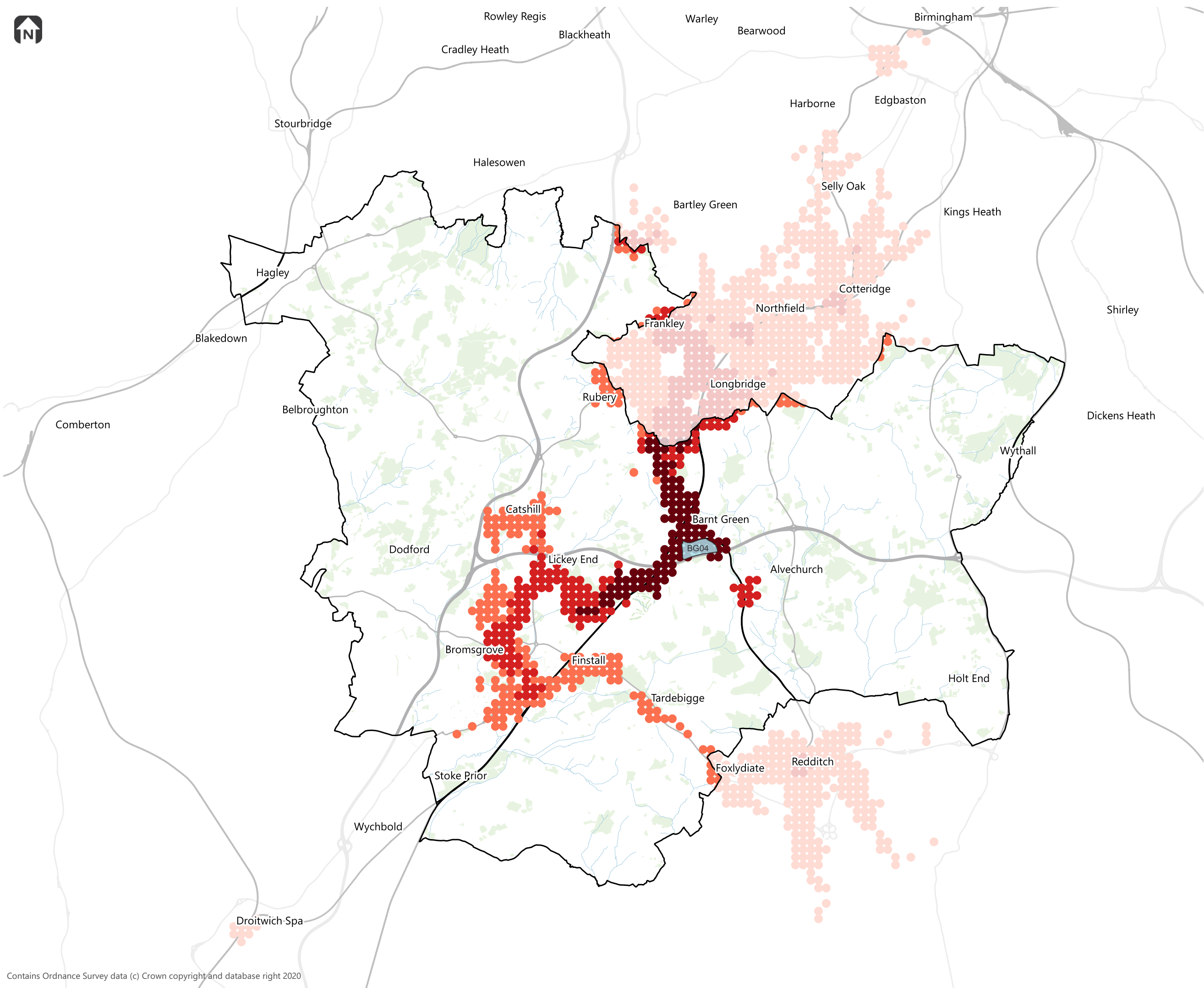
Figure title
BG03– Metric 3.1 – Public transport access to jobs

Revision
A

Project number
3578

Figure number
Figure 4-37

Date
April 2022

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Rowley Regis
Warley
Birmingham
Blackheath
Bearwood
Cradley Heath
Stourbridge
Harborne
Edgbaston
Halesowen
Selly Oak
Bartley Green
Kings Heath
Hagley
Cotteridge
Northfield
Shirley
Blakedown
Frankley
Rubery
Longbridge
Comberton
Dickens Heath
Belbroughton
Wythall
Catshill
Barnt Green
Dodford
BG04
Alvechurch
Lickey End
Holt End
Bromsgrove
Finstall
Tardebigge
Stoke Prior
Foxlydiate
Redditch
Wychbold
Droitwich Spa

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	Prepared	Reviewed	Date
	JP	SN	April 22

Key

☐ Bromsgrove District

Stage 3b - Sites and Clusters
☐ Cluster6 - BG04

Metric 3.1 - Number of Jobs (PT)
Journey Time Accessibility

Cluster06_PT_FROM_BG04

● 1 - 15 minutes
● 15 - 30 minutes
● 30 - 45 minutes

TransportNetwork
— Railway Line
— Strategic Road Network
— Major Road Network

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Client
Bromsgrove District Council

Project
Bromsgrove DPR Transport Assessment

Figure title
BG04 – Metric 3.1 – Public transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-38	April 2022

Metric 4: Access to healthcare

4.135 As shown in Figure 4-32 there is one healthcare facility within Barnt Green. Regarding public transport access, cluster group 6 receives a 'green' rating overall, with BG01, BG02 and BG04 also 'green', achieving an average journey time of less than 15 minutes.

4.136 Sub-cluster BG03 has noticeably poorer access with all but one point within the sub-cluster having an average journey time of 30 minutes, reflecting the limitations of public transport provision in that area.

Table 4-42: Cluster Group 6 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
BG01	10	Green
BG02	6	Green
BG03	30	Red
BG04	5	Green
Average - Cluster Group 6	10	Green

4.137 The nearest hospital with an A&E department is the Queen Elizabeth Hospital in Selly Oak. The average journey time for the overall group cluster is 58 minutes, representing an 'amber' score. However, it is important to note that for BG02 and BG04 the average journey time is anything greater than 60 minutes reflecting the poor public transport access.

Table 4-43: Cluster Group 6 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
BG01	58	Amber
BG02	> 60	Red
BG03	58	Amber
BG04	> 60	Red
Average - Cluster Group 6	58	Amber

4.138 For all sub-clusters the nearest hospital regarding driving access is Alexandra Hospital. For BG01 the estimated journey time is over 20 minutes giving it a 'red' rating (with an almost identical driving time to the QE Hospital from this sub-cluster), whilst BG02, BG03 and BG04 have an average time just under the threshold thus receiving an 'amber' rating. Overall, the cluster group receives a 'red' rating.

4.139 Compared to public transport access, however, journey time via driving is considerably shorter, proving greater incentive for people to travel to work or routine appointments through less sustainable modes.

Table 4-44: Cluster Group 6 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
BG01	22	Red
BG02	19	Amber
BG03	19	Amber
BG04	19	Amber
Average - Cluster Group 6	21	Red

Metric 5: Access to education

4.140 As shown in Figure 4-32 there is one educational facility within Barnt Green (St Andrew's CE First School) and several other surrounding the sub-clusters. The average journey time for sub-clusters BG01, BG02, BG04 and the overall group cluster is under 10 minutes and therefore they receive a 'green' rating.

4.141 Like access to healthcare facilities in Barnt Green, sub-cluster BG03 has significantly poorer public transport access, with an average journey time of 20 minutes, thus receiving a 'red' rating.

Table 4-45: Cluster Group 6 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
BG01	9	Green
BG02	5	Green
BG03	20	Red
BG04	8	Green
Average - Cluster Group 6	9	Green

4.142 For public transport access to secondary education the average journey time for the overall cluster group is 22 minutes, giving it an 'amber' rating. For BG03 the closest facility by public transport is Cadbury Sixth Form College, whilst for the other sub-clusters it is Bournville College of Further Education. Only BG01 has a 'green' rating, whereas BG03 and BG04 have 'red' scores.

Table 4-46: Cluster Group 6 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
BG01	19	Green
BG02	22	Amber
BG03	26	Red
BG04	28	Red
Average - Cluster Group 6	22	Amber

Metric 6: Proximity to planned local transport improvements

4.143 At the time of the study, there were no planned sustainable transport improvements identified within the vicinity of cluster group 6.

4.144 This results in a 'red' rating for the cluster group, as well as for all sub-clusters.

Metric 7: Access to district centres

4.145 Both sub-clusters BG03 and BG04 can access Bromsgrove and Longbridge in under 40 minutes and for BG01 and BG02 the closest centre is Longbridge.

4.146 BG01 is the only sub-cluster with a 'green' rating, BG02 and BG04 have been given an 'amber' rating and BG03 a 'red'. The overall average cluster group journey time is 24 minutes and therefore has been scored as 'amber'.

Table 4-47: Cluster Group 6 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
BG01	19	Green
BG02	22	Amber
BG03	36	Red
BG04	28	Amber
Average - Cluster Group 6	24	Amber

Summary and recommendations

4.147 Table 4-48 shows a summary of the RAG rating outputs where 2 is 'green', 1 is 'amber' and 0 is a 'red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-39 shows the number of each category of rating for each cluster.

4.148 Overall, the metrics assessed indicate an average level of suitability with regard to sustainable transport provision, with the cluster group scoring 55%.

4.149 There was a large performance range between the sub-clusters with BG01 scoring the highest (55%) and BG03 significantly the lowest at 25%. BG03 has 6 'red' ratings with only 1 'green'. This indicates that more intervention would be necessary to improve the sustainable transport provision and outcomes at BG03, particularly targeting public transport improvement.

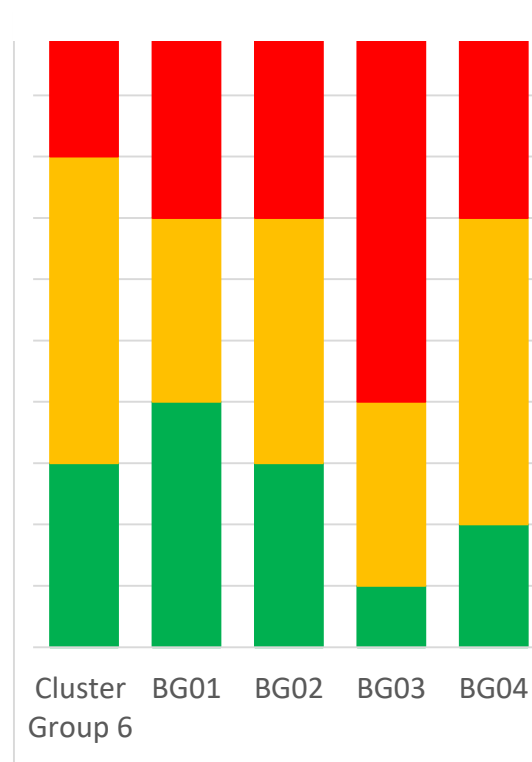### Figure 4-39: Cluster Group 6 Results

Table 4-48: Cluster Group 6 – Rating summary

		Cluster Group 6									
		6 Barnt Green		Individual Clusters							
	Metric			BG01		BG02		BG03		BG04	
% DRIVE TO WORK	1.1	1	77%	0	-	0	-	0	-	1	-
	1.2	-									
TRANSPORT SERVICES	2.1	2	-	1	-	2	-	2	-	1	-
LABOUR MARKET	3.1	1	47,038	1	53,734	1	42,734	1	42,733	1	48,952
	3.2	-									
HEATHCARE	4.1	2	10	2	10	2	6	0	30	2	5
	4.2	1	58	1	58	0	-	1	58	0	-
	4.3	0	21	0	22	1	19	1	19	1	19
EDUCATION	5.1	2	9	2	9	2	5	0	20	2	8
	5.2	1	22	2	19	1	22	0	26	0	28
PLANNED IMPROVEMENTS	6.1	0	0	0	-	0	-	0	-	0	-
DISTRICT CENTRES	7.1	1	24	2	19	1	22	0	36	1	28