# **COVID-19 Outbreak: Metro Area Travel Declines**

Collaborative research between the Metropolitan Council,
Metro Transit and MnDOT



### Motivation

- Minnesota Management and Budget office (MMB) asked MnDOT, Metropolitan
   Council and Metro Transit for measures of social distancing
- Measures meant to inform disease modeling efforts and evaluate effectiveness of social distancing policies
- Traffic and ridership data provide near-real-time measures of change
- Existing research was quickly re-tooled



### Sources of data

#### **MnDOT**

 100+ Automated Traffic Recorders (ATRs) spread across the state on various roadway types

### Metropolitan Council

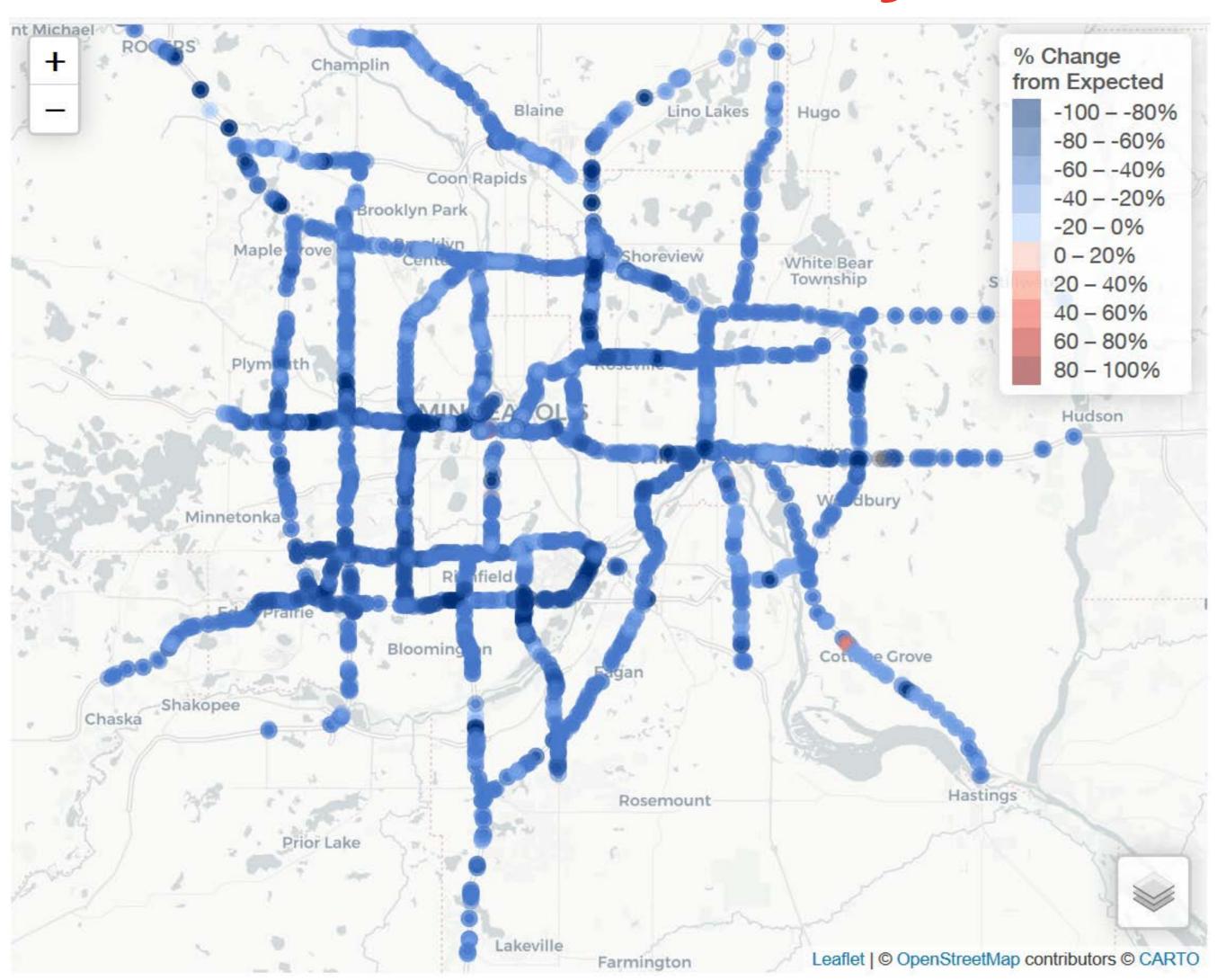
 1000+ MnDOT Regional Transportation Management Center (RTMC) traffic sensors on metro area freeways

### **Metro Transit**

Automated passenger counters (APCs) on buses and rail lines



# Metro Area Freeways



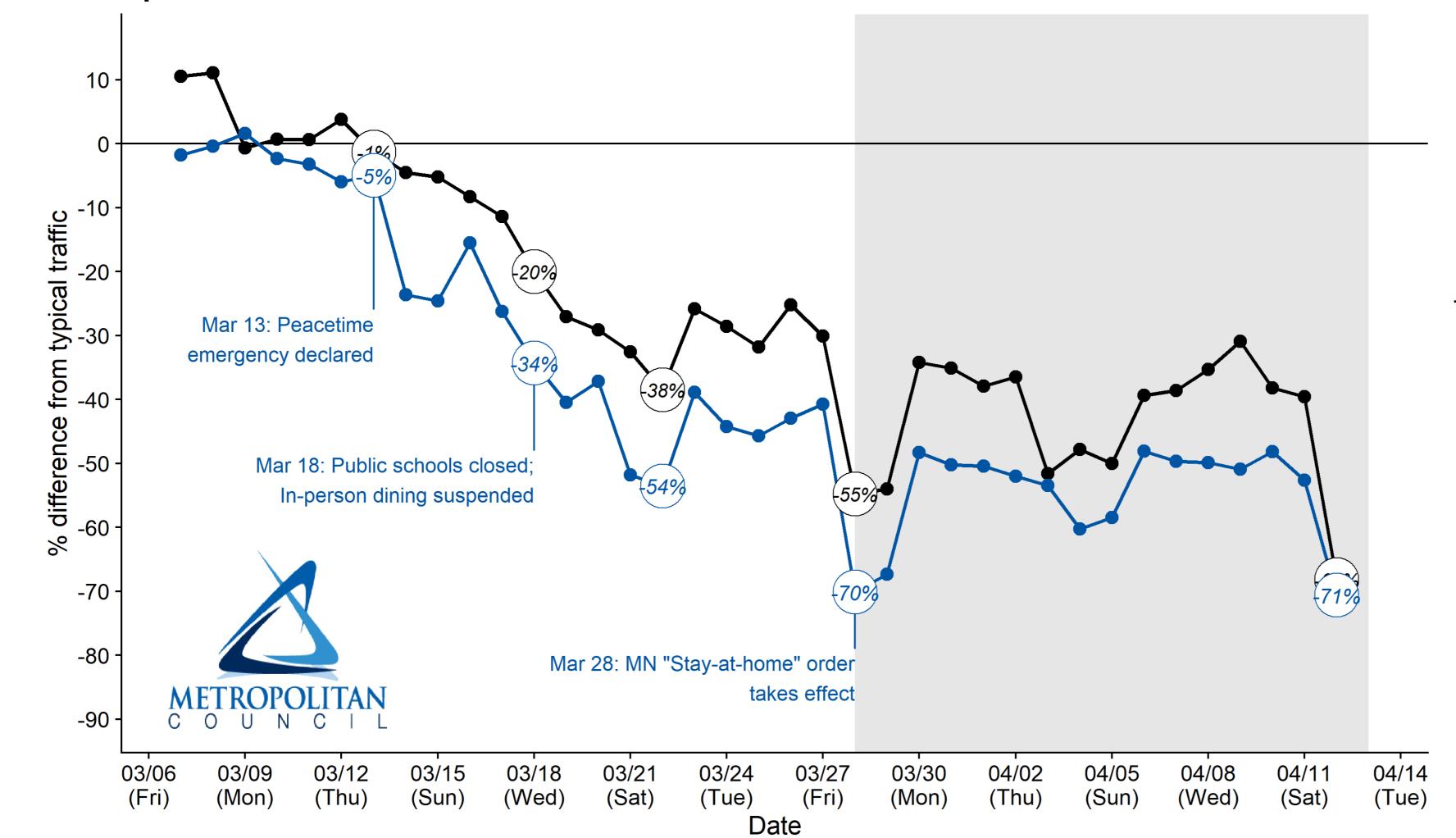
Interactive mapping application:

http://metrotransitmn.shinyapps.io/covid-traffic-trends/



# State actions appear in traffic data

**Traffic on MnDOT Roads Updated 2020-04-13** 



#### Traffic Sensor Group

MnDOT Metro Freeways

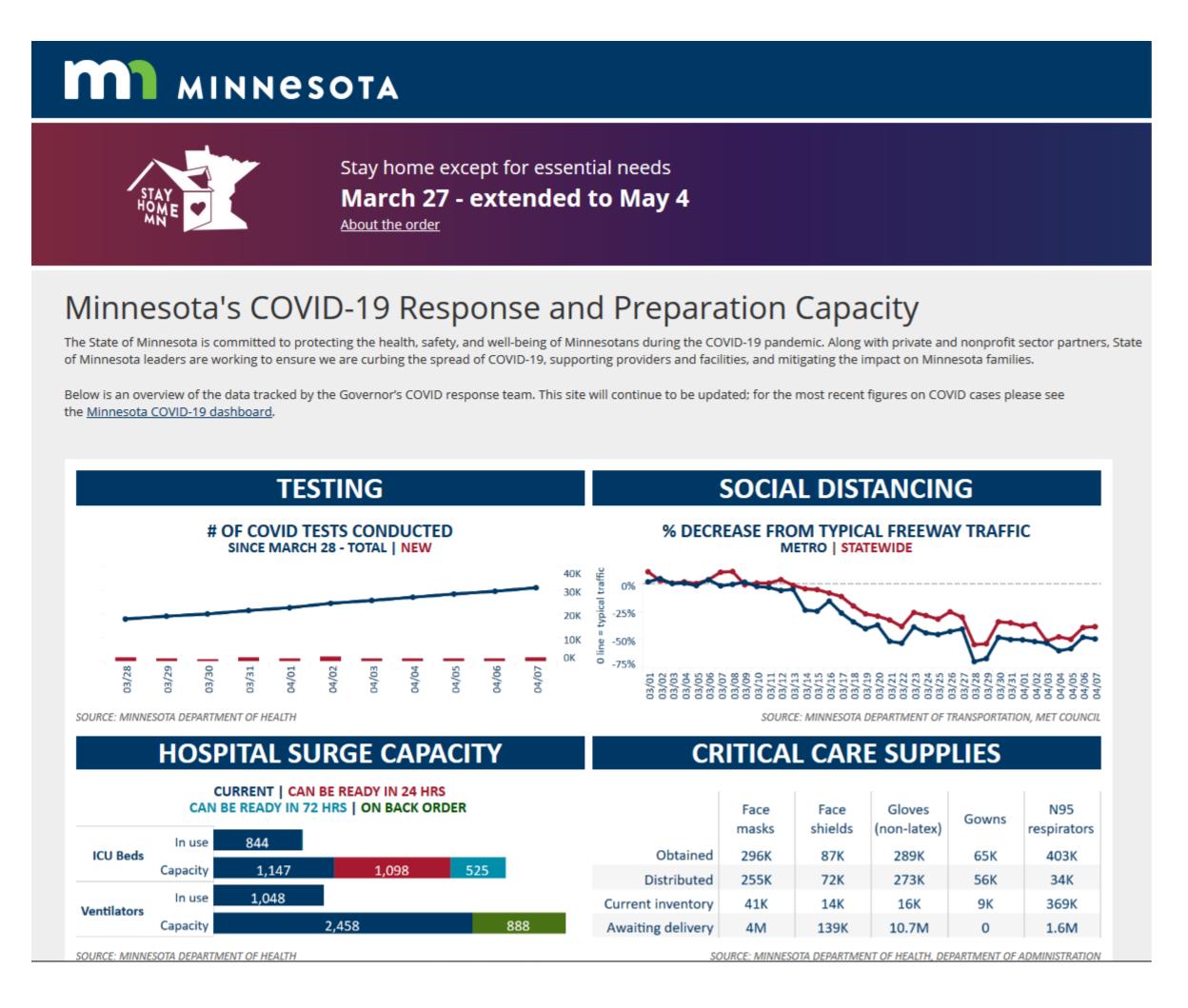
• (1000+ Stations)

MnDOT Statewide

• (105 Stations)



## Traffic data in state COVID-19 dashboard



Data updated daily in coordination with MMB

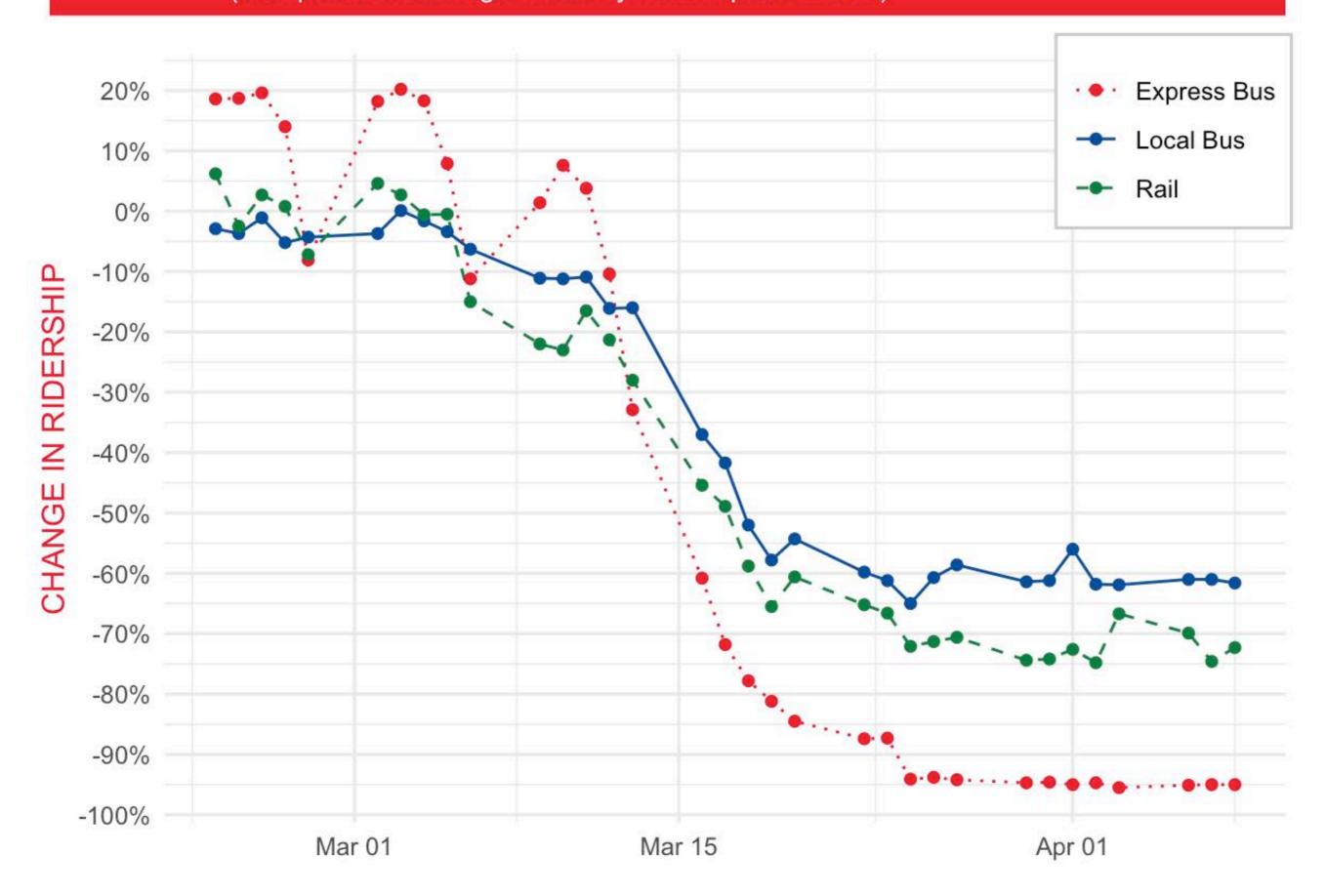
https://mn.gov/covid19/data/response.jsp



# Metro Transit: "thank you for not riding"

#### Percent Change in Weekday Ridership

(Compared to average weekday ridership 2/24-2/28)



\*Preliminary estimates, subject to change

- 9-5 commute trips collapsed
   March 16 week (school closure)
- service reduction March 25
- overall system down 72%
- managing system for social distancing capacity
- essential trips still supported

### Planned Research

- Using other sources of data to measure social distancing and the return to "normal"
- Developing collaborations with transportation scientists at the University of Minnesota
- Long-term effects of COVID-19 on travel and ridership
- Continued collaboration between MMB, MnDOT, Metro Transit and Metropolitan Council

