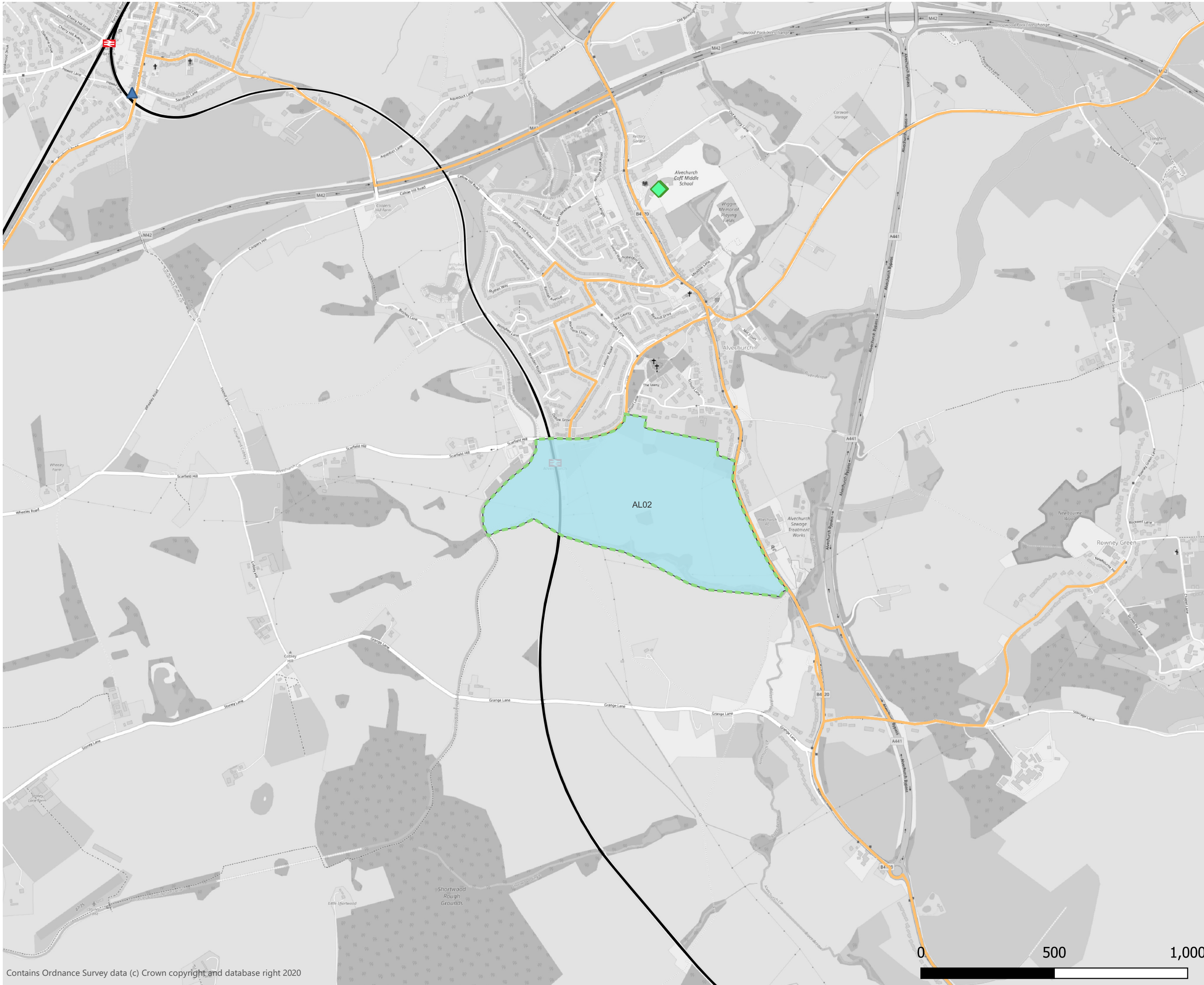


## Cluster Group 7: Alvechurch South

- 4.150 Cluster Group 7 presents opportunity for growth south of Alvechurch. It comprises a single area, predominantly covering greenfield, with the existing residential area to the north, as shown in Figure 4-40.
- 4.151 Although at smaller scale, this cluster has been separated out to enable analysis to distinguish between the opportunities facing the rail station and surrounding area to the south of Alvechurch, in comparison to areas north of Alvechurch (Cluster Group 8). As such, **AL02** encompasses the railway line and Alvechurch rail station, which could pose challenges to connectivity potential depending on where growth was located within it. However, it does offer potential for both local and long-distance connectivity.
- 4.152 There is no existing healthcare, nor secondary education provision within Alvechurch. This could signal the need for additional secondary school provision to be delivered should this cluster come forward for development at its scaled growth. A middle school is situated to the north of the village.
- 4.153 There is some bus route provision close to the cluster, but this is significantly limited in service frequency, whilst there is also no cycle route provision close by. If some or all of this cluster was to come forward improvements in these would form part of the vision.



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Key

Cluster 7

All Education

All Healthcare

Rail stations

railway line

Bus routes service frequency

< 2 buses per hour

OSM Standard



a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport  
Assessment

Figure title  
Cluster Group 7

Revision	Project number
A	3578

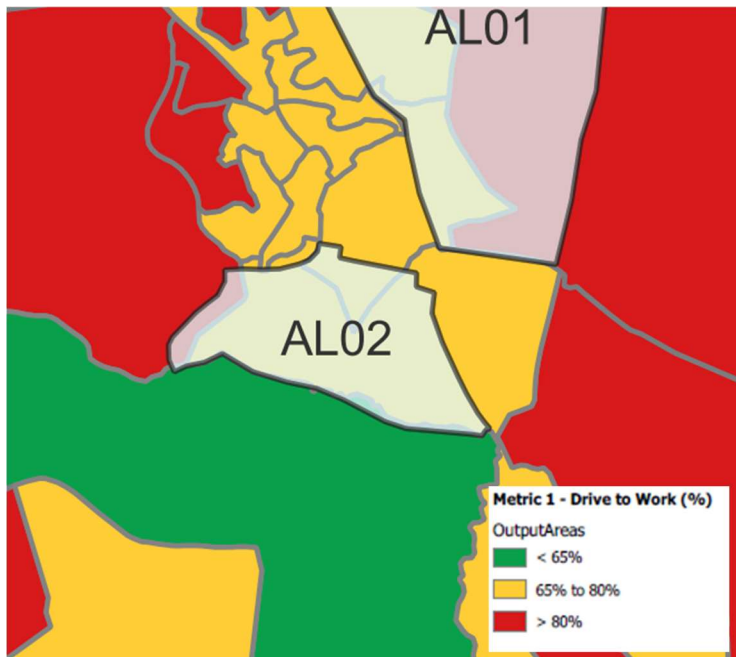
Figure number	Date
Figure 4-40	April 2022



### Metric 1: Average commuter travel mode split

- 4.154 The average drive to work proportion of output areas considered to represent cluster group 7 is 76% and attracts an 'amber' rating within the framework. Reviewing the mapping in Figure 4-41 much of the cluster group area represents this.

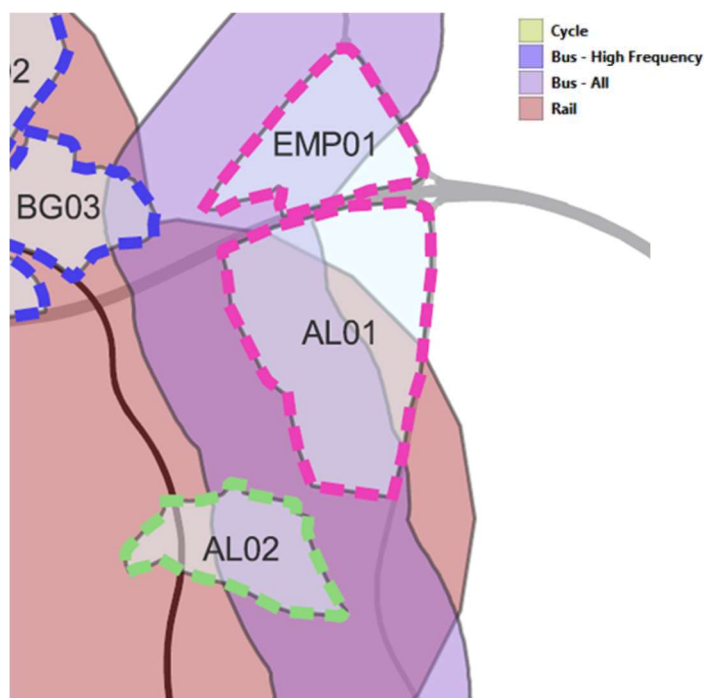
Figure 4-41: Cluster Group 7 – Metric 1 – Drive to work (%)



### Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

- 4.155 Cluster group 7 encompasses Alvechurch rail station and is in close proximity to bus provision (shown in Figure 4-42 where cluster group 7 is outlined in green). This is reflective of the 'green' rating given against this metric.
- 4.156 Bus frequency enhancements have the potential to improve this cluster group further. There is also opportunity for bus route extensions and active mode improvements to improve connectivity both locally and to the rail station.

Figure 4-42: Cluster Group 7 – Metric 2.1



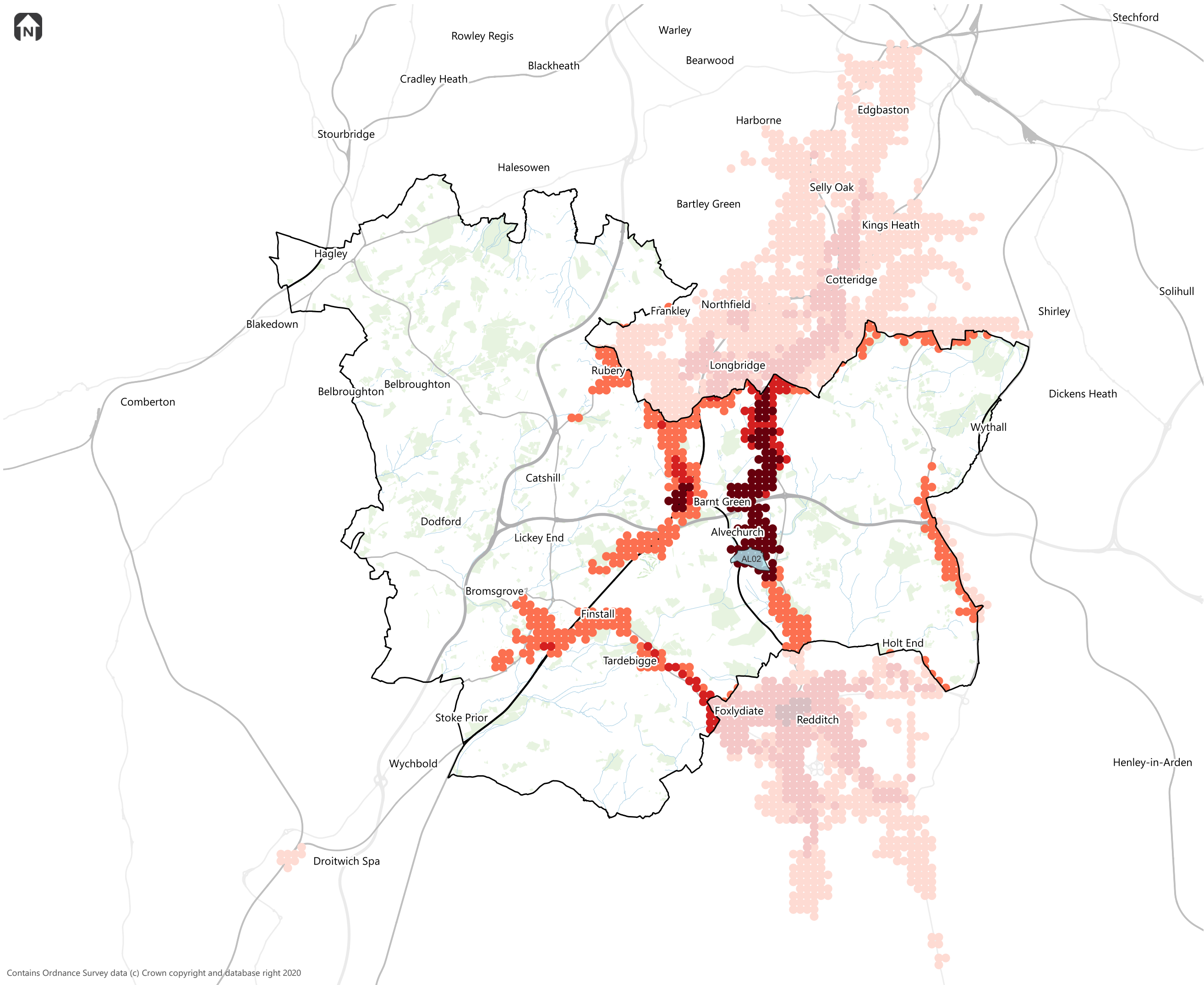
### Metric 3: Access to jobs by public transport

4.157 Figure 4-43 show the mapped outputs of the accessibility analysis for the cluster group with Table 4-49 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.


4.158 There is good access to employment opportunities within towns located on the Redditch – Birmingham railway line due to the location of Alvechurch rail station. No more than 45-minute public transport journey times from this cluster group extend north towards Longbridge, Selly Oak (Birmingham University and Queen Elizabeth hospital), and south of Birmingham city centre. Employment opportunities within Redditch town centre itself are also in reach of AL02. Enhancements to bus provision to improve connectivity and from rail stations could provide access to more employment opportunity.

Table 4-49: Cluster Group 7 – Metric 3.1 – Number of jobs accessible by public transport


Sub-cluster	Number of jobs	RAG Rating
AL02	71,000	Amber
Average - Cluster Group 7	71,000	Amber



Key

 Bromsgrove District




**Stage 3b - Sites and Clusters**

 Cluster7 - AL02




**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster07\_PT\_FROM\_AL02

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

**TransportNetwork**

-  Railway Line
-  Strategic Road Network
-  Major Road Network



Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
AL02 – Metric 3.1 – Public transport access to jobs

Revision  
A

Project number  
3578

Figure number  
Figure 4-43

Date  
April 2022



### Metric 4: Access to healthcare

4.159 As shown in Figure 4-40, there are limited healthcare facilities in Alvechurch, and as such longer distances are required for travel. This reflects the lengthier journey times and the cluster groups 'red' RAG rating. This is notwithstanding AL02s close positioning to rail and bus provision.

Table 4-50: Cluster Group 7 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
AL02	26	Red
Average - Cluster Group 7	26	Red

4.160 The cluster group performs slightly better comparative to other cluster groups for its average journey time access to A&E and achieves an 'amber' rating, with an average 47-minute journey time.

4.161 Figure 3-8 shows journey times are varied throughout AL02 and reflects the cluster group's 'amber' rating. Quicker journey times are available within areas in close proximity to Alvechurch rail station to access the Alexandra Hospital in Redditch (no longer than a 45-minute journey). Further TRACC analysis indicates areas in the east of the cluster group are more closely located with the QE Hospital in journey time despite being located further away. Improvements to rail station connectivity through cluster group 7 with new active mode routes would enhance the permeability of AL02 and potentially reduce journey times across the cluster.

Table 4-51: Cluster Group 7 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
AL02	47	Amber
Average - Cluster Group 7	47	Amber

4.162 The comparative average drive time to the Alexandra Hospital is presented in Table 4-52. These show the discrepancy between public transport and driving, with average journey times by public transport three times longer than the estimated car journey. The cluster group receives an 'amber' rating, but average journey time is on the green-amber threshold for this metric.

Table 4-52: Cluster Group 7 – Metric 4.3 – Driving access to A&amp;E

Sub-cluster	Estimated journey time	RAG Rating
AL02	15	Amber
Average - Cluster Group 7	15	Amber

### Metric 5: Access to education

- 4.163 Cluster group 7 is rated 'red' against its public transport access to education with an average journey time of 16-minutes. While this isn't necessarily considered poor in itself, comparatively this represents a poorer situation than presented by other spatial areas considered in this study.
- 4.164 Bus services operate at a low frequency along the northern and eastern boundaries of this cluster group to provide current connectivity to Alvechurch CofE Middle School. It is in these areas within AL02 that therefore offer the best journey times to education provision. However, due to the close proximity of the schools to this cluster group, improvements to cycle and walk infrastructure could encourage trips to be made by these modes.

Table 4-53: Cluster Group 7 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
AL02	16	Red
Average - Cluster Group 7	16	Red

- 4.165 The nearest further / higher provision by journey time is Heart of Worcestershire College, outside of Bromsgrove District in Redditch, and the cluster group receives an 'amber' rating. This is reflective of the accessibility the school has by rail due to its position close to Redditch rail station.

Table 4-54: Cluster Group 7 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
AL02	21	Amber
Average - Cluster Group 7	21	Amber

### Metric 6: Proximity to planned local transport improvements

- 4.166 The only planned sustainable transport scheme within the vicinity of cluster group 7 identified at the time of the study is the Alvechurch Rail Station Enhancement Scheme. This results in an 'amber' rating for the cluster.

### Metric 7: Access to district centres

- 4.167 Longbridge is the closest identified district centre by journey time and is an average of 33-minutes by public transport from the cluster group. However, Redditch is the closest as the crow flies (approximately one mile closer) with the cluster group therefore rated 'Red' within the framework.
- 4.168 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 4-55: Cluster Group 7 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
AL02	33	Red
Average - Cluster Group 7	33	Red

### Summary and recommendations

- 4.169 Table 4-56 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 4-44 shows the number of each category of rating for this cluster group.
- 4.170 Overall, the metrics assessed indicate an average level of suitability of these areas in sustainable transport terms with the cluster group scoring 40%. While the cluster group benefits from its close proximity to existing sustainable transport provision, AL02 is limited in closely located healthcare and education provision.
- 4.171 Any development of the area could include additional facilities within a masterplan for the cluster group. Consideration should be made to the railway line, as any new facilities suggested on the western side may not improve overall accessibility and continue to provide constraint to journey times.
- 4.172 New active mode routes for internal connectivity to Alvechurch rail station would also be beneficial to the cluster's connectivity.

Figure 4-44: Cluster Group 7 Results

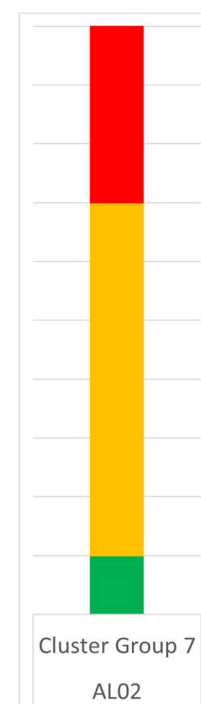


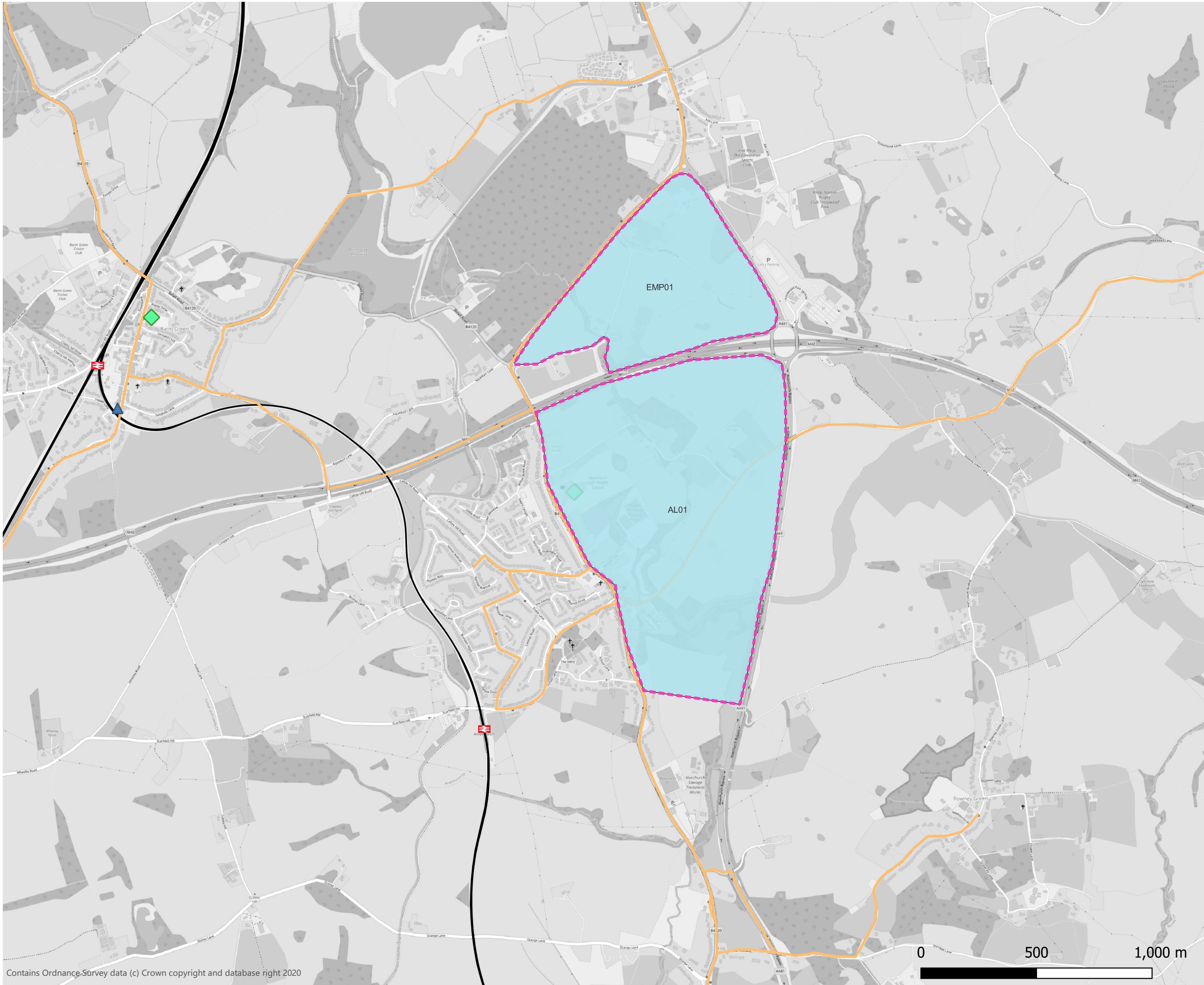


Table 4-56: Cluster Group 7 – Rating summary

		Cluster Group 7	
		Sub-cluster AL02 Alvechurch South	
% DRIVE TO WORK	1.1	1	76%
	1.2	-	
TRANSPORT SERVICES	2.1	2	-
LABOUR MARKET	3.1	1	71,000
	3.2	-	
HEALTHCARE	4.1	0	26
	4.2	1	47
	4.3	1	15
EDUCATION	5.1	0	16
	5.2	1	20.8
PLANNED IMPROVEMENTS	6.1	1	1
DISTRICT CENTRES	7.1	0	32.7

## Cluster Group 8: Alvechurch North

- 4.173 Cluster Group 8 comprises two areas to the north of Alvechurch. Each with different potential land uses for development, the two cluster sites, as shown in Figure 4-45, are situated:
- **AL01** – south of the M42 closely located to junction 2, covering greenfield land east of the village centre. This cluster encompasses existing east-west road links.
  - **EMP01** – further north, segregated from **AL01** by the M42 and closely located to Junction 2. This proximity to SRN access presents employment opportunities.
- 4.174 The residential cluster (AL01) has been paired with the employment site (EMP01) due to their proximity to each other and connected relationships with the SRN. They have been separated from the Alvechurch South cluster to allow for distinction between their existing transport connections.
- 4.175 There is no existing healthcare, nor secondary education provision within Alvechurch which could limit the opportunity for residential development. A middle school is situated in the north of the village.
- 4.176 Whilst there are a number of routes with bus services operating through and around this cluster group, they are significantly limited in their service frequency. There is also no cycle route provision and should some or all of these clusters come forward, improvements in these networks would form part of the vision.



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Prepared	Reviewed	Date
JP	SN	April 22

Key

Cluster 8

All Education

All Healthcare

Rail stations

railway line

Bus routes service frequency

< 2 buses per hour

OSM Standard

  
a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport  
Assessment

Figure title  
Cluster Group 8

Revision	Project number
A	3578

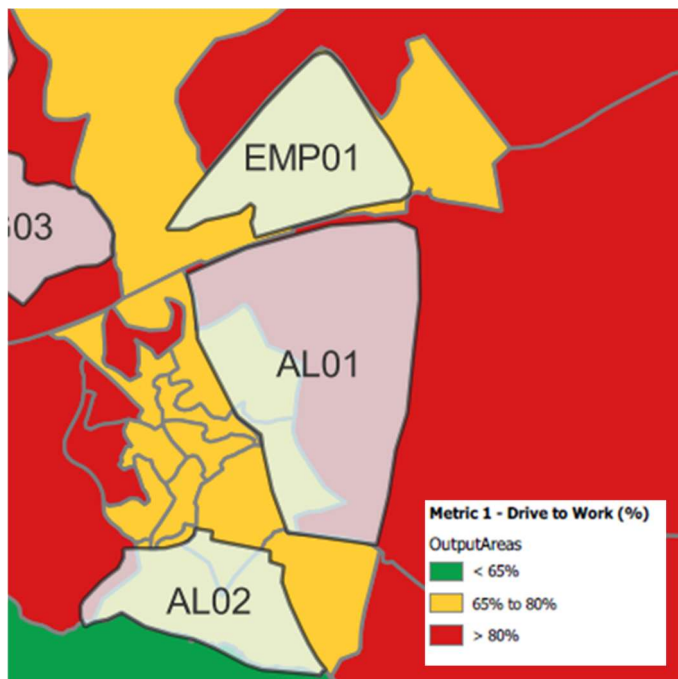
Figure number	Date
Figure 4-45	April 2022



### Metric 1: Average commuter travel mode split

- 4.177 The average drive to work proportion of output areas considered to represent sub-cluster AL01 is 76% and attracts an 'amber' rating within the framework. Reviewing the mapping in Figure 4-46, the area towards the western edge of the cluster area represents this, nearer to the rail station.
- 4.178 The average car mode split within workplace zones across sub-cluster EMP01 is 68% and is rated 'amber' against metric 1.2.

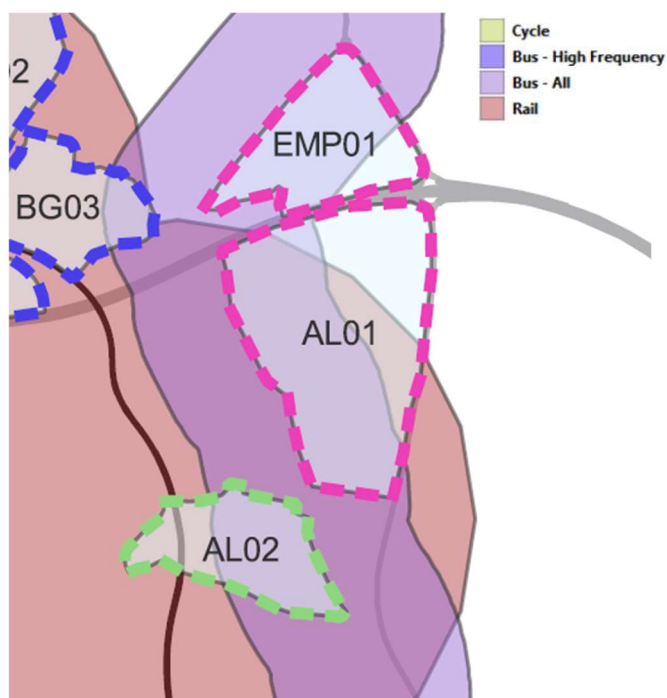
Figure 4-46: Cluster Group 8 – Metric 1 – Drive to work (%)



### Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

- 4.179 Cluster AL01 has bus and rail coverage as shown in Figure 4-47. This results in a 'green' rating for this sub-cluster. There is potential to provide new active mode routes to extend throughout AL01 connecting to the railway station to enhance connectivity across the area.
- 4.180 However, there is only single mode sustainable transport provision that currently exists in close proximity to sub-cluster EMP01 and attracts an 'amber' rating. There is potential to enhance frequency of the existing bus provision and deliver new cycle connections to improve connectivity locally and to public transport. It is noted that should this employment sub-cluster be delivered in conjunction with AL01, there may be a severing impact on communities due to the positioning of the M42 through this cluster group.

Figure 4-47: Cluster Group 8 – Metric 2.1



### Metric 3: Access to jobs by public transport

4.181 Sub-cluster AL01 provides access to 54,598 jobs predominantly north of the sub-cluster area within the conurbation as shown in Figure 4-48. Journey times of typically between 30 and 45 minutes extend to areas such as Longbridge and parts of Selly Oak, but does not fully encompass key employment sites such as Birmingham University and the Queen Elizabeth Hospital. AL01 also offers access to more local opportunities in Barnt Green, as well as Redditch town centre.

Table 4-57: Cluster Group 8 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
AL01	54,598	Amber
Average - Cluster Group 8 - Residential	54,598	Amber

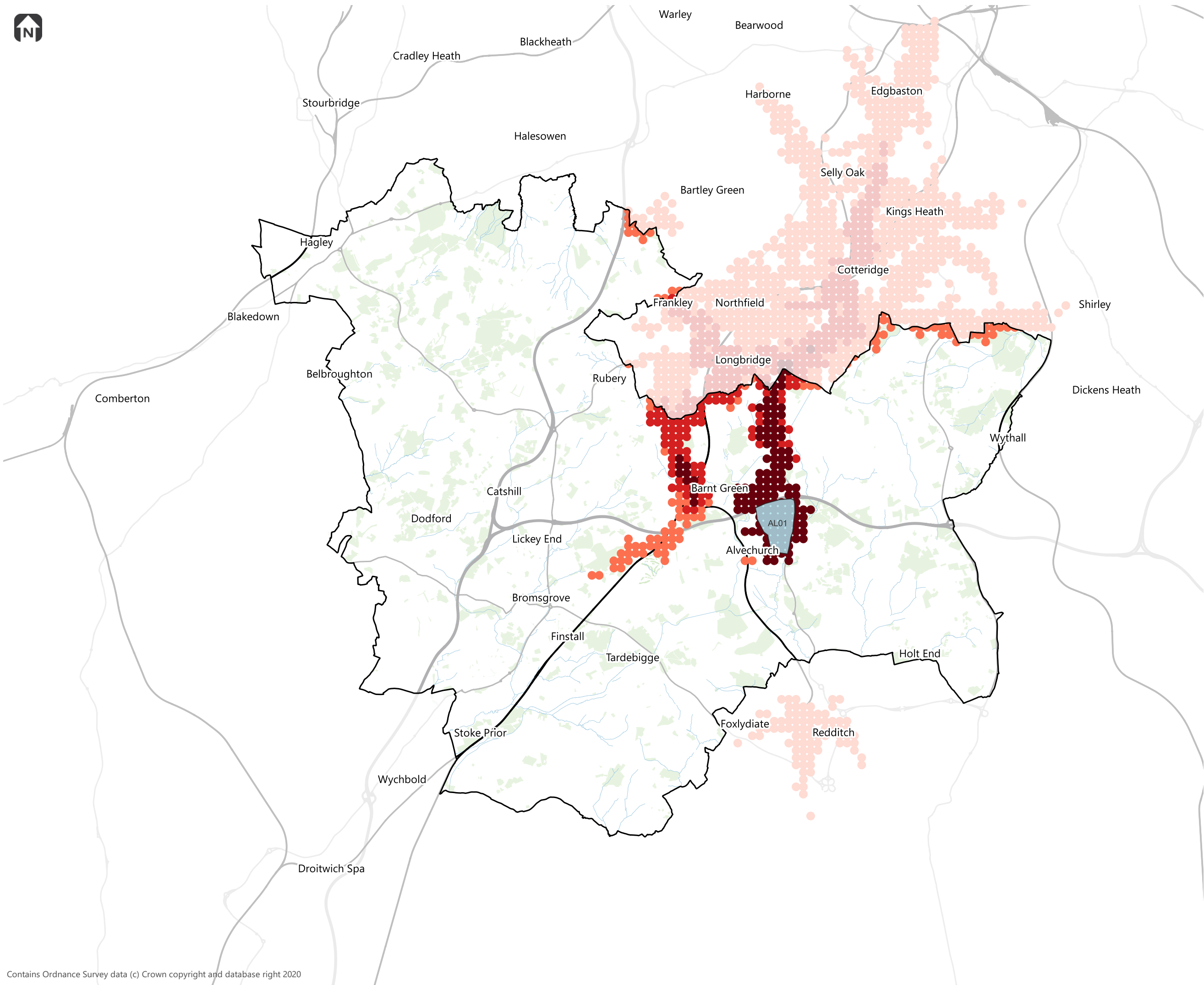
### Metric 3: Access to potential workforce by public transport

- 4.182 Sub-cluster EMP01 has access to a potential workforce of less than 25,000 within a 45-minute public transport journey time and rates 'Red' against Metric 3.2, as summarised in Table 4-58.
- 4.183 A 45-minute journey to EMP01 is constrained to residential areas of Wythall and Dickens Heath, north of the sub-cluster, and along the A441 corridor into areas of Redditch, as shown in Figure 4-49
- 4.184 Enhancements to bus services between this sub-cluster and the rail station could improve journey times to areas north of EMP01 and into existing built-up areas of the conurbation.

Table 4-58: Cluster Group 8 – Metric 3.2 – Number of potential workforce accessible by public transport

Sub-cluster	Number of workers	RAG Rating
EMP01	21,427	Red
Average - Cluster Group 8 - Employment	21,427	Red





Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster8 - AL01

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster08PT\_FROM\_AL01

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

**TransportNetwork**

- Railway Line
- Strategic Road Network
- Major Road Network



Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

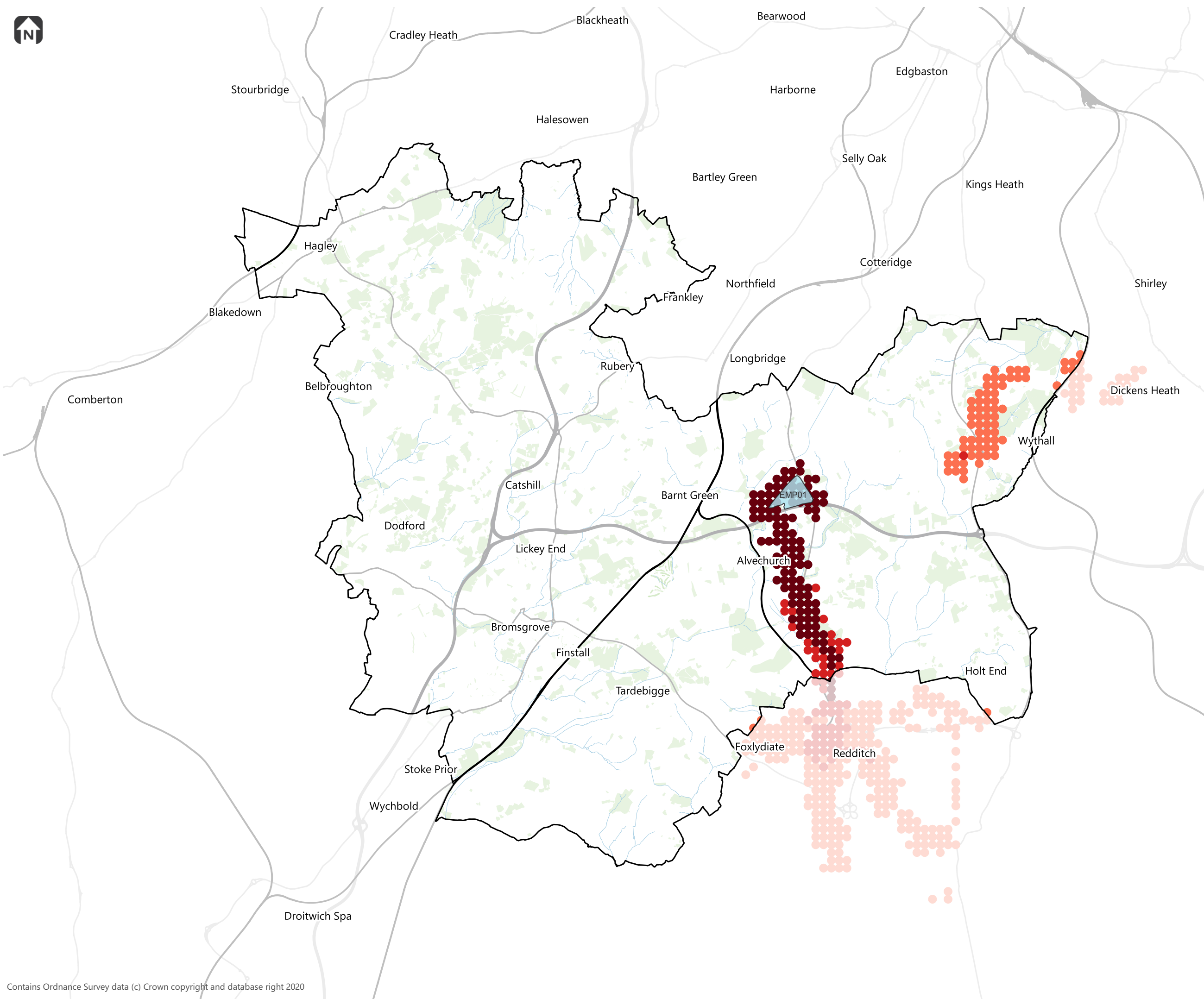
Figure title  
AL01 – Metric 3.1 – Public transport access to jobs

Revision  
A

Project number  
3578

Figure number  
Figure 4-48

Date  
April 2022



Prepared  
JP

Reviewed  
SN

Date  
April 22

Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster8 - EMP01

**Journey Time Accessibility**

**Metric 3.2 - Number of Potential Workforce (PT)**

Cluster08\_PT\_TO\_EMP01

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  
EMP01 – Metric 3.2 – Potential workforce accessible by public transport

Revision  
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Project number  
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Figure number  
Figure 4-49

Date  
April 2022

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#### Metric 4: Access to healthcare

- 4.185 As shown in Figure 4-45, there are limited healthcare facilities in areas around residential sub-cluster AL01, with nearest provision located in Barnt Green. This is highlighted in the higher journey times and resulting 'Amber' rating for this sub-cluster.
- 4.186 Table 4-59 shows in comparison, healthcare provision is not currently accessible within a 60-minute public transport journey of employment sub-cluster EMP01
- 4.187 Depending on the scale of development and the utilisation of existing healthcare in the area, delivering additional facilities within new developments to the north of Alvechurch could support more internalised trips within a new development. Shorter trips are more easily made by sustainable modes.

Table 4-59: Cluster Group 8 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
AL01	21	Amber
Average - Cluster Group 8 – Residential	21	Amber
EMP01	-	Red
Average - Cluster Group 8 – Employment	-	Red

- 4.188 The quickest Hospital to access using public transport with an A&E department is the QE Hospital in Selly Oak, with average journey times from each sub-cluster within this group highlighted in Table 4-68. Both sub-clusters sit close to the amber-red threshold boundary of 60 minutes.

Table 4-60: Cluster Group 8 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
AL01	57	Amber
Average - Cluster Group 8 – Residential	57	Amber
EMP01	54	Amber
Average - Cluster Group 8 – Employment	54	Amber

4.189 Comparative drive times to the Alexandra Hospital are presented in Table 4-61. These show the discrepancy between public transport and driving access.

Table 4-61: Cluster Group 8 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
AL01	16	Amber
Average - Cluster Group 8 – Residential	16	Amber
EMP01	16	Amber
Average - Cluster Group 8 – Employment	16	Amber

#### Metric 5: Access to education

4.190 As shown in Figure 4-45, residential sub-cluster AL01 encompasses Alvechurch CofE Middle School and reflects the 'green' rating achieved against this metric. New active mode routes through the site could encourage journeys to be made by cycle or by foot.

Table 4-62: Cluster Group 8 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
AL01	8	Green
Average - Cluster Group 8 - Residential	8	Green

4.191 While there is no secondary / post-16 education facilities in Alvechurch, public transport connections link to schools / colleges in the conurbation and Redditch with an average of a 20.9-minute journey from the sub-cluster location. This results in an 'amber' rating for metric 5.2 as shown in

4.192 Table 4-63. This result sits close to the green-amber threshold, which for this metric is 20 minutes, suggesting public transport improvements could be made to enhance journey times (for example Green Bus operated services 884 and 885).

4.193 It is noted these journey time results represent access opportunities along the western side of the site, and any homes delivered further east may not have similar connectivity without frequency enhancements to existing bus services and/or additional bus routes.

Table 4-63: Cluster Group 8 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
AL01	20.9	Amber
Average - Cluster Group 8 - Residential	20.9	Amber

#### Metric 6: Proximity to planned local transport improvements

- 4.194 There are no planned sustainable transport improvements within the vicinity of cluster group 8, that were identified at the time of the study. Therefore, both sub-clusters AL01 and EMP02 receive 'red' RAG ratings.

#### Metric 7: Access to district centres

- 4.195 Longbridge is the closest identified district centre by journey time and as the crow flies from sub-cluster EMP01 and is an average of 36.3-minutes by public transport. The low frequency bus provision and relative distance to rail access reflects the 'red' rating.
- 4.196 Despite AL01 being situated further south, at a greater distance from Longbridge comparative to EMP01, this sub-cluster offers quicker average journey times as shown in Table 4-64. This is likely due to the rail access AL01 offers. Average journey times to Longbridge and Redditch could be improved by enhancements to bus services connecting the sub-cluster to the rail station.
- 4.197 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 4-64: Cluster Group 8 – Metric 7.1 - Public transport access to district centres

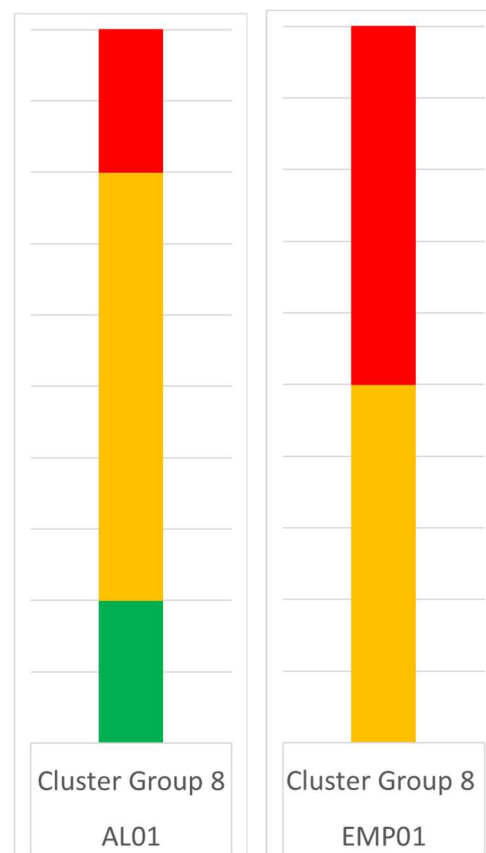
Sub-cluster	Average journey time	RAG Rating
AL01	30.5	Red
Average - Cluster Group 8 – Residential	30.5	Red
EMP01	36.3	Red
Average - Cluster Group 8 – Employment	36.3	Red

## Summary and recommendations

Figure 4-50: Cluster Group 8 Results

4.198 Cluster group 8 encompasses both employment and residential sub-clusters and have been assessed separately. Table 4-65 shows a summary of the RAG rating outputs for each sub-cluster – where 2 is 'Green', 1 is 'Amber' and 0 is a 'Red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-50 shows the number of each category of rating for each sub-cluster.

4.199 Overall, the metrics assessed against sub-cluster AL01 indicate a good level of suitability of this area in sustainable transport terms scoring 50%. In comparison, the assessment of employment sub-cluster EMP01 indicates a poor level of sustainable transport availability and connectivity, scoring 25%.and is the worst performing employment sub-cluster with no 'green' ratings.



4.200 Consideration should be made to the clear distinction that can be seen in the relative connectivity between the western and eastern sides of sub-cluster AL01. Any build out of this area, and relative densities should bear this in mind, with any delivery towards the eastern side, considering potential additional bus services and enhancements to existing bus services through the area. Dependent on the scale of growth, this sub-cluster may also benefit from additional healthcare and secondary education provision.

4.201 Improved connections to the railway station could also enhance travel options, particularly to nearby District Centres and the Alexandra Hospital, and encourage more sustainable travel from this location.

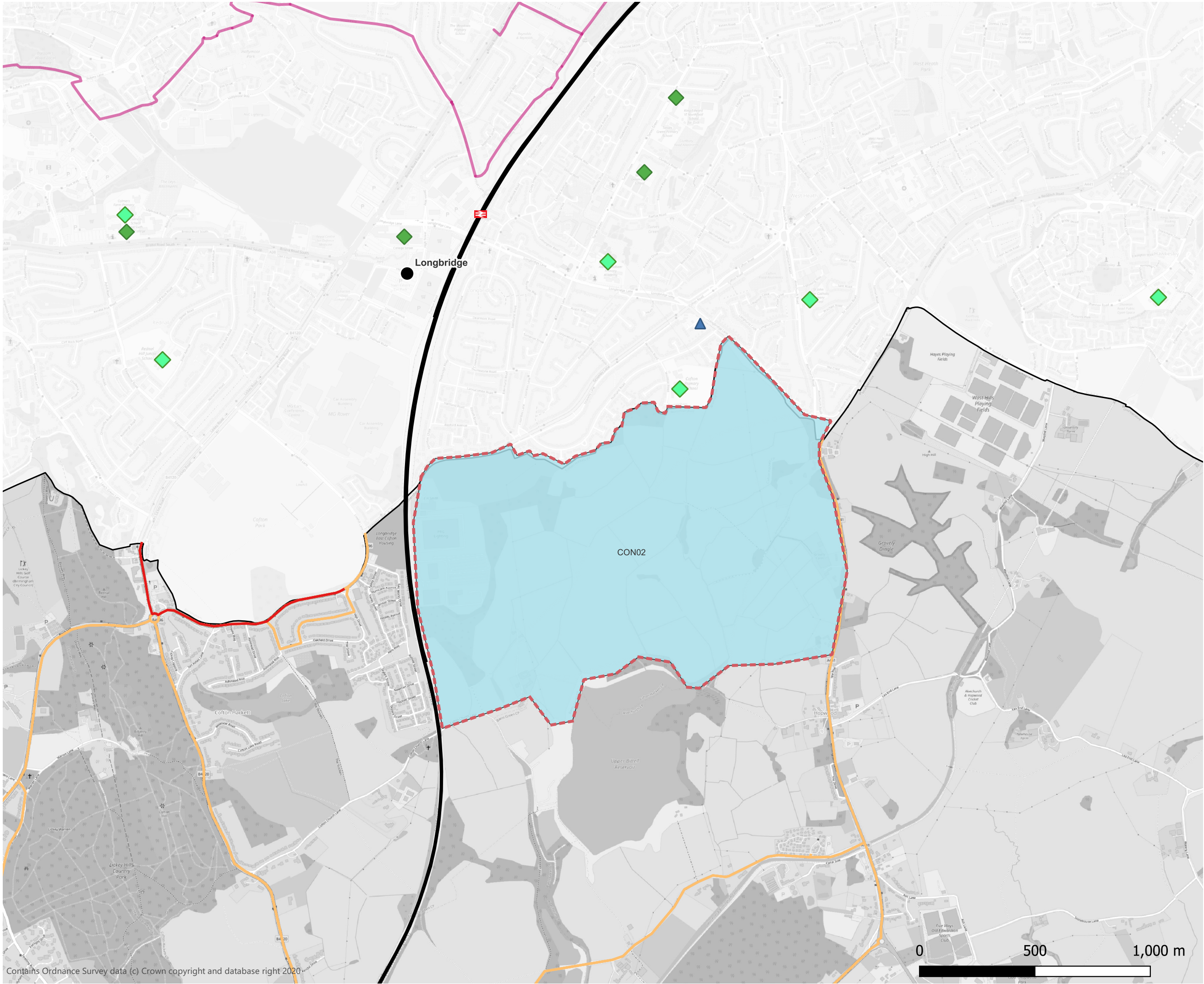


Table 4-65: Cluster Group 8 - Rating summary

		Cluster Group 8			
	Metric	Sub-cluster AL01 Alvechurch North		Sub-cluster EMP01 Alvechurch North	
% DRIVE TO WORK	1.1	1	71%	-	
	1.2	-		1	68%
TRANSPORT SERVICES	2.1	2	-	1	-
LABOUR MARKET	3.1	1	54,598	-	
	3.2	-		0	21,427
HEALTHCARE	4.1	1	21	0	-
	4.2	1	57	1	54
	4.3	1	16	1	16
EDUCATION	5.1	2	8	-	
	5.2	1	20.9	-	
PLANNED IMPROVEMENTS	6.1	0	0	0	0
DISTRICT CENTRES	7.1	0	30.5	0	36.3

## Cluster Group 9: Conurbation West A441

- 4.202 Cluster Group 9 comprises a single area west of the A441. CON02 is bound by the railway line along the western boundary and is situated directly south of the BDC boundary with the conurbation as shown in Figure 4 51. This cluster predominantly covers areas of greenfield land with some already established employment land in the west.
- 4.203 There are a number of leisure and retail facilities north of this cluster, within the existing conurbation in and around Longbridge. As such, this cluster has been considered separately for analysis due to its likely interaction and connections with this area. There are both primary and secondary education facilities in close proximity to the cluster group, as well as a general practice surgery. '
- 4.204 Whilst Longbridge rail station is approximately no more than 0.75 miles (crow fly) from the cluster, bus and cycle routes are limited in nature.



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Key

Cluster 9

Bromsgrove District

All Education

Secondary / Post16 Education

All Healthcare

Local Centre

National Cycle Network (NCN)

Rail stations

railway line

Bus routes service frequency

2+ buses per hour

< 2 buses per hour

OSM Standard



a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport  
Assessment

Figure title  
Cluster Group 9

Revision	Project number
A	3578

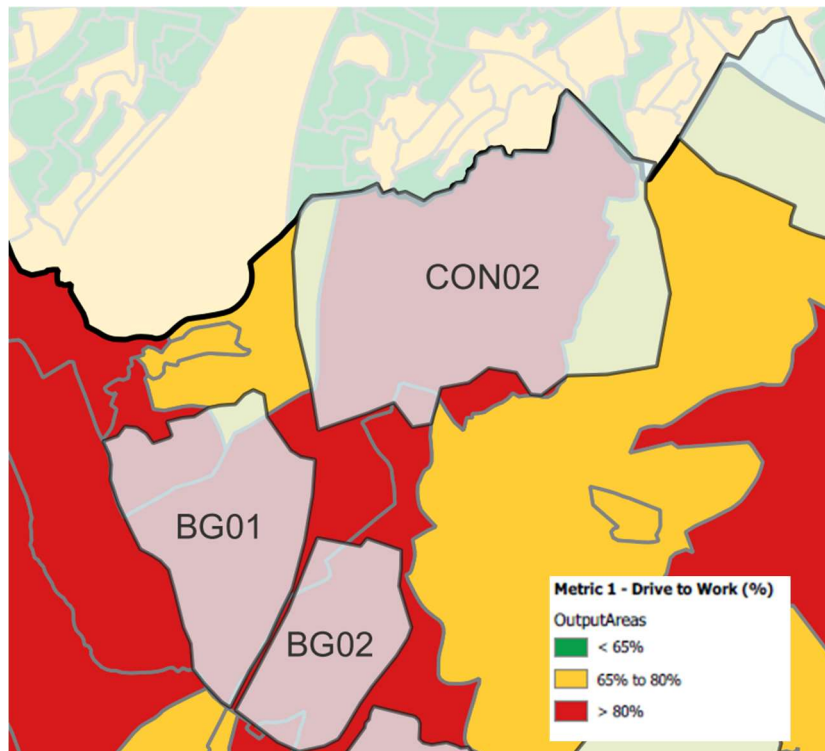
Figure number	Date
Figure 4-51	April 2022



### Metric 1: Average commuter travel mode split

4.205 The average drive to work proportion of output areas considered to represent cluster group 9 is 65%, which is lower than the regional average and attracts a 'Green' rating within the framework. This is reflected in the typical patterns of the more urban areas within the conurbation.

Figure 4-52: Cluster Group 9 – Metric 1 – Drive to work (%)

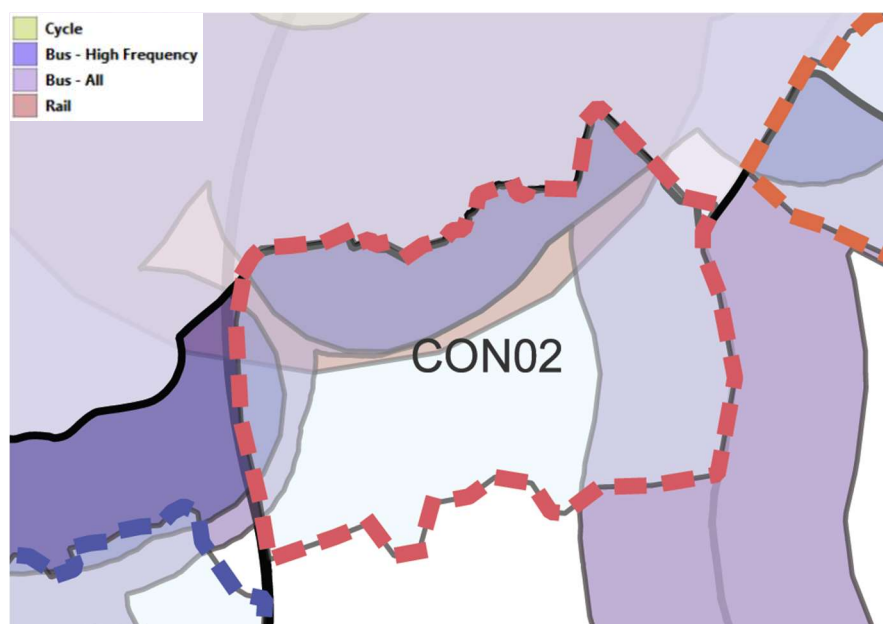


### Metric 2: Proximity to current sustainable transport services and infrastructure

4.206 This cluster group has a varied level of sustainable transport provision currently (shown in Figure 4-53) and is rated 'amber' within this metric. Existing provision is limited to the groups' most northern, eastern, and western extents, with access reduced within the more southern and central areas.

4.207 There is potential to extend the high frequency bus coverage to the wider cluster area and deliver cycle connections to improve connectivity locally and to other public transport provision.

Figure 4-53: Cluster Group 9 – Metric 2.1



### Metric 3: Access to jobs by public transport

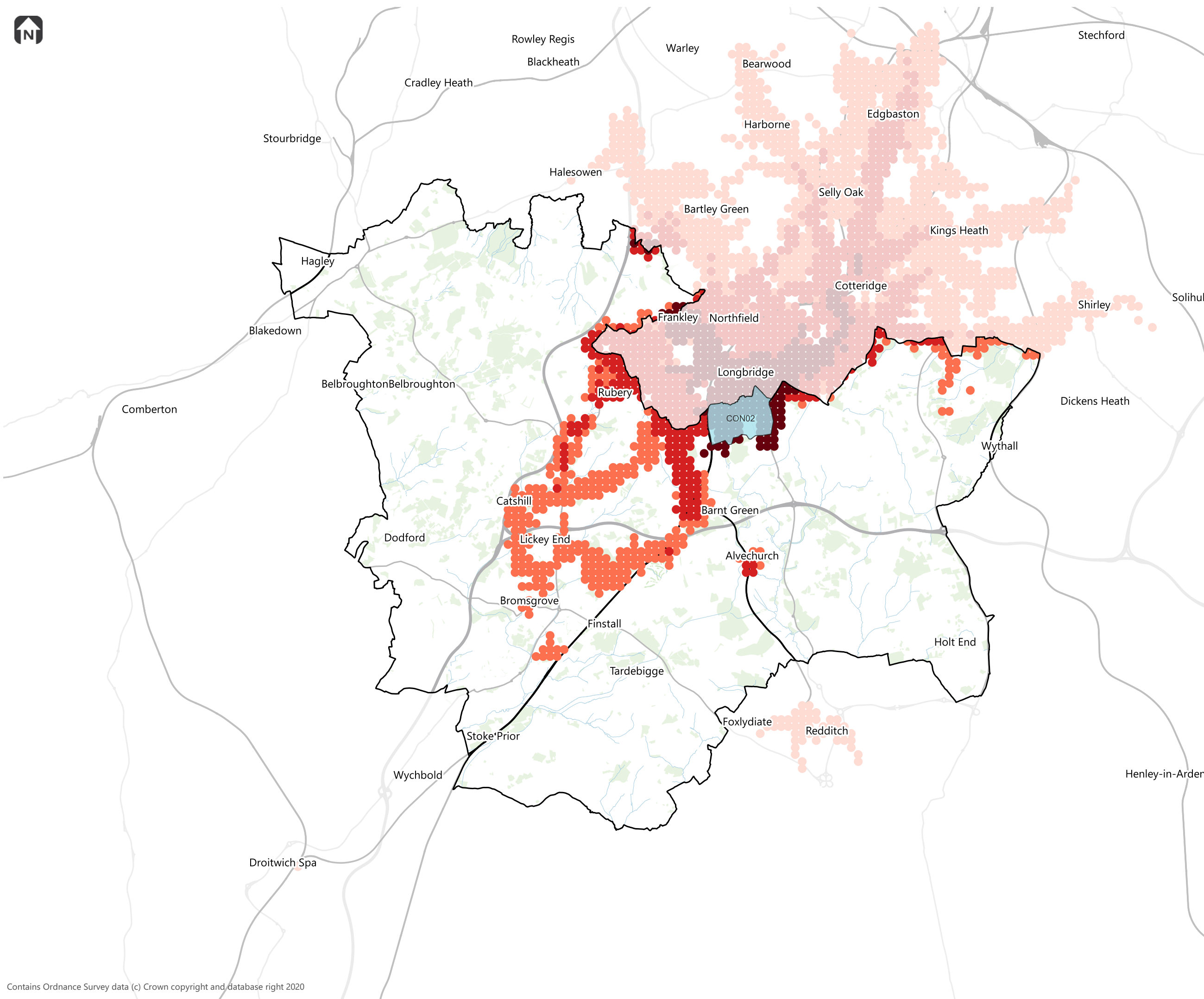
4.208 CON02 is within a 45-minute public transport journey of 89,490 jobs and therefore is rated 'amber' within this metric, as shown in Table 4-66. This is reflective of the higher frequency bus connections into the conurbation (along the A411 and A38 corridors) to provide access to employment areas across south Birmingham.

4.209 It is noted more central areas of this cluster group are not within a 45-minute journey time, as shown in the mapped output of this analysis in Figure 4-54. This is reflective of the limited sustainable transport provision across this area currently.

Table 4-66: Cluster Group 9 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
CON02	89,490	Amber
Average - Cluster Group 9	89,490	Amber





Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster9 - CON02

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster09\_PT\_FROM\_CON02

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network



Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
CON02 – Metric 3.1 – Public transport access to jobs

Revision  
A

Project number  
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Figure number  
Figure 4-54

Date  
April 2022

### Metric 4: Access to healthcare

4.210 Cofton Medical Centre is the closest located healthcare provision to cluster group 9, situated within the existing conurbation, as shown in Figure 4-51. This is also the only site within a 60-minute journey by public transport, with an average journey time of 18 minutes, and attracts an 'amber' rating for this metric.

Table 4-67: Cluster Group 9 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
CON02	18	Amber
Average - Cluster Group 9	18	Amber

4.211 The nearest Hospital with an A&E department is the Queen Elizabeth Hospital in Selly Oak, with an average journey time of 52-minutes and is given an 'amber' RAG rating.

Table 4-68: Cluster Group 9 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
CON02	52	Amber
Average - Cluster Group 9	52	Amber

4.212 Table 4-69 shows driving access to A&E is rated 'red' within the framework with an average journey time of 22 minutes. Whilst this is significantly quicker than by public transport, it is comparatively slower than other cluster groups within the study area.

4.213 Further analysis shows that despite Alexandra Hospital in Redditch being approximately four kilometres further than the QE, Journey times by car to Alexandra Hospital are on average eight minutes quicker.

Table 4-69: Cluster Group 9 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
CON02	22	Red
Average - Cluster Group 9	22	Red

### Metric 5: Access to education

4.214 There are four closely located primary education sites to cluster group 9, within the existing conurbation, as reflected in Figure 4-51. The average journey time from CON02 to any of these is 11-minutes.

4.215 Further TRACC analysis shows Cofton Primary School is within the 10-minute journey time green-amber threshold but longer journeys to Ark Kings Primary Academy reflect the cluster groups 'amber' RAG rating.

4.216 With Cofton Primary School, Albert Bradbeer Primary and St John Fisher RC Primary all 1 – 1.5 miles away from CON02, trips between these locations could also be encouraged by active travel.

**Table 4-70: Cluster Group 9 – Metric 5.1 – Public transport access to education**

Sub-cluster	Average journey time	RAG Rating
CON02	11	Amber
Average - Cluster Group 9	11	Amber

4.217 The closest secondary education provision in journey time to this cluster group is again situated within the existing conurbation. Bournville College and Cadbury Sixth Form College are close to existing bus services to CON02 and the average journey time is rated 'green'.

**Table 4-71: Cluster Group 9 – Metric 5.2 – Public transport access to secondary education**

Sub-cluster	Average journey time	RAG Rating
CON02	14.2	Green
Average - Cluster Group 9	14.2	Green

4.218 It is worth noting that these journey time results represent access opportunities along the eastern and northern sides of CON02 and any homes delivered within other areas may not have such good connections without enhancements.

#### **Metric 6: Proximity to planned local transport improvements**

4.219 There are no planned sustainable transports improvements within the vicinity of cluster group 9, that were identified at the time of the study. Therefore, this cluster group receives a 'Red' rating.

#### **Metric 7: Access to district centres**

4.220 The closest district centre identified to this cluster group is Longbridge, within the existing conurbation. This is both as the crow flies and in journey time by public transport, approximately 22-minutes on average.

4.221 With Longbridge less than 1.5 miles away from the cluster group, trips between the two could be encouraged by active travel.

Table 4-72: Cluster Group 9 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
CON02	22.1	Amber
Average - Cluster Group 9	22.1	Amber

### Summary and recommendations

4.222 Table 4-73 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 4-55 shows the number of each category of rating for cluster group 9.

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

4.224 While there is only one sub-cluster location within this 'group' some clear distinction can be seen in the relative connectivity between the eastern / northern extents of the site and more western and central areas.

4.225 Any build out of this area, and relative densities should bear this in mind, with any delivery within the central areas, considering potential rerouting of existing bus services or provision of additional routes.

Figure 4-55: Cluster Group 9 Results

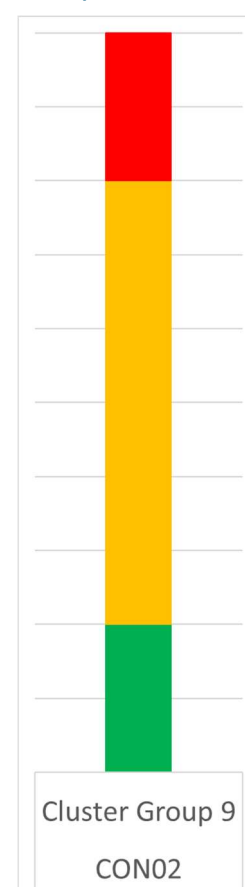


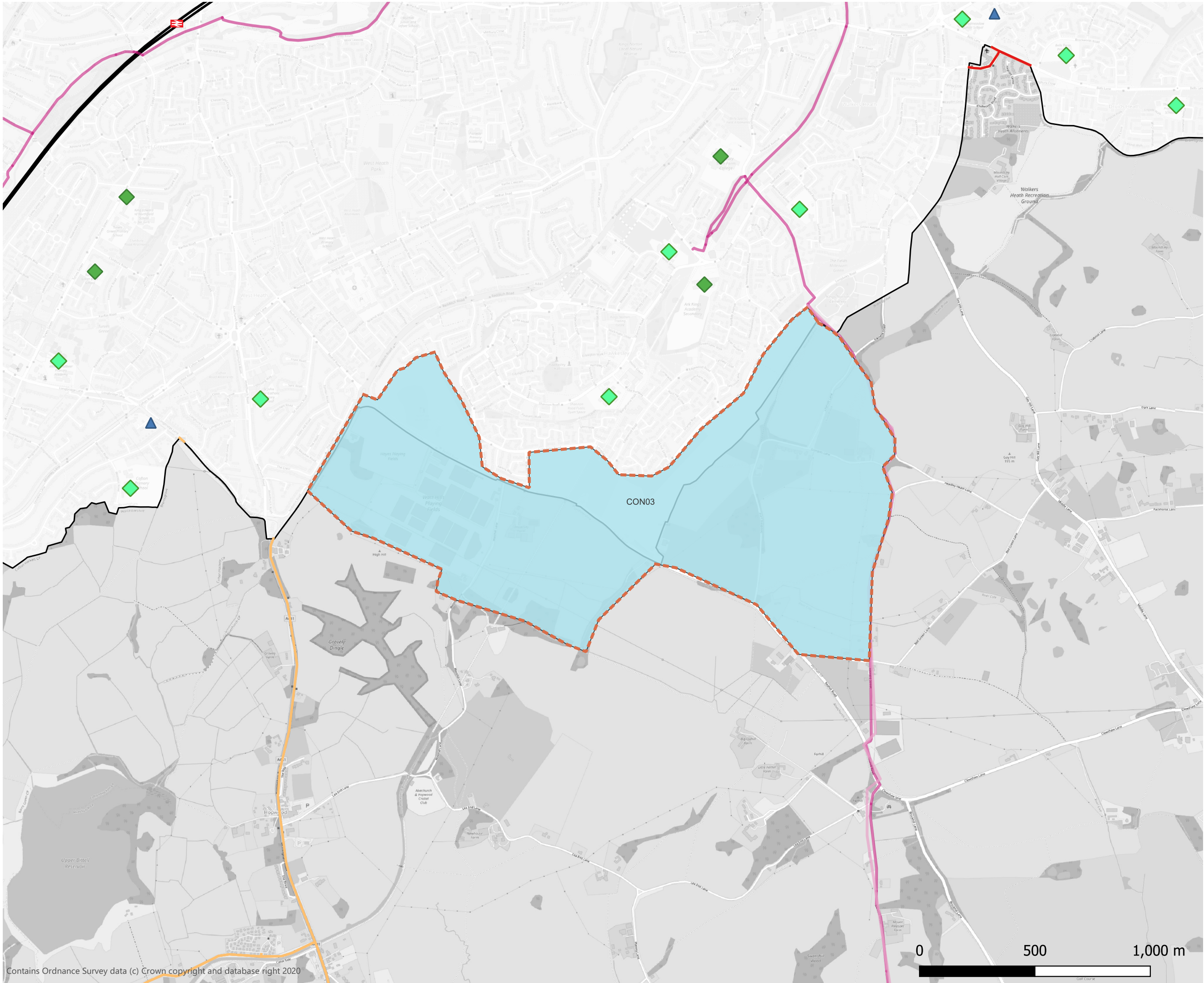
Table 4-73: Cluster Group 9 – Rating summary

		Cluster Group 9	
		Sub-Cluster AL02 Conurbation West A441	
Metric	1.1	2	65%
		-	
% DRIVE TO WORK	1.2		
TRANSPORT SERVICES	2.1	1	-
LABOUR MARKET	3.1	1	89,490
	3.2	-	
HEALTHCARE	4.1	1	18
	4.2	1	52
	4.3	0	22
EDUCATION	5.1	1	11
	5.2	2	14.2
PLANNED IMPROVEMENTS	6.1	0	0
DISTRICT CENTRES	7.1	1	22.1



## Cluster Group 10: Conurbation East A441

- 4.226 Cluster Group 10 considers a single area east of the A441 and lies across both BDC and conurbation local authority areas, as shown in Figure 4-56. The existing residential built-up area is north of **CON03**, with greenfield land south and east.
- 4.227 This cluster has been considered separately for analysis due to its likely interaction with the existing conurbation, and facilities around Hawkesley, West Heath and Kings Norton. There are several primary and secondary schools, but fewer general practice surgeries closely located.
- 4.228 There is some cycle route provision east of the cluster for indirect connections to the aforementioned facilities within Hawkesley. However, existing bus route provision is more limited in connection and proximity to the cluster.



Prepared  
JP

Reviewed  
SN

Date  
April 22

Key

- Cluster 10
- 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



a company of **Royal HaskoningDHV**

Client

**Bromsgrove District Council**

Project

**Bromsgrove DPR Transport Assessment**

Figure title

**Cluster Group 10**

Revision  
A

Project number  
3578

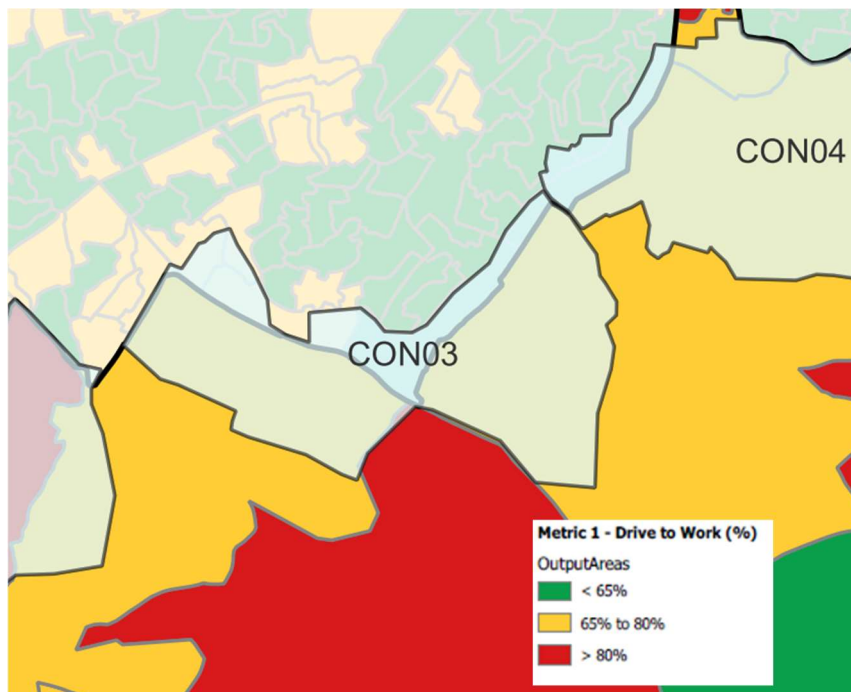
Figure number  
Figure 4-56

Date  
April 2022

### Metric 1: Average commuter travel mode split

- 4.229 The average drive to work proportion of output areas considered to represent cluster group 10 is 65% and attracts a 'green' rating within the framework. Reviewing the mapping in Figure 4-57, this is reflective of the travel behaviours across the areas within the conurbation.
- 4.230 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 4-57: Cluster Group 10 – Metric 1 – Drive to work (%)

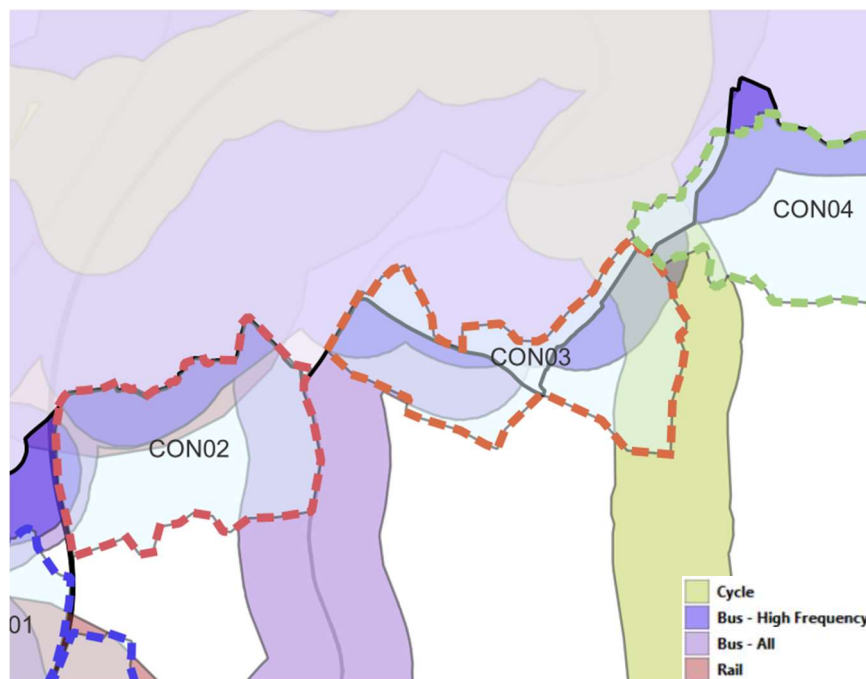


### Metric 2: Proximity to current sustainable transport services and infrastructure

- 4.231 Cluster group 10 has a varied level of sustainable transport provision currently (shown in Figure 4-58 where cluster group 10 is outlined in orange), with the group rating as 'amber'.
- 4.232 Bus provision exists to the north of the site with potential to extend and/or enhance frequencies. There is also potential to enhance cycle connections across the site.



Figure 4-58: Cluster Group 10 – Metric 2.1

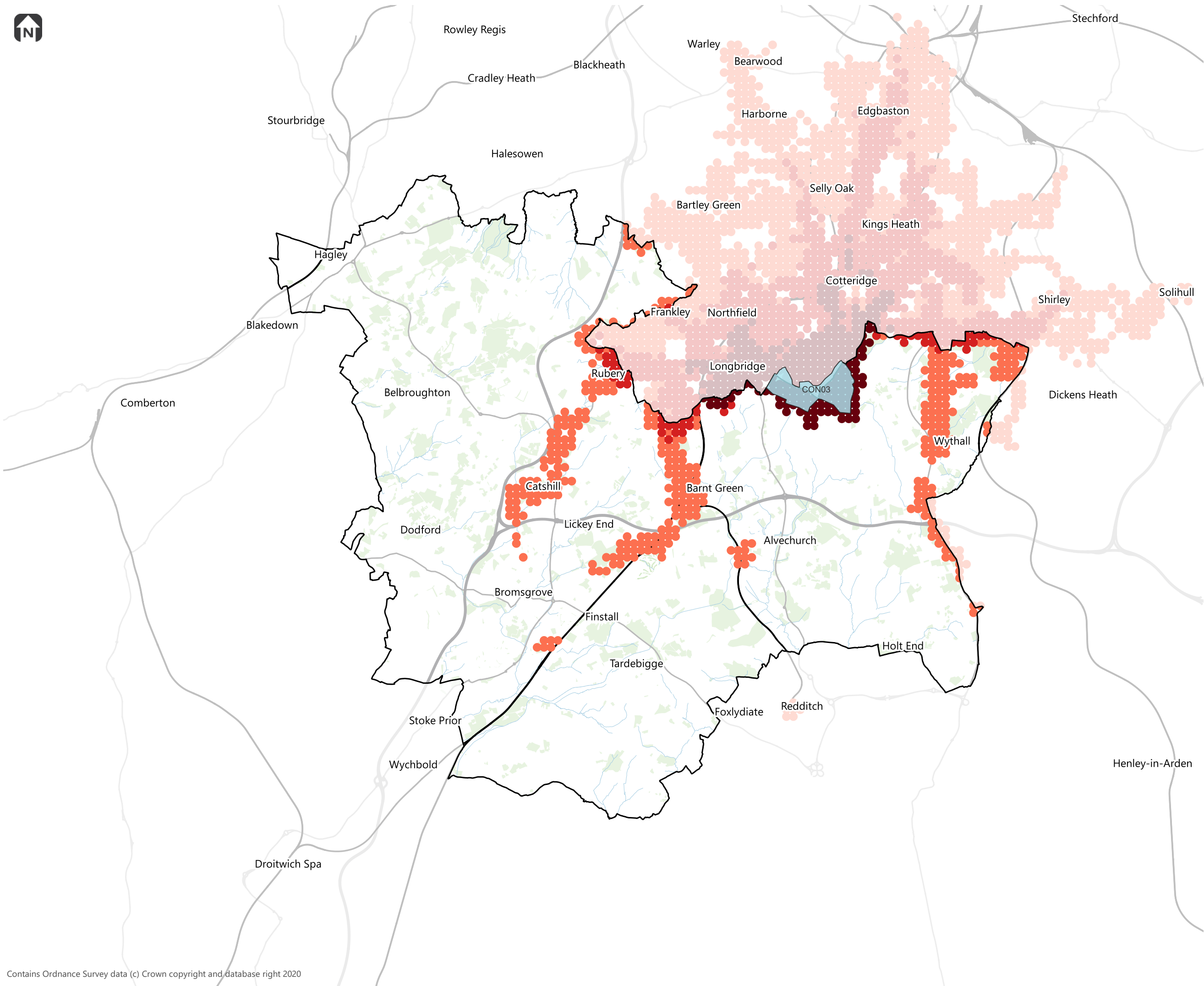


### Metric 3: Access to jobs by public transport

- 4.233 Figure 4-59 show the mapped outputs of the analysis for cluster group 10 for this metric, with Table 4-74 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.
- 4.234 CON03 mainly provides access to opportunities north of this cluster group and encompasses key areas of employment across south Birmingham. Areas of Solihull are also accessible within a 45-minute public transport journey time. The accessibility to opportunities south of cluster group 10 are more limited and reflects the group's 'amber' rating.

Table 4-74: Cluster Group 10 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
CON03	94,305	Amber
Average - Cluster Group 10	94,305	Amber



Prepared  
JP

Reviewed  
SN

Date  
April 22

Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster10 - CON03

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster10\_PT\_FROM\_CON03

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network



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Bromsgrove District Council

Project  
Bromsgrove DPR Transport  
Assessment

Figure title  
CON03 – Metric 3.1 – Public  
transport access to jobs

Revision  
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3578

Figure number  
Figure 4-59

Date  
April 2022



#### Metric 4: Access to healthcare

4.235 As shown in Figure 4-56 there are two local healthcare sites within close proximity of CON03 within the conurbation. The average journey time for this cluster group sits on the 15 minutes threshold with an 'amber' rating.

Table 4-75: Cluster Group 10 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
CON03	15	Amber
Average - Cluster Group 10	15	Amber

4.236 The Queen Elizabeth Hospital in Selly Oak is the most closely located hospital provision with an A&E both by journey time and crow fly. Table 4-76 indicates an average journey time of 50-minutes from this cluster group, although Figure 3-8 shows this reflects journey times from a small area of CON03 along the northern and western edges. This results in an 'amber' rating for the cluster group.

Table 4-76: Cluster Group 10 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
CON03	50	Amber
Average - Cluster Group 10	50	Amber

4.237 Comparative drive times to the Queen Elizabeth Hospital are presented in Table 4-77. While 21 minutes journey time is not necessarily considered poor in itself, comparatively this represents a poorer situation than presented by other clusters considered in this study; therefore, the cluster receives a 'red' rating.

Table 4-77: Cluster Group 10 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
CON03	21	Red
Average - Cluster Group 10	21	Red

### Metric 5: Access to education

4.238 As shown in Figure 4-56, there are numerous primary education facilities concentrated north of this cluster group within the conurbation. These are predominantly around the area of Hawksley, with an average journey time of 11 minutes by public transport.

4.239 With each school located less than 1.5 miles (crow fly) from CON03 there is opportunity to encourage trips to be made by active travel modes.

Table 4-78: Cluster Group 10 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
CON03	11	Amber
Average - Cluster Group 10	11	Amber

4.240 Secondary education provision is also concentrated north of CON03, with the closest located in journey time and crow fly being Ark Kings Academy Secondary. Some of the public transport journey time results also represent travel to schools a further distance away, such as Cadbury Sixth Form College and Turves Green Boys School. This is likely due to the availability of public transport services to these areas and reflects a 'green' rating.

4.241 It is worth noting that these journey time results represent access opportunities around the northern edge of the sub-cluster area, and any homes delivered further towards more southern areas may not have such good connections without enhancements to services and additional routes.

Table 4-79: Cluster Group 10 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
CON03	13.9	Green
Average - Cluster Group 10	13.9	Green

### Metric 6: Proximity to planned local transport improvements

4.242 There are no planned sustainable transports improvements within the vicinity of cluster group 10, that were identified at the time of the study. Therefore, this cluster group receives a 'Red' rating.

### Metric 7: Access to district centres

- 4.243 Longbridge is the closest (crow fly distance) identified district centre of significant scale, however smaller centres such as West Heath and Kings Norton are closer in crow fly distance. the TRACC analysis also shows there is some area of CON03 where travel to Kings Heath offers the fastest public transport trip. Whilst at a longer journey time of 52-minutes, there is also a single point within the cluster group whereby Northfield is the closest district centre by journey time. This cluster group therefore receives an 'amber' rating as reflected in Table 4-80.
- 4.244 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 4-80: Cluster Group 10 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
CON03	24.5	Amber
Average - Cluster Group 10	24.5	Amber

### Summary and recommendations

- 4.245 Table 4-81 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 4-60 shows the number of each category of rating for cluster group 10.
- 4.246 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 50%.
- 4.247 While there is only one sub-cluster location within this 'group', there is some clear distinction in the relative connectivity between the northern and southern areas of cluster group 10. Most likely due to the more concentrated provision of facilities within the conurbation, any build out of this area, should bear this in mind. Enhanced and extended bus provision and new active travel mode infrastructure through this sub-cluster could enhance connectivity across the area as a whole.

Figure 4-60: Cluster Group 10 Results

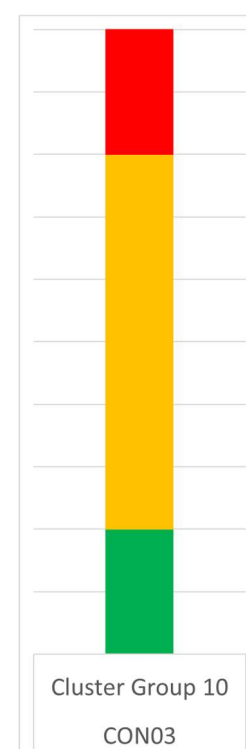


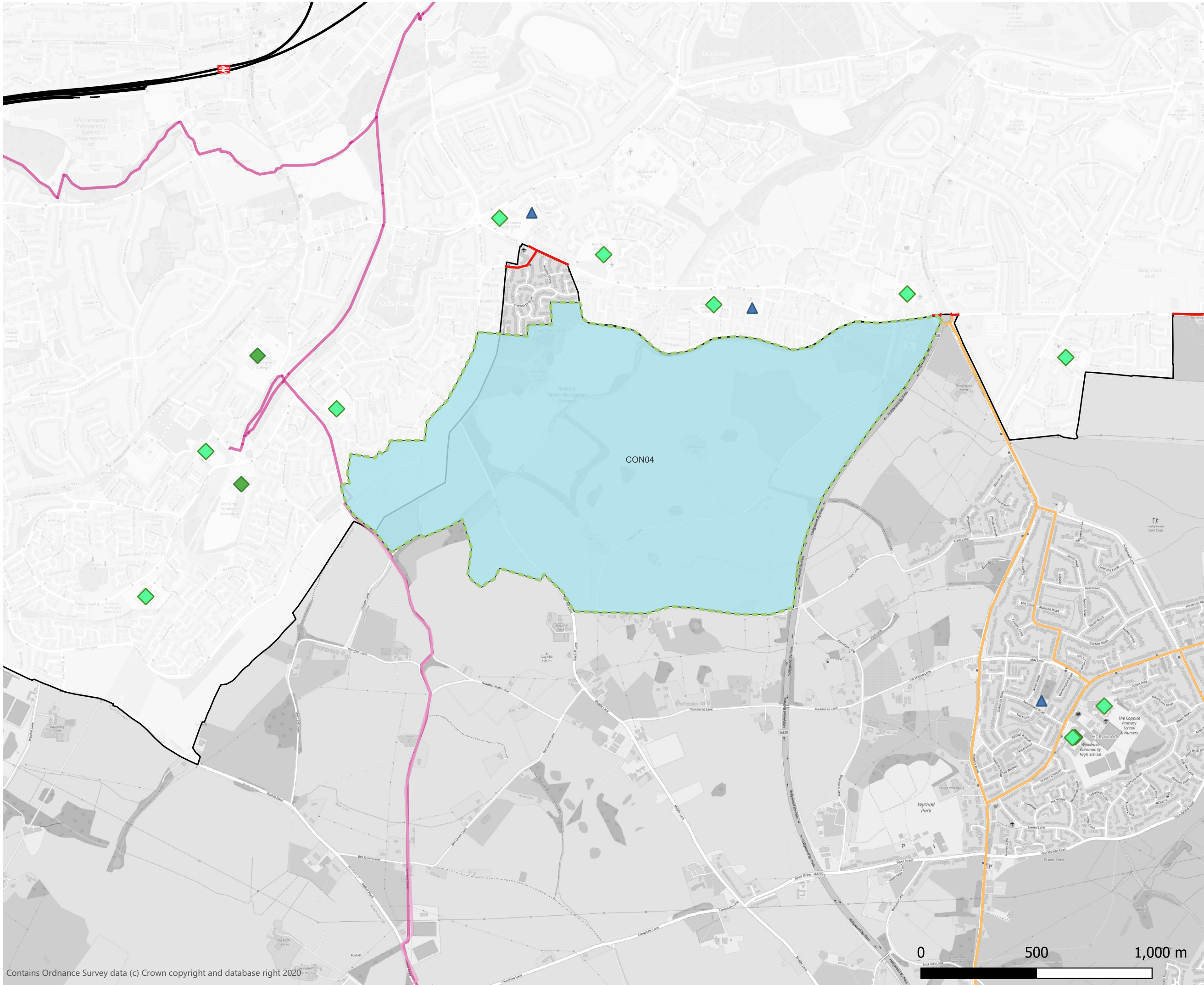
Table 4-81: Cluster Group 10 – Rating summary

		Cluster Group 10	
		Sub-cluster CON03 Conurbation East A441	
% DRIVE TO WORK	1.1	2	65%
	1.2	-	
TRANSPORT SERVICES	2.1	1	-
LABOUR MARKET	3.1	1	94,305
	3.2	-	
HEALTHCARE	4.1	1	15
	4.2	1	50
	4.3	0	21
EDUCATION	5.1	1	11
	5.2	2	13.9
PLANNED IMPROVEMENTS	6.1	0	0
DISTRICT CENTRES	7.1	1	24.5

## Cluster Group 11: Conurbation West A435

- 4.248 Cluster Group 11 considers a single area between Headley Heath and Druids Heath. Figure 4-61 shows **CON04** situated adjacent to the A435 (to the east), with its most western extents extending across the BDC area boundary into the conurbation.
- 4.249 This cluster has been considered separately to other potential cluster sites adjacent to the conurbation due to its scale and its likely interaction with the conurbation and facilities around Druids Heath and Maypole. There are several primary schools north of the cluster site within the already established residential areas of the conurbation, as well as a couple of general practice surgeries.
- 4.250 A single cycle route connects the south-western boundary of the cluster to areas north and south, but there is a lack of cycle connectivity elsewhere. The frequency of bus routes along links north of the cluster group are greater than those along eastern and western boundaries.





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Key

Cluster 11

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



Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Cluster Group 11

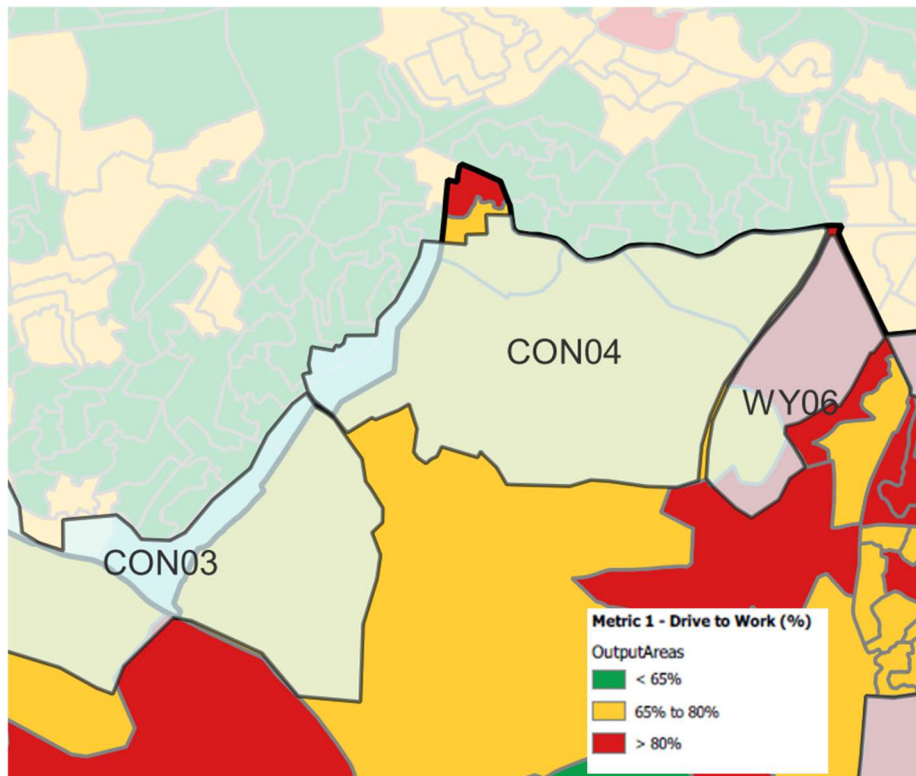
Revision	Project number
A	3578

Figure number	Date
Figure 4-61	April 2022

### Metric 1: Average commuter travel mode split

4.251 The average drive to work proportion of output areas considered to represent cluster group 11 is 56% and attracts a 'Green' rating within the framework. This is much lower than the regional average and likely reflects the travel behaviours and mode choices of those within the conurbation and in close proximity to built-up areas.

Figure 4-62: Cluster Group 11 – Metric 1 – Drive to work (%)

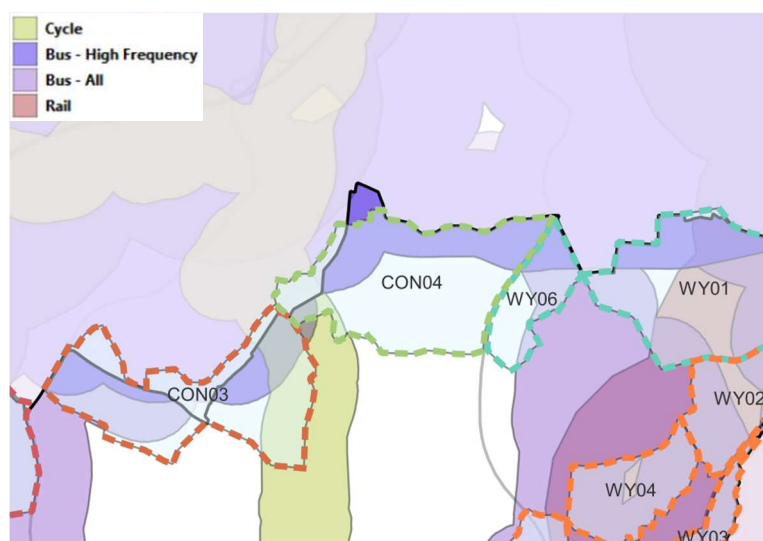


### Metric 2: Proximity to current sustainable transport services and infrastructure

- 4.252 Cluster group 11 rates 'amber' in its' current level of sustainable transport provision (shown in Figure 4-63 where cluster group 11 is outlined in green).
- 4.253 CON04 benefits from being in close proximity to high frequency bus provision, in particular along the northern extents but lacks immediate access to rail and has limited cycle route provision.
- 4.254 This cluster group has potential to improve, with bus frequency enhancements and/or route extensions to the southern areas of CON04 and active mode improvements to enhance access to any new and existing connections.



Figure 4-63: Cluster Group 11 – Metric 2.1

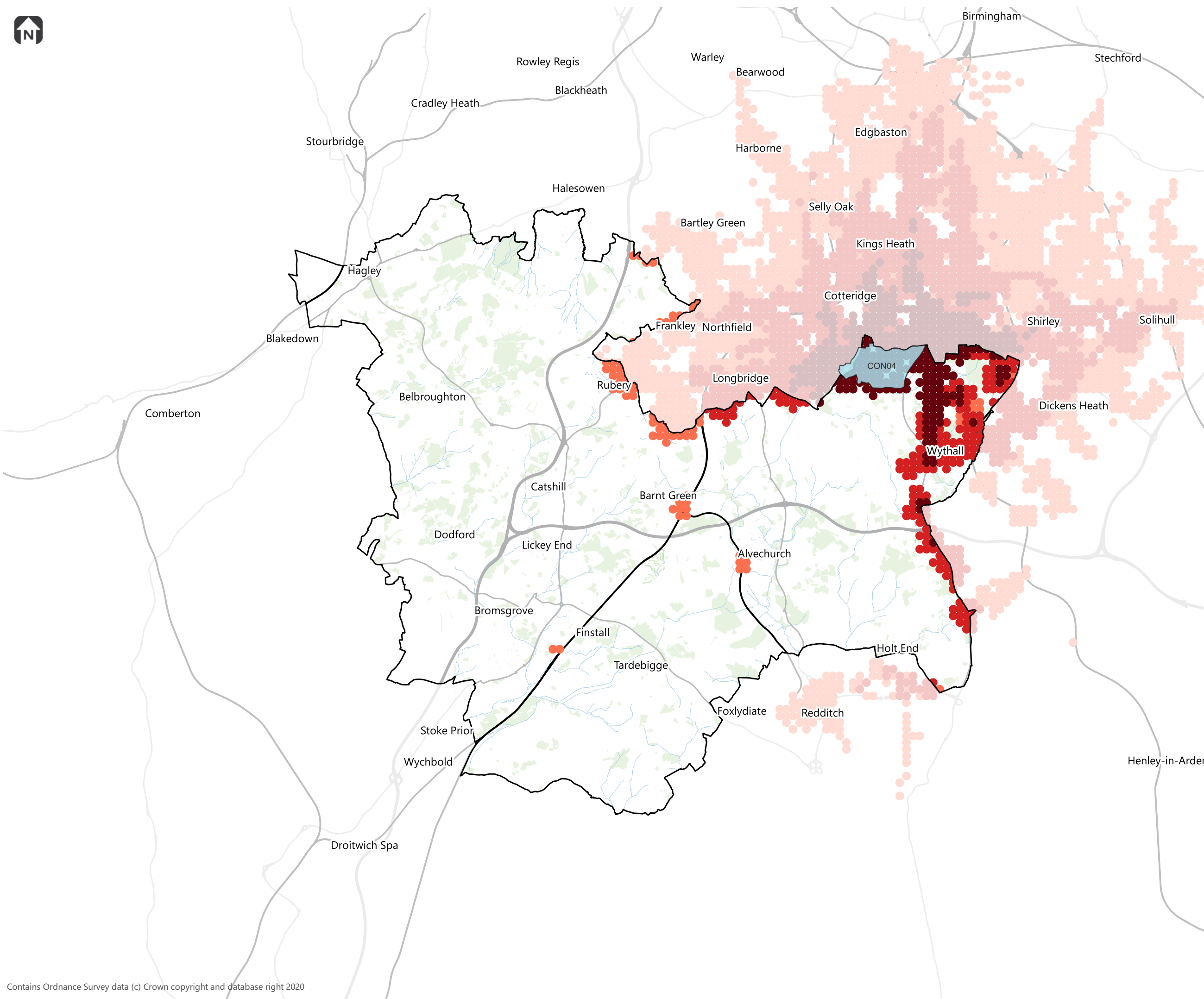


### Metric 3: Access to jobs by public transport

4.255 There are over 125,000 jobs accessible within a 45-minute public transport journey time and receives a 'green' RAG rating. Figure 4-64 shows the mapped output of the analysis for this cluster group within this metric, to highlight its connections to high frequency bus routes connecting to areas across south Birmingham, Solihull and Birmingham City Centre.

Table 4-82: Cluster Group 11 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
CON04	126,325	Green
Cluster Group 11	126,325	Green



Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster11 - CON04

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster11\_PT\_FROM\_CON04

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

**TransportNetwork**

- Railway Line
- Strategic Road Network
- Major Road Network



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Bromsgrove District Council

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Bromsgrove DPR Transport  
Assessment

Figure title  
CON04 – Metric 3.1 – Public  
transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-64	April 2022

#### Metric 4: Access to healthcare

4.256 Figure 4-61 shows two local healthcare sites in close proximity to cluster group 11, within the existing conurbation, and therefore receives a 'green' RAG rating with an average journey time of 11 minutes.

Table 4-83: Cluster Group 11 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
CON04	11	Green
Average - Cluster Group 11	11	Green

4.257 The nearest hospital (crow fly) with an A&E department is the Queen Elizabeth Hospital in Selly Oak. Bus provision along the northern and western boundaries of CON04 provides these areas with a journey time to an A&E within 60-minutes. Figure 3-8 highlights journey times exceed 60-minutes elsewhere within this cluster group.

4.258 Whilst the Alexandra Hospital is further as the crow flies, further analysis of the TRACC output indicates there is a single area within CON04 where this is its nearest hospital in journey time. This is likely due to the cluster's eastern boundary adjacent to the A435.

Table 4-84: Cluster Group 11 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
CON04	54	Amber
Average - Cluster Group 11	54	Amber

4.259 Table 4-85 indicates journey times to an A&E facility by car are significantly quicker than by public transport but is rated 'red' for this metric relative to its performance against other cluster groups within this study. Further analysis highlights that despite Alexandra Hospital located further than The Queen Elizabeth as the crow flies, journey times by car to Alexandra Hospital A&E are on average 9 minutes quicker.

Table 4-85: Cluster Group 11 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
CON04	22	Red
Average - Cluster Group 11	22	Red



### Metric 5: Access to education

- 4.260 There are four primary education facilities within the conurbation in close proximity to the cluster's northern boundary, as shown in Figure 4-61, and is reflective of the 'green' rating.
- 4.261 Further analysis of the TRACC journey time output indicates that despite the close position of St Jude's RC Primary, journey times by public transport are quickest from some origins within the cluster to Oaks Primary School. It is also noted Hawkesley Primary school is further located but is the closest in journey time for much of the western part of the cluster.

Table 4-86: Cluster Group 11 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
CON04	10	Green
Average - Cluster Group 11	10	Green

- 4.262 As shown in Figure 4-61, there are two secondary education facilities within Hawkesley, and one south-east in the Hollywood area.
- 4.263 The level of connectivity by public transport and direction of routes close to the northern areas of the cluster mean some areas within CON04 access schools further afield more quickly. The high frequency of these routes does not appear to impact journey times significantly with an average journey time of 15.6 minutes.
- 4.264 It is noted that much of CON04 is unable to reach secondary provision by public transport due to the existing constrained provision through the site. Enhancements to create a more permeable environment through the site may be beneficial to increase connectivity from the site as a whole.

Table 4-87: Cluster Group 11 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
CON04	15.6	Green
Average - Cluster Group 11	15.6	Green

### Metric 6: Proximity to planned local transport improvements

- 4.265 There is one planned sustainable transport scheme within the vicinity of cluster group 11, that was identified at the time of the study. This is the Rapid Transit - City centre - Maypole / Druids Heath. This scheme therefore results in a 'Amber' RAG rating for CON04 and the cluster group as a whole.

### Metric 7: Access to district centres

- 4.266 Kings Heath is the closest located district centre to cluster group 11, both in journey time and as the crow flies. This is approximately 2.5 miles north, with an average journey time of approximately 22 minutes and therefore receives an 'amber' RAG rating against this metric.
- 4.267 Despite this, the average journey time reflects the existing level of bus provision within the conurbation, and along the A435. Improvements to bus services along this corridor could be made to improve journey times further.

Table 4-88: Cluster Group 11 – Metric 7.1 - Public transport access to district centres

Cluster	Average journey time	RAG Rating
CON04	21.6	Amber
Average - Cluster Group 11	21.6	Amber

## Summary and recommendations

- 4.268 Table 4-89 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 4-65 shows the number of each category of rating for each cluster.
- 4.269 Overall, the metrics assessed indicate a good level of suitability of these areas in sustainable transport terms with the cluster group scoring 70%, with a higher proportion of the metrics assessed receiving a 'green' rating.
- 4.270 While there is only one cluster location within this 'group' some clear distinction can be seen in the relative connectivity between the most northern areas of CON04 comparative to elsewhere. This is likely due to the high frequency bus provision along the northern border and the concentration of facilities located north of the cluster group.
- 4.271 Extension of bus provision with additional routes further south into this area could improve connectivity further. Consideration could also be made to additional facilities provided within the cluster group to promote internal journeys made by active modes.

Figure 4-65: Cluster Group 11 Results

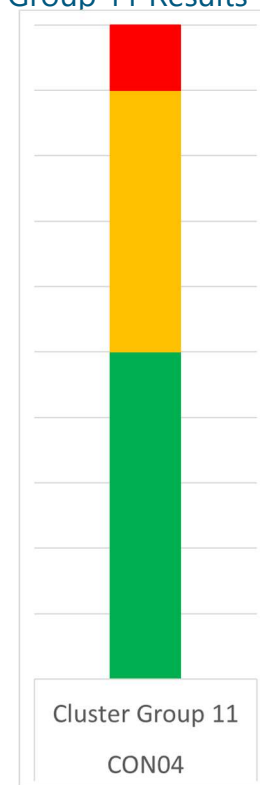


Table 4-89: Cluster Group 11 – Rating summary

		Cluster Group 11	
	Metric	Sub-cluster CON04 Conurbation West A435	
% DRIVE TO WORK	1.1	2	56%
	1.2	-	
TRANSPORT SERVICES	2.1	1	-
LABOUR MARKET	3.1	2	126,325
	3.2	-	
HEALTHCARE	4.1	2	11
	4.2	1	54
	4.3	0	22
EDUCATION	5.1	2	10
	5.2	2	15.6
PLANNED IMPROVEMENTS	6.1	1	1
DISTRICT CENTRES	7.1	1	21.6

## Cluster Group 12: Wythall North

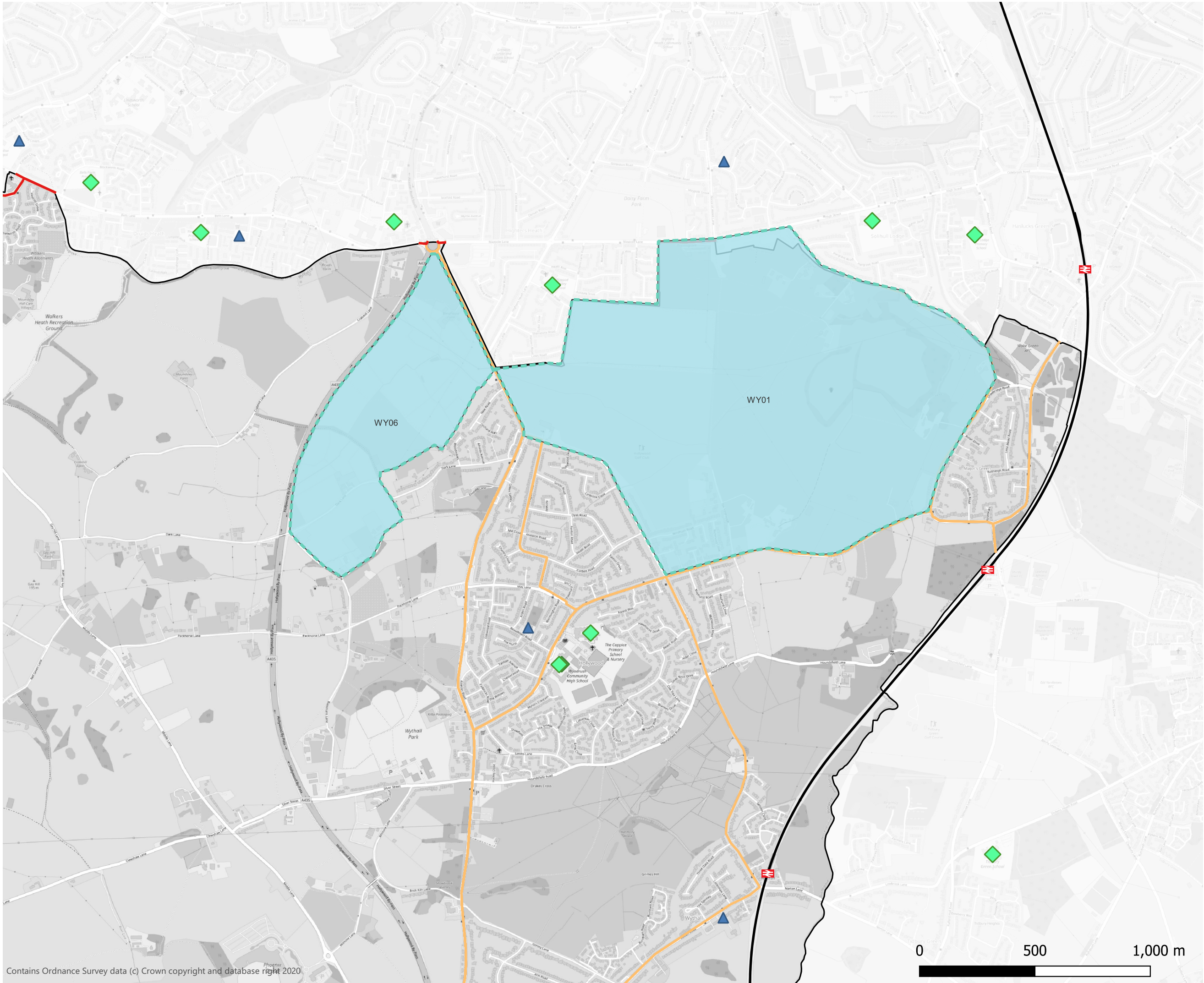
4.272 Cluster Group 12 comprises two areas considered together due to their geographic proximity, collective scale and likely interaction with their existing surroundings north of Wythall. As shown in Figure 4-66 the two clusters are situated:

- **WY01** – north-east of the Hollywood area, covering some area of already developed residential land.
- **WY06** – north-west of the Hollywood area, between an existing residential area and the A435 to the west.

4.273 Primary and secondary schools, as well as general practice surgeries, are located both north and south of the cluster group, with closely located facilities predominantly north in the conurbation area.

4.274 A number of bus routes align with the individual clusters within this group and provide access to the rail network (with links to Whitlocks End and Wythall rail stations) but have typically limited frequency of less than two buses per hour. There is no cycle route provision.





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Key

Cluster 12

Bromsgrove District

All Education

Secondary / Post16 Education

All Healthcare

Rail stations

railway line

Bus routes service frequency

2+ buses per hour

< 2 buses per hour

OSM Standard



a company of Royal HaskoningDHV

Client  
Bromsgrove District Council

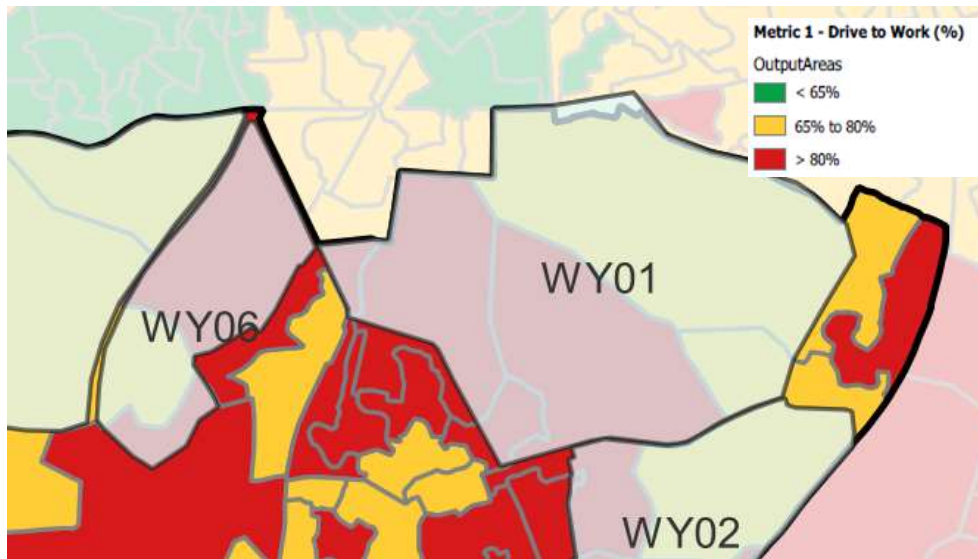
Project  
Bromsgrove DPR Transport Assessment

Figure title  
Cluster Group 12

Revision	Project number
A	3578

Figure number	Date
Figure 4-66	April 2022

Figure 4-67: Cluster Group 12 – Metric 1 – Drive to work (%)

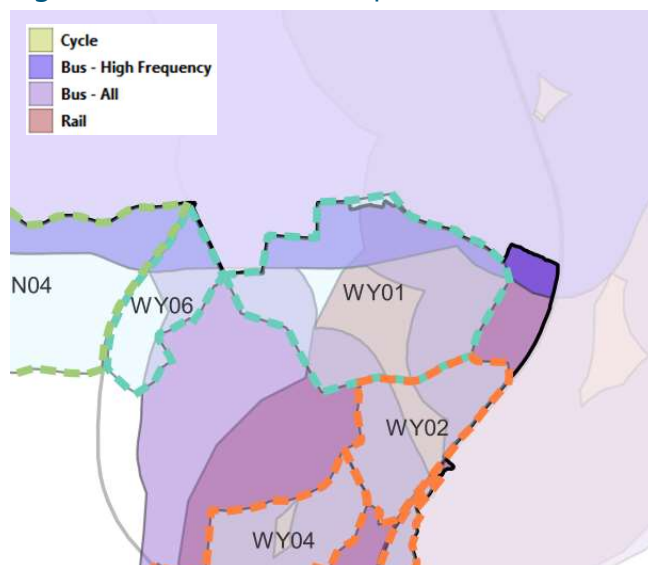


#### Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

- 4.277 Cluster group 12 has a wide range of sustainable transport provision as seen in Figure 4-68 (outlined in light blue), with the group rating as 'green' overall.
- 4.278 Both sub-cluster WY01 and WY06 benefit from access to high frequency bus service across the north of the sub-cluster. WY06 has no sustainable transport provision at its south-west and does not have rail coverage (unlike WY01) which reflects its 'amber' rating compared to WY01 which is rated 'green'.
- 4.279 There is potential to enhance frequency further south within both sub-clusters as well as provide a cycle network to improve active travel connections.



Figure 4-68: Cluster Group 12 – Metric 2.1

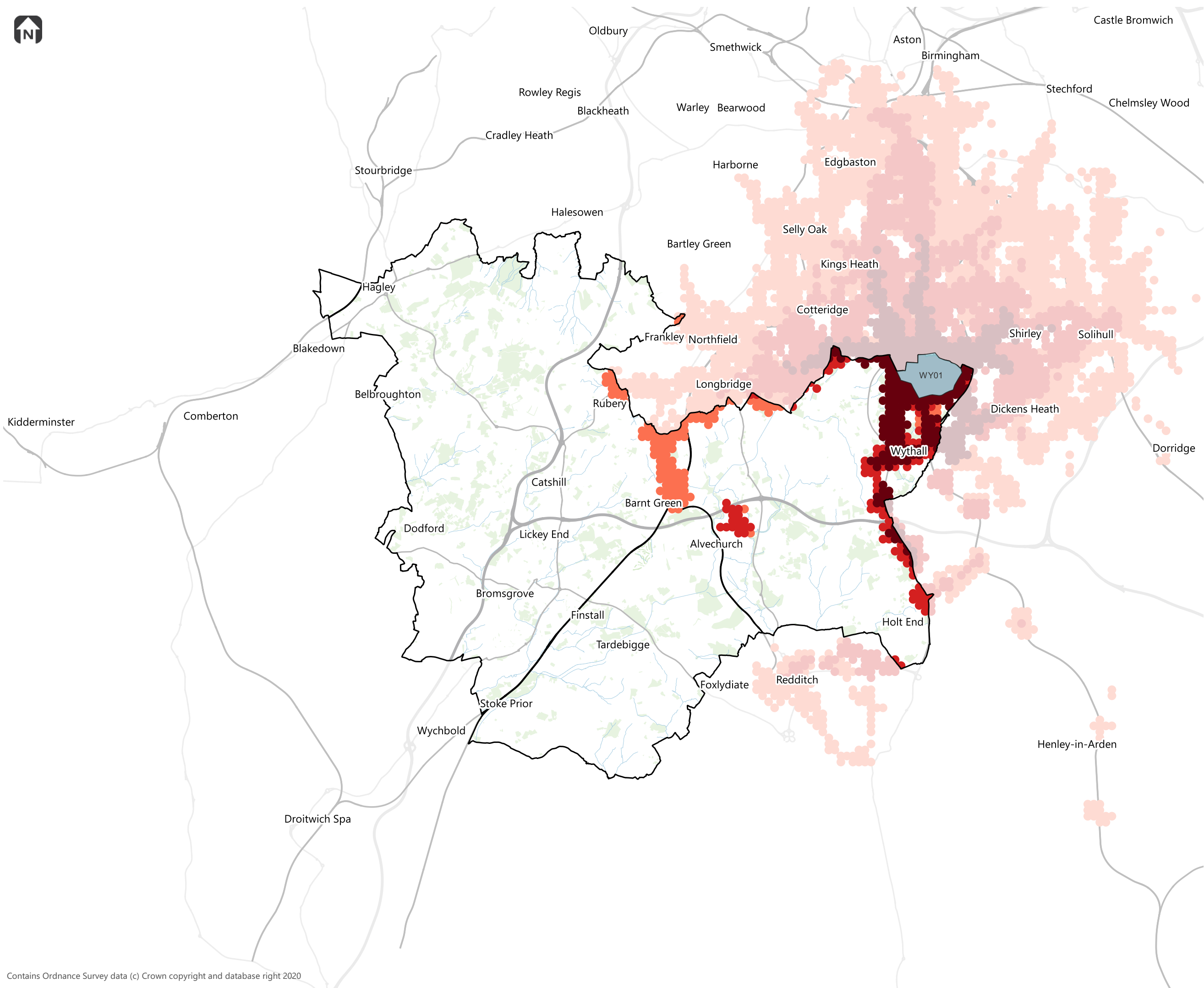


### Metric 3: Access to jobs by public transport

- 4.280 Figure 4-69 and Figure 4-70 show the mapped outputs of the analysis for each sub-cluster for this metric, with Table 4-82 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport. These show public transport connecting the sub-clusters across the conurbation, out to Solihull, south of Birmingham City Centre, and Longbridge as well as south to northern parts of Redditch.
- 4.281 Cluster group 12 has the highest average number of jobs accessible by public transport within 45 minutes of any of the group clusters (126,356). Both sub-clusters have an average number of jobs significantly over 100,000 and therefore all rate as 'green'. This reflects the strong sustainable transport service provision in this cluster group.

Table 4-90: Cluster Group 12 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
WY01	135,347	Green
WY06	117,365	Green
Average - Cluster Group 12	126,356	Green



Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster12 - WY01

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster12\_PT\_FROM\_WY01

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

**TransportNetwork**

- Railway Line
- Strategic Road Network
- Major Road Network



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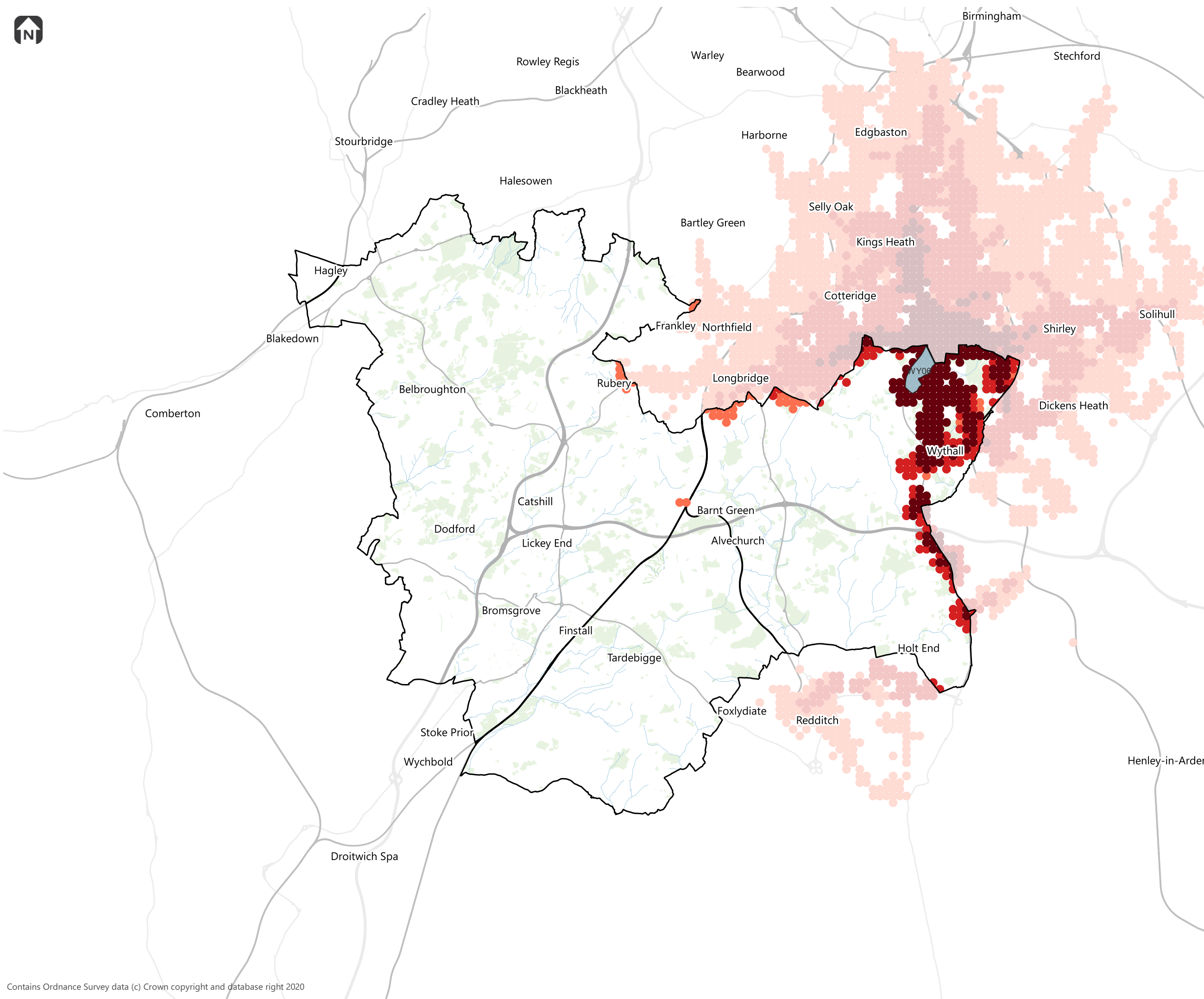
Figure title  
WY01 – Metric 3.1 – Public  
transport access to jobs

Revision  
A

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3578

Figure number  
Figure 4-69

Date  
April 2022



Prepared  
JP

Reviewed  
SN

Date  
April 22

Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster12 - WY06

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster12\_PT\_FROM\_WY06

1 - 15 minutes

15 - 30 minutes


30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network

  
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Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
WY06 – Metric 3.1 – Public transport access to jobs

Revision  
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Project number  
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Figure number  
Figure 4-70

Date  
April 2022



#### Metric 4: Access to healthcare

4.282 As seen in Figure 4-66 there is one healthcare facility in Hollywood and another two north and north-west of the group 12 sub-clusters. The proximity of these is reflected by the cluster group's 'green' RAG rating with an average journey time of 14 minutes.

Table 4-91: Cluster Group 12 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
WY01	14	Green
WY06	12	Green
Average - Cluster Group 12	14	Green

4.283 The nearest hospital with an A&E department is Alexandra Hospital. The more detailed analysis shows that in the east of WY06 and west of WY01 it is possible to reach an A&E by public transport in between 45 and 60 minutes. For the majority of WY01 and the western edge of WY06 it is not possible to access within 60 minutes. This results in an average journey time of 55 minutes for WY01, 49 minutes for WY06 and 53 minutes for the overall group cluster, as such all receive an 'amber' rating.

Table 4-92: Cluster Group 12 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
WY01	55	Amber
WY06	49	Amber
Average - Cluster Group 12	53	Amber

4.284 For both sub-clusters the nearest hospital by driving access is Alexandra Hospital. For WY01 the estimated journey time is 23 minutes and for WY06 22 minutes, giving them both a 'red' rating. The overall cluster group average is 23 minutes also giving it a 'red' score.

4.285 For all sub-clusters and the overall group cluster the average driving journey time takes less than half the time it would take by public transport.

Table 4-93: Cluster Group 12 – Metric 4.3 – Driving access to A&amp;E

Sub-cluster	Estimated journey time	RAG Rating
WY01	23	Red
WY06	22	Red
Average - Cluster Group 12	23	Red

#### Metric 5: Access to education

4.286 As shown in Figure 4-66 there are three educational facilities in Hollywood and several others to the north. The average journey time for sub-cluster WY01 is 10.02 meaning it is just above the threshold between 'amber' and 'green' which is 10 minutes. WY06 has an average journey time of 9 minutes, and the overall group cluster is 9.9 minutes meaning both are rated as 'green'.

Table 4-94: Cluster Group 12 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
WY01	10.02	Amber
WY06	9	Green
Average - Cluster Group 12	9.9	Green

4.287 For the average journey time to secondary and post-16 education, all sub-clusters and the overall cluster group receive a 'green' RAG rating, with WY01 having an average journey time of 17 minutes and WY06 an average journey time of 10 minutes. This reflects the journey times to schools including Woodrush High School and Light Hall College.

Table 4-95: Cluster Group 12 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
WY01	17	Green
WY06	10	Green
Average - Cluster Group 12	15.9	Green

### Metric 6: Proximity to planned local transport improvements

4.288 Planned sustainable transport improvements within the vicinity of cluster group 12, that were identified at the time of the study include:

- Local stations multi-modal interchange and access improvement in Solihull
- "Corridor L" Rail Enhancements on Snow Hill Lines
- Rapid Transit - City centre - Maypole / Druids Heath (estimated location)

4.289 These improvements result in an 'green' rating for the cluster group.

### Metric 7: Access to district centres

4.290 For sub-cluster WY01 both Shirley and Kings Heath can be accessed in under 40 minutes which results in an average journey time of 26 minutes ('amber' rating). For WY06 Kings Heath is the closest local centre with an average journey time of 17 minutes and a 'green' rating. The overall average cluster group journey time is 24.8 minutes giving it an 'amber' rating.

Table 4-96: Cluster Group 12 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
WY01	26	Amber
WY06	17	Green
Average - Cluster Group 12	24.8	Amber

## Summary and recommendations

- 4.291 Table 4-97 shows a summary of the RAG rating outputs where 2 is 'green', 1 is 'amber' and 0 is 'red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-71 shows the number of each category of rating for each cluster.
- 4.292 This cluster group has the joint highest overall score out of all cluster groups (75%) indicating very high suitability in sustainable transport terms.
- 4.293 Sub-cluster WY06 scores slightly better (70%) than WY01 (60%) with WY06 having 5 'greens' and 1 'red' whilst WY01 receiving 4 'greens' and 2 'reds'.

Figure 4-71: Cluster Group 12 Results

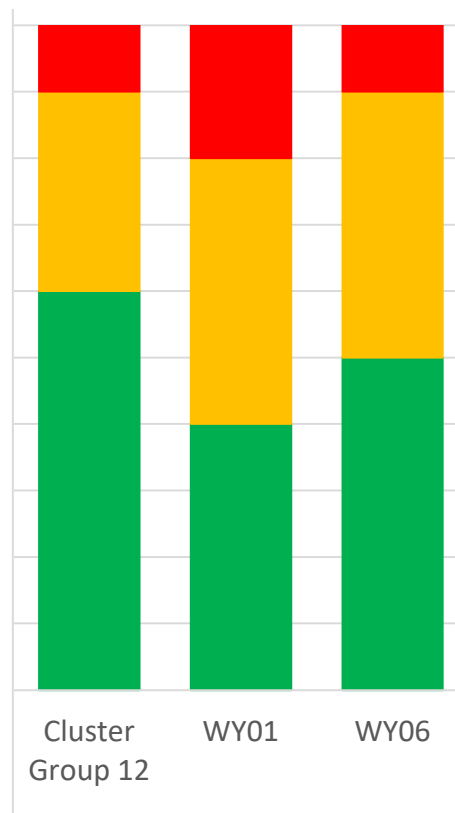


Table 4-97: Cluster Group 12 - Rating Summary

		Cluster Group 12					
		12		Individual clusters			
		Wythall North		WY01		WY06	
	Metric						
% DRIVE TO WORK	1.1	1	77%	1	-	1	-
	1.2	-					
TRANSPORT SERVICES	2.1	2	-	2	-	1	-
LABOUR MARKET	3.1	2	126,356	2	135,347	2	117,365
	3.2	-					
HEALTHCARE	4.1	2	14	2	14	2	12
	4.2	1	53	1	55	1	49
	4.3	0	23	0	23	0	22
EDUCATION	5.1	2	9.9	1	10.02	2	9
	5.2	2	15.9	2	17.0	2	10.0
PLANNED IMPROVEMENTS	6.1	2	3	0	-	1	-
DISTRICT CENTRES	7.1	1	24.8	1	26	2	17



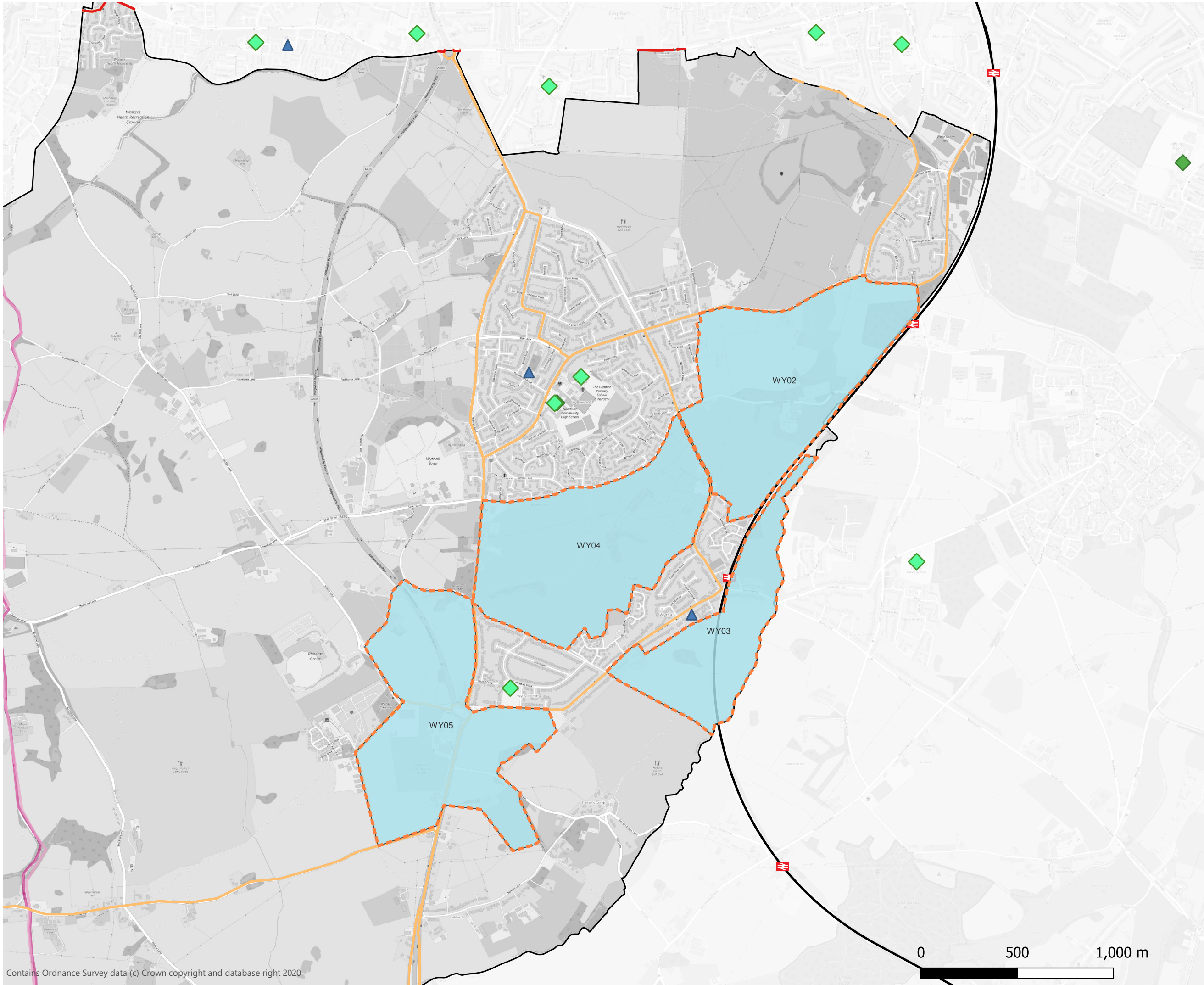
## Cluster Group 13: Wythall South

4.294 Cluster Group 13 comprises areas south of Wythall. As shown in Figure 4-72 the four clusters are situated:

- **WY02** – Directly west of the railway line and Whitlocks End rail station, covering areas of greenfield land and a mix of uses off Houndsfield Lane..
- **WY03** – Adjacent to Wythall rail station and bounded on its eastern extent by the BDC boundary. This cluster crosses the rail line which could pose challenges to connectivity potential depending on where growth was located within it.
- **WY04** – Between built-up residential areas north (Hollywood) and south (Wythall), covering existing greenfield land.
- **WY05** – Furthest south, intersected north-south by the A435. This area presents employment and residential opportunities.

4.295 There is existing healthcare and education provision within the residential areas surrounding Wythall.

4.296 Their collective scale and proximity to each other represents opportunity for large scale residential development, at which would complement sustainable transport outcomes and to create a sustainable transport vision for across Wythall.



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Prepared  
JP

Reviewed  
SN

Date  
April 22

Key

- Cluster 13
- 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



Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
Cluster Group 13

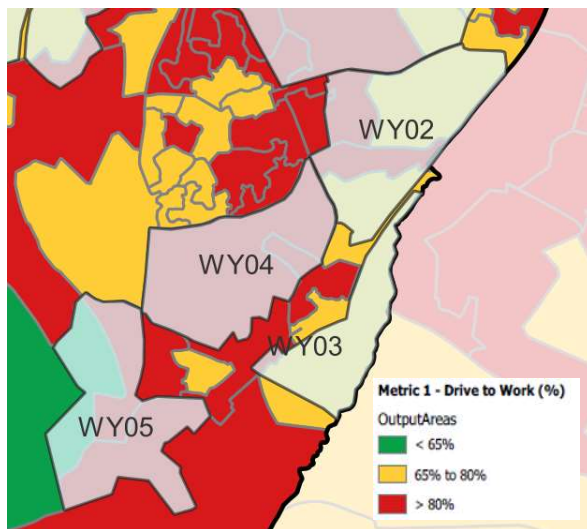
Revision  
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3578

Figure number  
Figure 4-72

Date  
April 2022

Figure 4-73: Cluster Group 13 – Metric 1 - Drive to work (%)

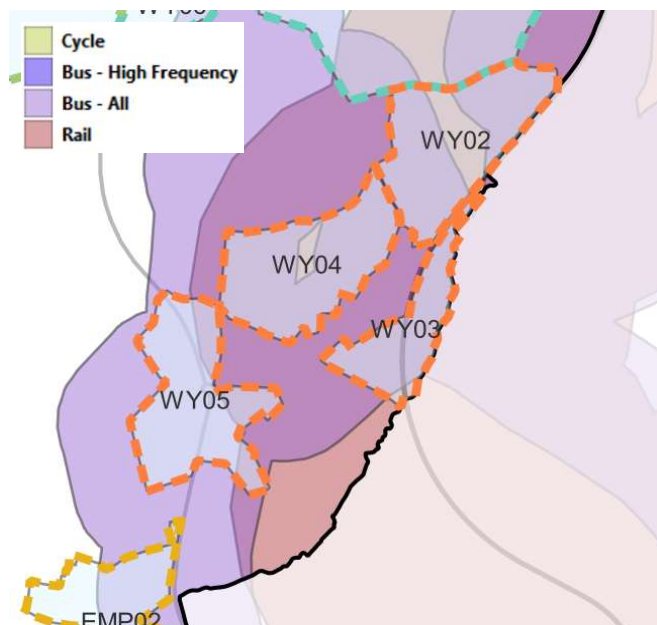


#### Metric 2: Proximity to current sustainable transport services and infrastructure that serve key settlements

- 4.299 Cluster group 13 has a wide range of sustainable transport provision as seen in Figure 4-74 (outlined in orange), with the group rating as 'green' overall.
- 4.300 Bus and rail coverage exist for sub-clusters WY02, WY03 and WY04 giving it a RAG rating of 'green'. On the other hand, WY05 only has low frequency bus coverage which reflects its 'amber' score.
- 4.301 There is potential to enhance frequency and deliver cycle connections to all sub-clusters to improve connectivity locally and to public transport.



Figure 4-74: Cluster Group 13 – Metric 2.1



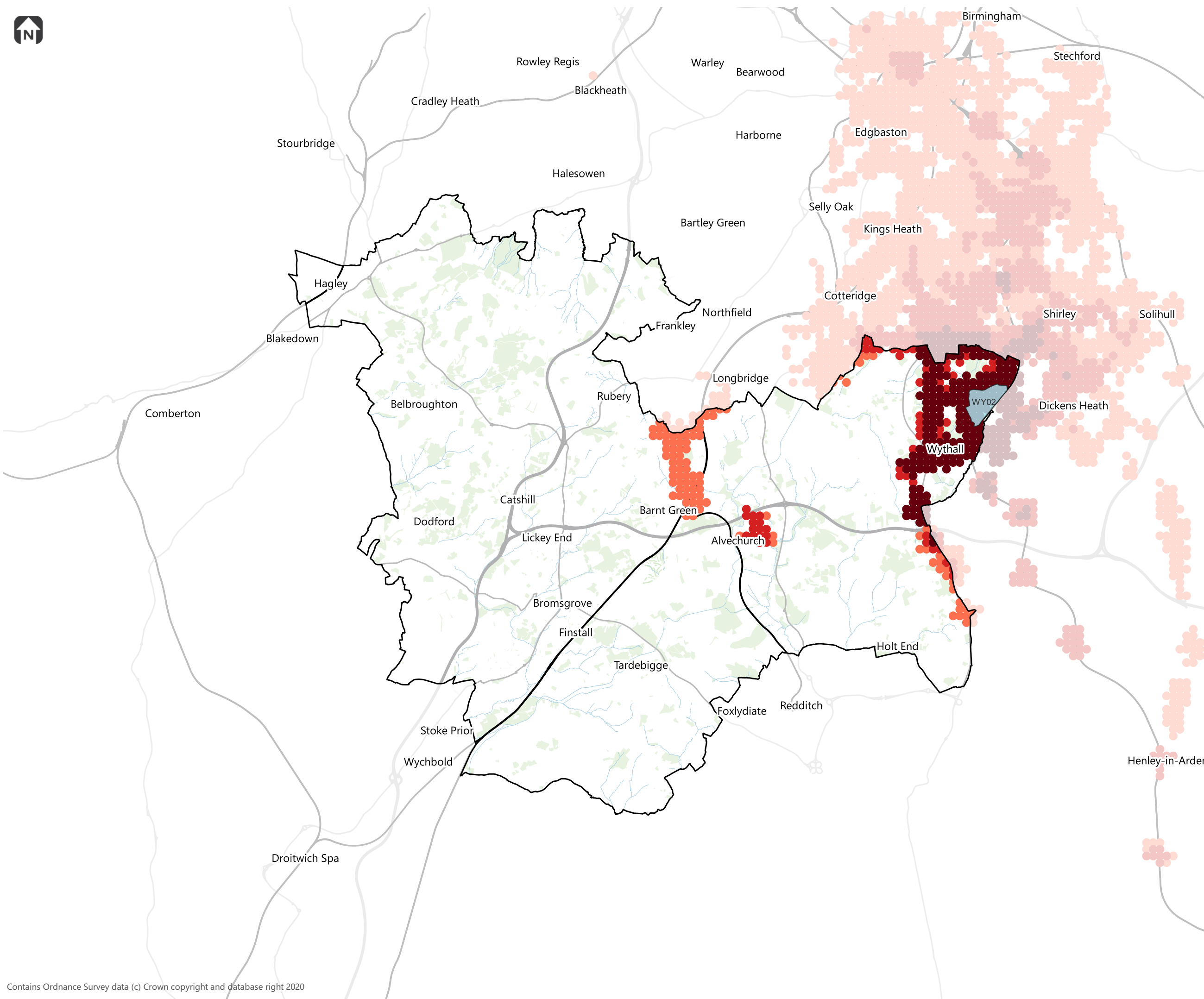
### Metric 3: Access to jobs by public transport

4.302 Figure 4-75, Figure 4-76, Figure 4-77 and Figure 4-78 show the mapped outputs of the analysis for each sub-cluster for this metric, with Table 4-56 providing a summary of the resulting number of jobs accessible within 45 minutes by public transport.

4.303 WY03, WY04 and WY05 have over 40,000 jobs accessible by public transport within 45 minutes, resulting in them receiving an 'amber' rating, whilst WY02 has over 100,000 giving it a 'green' rating.

Table 4-98: Cluster Group 13 – Metric 3.1 – Number of jobs accessible by public transport

Sub-cluster	Number of jobs	RAG Rating
WY02	101,621	Green
WY03	73,485	Amber
WY04	91,928	Amber
WY05	80,117	Amber
Average - Cluster Group 13	86,788	Amber



Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster13 - WY02

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster13\_PT\_FROM\_WY02

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network



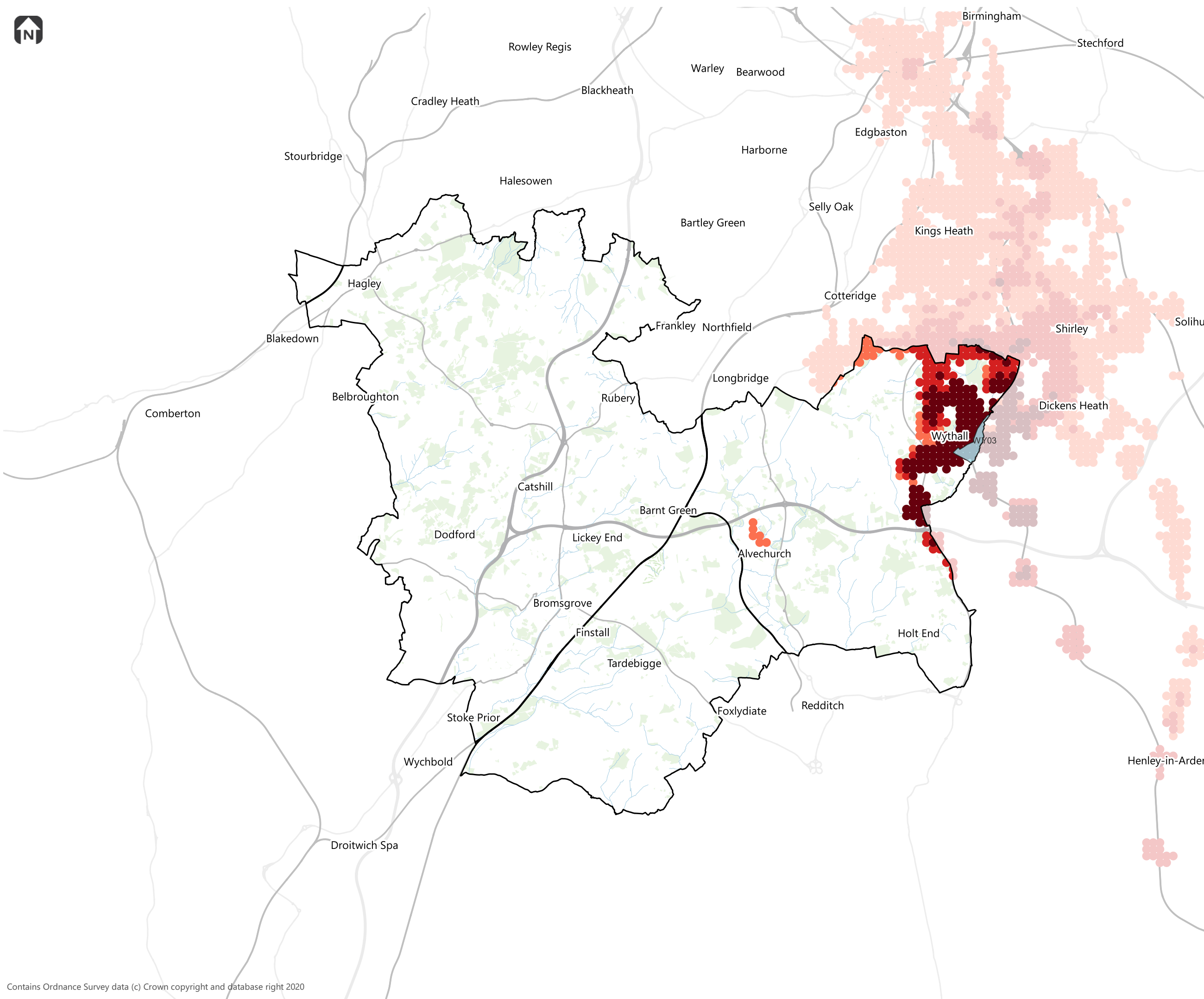
Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
WY02 – Metric 3.1 – Public transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-75	April 2022



Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster13 - WY03

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster13\_PT\_FROM\_WY03

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network



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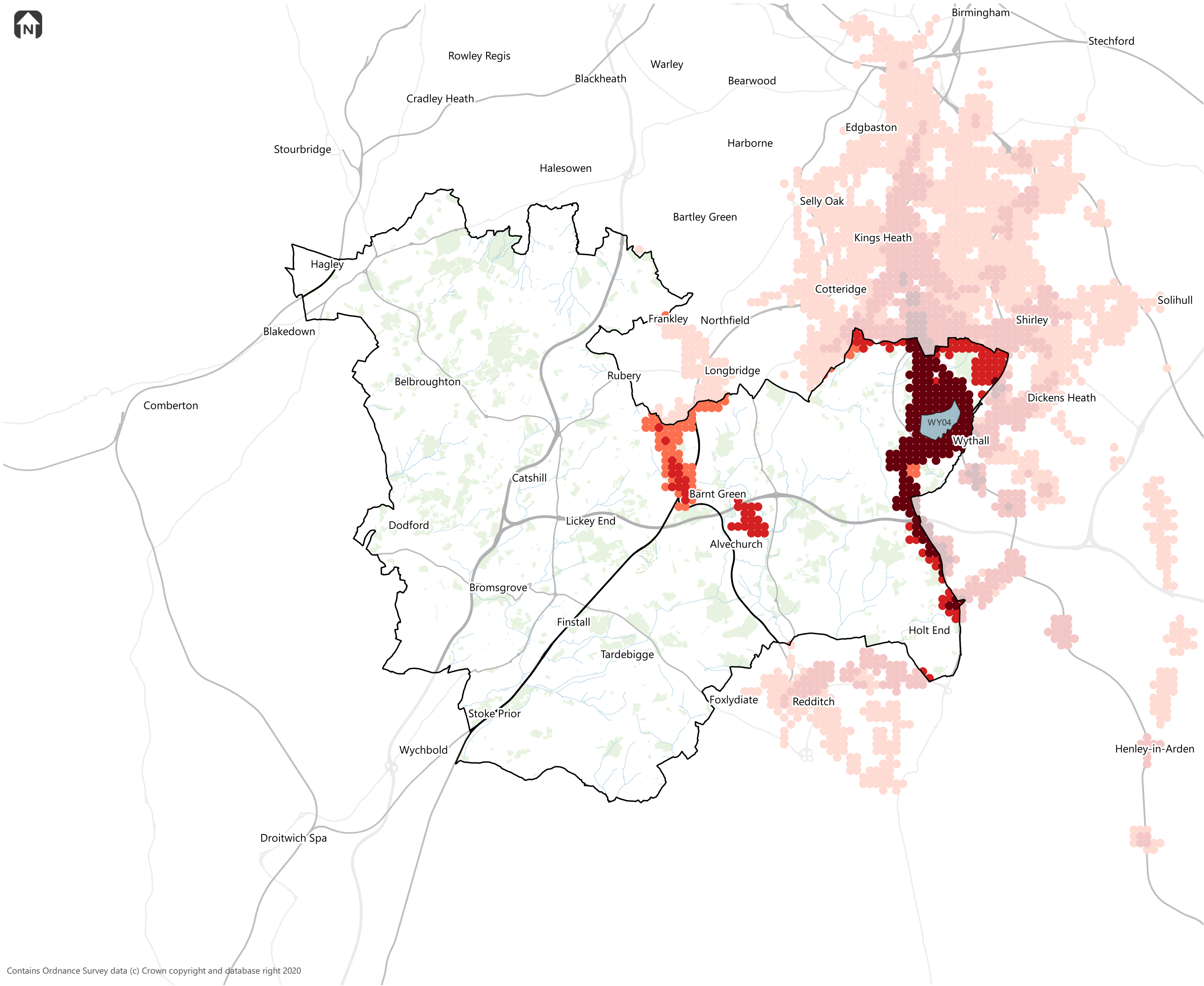
Project  
Bromsgrove DPR Transport Assessment

Figure title  
WY03– Metric 3.1 – Public transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-76	April 2022





Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster13 - WY04

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster13\_PT\_FROM\_WY04

1 - 15 minutes

15 - 30 minutes

30 - 45 minutes

**TransportNetwork**

Railway Line

Strategic Road Network

Major Road Network



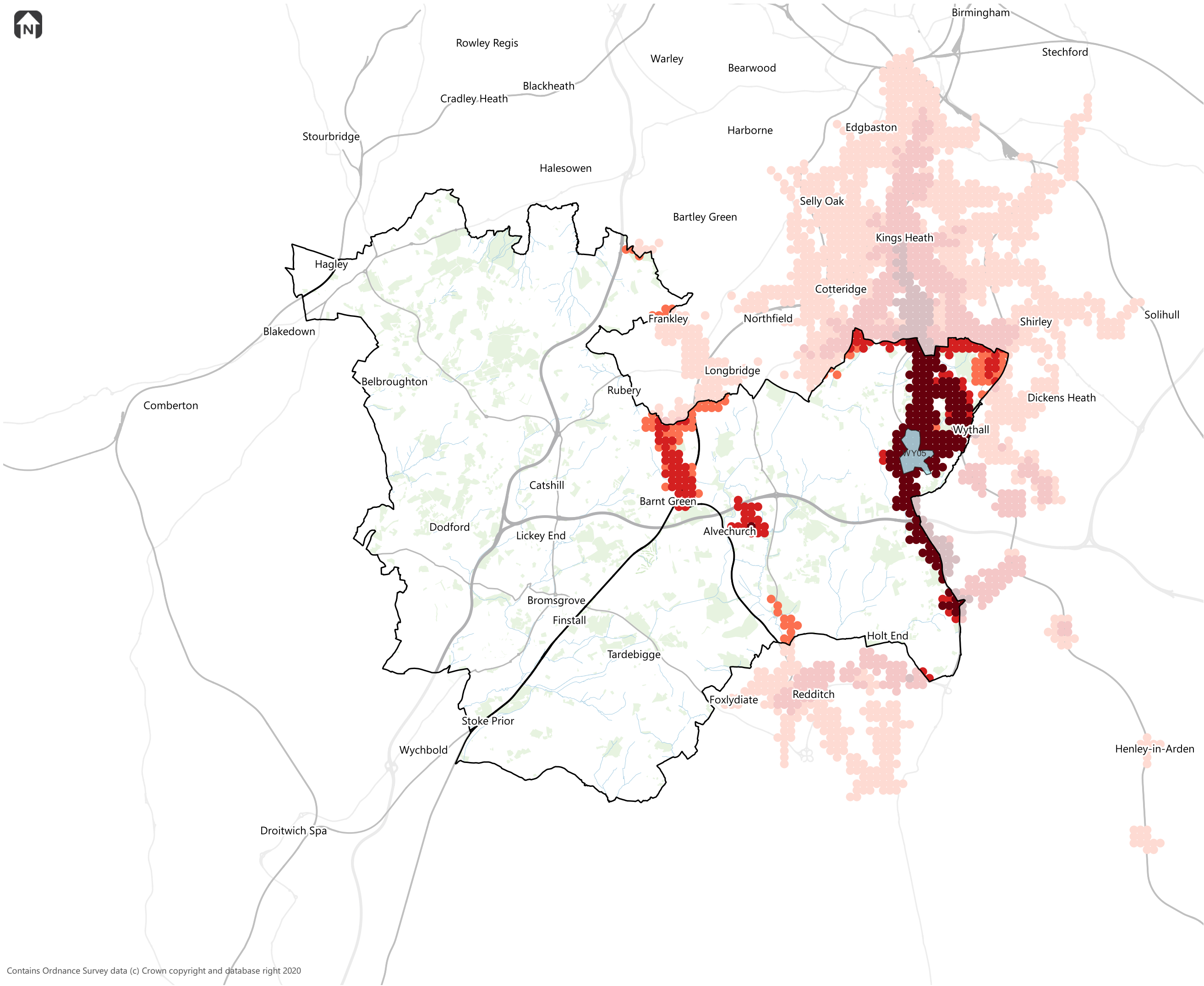
Client  
Bromsgrove District Council

Project  
Bromsgrove DPR Transport Assessment

Figure title  
WY04 – Metric 3.1 – Public transport access to jobs

Revision	Project number
A	3578

Figure number	Date
Figure 4-77	April 2022



Key

Bromsgrove District

**Stage 3b - Sites and Clusters**

Cluster13 - WY05

**Metric 3.1 - Number of Jobs (PT)**

**Journey Time Accessibility**

Cluster13\_PT\_FROM\_WY05

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

**TransportNetwork**

- Railway Line
- Strategic Road Network
- Major Road Network



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Client  
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Project  
Bromsgrove DPR Transport  
Assessment

Figure title  
WY05– Metric 3.1 – Public  
transport access to jobs

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A

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3578

Figure number  
Figure 4-78

Date  
April 2022

#### Metric 4: Access to healthcare

4.304 As seen in Figure 4-72 there is one healthcare facility in Hollywood, and another in Wythall located between sub-clusters WY03 and WY04. The proximity of these is reflected by the cluster group's 'green' RAG rating with an average journey time of 11 minutes, with sub-clusters ranging from 9 to 14 minutes (all receiving 'green' ratings themselves).

Table 4-99: Cluster Group 13 – Metric 4.1 – Public transport access to healthcare

Sub-cluster	Average journey time	RAG Rating
WY02	9	Green
WY03	9	Green
WY04	14	Green
WY05	12	Green
Average - Cluster Group 13	11	Green

4.305 The nearest hospital with an A&E department is Alexandra Hospital. It is not possible to access sub-clusters WY02 and WY03 within 60 minutes by public transport. On the edge of WY04 and WY05 it is possible to access the A&E in between 30 and 45 minutes, however for the majority of both it is between 45 and 60 minutes. This results in an average journey time of 46 minutes for both and an 'amber' rating. The overall cluster group average is also rated as 'amber' with an average journey time of 55.1 minutes.

Table 4-100: Cluster Group 13 – Metric 4.2 – Public transport access to A&E

Sub-cluster	Average journey time	RAG Rating
WY02	> 60	Red
WY03	> 60	Red
WY04	46	Amber
WY05	46	Amber
Average - Cluster Group 13	55.1	Amber

4.306 In terms of driving access to A&E, the nearest hospital for all sub-clusters is Alexandra Hospital. WY02 and WY03 have an estimated journey time of 21 minutes and thus receive a 'red' rating, whilst WY04 and WY05 are both under 20 minutes giving them an 'amber' rating. The overall cluster group average is scored as 'amber' as well.

4.307 For all sub-clusters and the overall group cluster the average driving journey time takes significantly less than half the time it would take by public transport.

Table 4-101: Cluster Group 13 – Metric 4.3 – Driving access to A&E

Sub-cluster	Estimated journey time	RAG Rating
WY02	21	Red
WY03	21	Red
WY04	19	Amber
WY05	17	Amber
Average - Cluster Group 13	19	Amber

#### Metric 5: Access to education

4.308 As shown in Figure 4-72 there are three educational facilities in Hollywood and another between sub-clusters WY04 and WY05. The average journey time for WY02 and WY03 is 9 minutes, reflecting its 'green' RAG rating, and 11 minutes for WY04 and WY05 giving it an 'amber' rating. The average journey time for the overall group cluster is 10.1 minutes, also giving it an 'amber' rating.

Table 4-102: Cluster Group 13 – Metric 5.1 – Public transport access to education

Sub-cluster	Average journey time	RAG Rating
WY02	9	Green
WY03	9	Green
WY04	11	Amber
WY05	11	Amber
Average - Cluster Group 13	10.1	Amber

4.309 The average journey time to secondary education for all sub-clusters is under 20 minutes meaning they all receive a 'green' rating. The overall group cluster average is 13.5 minutes.

4.310 The closest secondary school by public transport for all origin points is Woodrush Community High School, aside from one point in sub-cluster WY05 where the closest is Bournville College of Further Education.

Table 4-103: Cluster Group 13 – Metric 5.2 – Public transport access to secondary education

Sub-cluster	Average journey time	RAG Rating
WY02	12	Green
WY03	12	Green
WY04	12	Green
WY05	16	Green
Average - Cluster Group 13	13	Green

### Metric 6: Proximity to planned local transport improvements

4.311 Planned sustainable transport improvements within the vicinity of cluster group 13, that were identified at the time of the study include:

- Wythall Rail Station Enhancement Scheme
- Local stations multi-modal interchange and access improvement in Solihull
- "Corridor L" Rail Enhancements on Snow Hill Lines

4.312 These improvements result in a 'green' RAG rating for the cluster group, where WY02 rates 'green', WY03 and WY04 rate 'amber' and WY05 is not in the vicinity of any identified improvements and receives a 'red' rating.

### Metric 7: Access to district centres

4.313 For sub-clusters WY02 and WY03 the closest local centre in terms of average journey time is Shirley. In WY04, Shirley and Kings Heath can be accessed in under 45 minutes and in WY05 both Longbridge and Kings Heath can be accessed in under 45 minutes.

4.314 This results in an average cluster group journey time of 29.3 minutes to local centres which gives it a RAG rating of 'amber'. Both WY02 and WY03 receive 'red' ratings.

Table 4-104: Cluster Group 13 – Metric 7.1 - Public transport access to district centres

Sub-cluster	Average journey time	RAG Rating
WY02	34	Red
WY03	33	Red
WY04	28	Amber
WY05	24	Amber
Average - Cluster Group 13	29.3	Amber

### Summary and recommendations

4.315 Table 4-105 shows a summary of the RAG rating outputs where 2 is 'green', 1 is 'amber' and 0 is 'red' rating. Where applicable the numerical outputs are shown alongside. Figure 4-79 shows the number of each category of rating for each cluster.

4.316 Overall, the metrics assessed indicate a very good level of suitability in sustainable transport terms with the cluster group scoring 70%. All sub-clusters score similar to each other in the assessment with the highest being WY02 (65%) and the lowest WY03 and WY05 with 55% each.

Figure 4-79: Cluster Group 13 Results

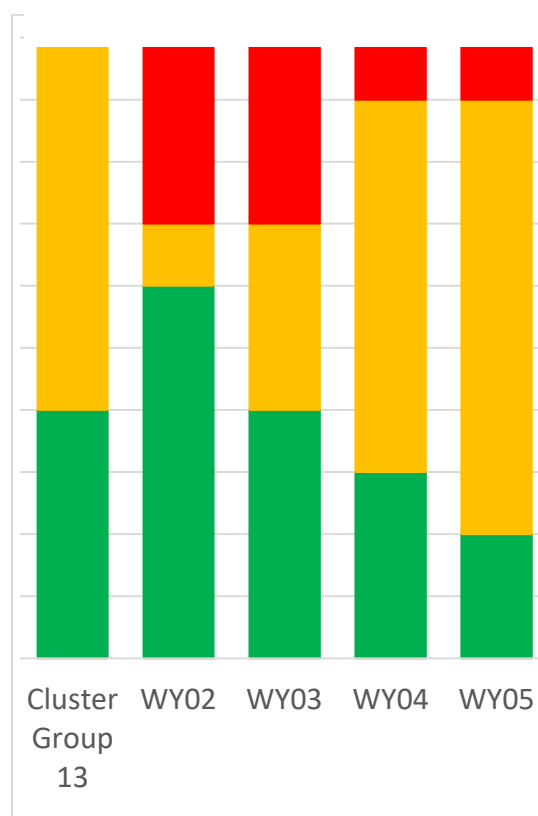




Table 4-105: Cluster Group 13 - Rating Summary

	Metric	Cluster Group 13									
		13		Individual clusters							
		Wythall South		WY02		WY03		WY04		WY05	
% DRIVE TO WORK	1.1	1	79%	1	-	1	-	0	-	1	-
	1.2	-									
TRANSPORT SERVICES	2.1	2	-	2	-	2	-	2	-	1	-
LABOUR MARKET	3.1	1	86,788	2	101,621	1	73,485	1	91,928	1	80,117
	3.2	-									
HEALTHCARE	4.1	2	11	2	9	2	9	2	14	2	12
	4.2	1	46	0	-	0	-	1	46	1	46
	4.3	1	19	0	21	0	21	1	19	1	17
EDUCATION	5.1	1	10.1	2	9	2	9	1	11	1	11
	5.2	2	13.5	2	12.1	2	12.5	2	12.4	2	16.1
PLANNED IMPROVEMENTS	6.1	2	3	2	-	1	-	1	-	0	-
DISTRICT CENTRES	7.1	1	29.3	0	34	0	33	1	28	1	24