

# Accessibility Matrix 2022 – Metadata

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## Origins

All postcodes within Gloucestershire and those within a 5 mile buffer around the county boundary have been used to calculate the accessibility of services. This includes postcodes attached to commercial properties, which may not have a resident population.

The postcode list used was the November 2021 release, accessed in November 2021 which can be found at:

<https://inform.gloucestershire.gov.uk/geography-and-boundaries/postcode-lookup-tool/> and the Office for National Statistics Open Geography Portal: <http://geoportal.statistics.gov.uk/>

## Destinations

To ensure continuity the destinations used in previous iterations of the Accessibility Matrix have been reproduced, these services were selected as they represent essential health, wellbeing, education and employment destinations. The destinations are as follows:

- Primary Schools
- Secondary Schools
- Further Education establishments
- GPs
- A&Es and MIUs
- Pharmacies
- Major Supermarkets
- Libraries
- Post Offices
- Fitness Facilities

All of the above destinations that fall within Gloucestershire and those within a 15 mile buffer of the county boundary were included in calculations.

## Calculations

Calculations from origins to destinations are all undertaken using modelled data and are therefore not a completely accurate travel time as **they take no account for traffic or weather conditions**; however they offer a standardized travel time that allows for accurate comparisons between origins.

Drive time calculations use set speed limits (km/h) for each road type:

Select travel mode to update speed :

Car Speed: AM Peak PM Peak **Off Peak** Evening Night Weekend Days

Please Enter Speeds Below to update Speed(Leaving it blank to leave current speed.)

MinorRoad	35	<input checked="" type="checkbox"/> Both Direction
LocalStreet	35	<input checked="" type="checkbox"/> Both Direction
PrivateRoadRestrictedAccess	30	<input checked="" type="checkbox"/> Both Direction
ARoad	75	<input checked="" type="checkbox"/> Both Direction
BRoad	65	<input checked="" type="checkbox"/> Both Direction
Alley	0	<input checked="" type="checkbox"/> Both Direction
PrivateRoadPubliclyAccessible	30	<input checked="" type="checkbox"/> Both Direction
Footpath	0	<input checked="" type="checkbox"/> Both Direction
Motorway	100	<input checked="" type="checkbox"/> Both Direction

Previous Next Finish Cancel

Drive time calculations are based on the average journey time between 10am and 12noon on a Tuesday for all destinations except educational establishments (Primary Schools, Secondary Schools and Further Education Colleges) where the times are calculated between 7am and 9am.

All journeys are calculated one way, i.e. from the origin to the destination. One result (the shortest journey time) is returned for each origin point. The road network used in the calculations includes route restrictions (such as one-ways) and is from Ordnance Surveys Highways and Paths 2021 release, accessed on 16/11/2021.

Public Transport calculations are undertaken using bus stops and timetables supplied by Traveline. The transport list used was the October 2021 release, accessed on 18/10/2021. Road speeds are set at the same speed as with driving calculations.

The calculations include; walking from the origin to the nearest bus stop; waiting for the next available bus going in the correct direction; travelling to transfer stops; walking between connecting bus stops; waiting for connecting buses; and walking from final bus termination point to destination. Calculations are set within the same time parameters as with drive time calculations however the journey in its entirety (including walking, waiting and transfers) must take place within the 2 hour period or an 'impossible' result is returned. The Urban Path network is used for walking journeys to the nearest bus stop. Footpath networks in rural areas are not included e.g. Public Rights of Way. Walking speeds are set at 4.8km/h. Maximum walking distance for interchanges onto public transport are set at 800 metres (approx. ½ mile) and does not take into account the gradient of the walk.

Results are displayed on maps as accessibility in the following periods; up to 15, 15-30, 30-45 and 45+ minutes for Public Transport journeys and up to 5, 5-15 and 15+ minutes for Drive journeys.

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