

DEVELOPMENT OF AN AVERAGE ANNUAL WEEKDAY TRAFFIC FACTOR FOR 2020

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Definitions

- AADT
 - Average Annual Daily Traffic
- AAWDT
 - Average Annual Weekday Traffic
- VMT
 - Vehicle Miles Traveled
- RTDC
 - Regional Transportation Data Clearinghouse



Daily to Weekday Factors Uses

- Used to estimate AAWDT from AADT where only AADT is available
 - Used in travel demand model validation
 - Populated in and shared via the RTDC
- Used to estimate Average Weekday VMT from Average Daily VMT reported in the Regional VMT Trends Table
 - Used in network development
 - Used for setting safety targets



Recent History of Daily to Weekday Factors

- Analysis of continuous count stations in Maryland in 2005
 - **Daily to Weekday Factor = 1.05**
 - Received AAWDT from VA and DC, factoring not necessary
- Gen3 Model - 2018 AAWDT in the District and Jefferson County WV
 - MD and VA provide both AADT and AAWDT
 - Analyzed continuous counts from 2017 to 2019 in the District
 - Calculated average AADT to AAWDT factor on network links in counties near Jefferson - Fauquier, Loudoun, and Frederick
 - **Daily to Weekday Factor = 1.05**
- Develop special factor for pandemic year of 2020



Methodology for 2020 Factor

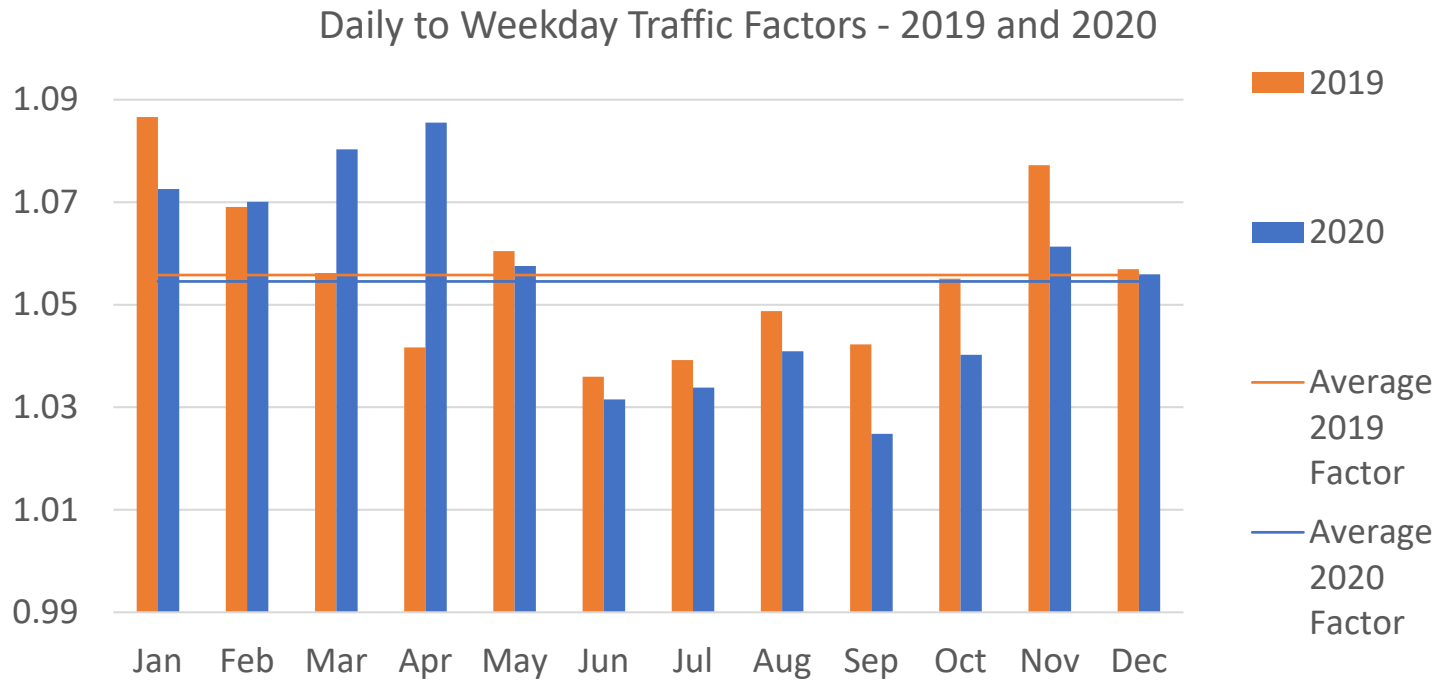
- Analyzed continuous count station data from DC, MD, and VA
- Calculated a daily to weekday factor for all operational stations, *exclusive of holidays* for each month
- Averaged the factors for all stations, **Daily to Weekday Factor = 1.05**
- Averaged the factors for all stations by month, averaged the monthly average factors, **Daily to Weekday Factor = 1.05**

Ring	2019 Factor	2020 Factor
Regional Core	1.088	1.083
Inner Ring	1.064	1.064
Outer Ring	1.042	1.041

Functional Classification	2019 Factor	2020 Factor
Interstate	1.031	1.035
Other Freeway	1.069	1.071
Prin. Arterial	1.074	1.070
Minor Art/Collector	1.065	1.052



Monthly 2019 and 2020 Factors



Source: Continuous Count Stations Operated by State DOTs

- Monthly factors varied widely during 2020, but the average of all of the months' factors was very close to that of 2019

Final 2020 Factor and Next Steps

- Continue to use 1.05 as the daily to weekday factor through 2020
- Plan to analyze 2021 data to see if a special factor should be used – travel behavior is still being affected by the pandemic
- Plan to analyze subsequent years' data and gradually move to every three years



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