COVID-19 Traffic Trends Update
Traffic sensors used in analysis

- 2000+ MnDOT traffic nodes, spread across 26 corridors
- Each node = one or many individual sensors
- For 2020 alone, 14.6 million rows of hourly data for 2,411 nodes
- Used 2018 + 2019 data to estimate a “typical” volume

http://metrotransitmn.shinyapps.io/covid-traffic-trends/
Annual Weekly Hourly

Traffic trends over time

Traffic Sensor Group
- MnDOT Metro Freeways (1000+ Stations)
- MnDOT Statewide (105 Stations)

[Graph showing traffic trends over time]

http://metrotransitmn.shinyapps.io/covid-traffic-trends/
Metro freeway traffic trends, by hour

Line shows a smoothed trend for traffic volumes during each day part. Total daily volumes are available at http://metrotransitmn.shinyapps.io/covid-traffic-trends/.
Metro freeway traffic volumes: Monday-Friday
Metro freeway traffic volumes: Saturday+Sunday

Total Volume

04 AM 05 AM 06 AM 07 AM 08 AM 09 AM 10 AM 11 AM 12 PM 01 PM 02 PM 03 PM 04 PM 05 PM 06 PM 07 PM 08 PM 09 PM 10 PM

2018-19 Average
March 2021
December 2020
September 2020
March 2020

METROPOLITAN COUNCIL
Trends by Corridor - Week of March 1, 2021

Change in Traffic (%)

corridors from highest -> lowest typical volume
Maps show traffic declines at metro-area RTMC nodes during the week of 3/1/2021 relative to a 2018-2019 baseline. Mornings = 7-9AM; Evenings = 4-6PM.
Ongoing work

• Refreshing traffic data weekly
• Collaborating with experts at MnDOT Regional Traffic Management Center
• Expanding the Traffic Trends App to include the ability to view and download data for each corridor and hour (by March 26)
• Refining our statistical models to predict the effects of weather and special events on traffic (Q2-Q3 2021)
• Exploring sources of data for non-freeway, non-auto travel
• Improving our understanding of who is traveling less (or more) and why by conducting the Travel Behavior Inventory Household Survey