

COVID-19 Impact Analysis

MDOT SHA TDSD

Jong In Lee

October 8th, 2020

OUTLINE

Statewide (pre vs. post COVID)

- Trips/person
- Miles/person
- Work trips/person
- Non-work trips/person

Statewide (2019 vs 2020)

- Number of trips
- Number of trips 50-100 Miles

Counties (weekday)

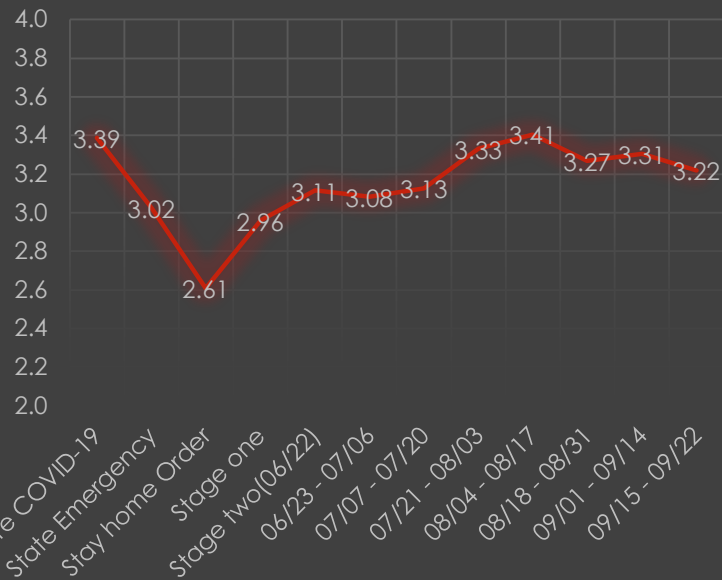
- Trips/person
- Work trips/person
- Miles/person

Data

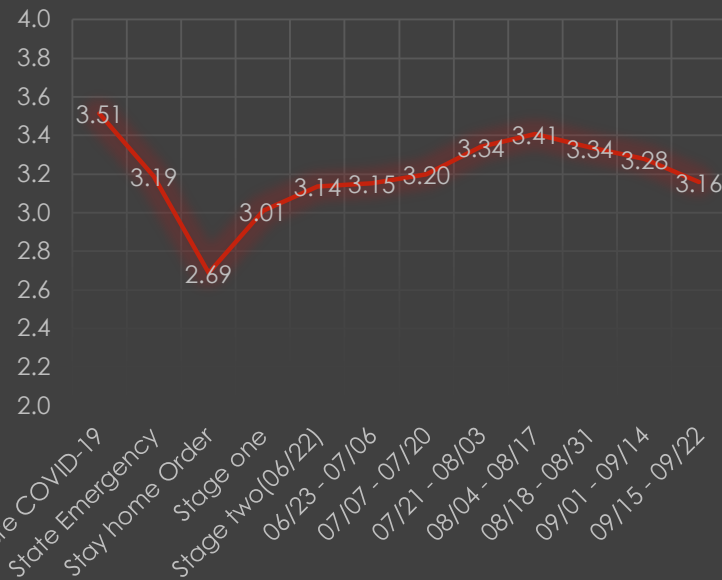
- University of Maryland CATT Lab
- Cell phone

COMPARISON CHARTS FOR TRIPS/PERSON

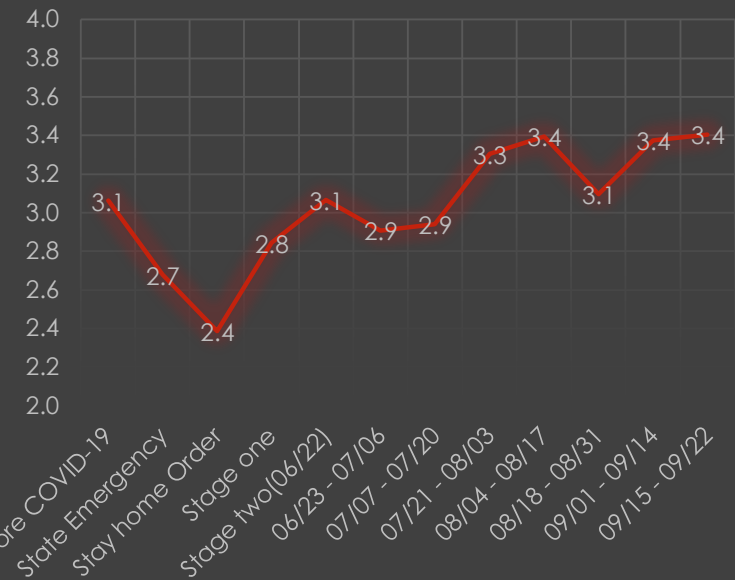
Trips/person



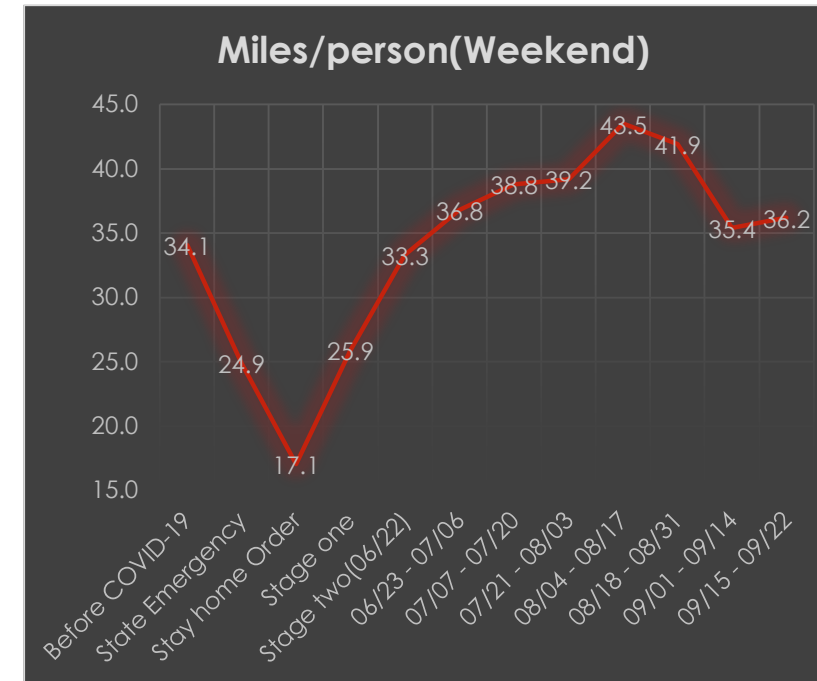
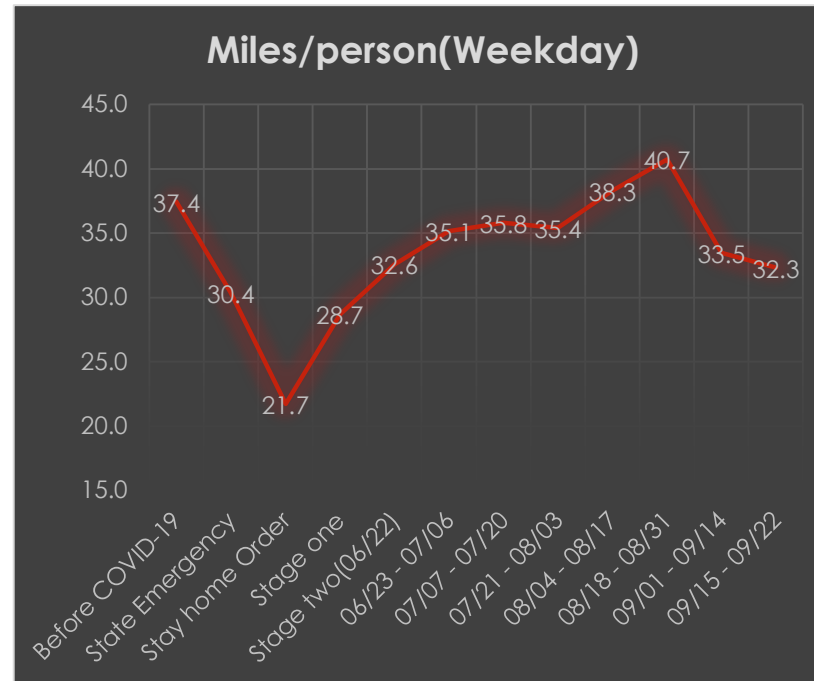
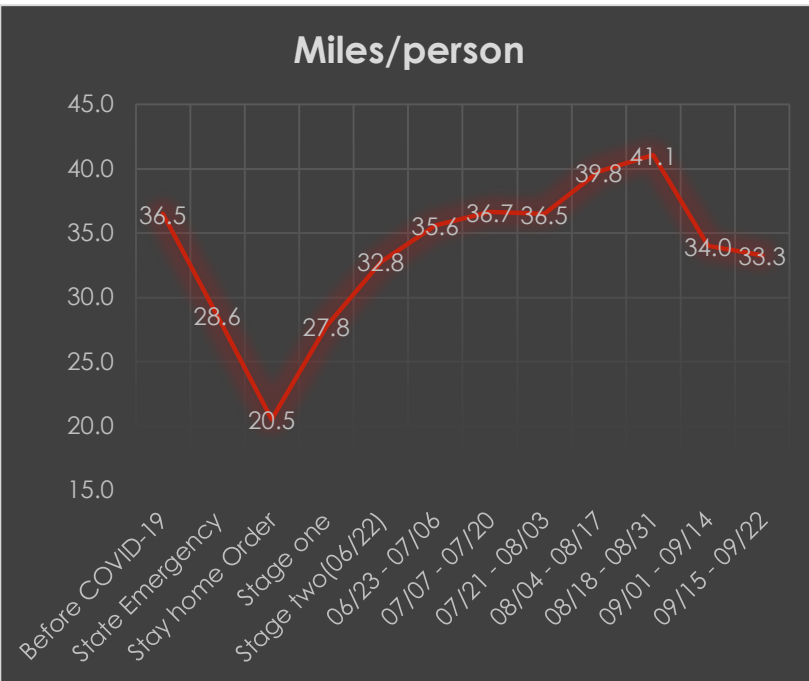
Trips/person(Weekday)



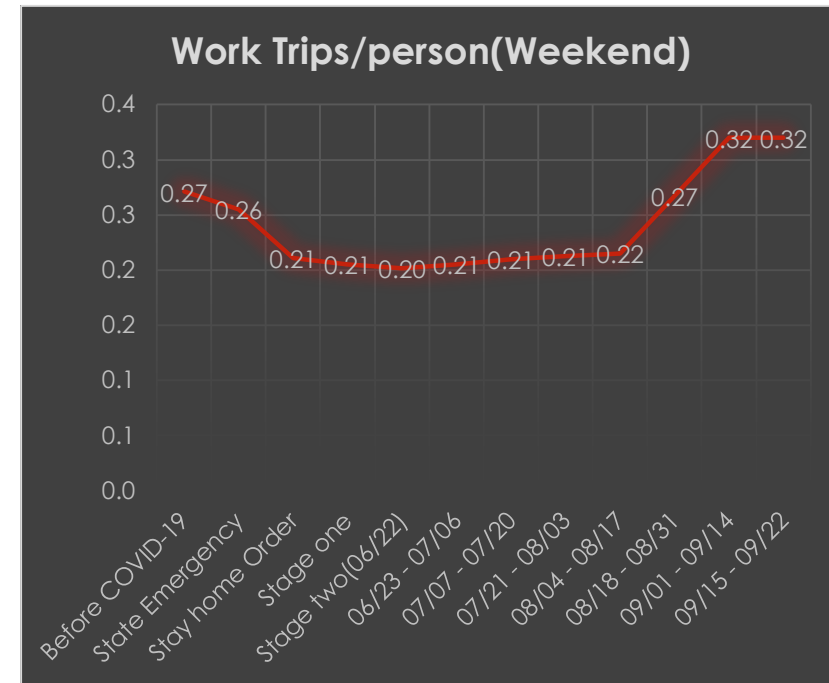
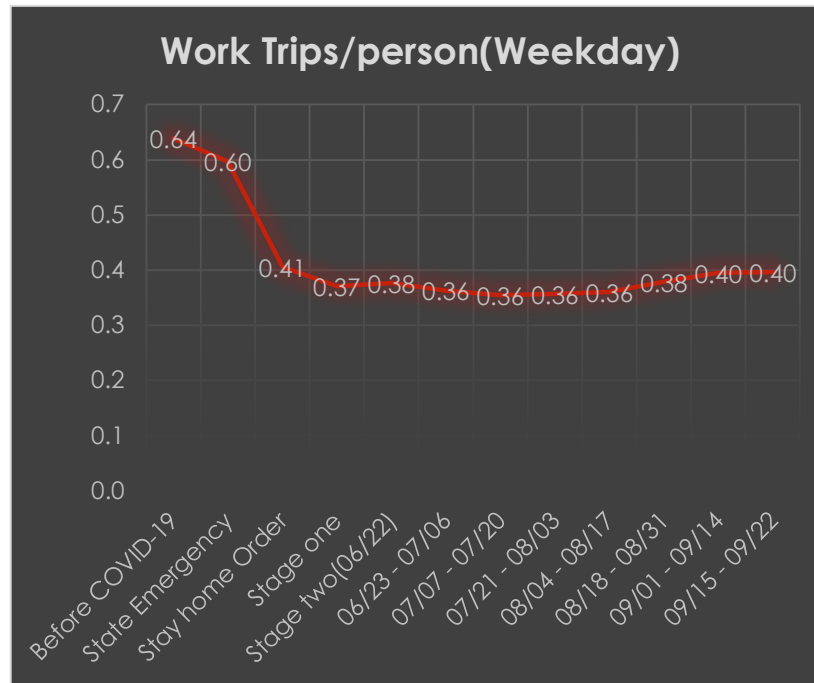
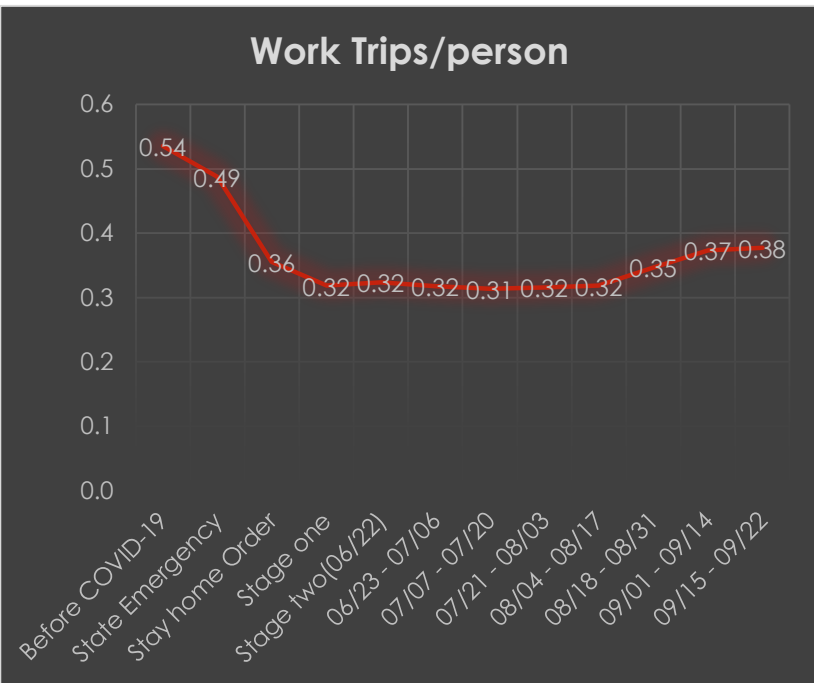
Trips/person(Weekend)



COMPARISON CHARTS FOR MILES/PERSON

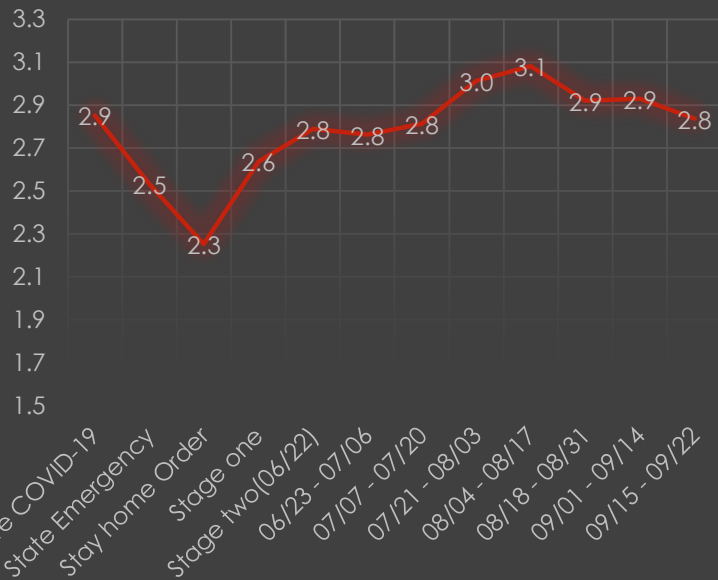


COMPARISON CHARTS FOR WORK TRIPS/PERSON

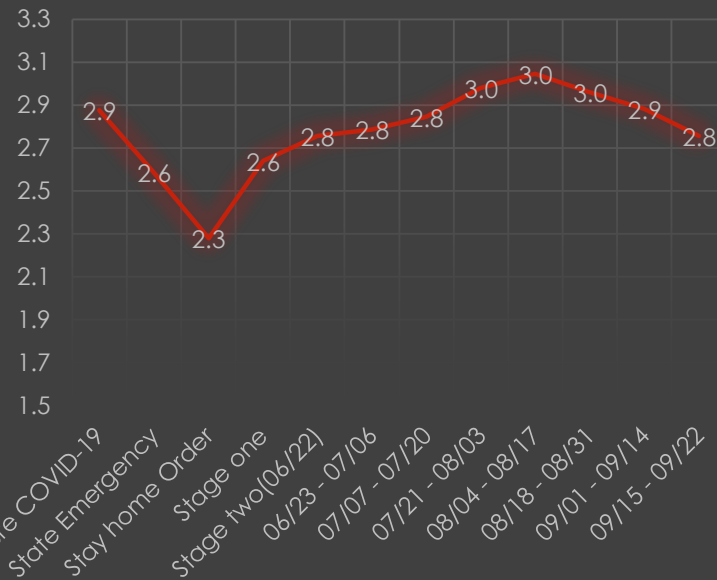


COMPARISON CHARTS FOR NON-WORK TRIPS/PERSON

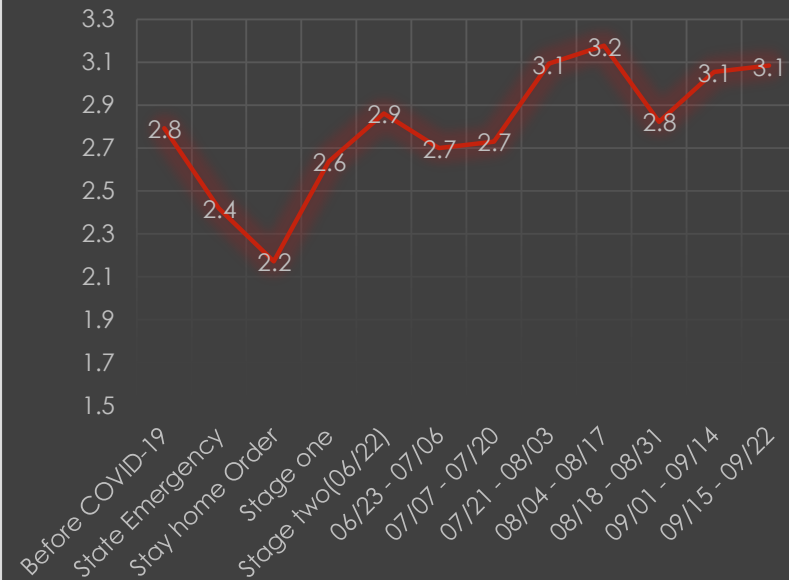
Non-work Trips/person



Non-work Trips/person(Weekday)



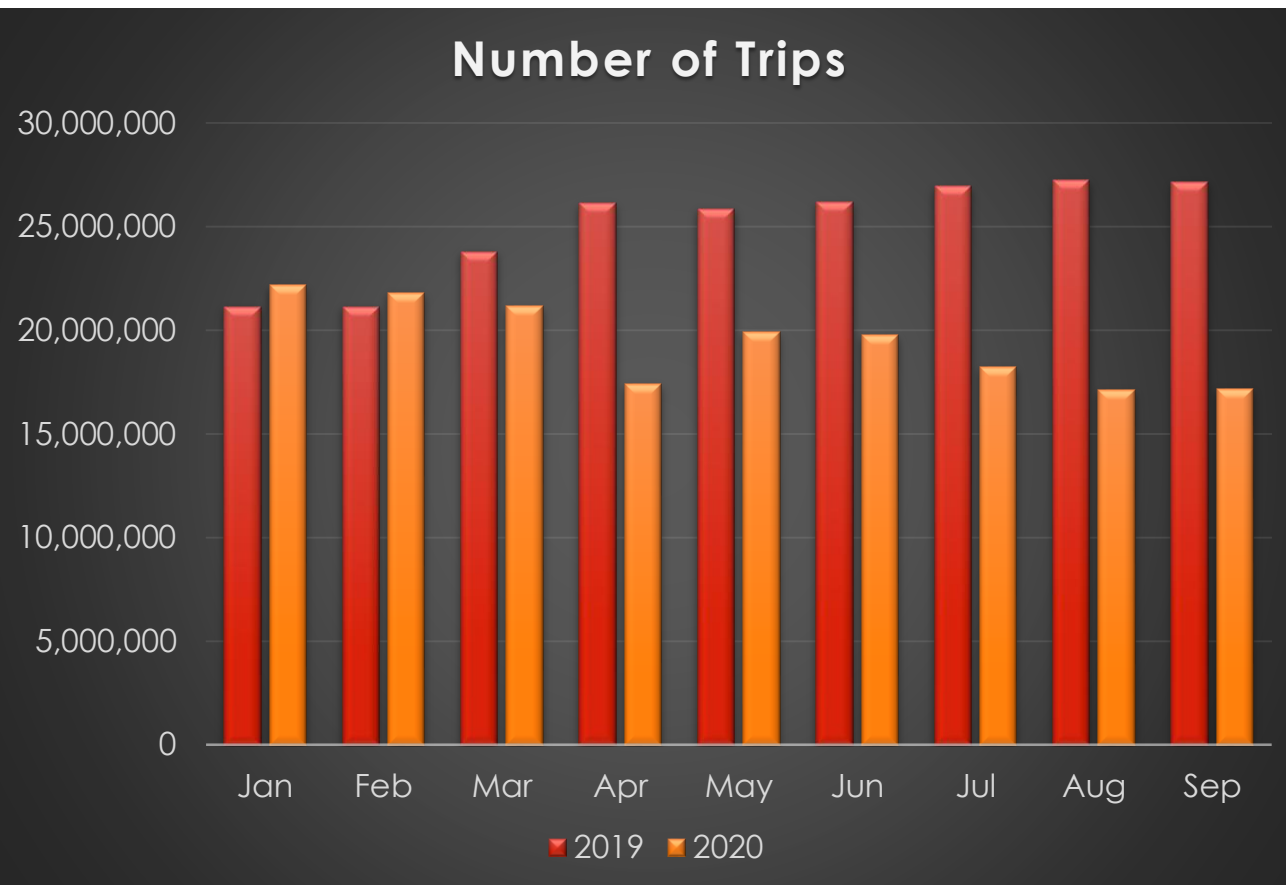
Non-work Trips/person(Weekend)



CHANGE RATE COMPARE WITH VALUES OF BEFORE COVID-19(WEEKDAY)

	% Staying Home	Trips/person	Miles/person	Work Trips/person	Non-work trips/person
State Emergency	41.2	-9.3	-18.9	-6.6	-10.0
Stay home Order	93.3	-23.5	-42.0	-36.4	-20.7
Stage one	58.8	-14.3	-23.4	-42.0	-8.3
Stage two(06/22)	49.8	-10.8	-13.0	-41.1	-4.1
06/23 - 07/06	54.4	-10.4	-6.1	-43.2	-3.1
07/07 - 07/20	49.5	-9.0	-4.4	-44.4	-1.1
07/21 - 08/03	51.2	-4.9	-5.4	-44.1	3.7
08/04 - 08/17	47.4	-3.0	2.2	-43.7	5.9
08/18 - 08/31	44.1	-5.1	8.8	-40.7	2.9
09/01 - 09/14	55.0	-6.7	-10.6	-38.2	0.2
09/15 - 09/22	49.9	-10.1	-13.7	-37.9	-4.2

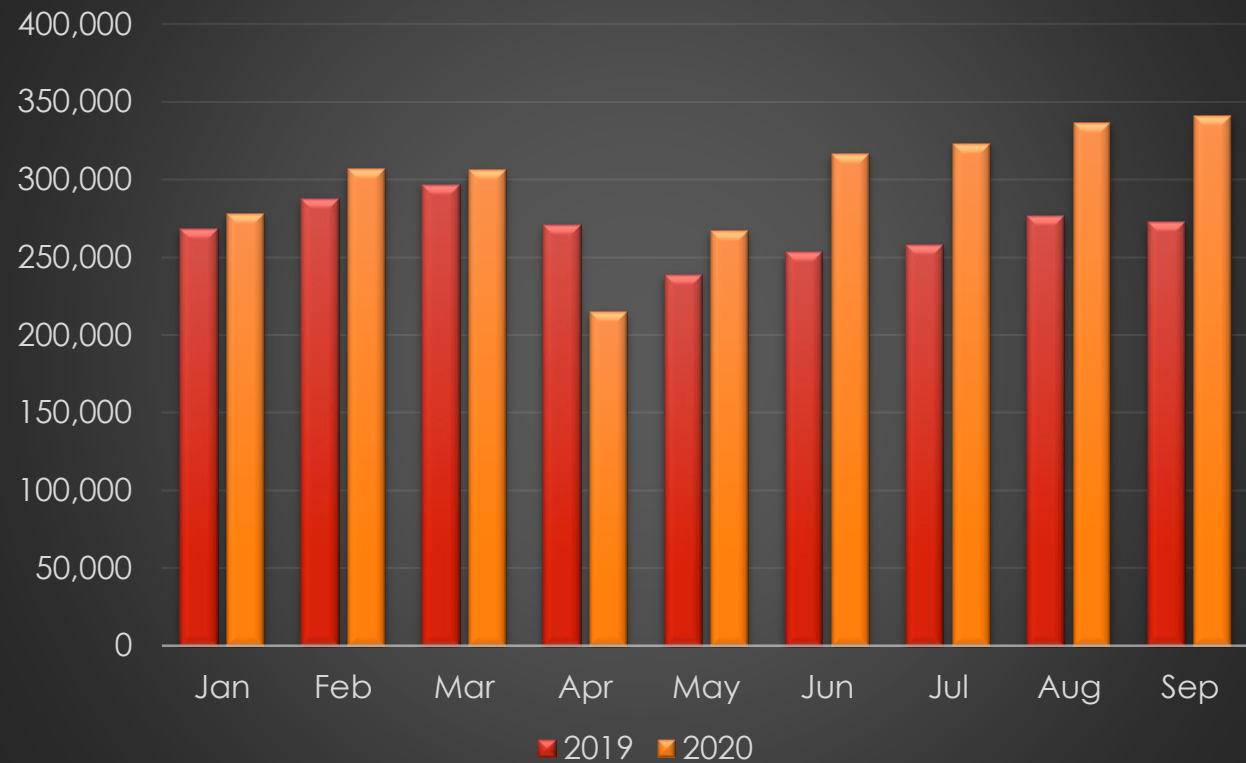
NUMBER OF TRIPS (2019 VS. 2020)



Month	2019	2020	Difference	Change Rate
Jan	21,142,513	22,160,081	▲ 1,017,568	▲ 5%
Feb	21,122,086	21,806,505	▲ 684,419	▲ 3%
Mar	23,778,544	21,163,419	▼ 2,615,125	▼ 11%
Apr	26,114,831	17,406,023	▼ 8,708,807	▼ 33%
May	25,884,422	19,898,220	▼ 5,986,203	▼ 23%
Jun	26,185,555	19,786,010	▼ 6,399,545	▼ 24%
Jul	26,977,245	18,207,017	▼ 8,770,227	▼ 33%
Aug	27,234,352	17,123,994	▼ 10,110,358	▼ 37%
Sep	27,152,232	17,169,956	▼ 9,982,276	▼ 37%

NUMBER OF TRIPS 50 –100 MILES (2019 VS. 2020)

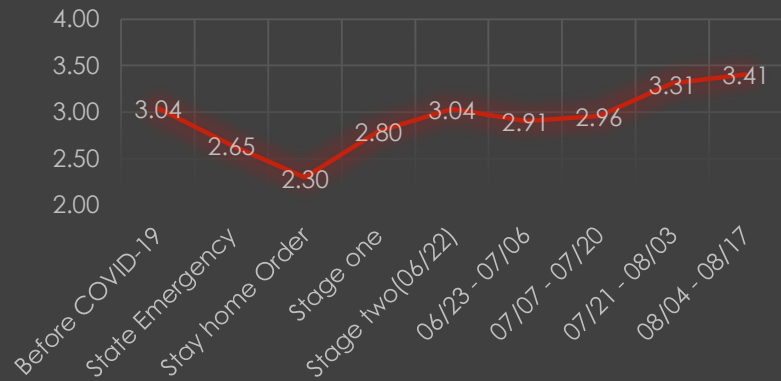
Number of Trips between 50-100 miles



Month	2019	2020	Difference	Change Rate
Jan	268,065	277,768	▲ 9,703	▲ 4%
Feb	287,523	306,536	▲ 19,013	▲ 7%
Mar	296,457	305,767	▲ 9,310	▲ 3%
Apr	270,235	214,477	▼ 55,758	▼ 21%
May	238,641	266,818	▲ 28,177	▲ 12%
Jun	253,383	316,010	▲ 62,627	▲ 25%
Jul	258,080	322,762	▲ 64,683	▲ 25%
Aug	276,362	336,335	▲ 59,973	▲ 22%
Sep	272,380	340,881	▲ 68,501	▲ 25%

COUNTIES - ANNE ARUNDEL

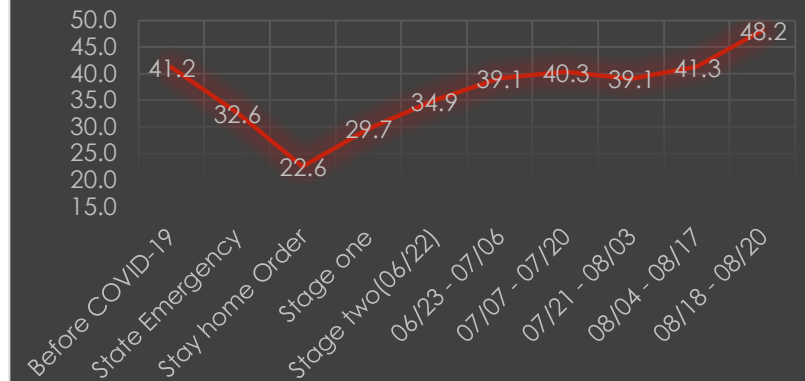
Trips/person (weekday)



Work Trips/person (weekday)

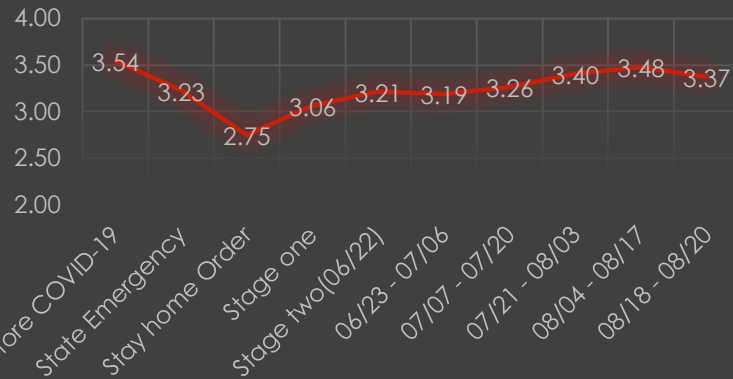


Miles/person (weekday)

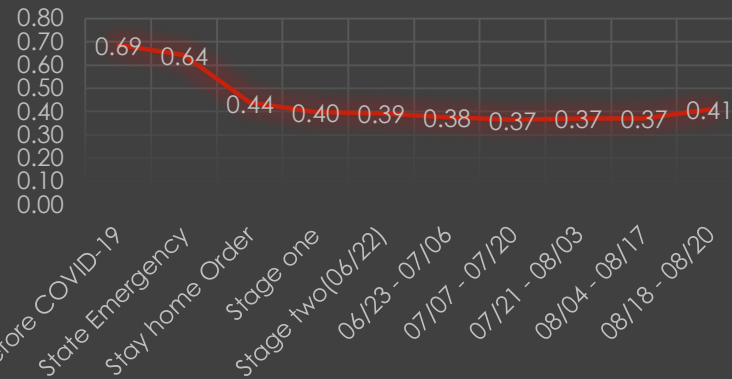


COUNTIES – BALTIMORE COUNTY

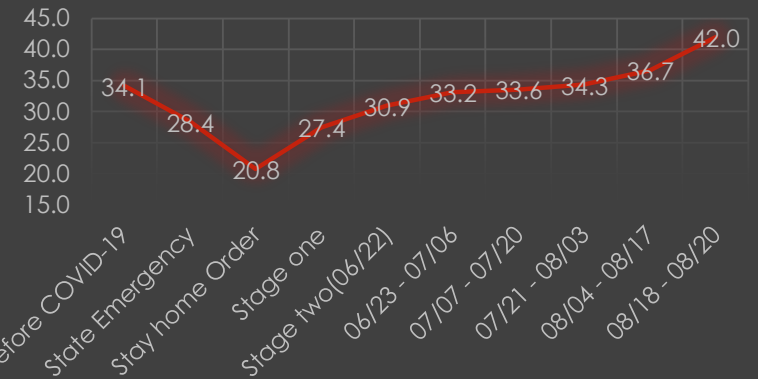
Trips/person (weekday)



Work Trips/person (weekday)

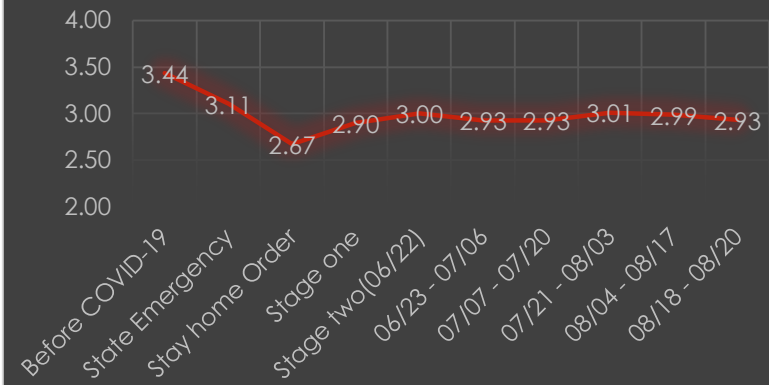


Miles/person (weekday)

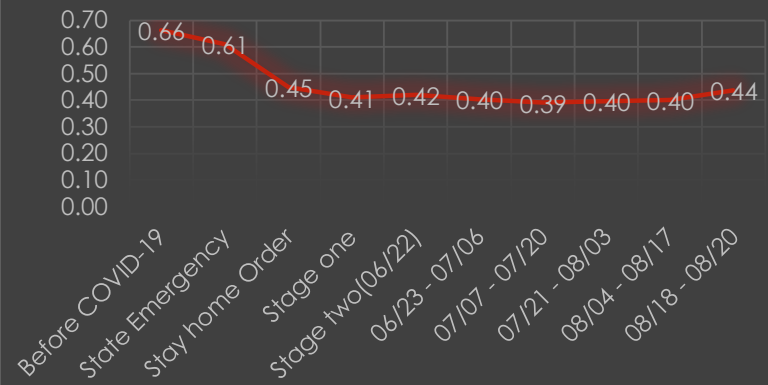


COUNTIES – BALTIMORE CITY

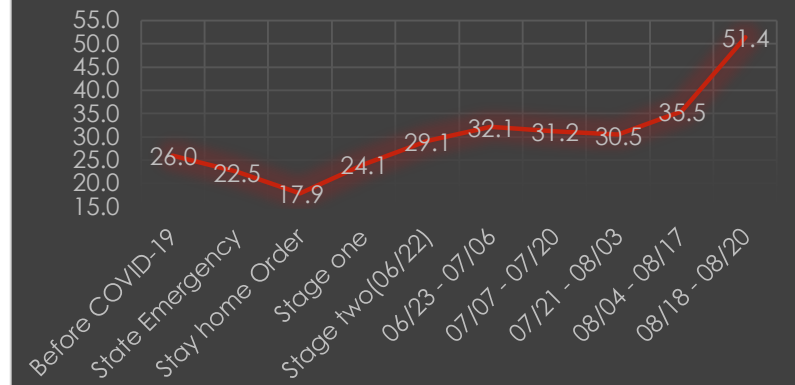
Trips/person (weekday)



Work Trips/person (weekday)



Miles/person (weekday)

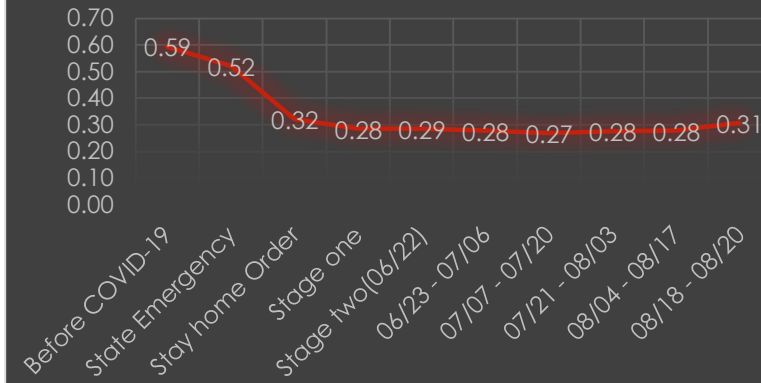


COUNTIES – HOWARD

Trips/person



Work Trips/person

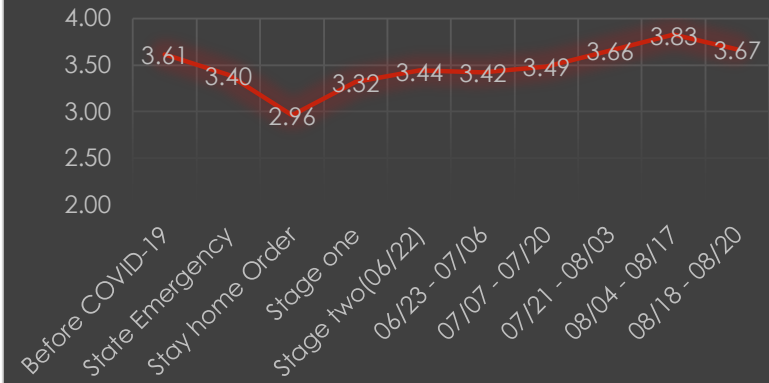


Miles/person

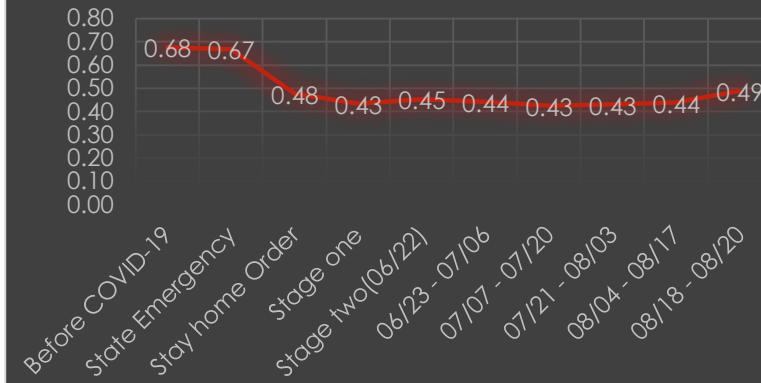


COUNTIES – CARROLL

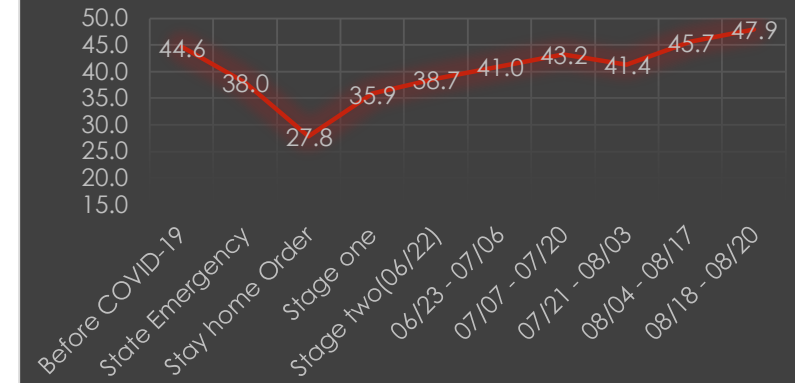
Trips/person



Work Trips/person



Miles/person



CONCLUSIONS

Work trips vs personal trips

- Personal trips have largely recovered
- Work trips are still down

Number of longer trips has increased

- Driving over flying
- Less travel to urban places

Impacts are greater in:

- More urban areas
- More white-collar/tech areas



THANK YOU!

