

INSTITUTE OF TRANSPORTATION ENGINEERS  
COMMON TRIP GENERATION RATES (AM/PM PEAK HOUR)  
(TRIP GENERATION MANUAL, 11<sup>TH</sup> EDITION)

| CODE                 | DESCRIPTION                          | UNIT OF MEASURE | TRIPS PER UNIT<br>(AM PEAK HR) | TRIPS PER UNIT<br>(PM PEAK HR) |
|----------------------|--------------------------------------|-----------------|--------------------------------|--------------------------------|
| <b>RESIDENTIAL</b>   |                                      |                 |                                |                                |
| 210                  | Single-Family Detached Housing       | Dwelling Units  | 0.75                           | 0.99                           |
| 220                  | Apartment                            | Dwelling Units  | 0.47                           | 0.57                           |
| 221                  | Low-Rise Apartment                   | Dwelling Units  | 0.35                           | 0.39                           |
| 222                  | High-Rise Apartment                  | Dwelling Units  | 0.33                           | 0.40                           |
| 230                  | Residential Condominium/Townhouse    | Dwelling Units  | 0.44                           | 0.39                           |
| 240                  | Mobile Home Park                     | Dwelling Units  | 0.47                           | 0.65                           |
| 251                  | Senior Adult Housing-Detached        | Dwelling Units  | 0.34                           | 0.39                           |
| 252                  | Senior Adult Housing-Attached        | Dwelling Units  | 0.29                           | 0.30                           |
| 253                  | Congregate Care Facility             | Dwelling Units  | 0.19                           | 0.23                           |
| 254                  | Assisted Living                      | Beds            | 0.22                           | 0.33                           |
| 255                  | Continuing Care Retirement Community | Dwelling Units  | 0.19                           | 0.25                           |
| 270                  | Residential Planned Unit Development | Dwelling Units  | 0.58                           | 0.72                           |
| <b>LODGING</b>       |                                      |                 |                                |                                |
| 310                  | Hotel                                | Rooms           | 0.53                           | 0.60                           |
| 320                  | Motel                                | Rooms           | 0.40                           | 0.41                           |
| 330                  | Resort Hotel                         | Rooms           | 0.41                           | 0.50                           |
| <b>RECREATIONAL</b>  |                                      |                 |                                |                                |
| 415                  | Beach Park                           | Acres           | 0.48                           | 0.60                           |
| 420                  | Marina                               | Berths          | 0.12                           | 0.20                           |
| 430                  | Golf Course                          | Acres           | 0.33                           | 0.39                           |
| <b>RECREATIONAL</b>  |                                      |                 |                                |                                |
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| <b>RECREATIONAL</b>  |                                      |                 |                                |                                |
| 445                  | Multiplex Movie Theater              | Movie Screens   |                                | 27.11/71.81                    |
| 480                  | Amusement Park                       | Acres           | 3.16/17.58                     | 4.99/17.58                     |
| 488                  | Soccer Complex                       | Fields          | 1.77/37.48                     | 16.90/37.48                    |
| 490                  | Tennis Courts                        | Courts          | -                              | 4.21                           |
| 492                  | Health/Fitness Club                  | 1,000 SF        | 1.40                           | 3.92                           |
| 493                  | Athletic Club                        | 1,000 SF        | 3.40                           | 6.36/8.60                      |
| 495                  | Recreational Community Center        | 1,000 SF        | 1.85                           | 2.53                           |
| <b>INSTITUTIONAL</b> |                                      |                 |                                |                                |
| 520                  | Elementary School                    | Students        | 0.75                           | 0.45                           |
| 522                  | Middle School/Junior High School     | Students        | 0.74                           | 0.36                           |
| 525                  | High School                          | Students        | 0.51                           | 0.32                           |
| 532                  | Private School (k-12)                | Students        | 0.80                           | 0.53                           |
| 540                  | Junior/ Community College            | Students        | 0.12                           | 0.13                           |
| 560                  | Church                               | 1,000 SF        | 0.68/10.36                     | 0.80                           |
| 565                  | Daycare Center                       | 1,000 SF        | 11.73                          | 11.82                          |
| 566                  | Cemetery                             | Acres           | 1.23                           | 1.26                           |
| 590                  | Library                              | 1,000 SF        | 6.25                           | 8.53                           |
| <b>MEDICAL</b>       |                                      |                 |                                |                                |
| 610                  | Hospital                             | 1,000 SF        | 0.86                           | 0.98                           |
| 620                  | Nursing Home                         | 1,000 SF        | 0.65                           | 0.82                           |
| 630                  | Clinic                               | 1,000 SF        | 3.44                           | 4.22                           |

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|---------------|-------------------------------------|-----------------|--------------------------------|--------------------------------|-----|
| <b>OFFICE</b> |                                     |                 |                                |                                |     |
| 710           | General Office Building             | 1,000 SF        | 1.52                           | 1.44                           |     |
| 714           | Corporate Headquarters Building     | 1,000 SF        | 1.45                           | 1.30                           |     |
| 715           | Single Tenant Building              | 1,000 SF        | 1.85                           | 1.76                           |     |
| 720           | Medical-Dental Office Building      | 1,000 SF        | 3.74                           | 4.79                           |     |
| 730           | Government Office Building          | 1,000 SF        | 3.69                           | 3.19                           |     |
| 731           | State Motor Vehicles Department     | 1,000 SF        | 8.86                           | 7.68                           |     |
| 732           | United States Post Office           | 1,000 SF        | 12.38                          | 15.11                          |     |
| 750           | Office Park                         | 1,000 SF        | 1.33                           | 1.30                           |     |
| 760           | Research and Development Center     | 1,000 SF        | 1.03                           | 0.98                           |     |
| 770           | Business Park                       | 1,000 SF        | 1.35                           | 1.22                           |     |
| <b>RETAIL</b> |                                     |                 |                                |                                |     |
| 812           | Building Materials and Lumber Store | 1,000 SF        | 2.31                           | 2.65/9.58                      | *** |
| 813           | Free-Standing Discount Superstore   | 1,000 SF        | 3.18                           | 4.39                           |     |
| 814           | Variety Store                       | 1,000 SF        | 4.51                           | 7.42                           |     |
| 815           | Free Standing Discount Store        | 1,000 SF        | 5.61                           | 5.42/7.04                      | *** |
| 816           | Hardware / Paint Store              | 1,000 SF        | 1.39                           | 1.10                           |     |
| 817           | Nursery (Garden Center)             | 1,000 SF        | 8.00                           | 8.37                           |     |
| 818           | Nursery ( Wholesale)                | 1,000 SF        | 2.84                           | 5.01/5.19                      | *** |
| 820           | Shopping Center(>150K)              | 1,000 SF        | 2.87                           | 4.09/4.40                      |     |
| 821           | Shopping Plaza (40-150K)            | 1,000 SF        | 7.06                           | 9.72                           |     |
| 822           | Strip Retail Plaza (<40K)           | 1,000 SF        | 7.60                           | 13.24                          |     |
| 823           | Factory Outlet Center               | 1,000 SF        | 2.06                           | 1.94/3.79                      | *** |
| 826           | Specialty Retail Center             | 1,000 SF        | 6.84                           | 5.02                           |     |

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|---------------|--|-----------------|--------------|--------------|-----|
| <b>RETAIL</b> |  |                 |              |              |     |
| 841           | New Car Sales                                    | 1,000 SF        | 2.15         | 2.65/4.02    | *** |
| 843           | Automobile Parts Sales                           | 1,000 SF        | 4.47         | 5.88/11.53   | *** |
| 848           | Tire Store                                       | 1,000 SF        | 3.56         | 3.72/5.05    | *** |
| 850           | Supermarket                                      | 1,000 SF        | 6.78         | 9.19/10.10   | *** |
| 851           | Convenience Store                                | 1,000 SF        | 68.83        | 53.51/79.12  |     |
| 852           | Convenience Market ( Open 15-16 Hours)           | 1,000 SF        | 32.60        | 36.22        |     |
| 853           | Convenience Market with Gasoline Pumps           | 1,000 SF        | 42.86        | 62.57        |     |
| 854           | Discount Supermarket                             | 1,000 SF        | 6.33         | 8.13         |     |
| 857           | Discount Club                                    | 1,000 SF        | 3.46         | 4.62/6.37    | *** |
| 862           | Home Improvement Superstore                      | 1,000 SF        | 2.66         | 3.21/4.37    | *** |
| 863           | Electronics Superstore                           | 1,000 SF        | 3.57         | 4.48/6.46    | *** |
| 875           | Department Store                                 | 1,000 SF        | 2.14         | 2.81/3.45    | *** |
| 880           | Pharmacy /Drugstore without Drive-Through Window | 1,000 SF        | 7.71         | 8.62/10.68   | *** |

|   |          |      |          |     |
|---|----------|------|----------|-----|
| 881 Pharmacy /Drugstore with Drive-Through Window | 1,000 SF | 9.08 | 11.23    |     |
| 890 Furniture Store                               | 1,000 SF | 0.52 | 0.7/1.10 | *** |

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|-----------------|---|-------------------|--------------|--------------|--------|
| <b>SERVICES</b> |   |                   |              |              | ***    |
| 912             | Drive-In Bank   | 1,000 SF          | 14.78        | 20.92        | ***    |
| 925             | Drinking Place  | 1,000 SF          | <b>8.10</b>  | 15.49        | ***    |
| 930             | Fast Casual Restaurant  | 1,000 SF          | <b>5.71</b>  | 18.57/32.64  |        |
| 931             | Fine Dining Restaurant  | 1,000 SF          | 4.47         | 8.28/10.68   |        |
| 932             | High-Turnover (Sit-Down) Restaurant                                 | 1,000 SF          | 13.68        | 16.35/25.83  |        |
| 933             | Drive-Through Window  | 1,000 SF          | 63.50        | 52.40        |        |
| 933             | Fast Food Restaurant with Drive-Through Window                      | 1,000 SF          | 53.43        | 52.77        |        |
| 936             | Drive-Through Window  | 1,000 SF          | 96.43        | 32.99        | *      |
| 937             | Coffee / Donut Shop with Drive-Through Window                       | 1,000 SF          | 101.27       | 43.65        | ***    |
| 938             | Coffee / Donut Shop with Drive-Through Window and No Indoor Seating | 1,000 SF          | 45.71        | 17.50        |        |
| 941             | Quick Lubrication Vehicle Shop                                      | Service Positions | 10.14        | 9.42         |        |
| 942             | Automobile Care Center  | 1,000 SF          | 2.83         | 3.51/23.72   |        |
| 944             | Gasoline / Service Station  | Fueling Positions | 10.53        | 14.41        |        |
| 945             | Gasoline / Service Station with Convenience Market                  | Fueling Positions | 16.46        | 19.13        | *, *** |