

3. Project outputs

This section of the report will feature maps depicting the data from each of the 8 criteria along with the results from the MCDM analysis, which will show the most suitable areas for new trees when all of the factors are considered. The colour scheme used for the criteria maps corresponds to the colours used for each score value in table 1.

3.1 Figure 1 – Distance from trees

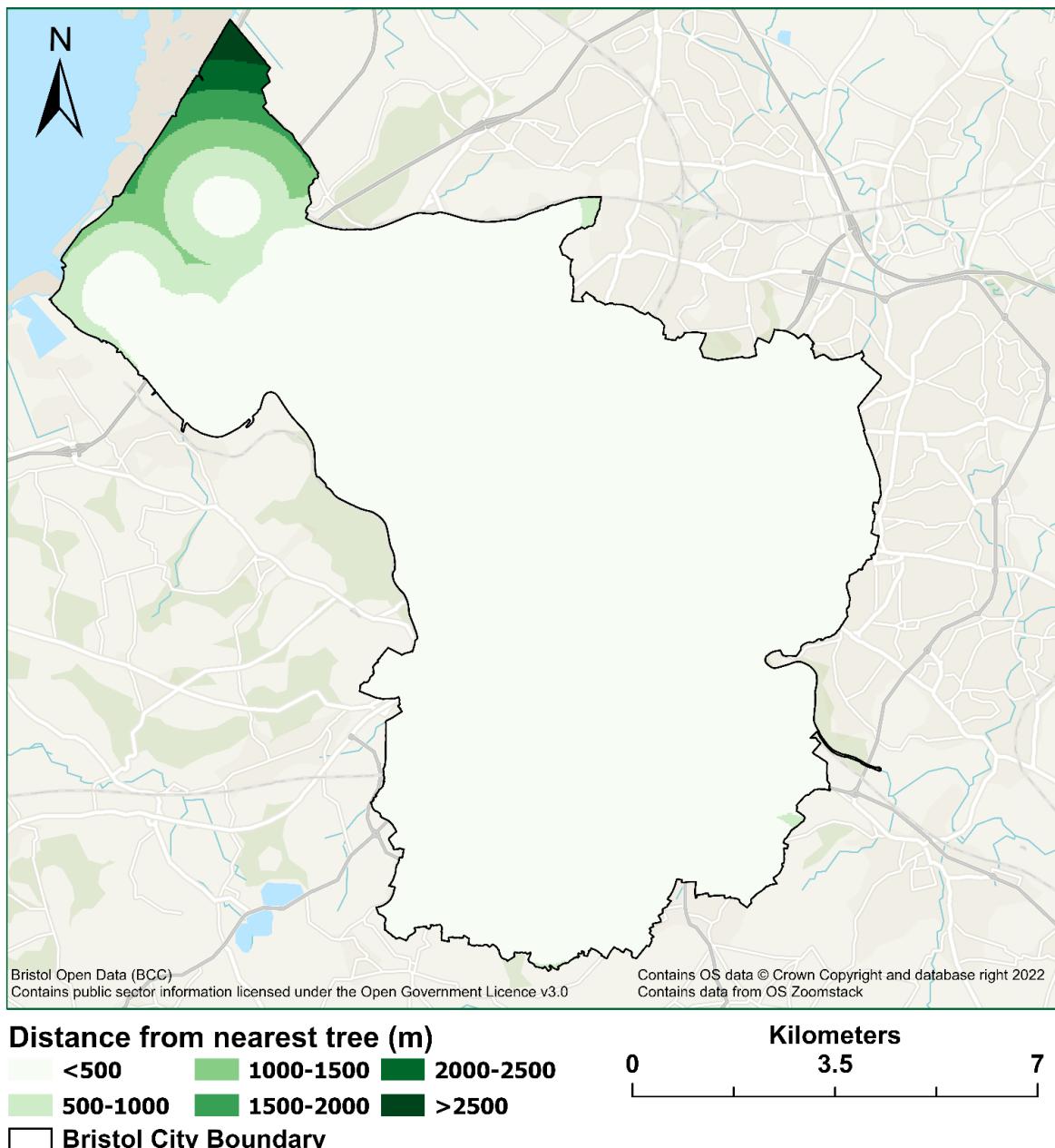


Figure 1 shows that almost everywhere in Bristol is within less than 500m of a tree. The exception to this is a small, high scoring area in the northwest.



3.2 Figure 2 – Distance from green spaces

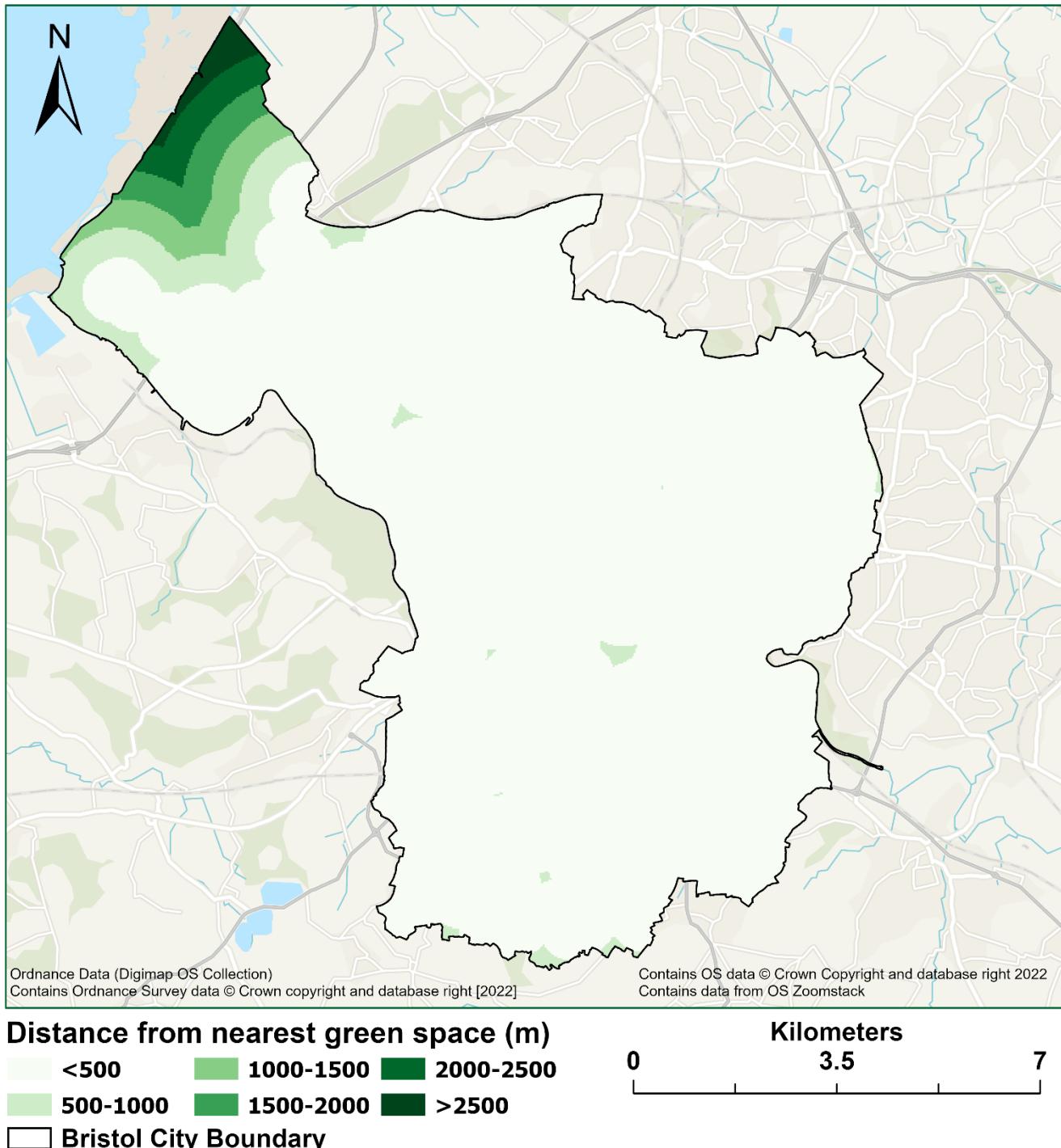
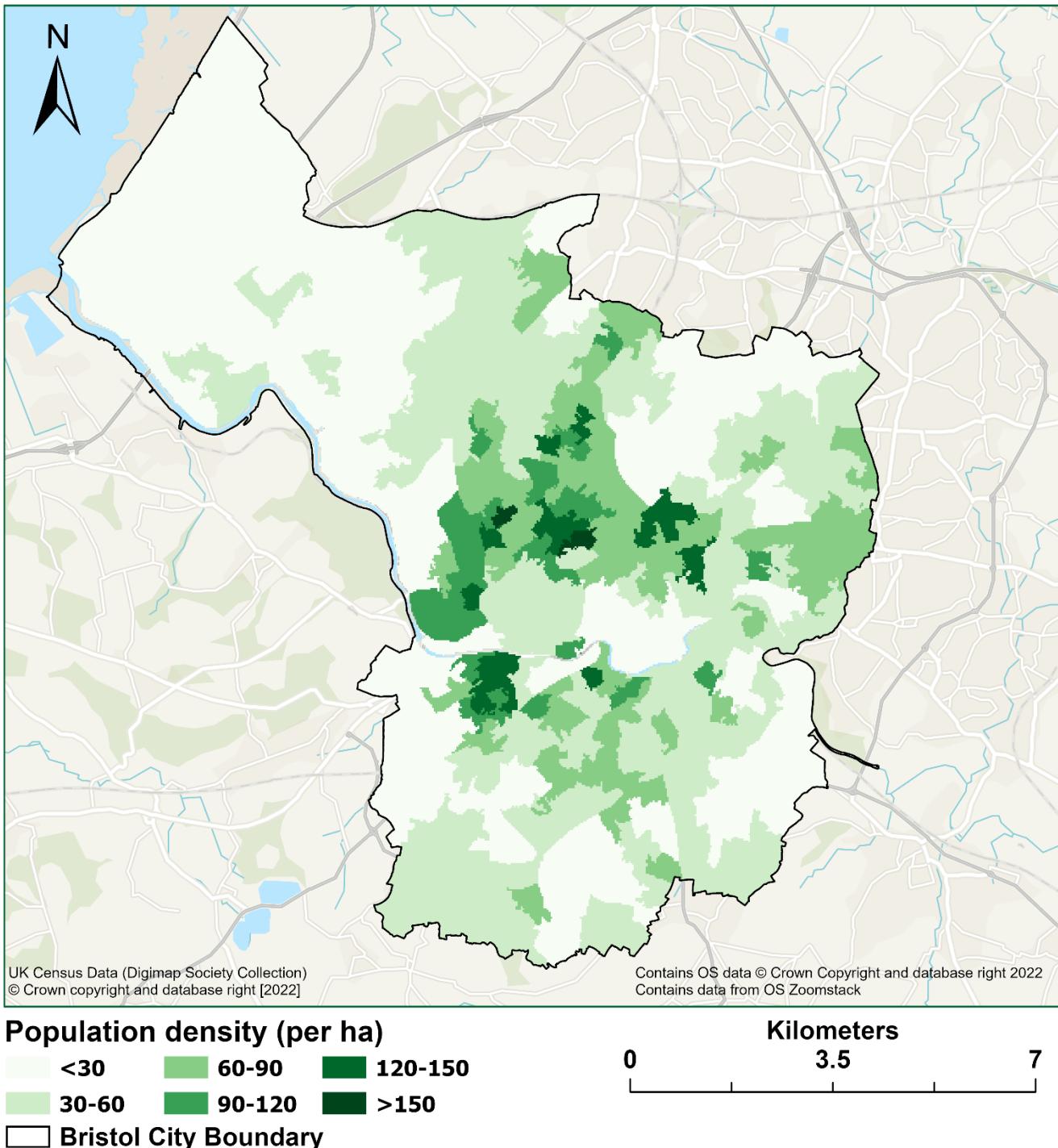


Figure 2 has a similar pattern to figure 1, with the highest scoring areas concentrated in the northwest.



3.3 Figure 3 – Population density



In figure 3 the highest scoring areas are in and around the city centre. Here population density per hectare is mostly between 90-120 and 120-150 with some areas exceeding 150.



3.4 Figure 4 – Satisfaction with green spaces

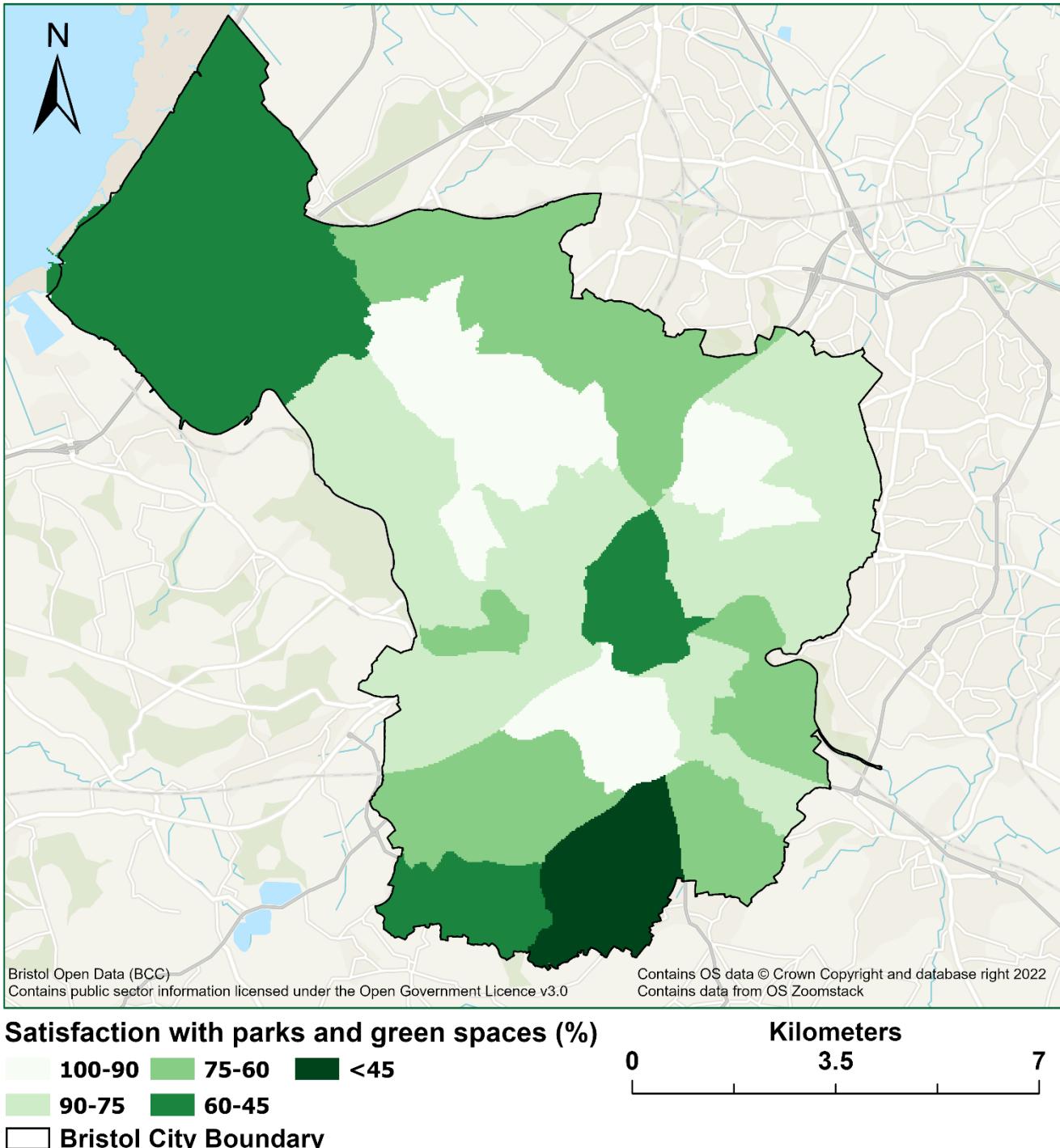
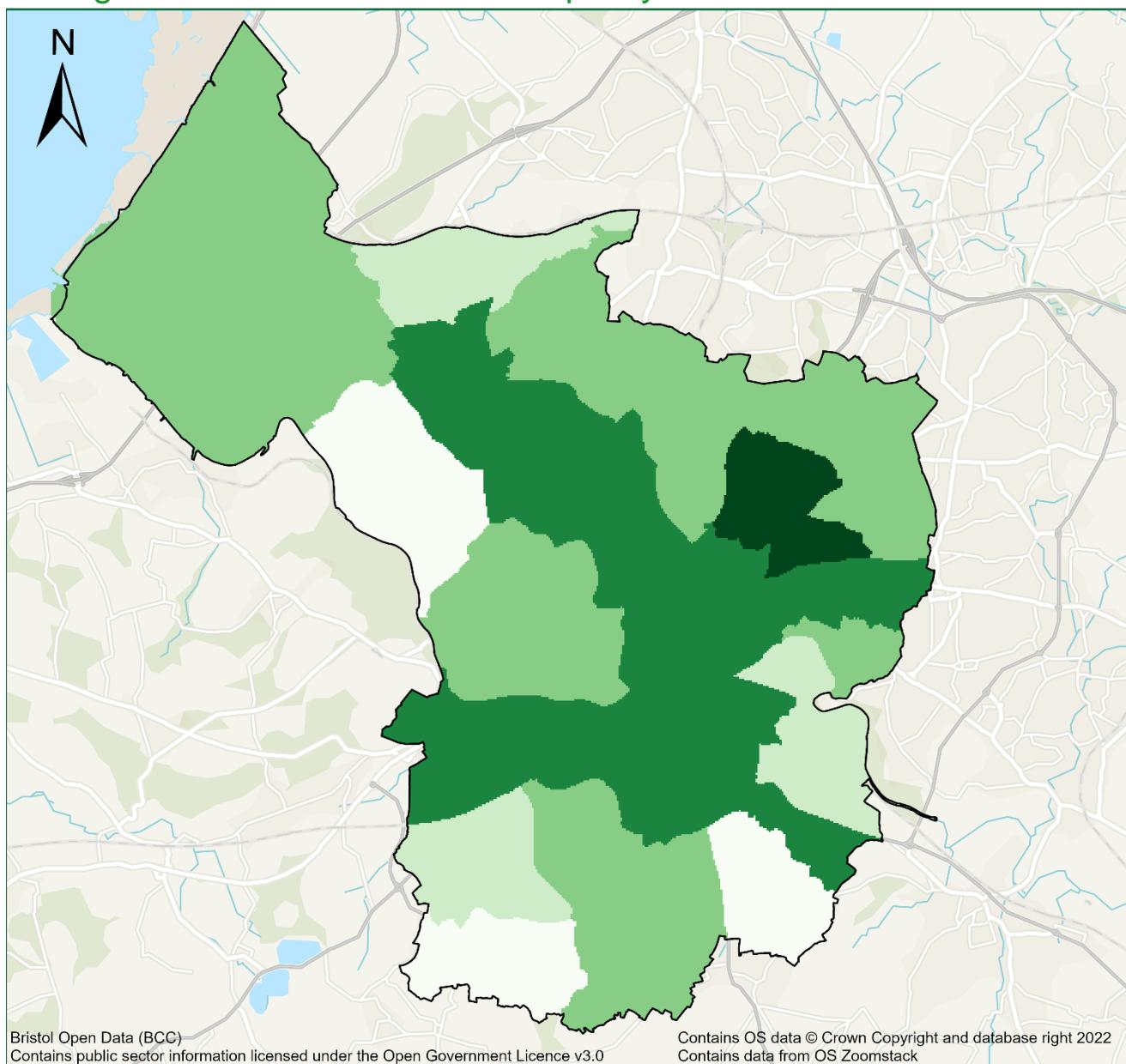


Figure 4 shows a variety in the location of high scoring areas. One area in the south has a satisfaction level below 45%. There are also areas near the centre, northwest and south that have a satisfaction level of between 60-45%.



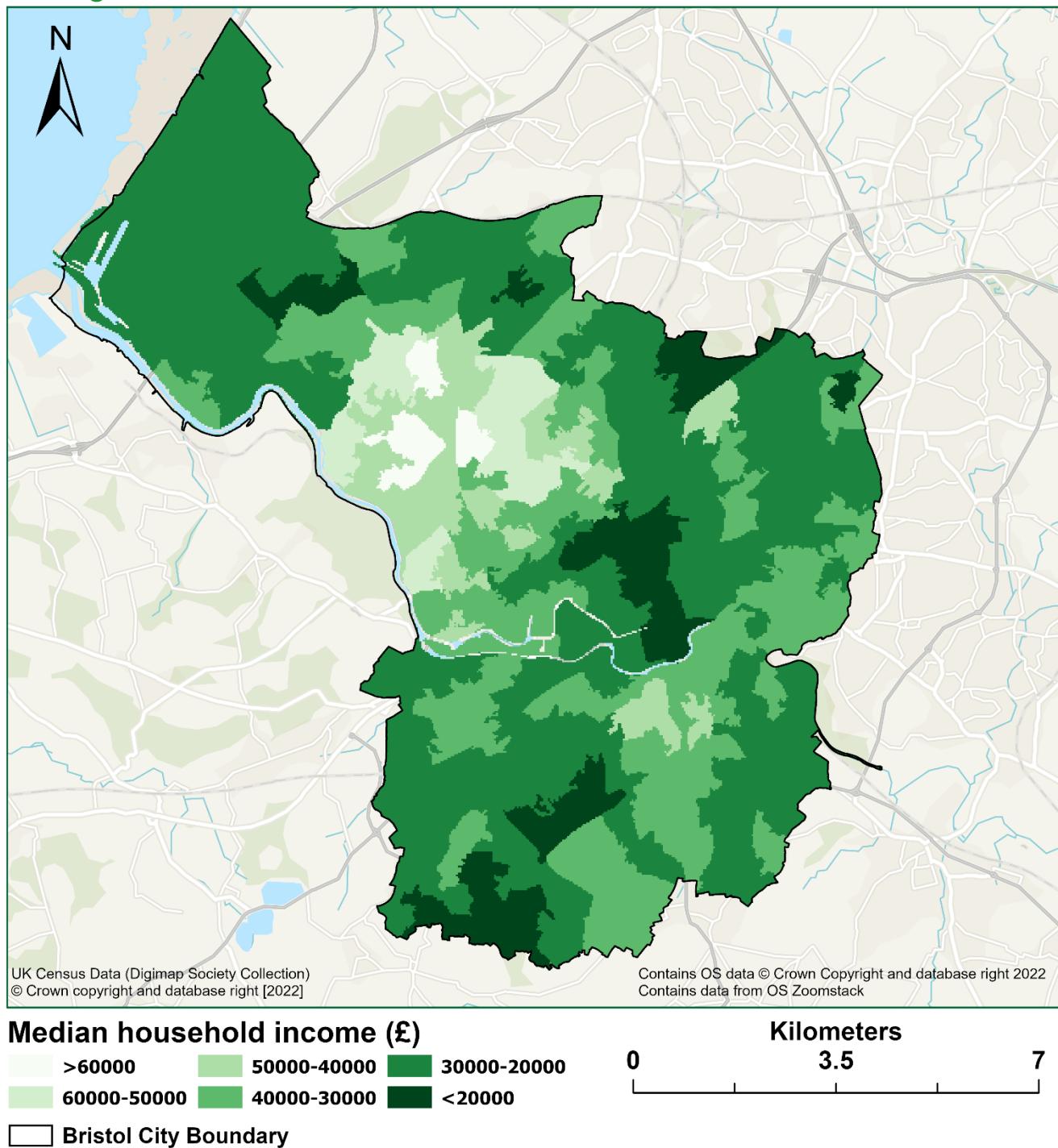
3.5 Figure 5 – Satisfaction with air quality



In figure 5 one area in the northeast has a satisfaction level below 55%. Several areas spread out near the centre of the city have satisfaction levels between 55-65%.



3.6 Figure 6 – Median household income



Higher income (£>60,000 and £60,000-50,000) areas are concentrated to the northwest of the centre. Generally, the less wealthy areas with higher scores are found around the edge of the city.



3.7 Figure 7 – Distance from A roads

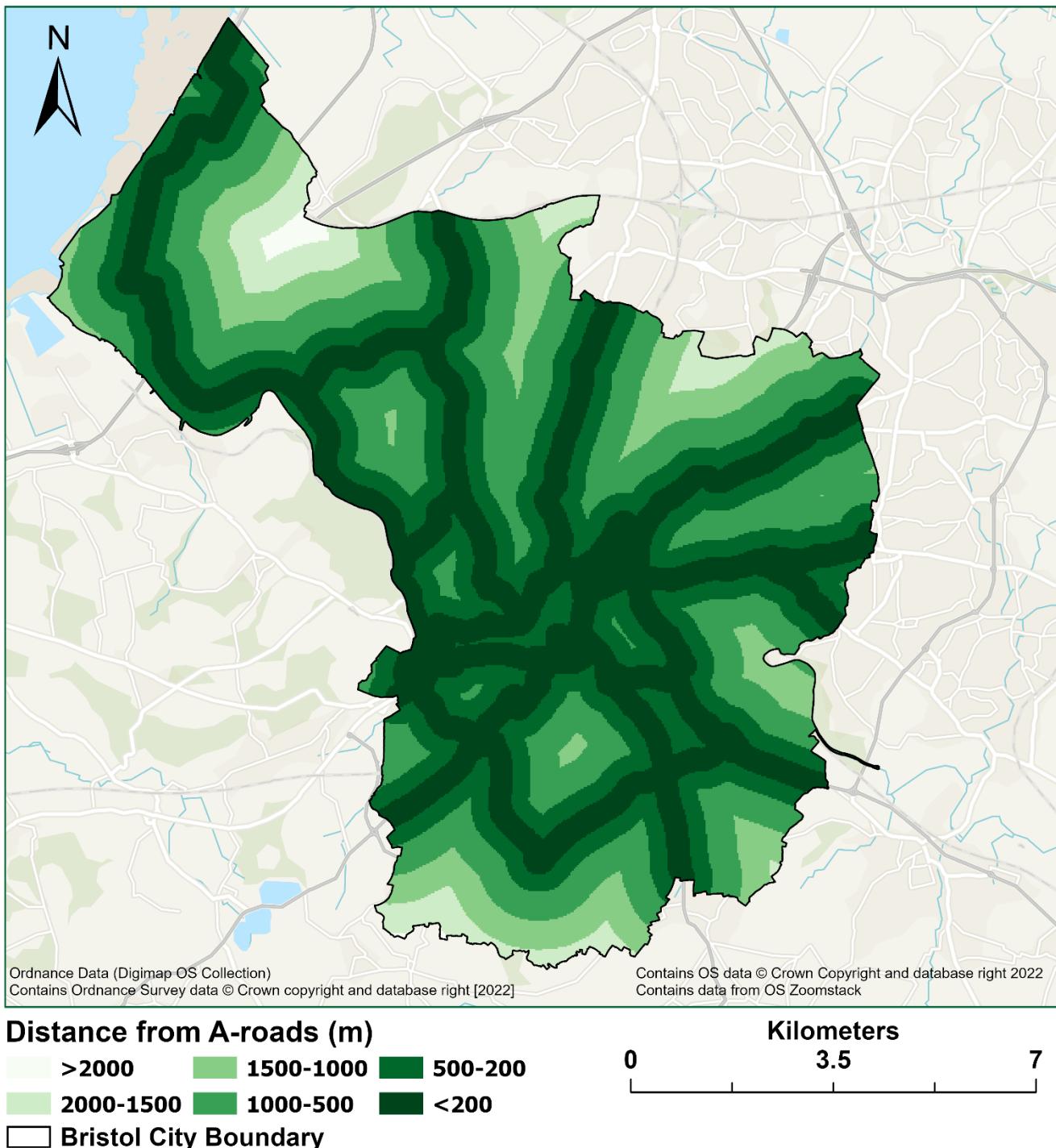


Figure 7 shows that the city centre has the highest concentration of A-roads, although they are spread throughout the city.



3.8 Figure 8 – Car ownership per person

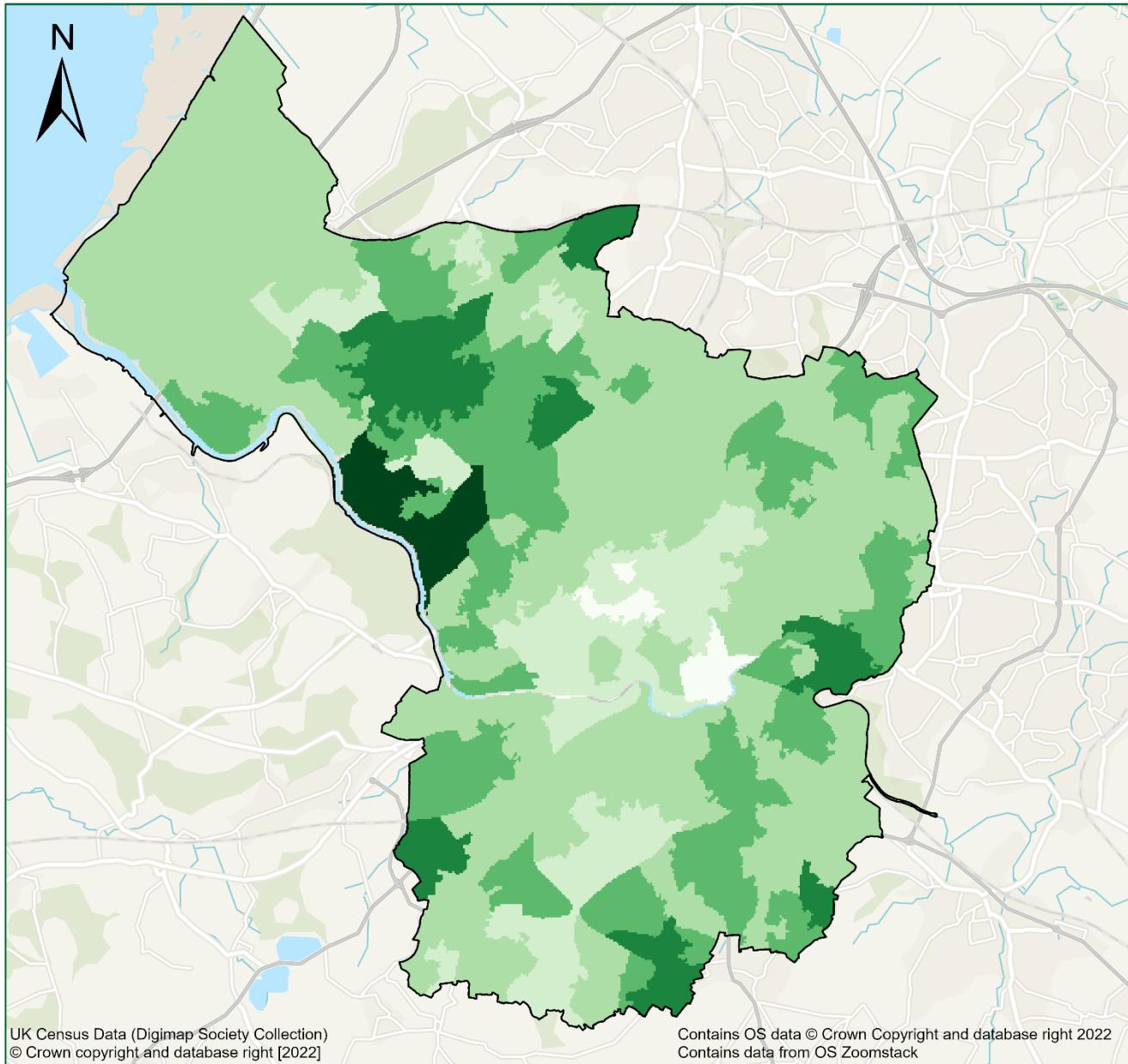
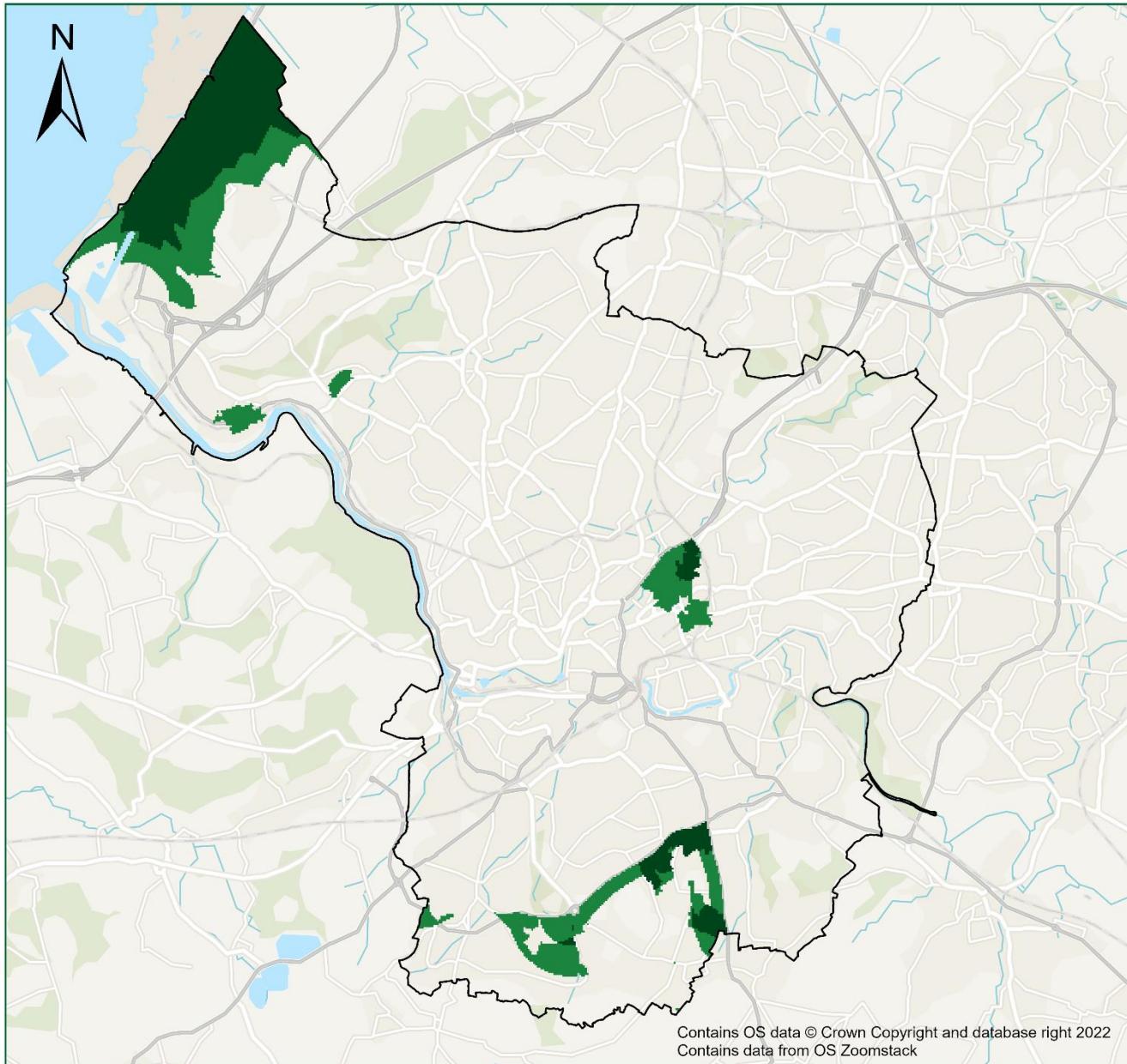


Figure 8 shows that generally, car ownership rates score lowly. The one exception to this is an area to the northwest of the city centre which has a score of 10 due to its car ownership rate exceeding 0.7 per person.



3.9 Figure 9 – Most suitable areas for new trees (MCDM results)



MCDM Results

- Score of >0.55 (Most suitable)
- Score of 0.5-0.55 (Suitable)
- Bristol City Boundary

Kilometers
0 3.5 7

Figure 9 is the overall output of the MCDM analysis, when all different criteria from the previous maps are combined together and their weightings considered. The areas highlighted in dark green scored the highest and are therefore the most suitable areas for new urban trees. The areas highlighted in green still scored highly and should be considered suitable for new trees. However, additional trees here should be less of a priority.

