

Employment Internalisation

3. In order to determine the level of internalisation of employment related trips within Kidderminster, 2011 Census data was used. Specifically, resident and journey to work data was used. The Census data shows the location of the most regular place of work for residents in Kidderminster (within the area defined at **Figure 1**). A summary of which is provided in **Table 1**.
4. **Table 1** shows a summary of the Census data.

Table 1 – Kidderminster Resident and Journey to work Census Data

	Total People	% Split
Live in Kidderminster and WFH (Work from Home)	2,472	10.1%
Live in Kidderminster and Work in Kidderminster	9,917	40.6%
Live in Kidderminster and Work outside Kidderminster	12,056	49.3%

5. As can be seen in **Table 1**, 10.1% of residents in employment (2,472 residents) mainly work from home and a further 40.6% of residents in employment (9,917 residents) both live and work within Kidderminster. The WFH proportion is for those that ‘mainly work from home’ and does not include people that occasionally work from home, or regularly work from home but not for most of the week. As trends since 2011 have moved substantially towards more flexible working this figure is an underestimate.
6. However, on this basis, of all the residents living within Kidderminster, 50.7% are employed internally within the area. It should be noted that this is an underestimate for the reason set out above, and additionally the expected long term change in working practice as a result of Covid-19.

Education Internalisation

7. With regard to education trips, it is considered that the majority would remain within Kidderminster. In this context, we have assumed that 90% of primary school and 65% of secondary school trips are undertaken within a 2-mile catchment (approximately the same distance from the centre of Kidderminster to its external borders).
8. Assuming an even 50/50 split of students between primary and secondary schools, on this basis, 77.5% of education trips are likely to be contained within Kidderminster.

Leisure Internalisation

9. To determine an internalisation factor for leisure trips, NTS data (2019) has been examined. The NTS data provides the average distance of leisure trips by purpose, for example shopping, sport, holidays or visiting friends and also the proportion of each purpose. This information is shown at **Table 2**.

Table 2 – Leisure Journey Purpose and Distances (NTS0403)

Journey Purpose	Proportion	Ave Distance (miles)
Shopping	27%	3.9
Other escort	13%	5.3
Personal business	13%	5.0
Visiting friends at private home	12%	10.7
Visiting friends elsewhere	7%	6.1
Entertainment / public activity	9%	6.9
Sport: participate	2%	7.4
Holiday: base	2%	45.4
Day trip	5%	13.8
Other including just walk	9%	0.9
Total	100%	-

10. To determine an internalisation factor for leisure for Kidderminster, using the data provided at **Table 2** assumptions have been made for each journey purpose as follows:

- Shopping – 80% of shopping trips will be internal to Kidderminster, there are a number of local shops located on the outskirts, with a number of larger chain retailers located predominantly within the centre of Kidderminster;
- Other Escort – 70% of other escort trips will be internal to Kidderminster;
- Personal business – 70% of personal business trips are likely to be internal to Kidderminster, this includes trips to the bank or other day-to-day errands;
- Visiting friends at private home – 60% of trips to friends at their private homes will be internal to Kidderminster, people may have friends from outside the area;
- Visiting friends elsewhere – 70% of journeys for visiting friends elsewhere will be internal to Kidderminster, the area boasts a number of parks and leisure facility that may be used for meeting points;
- Entertainment/Public activity – 70% of trips for entertainment or public activities will be within Kidderminster, this includes trips to cinema complex’s, bowling, museums or other activities, which Kidderminster offers a wide variety of;
- Sports (participating) – 70% of sport participation can be undertaken within Kidderminster, which offers outdoor sporting facilities including cricket and football pitches locally;
- Holiday – 0% of holiday trips will be internal to Kidderminster, it is not likely that residents of Kidderminster would go on holiday to the same area;
- Day trip – 0% of day trips would be internal to Kidderminster, as per holiday journey purpose, it is not likely that residents of Kidderminster would take a day trip to the same area;

- Other including just walk – 95% of other trips including walking trips will be internal to Kidderminster, there are several opportunities within the local area for walks to be undertaken but some will still decide to venture outside of Kidderminster.

11. Applying the above assumptions to the information provided within **Table 2**, this allows for the calculation of a total internalisation factor for leisure trips which is shown within **Table 3**. The internalisation factors for each journey purpose have been applied proportionally to the number of trips each purpose generates.

Table 3 – Leisure Internalisation

Journey Purpose	Proportion	Internalisation %	Total Internalised Trips (%)
Shopping	27%	80%	21.9%
Other escort	13%	70%	8.9%
Personal business	13%	70%	9.3%
Visiting friends at private home	12%	60%	7.4%
Visiting friends elsewhere	7%	70%	5.1%
Entertainment / public activity	9%	70%	6.2%
Sport: participate	2%	70%	1.4%
Holiday: base	2%	0%	0.0%
Day trip	5%	0%	0.0%
Other including just walk	9%	95%	8.8%
Total	100%	-	69.1%

12. As can be seen in **Table 3**, the resultant internalisation of leisure trips in Kidderminster with these assumptions is 69.1%.

Total Internalisation of Kidderminster

13. This note has identified the following internalisation factors for each employment, education, and leisure journey purposes respectively. The internalisation factor of each is summarised as follows:

- Employment Internalisation – 50.7%;
- Education Internalisation – 77.5%; and
- Leisure Internalisation – 69.1%.

14. To determine the total internalisation of Kidderminster, NTS journey purpose by time data (NTS table NTS0502) is provided at **Table 4**.
15. The table shows the % split between employment, education and leisure trips in each hour through the day. For the purpose of this assessment the 3 hours AM and PM peak periods (0700-1000 and 1600-1900) have been provided along with the 12hr daily total.

Table 4 – NTS Journey Purpose

	Commuting	Education	Leisure/Recreation
0700-0800	53.3%	19.8%	26.9%
0800-0900	22.9%	51.4%	25.7%
0900-1000	15.8%	10.0%	74.2%
1600-1700	26.0%	11.2%	62.8%
1700-1800	35.5%	5.2%	59.3%
1800-1900	23.7%	1.9%	74.3%
12-Hour Daily	21.6%	16.5%	61.9%

16. By multiplying the commuting trip journey splits shown in **Table 4** by 50.7%, education trip journey splits by 77.5% and the leisure trip journey splits by 69.1%, the total internalisation of all journeys can be derived. These calculations are shown at **Table 5**. These results should be used in conjunction with those provided at **Table 4**, for example, 53.3% (**Table 4**) of all trips between 0700-0800 are for the purpose of commuting, 50.7% of these are internalised which is equivalent to 27.0% (**Table 5**) of all trips in that hour.

Table 5 – Percentage of all Trips Internalised

	Commuting	Education	Leisure/Recreation
0700-0800	27.0%	15.3%	18.6%
0800-0900	11.6%	39.8%	17.8%
0900-1000	8.0%	7.8%	51.3%
1600-1700	13.2%	8.7%	43.4%
1700-1800	18.0%	4.0%	41.0%
1800-1900	12.0%	1.5%	51.3%
12-Hour Daily	10.9%	12.8%	42.8%

17. By combining each row of **Table 5**, the total internalisation in each peak hour and throughout the 12-hour day can be provided. This is shown at **Table 6**.

Table 6 – Total Internalisation of Kidderminster

	Internalisation
0700-0800	61.0%
0800-0900	69.2%
0900-1000	67.0%
1600-1700	65.3%
1700-1800	63.0%
1800-1900	64.8%
12-Hour Daily	66.5%

18. Given this, it is reasonable to make the judgement that pre COVID internalisation of accessibility within Kidderminster, across a typical day, was in the order of 65% - 70%, and that this is likely to be higher in a stable post COVID scenario.