# AASHTO AADT Method 

FHWA Highway Information Seminar October 31, 2018

## AADT

The average volume of traffic for a one-day (24hour) period for a entire calendar year year.

- Directly from a continuous count
- Factored from a short duration count


## AADT - from continuous count

$$
\frac{1}{7} \sum_{i=1}^{7}\left[\frac{1}{12} \sum_{j=1}^{12}\left[\frac{1}{n} \sum_{k=1}^{n}\left[\text { Volume }_{i j k}\right]\right]\right]
$$

Volume_ijk is the daily traffic for day $K$ of day of week $i$ in month $j$. $\mathrm{i}=$ day of week (Monday, Tuesday,,, Sunday)

$$
j=\text { month of year }(1,2,3,,, 12)
$$

$\mathrm{K}=$ the first day of the week in a month where data is available $\mathrm{n}=$ number of days available for that day of week during that month

|  | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jan | 37,062 | 30,754 | 30,956 | 31,203 | 32,968 | 36,870 | 36,223 |
| Feb | 39,499 | 32,963 | 33,643 | 32,233 | 34,882 | 46,814 | 40,759 |
| Mar | 46,381 | 36,898 | 36,279 | 39,125 | 37,182 | 57,215 | 51,906 |
| Apr | 50,549 | 38,099 | 36,789 | 38,276 | 38,923 | 54,463 | 50,811 |
| May | 44,580 | 38,622 | 38,455 | 39,639 | 39,847 | 52,279 | 47,808 |
| Jun |  |  |  |  |  |  |  |
| Jul | 48,278 | 40,656 | 38,475 | 38,940 | 40,698 | 55,675 | 58,069 |
| Aug | 47,182 | 41,856 | 39,492 | 40,172 | 41,142 | 51,031 | 50,830 |
| Sep | 41,858 | 34,109 | 32,203 | 33,191 | 36,295 | 49,648 | 42,517 |
| Oct | 40,298 | 36,601 | 36,998 | 38,447 | 42,107 | 47,931 | 38,487 |
| Nov | 47,261 | 35,226 | 34,605 | 34,692 | 38,103 | 47,089 | 50,311 |
| Dec | 43,532 | 32,935 | 33,150 | 35,980 | 38,579 | 42,100 | 45,866 |

## A=Sum/12

AADT= sum of $A / 7=$

|  | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jan | 37,062 | 30,754 | 30,956 | 31,203 | 32,968 | 36,870 | 36,223 |
| Feb | 39,499 | 32,963 | 33,643 | 32,233 | 34,882 | 46,814 | 40,759 |
| Mar | 46,381 | 36,898 | 36,279 | 39,125 | 37,182 | 57,215 | 51,906 |
| Apr | 50,549 | 38,099 | 36,789 | 38,276 | 38,923 | 54,463 | 50,811 |
| May | 44,580 | 38,622 | 38,455 | 39,639 | 39,847 | 52,279 | 47,808 |
| Jun | 47,366 | 39,523 | 38,466 | 38,623 | 40,012 | 53,789 | 52,960 |
| Jul | 48,278 | 40,656 | 38,475 | 38,940 | 40,698 | 55,675 | 58,069 |
| Aug | 47,182 | 41,856 | 39,492 | 40,172 | 41,142 | 51,031 | 50,830 |
| Sep | 41,858 | 34,109 | 32,203 | 33,191 | 36,295 | 49,648 | 42,517 |
| Oct | 40,298 | 36,601 | 36,998 | 38,447 | 42,107 | 47,931 | 38,487 |
| Nov | 47,261 | 35,226 | 34,605 | 34,692 | 38,103 | 47,089 | 50,311 |
| Dec | $\mathbf{4 3 , 5 3 2}$ | $\mathbf{3 2 , 9 3 5}$ | $\mathbf{3 3 , 1 5 0}$ | $\mathbf{3 5 , 9 8 0}$ | $\mathbf{3 8 , 5 7 9}$ | $\mathbf{4 2 , 1 0 0}$ | 45,866 |
| A=Sum/12 | $\mathbf{4 4 , 4 8 7}$ | $\mathbf{3 6 , 5 2 0}$ | $\mathbf{3 5 , 7 9 3}$ | $\mathbf{3 6 , 7 1 0}$ | $\mathbf{3 8 , 3 9 5}$ | $\mathbf{4 9 , 5 7 5}$ | $\mathbf{4 7 , 2 1 2}$ |

AADT= sum of $\mathrm{A} / 7=(44,487+36,520+36,793+36,710+38,395+49,575+47,212) / 7=41,242$

## Next FHWA AADT Method

U.S. Department of Transportation

Federal Highway Administration Office of Highway Policy Information

