



Department
for Environment
Food & Rural Affairs



Government
Statistical Service

Statistical Digest of Rural England:

5 – Connectivity and Accessibility

August 2023





© Crown copyright 2023

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit

www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

rural.statistics@defra.gov.uk

www.gov.uk/defra

Cover photos

		Ward 2011	Rural-Urban Classification
TL	Helmsley marketplace	Helmsley	Rural Village and Dispersed in a sparse setting
TC	Horton-in-Ribblesdale train station with Penyghent behind	Penyghent	Rural Village and Dispersed in a sparse setting
TR	St Giles Church, Skelton	Rural West York	Rural Town and Fringe
CL	Fishing Boat, Marske-by-the-Sea with Hunt cliff in the distance	St Germain's; Saltburn	Rural Town and Fringe
CR	Thornton Force Waterfall, Ingleton Waterfalls Trail	Ingleton and Clapham	Rural Village and Dispersed in a sparse setting
BL	Farmer working the fields in Knapton	Rural West York	Rural Town and Fringe
BC	Remote pub at Ribblehead viaduct	Ingleton and Clapham	Rural Village and Dispersed in a sparse setting
BR	Glamping pod in the North York Moors	Pickering East	Rural Town and Fringe in a sparse setting

All cover photos provided by Martin Fowell.

Table of Contents

About the Statistical Digest of Rural England	5
Official Statistics.....	6
Connectivity and Accessibility.....	7
A. Broadband.....	8
Summary.....	8
Background information.....	9
Broadband speed	10
Broadband coverage	10
Broadband explanatory notes	12
B. Travel behaviours	14
Summary.....	14
Disclaimer	14
Travel behaviour in 2021	14
Average distance travelled in 2021	15
Average distance travelled – long-term trends	18
Average trip length in 2021	23
Average trip length – long-term trends.....	24
Number of trips made in 2021	25
Number of trips made – long-term trends	26
Journey to School.....	27
Car availability	29
Travel behaviour explanatory notes	31
C. Access to personal transport	32
Summary.....	32
Fuel types	32
Electric vehicles.....	32
Personal transport explanatory notes	37
D. Access to services.....	38
Summary.....	38
Average minimum travel times.....	38
Access to key services	40
Average number of key services available	45
Overall measure of accessibility to services	47
Overall measure of accessibility to services: technical note.....	54
Access to services explanatory notes	54
E. Home working	56
Summary.....	56
Home working.....	56

Home working explanatory notes.....	59
Appendix 1: Defining Rural areas.....	60
Appendix 2: The 7 thematic reports that make up the new Statistical Digest of Rural England	64
Appendix 3: Mapping the old digest sections to the 7 new themes	65

About the Statistical Digest of Rural England

The Statistical Digest of Rural England (hereafter the Digest) is a collection of statistics on a range of social and economic topics and provides broad comparisons between Rural and Urban areas by settlement type. For more information on our classifications, including maps and diagrams explaining the classification, see Appendix 1.

The Digest has been restructured into thematic reports and incorporates the previously separate publication the [Rural Economic Bulletin](#).

The Digest consists of the following thematic reports:

1. Population
2. Housing
3. Health and Wellbeing
4. Communities and Households
5. Connectivity and Accessibility
6. Education, Qualifications and Training
7. Rural Economic Bulletin

As shown in Appendix 2, all of the content previously found within the Digest has been clustered into sub-themes. There is a lookup table in Appendix 3 which shows how the new structure maps to the previous publication structure. The Digest will continue to be updated regularly when new material is available. Thematic reports will be updated individually and not every report will be updated every month. The most recent updates for this theme are shown in Table 1. Please note that in August 2023, the “Travel and Transport” section from previous releases of the Digest has been split into two sections (“Travel behaviours” and “Access to personal transport”), although no new analysis has been added.

Table 1: Update monitor for Connectivity and Accessibility subsections

where “✓” indicates the topic has been updated, “✗” indicates the topic has not been updated, and “New” indicates a new topic with analysis not previously included within the Digest.

Section	March 2023	July 2023	August 2023
Broadband	✓	✗	✓
Travel behaviours	✓	✓	New
Access to personal transport	✓	✓	New
Access to services	✓	✓	✗
Home working	✓	✗	✓

Official Statistics

These statistics have been produced to the high professional standards set out in the Code of Practice for Official Statistics, which sets out eight principles including meeting user needs, impartiality and objectivity, integrity, sound methods and assured quality, frankness and accessibility.

More information on the Official Statistics Code of Practice can be found at: [Code of Practice for Statistics](#).

This publication has been compiled by the Rural Statistics Team within the Rural and Place Team in Defra:

Stephen Hall

Sarah Harriss

Beth Kerwin

Martin Fowell

rural.statistics@defra.gov.uk

There is a 2011 Census version of the Digest which looks at the data from the 2011 Census and where possible makes comparisons to the 2001 Census results.

This can be found at <https://www.gov.uk/government/statistics/2011-census-results-for-rural-england>

Analysis of the 2021 Census will follow the release of a 2021-based Rural-Urban Classification.

Connectivity and Accessibility

The part of the Statistical Digest of Rural England focuses on Connectivity and Accessibility, and covers the following:

- broadband speeds and coverage (Section [A](#)).
- rural accessibility in terms of travel behaviour (Section [B](#)).
- accessibility to personal transport (e.g., electric vehicles) (Section [C](#)).
- accessibility to key services (such as hospitals, centres of employment, primary schools, and food stores) (Section [D](#)).
- home working (Section [E](#)).

The key findings from this chapter are as follows:

- In 2022 the lowest average broadband speeds across England were seen in Mainly Rural areas (80 Mbit/s); the highest average speeds seen were in Urban with Major Conurbation areas (128 Mbit/s).
- In 2021 people living in the most Rural areas travelled almost twice as far per year than those in the most Urban areas.
- The uptake of electric vehicles over petrol or diesel engines is rising every year, resulting in an increased demand for EV charging points. As of January 2023, there were 45 charging devices per 100,000 population in Predominantly Rural areas, and 62 charging devices per 100,000 population in Predominantly Urban areas.
- In 2019, 80.9% of people living in Rural areas had access to a General Practice within half an hour's travel using public transport and walking, compared with 99.8% of people living in Urban areas.
- In 2021 there were an estimated 1.5 million home workers in Rural areas, accounting for 32% of all workers living in Rural areas. There were an estimated 6.3 million home workers in Urban areas, accounting for 28% of all workers living in Urban areas.

A. Broadband

Summary

There were very few areas in 2022 that were not able to access a decent fixed broadband service (one which is capable of delivering a download speed of at least 10 Mbit/s and upload speed of at least 1 Mbit/s as defined by the Universal Service Obligation, see [Note A-1](#)). Just 0.4% of premises in Predominantly Rural areas were unable to access a decent fixed broadband service. In Predominantly Urban areas nearly all premises had access to a decent fixed broadband service.

In 2022 the average speed in Predominantly Rural areas was 84 Mbit/s compared with 126 Mbit/s in Predominantly Urban areas. The lowest average broadband speeds across England were seen in Mainly Rural areas (80 Mbit/s); the highest average speeds seen were in Urban with Major Conurbation areas (128 Mbit/s).

Background information

When we talk about broadband speeds, we are referring to the rate of download available within an area. Higher speeds result in shorter download times, meaning a user has a better experience with things like streaming television programmes or films. Upload speeds (i.e., posting photos and videos to social media or participating in a video conference) tend to be much slower than download speeds, but these are not analysed within this section.

This section uses data at Local Authority level from Ofcom's Connected Nations reporting analysed using the official statistics Rural-Urban Classification, consistent with the rest of the Digest. Findings within the Ofcom reporting uses a different 'Locale' classification. As such, statistics will not be comparable between the Digest and Ofcom reporting, (see [Note A-2](#) and [Note A-3](#)).

Overall, average broadband speeds in Rural areas tend to be slower than those in Urban areas. In 2022 the average speed in Predominantly Rural areas was 84 Mbit/s compared with 126 Mbit/s in Predominantly Urban areas, as shown in Figure **A-1**. This is because there are fewer Superfast Broadband (SFBB) connections available in Rural areas, and Rural premises are typically further away from cabinets, resulting in long copper line connections leading to slower performance as copper cables are slow, and the signal degrades the further it has to travel. However, there are some Rural areas with excellent broadband availability following targeted investment via the Rural Community Broadband Fund and other community led schemes.

For illustration, for a household with the average broadband speed in Predominantly Rural areas of 84 Mbit/s, downloading a film (via On Demand) would take around 1 minute and 20 seconds, while for a household with the average broadband speed in Predominantly Urban areas of 126 Mbit/s it would take around 55 seconds (assuming a size of 858 MB for a typical film). For a household with a download speed of 10Mbit/s (the minimum speed to be considered a decent broadband service) the download time jumps to 12 minutes. Furthermore, we see that despite being slower than speeds in Predominantly Urban areas, the average broadband speed for a household in a Predominantly Rural area is still considered to be very good.

Broadband speed

Average broadband speeds in Predominantly Rural areas tend to be slower than those in Predominantly Urban areas (84 Mbit/s and 126 Mbit/s respectively) as shown in Figure A-1. In 2022 the average broadband speed in Mainly Rural areas was 80 Mbit/s compared with 128 Mbit/s in Urban with Major Conurbation areas. This is shown in **Table A-1**. Speeds vary because it is harder for network operators to recoup the fixed costs necessary for upgrading exchanges and cabinets in Rural areas, where there are lower population densities, and therefore fewer end subscribers.

Figure A-1: Average download speed (in Mbit/s) where broadband and speed information are available, by broad Rural-Urban Classification in England, Local Authority level, 2022

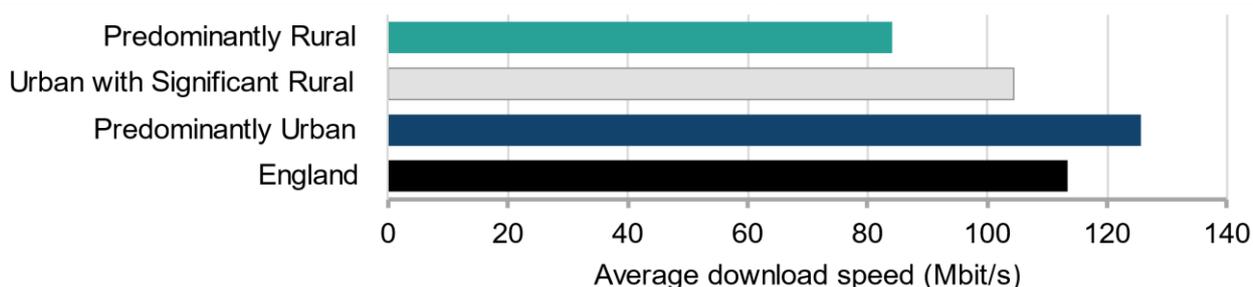


Table A-1: Average download speed (in Mbit/s), by Rural-Urban Classification in England, 2022

	Mbit/s
Mainly Rural	80
Largely Rural	86
Urban with Significant Rural	104
Urban City and Town	125
Urban Minor Conurbation	103
Urban Major Conurbation	128
Predominantly Rural	84
Predominantly Urban	126
England	113

Broadband coverage

When we talk about broadband coverage, we are referring to the quality of service available within an area. Availability of broadband is important for a wide range of activities. It can be used to access services, for social activities, for businesses to operate and hence for economic development.

Table A-2 shows that, in 2022, 0.4% of premises in Predominantly Rural areas were not able to access a decent fixed broadband service capable of delivering a download speed of at least 10 Mbit/s and upload speed of at least 1 Mbit/s. This compares with less than 0.1% of premises in Predominantly Urban areas.

The more Rural an area is, the higher the proportion of premises that cannot access a decent fixed broadband speed. In 2022, 0.6% of premises in Mainly Rural authorities were unable to access a download speed of at least 10 Mbit/s, as shown in **Figure A-2**.

Table A-2: Proportion of premises not able to access a 10 Mbit/s download speed (%), by Rural-Urban Classification in England, 2022

	% of premises
Mainly Rural	0.6
Largely Rural	0.3
Urban with Significant Rural	0.2
Urban City and Town	0.0
Urban Minor Conurbation	0.0
Urban Major Conurbation	0.0
Predominantly Rural	0.4
Predominantly Urban	0.0
England	0.1

Figure A-2: Percentage of premises not able to access a 10 Mbit/s download speed, by detailed Rural-Urban Classification in England, 2022

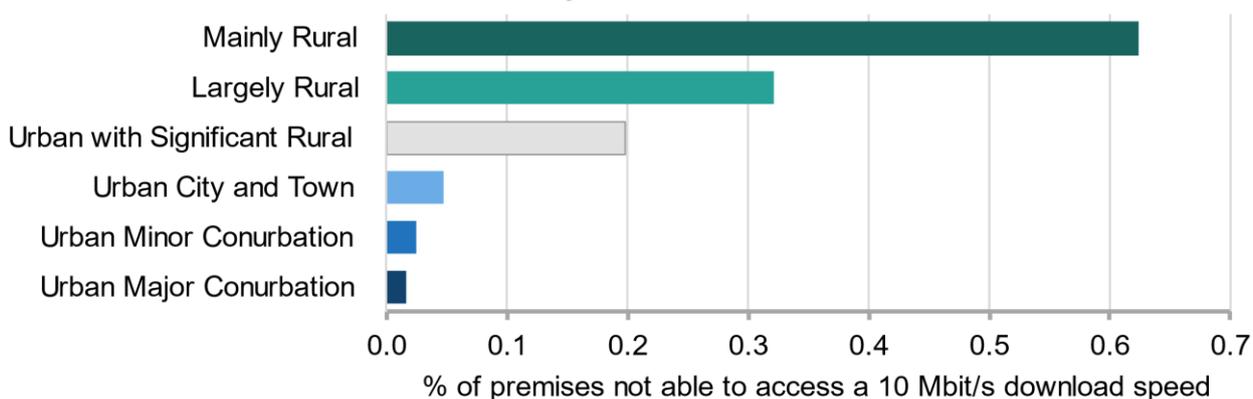


Figure A-3 shows that superfast broadband (defined as delivering a download speed of at least 30Mbit/s) is available for 93% of premises in Predominantly Rural areas, compared with 97% in Predominantly Urban areas.

Figure A-3: Superfast broadband coverage by broad Rural-Urban Classification in England, 2022



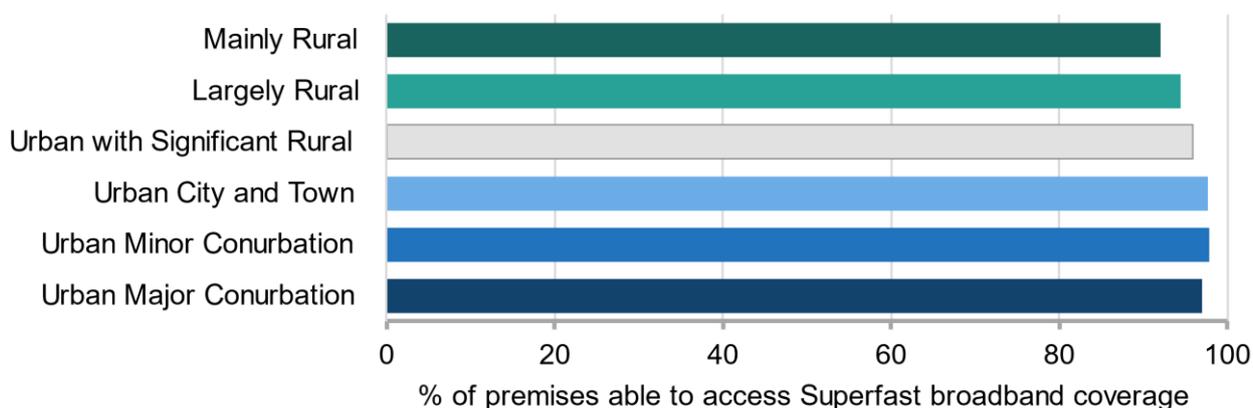
Superfast broadband availability differs slightly within Rural areas; the more Rural an area is, the higher the proportion of premises that do not have access to superfast broadband, as shown in **Table A-3** and

Figure A-4. 92% of premises have availability in Mainly Rural areas, compared to 94% of premises in Largely Rural areas.

Table A-3: Percentage of premises that could have access to Superfast broadband coverage (>30 Mbit/s download speed), by Rural-Urban Classification in England, 2022

	% of premises
Mainly Rural	92
Largely Rural	94
Urban with Significant Rural	96
Urban City and Town	98
Urban Minor Conurbation	98
Urban Major Conurbation	97
Predominantly Rural	93
Predominantly Urban	97
England	96

Figure A-4: Percentage of premises that could have access to Superfast broadband coverage (>30 Mbit/s download speed), by detailed Rural-Urban Classification in England, 2022



Broadband explanatory notes

- **Note A-1**

Details of the Universal Service Obligation can be found at www.legislation.gov.uk/ukxi/2018/445/schedule/1/made

- **Note A-2**

Data used in this section are at Local Authority level. Some caution should be used when considering these results as the data will not distinguish where within an authority the better broadband speeds and coverage and makes no distinction between the Rural and Urban areas within each authority.

- **Note A-3**

The analysis uses data from Ofcom’s Connect Nations report. It should be noted that the definition of ‘Rural’ differs between the two publications, and therefore caution should be taken when making comparisons. Within this Digest the Official Statistics classification is used which defines areas as Rural if they are outside settlements below 10,000 resident population and open countryside. The Connected Nations report uses the Locale classification (a third-party data source based on analysis of 2011 census output areas) which defines Rural areas as those settlements with a population under 2,000. Further information can be found in the methodology document here: https://www.ofcom.org.uk/data/assets/pdf_file/0031/249286/connected-nations-methodology.pdf

- **Note A-4**

Figures are based on Ofcom Local Authority level data. Average speeds for fixed broadband are weighted by the number of connections while coverage data are weighted by the number of premises. Source: OFCOM, www.ofcom.org.uk, Ofcom Connected Nations Report, 2020 ([infrastructure-2022](#)).

- **Note A-5**

Department for Culture, Media and Sport publish quarterly Broadband Performance Indicators, which are available online: www.gov.uk/government/collections/broadband-performance-indicators. They show the number of premises covered per £million of broadband delivery programme expenditure.

B. Travel behaviours

Summary

The average number of trips per person was similar for all settlement types in 2021. However, people in the most Rural areas travelled almost twice as far as those in the most Urban areas. In 2021, in the most Rural areas, 75% of travel was made using a car or van (as a driver or passenger) in 2021 compared with 51% in the most Urban areas.

11 to 16-year olds in the most Rural areas travelled nearly twice as far as those in the most Urban areas to get to school in 2021.

In the most Rural areas, only 5% of households did not have a car or van in 2021, compared with 33% of households in the most Urban areas. There were 45 electric vehicle charging devices per 100,000 population in Predominantly Rural areas in January 2023; this is 16 per 100,000 population less than Predominantly Urban areas.

Disclaimer

As a result of the coronavirus (COVID-19) pandemic, there were changes in travel behaviour, a reduction of data collected and changes in the methodology of data collection. The Department for Transport recommend that care should be taken when interpreting and comparing this data.

Travel behaviour in 2021

There are several different ways to measure travel behaviour across England. Table B-1 shows that people living in Rural Villages, Hamlets and Isolated Dwellings travelled further and for longer in 2021 compared with any other area within the Rural-Urban Classification. Per person, on average, they:

- made 6 more trips than those in Urban City and Town areas and 20 more trips than those living in Urban Conurbations per year
- travelled 2,000 miles more than those in Urban City and Town areas and 2,800 miles more than those living in Urban Conurbations per year
- travelled 36 hours more than those in Urban City and Town areas and 15 hours more than those in Urban Conurbations per year
- went 2.5 miles further per trip than those in Urban City and Town areas and 3.5 miles further per trip than those in Urban Conurbations per year [\[Note B-5\]](#).

Table B-1: Average number of trips and total distance travelled per person per year, time spent travelling and average trip length in 2021, by settlement type, in England ([Note B-5](#))

	Trips per person	Distance travelled per person (miles)	Travelling time per person (hours)	Trip length (miles)
Rural Village, Hamlet and Isolated Dwelling	770	6,450	300	8.4
Rural Town and Fringe	750	4,940	260	6.6
Urban City and Town	760	4,460	260	5.8
Urban Conurbation	750	3,660	280	4.9
England	760	4,330	270	5.7

Notes:

- Trips include those made on foot, by private car or van as both a driver and passenger, by bicycle, motorcycle, private hire bus and other modes of private transport, by local bus, by rail and London Underground, and by non-local bus, taxi / minicab, and other modes of public transport (air, ferries and light rail).
- Figures in Table B-1 are rounded to the nearest 10 trips/10 miles/10 hours/0.1 miles respectively.

Average distance travelled in 2021

Figure B-1 shows that a greater total distance was travelled per person in Rural areas than in Urban areas in 2021, for all modes of transport. The highest average total distance travelled per person was in Rural Villages, Hamlets and Isolated Dwellings. A greater distance was travelled per person by car or van in 2021 than any other mode of transport for all settlement types.

Figure B-1: Average total distance travelled, per person per year, by mode and settlement type, in England, 2021 (Note B-3, Note B-5)

The legend is presented in the same order and orientation as the stacked columns.

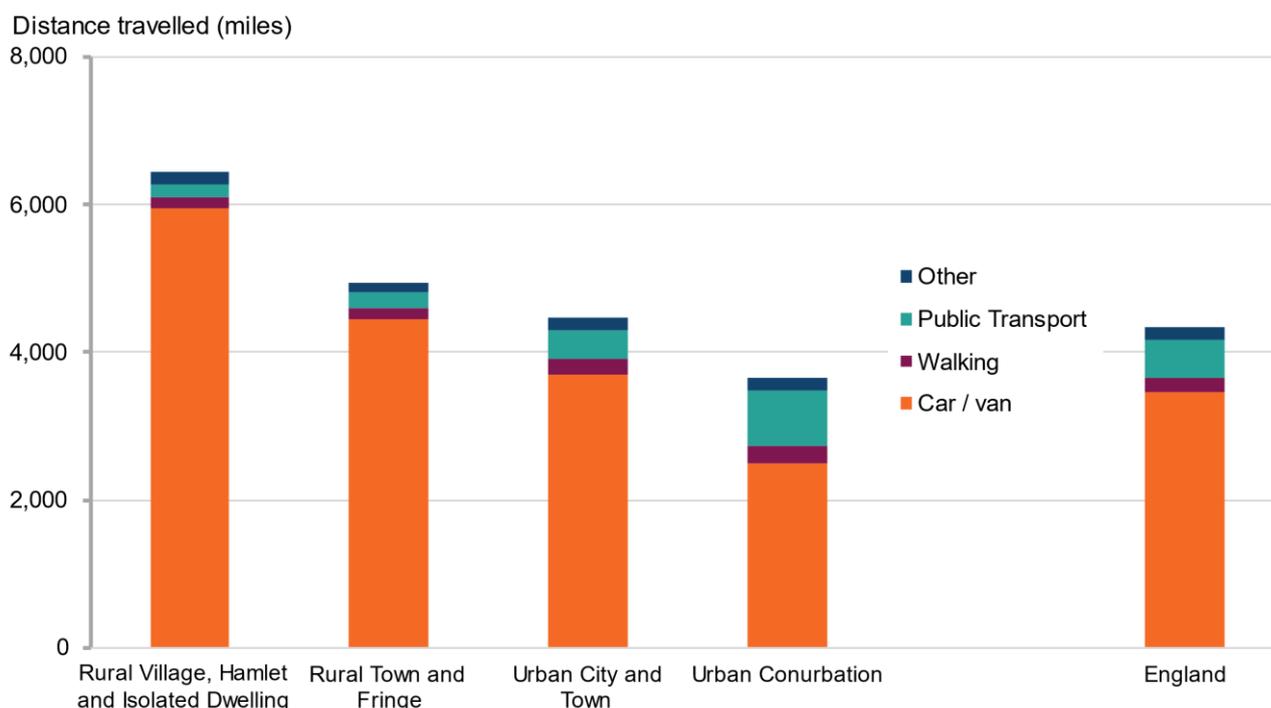


Table B-2 shows that whilst a greater distance was travelled by car or van than any other mode of transport in 2021, and people in Rural areas travelled more miles by car than those in Urban areas, for other modes of transport the Urban population covered a greater distance, in particular public transport.

People living in Rural Villages, Hamlets and Isolated Dwellings travelled more than double the distance of those in Urban Conurbations by car or van in 2021, with an average of 6,000 miles and 2,500 miles per person respectively. When taking the local bus, people living in Urban Conurbations travelled more than four times the distance of those in Rural Villages, Hamlets and Isolated Dwellings, travelling on average 180 miles and 40 miles per person respectively.

Table B-2: Average total distance travelled, per person per year, by mode and settlement type, 2021 ([Note B-3](#), [Note B-5](#))

	Miles per person per year						
	Walk	Car/van driver	Car / van passenger	Local bus	Rail	Other	All modes
Rural Village, Hamlet and Isolated Dwelling	140	3,970	1,990	40	130	180	6,450
Rural Town and Fringe	160	3,210	1,230	90	120	130	4,940
Urban City and Town	210	2,380	1,320	110	270	170	4,460
Urban Conurbation	230	1,540	960	180	570	180	3,660
England	210	2,230	1,220	130	370	170	4,330

How far people travel for a selection of common purposes is shown in Figure B-2 where we see that those living in Rural areas travelled more miles for work than those in Urban areas. People living in Rural areas travelled a greater distance on average than those in Urban areas when commuting (150 miles more) or travelling for business (160 miles more) in 2021. When travelling for education, people in Rural areas travelled 30 miles further than those in Urban areas. Across all settlement types, a greater distance was travelled per person for commuting than for business or education.

Figure B-2: Average distance travelled for work, per person per year, by Rural-Urban Classification, in England, 2021 ([Note B-3](#), [Note B-5](#), [Note B-6](#), [Note B-7](#))

The legend is presented in the same order and orientation as the columns.

■ Rural Village, Hamlet and Isolated Dwelling ■ Rural Town and Fringe ■ Urban City and Town ■ Urban Conurbation

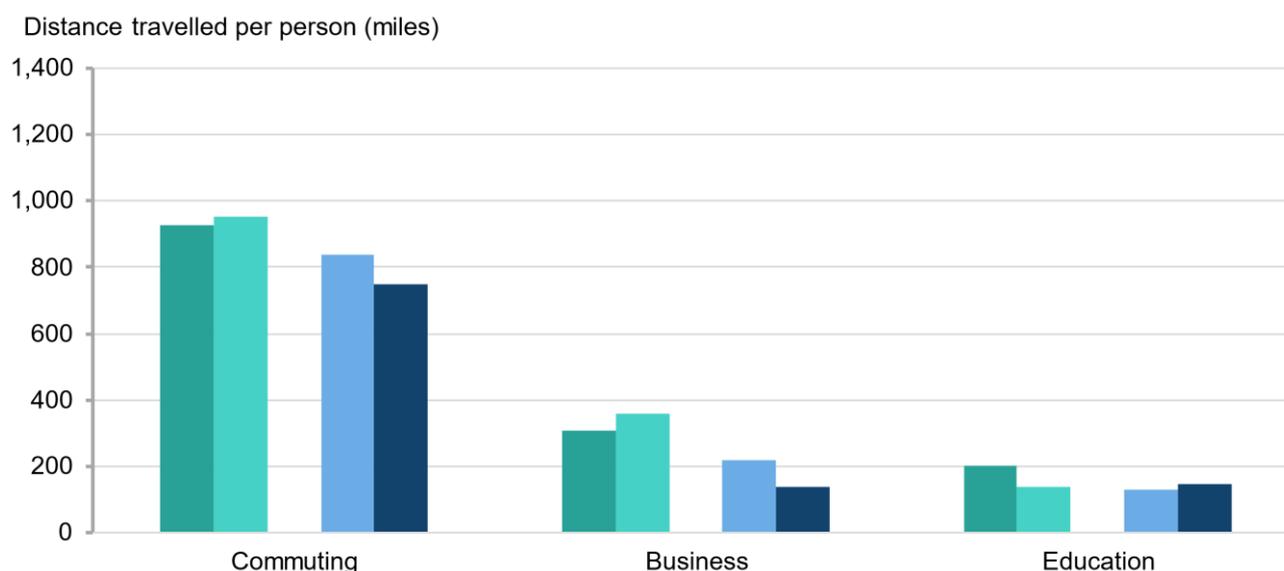


Figure B-3 shows the average distance travelled for leisure per person in 2021. People living in Rural areas travelled a greater distance on average than those in Urban areas when visiting friends (210 miles more), travelling for a holiday or day trip (220 miles more), or travelling for sport or entertainment (70 miles more). Across all settlement types, a greater distance was travelled per person for the purposes of visiting friends than for holidays/day trips or sport/entertainment.

Figure B-3: Average distance travelled for leisure, per person per year, by Rural-Urban Classification, in England, 2021 ([Note B-3](#), [Note B-5](#), [Note B-6](#), [Note B-7](#))

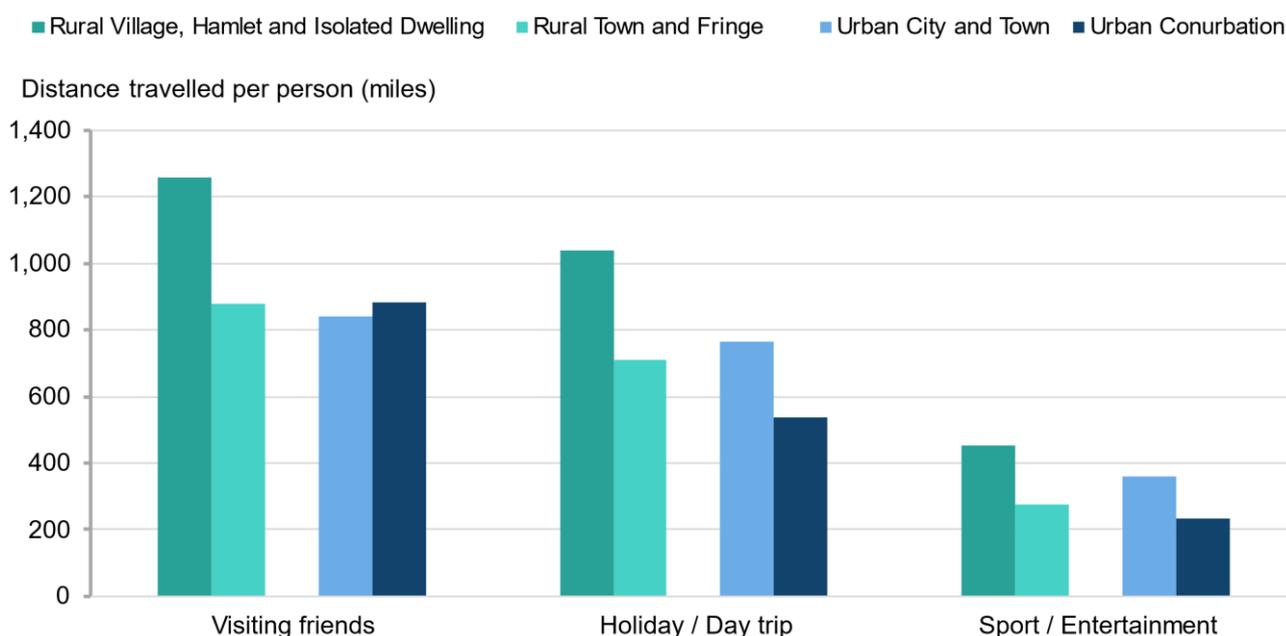
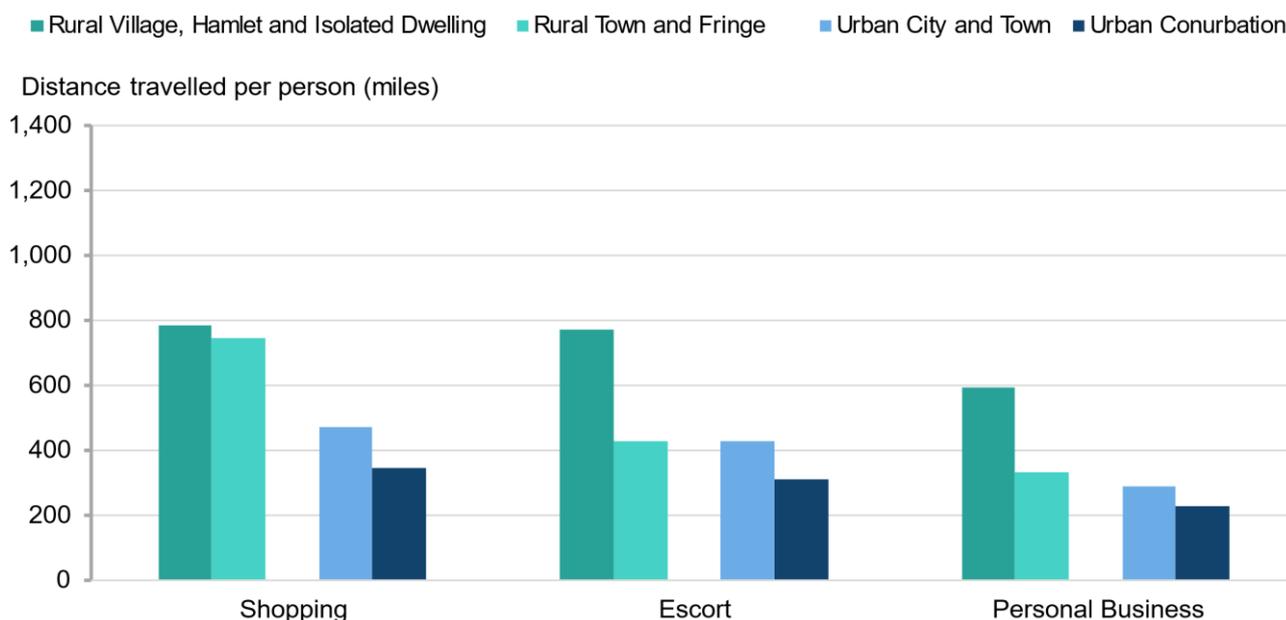


Figure B-4 shows the average distance travelled for essential purposes per person in 2021. People living in Rural areas travelled a greater distance on average than those in Urban areas when shopping (360 miles more), escorting (230 miles more), or travelling to conduct personal business (210 miles more). Across all settlement types, a greater distance was travelled per person for shopping than for escorting or conducting personal business.

Figure B-4: Average distance travelled for essential purposes, per person per year, by Rural-Urban Classification, in England, 2021 ([Note B-3](#), [Note B-5](#), [Note B-6](#), [Note B-7](#)).



For almost all purposes, people living in Rural Villages, Hamlets and Isolated Dwellings travelled a greater distance than those in any other settlement type; people living in Urban Conurbations travelled the fewest miles in 2021.

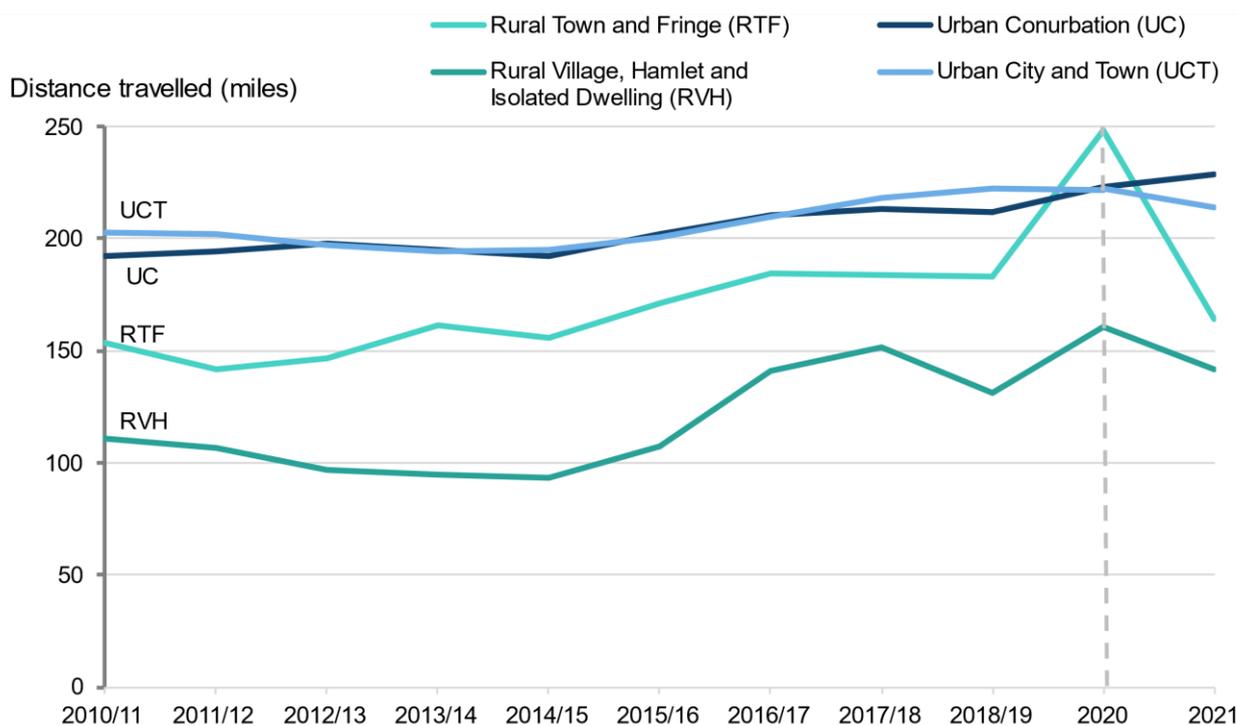
Notes:

- In Figure B-1, “Car / van” includes drivers and passengers. “Public Transport” refers to both rail and local bus. “Other” means all modes of transport not already mentioned, including walking.
- In Figure B-4, the “escort” category contains both escorting to education institutions and other escorting. The “visiting friends” category contains both visiting friends at a private home and visiting friends elsewhere.
- Average total distance travelled per person concerns the total population, and not just the service users.

Average distance travelled – long-term trends

Figure B-5 shows the average distance travelled by **walking** between 2010/11 and 2021. Distance travelled by walking has been consistently lower in Rural areas than in Urban areas until 2020; this change is likely to be a result of the COVID-19 enforced lockdowns increasing the amount of recreational and other walking in Rural areas. In 2021, the distance travelled by walking returned to pre-pandemic levels in Rural areas, whereas in Urban Conurbations it continued to increase.

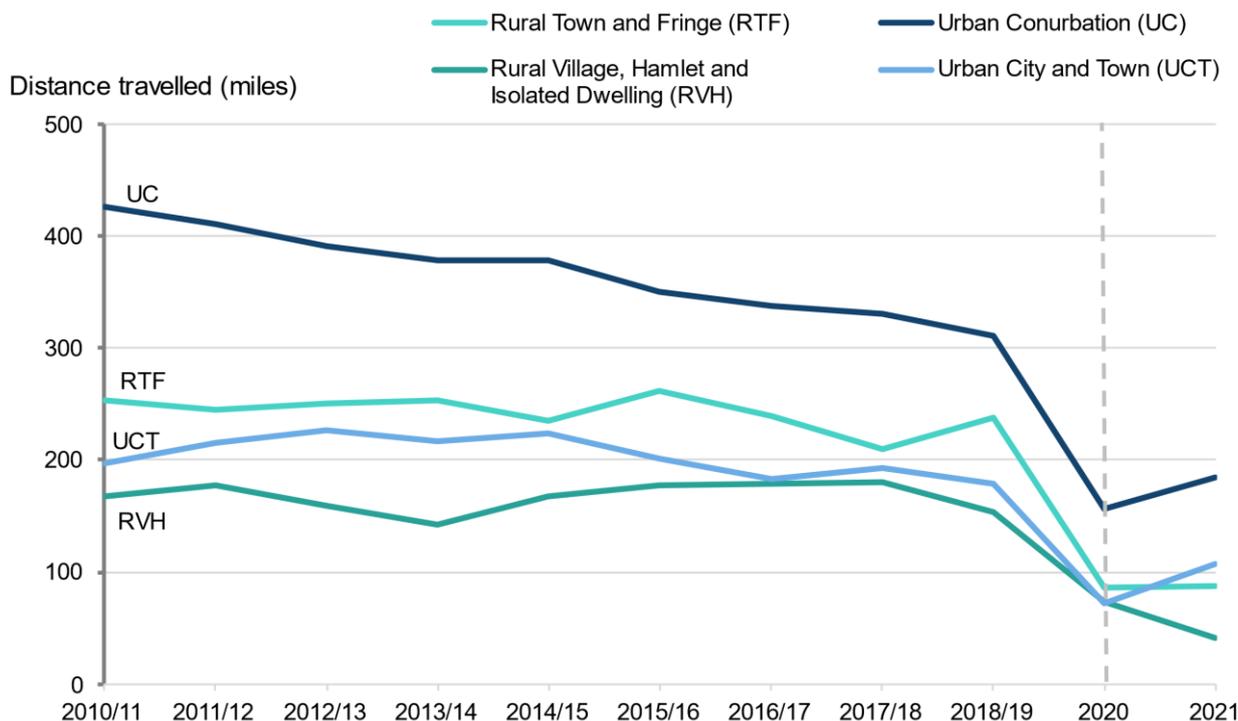
Figure B-5: Average total distance travelled by walking, per person per year, by settlement type, in England, 2010/11 to 2021 ([Note B-1](#), [Note B-3](#), [Note B-5](#))



Average distance travelled by walking by those from Rural Villages, Hamlets and Isolated Dwellings increased by 31 miles (22%) and those living in Rural Town and Fringe by 11 miles (7%) between 2010/11 and 2021. More miles were walked in 2018/19 than in 2010/11, and there were further sharp increases in Rural areas between 2018/19 and 2020. The average distance travelled by walking in Urban Conurbations increased between 2018/19 and 2020, whereas it decreased slightly in Urban City and Town areas. In Rural Villages, average distance travelled by walking decreased by 19 miles from 2020 to 2021, and by 84 miles in Rural Town and Fringe areas over the same period. Urban City and Town areas saw a small decrease of 9 miles, whilst people living in Urban Conurbations travelled 5 miles more on average in 2021 compared with 2020.

Figure B-6 shows the average total distance travelled by **local bus** between 2010/11 and 2021.

Figure B-6: Average total distance travelled by local bus, per person per year, by settlement type, in England, 2010/11 to 2021 ([Note B-1](#), [Note B-3](#), [Note B-5](#))



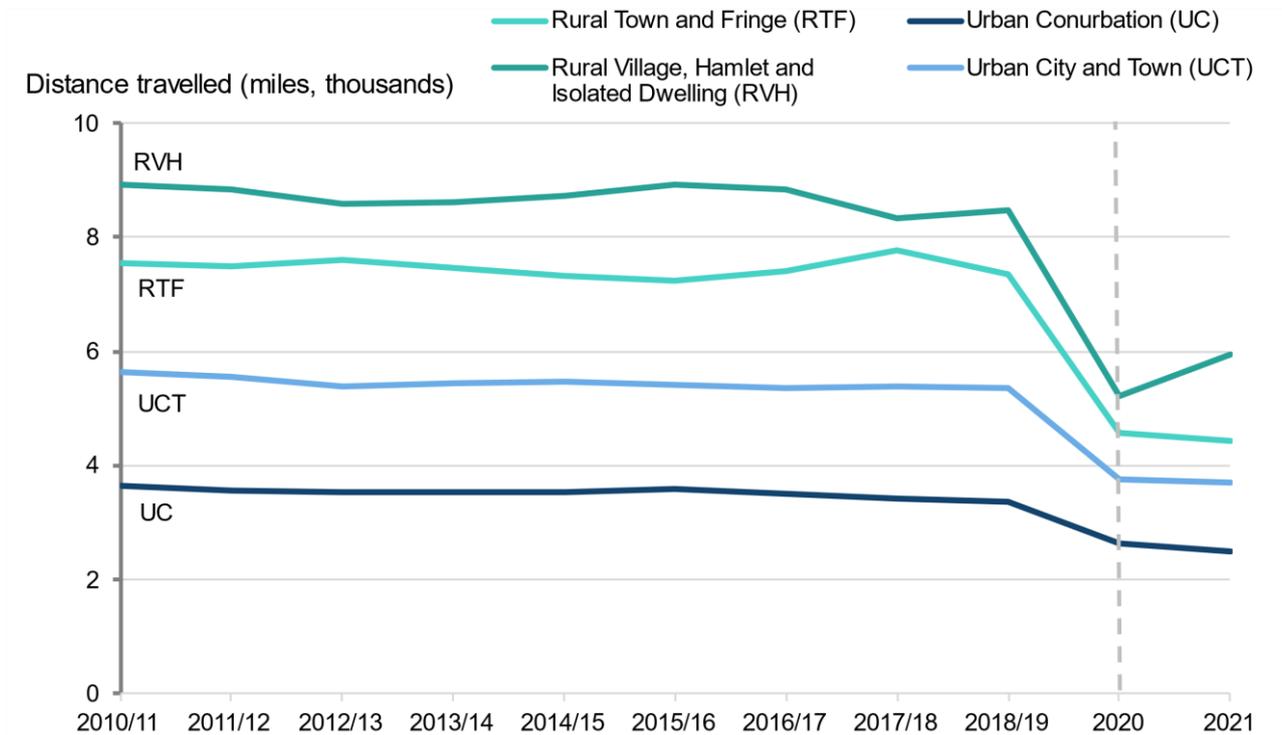
The average total distance travelled by local bus declined sharply between 2018/19 and 2020 in all areas due to the COVID-19 pandemic. In 2020 there were enforced lockdowns which restricted mobility resulting in large numbers of people working from home [see section [D. Home working](#)] and not using bus services; in some Rural areas bus services have not recovered. Between 2020 to 2021, the distance travelled by local bus decreased in Rural Villages, Hamlets and Isolated Dwellings, and remained the same in Rural Town and Fringe areas. In comparison, people living in Urban areas travelled further by local bus in 2021 than in 2020.

The average distance travelled by Local Bus prior to the COVID-19 pandemic (2010/11 to 2018/19) still saw a slight decrease in Urban areas, whereas Rural areas remained relatively consistent. The average distance travelled by Local Bus decreased by 115 miles per person per year in Urban Conurbations between 2010/11 and 2018/19, and decreased by 15 miles per person in Rural areas. Urban City and Town areas, however, followed a similar trend to Rural areas, since the average distance travelled by Local Bus decreased by just 19 miles per person between 2010/11 and 2018/19 – considerably less than in Urban Conurbation areas.

Figure B-7 shows the average distance travelled by **car or van** between 2010/11 and 2021. Note that the scale on this chart is different to the charts showing distance travelled by walking and by local bus. This is because a much greater total distance was travelled by car or van than by any other means. Since 2010/11, people living in Rural areas travelled further per year as a car / van driver or passenger than those in Urban areas, indicating the Rural population’s reliance on private rather than public transport. The distance travelled by car or van changed little between 2010/11 and 2018/19 in Urban areas. The same can be said for Rural areas, although there was a slight fluctuation around 2017/18 when more miles were covered by people living in Rural Town and Fringe areas, and fewer miles were covered by those in Rural Villages, Hamlets and Isolated Dwellings.

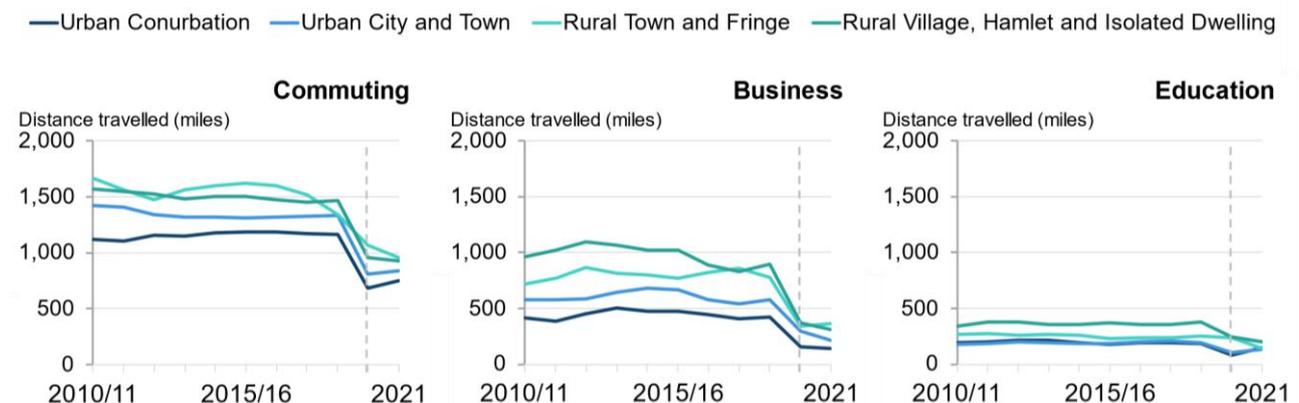
All areas saw a decrease between 2018/19 and 2020 owing to the COVID-19 pandemic, although there was a larger decrease in Rural areas than in Urban areas. This was followed by further decreases in 2021 in all areas besides Rural Villages, Hamlets and Isolated Dwellings, for which there was an average increase of 760 miles per person.

Figure B-7: Average total distance travelled as a car/van driver or passenger, per person per year, by settlement type, in England, 2010/11 to 2021 (Note B-1, Note B-3, Note B-5)



For all purposes and settlement types, the average distance travelled per person in 2021 was lower than it was prior to the COVID-19 pandemic (i.e., in 2018/19). Figure B-8 shows the average distance travelled per person per year when travelling for work between 2010/11 and 2021.

Figure B-8: Average total distance travelled for work, per person per year, by settlement type, 2010/11 to 2021 (Note B-1, Note B-3, Note B-5, Note B-6, Note B-7)

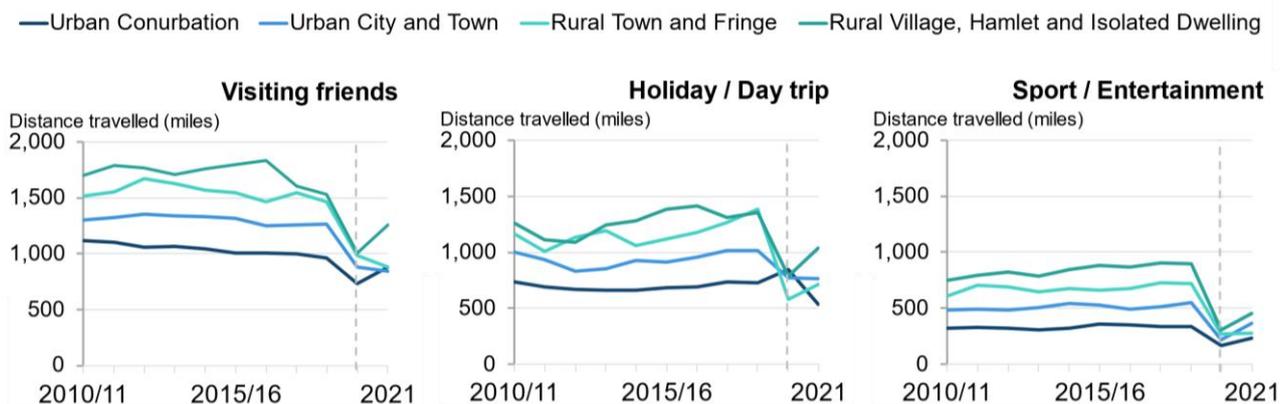


There was little variation in the average total distance travelled per person for work between 2010/11 and 2018/19. Between 2018/19 and 2020, the average total distance travelled per person decreased sharply in all settlement types when travelling for business, education or commuting purposes due to the COVID-19 pandemic; due to the implementation of the stay-at-home orders throughout the pandemic, many workplaces and education centres adopted [home working](#). This

became normalised in many cases, such that the average total distance travelled per person either increased only slightly or remained the same between 2020 and 2021 for all settlement types when travelling for work.

Figure B-9 shows the average distance travelled per person per year when travelling for leisure between 2010/11 and 2021.

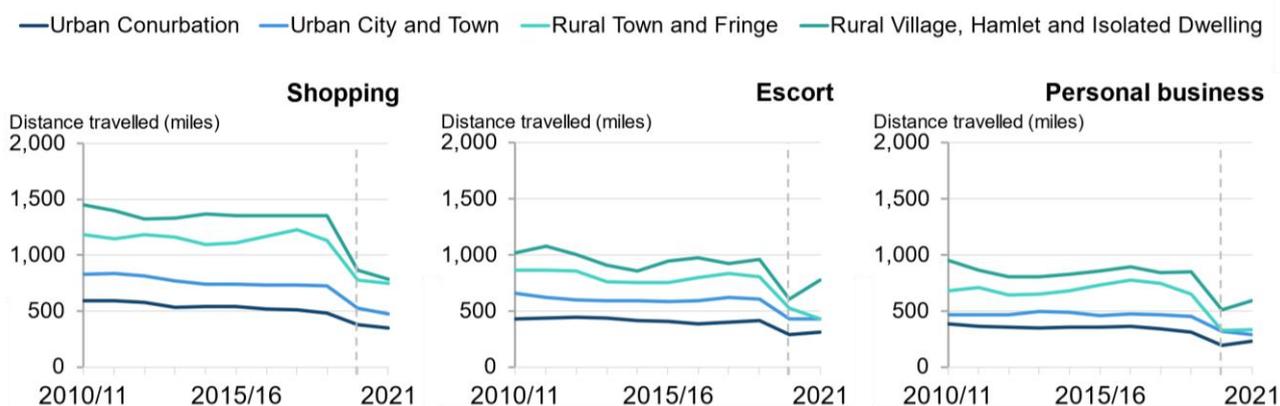
Figure B-9: Average total distance travelled for leisure, per person per year, by settlement type, 2010/11 to 2021 ([Note B-1](#), [Note B-3](#), [Note B-5](#), [Note B-6](#), [Note B-7](#))



There was little variation in the average total distance travelled per person for sports and entertainment purposes or visiting friends between 2010/11 and 2018/19. When travelling for holidays or day trips, there was a slight increase in the total distance travelled per person between 2010/11 and 2018/19. Between 2018/19 and 2020, the average total distance travelled per person decreased sharply in all settlement types when travelling for sport/entertainment purposes, visiting friends, or travelling for holidays/day trips due to the COVID-19 pandemic. Due to the introduction of stay-at-home orders, there were fewer opportunities for leisure activities. Post-COVID, there has been an increase in the total distance travelled for leisure in Rural areas and some Urban areas between 2020 and 2021.

Figure B-10 shows the average distance travelled per person per year when travelling for essential purposes between 2010/11 and 2021.

Figure B-10: Average total distance travelled for essential purposes, per person per year, by settlement type, 2010/11 to 2021 ([Note B-1](#), [Note B-3](#), [Note B-5](#), [Note B-6](#), [Note B-7](#))



There was little variation in the average total distance travelled per person when travelling for personal business, shopping or to escort between 2010/11 and 2018/19. Between 2018/19 and 2020, the average total distance travelled per person decreased sharply in all settlement types

when travelling for essential purposes due to the COVID-19 pandemic. Due to the introduction of stay-at-home orders, many people opted to shop online rather than visit in-store, and the need for escorting others or conducting personal business decreased. Post-COVID, there has been an increase in the total distance travelled for essential purposes in some Rural areas between 2020 and 2021, whereas there was little change in Urban areas.

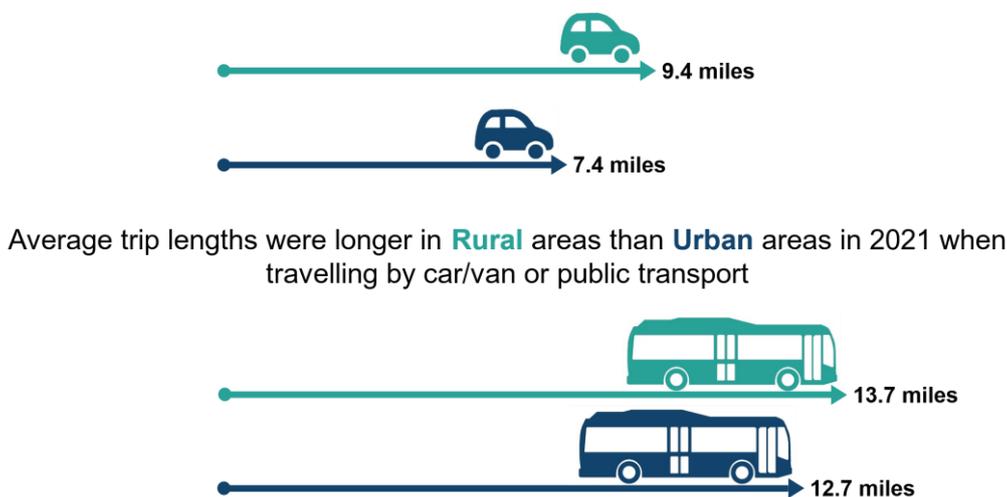
Notes:

- In Figure B-5, Figure B-6, and Figure B-7, the scales (y-axes) differ and this should be considered when making cross-modal comparisons.
- Data collection processes changed in 2020 due to the COVID-19 pandemic, so data for 2020 and 2021 are presented as a single year. This change is denoted by a vertical dashed line.
- Distance by mode is based on stage distance. Local Bus includes London buses. Rail includes London Underground. Other includes: bicycle, motorcycle, private hire bus, other modes of private transport, non-local bus, taxi / minicab and other modes of public transport (air, ferries, light rail).
- Distance by purpose covers all modes of transport.

Average trip length in 2021

Generally, people living in Rural areas travelled further per trip than those in Urban areas in 2021 when travelling by public transport or a car/van; this is shown in Figure B-11.

Figure B-11: Average trip length in 2021, by car/van or public transport



The average trip length when walking was just under a mile in both Rural and Urban areas, as shown in Table B-3. Furthermore, once a trip exceeds a mile, most people switched to a different mode of transport in 2021.

The greatest average trip lengths were highest in Rural Villages, Hamlets and Isolated Dwellings, where people travelled 6.6 miles by local bus and 25.1 miles by rail on average. The shortest average trip lengths when taking public transport were seen in Urban Conurbation areas: 4.0 miles when travelling by local bus and 17.1 miles when travelling by rail. This means people living in the most Rural areas travelled 2.6 miles further by local bus and 8.0 miles further via rail than those in the most Urban areas.

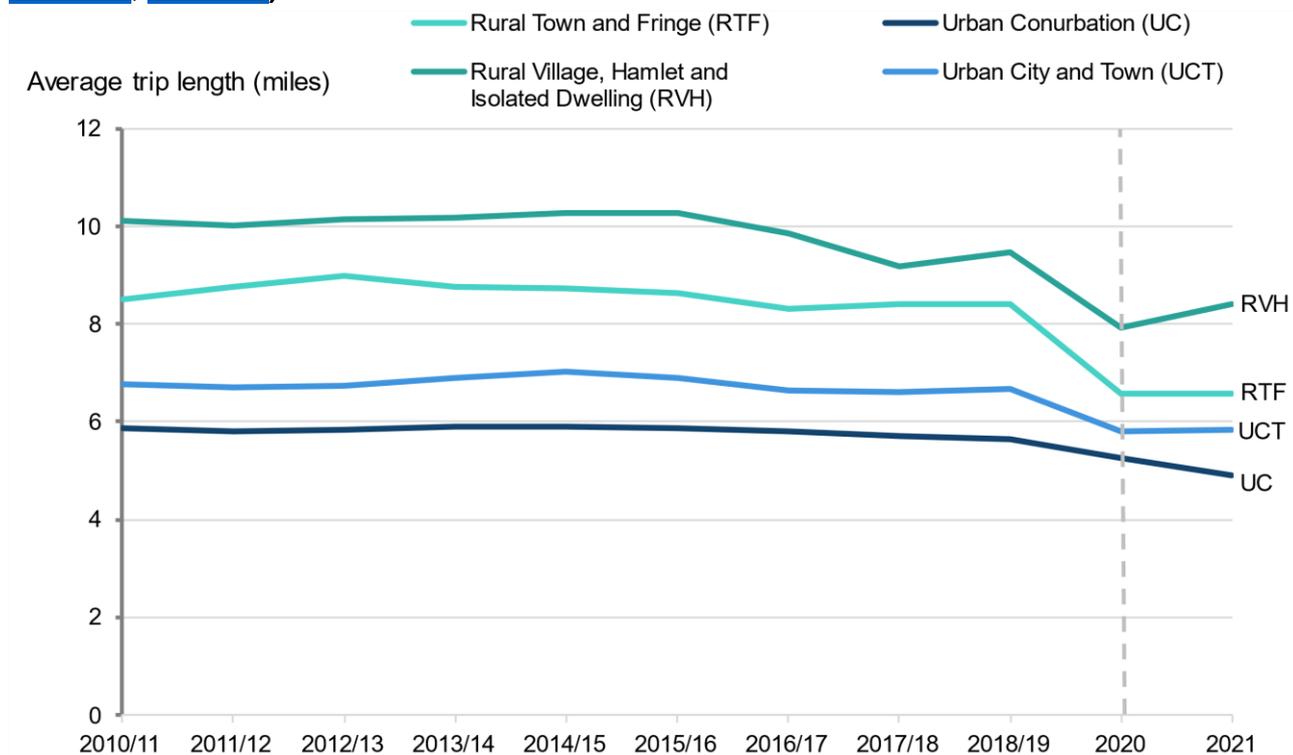
Table B-3: Average trip length, by selected modes of transport and settlement type, 2021
([Note B-3](#), [Note B-5](#))

	Walk	Car/van driver	Car / van passenger	Local bus	Rail	All modes
Rural Village, Hamlet and Isolated Dwelling	0.9	9.9	11.3	6.6	25.1	8.4
Rural Town and Fringe	0.8	9.0	7.3	5.9	17.1	6.6
Urban City and Town	0.8	7.4	8.6	6.4	23.2	5.8
Urban Conurbation	0.8	6.3	7.2	4.0	17.1	4.9
England	0.8	7.4	8.2	4.5	19.0	5.7

Average trip length – long-term trends

The average trip length, by settlement type, can be considered to determine how travel behaviours have changed over time. Figure B-12 shows the change in average trip length by all modes of transport between 2010/11 and 2021.

Figure B-12: Average trip length, by settlement type, in England, 2010/11 to 2021 ([Note B-1](#), [Note B-3](#), [Note B-5](#))



Since 2010/11, the average trip length has been consistently higher for those living in Rural areas than in Urban areas. The longest average trip length was for those in Rural Villages, Hamlets and Isolated Dwellings, which has consistently been around 50% greater than the average trip length for people in Urban Conurbations. A contributing factor to this is that people living in the most Rural areas often need to travel further to reach key services [see section [D. Access to Services](#)]. The average trip length was lower in 2021 than in 2018/19 (i.e., prior to the COVID-19 pandemic) across all areas, however in Rural Villages, Hamlets and Isolated Dwellings there has been a slight increase of 0.5 miles between 2020 and 2021. The average trip length remained the same between 2020 and 2021 in Urban City and Town, and Rural Town and Fringe areas. In Urban Conurbations, the average trip length decreased by 0.4 miles between 2020 and 2021.

Prior to the COVID-19 pandemic, there was little variation over time in the average trip length; in Rural Villages, Hamlets and Isolated Dwellings, there were slight decreases between 2015/16 and 2017/18, but the average trip length was relatively stable for all other settlement types.

Number of trips made in 2021

Another metric we can investigate is the number of trips people are making. Results are presented for 2021, although the after-effects of the COVID-19 pandemic should be considered.

Figure B-13 shows that people living in all settlement types made more trips by car or van than by any other mode of transport in 2021.

In Rural areas, the least common mode of transport in 2021 was public transport (i.e., local bus or rail), since this accounted for just 2% of trips made; in Urban areas, public transport accounted for 7% of trips made. People living in Rural areas were less likely to use walking as their mode of transport than those in Urban areas. In 2021, walking accounted for 20% of trips in Rural Villages and Hamlets, compared with 34% in Urban Conurbations. There were more trips made in 2021 by car or van by people living in Rural Villages, Hamlets and Isolated Dwellings (75%) compared to other settlement types (51% for Urban Conurbations); for all other modes of transport, there were fewer trips made than the national average.

Figure B-13: Proportion of trips made by mode of transport, per person per year, Rural-Urban Classification, in England, 2021 ([Note B-3](#), [Note B-5](#))

The legend is presented in the same order and orientation as the stacked columns.

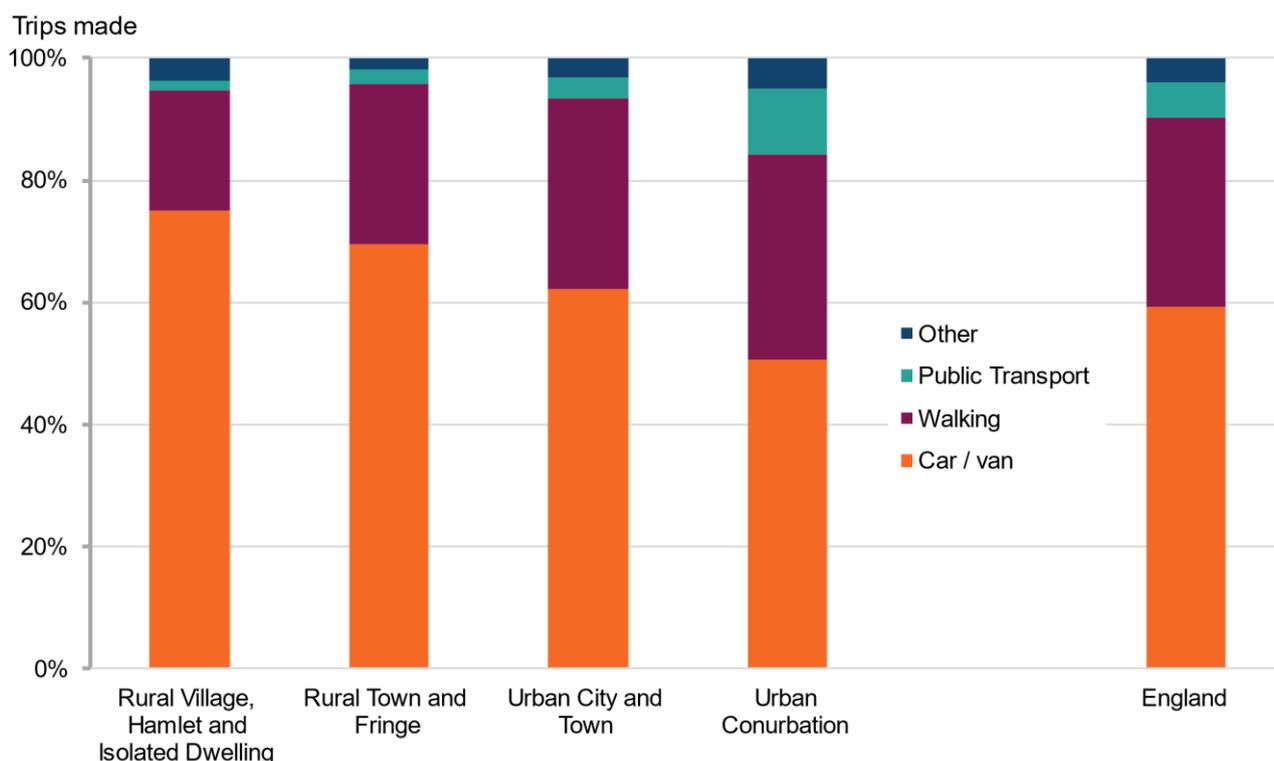


Table B-4 shows that rail was the least frequently used mode of transport in 2021 across all areas in England, with an average of only 6 trips made per person living in Rural areas. The average number of trips by local bus and rail were also low in 2021. Walking and driving a car or van were the two most frequently used modes of transport across England, with a national average of 235 trips and 300 trips respectively.

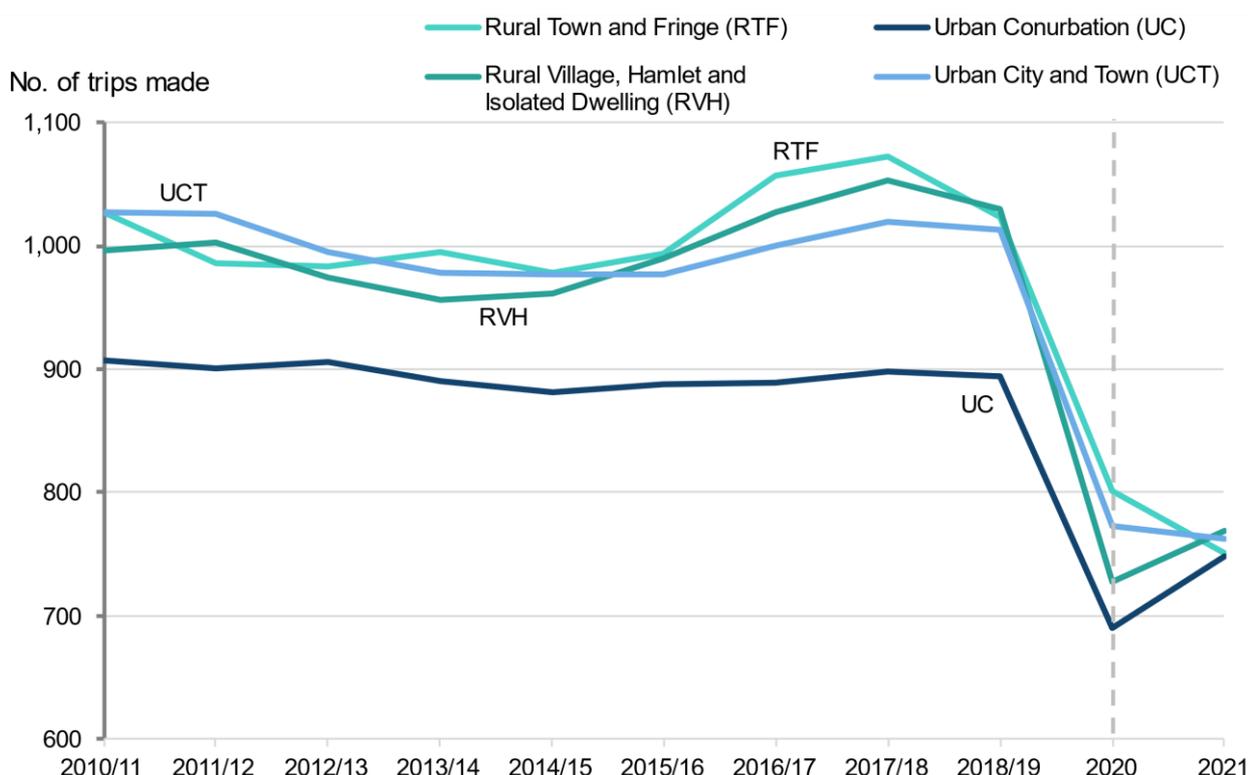
Table B-4: Average number of trips made, per person per year, by mode and settlement type, in England, 2021 (Note B-3, Note B-5)

	Trips per person per year						All modes
	Walk	Car/van driver	Car / van passenger	Local bus	Rail	Other	
Rural Village, Hamlet and Isolated Dwelling	152	401	175	6	6	29	769
Rural Town and Fringe	197	355	167	12	6	14	751
Urban City and Town	239	321	152	16	8	25	763
Urban Conurbation	253	245	134	45	36	37	748
England	235	300	148	26	19	29	757

Number of trips made – long-term trends

The number of trips made, by settlement type, can be measured to determine how travel behaviours have changed over time. Figure B-14 shows the average number of trips made per person for all modes of transport between 2010/11 and 2021. Since 2010/11, people in Urban Conurbations made fewer trips than in other settlement types. The settlement type making the most trips has fluctuated between 2010/11 and 2021.

Figure B-14: Average number of trips made, per person per year, by settlement type, in England, 2010/11 to 2021 (Note B-1, Note B-3, Note B-5).



Between 2010/11 and 2018/19, there was fluctuation between 980 and 1,030 trips made per person in Rural Villages, Hamlets and Isolated Dwellings, Rural Town and Fringe areas, and Urban City and Town areas. In Urban Conurbations, the average number of trips made varied less, fluctuating between 890 and 910 trips per person. Between 2018/19 and 2020, all settlement types saw a vast decrease in the average number of trips made, due to the COVID-19 pandemic. Between 2020 and 2021, a slight recovery towards pre-pandemic levels were seen in Rural

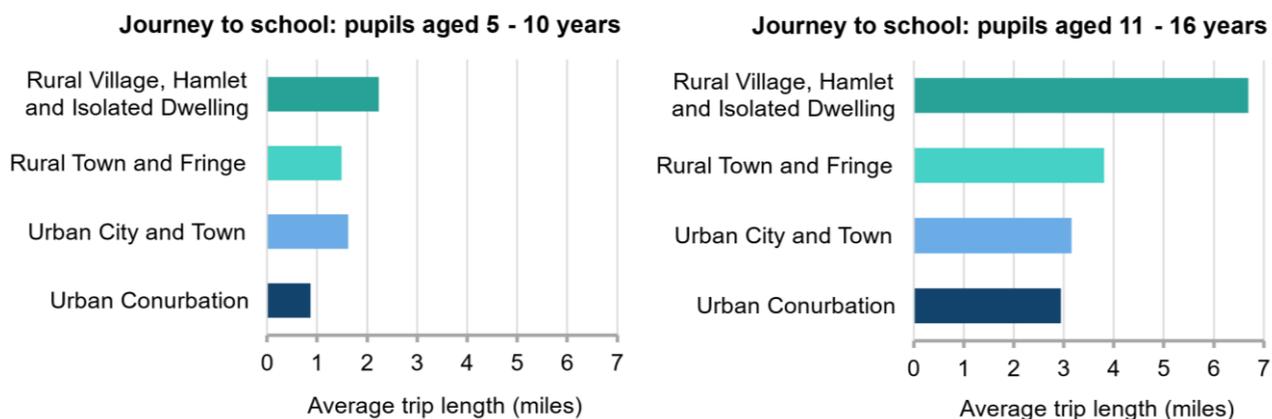
Villages, Hamlets and Isolated Dwellings and Urban Conurbations, whilst the average number of trips made continued to decrease in Rural Town and Fringe areas and to a lesser extent in Urban City and Towns. However, there were still 25% fewer trips made per person in Rural Villages, Hamlets and Isolated Dwellings in 2021 compared to 2018/19 (i.e., prior to the COVID-19 pandemic), and 27% fewer trips made per person in Rural Town and Fringe areas.

Journey to School

The COVID-19 pandemic affected school attendance and journeys to school. The introduction of stay-at-home orders in 2020 meant that the number of trips made was reduced in all areas, and continued to affect journeys to school into 2021.

The average journey length to school in 2021 was longer for pupils living in Rural areas than for those living in Urban areas. Figure B-15 shows that the group with the longest journey were 11 to 16-year olds living in Rural Villages, Hamlets and Isolated Dwellings who travelled 6.7 miles on average; this compares with a journey of 2.9 miles in an Urban Conurbation for the same age group. That means 11 to 16-year olds in Rural Villages, Hamlets and Isolated Dwellings were travelling at least twice as far as those in Urban Conurbations to get to school. Pupils aged 5-10 years living in Rural Villages and Hamlets also had the longest journey length for their age group compared to other settlement types.

Figure B-15: Average journey length to school for pupils aged 5-10 years (left) and 11-16 years (right), Rural-Urban Classification, in England, 2021 (Note B-5)



Further detail of average school journey lengths of pupils is given in Table B-5. Pupils living in Rural Villages, Hamlets and Isolated Dwellings travelled further than the national average in 2021, whilst those living in Urban Conurbations travelled less. The average journey length for pupils to get to school is longer for those aged 11-16 years than those aged 5-10 years, since secondary schools tend to be much larger and accommodate for a much larger area.

Table B-5: Average journey length (miles) to school by pupils, by age group and settlement type, in England, 2021 (Note B-5)

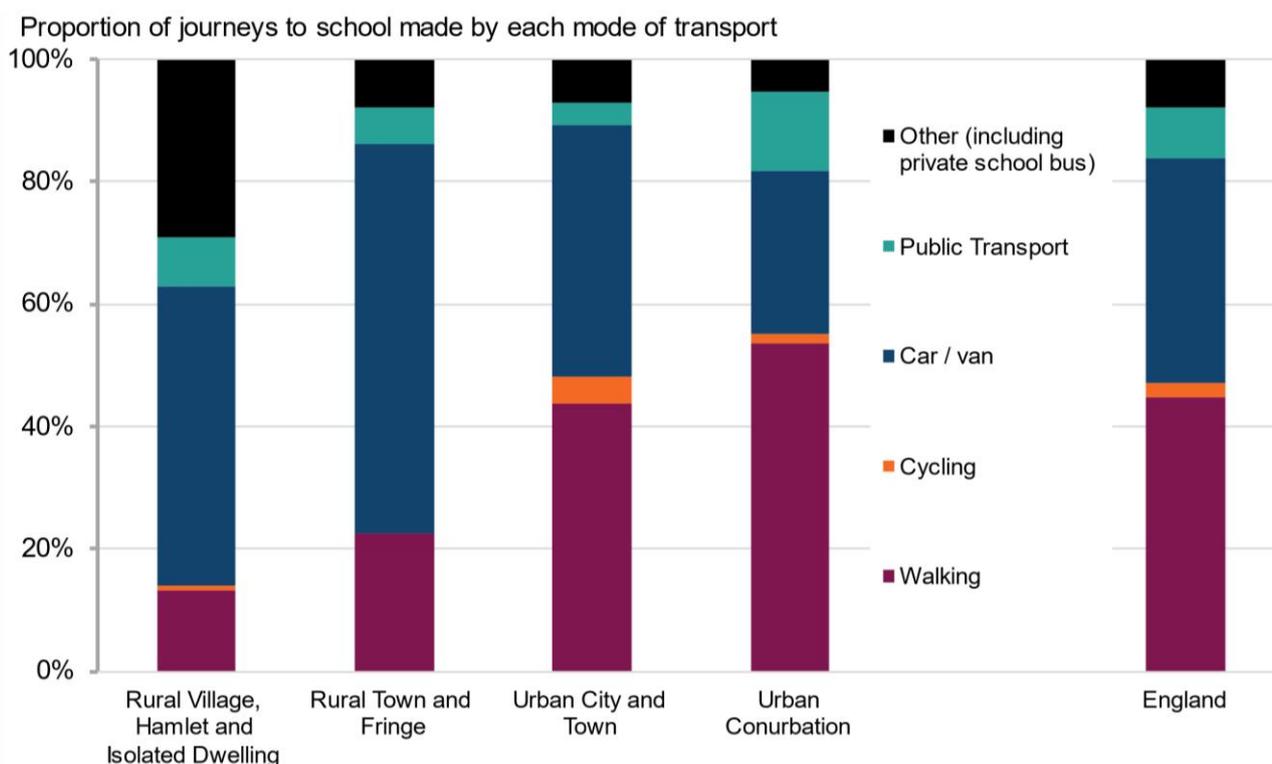
	Average trip length (miles)	
	Aged 5-10 years	Aged 11-16 years
Rural Village, Hamlet and Isolated Dwelling	2.2	6.7
Rural Town and Fringe	1.5	3.8
Urban City and Town	1.6	3.2
Urban Conurbation	0.9	2.9
England	1.3	3.4

Figure B-16 shows the proportions of pupils travelling to school by each mode of transport in 2021. In Rural areas, it was more common for pupils to get to school via car or van, or by ‘other’ means (including the private school bus), whereas in Urban areas it was most common for pupils to walk to school:

- 49% of students from Rural Villages, Hamlets and Isolated Dwellings and 64% of students from Rural Town and Fringe areas commuted to school via car or van, compared with 27% of those in Urban Conurbations.
- 13% of pupils living in Rural Villages, Hamlets and Isolated Dwellings walked to school, compared with 54% of those in Urban Conurbations.
- 8% of pupils in Rural Villages, Hamlets and Isolated Dwellings commuted to school via public transport, compared with 13% of pupils in Urban Conurbations.
- Cycling was the least common mode of transport to get to school in 2021, with just 1% of pupils in Rural Villages, Hamlets and Isolated Dwellings and 5% in Urban City and Town areas commuting this way.

Figure B-16: Mode of transport used for journey to school by pupils, by settlement type, in England, 2021 (Note B-5)

The legend is presented in the same order and orientation as the stacked columns.



Notes:

- Journeys to school include trips under 50 miles only.
- “Walking” to school includes when pupils ride in non-motorised wheelchairs, prams or pushchairs, toy bicycles/tricycles, roller-skates, skateboards, and non-motorised scooters.

Car availability

Having access to (or owning) a car is important in Rural areas for accessing services, work, and other activities since public transport is less widely available; some Rural areas are too far away from the main rail network, meaning journeys via public transport would only be possible using buses. Where rail can be accessed, the frequency of trains is often much lower (as with buses) and therefore travel via car can be more convenient.

The data on car availability refers to both privately-owned cars, and company cars.

Figure B-17 shows that the percentage of households with no car or van was higher in Urban areas in 2021; 33% of households in Urban Conurbation areas, and 16% of households in Urban City and Town areas did not have a car/van in 2021. Comparatively, only 5% of households in Rural Villages, Hamlets or Isolated Dwellings, and 14% of households in Rural Town and Fringe areas did not have a car/van in 2021.

Figure B-17: Percentage of households with no car or van, by settlement type in England, 2021 (Note B-3, Note B-5)

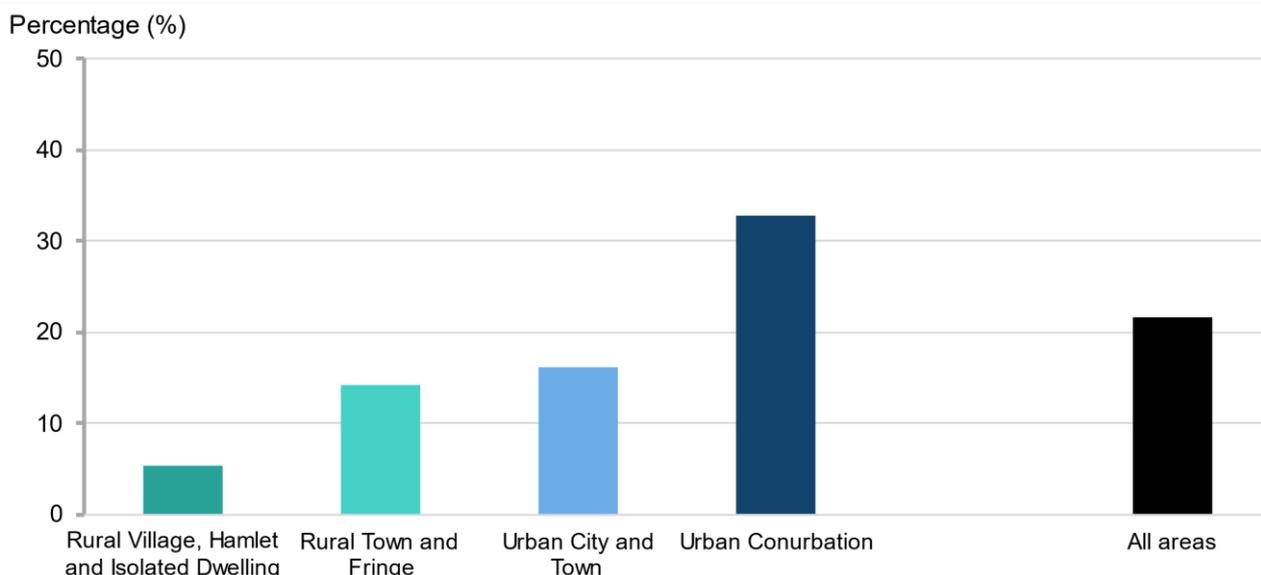


Figure B-18 shows that in 2021 the percentage of households with one car or more was higher in Rural areas than in Urban areas. The more rural an area is, the higher the average number of cars per household. 95% of households in Rural Villages, Hamlets or Isolated Dwellings had one or more cars or vans (comprising of 37% having one car and 58% having two or more). In comparison, 67% of households in Urban Conurbations had one or more cars or vans. In England overall, 78% of households had one or more cars or vans in 2021 (and therefore 22% did not have a car or van); 45% of households in England had just one car or van, whereas 33% were multi-car households.

Figure B-18: Percentage of households by number of cars/vans and settlement type, in England, 2021 ([Note B-3](#), [Note B-5](#))

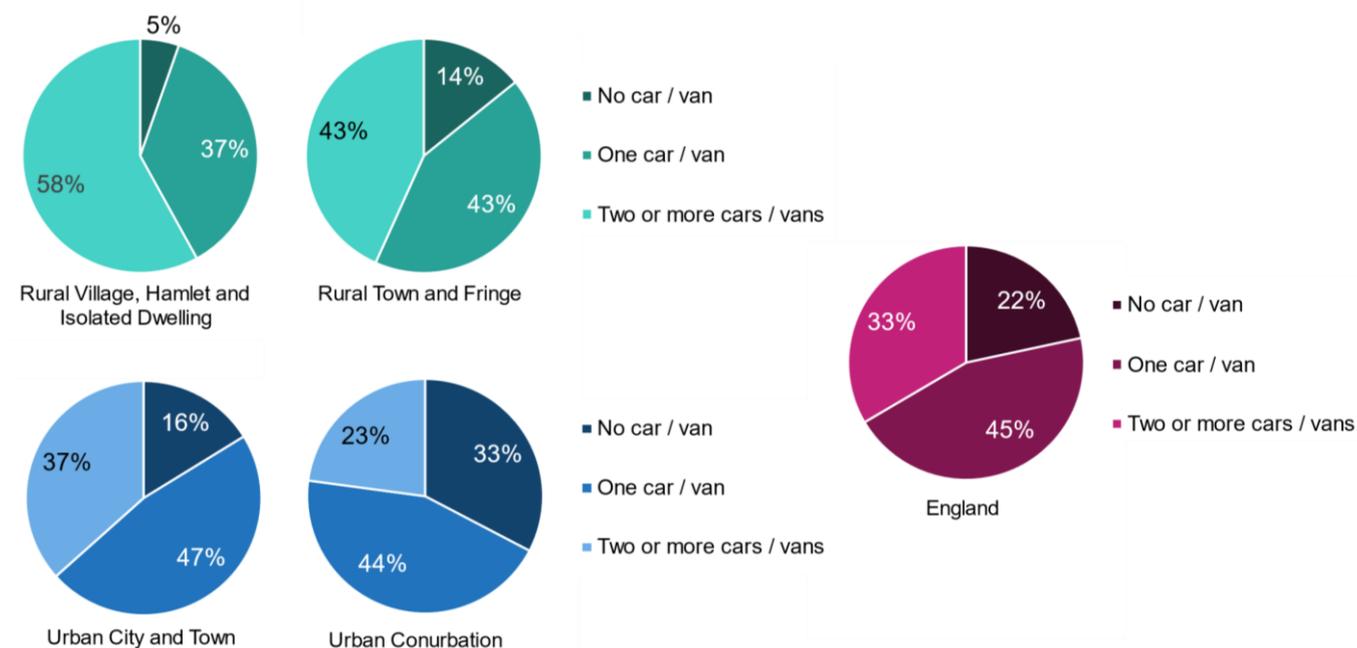
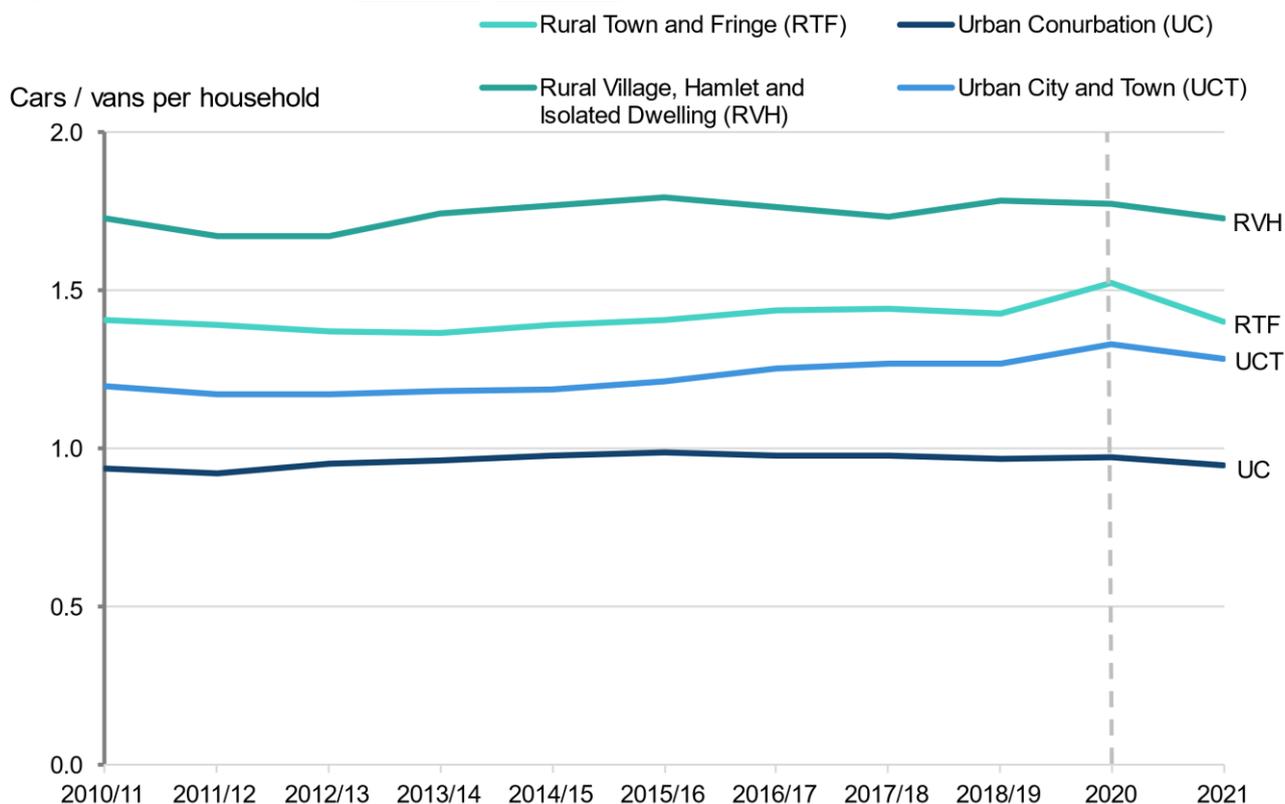


Figure B-19 shows the number of cars or vans per household between 2010/11 and 2021. There was little change across all settlement types between 2010/11 and 2018/19 (i.e., prior to the COVID-19 pandemic). Between 2018/19 and 2021 there has been some slight variation in the average number of cars or vans per household, but these changes should be treated with caution due to the smaller sample size used during the COVID-19 pandemic.

Figure B-19: Average number of cars or vans per household, by settlement type, in England, 2010/11 to 2021 ([Note B-1](#), [Note B-5](#))



Travel behaviour explanatory notes

- **Note B-1**

The sample size for one year is too small to produce robust results so the analysis within some sub-sections combines data from two years (i.e., reporting 2018/19) until 2020 and 2021, which have been reported as standalone years due to the effects of COVID.

- **Note B-2**

The results are weighted. Weights are applied to adjust for non-response to ensure the characteristics of the achieved sample match the population and for the drop off in trip recording. The survey results are subject to sampling error. Further information: <https://www.gov.uk/government/collections/national-travel-survey-statistics>.

- **Note B-3**

Tables of the data seen in this section are available in the [connectivity and accessibility supplementary data tables](#).

- **Note B-4**

Sources: [DfT National Travel Survey](#); [Office for National Statistics \(Population estimates\)](#); [Zap-Map](#).

- **Note B-5**

“Urban Conurbation” refers to the combination of two categories within the [Rural-Urban Classification](#): “Urban with Minor Conurbation” and “Urban with Major Conurbation”. “Rural Village, Hamlet and Isolated Dwelling” refers to the combination of “Rural Village” and “Rural Hamlet and Isolated Dwellings”.

- **Note B-6**

Figures in the tables may not match those in the text due to rounding.

Distance by mode is based on stage distance. “Local Bus” includes London buses. “Rail” includes London Underground. “Other” includes: bicycle, motorcycle, private hire bus, other modes of private transport, non-local bus, taxi / minicab and other modes of public transport (air, ferries, light rail).

- **Note B-7**

Purposes for travel include:

Commuting - trips to a usual place of work from home, or from work to home

Business – personal trips in course of work, including all work trips by people with no usual place of work (e.g., site workers) and those who work from home

Education – trips to school or college by students

Escort – when a traveller has no purpose of their own, other than to accompany another person (e.g., taking a child to school)

Shopping – all trips to shops or from shops to home (with or without purchase or intention to buy)

Personal business – visits to services (e.g., hairdressers, laundrettes, dry-cleaners, banks)

Sport / Entertainment – all types of entertainment or sport, clubs, etc.

Holiday / Day trip – trips within Great Britain to or from any holiday, or trips for pleasure within a single day.

C. Access to personal transport

Summary

The uptake of electric vehicles over petrol or diesel engines is rising every year, resulting in an increased demand for EV charging points. As of January 2023, there were 45 charging devices per 100,000 population in Predominantly Rural areas, and 62 charging devices per 100,000 population in Predominantly Urban areas.

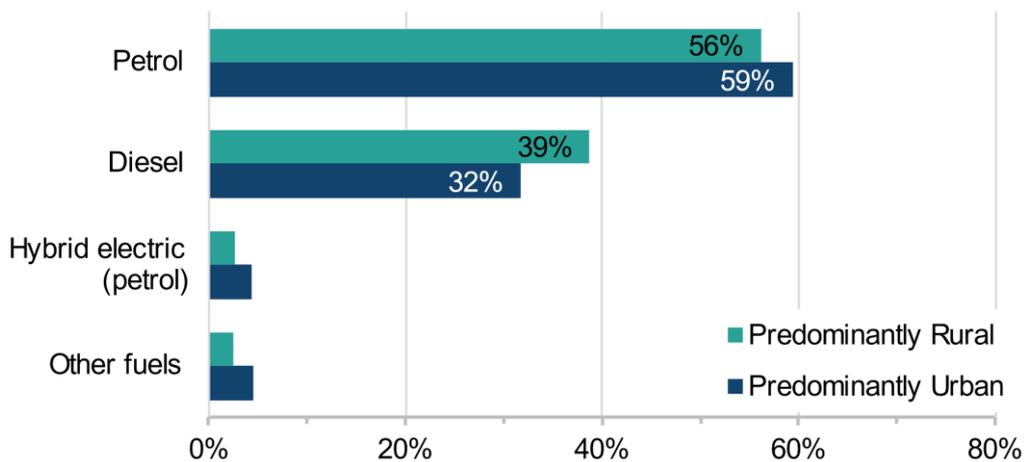
Fuel types

The fuel types of vehicles can be analysed in order to determine the differences between personal vehicles by road users in Predominantly Rural and Predominantly Urban areas. This is shown in Figure C-1.

In Quarter 4 2022 (October to December 2022), the majority of personal cars (whether privately-owned or company cars) had petrol engines, making up 56% of cars in Predominantly Rural areas and 59% in Predominantly Urban areas. There was a higher proportion of cars with diesel engines on the road in Q4 2022 in Predominantly Rural areas (39%) compared with Predominantly Urban areas (32%). For vehicles with hybrid electric engines, there was a smaller proportion of vehicles registered in Predominantly Rural areas (3%) than in Predominantly Urban areas (4%).

Figure C-1: Proportion of total registered cars, by fuel type and broad Rural-Urban Classification, Quarter 4 2022

The legend is presented in the same order and orientation as the clustered bars. Fuel types representing less than 5% of registered cars have not been labelled.

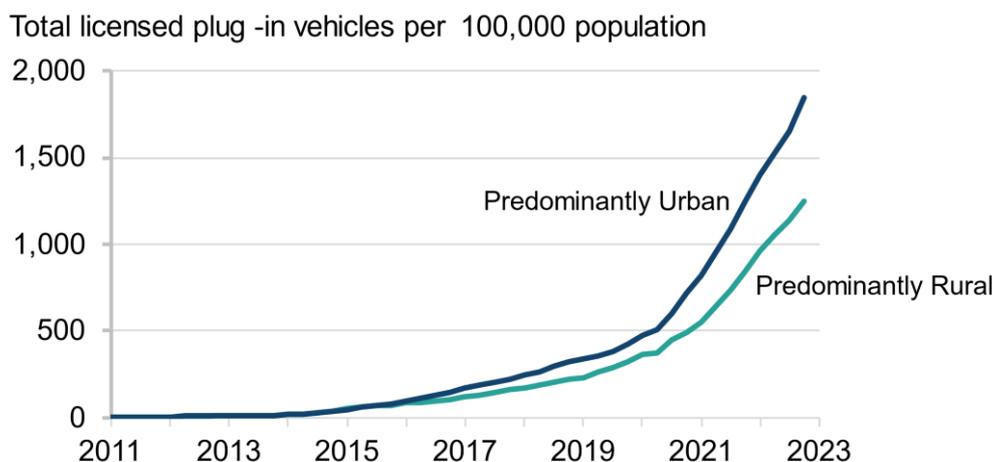


Electric vehicles

The uptake of electric vehicles over petrol or diesel engines is increasing every year. There has consistently been more electric vehicles registered in Predominantly Urban areas than in Predominantly Rural areas, and the proportion in Predominantly Urban areas is growing at a faster rate. Plug-in vehicles include those that are battery electric, hybrid diesel/petrol, or range extended electric.

By the end of Q4 2022, there were 1,248 plug-in cars per 100,000 population in Predominantly Rural areas, and 1,847 plug-in cars registered in Predominantly Urban areas. This compares with 2.1 plug-in cars per 100,000 population in Predominantly Rural areas (and 4.2 per 100,000 population in Predominantly Urban areas) in Q1 2011. This is shown in Figure C-2.

Figure C-2: Total licensed plug-in vehicles at the end of the quarter, per 100,000 population, by broad Rural-Urban Classification, Quarter 1 2011 to Quarter 4 2022 (Note C-4)



The increased uptake of electric vehicles results in an increased demand for EV charging points. Overall, there were more charging devices per 100,000 population in Predominantly Urban areas than in Predominantly Rural areas in January 2023 as shown in Table C-1.

Table C-1: Total electric vehicle (EV) charging devices per 100,000 population, by broad Rural-Urban Classification in England, January 2023 (Note C-1, Note C-2, Note C-3)

	Total charging devices per 100,000 population
Predominantly Rural	45.3
Urban with Significant Rural	40.4
Predominantly Urban	61.7

Table C-2 describes the number of electric vehicle charging devices per 100,000 population in more detail. There were 50.4 EV charging devices per 100,000 population in Mainly Rural areas in 2023, and 42.1 charging devices per 100,000 population in Largely Rural areas. This is higher than in Urban Minor Conurbations (34.4 devices per 100,000 population), but lower than in Urban Major Conurbations (74.7 devices per 100,000 population).

Table C-2: Total electric vehicle (EV) charging devices per 100,000 population, by detailed Rural-Urban Classification in England, January 2023 (Note C-1, Note C-2, Note C-3)

	Total charging devices per 100,000 population
Mainly Rural	50.4
Largely Rural	42.1
Urban with Significant Rural	40.4
Urban City and Town	47.9
Urban Minor Conurbation	34.4
Urban Major Conurbation	74.7
England	55.2

Figure C-3 shows the number of electric vehicle charging devices per 100,000 population in Predominantly Rural areas, followed by the number of charging devices per 100,000 population in Predominantly Urban and Urban with Significant Rural areas in Figure C-4.

As of January 2023, in Predominantly Rural areas there were:

- 13 Local Authorities with 25 or less electric vehicle charging devices per 100,000 population, resulting in poorer accessibility,
- 37 Local Authorities with between 25 and 50 electric vehicle charging devices per 100,000 population,
- 25 Local Authorities with more than 50 and up to 100 electric vehicle charging devices per 100,000 population, resulting in good accessibility,
- 0 Local Authorities with more than 100 electric vehicle charging devices per 100,000 population, meaning no Rural areas had the highest levels of EV accessibility.

Predominantly Urban and Urban with Significant Rural areas have been combined on the map shown in Figure C-4 to highlight areas that are not Rural. As of January 2023, in Predominantly Urban areas there were:

- 50 Local Authorities with 25 or less electric vehicle charging devices per 100,000 population, resulting in poorer accessibility,
- 64 Local Authorities with between 25 and 50 electric vehicle charging devices per 100,000 population,
- 41 Local Authorities with more than 50 and up to 100 electric vehicle charging devices per 100,000 population, resulting in good accessibility,
- 19 Local Authorities with more than 100 electric vehicle charging devices per 100,000 population, resulting in the highest levels of EV accessibility.

In Urban with Significant Rural areas in January 2023, there were:

- 6 Local Authorities with 25 or less electric vehicle charging devices per 100,000 population, resulting in poorer accessibility,
- 30 Local Authorities with between 25 and 50 electric vehicle charging devices per 100,000 population,
- 9 Local Authorities with more than 50 and up to 100 electric vehicle charging devices per 100,000 population, resulting in good accessibility,
- 1 Local Authority (Folkestone & Hythe) with more than 100 electric vehicle charging devices per 100,000 population, resulting in the highest levels of EV accessibility.

More Local Authorities had between 25 and 50 electric vehicle charging devices per 100,000 population than any other density class for all settlement types. 19 Predominantly Urban Local Authorities had more than 100 electric vehicle charging points per 100,000 population, whereas there were no Predominantly Rural Local Authorities that were this accessible. This means that 1 in every 1,000 people in Predominantly Urban areas could charge their electric vehicle using a public charging point at any one time, as of January 2023.

Figure C-3: Total electric vehicle (EV) charging devices per 100,000 population in Predominantly Rural areas in England, January 2023 (Note C-1, Note C-2, Note C-3)

White areas on the map represent Predominantly Urban and Urban with Significant Rural areas.

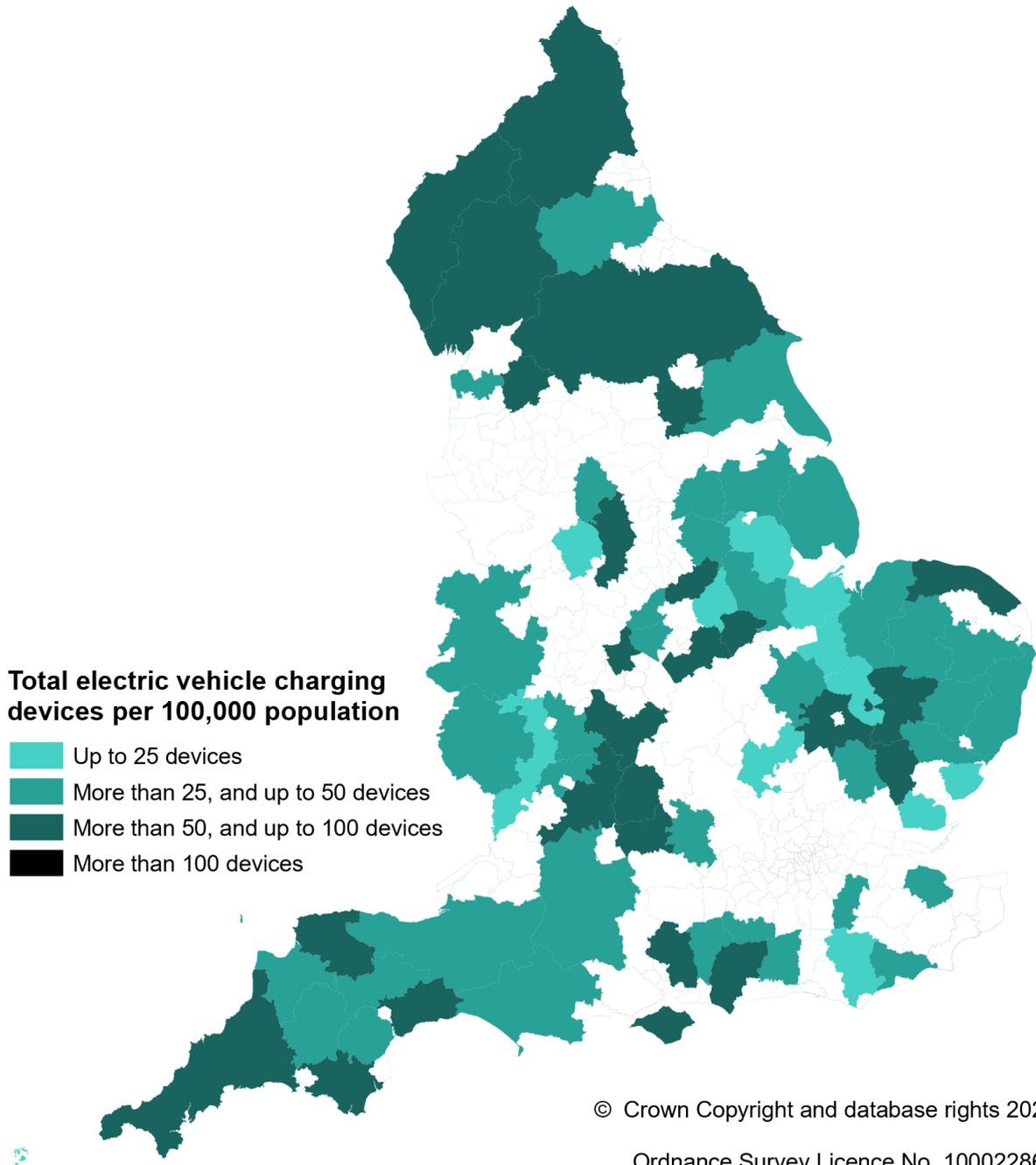
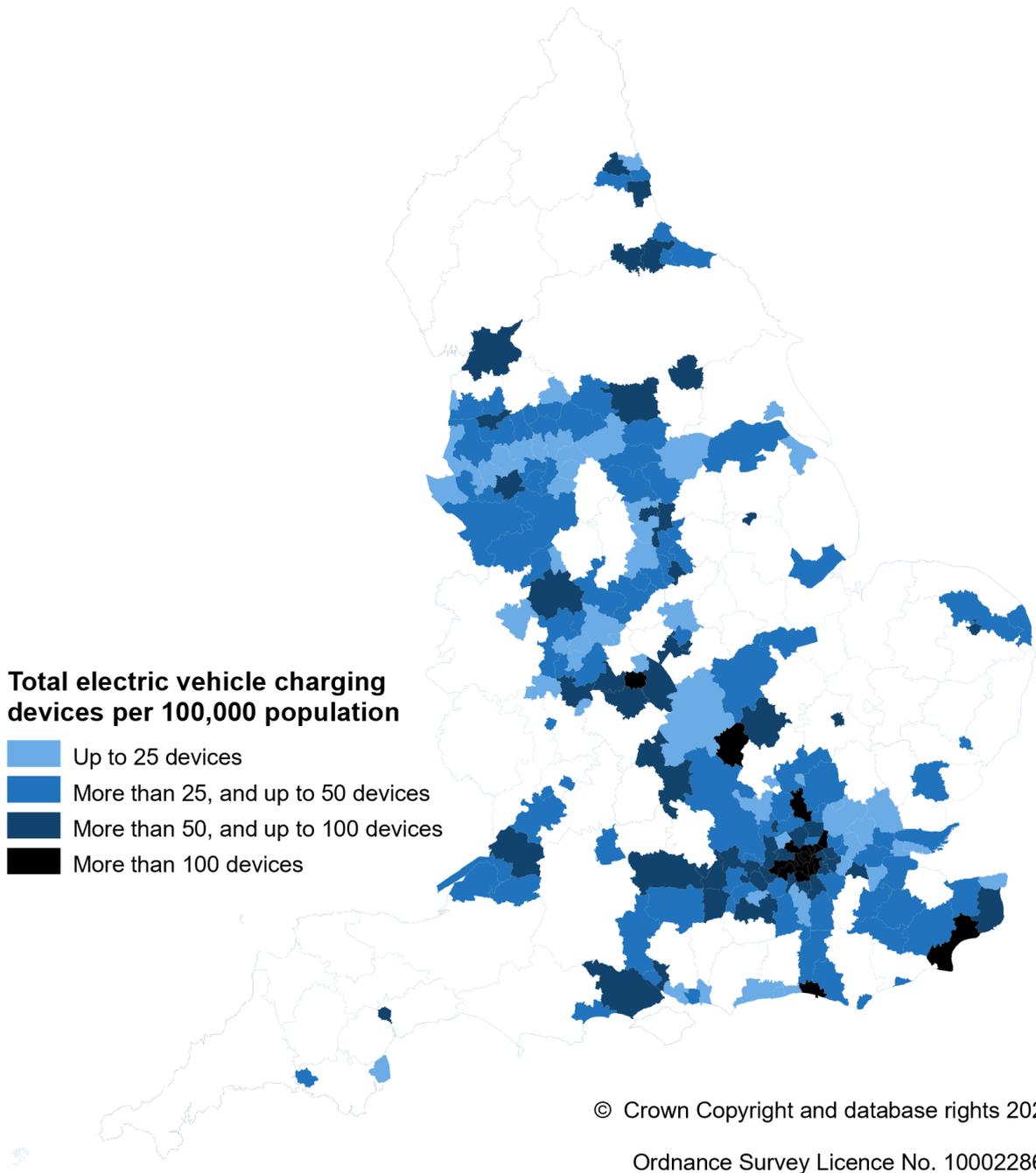


Figure C-4: Total electric vehicle (EV) charging devices per 100,000 population in Predominantly Urban and Urban with Significant Rural areas in England, January 2023

([Note C-1](#), [Note C-2](#), [Note C-3](#))

White areas on the map represent Predominantly Rural areas.



Personal transport explanatory notes

- **Note C-1**

Tables of the data seen in this section are available in the [connectivity and accessibility supplementary data tables](#).

- **Note C-2**

Sources: [DfT National Travel Survey](#); [Office for National Statistics \(Population estimates\)](#); [Zap-Map](#).

- **Note C-3**

Represents devices reported as operational at midnight at the start of each quarter.

‘Total devices’ represent publicly available charging devices at all speeds. A device can have a number of connectors of varying speeds.

The most recent population figures by Local Authority are sourced from the Office for National Statistics Population estimates for mid-year 2021. For quarters from July 2020 to April 2021, the population figures were sourced from 2019 estimates. For quarters from April 2020 previous, the population figures were sourced from the 2018 estimates. The Local Authority administrative geographies are used from April 2021.

- **Note C-4**

Includes both privately-owned cars and company cars. Source: Department for Transport (DfT) and Driver and Vehicle Licensing Agency (DVLA), [Vehicle licensing statistics data tables - GOV.UK \(www.gov.uk\)](#)

D. Access to services

Summary

The average minimum travel times to reach the nearest key services were longer for people living in Rural areas, compared with people living in Urban areas.

More services were available on average for people living in Urban areas for all service types and all journey times compared with those for people living in Rural areas, when travelling by public transport and walking or by car. Additionally, more users had access to key services in Urban areas than in Rural areas, by any mode of transport.

In 2019, within 60 minutes by public transport/walking, 35% of households in Rural Hamlets and Isolated Dwellings could access a hospital, compared with 62% in Rural Town and Fringe areas and 92% in Urban areas.

When travelling by public transport/walking, 15% of people of employment age in Rural areas did not have a small or medium sized employment centre within 30 minutes travel time. 83% of the people of employment age in Rural areas did not have a large employment centre within 30 minutes travel time.

In 2019, 5% of school-age children in Rural areas did not have a primary school and 36% did not have a secondary school within 30 minutes travel time by public transport/walking. 52% of 16-19 year olds in Rural areas did not have a further education college within 30 minutes travel time.

Average minimum travel times

Generally, people living in Rural areas have lower overall levels of accessibility to key service locations compared with people living in Urban areas, and people living in Rural areas in a sparse setting have the lowest overall accessibility.

The average minimum travel times to reach the nearest key services were longer for people living in Rural areas for all services, compared with people living in Urban areas. More services were available on average for people living in Urban areas for all service types and all journey times compared with those for people living in Rural areas, when walking and using public transport.

Figure D-1 shows that average travel times to services were higher in Rural areas by public transport or walking. In Rural areas the services with the lowest level of accessibility were hospitals and centres of employment with 5,000 or more jobs. The average minimum travel time to a hospital was a little over one hour in Rural areas, compared with a little over half an hour in Urban areas. The average travel time to centres of employment with 5,000 or more jobs was 55 minutes in Rural areas compared with 26 minutes in Urban areas. For most key service types, the average minimum Rural travel times were around double the average minimum Urban travel times, however for places of employment with 100-499 jobs and food stores they were 2.5 times longer and for primary school they were 1.5 times longer.

Figure D-1: Average minimum travel time to reach the nearest key services by Walking and/or Public Transport, by Lower Super Output Area Rural-Urban Classification, in England, 2019

The legend is presented in the same order and orientation as the bars.

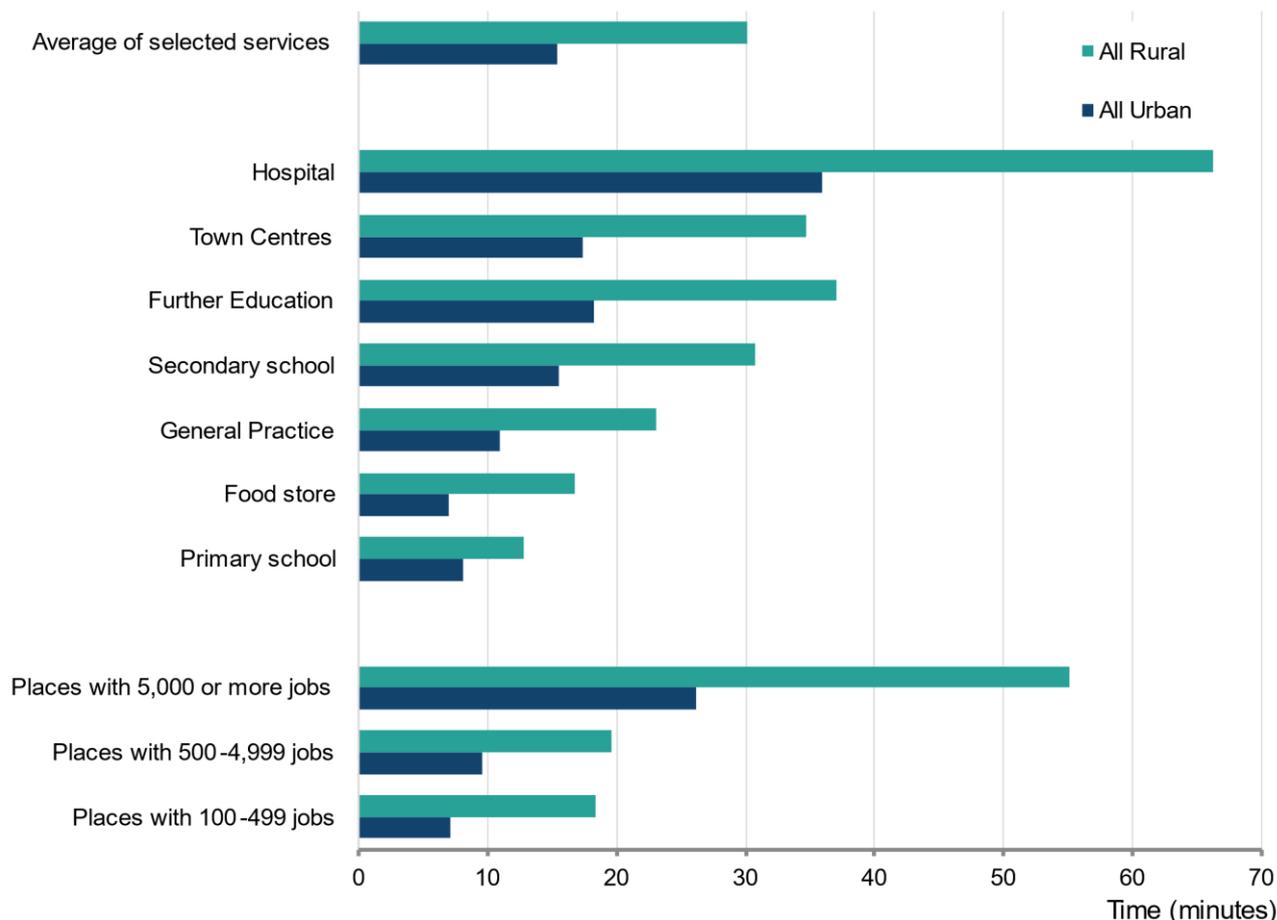
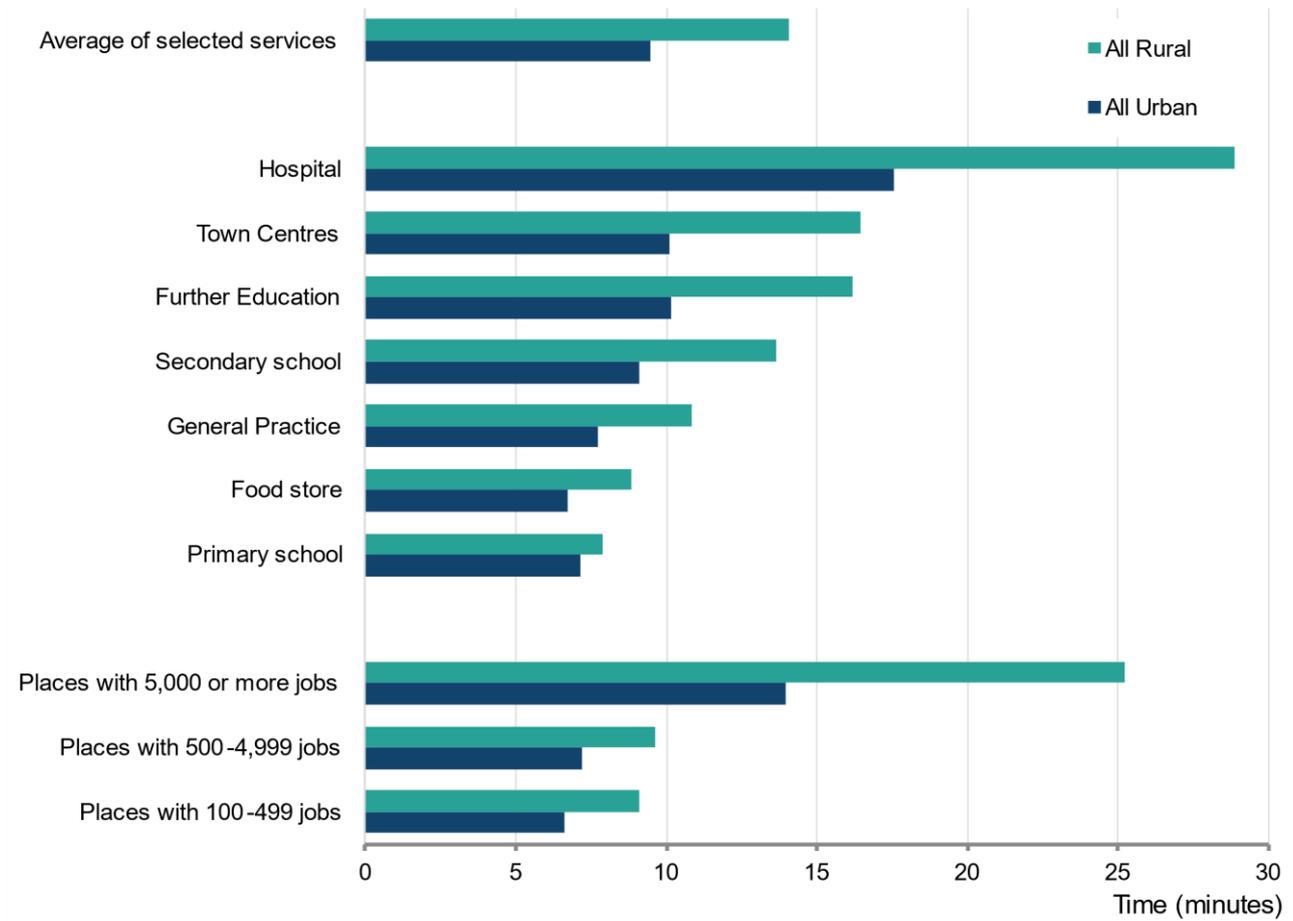


Figure D-2 shows that average travel times to services were higher in Rural areas when travelling by car, but differences compared with Urban areas were much reduced from the differences when travelling by public transport or walking. For people living in Rural areas, making the same journey by car compared with using public transport or walking, had the effect of halving the average minimum journey times. Urban areas also saw a reduction in travel times when comparing travel by car with public transport or walking but the difference was less consistent, travel times to hospitals and centres of employment with 5,000 or more jobs were halved, but travel times to primary school, food stores and centres of employment with 100-499 jobs were similar. The average minimum travel time across all eight services was 33% higher in Rural areas compared with Urban areas overall.

In Rural areas, the biggest differences between walking/public transport and travelling by car are seen when evaluating average minimum travel times to hospitals, further education centres and places with 5,000 or more jobs; by car, it would take 29 minutes on average to travel to the nearest town centre in Rural areas – this compares with 66 minutes when travelling by public transport/walking. Therefore, travelling by car will save 37 minutes on average. In a similar way, it would take 25 minutes on average to travel to a centre of employment with 5,000 or more jobs by car, compared with 55 minutes by public transport/walking, indicating a saving of 30 minutes.

Figure D-2: Average minimum travel time to reach the nearest key services by Car, by Lower Super Output Area Rural-Urban Classification, in England, 2019

The legend is presented in the same order and orientation as the bars.



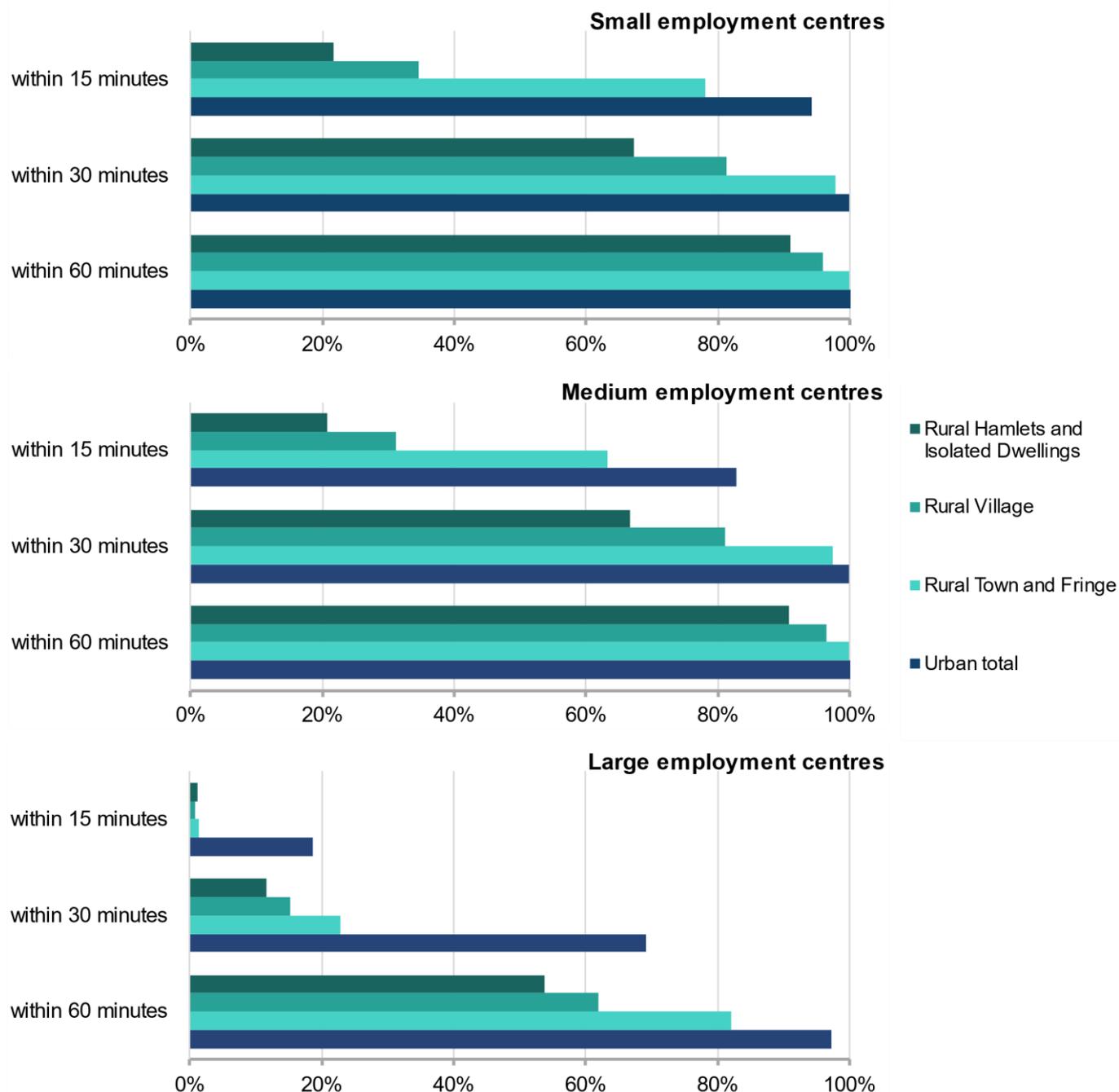
Notes:

- The average of selected services is calculated from the minimum journey times to medium sized centres of employment (500-4999 jobs), primary and secondary schools, further education, General Practices, hospitals, food stores and town centres.
- The scales between Figure D-1 and Figure D-2 differ, so caution should be taken when making comparisons.

Access to key services

We can measure accessibility based on time thresholds, i.e., whether users can access key services within selected travel times. Figure D-3 shows the percentage of people of employment age that can access an **employment centre** by public transport and/or walking in 2019.

Figure D-3: Percentage of people of employment age able to access an employment centre within selected travel times, by Public Transport / Walking, in England, 2019



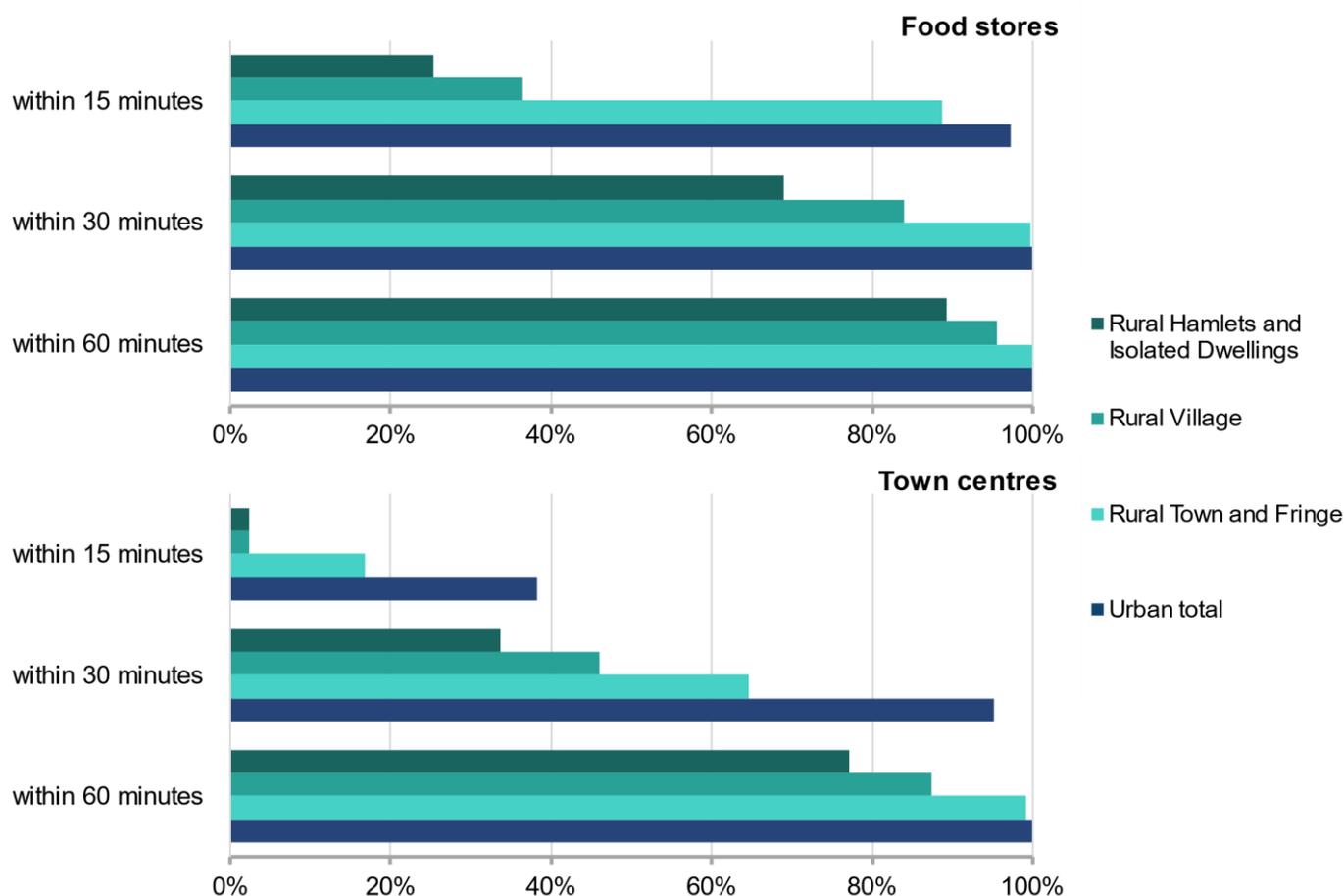
The more Rural an area is, the less there is access to employment centres by Public Transport/Walking. In the most rural areas (Rural Hamlets and Isolated Dwellings), only 22% of people of employment age were able to access a **small employment centre** within 15 minutes travel time in 2019. This is 72 percentage points less than in Urban areas (94%). Within 60 minutes travel time, all those in Urban areas could access a small employment centre, compared with 91% of those in Rural Hamlets and Isolated Dwellings.

21% of people of employment age in Rural Hamlets and Isolated Dwellings were able to access a **medium employment centre** within 15 minutes travel time in 2019 by public transport/walking. This compares with 63% in Rural Town and Fringe areas and 83% in Urban areas. Within 60 minutes travel time, 91% of people of employment age in Rural Hamlets and Isolated Dwellings were able to access a medium employment centre, compared with 100% in Rural Town and Fringe areas and in Urban areas.

Within 60 minutes travel time by public transport/walking, 54% of people of employment age in Rural Hamlets and Isolated Dwellings were able to access a **large employment centre**, compared with 82% in Rural Town and Fringe areas and 97% in Urban areas.

Employment centres are not the only services where accessibility is poorer in the more Rural areas. Figure D-4 shows the percentage of households that could access a **food store** or **town centre** within a given travel time by public transport and/or walking in 2019.

Figure D-4: Percentage of households able to access a food store or town centre within selected travel times, by Public Transport / Walking, in England, 2019

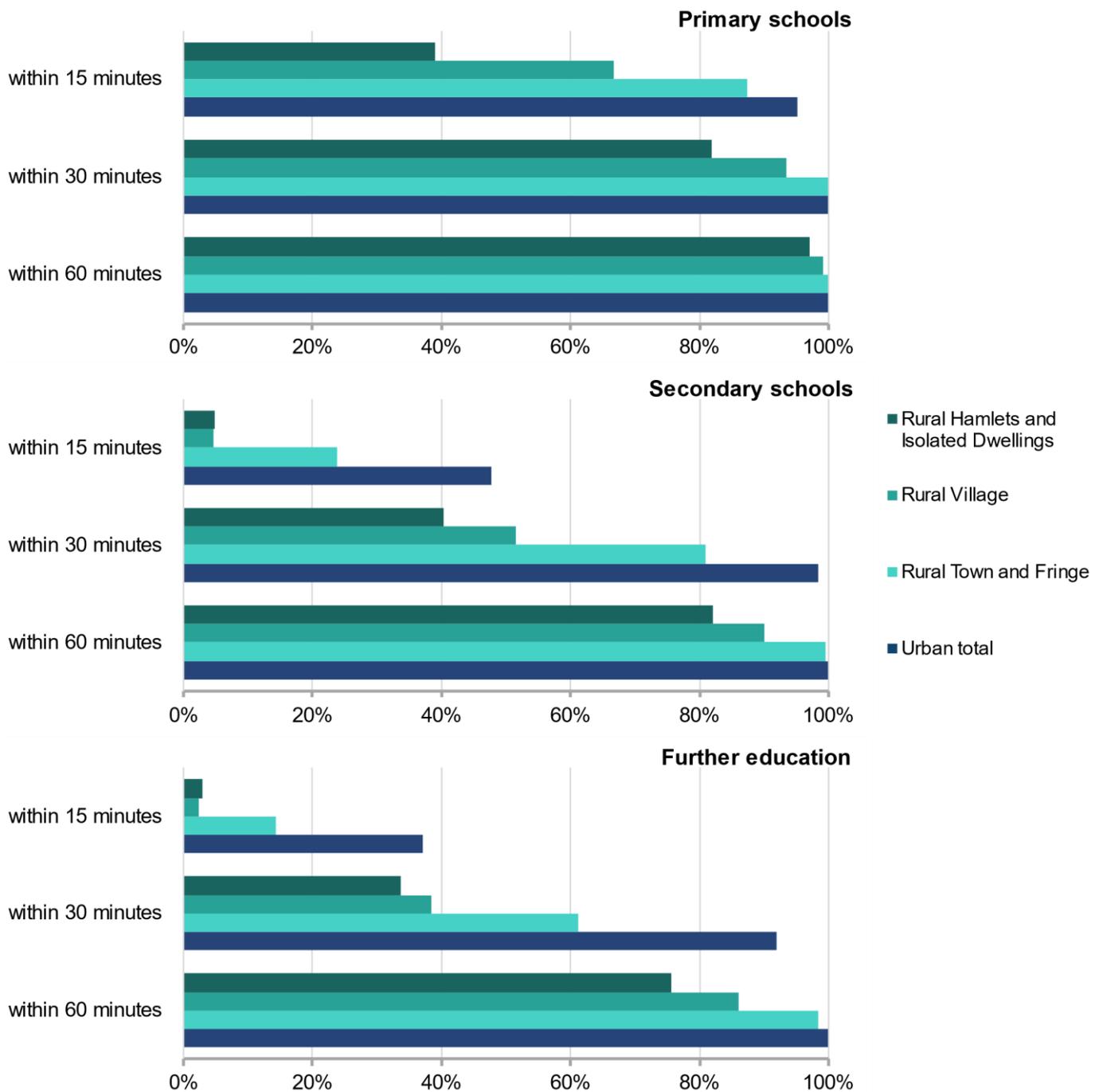


25% of households in Rural Hamlets and Isolated Dwellings could access a **food store** within 15 minutes travel time by public transport/walking in 2019, compared with 97% in Urban areas. Within 60 minutes travel time, all Urban households and 89% of those in Rural Hamlets and Isolated Dwellings could access a food store.

2% of households in Rural Hamlets and Isolated Dwellings could get to a **town centre** within 15 minutes travel time by public transport and/or walking in 2019, compared with 38% of those in Urban areas. Within 60 minutes travel time, all Urban households and 77% of those in Rural Hamlets and Isolated Dwellings could access a town centre.

Access to education institutions is poorer in Rural areas than in Urban areas, and more so for secondary schools and further education colleges than primary schools. Figure D-5 shows the percentage of students (school-age children or 16-19 year olds) that could access a **school or college** within a given travel time by public transport and/or walking in 2019.

Figure D-5: Percentage of students able to access a school or college within selected travel times, by Public Transport / Walking, in England, 2019



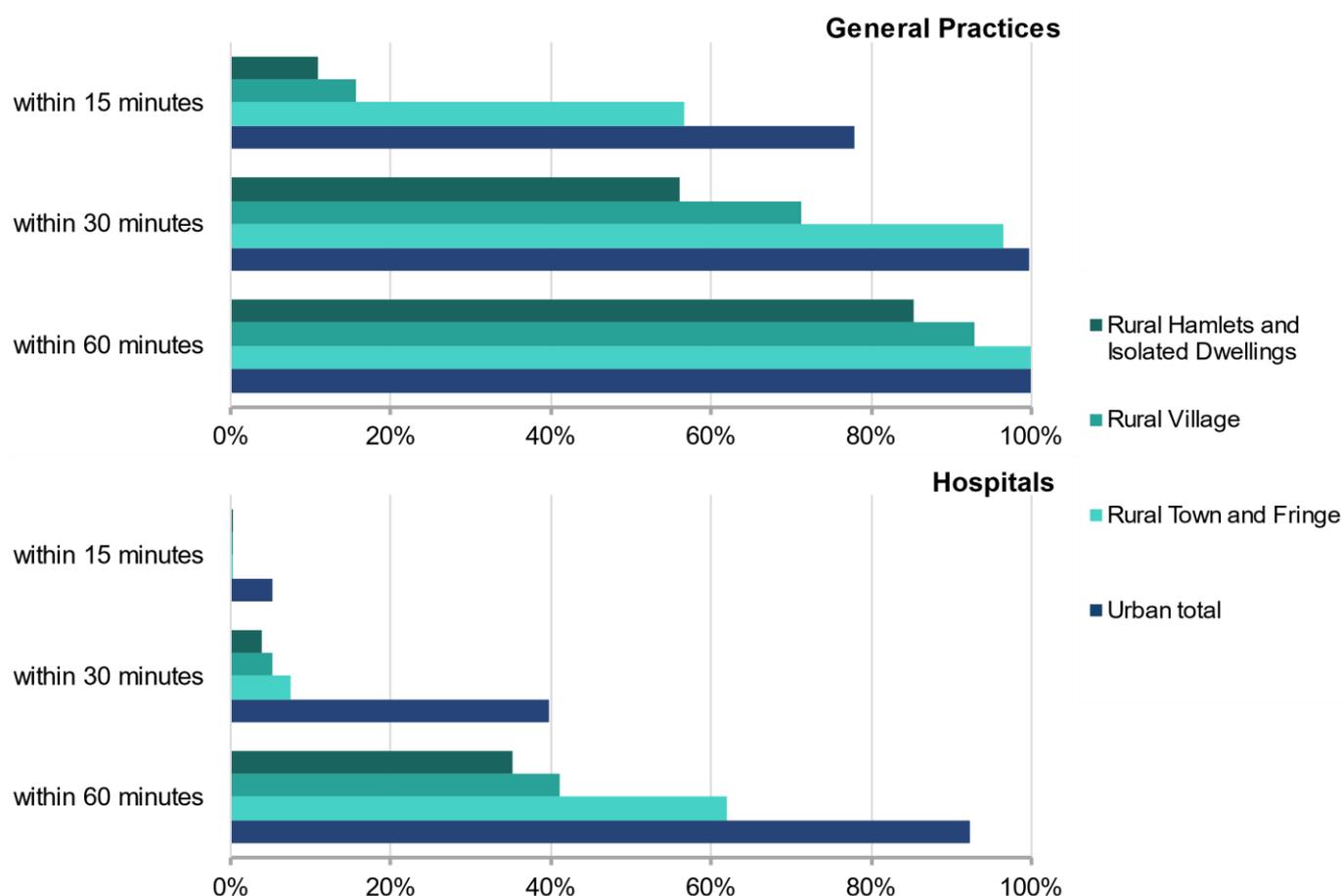
39% of school-age children in Rural Hamlets and Isolated Dwellings were able to access a **primary school** within 15 minutes travel time by public transport/walking, compared with 87% in Rural Town and Fringe areas and 95% in Urban areas. Within 60 minutes travel time, 97% of children in Rural Hamlets and Isolated Dwellings could access a primary school, compared with 100% in Rural Town and Fringe areas and in Urban areas.

5% of school-age children in Rural Hamlets and Isolated Dwellings were able to access a **secondary school** within 15 minutes travel time by public transport/walking, compared with 24% in Rural Town and Fringe areas and 48% in Urban areas. Within 60 minutes travel time, 82% of school-age children could access a secondary school, compared with 100% in Rural Town and Fringe areas and in Urban areas.

3% of 16-19 year olds in Rural Hamlets and Isolated Dwellings were able to access a **further education college** within 15 minutes travel time by public transport/walking, compared with 14% in Rural Town and Fringe areas and 37% in Urban areas. Within 60 minutes travel time, 76% of 16-19 year olds in Rural Hamlets and Isolated Dwellings could access a further education college, compared with 98% in Rural Town and Fringe areas and 100% in Urban areas.

Health services are less accessible in Rural areas than in Urban areas. Figure D-6 shows the percentage of households that could access a **health service** within a given travel time by public transport and/or walking in 2019.

Figure D-6: Percentage of households able to access a health service within 30 minutes travel time, by Public Transport / Walking, by Rural-Urban Classification, in England, 2019



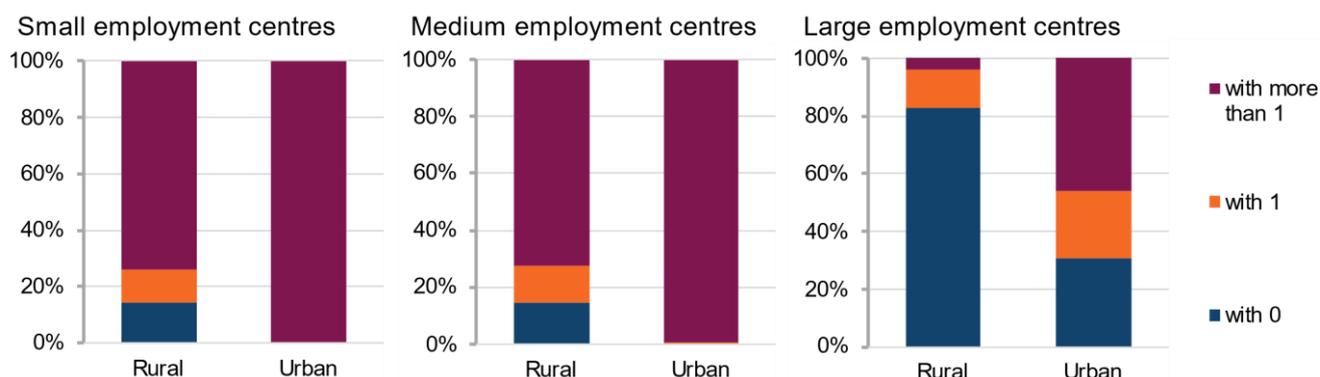
11% of households in Rural Hamlets and Isolated Dwellings were able to access a **General Practice** within 15 minutes travel time by public transport/walking, compared with 57% of households in Rural Town and Fringe areas and 78% in Urban areas. Within 60 minutes travel time, 85% of households in Rural Hamlets and Isolated Dwellings were able to access a General Practice, compared with 100% in Rural Town and Fringe areas and in Urban areas.

Within 60 minutes travel time by public transport/walking, 35% of households in Rural Hamlets and Isolated Dwellings could access a hospital, compared with 62% in Rural Town and Fringe areas and 92% in Urban areas.

Average number of key services available

More services were available on average for people living in Urban areas for all service types and all journey time thresholds compared with those for people living in Rural areas when travelling by public transport and/or walking. Figure D-7 shows the number of **employment centres** within 30 minutes travel time by public transport and/or walking in 2019.

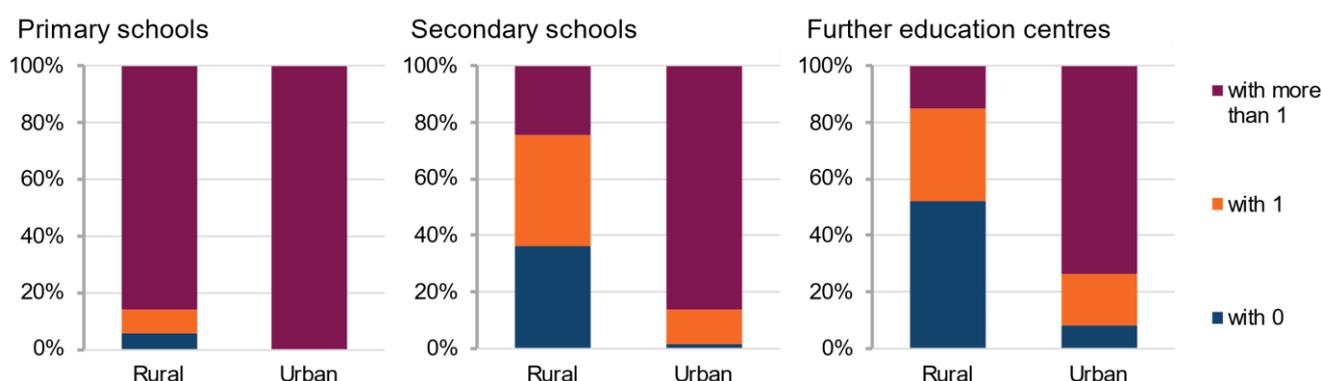
Figure D-7: Number of employment centres within 30 minutes travel time for people of employment age, by Public Transport / Walking, by Rural-Urban Classification, in England, 2019



In Rural areas, 15% of people of employment age did not have a small or medium employment centre within 30 minutes travel time by public transport/walking. In comparison, all of the Urban population that were employed could access at least one small or medium employment centre within 30 minutes travel time. 83% of the Rural employed population did not have a large employment centre within 30 minutes travel time, compared with 31% of the Urban population.

Figure D-8 shows the number of **schools** or **education colleges** within 30 minutes travel time by public transport and/or walking in 2019.

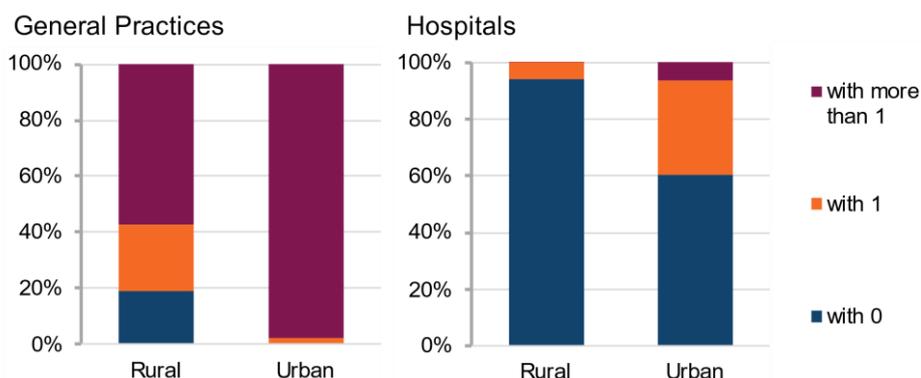
Figure D-8: Number of education centres within 30 minutes travel time for the school-age population / 16-19 year olds, by Public Transport / Walking, by Rural-Urban Classification, in England, 2019



In Rural areas, 5% of school-age children did not have a primary school within 30 minutes travel time by public transport/walking. 36% of school-age children in Rural areas did not have a secondary school within 30 minutes travel time. In comparison, all school-age children in Urban areas could access at least one primary school, and 98% could access at least one secondary school within 30 minutes travel time. 52% of 16-19 year olds in Rural areas did not have a further education centre within 30 minutes travel time, compared with 8% of those in Urban areas.

Figure D-9 shows the number of **health services** within 30 minutes travel time by public transport and/or walking in 2019.

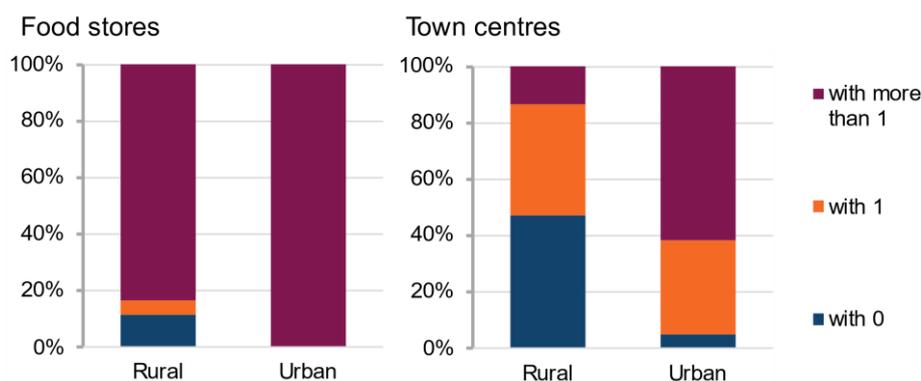
Figure D-9: Number of health services available within 30 minutes travel time for households, by Public Transport / Walking, by Rural-Urban Classification, in England, 2019



In Rural areas, 19% of households did not have a General Practice within 30 minutes travel time by public transport/walking. In comparison, all households in Urban areas could access at least one General Practice within 30 minutes. 94% of households in Rural areas did not have a Hospital within 30 minutes travel time, compared with 60% of households in Urban areas.

Figure D-10 shows the number of **food stores** and **town centres** within 30 minutes travel time by public transport and/or walking in 2019.

Figure D-10: Number of food stores and town centres within 30 minutes travel time for households, by Public Transport / Walking, by Rural-Urban Classification, in England, 2019



In Rural areas, 11% of households did not have a food store within 30 minutes travel time by public transport/walking. In comparison, all households in Urban areas could access at least one food store within 30 minutes. 47% of Rural households did not have a town centre within 30 minutes travel time, compared with 5% of Urban households.

Overall measure of accessibility to services

This measure of accessibility of services is determined by looking at average minimum travel times to key services, when travelling by either public transport and walking, or by car.

To get an assessment of service accessibility the average minimum travel time to the following nine types of service have been used: medium and large centres of employment (locations where over 500 people are employed across the businesses and services there, such that a range of jobs are likely to be available); primary school; secondary school; further education; General Practice; hospital; food store; town centre; post office (at the time of analysis, post office data were unavailable, so these calculations used 2016 data for post offices rather than 2019).

For each area an overall accessibility index has been calculated by indexing and weighting the minimum travel times to key services. Travel times were indexed in terms of relative travel times and weighted to take account of the frequency of use of each service. This means that infrequently used but important services (e.g., hospital) if distant do not disproportionately affect the overall index for an area (see [technical note](#) for more details).

Accessibility to services (derived from minimum travel times) has been presented on maps based on this overall index for travelling by public transport and walking, and for travelling by car. Rural areas are shown in green and Urban areas are shown in blue, the darker the area, the poorer the accessibility of services.

When using public transport and walking Rural areas generally have poorer accessibility to services based on minimum travel times than Urban areas. Unsurprisingly, travelling by car generally reduces travel times to key services, but overall differences in relative travel times are similar to those experienced when using public transport and walking, and Rural areas still tend to have poorer accessibility (in terms of minimum travel times), compared with Urban areas.

Overall Accessibility by Public Transport and Walking

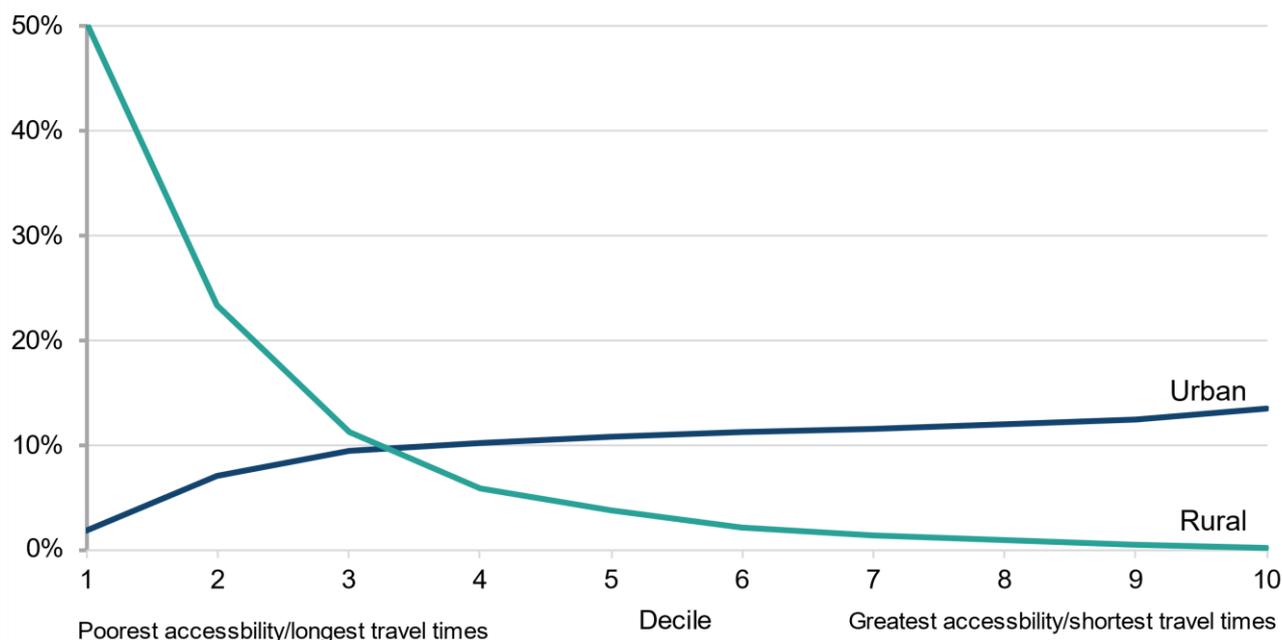
Rural areas tend to have poorer accessibility to services based on minimum travel times than Urban areas when using public transport or walking as shown in Table D-1 and Figure D-11.

- 50% of the Rural population are living in areas that have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times, compared with 2% of the Urban population).
- <1% of the Rural population are living in areas that have the greatest accessibility to services (highest 10% / decile 1) based on minimum travel times, compared with 13% of the Urban population.

Table D-1: Proportion of the population within each decile for accessibility of services based on minimum travel times by Public Transport and Walking, by broad Rural-Urban Classification, England, 2019

Decile	(Poorest accessibility of services)					(Greatest accessibility of services)				
	1	2	3	4	5	6	7	8	9	10
Rural	50%	23%	11%	6%	4%	2%	1%	1%	1%	<1%
Urban	2%	7%	9%	10%	11%	11%	11%	12%	12%	13%

Figure D-11: Distribution of population within each decile of accessibility of services based on minimum travel times by Public Transport and Walking, by broad Rural-Urban Classification, England, 2019



As might be expected, sparsely populated areas tend to have poorer accessibility of services based on minimum travel times when using public transport or walking (as shown in Figure D-12).

- 26% of the population living in Rural Town and Fringe areas in a sparse setting have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times compared with 24% of the population living in Rural Town and Fringe areas not in a sparse setting.
- 96% of the population living in Rural Village and Dispersed areas in a sparse setting have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times compared with 80% of the population living in Rural Village and Dispersed areas not in a sparse setting.

Figure D-12: Distribution of Rural population within each decile of accessibility of services based on minimum travel times by Public Transport and Walking, by detailed Rural-Urban Classification, England, 2019 (Note D-5)

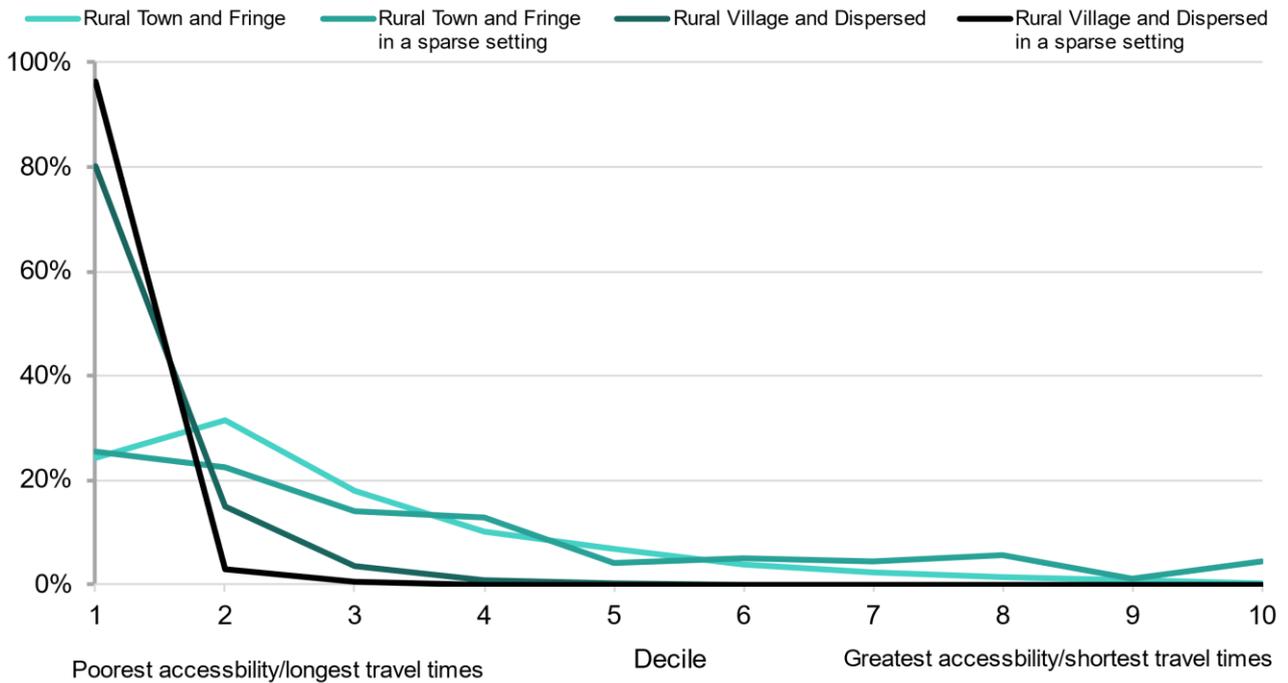
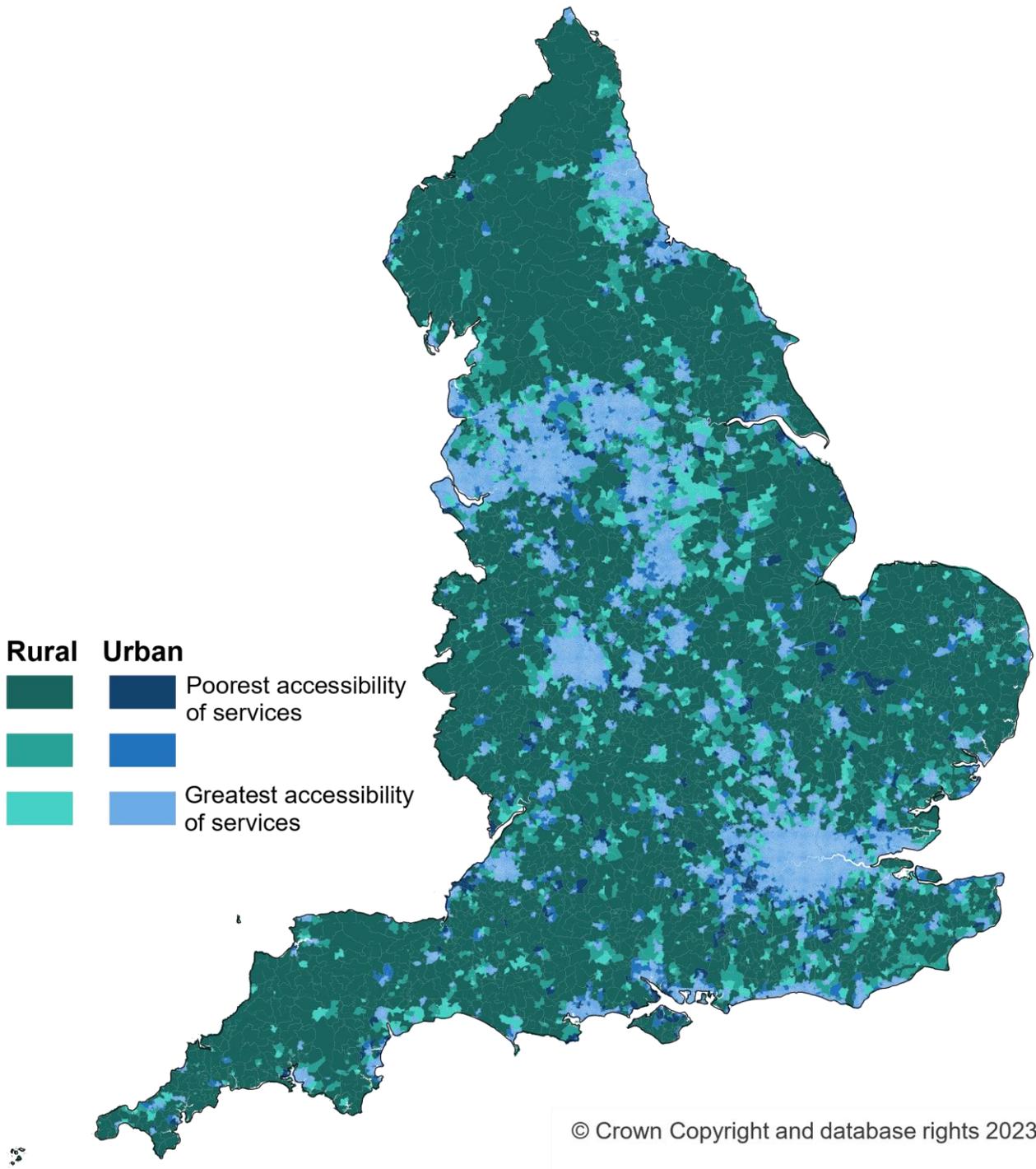


Figure D-13 maps the accessibility of services across England by public transport and walking; in previous editions we have used two 10-colour scales to represent Rural and Urban accessibility levels, where each shade represented a decile of the overall accessibility index. To improve readability, we have reduced the scale whilst still allowing the maps to provide an accurate representation of the data. We focus on highlighting the areas with poorest accessibility; for both Rural and Urban, the darkest shade now represents decile 1 (the decile with poorest accessibility), the mid-tone represents deciles 2, and the lightest shade represents all other deciles (3 to 10).

Figure D-13: Accessibility of services based on minimum travel times by Public Transport and Walking, by Rural-Urban Classification (Lower Super Output Areas), in England (2019)

The darker the colour, the lower the accessibility decile and therefore less accessible a place is.



© Crown Copyright and database rights 2023

Ordnance Survey Licence No. 100022861

Overall Accessibility by Car

Unsurprisingly travelling by car generally reduces travel times to key services compared with public transport and walking, but overall relative differences in travel times are similar, and Rural areas still tend to have poorer accessibility (in terms of minimum travel times), compared with Urban areas. This is seen in Table D-2 and Figure D-14.

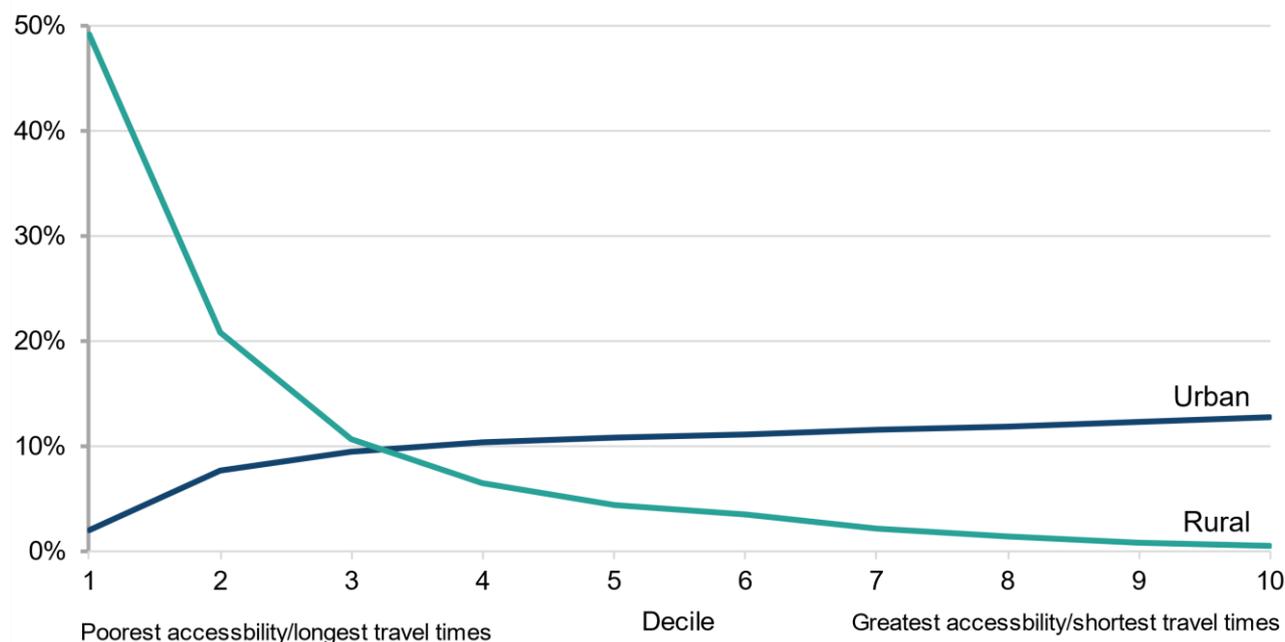
- 49% of the Rural population are living in areas that have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times compared with 2% of the Urban population.
- Less than 1% of the Rural population are living in areas that have the greatest accessibility to services (highest 10% / decile 1) based on minimum travel times compared with 13% of the Urban population.

Table D-2: Proportion of the population within each decile of accessibility of services based on minimum travel times by Car, by Rural-Urban Classification, England, 2019

where decile 1 = poorest accessibility of services, and decile 10 = greatest accessibility of services

Decile	1	2	3	4	5	6	7	8	9	10
Rural	49%	21%	11%	6%	4%	4%	2%	1%	1%	<1%
Urban	2%	8%	10%	10%	11%	11%	12%	12%	12%	13%

Figure D-14: Distribution of population within each decile of accessibility of services based on minimum travel times by Car, by broad Rural-Urban Classification, England, 2019



As might be expected, sparsely populated areas tend to have poorer accessibility of services based on minimum travel times when using a car. This is shown in Figure D-15.

- 26% of the population living in Rural Town and Fringe areas in a sparse setting have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times compared with 23% of the population living in Rural Town and Fringe areas not in a sparse setting.

- 94% of the population living in Rural Village and Dispersed areas in a sparse setting have the poorest accessibility to services (lowest 10% / decile 1) based on minimum travel times compared with 78% of the population living in Rural Village and Dispersed areas not in a sparse setting.

Figure D-15: Distribution of Rural population within each decile of accessibility of services based on minimum travel times by Car, by detailed Rural-Urban Classification, England, 2019 (Note D-5)

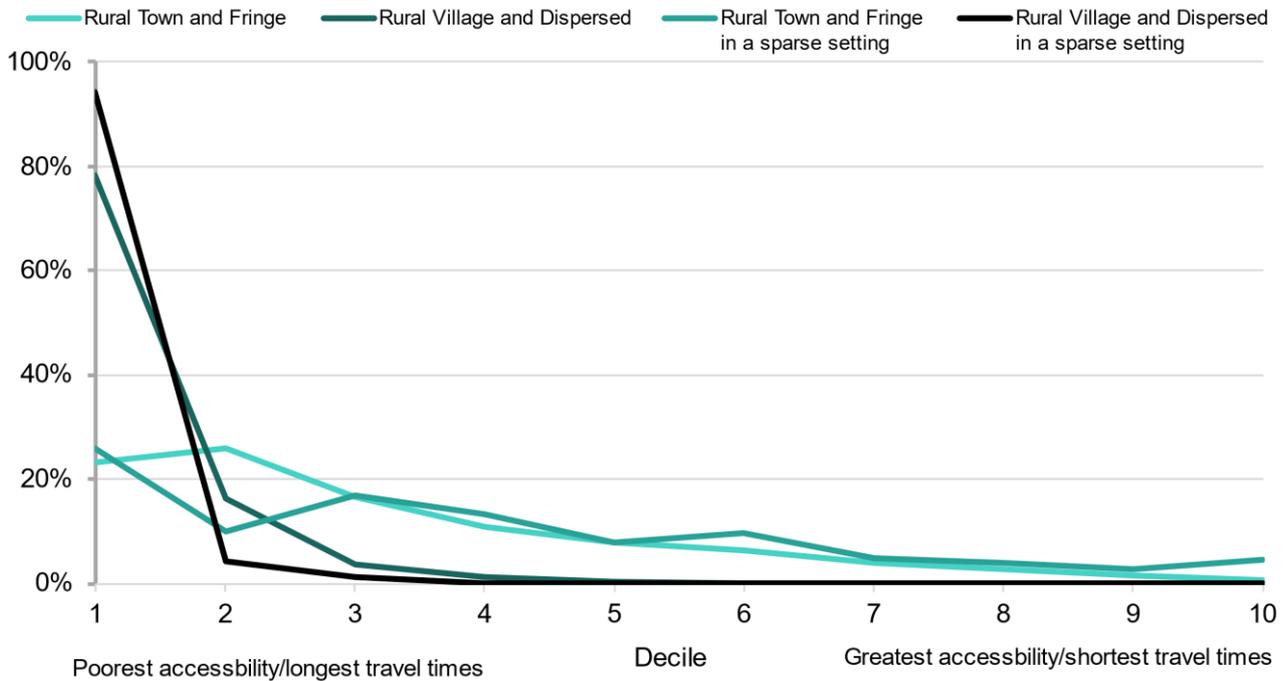
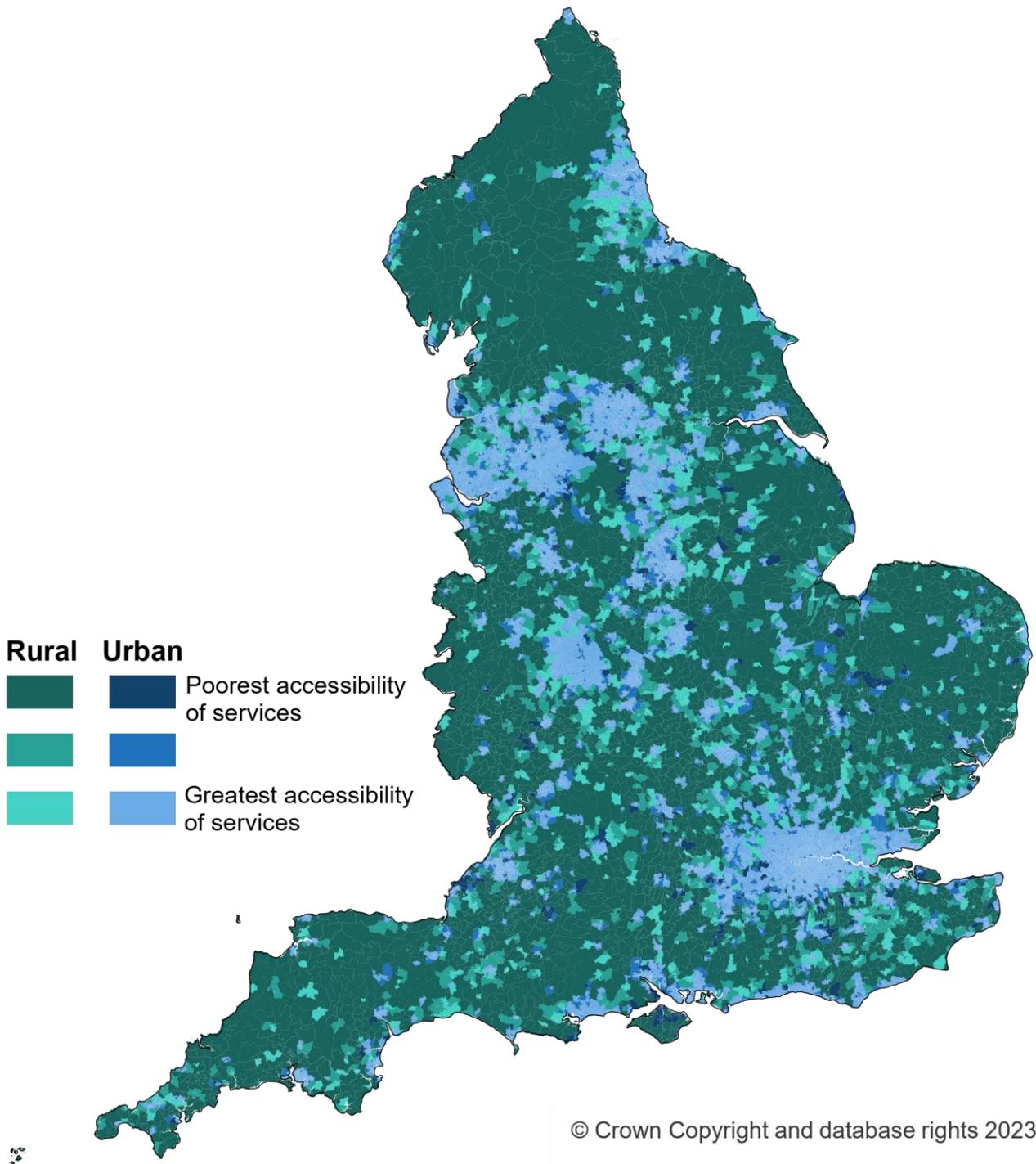


Figure D-16 maps the accessibility of services across England by car; in previous editions we have used two 10-colour scales to represent Rural and Urban accessibility levels, where each shade represented a decile of the overall accessibility index. To improve readability, we have reduced the scale whilst still allowing the maps to provide an accurate representation of the data. We focus on highlighting the areas with poorest accessibility; for both Rural and Urban, the darkest shade now represents decile 1 (the decile with poorest accessibility), the mid-tone represents deciles 2, and the lightest shade represents all other deciles (3 to 10).

Figure D-16: Accessibility of services based on minimum travel times using a car, by Rural-Urban Classification (Lower Super Output Areas), in England (2019)

The darker the colour, the lower the accessibility decile and therefore less accessible a place is.



© Crown Copyright and database rights 2023

Ordnance Survey Licence No. 100022861

Overall measure of accessibility to services: technical note

Table D-3 shows the weightings used for the nine services and the reasons these were chosen. Assumptions have had to be made that will not hold true for every individual. These weightings are simply an attempt at ensuring that services that are typically visited very infrequently although an important service (such as a hospital) do not have undue influence over the final measure if the travel times are much greater than for other services.

Table D-3: Explanation of weightings used for the nine services within the accessibility to services section

Service	Weighting	Reason
Medium and Large Employment Centre	0.22	Under the assumption of 240 working days per year, one journey per day
Primary School	0.18	Under the assumption of 190 school days per year, one journey per day
Secondary School	0.18	Under the assumption of 190 school days per year, one journey per day
Further Education	0.18	Under the assumption of 190 school days per year, one journey per day
General Practice	0.01	Under the assumption of 6 visits per year
Hospital	0.002	Under the assumption of 2.4 visits per year
Food Store	0.10	Under the assumption of 2 visits per week
Town Centre	0.10	Under the assumption of 2 visits per week
Post Office	0.05	Under the assumption of a weekly visit

In most cases the weightings are broadly of the same magnitude and hence their use does not result in significant adjustments. Where possible the weightings have been determined using statistical evidence but are otherwise based on best judgements, for example an average person will travel more frequently to their place of work or school than they would to some other services.

The weighted minimum travel times were indexed and then summed to give a single value which was then indexed again. This indexing process was used to ensure that infrequently used services did not disproportionately influence overall accessibility if travel times are large. As index an actual travel time has not been determined, the index is a relative measure.

Sources:

[Lower layer Super Output Area population estimates, NHS statistics, facts and figures hosted on nhsconfed.org](#)

Access to services explanatory notes

- **Note D-1**

A Lower Super Output Area (LSOA) is a geographic area built up from groups of Census Output Areas. LSOAs were developed (along with Middle Super Output Areas) to help improve the reporting of small area statistics, allowing for greater precision than reporting at Local Authority level. Each Local Authority will be built up of many LSOAs, therefore just because one LSOA scores poorly on accessibility of services it does not mean that this is an issue for the whole Local Authority.

- **Note D-2**

Tables of the data within this section are available in the [connectivity and accessibility supplementary data tables](#).

- **Note D-3**

Technical information on Journey Time Statistics can be found at <https://www.gov.uk/government/publications/journey-time-statistics-guidance>

- **Note D-4**

Source: DfT Journey Time Statistics: www.gov.uk/government/collections/journey-time-statistics#data-tables (files JTS0102, JTS0202, JTS0302)

- **Note D-5**

“Rural Village and Dispersed” refers to the combination of “Rural Village” and “Rural Hamlet and Isolated Dwellings” from the Rural-Urban Classification.

E. Home working

Summary

In 2021 there were an estimated 1.5 million home workers in Rural areas, accounting for 32% of all workers living in Rural areas. There were an estimated 6.3 million home workers in Urban areas, accounting for 28% of all workings living in Urban areas.

Between 2006 and 2021 the rate of home working increased in both Rural and Urban areas.

Home working

Home working is defined as those who usually spend at least half of their work time using their home, either within their grounds or in different places or using it as a base.

The following analysis uses data from the Office for National Statistics Annual Population Survey. 2021 survey results show an increase in the number of homeworkers when compared with 2020. This anticipated increase in homeworking was not evident in the 2020 results as respondents were asked to consider where they would usually work in their main job prior to the COVID-19 pandemic, rather than the situation under COVID-19 restrictions. In 2021 the survey returned to the original question wording, simply asking respondents to record whether or not they work from home in their main job. This means it is not until 2021 that we see fully the anticipated increase in homeworking which came about as a result of the COVID-19 pandemic and its longer term implications for working patterns.

The Annual Population Survey estimated that of the 27.5 million people in work in England in 2021 (see [Note E-1](#)), 7.8 million (28%) were home workers. Of these 7.8 million home workers, 1.5 million were from Rural areas, and 6.3 million were from Urban areas, as shown in Figure .

Figure E-1: Infographic to show the proportions of home workers by Rural-Urban Classification, 2021

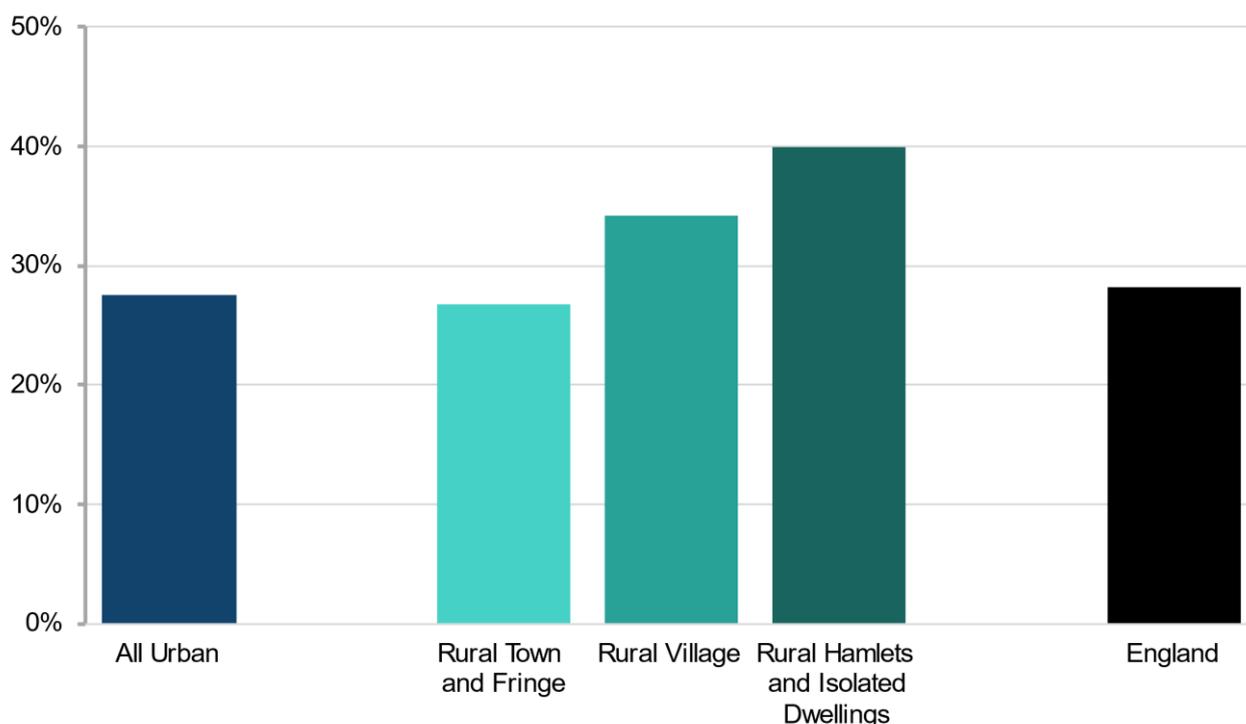


The highest rate of home workers was found in Rural Hamlets and Isolated Dwellings, at 40%. Overall Rural areas had a higher rate of home working (32%) compared with Urban areas (28%). This is to be expected as those in Rural areas have more to gain from home working. When considering average journey times those in Rural areas have further to travel to access key services, such as places of work. For example, the average journey time by car to places with 5,000 or more jobs is 25 minutes in Rural areas and 14 minutes in Urban areas. See Section D: Access to Services for more detail.

According to the Office for National Statistics, home workers are more likely to be working in higher skilled roles and hence earn on average a higher hourly wage, however this will vary across Rural areas (see [Note E-3](#)).

Figure E-2 shows that rates of home working tend to be higher the more Rural a settlement is. The highest for 2021 was 40% in Rural Hamlets and Isolated Dwellings. However, in more urbanised rural areas (Rural Town and Fringe) rates of homeworking are close to those in Urban areas (27% for Rural Town and Fringe and 28% for Urban areas).

Figure E-2: Home workers as a percentage of all those employed, by Rural-Urban Classification in England, 2021



Between 2011 and 2021 the rate of home working increased across all rural and urban categories, and as shown in Figure E-3 2021 showed the highest rate of home workers for the period 2011 to 2021 (see [Note E-4](#)). Rates have shown the greatest increase over the last two years, potentially as a result of the COVID-19 pandemic. The greatest increases have been seen in Urban areas where the proportion of home workers has increased by 14 percentage points, compared with an increase of 10 percentage points in Rural areas.

Figure E-3: Home workers as a percentage of all those employed, by Rural-Urban Classification in England, 2011 to 2021

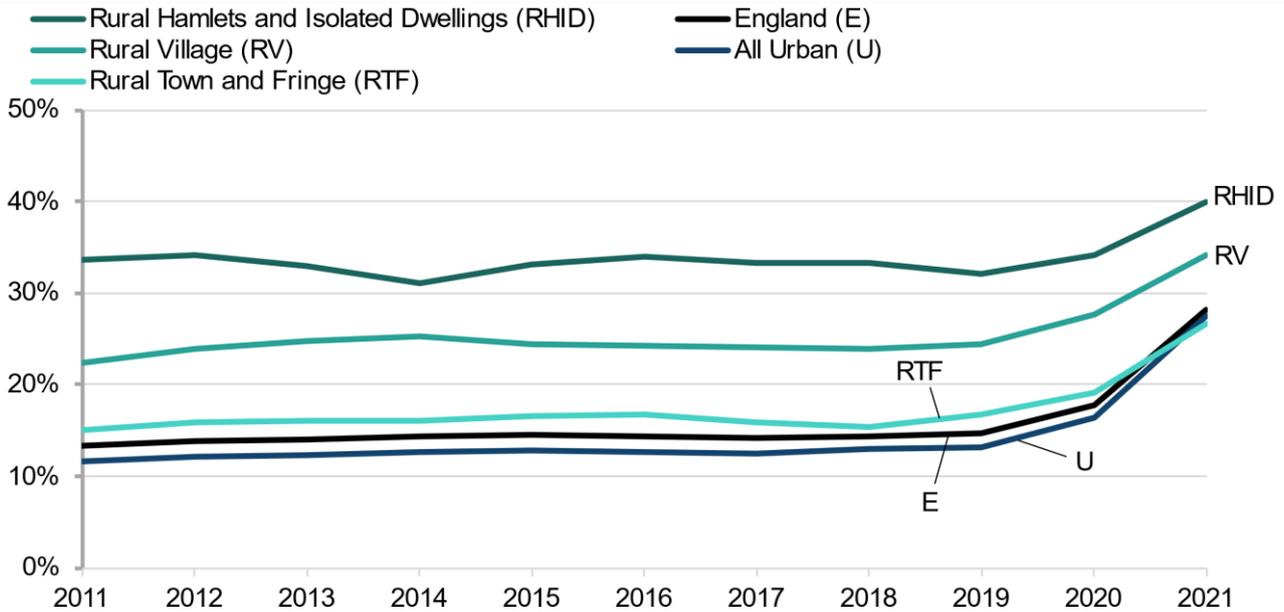


Figure E-4 focusses on the increase in home-workers between 2020 and 2021. It shows that while the Rural Hamlets and Isolated Dwellings classification continues to have the greatest proportion of home-workers (40% of the working population for the area type in 2021), it is Urban areas that have seen the greatest increase in the level of home-workers with an increase of 11 percentage points between 2020 and 2021.

Figure E-4: Home workers as a percentage of all those employed, by Rural-Urban Classification in England, 2020 to 2021

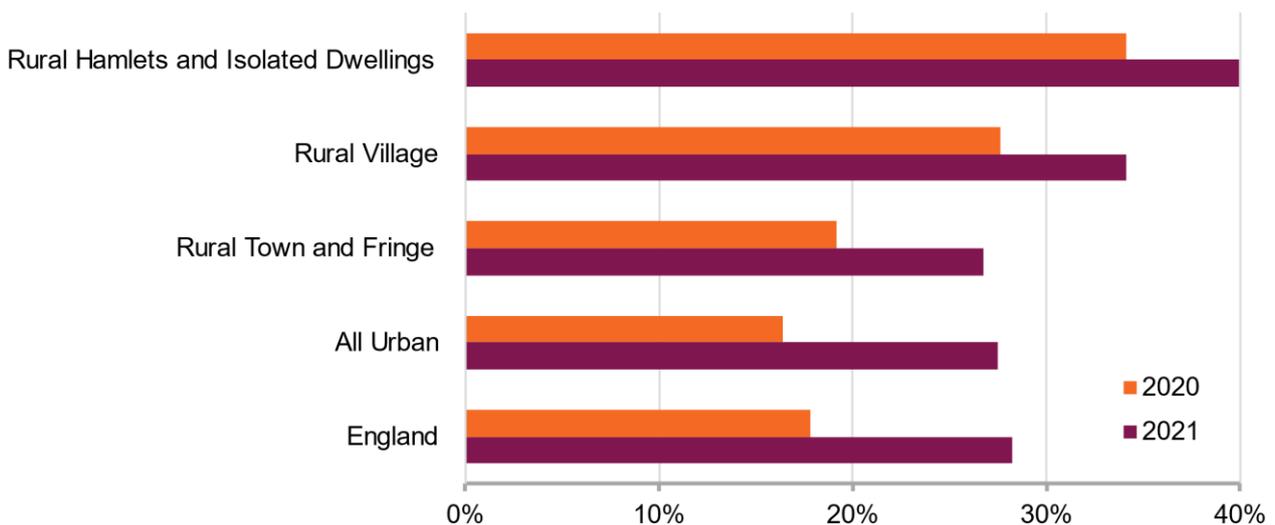
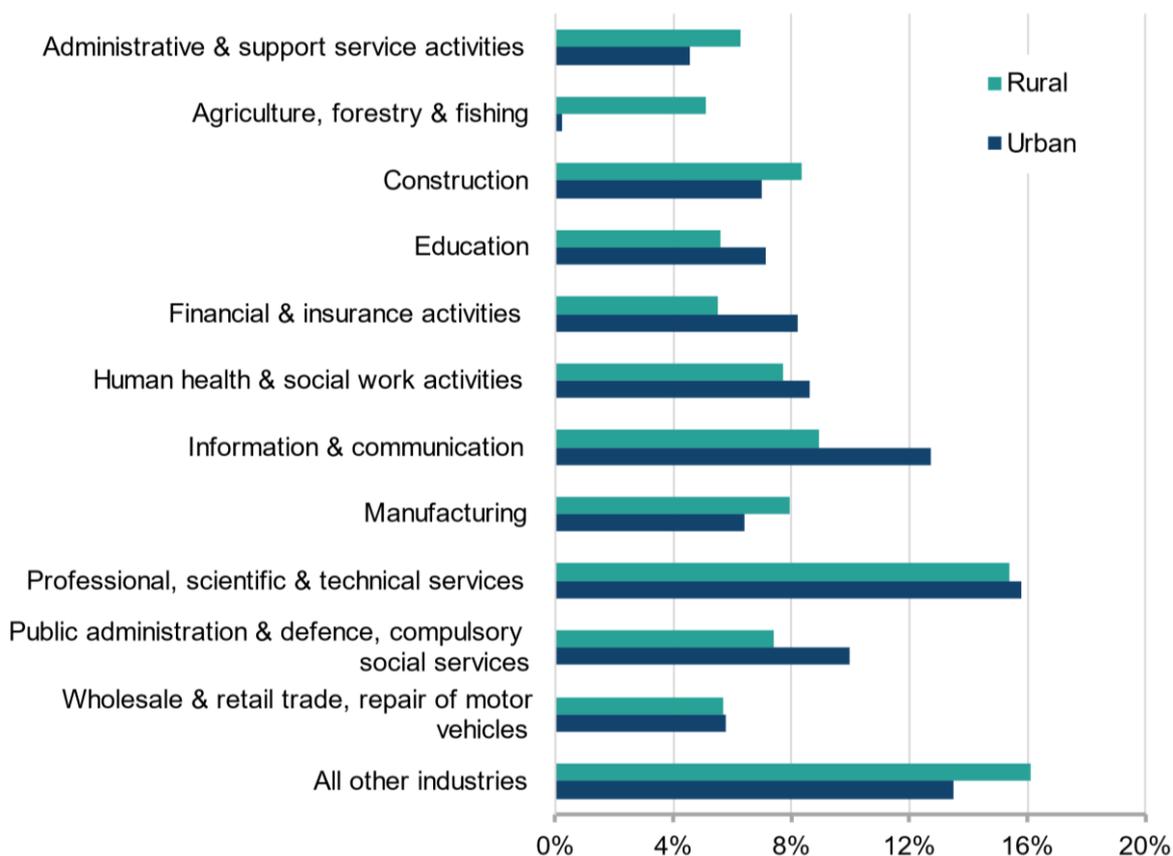


Figure E-5 shows how the home-working populations for Rural and Urban areas are split across the high-level industry groupings in 2021. Leaving aside the ‘all other industries’ grouping, this shows that the sector with the greatest proportion of the home-working population in both Rural and Urban areas is the Professional, scientific and technical service sector (15% and 16% respectively).

Figure E-5: Home-working population, by industry and Rural-Urban Classification in England, 2021 (Note E-6)



Notes:

- “Employed” involves people aged 16 and over.
- All Urban category includes Urban City and Town, Urban Minor Conurbation and Urban Major Conurbation areas.

Home working explanatory notes

• **Note E-1**

This figure is for all those who reported their working status. It differs slightly from the total number employed as some respondents have not reported their home working status.

• **Note E-2**

Home workers are defined as those who usually spend at least half of their work time using their home, either within their grounds or in different places or using it as a base. Home workers will include both those who are employees of organisations and those who are self-employed. The category for home workers includes the following: those who work within their home, those who work in the same grounds or buildings of their home, and those who work in different places but use their home as a base.

• **Note E-3**

Further information can be found in the [ONS document, Characteristics of Home Workers, 2014](#)

• **Note E-4**

For Figure E-3: data from 2011 are classified using the Rural-Urban Classification 2011.

• **Note E-5**

A table of homeworking figures broken down by Rural-Urban Classification covering 2006 to 2021 is available in the [supplementary data tables](#).

• **Note E-6**

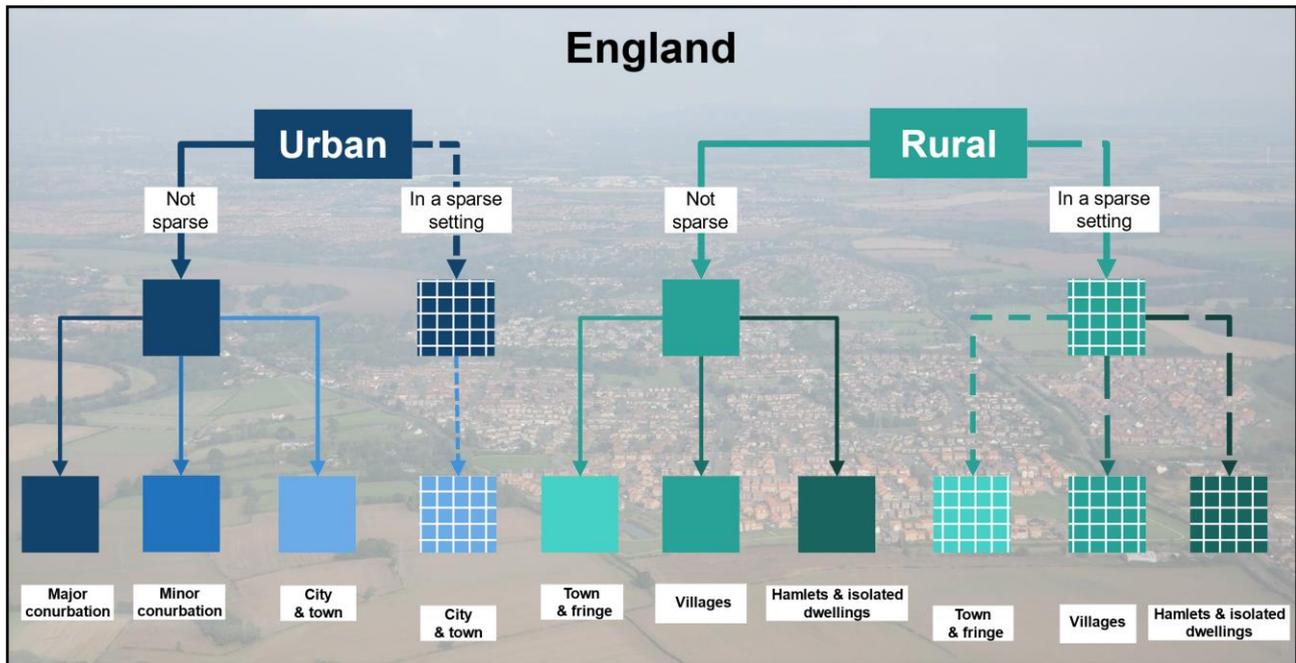
All industries with less than 75 thousand home-workers in Rural areas have been grouped into the ‘All other industries’ category.

Appendix 1: Defining Rural areas

Wherever possible, the Rural-Urban Classification is used to distinguish Rural and Urban areas. The Classification defines areas as Rural if they fall outside of settlements with more than 10,000 resident population.

Census Output Areas are the smallest areas for which data are available from Censuses. These Census Output Areas are assigned to one of four Urban or six Rural categories (Figure X-1) based on dwelling densities. Those described as “in a sparse setting” reflect where the wider area is sparsely populated (again based on dwelling densities). From Census Output Areas, other small area geographies can be classified based on how they map to Census Output Areas (such as Lower Super Output Areas (LSOAs), Wards, and postcodes – [Note 1](#)).

Figure X-1: Classifying Rural and Urban areas for small geographical areas



A map showing the distribution of the Rural and Urban Census Output Areas is shown in Figure X-2.

When data are not available at a small geographical scale, it may be possible to apply the Rural-Urban Local Authority Classification or a similar classification for other larger geographies. This classification categorises districts and unitary authorities on a six-point scale from Rural to Urban. It is underpinned by Rural and Urban populations as defined by the Census Output Area Classification. A map of the geographical distribution of the Rural and Urban Local Authorities is shown in Figure X-3.

However, the Local Authority Classification also considers some Urban areas as Hub Towns (with populations of between 10,000 and 30,000). These Hub Towns have met statistical criteria (based on dwelling and business premise densities) to be considered hubs for services and businesses for a wider rural hinterland and their populations are therefore classified as effectively Rural for the purposes of determining the classification of the authority.

Figure X-2: Map of the 2011 Rural-Urban Classification for Census Output Areas in England

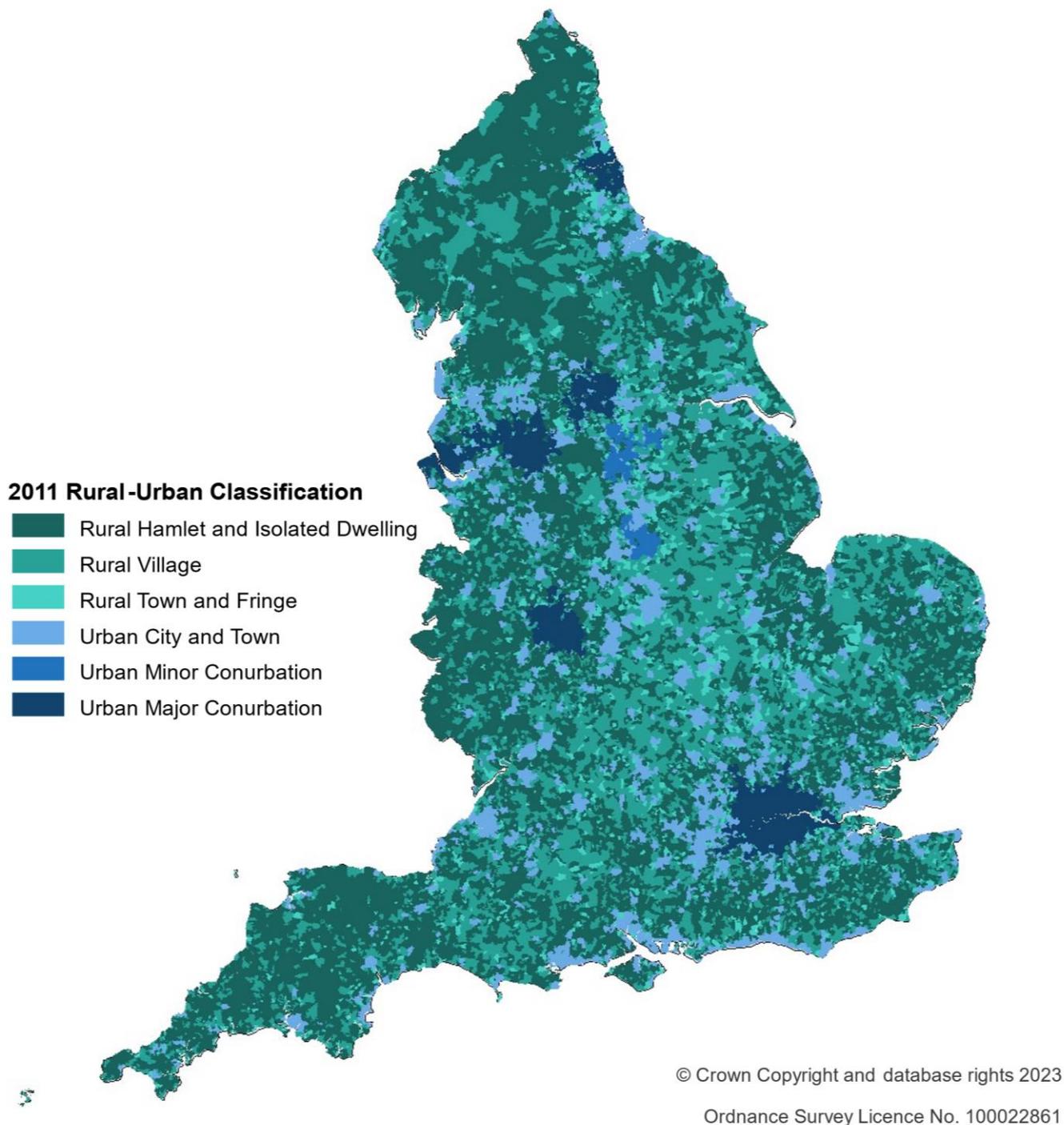
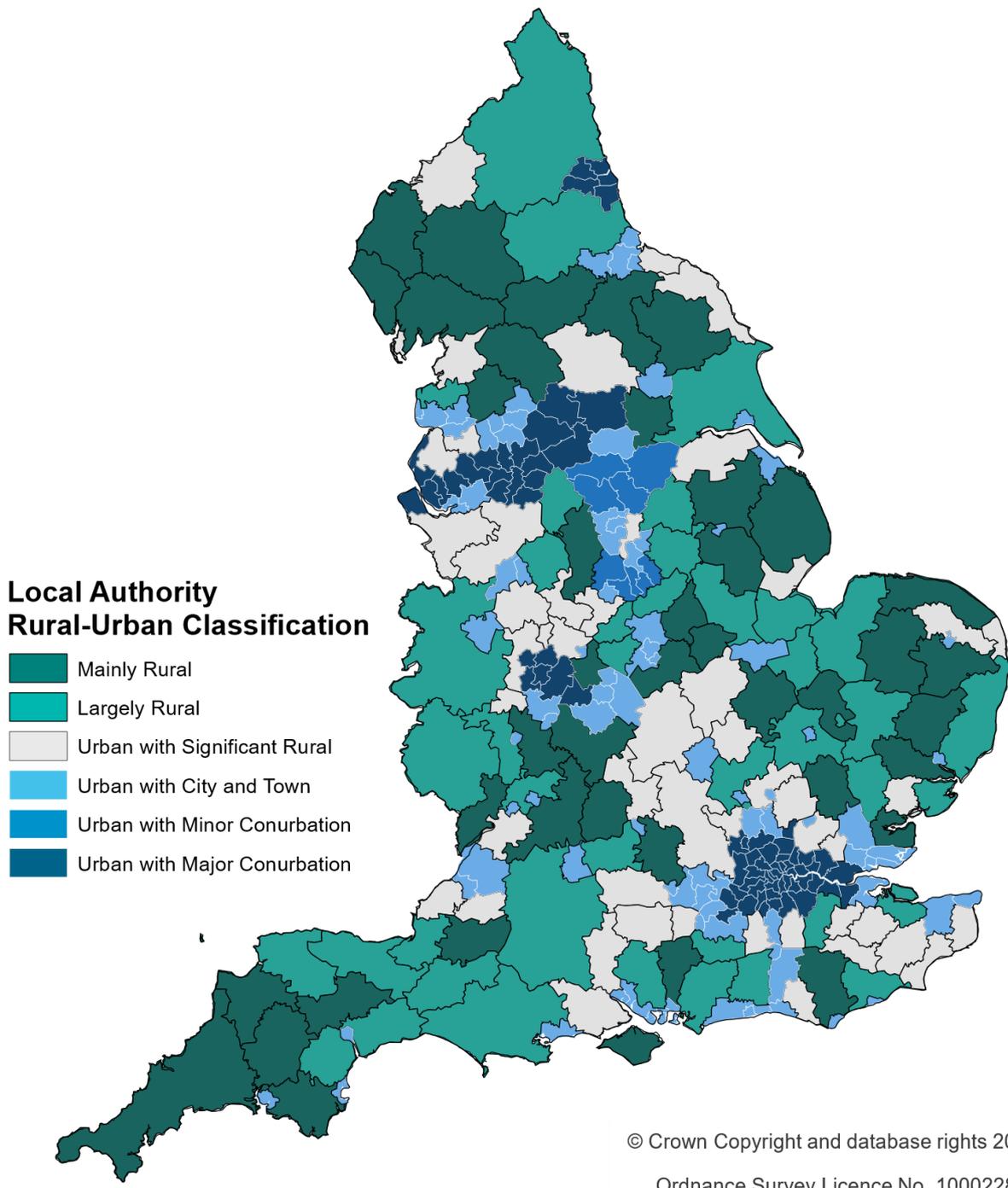
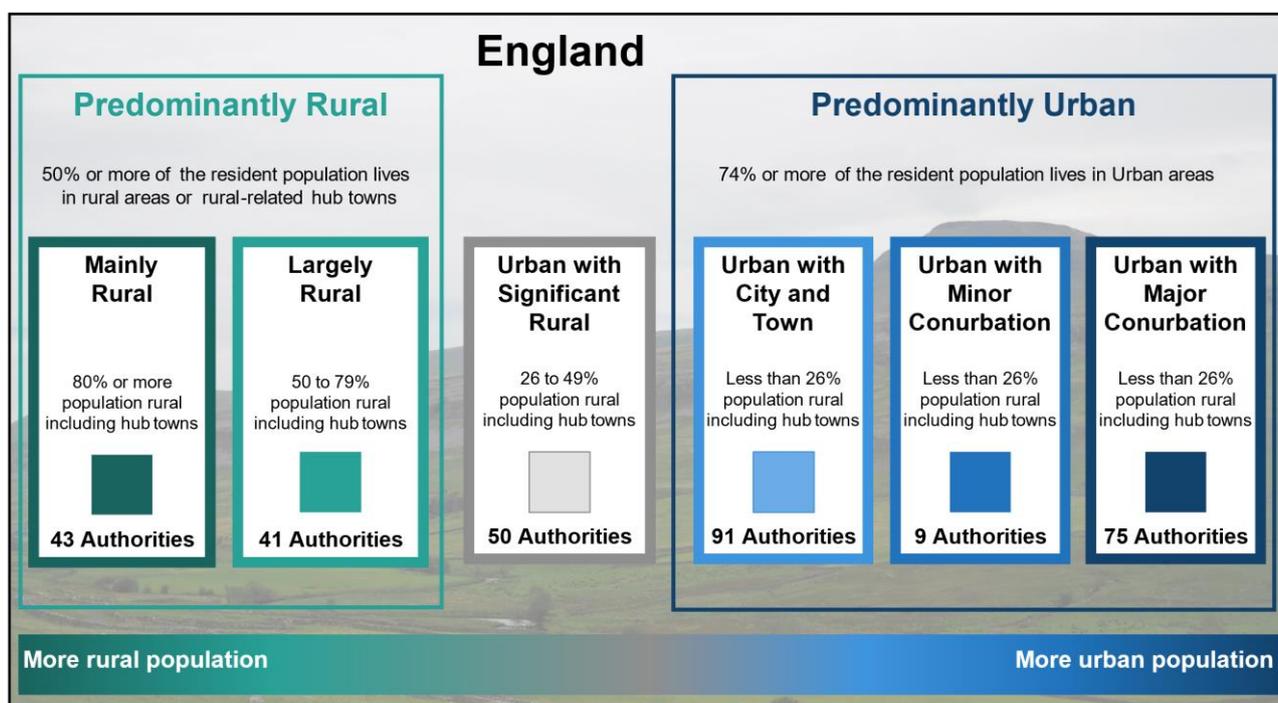


Figure X-3: Map of the 2011 Rural-Urban Classification for Local Authority Districts and Unitary Authorities in England



Under the classification, which is shown in Figure X-4, each Local Authority is assigned to one of six categories on the basis of the percentage of the total resident population accounted for by the combined Rural and Hub Town components of its population and its 'conurbation context'. The Local Authority Classification categories are frequently aggregated to 'Predominantly Rural', 'Urban with Significant Rural' and 'Predominantly Urban' as shown on Figure X-4.

Figure X-4: 2011 Rural-Urban Classification for Local Authority Districts and Unitary Authorities in England



It should be noted that the Local Authority Rural-Urban Classification is based on populations and settlement patterns, not on how much countryside there is. Authorities classified as Urban may have wide areas of countryside and may have sizeable Rural populations. The classification has been made according to the proportions of the population residing in Urban settlements and outside Urban settlements. More information on the classifications can be found at: [The Rural-Urban Definition](#).

Defining Rural areas explanatory notes

- **Note 1:** Defining Super Output Areas and Wards

Census Output Areas (OAs) were created for publication of the results of the recent Censuses. They cover around 125 households. In practice few datasets are produced at OA level. However, other larger geographies can be built up from OAs. These include *Lower Layer Super Output Areas* (LSOAs) which typically contain 5 OAs, so contain approximately 625 households or a population of approximately 1,500 and a minimum 1,000. Their Rural-Urban Classification is based on the majority category of OAs they contain. Some other geographies, for example postcodes are classified based on the location of their central point and the classification of respective OA.

- **Note 2:** Accessibility of Figure X-2

We accept that this map might not be accessible for all users, but it is difficult to develop a map containing six colours that will provide enough contrast between all colours to enable every user to see them, especially when the shaded areas are small. Separate maps (showing only three levels of shading) for Rural and Urban areas are available on request from: rural.statistics@defra.gov.uk

Appendix 2: The 7 thematic reports that make up the new Statistical Digest of Rural England (and the topics included within them).

1. Population

- A. Population level and change
- B. Population age profile
- C. Ethnicity
- D. Internal migration
- E. Local Authority population data

2. Housing

- A. Additions to housing stock
- B. House prices
- C. Affordable housing
- D. Second and empty homes
- E. Homelessness

3. Health and Wellbeing

- A. Life expectancy
- B. Wellbeing
- C. Loneliness
- D. Volunteering and charity
- E. Childcare provision

4. Communities and Households

- A. Deprivation
- B. Poverty due to low income
- C. Fuel poverty
- D. Energy costs and consumption
- E. Household expenditure
- F. Police recorded crime and outcomes
- G. Crime surveys: local police and business
- H. Feelings about the local neighbourhood

5. Connectivity and Accessibility

- A. Broadband
- B. Travel behaviours
- C. Access to personal transport
- D. Access to services
- E. Home working

6. Education, Qualifications and Training

- A. Secondary education – GCSE Maths and English attainment
- B. School inspections
- C. Higher education
- D. Apprenticeships and on-the-job training
- E. Workforce education level

7. Rural Economic Bulletin

- A. Employment
- B. Earnings
- C. Redundancies
- D. Claimant count - Jobseeker's Allowance
- E. Output and productivity measured by Gross Value Added (GVA)
- F. Businesses - status, structure and composition
- G. Innovation and investment

Each of the 7 themes also has their own set of supplementary data tables that include the larger source data that could not be included in the presented document. The chapter headings above are hyperlinked to the home page for that specific digest theme. The supplementary tables can be accessed from these home pages.

There is a further document including the individual Local Authority data tables, which have been separated for ease of use.

Appendix 3: Mapping the old digest sections to the 7 new themes

Old Digest section	New Digest Theme
Rural population and migration	
Mid-year population 2020	Population
Population by age	Population
Average age of the population	Population
Population change	Population
Ethnicity	Population
Population at local authority level	Population
Internal migration	Population
Internal migration by age	Population
Rural economy	
Employment and earnings	
Employment rate	Rural Economic Bulletin
Unemployment rate	Rural Economic Bulletin
Economic inactivity	Rural Economic Bulletin
Earnings	Rural Economic Bulletin
Home working	Connectivity and Accessibility
Productivity measured by Gross Value Added (GVA)	
Contribution to England's Gross Value Added (GVA)	Rural Economic Bulletin
Gross Value Added (GVA) per Workforce Job	Rural Economic Bulletin
Contribution to England's Gross Value Added (GVA) by Industry	Rural Economic Bulletin
Businesses	
Business composition	Rural Economic Bulletin
Businesses by industry type	Rural Economic Bulletin
Employment by industry type	Rural Economic Bulletin
Businesses by size band	Rural Economic Bulletin
Small and medium businesses	Rural Economic Bulletin
Business count	Rural Economic Bulletin
Business start-ups	Rural Economic Bulletin
Innovation and investment	
Businesses engaged in innovation	Rural Economic Bulletin
Capital investment per employee	Rural Economic Bulletin
Rural accessibility	
Transport and travel	
Distance travelled	Connectivity and Accessibility
Trips made	Connectivity and Accessibility
Journey to School	Connectivity and Accessibility
Accessibility to services	

Old Digest section	New Digest Theme
Average minimum travel times	Connectivity and Accessibility
Access to key services	Connectivity and Accessibility
Average number of key services available	Connectivity and Accessibility
Overall measure of accessibility of services	Connectivity and Accessibility
Broadband	
Broadband speed	Connectivity and Accessibility
Broadband coverage	Connectivity and Accessibility
Tourism	
Gross Value Added (GVA) from Tourism	Rural Economic Bulletin
Tourism: business counts and employment	Rural Economic Bulletin
Rural living	
Housing	
Housing completions	Housing
Net additions to housing stock	Housing
Second and empty homes	Housing
Residential housing transactions	Housing
Additions to affordable housing stock	Housing
Housing and accommodation affordability	Housing
Housing affordability	Housing
Homelessness and temporary accommodation	Housing
Household expenditure	
Nominal expenditure and disposable income	Communities and Households
Expenditure on commodity or service groups	Communities and Households
Deprivation	Communities and Households
Poverty	Communities and Households
Fuel poverty	Communities and Households
Education and skills	
Childcare provision	Health and Wellbeing
Secondary education	
Pupils leaving school with English and Maths at A* to C grades or equivalent at GCSE level, based on residency of pupils	Education, Qualifications and Training
Pupils leaving school with English and Maths A* to C grades or equivalent at GCSE level, based on Income Deprivation Affecting Children Indices (IDACI) decile and residency of pupils	Education, Qualifications and Training
Pupils leaving school with English and Maths at GCSE level, by geographical residency of pupils	Education, Qualifications and Training
Pupils leaving school with English and Maths A* to C grades or equivalent at GCSE level, based on school location	Education, Qualifications and Training
School inspection outcomes, based on school location	Education, Qualifications and Training
Higher education	
Full-time entrants to higher education	Education, Qualifications and Training

Old Digest section	New Digest Theme
Part-time entrants to higher education	Education, Qualifications and Training
Skills	
Workplace based skills	Education, Qualifications and Training
Residence based skills	Education, Qualifications and Training
Apprenticeships	Education, Qualifications and Training
Health and Wellbeing	
Life expectancy	Health and Wellbeing
Potential years of life lost (PYLL)	Health and Wellbeing
Infant mortality rate	Health and Wellbeing
Wellbeing	Health and Wellbeing
Loneliness	Health and Wellbeing
Feelings about the local neighbourhood	Communities and Households
Volunteering and charity	Health and Wellbeing
Crime	
Commercial Victimisation Survey	Communities and Households
Crime Survey for England & Wales	Communities and Households