COVID-19 PANDEMIC TRAVEL IMPACTS:

Looking back at 2020 traffic volume data & looking ahead to the remainder of 2021 and beyond

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DENVER REGION DATA BRIEF
COVID-19’s effects on traffic volumes
December 2020

TRAFFIC TELLS A STORY
The COVID-19 pandemic disrupted lives around the globe. In the Denver region, government policies and personal safety measures to reduce the spread of the virus changed how people traveled and the amount of vehicle traffic on the region’s roadways. DRDCOG staff compared the volume of traffic at several permanent traffic counter locations for 2020 and 2019, which revealed that COVID-19 affected both the quantity and timing of vehicle travel throughout the day.

2020 Monthly Average Traffic Volume Change from 2019 (Monday-Friday)

Just the numbers
- Overall traffic in the region in April 2020 was 20% less than in April 2019.
- Volumes increased through the spring. By June, regional average volumes were approximately 15% less than in June 2019. By October, average regional traffic volumes were approximately 10% less than they had been in October 2019.
- The I-250 southeast of York Street location was an exception, because higher commercial and freight activity resulted in less significant decreases of only 23%. By October, this location had slightly more average weekday traffic than 2019.

https://drcog.org/services-and-resources/data-maps-and-modeling
SOURCE: CDOT PERMANENT TRAFFIC COUNT LOCATIONS
2020 MONTHLY AVERAGE TRAFFIC VOLUME CHANGE FROM 2019 (MON-FRI)

-70% -60% -50% -40% -30% -20% -10% 0% 10% 20%

January February March April May June July August September October November December

- 6th W/O Federal
- I25 S/O 6th
- SH44 (104th) W/O Brighton Rd
- SH285 W/O Sheridan
- US36 SE/O McCaslin
- I-270 SE/O York
- SH470 NW/O Morrison
2019 TO 2020 HOLIDAY TRAFFIC VOLUME CHANGE

-60%  -50%  -40%  -30%  -20%  -10%  0%  10%


Thanksgiving Day  Christmas Day
• Overall traffic in the region was down 50% in April 2020 compared to April 2019.

• Volumes increased through the spring. By June, regional average volumes were approximately 15% less than in June 2019. By October, average regional traffic volumes were approximately 10% less than they had been in October 2019.

• November and December brought more variation with the holidays and evolving travel and gathering restrictions. Average weekday regional traffic volumes in November and December were approximately 15-20% less in 2020 than 2019.

• The I-270 southeast of York Street location was an exception, because higher commercial and freight activity resulted in less significant decreases of only 25%. In October, this location had slightly more average weekday traffic than 2019.
April 2019 and April 2020 at US-285 W/O Sheridan Blvd, Denver
TIME OF TRAVEL CHANGE

October 2019 and October 2020 at US-285 W/O Sheridan Blvd, Denver
50 PERCENT VMT REDUCTION APRIL 2020

Pre-COVID 2019 - VMT by Purpose
Avg. Daily VMT = 85 million

- Shop, Social, School
- Work Commute - "Office"
- Work Commute - Other
- Small Com. Vehs.
- Big Trucks, Heavy Vehs.

April 2020 Shutdown VMT % by Purpose
Avg. Daily VMT = 42 million

- Shop, Social, School
- Work Commute - "Office"
- Work Commute - Other
- Reduced Shop, Social, School
- Laid off Workers
- Teleworking
- Small Com. Vehs.
- Big Trucks, Heavy Vehs.
• Higher telework rates remain among “office workers”
• Greater level of online education at home
• Generally, traffic patterns looked more like typical Saturdays
• Significant reduction in transit ridership (office and entertainment)
• More package deliveries
TRAVEL TRENDS SUSTAINED THROUGH 2020 (2)

• Major decrease in travel near:
  • Office parks, downtowns, universities
  • DIA, convention center, hotels
  • Entertainment venues
• Minor overall decrease in traffic = major decrease in congestion
• Traffic and parking impacts near mountain parks and trailheads
• Crashes and fatalities down at first; back on the rise
• Dangerous speeding levels and careless driving observed
QUESTIONS FOR THE FUTURE

• What will be the “new-normal” level for telework by office workers?
• Restructuring of office space and real estate?
• Will VMT increase with desire to live further from employer / home offices?
• When will transit ridership bounce back?
• Will entertainment and event venues return to pre-COVID levels?
• Ridehailing services? Bicycle and scooter sharing?
• Will the Denver region see continued population growth? (+ 1 million by 2050)
• Economic job recovery? Business travel? Conventions?
ADDITIONAL DATA: DRCOG REGIONAL TRAFFIC COUNTS

This map provides all-day (24 hour, both directions) total traffic volume data for the period of 2010-2019, as available. Toggle layers and basemaps using the icons on the right.

Traffic counts were made available to DRCOG from CDOT, local governments and toll road authorities. DRCOG does not collect traffic counts.

The numbers on the cluster bubbles show the total traffic counts within that area. Continue to zoom, click, and expand the legend for more detailed data.

For additional information about the Denver Regional Council of Governments Traffic Counts program, visit the DRCOG Traffic Counts webpage.
ADDITIONAL DATA: DRCOG REGIONAL TRAFFIC COUNTS

Includes short term traffic counts from multiple counts and years. Provided by local jurisdictions and CDOT.
QUESTIONS AND DISCUSSION