

TECHNICAL NOTE 3

DATE:	23 January 2023	CONFIDENTIALITY:	Restricted
SUBJECT:	Comparison of 2011 and 2021 Census Data		
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INTRODUCTION

The Corby LCWIP project seeks to identify where walking and cycling infrastructure could be delivered in Corby to encourage increased sustainable mode usage. This project has been undertaken over the period of 2022-2023, during which time the initial results of the 2021 Census were published Office of National Statistics (ONS).

The purpose of this Note is to compare the 2011 Census data utilised in the initial LCWIP work against the emerging data from the 2021 Census. However, it should be mentioned that the Census was somewhat skewed by many people working from home during the COVID-19 lockdown.

Two sets of Census Data were utilised in the initial reporting:

- 1 Travel to Work Mode Share** – This was considered at Output Area (OA). This data set is available for 2011 and 2021.
- 2 Place of Work in relation to Place of Residence** – This was considered at Lower Layer Super Output Area (LSOA) and provided information on the origin and destination of travel to work movements within Corby. The 2021 data set with this information is yet to be published.

In addition to the two used data sets, two additional 2021 Census datasets are considered in this note due to their relevance to people's choice to walk, cycle or use other modes.

- 1 Household Car Access** information has also been explored as potentially relevant. It can identify areas where people might walk or cycle because they have no access to a private car. This data will be considered at LSOA level.
- 2 Distance Travelled to Work** information has been explored as the distance travelled is often an influence on modal choice.

Whilst not Census Data, the study also included review of the **Indices of Multiple Deprivation** values, last published by the ONS in 2019. IMD values are reviewed every 3-4 years¹ and as such the 2019 Dataset remains the most recent available to the public.

¹ Superhighways (2019) *Indices of Multiple Deprivation: How to Explore Data In Your Area*. Available at: <https://superhighways.org.uk/latest/how-to-use-the-indices-of-mult/> (Accessed 12/01/2023)

CONTEXT

POPULATION CHANGES

Table 1 shows the population within the study area by age group.

Table 1: Population Demographics

	Value	Total	0-14	15-74	75+
2011	Absolute	65,238	12,468	48,850	3,920
	Percentage		19%	75%	6%
2021	Absolute	79,785	15,666	59,222	4,897
	Percentage		20%	74%	6%

The preceding data shows that the study area’s **population has increased by 22%** between 2011 and 2021, with the composition of the population remaining broadly similar; with a slight increase in the portion of the population aged 0-14, and a slight decrease in the population aged 15-74.

GEOGRAPHIC CHANGES

Figure 1 provides a comparison of Output Area Boundaries in 2011 against those in 2021.

Figure 1: Comparison of 2011 and 2021 Output Area Boundaries

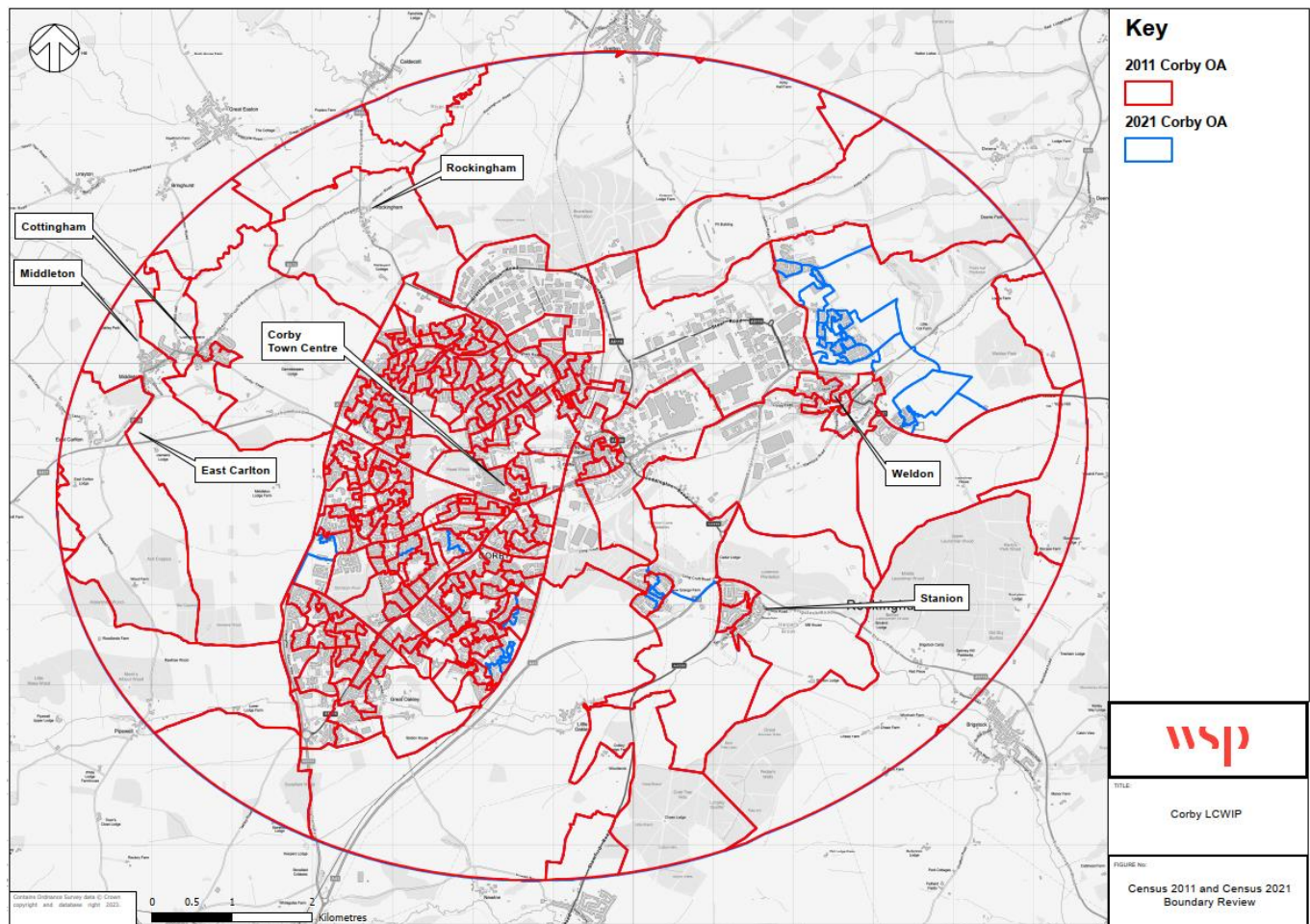


Figure 1 shows that some of the Output Areas have been divided between the 2011 and 2021 Census, particularly in the developing east of the town. This is due to the definition of an Output Area as an area containing between 40 and 250 households². As new developments have come forward since 2011 the Office for National Statistics created new UAs by subdividing the 2011 OAs so that the 2021 number of households per OA remained in the 40-250 band.

MODE SHARE CHANGES

INTRODUCTION & ADJUSTMENTS

This section of the Note compares how many people travelled to work on foot or by bike in 2011 and 2021. The Mode Share is calculated from the Census Travel to Work (TTW) data at OA level.

The 2011 Census TTW data counts the resident population as everyone aged between 16 and 74, setting those not Travelling to Work in a separated “Unemployed” Category. The 2021 Census TTW only includes those working in the study year.

Therefore, to make the data sets comparable, the “Unemployed” category in the 2011 data set isn’t considered as a portion of those working.

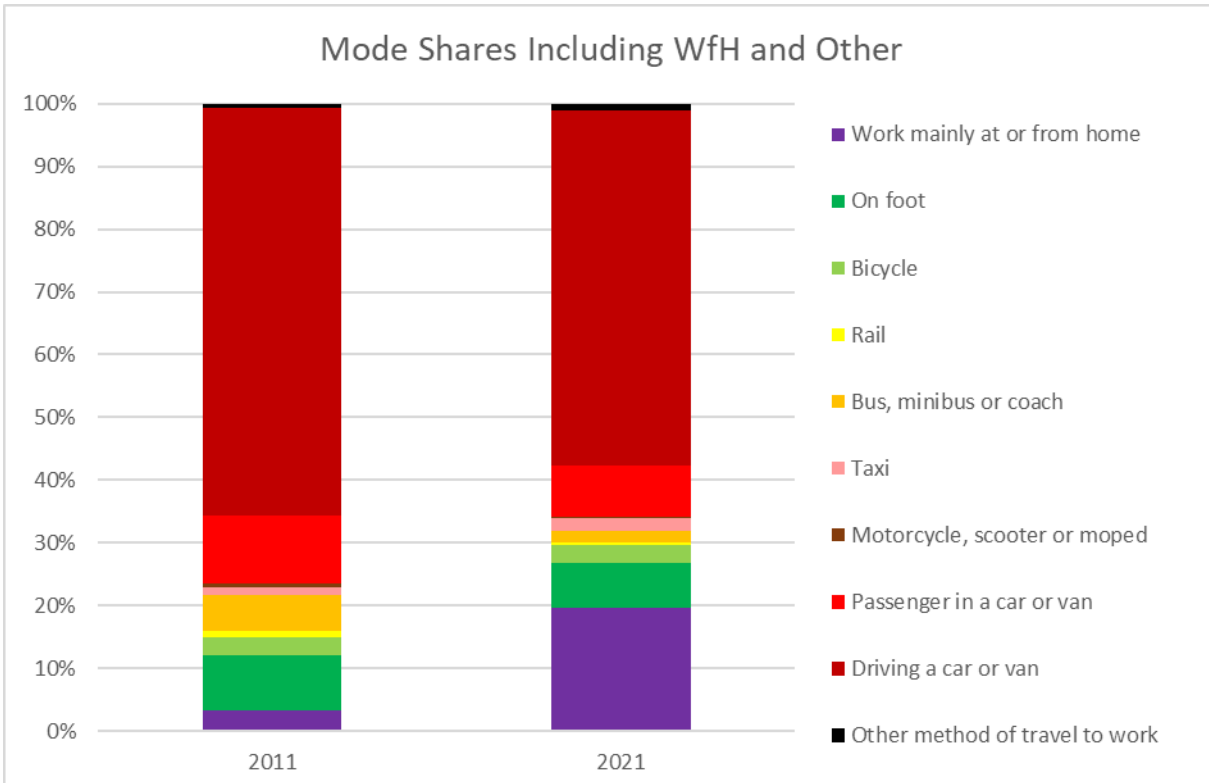
Additionally, both Census data sets include “Working from Home” (WfH) and “Other” as response options. These are also discounted as:

- Those “Working from Home” aren’t travelling to work and therefore not adding trips to the network.
- “Other” is a very vague category that doesn’t really lend itself to use in this analysis.

Additionally, discounting Work from Home is also intended to make for a fairer comparison of 2011 and 2021, with Residents in the latter year being more likely to Work from Home due to the Covid-19 lockdown. For reference, **Figure 2** shows the study area Mode Shares in 2011 and 2021 including “Working from Home” and “Other”.

² Office for National Statistics (2021) *Census 2021 Geographies*. Available at: <https://www.ons.gov.uk/methodology/geography/ukgeographies/censusgeographies/census2021geographies> (Accessed 12/01/2023)

Figure 2: 2011 & 2021 Study Area Mode Share Including Working from Home and Other



As can be observed, if retained, Working from Home makes up 20% of trips in 2021, likely due to the pandemic and lockdown restrictions on movement. This means that, if retained, it would make the mode shares of those actually travelling look like a smaller share.

MAPS

Figure 3 and Figure 4 show the OA Level Walking Mode Share in 2011 and 2021 respectively (excluding WFH). Figure 5 shows the percentage change between 2011 and 2021.

Figure 3: 2011 Walking Mode Share at OA Level

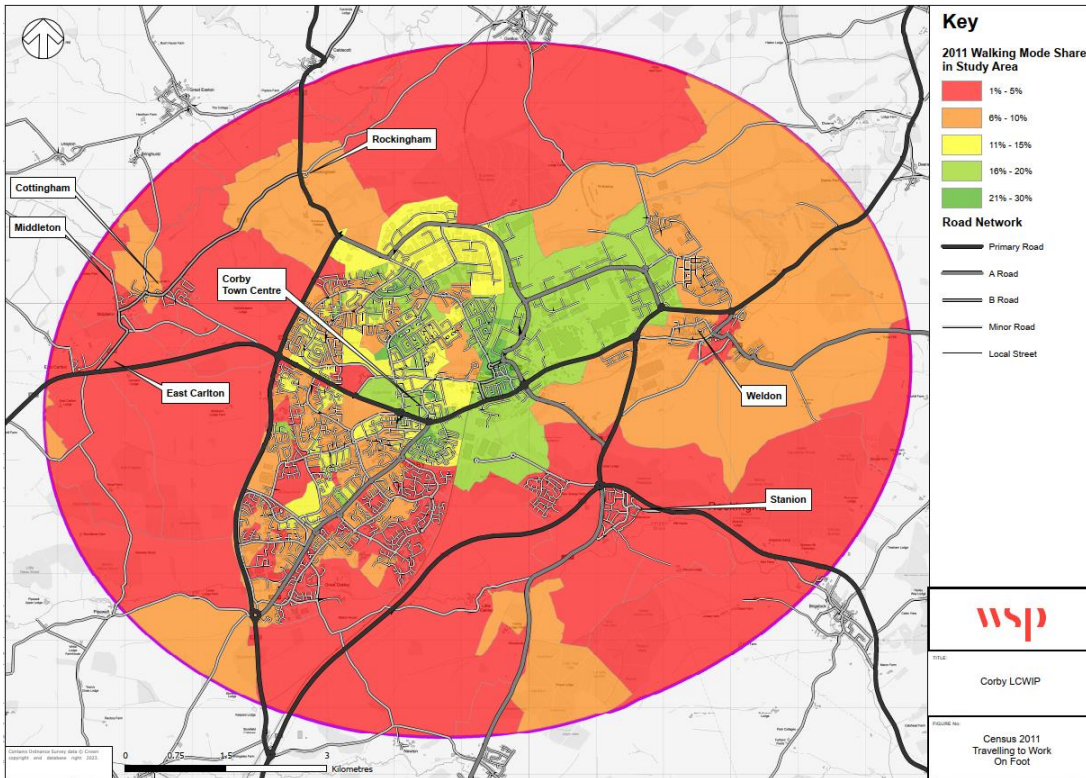


Figure 4: 2021 Walking Mode Share at OA Level

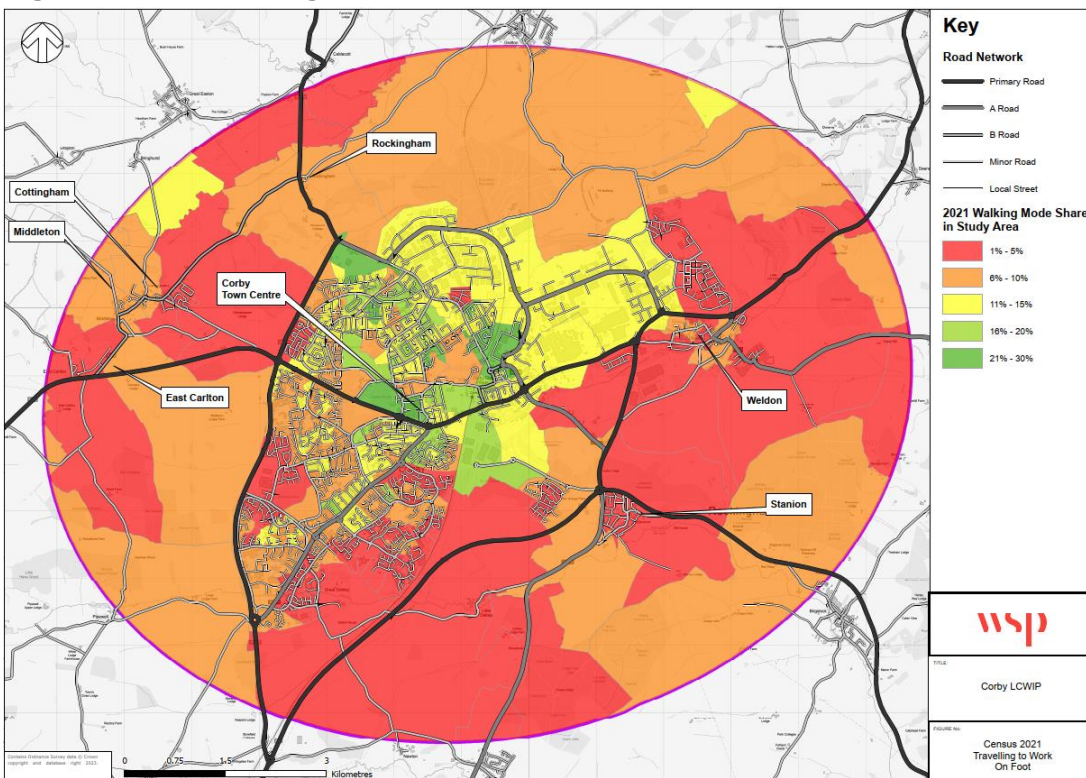
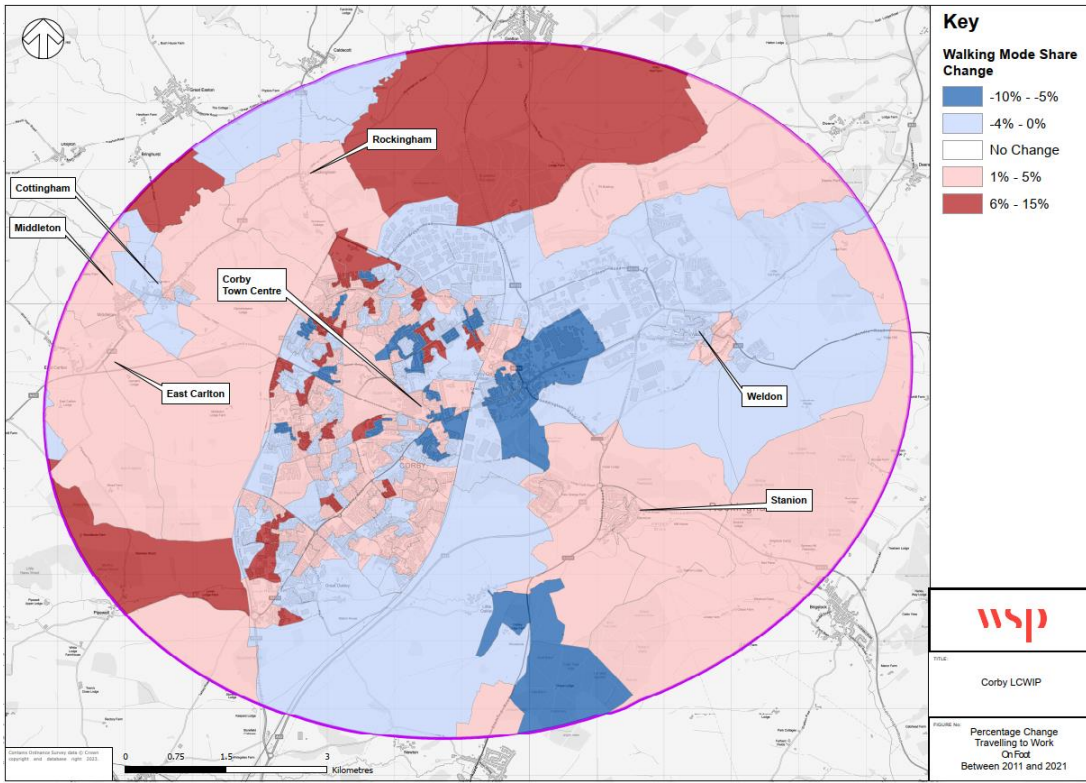


Figure 5: Change in Walking Mode Share between 2011 and 2021



The preceding figures show that there has been a shift between 1% and 15% towards walking in the areas to the north and west of Corby. Areas in the west of the town (in relation to the town centre) also show an increased walking mode share, in most instances. There are reductions in walking mode share in the east of the town centre area, as well as the wider east of Corby. This includes the initial stages of the Priors Hall development.

Table 2 shows the change in Walking mode share between 2011 and 2021 for the whole study area.

Table 2: Total Residents Walking to Work

	Residents Travelling to Work Within Study Area	Study Area Residents Walking to Work	
		Total	Mode Share
2011	31,546	2,736	8.7%
2021	32,335	2,889	8.9%
Percentage Change	+3%	+6%	+0.2%

As can be observed in **Table 2**, the number of residents within the study area travelling to work increased by 3% between 2011 and 2021. Over the same period, the portion of residents walking to work increased by 6%, representing an increase in walking’s mode share of 0.2% overall.

Figure 6 and **Figure 7** show the OA Level Cycling Mode Share in 2011 and 2021 respectively. **Figure 8** shows the percentage change between 2011 and 2021.

Figure 6: 2011 Cycling Mode Share at OA Level

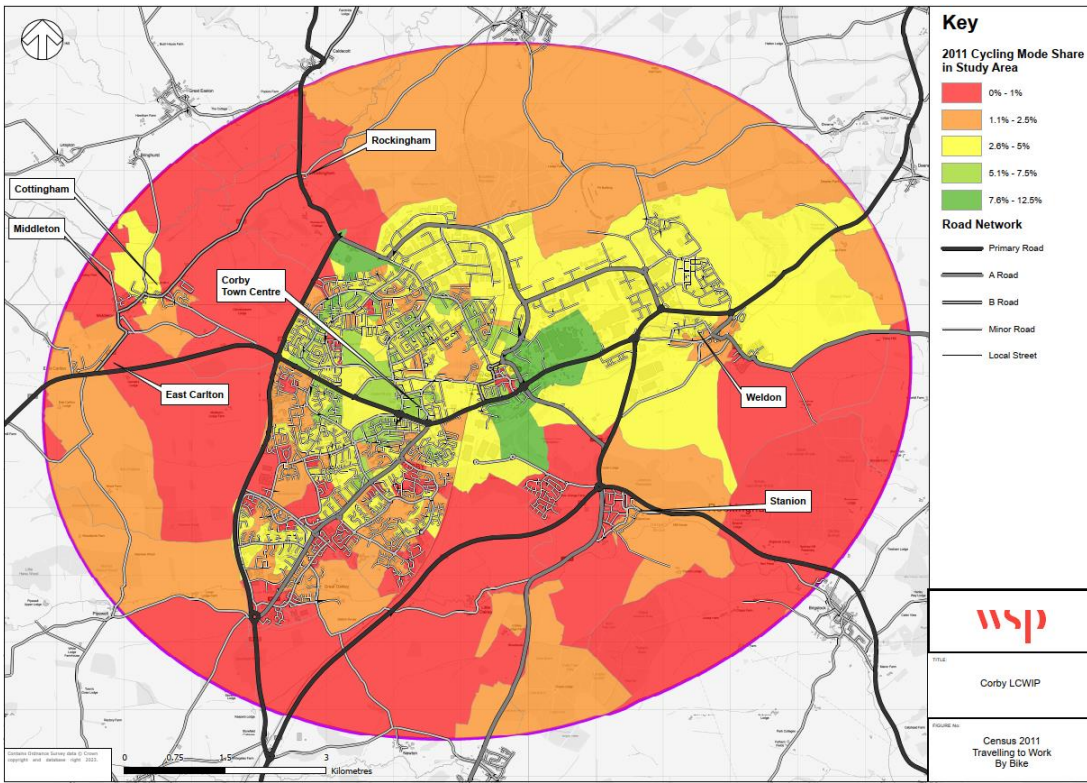


Figure 7: 2021 Cycling Mode Share at OA Level

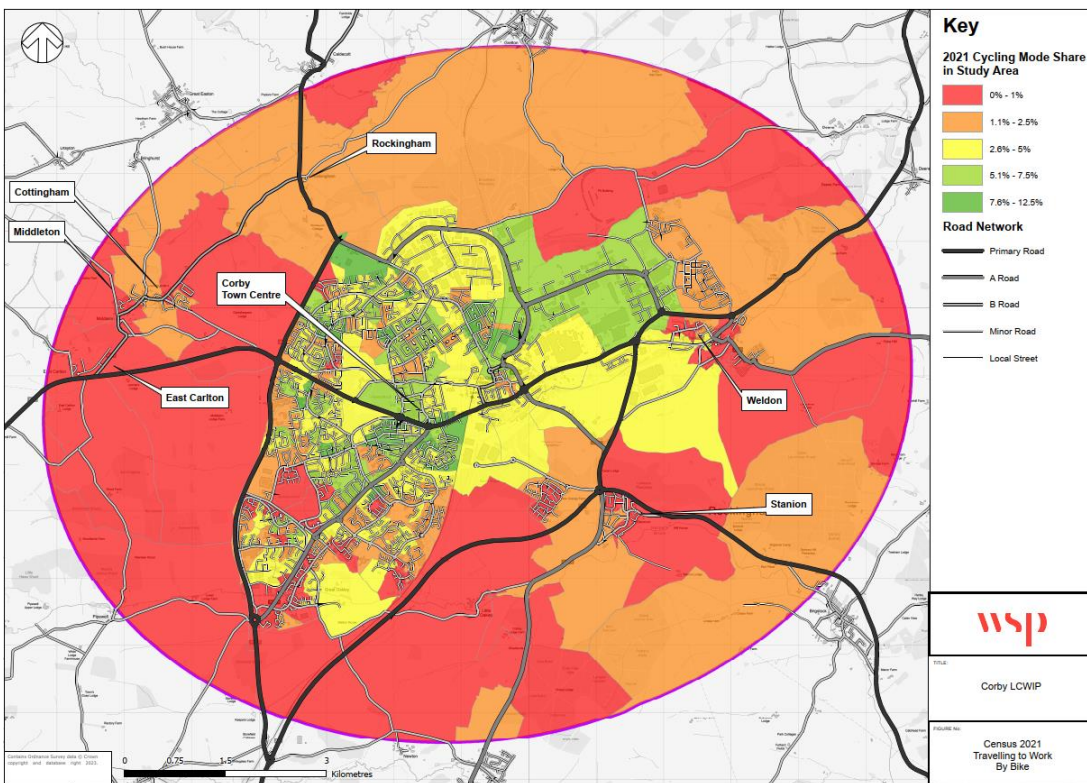
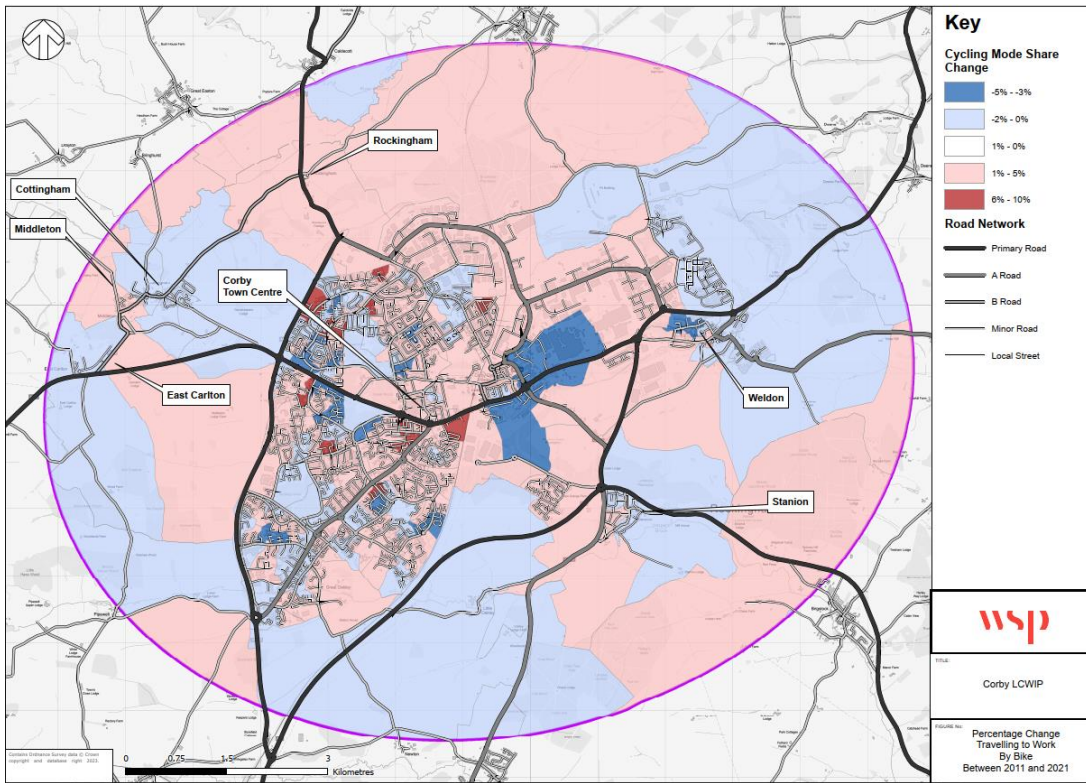


Figure 8: Change in Cycling Mode Share between 2011 and 2021



The preceding Figures show that, between 2011 and 2021, cycling in Corby increased across many OAs within the town centre area, as well as to the southwest along Oakley Road. There were also increases in cycling mode share for the OAs north and west of the town. Cycle mode share declined in pockets either side of the A427, with a marked decline in cycling mode share in the area east of Corby Old Village, similar to the decline in walking mode share in the same area. This could be driven by the changing land uses in the area, with the closure of Corus’s offices and wider redevelopment of the area leading to residents needing to travel further for work on trips less suited to walking or cycle use.

Table 3 shows the change in Cycle mode share between 2011 and 2021 for the whole study area.

Table 3: Total Residents Cycling to Work

	Residents Travelling to Work in Study Area	Study Area Residents Cycling to Work	
		Total	Mode Share
2011	31,546	876	2.8%
2021	32,335	1,131	3.5%
Percentage Change	+3%	+29%	+0.7%

As can be observed, the number of people travelling to work by cycle increased by 29% between 2011 and 2021. This increased the cycling’s mode share among those physically travelling to work by 0.7%.

HOUSEHOLD CAR OWNERSHIP

Figure 9 and Figure 10 show the portion of Households without Access to Cars in 2011 and 2021 respectively. Figure 11 shows the percentage change between 2011 and 2021.

Figure 9: Census 2011 Portion of Households Without Car Access

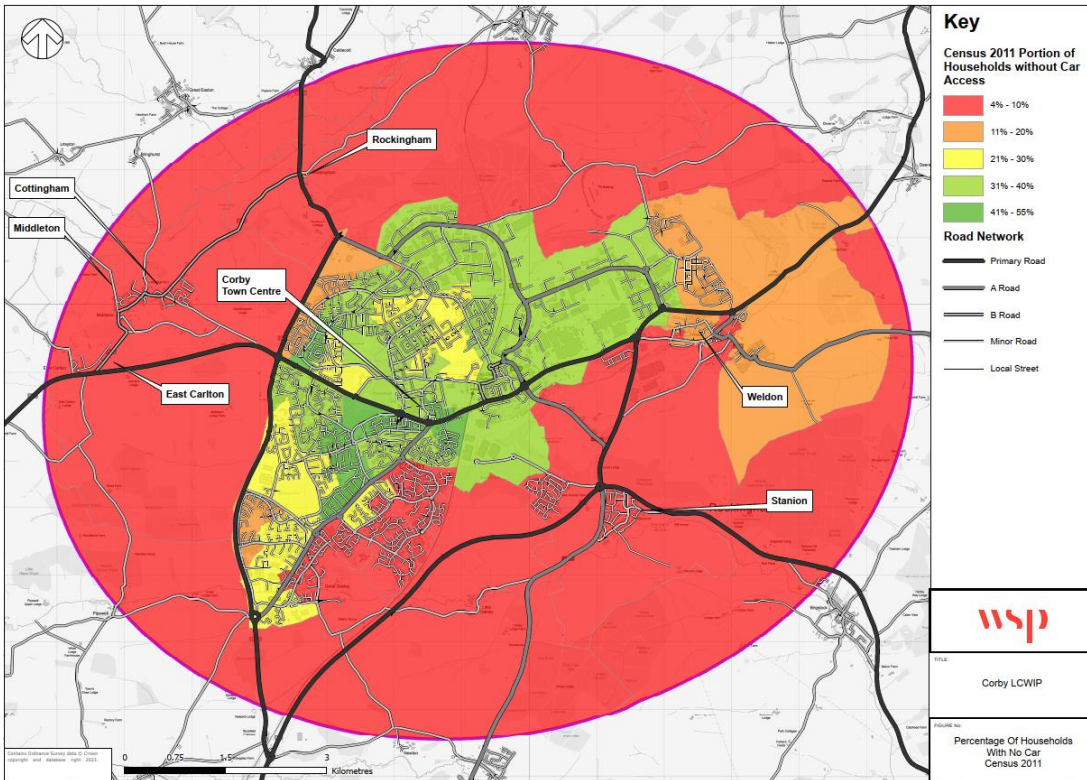


Figure 10: Census 2021 Portion of Households Without Car Access

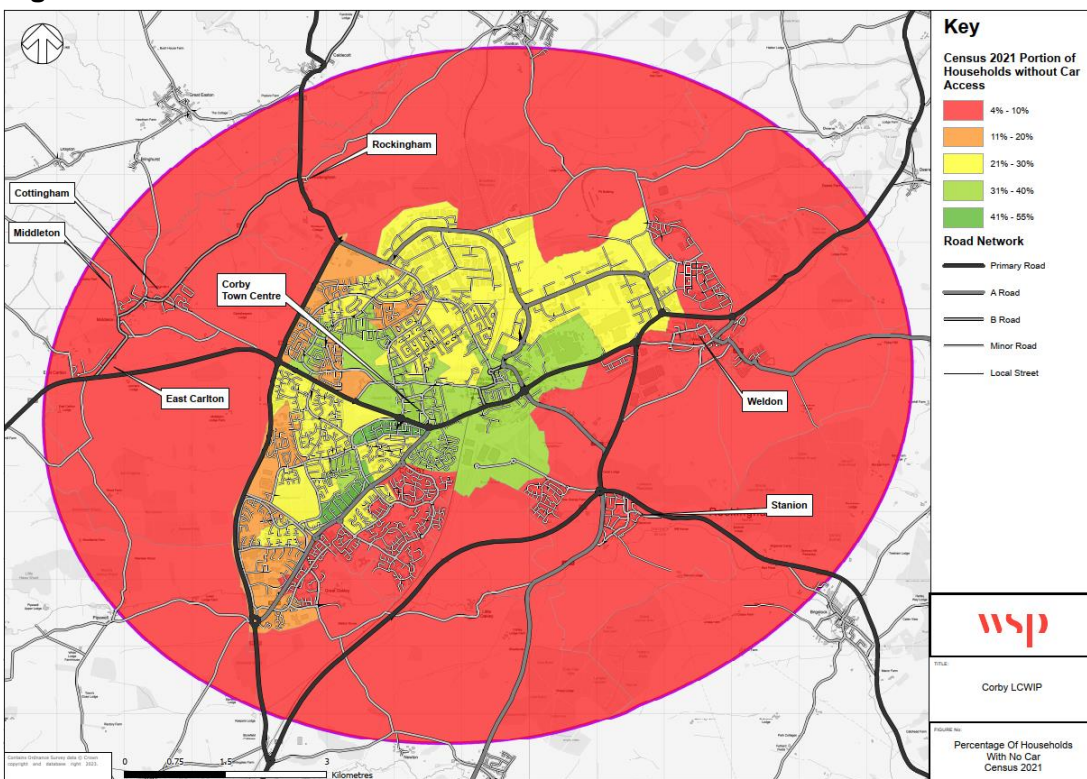
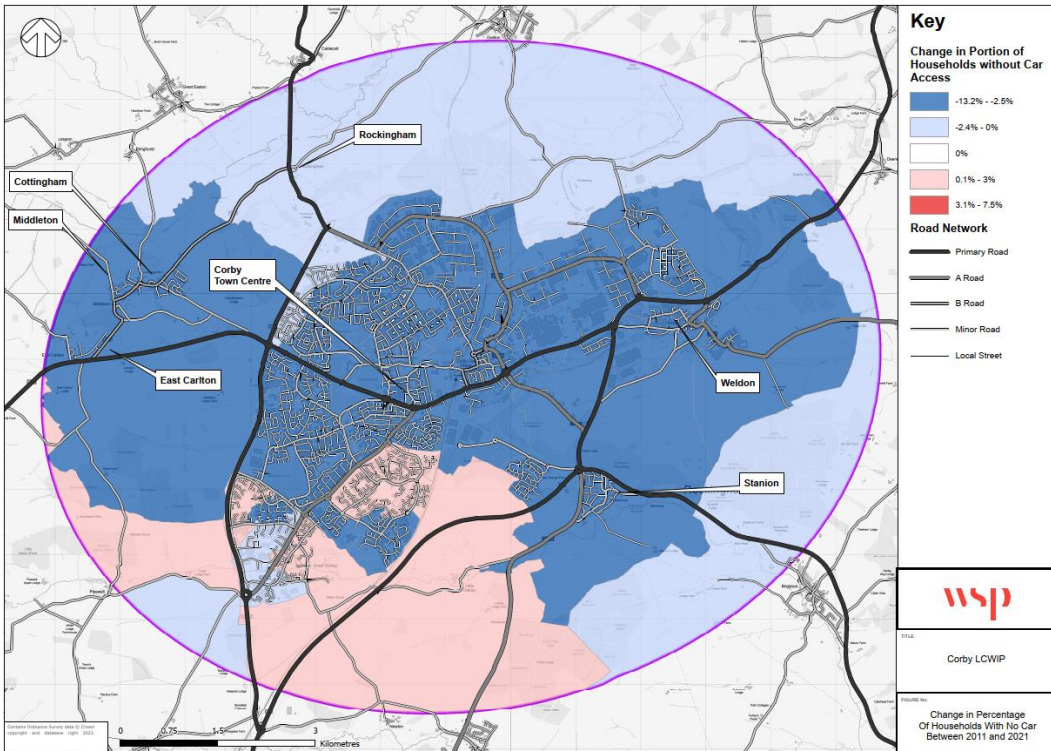


Figure 11: Change in Portion of Households Without Car Access between 2011 and 2021



As shown in **Figure 12**, the majority of the study area saw reductions in the portion of households without car access between 2011 and 2021, with the exception of some of the outlying areas to the southwest. The shift in the southwest could reflect the new developments on the southern edge of Corby, adding new households within walking or cycling distance of the town in what was previously a rural, car dependent, Census Area.

Table 4 and **Figure 12** show the changes in household car ownership within the study area between 2011 and 2021.

Table 4: Study Area Car Ownership Changes

	All Households within the Study Area	Households with No Car	Households with One Car	Households with Two Cars	Households with Three+ Cars
2011	30,576	7,081	12,927	8,175	2,393
2021	35,715	6,245	14,159	11,355	3,956
Percentage Change	+17%	-12%	+10%	+39%	+65%

Figure 12: Study Area Car Ownership Changes

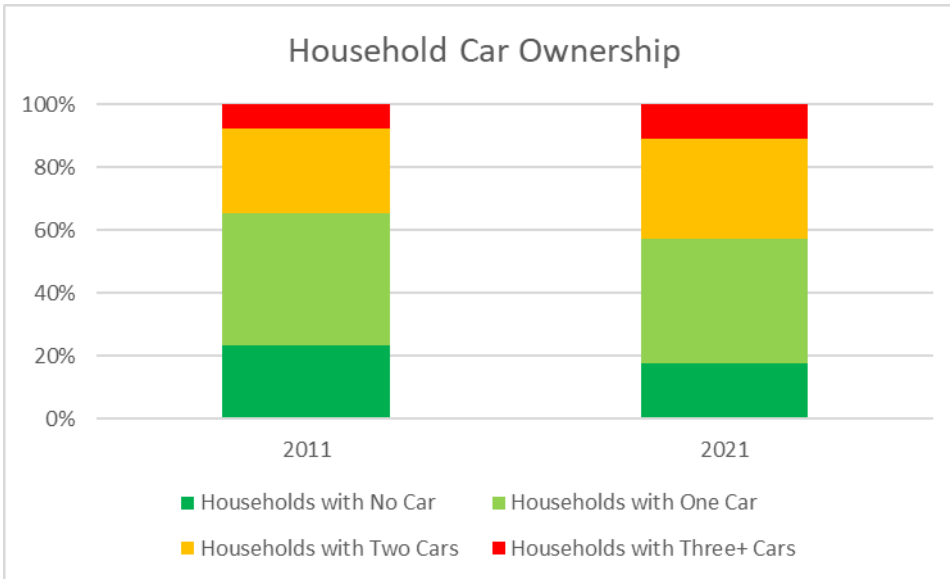


Table 4 and **Figure 12** show that, between 2011 and 2021, the portion of households with access to one car increased slightly, with larger increases in the portions with two or more cars available. The increased car availability is reflected by an increase in the portion of residents travelling to work by car from 69% to 73%; possibly encouraged by the restrictions on public transport use in place due to the COVID-19 pandemic at the time of Census.

Furthermore, ownership of more than one car often allows the additional vehicle to be used for non-work trips which wouldn't be identified in the census data.

DISTANCE TRAVELLED TO WORK

Figure 13 and **Figure 14** show the distances travelled to work by those in the study area for 2011 and 2021 respectively. These are supported by **Table 5** which sets out the same portions in absolute numbers.

Figure 13: 2011 Distance of Trips to Work as a Portion of Trips

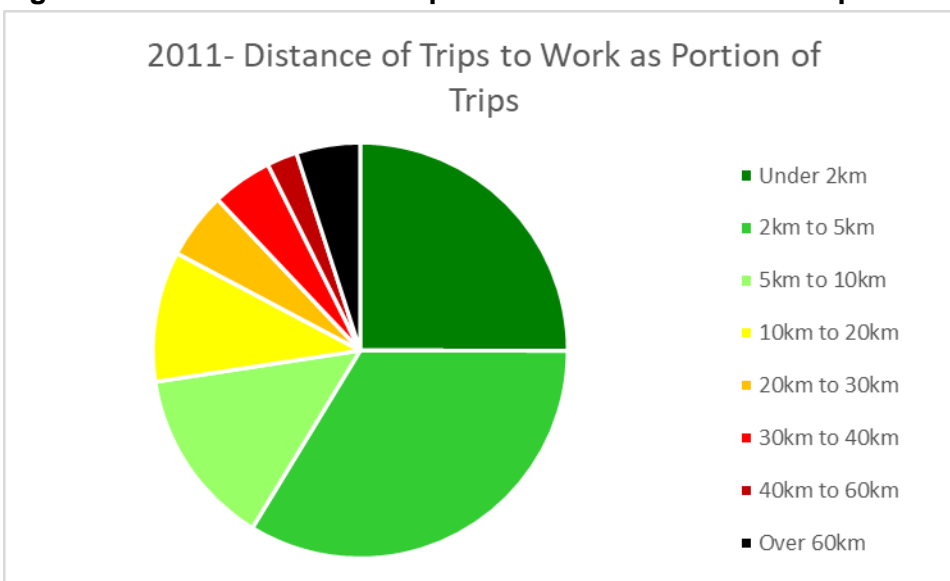


Figure 14: 2021 Distance of Trips to Work as a Portion of Trips

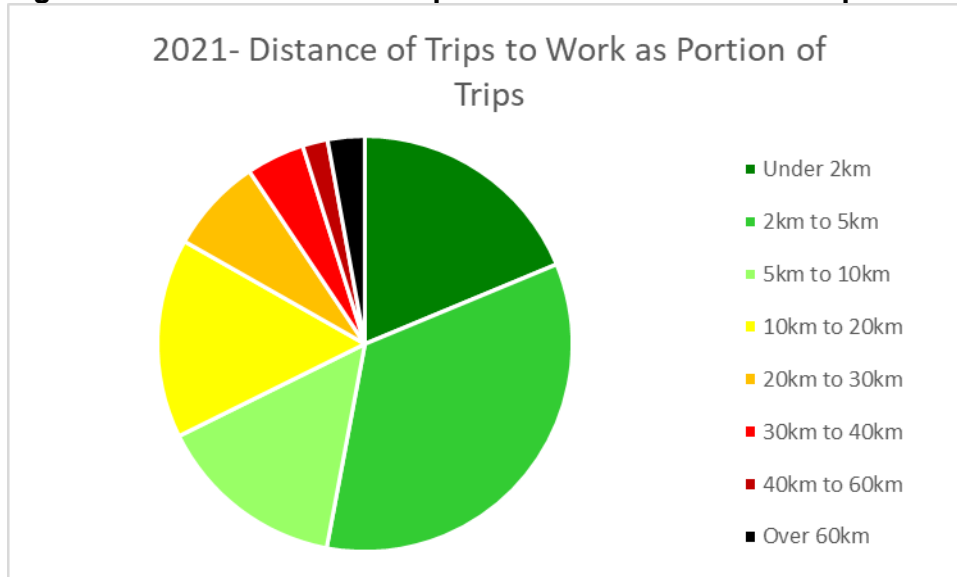


Table 5: Study Area Travel to Work Distances

Year	Value	<2km	2km to 5km	5km to 10km	10km to 20km	20km to 30km	30km to 40km	40km to 60km	>60km	Total Travel to Work Distance Responses ³
2011	Absolute	7,127	9,593	3,952	2,892	1,479	1,340	674	1,421	28,478
	Percentage	25%	34%	14%	10%	5%	5%	2%	5%	
2021	Absolute	5,168	9,434	4,061	4,279	2,036	1,254	541	798	27,571
	Percentage	19%	34%	15%	16%	7%	5%	2%	3%	

As can be observed, there has been a reduction in trips under 2km, with trips of 10km to 20km increasing both proportionality and in absolute numbers. There's also a small increase in trips of 20km to 30km. This could impact the portion of travel to work trips for which walking and cycling are viable options.

Trips between 2km and 5km, which could potentially be undertaken by bicycle, remain a stable proportion of trips, though show a small decrease in absolute numbers.

³ As can be observed, these don't align with the Travel to Work Within Study Area value given in **Table 2**. This is likely due to inconsistent responses to the Census.