**Essex Transport & Travel Profile**



The RSN Transport & Travel Profile brings together key data to inform and contextualise a local authority areas transport & travel situation. The analysis provides comparison to the average for the authority class and for the Predominantly Rural and Urban classifications. The sheets are editable to allow narrative descriptions and to emphasize or delete the graphs as may be appropriate for the intended use and for your local authority area.

The areas covered are:

* [Travel time](#Travel)
* [Motor vehicle traffic](#Motor)
* [Road network](#Road)
* [Road speed and delay](#Speed)
* [Walking and cycling](#Walking)

**Travel time**

*NB. travel times are in minutes except where travel time is above 120 minutes in which case 120 is shown.*

Travel time in minutes to nearest employment centre with 100 to 499 jobs

Travel time in minutes to nearest employment centre with 500 to 4999 jobs

Travel time in minutes to nearest employment centre with at least 5000 jobs

Travel time to nearest primary school by Public Transport/Walk

Travel time to nearest primary school by Cycle

Travel time to nearest primary school by Car

Travel time to nearest secondary school by Public Transport/Walk

Travel time to nearest secondary school by Cycle

Travel time to nearest secondary school by Car

Travel time to nearest further education by Public Transport/Walk

Travel time to nearest further education by Cycle

Travel time to nearest further education by Car

Travel time to nearest GP by Public Transport/Walk

Travel time to nearest GP by Cycle

Travel time to nearest GP by Car

Travel time to nearest Hospital by Public Transport/Walk

Travel time to nearest Hospital by Cycle

Travel time to nearest Hospital by Car

Travel time to nearest Pharmacy by Cycle

Travel time to nearest Pharmacy by Car

Travel time to nearest Food Store by Public Transport/Walk

Travel time to nearest Food Store by Cycle

Travel time to nearest Food Store by Car

Travel time to nearest Town Centre by Public Transport/Walk

Travel time to nearest Town Centre by Cycle

Travel time to nearest Town Centre by Car

**Motor vehicle traffic**

|  |  |
| --- | --- |
|  | *Million vehicle miles* |
| **Motor vehicle traffic (vehicle miles)** | 2012 | 2013 | 2014 | 2015 | 2016 |
| Predominantly Rural total | 57557 | 58218 | 59684 | 60993 | 62470 |
| Predominantly Urban total | 120136 | 119953 | 122940 | 124353 | 126852 |
| Shire County total | 136667 | 137449 | 141094 | 144150 | 147373 |
| Essex | 8489 | 8525 | 8860 | 9043 | 9303 |

|  |  |
| --- | --- |
|  | *Million vehicle miles* |
| **Car vehicle traffic (vehicle miles)** | 2012 | 2013 | 2014 | 2015 | 2016 |
| Predominantly Rural total | 44873 | 45190 | 46126 | 46785 | 47789 |
| Predominantly Urban total | 96721 | 96181 | 97976 | 98735 | 100609 |
| Shire County total | 108056 | 108103 | 110362 | 112089 | 114258 |
| Essex | 6693 | 6689 | 6893 | 6991 | 7169 |

|  |  |
| --- | --- |
|  | *Million vehicle miles* |
| **Motor vehicle traffic (vehicle miles) excluding trunk roads** | 2012 | 2013 | 2014 | 2015 | 2016 |
| Predominantly Rural total | 39056 | 39428 | 40660 | 41371 | 42317 |
| Predominantly Urban total | 88003 | 87561 | 89587 | 90148 | 91772 |
| Shire County total | 84303 | 84677 | 87400 | 88865 | 90834 |
| Essex | 5480 | 5506 | 5735 | 5796 | 5948 |

*Motor Vehicle Flow - The number of vehicles passing in 24 hours at an average point on the road network in each local authority. This controls for differing length of road in each authority, providing a measure of how heavily used the roads are.*

*It is calculated by dividing the estimate of annual vehicle miles in each local authority by the length of road in that authority and number of days in the year*

**Road network**

*NB. SCANNER (Surface Condition Assessment for the National Network of Roads) data are collected using automated road condition survey machines. Although each machine is accredited for accuracy and readings fall within the accepted boundaries of the SCANNER specification for road condition, there is still variability between the results that each machine delivers. This can lead to changes in the figures over time that are for reasons beyond the condition of the road, and above the expected range of variability that already exists within the data. Caution should therefore be taken when comparing the figures across years. Additionally, alternative technologies to SCANNER surveys were used to collect data for some local authorities. The following charts show the data such as it is, but should be read in mind of the caveats as stated.*

Principal and non-principal classified roads where maintenance should be considered

Total road length (miles) by road type

|  |  |
| --- | --- |
|  | *Motorways, miles* |
| **Road length (miles) , 2016** | Trunk motorways | Principal motorways | All motorways |
| Predominantly Rural total | 330.38 | 0 | 330.38 |
| Predominantly Urban total | 789.22 | 25.72 | 814.95 |
| Shire County total | 1088.69 | 7.33 | 1096.03 |
| Essex | 46.79 | 0 | 46.79 |

|  |  |
| --- | --- |
|  | *A' roads, miles* |
| **Road length (miles) , 2016** | Trunk rural 'A' | Trunk urban 'A' | Principal rural 'A' | Principal urban 'A' | All 'A' roads |
| Predominantly Rural total | 1233.18 | 38.59 | 5873.4 | 592.25 | 7737.38 |
| Predominantly Urban total | 298.8 | 95.71 | 1989.36 | 4096.03 | 6479.91 |
| Shire County total | 1666.44 | 71 | 8013.15 | 1867.74 | 11618.34 |
| Essex | 91.09 | 0 | 204.8 | 96.87 | 392.77 |

|  |  |
| --- | --- |
|  | *Minor roads, miles* |
| **Road length (miles) , 2016** | Rural 'B'  | Urban 'B' | Rural 'C' and 'U' | Urban 'C' and 'U' | All minor roads |
| Predominantly Rural total | 5416.9 | 395.2 | 47980.4 | 8406.8 | 62199.3 |
| Predominantly Urban total | 1349.5 | 1752 | 11188 | 43816.6 | 58107.2 |
| Shire County total | 6486.4 | 1207.9 | 61474 | 24957.6 | 94125.7 |
| Essex | 386.4 | 93.3 | 2542.2 | 1660.5 | 4682.5 |

|  |  |
| --- | --- |
|  | *All roads, miles* |
| **Road length (miles) , 2016** | Major: Trunk roads | Major: Prinicipal roads | Minor roads | Total road length |
| Predominantly Rural total | 1602.12 | 6465.6 | 62199.3 | 70267.2 |
| Predominantly Urban total | 1183.71 | 6111.12 | 58107.2 | 65402.6 |
| Shire County total | 2826.16 | 9888.2 | 94125.7 | 106840.3 |
| Essex | 137.88 | 301.68 | 4682.5 | 5122 |

Taking the total road lengths and proportion where maintenance should be considered:

|  |  |
| --- | --- |
| Road length of principal roads in Essex where maintenance should be considered (2016): | 6miles |

|  |  |
| --- | --- |
| Road length of non-principal roads in Essex where maintenance should be considered (2016): | 140miles |

Percentage of unclassified roads where maintenance should be considered

*NB. Different survey types between authorities were used in collecting the maintenance data for unclassified roads. Averages have been calculated on the data as made available.*

**Road speed and delay**

Average speed on local 'A' roads

The average speed measure weights speed observations from a sample of vehicles by associated traffic flows so that it is representative of traffic volumes on the roads in different locations and at different times of day. Travel time observations used to calculate this measure are derived from cars and light vans travel time data only. All day average speed calculated across the complete 24 hourly period and includes all days (weekdays, weekends, bank holidays etc.)

Average delay on locally managed 'A' roads

Delay is calculated by subtracting derived ‘free flow’ travel times from observed travel times for individual road sections. Free flow travel times are calculated using the 85th percentile speed observation for each individual road sections. These are 'capped' at national speed limits. Average delay is calculated by aggregating delay estimates from individual road sections and weighting observations by associated traffic flows so that it is representative of traffic volumes. Travel time observations used to calculate this measure are derived from cars and light vans data only. All day average delay calculated across the complete 24 hourly period and includes all days (weekdays, weekends, bank holidays etc.)

**Walking and cycling**

The following charts relate to statistics covering the time period mid-November 2015 to mid-November 2016.

Walking in the above analysis refers to any continuous walk of over 10 minutes, irrespective of purpose. Cycling in this analysis refers to any cycling, irrespective of length or purpose.

Cycling in the following charts refers to any cycling, irrespective of length or purpose and leisure refers to cycling for the purpose of health, recreation, training or competition, not to get from place to place.

Walking in the following charts refers to any continuous walk of over 10 minutes, and leisure refers to walking for the purpose of health, recreation, training or competition, not to get from place to place.

**Statistical sources**

Department for Transport statistics - Journey Time Statistics, Tables JTS0401 to JTS0409

Department for Transport statistics - Vehicle Traffic and Flow, Tables TRA8901, 8902, 8903, 8907

Department for Transport statistics - Total Road Length, Table RDL0102a

Department for Transport statistics - Classified roads where maintenance should be considered, Table RDL0120

Department for Transport statistics - Unclassified roads where maintenance should be considered, Table RDL0130

Department for Transport statistics - Unclassified roads where maintenance should be considered, Table RDL0130

Department for Transport statistics - Average speed on local 'A' roads, Table CGN0501

Department for Transport statistics - Average delay on local 'A' roads, Table CGN0502

Department for Transport statistics - Walking and Cycling Statistics, Tables CW0301, 0302, 0303