



# Telecommuting: Minnesota Efforts, Benefits and Future

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May 18, 2020





# Presentation Outline

- Organizational Background
- eWorkPlace
  - Overview
  - Driving Forces
- Work Plan Approach
- Telework Benefits and Overall Results
- Conclusions and Some Thoughts



## Humphrey School of Public Affairs

- **Mission:** to inspire, educate, and support innovative leaders to advance the common good in a diverse world.
- Ranked in top 10 public policy and planning schools
- 422 students and 46 full-time faculty
- **State and Local Policy Program** is one of 8 research and outreach centers, founded in 1991, with a focus on transportation research

## Center for Transportation Studies

- **Mission:** CTS serves as a catalyst for transportation innovation, advancing knowledge through research, education and engagement.
- University-wide Center
- 150 faculty and staff researchers
- Fostering stakeholder and public engagement is a key focus area



# What is TPEC?

→ Transportation Policy and Economic Competitiveness Program (TPEC) is a research program within The State and Local Policy Program: an HHH School Research and outreach center  
Focusing on transportation policy and Economic Development

→ TPEC Research focuses on...

- ◆ Finance
- ◆ Industry Clusters and Freight
- ◆ Technology
  - automated vehicles
  - telework





# What is Telework?



Working away from the office, either from home, another location or while traveling



Can be performed full- or part-time





# What is eWorkPlace?



Free telework assistance to Minnesota employers



Helps employers introduce telework and enjoy its benefits



Enables employees to work from home and connect to the office digitally



Benefits: reduces congestion, saves time and money, Improve Environment and is beneficial for employers and employees alike



# eWorkPlace Phases

## Phase I

Marketing, awareness and  
implementation campaign  
Promoted teleworking and  
flexible work scheduling  
Reduced peak period  
commuting on congested  
roads

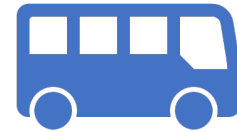
## Phase II

Focused on Hennepin County  
Aimed to reduce congestion  
and improve air quality by  
increasing telework



# Phase III

- March 2017 through December 2018
- Focused on 35W@94 construction project
- Collaboration with Minnesota Department of Transportation (MnDOT), Metro Transit Hennepin County, City of Minneapolis and other involved parties
- Funded by federal TDM grant and MnDOT match







# Driving Forces

- Traffic Congestion Doesn't Have to be Accepted!
- Same Old Approach Will Produce Same Results
- Fed's challenge to use the four Ts: Tolling, Transit, Technology and Telecommuting to manage congestion
- Minnesota selected to be one of five Urban Partnership Agreements and received over \$133 million grant
- Must measure results



# Driving Forces

- Transportation cause of 1/3 of greenhouse gas emission
- Even 55 miles per gallon efficiency standard will have modest impact (Sec. Ray LaHood)
- VMT/Trip reduction is the only way
- Telework maybe the best option
- State Climate Action Plan



# The Costs of Congestion

- The financial cost of congestion:
  - 8.8B hours of delay and 3.3 Billion gallons of wasted fuel annually\*
  - Congestion Cost of \$166B and extra 54 hour in urban area\*
  - In 2019 Twin Cities metro area yearly delay 56 hours costing \$980. \$2.08 Billion\*
- Congestion hurts family and civic life, impacting:
  - Where people live and work
  - Where they shop
  - How much they pay for goods and services



Congestion on I-95 in Northern Virginia

\* Texas Transportation Institute, 2019 Urban Mobility Report



# Market Research

- To better understand the barriers and opportunities that exist for telecommuting and provide input in the development of a Marketing/Communications (MARCOM)
- To provide input into branding, advertising and marketing/educational materials.

# Work Plan

- Identify Target Employers
- Marketing and Education
- Recruitment
- Migration
- Evaluation and Measurement





# Program Services





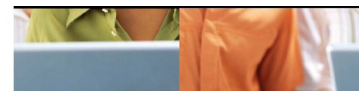
# Program Services

- Wealth of telework information via the eWorkPlace website ([www.eworkplace-mn.com](http://www.eworkplace-mn.com)), toolkits, and blog
  - Managers' guide
  - Policy templates
  - Selection guide and checklist
  - Solutions to issues/barriers
  - Quick start options
  - Case studies (employer & teleworker)
  - Business reports
  - White papers
  - *Ask the Expert* corner

**Manager's Guide to Telework**



**eWorkPlace**





# Events



Webinars



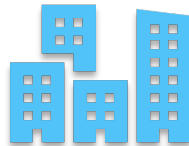
Manager  
telework  
trainings



Employee  
telework  
trainings



35W@94 Open  
Houses



Downtown  
Employer  
telework event



Tabling at  
various  
employer open  
houses





# Social Media



EWorkPlace  
@eWorkPlaceMN

Home

Reviews

Photos



Have you heard about eWorkPlace??

Like Share Suggest Edits ...

Sign Up Send Message



**eWorkPlace MN**  
@eWorkPlaceMN

Public program for Twin Cities area employers to implement and promote telecommuting, reduce traffic, and so much more! [bit.ly/TeleworkMN](http://bit.ly/TeleworkMN)

Twin Cities, MN

[eworkplace-mn.com](http://eworkplace-mn.com)

Joined May 2009

72 Photos and videos

Tweets 1,003 Following 1,376 Followers 655 Likes 816 Lists 9 Moments 0

Tweets Tweets & replies Media

Pinned Tweet

**eWorkPlace MN** @eWorkPlaceMN · 24 Apr 2018

Do you get to work using 35W between 94 and 62? Reconstruction is going to slow things down, plan ahead to work from home! We help Twin Cities employers who want to begin or improve their use of telework: [eworkplace-mn.com/get-started/](http://eworkplace-mn.com/get-started/)

**Summer 2018 – Fall 2018**

Hwy 65 to/from downtown and 12th St ramp CLOSED Summer 2018

Portland Ave Bridge OPEN



# the bottom line





# Evaluation plan

- Longitudinal survey of eWorkplace participants
  - Start of program
  - 3 months after
  - 9 months after
- Commute Tool / Diary
  - Weekly commuting behavior
  - Perception of telework
  - Trip diary: compare a telework day and an office day



# Evaluation Objectives

- Observe changes in attitudes towards telework
  - Productivity
  - Available work hour
  - Preferred number of telework days
- Observe changes in travel behaviors
  - Modes
  - Number of trips
  - Length (VMT)
  - Time of day (peak vs. non-peak)
  - I-35W and I-394 usage



# Participation Phase 1

- 50+ Employers
  - Non-profit (e.g. Fairview, Wilder)
  - Public (e.g. Hennepin and Carver Counties)
  - Private (e.g. Turck, Ecolab)
- 4200+ employees
  - Participants per employer range from 1 – 1400
  - Employees participating in surveys: 1005





# Employer Survey

- 75% felt productivity stayed the same or increased
- 95% plan to continue or expand their telework program
- Benefits: Increased job satisfaction, productivity, and reduced absenteeism
- Challenges: More cultural than technical
- Lessons: Seek strong “top down” support. Start with a pilot. Use resources available



- 90% of participants reported an increase in productivity
- 85% of supervisors felt telework had a positive effect on productivity
- 100% of co-workers surveyed felt that teleworkers were accessible and responsive



- 95% case processing rate
- 77% decrease in unprocessed in-basket items
- 9% increase in case processing

"I have noticed that the response time of my staff has improved, and this month's outcome measures have improved as well

– HSPHD Support

*Manager*







- 16% increase in calls answered
- 10% increase in quick call resolution
- 4.5 out of 5 rating for customer satisfaction

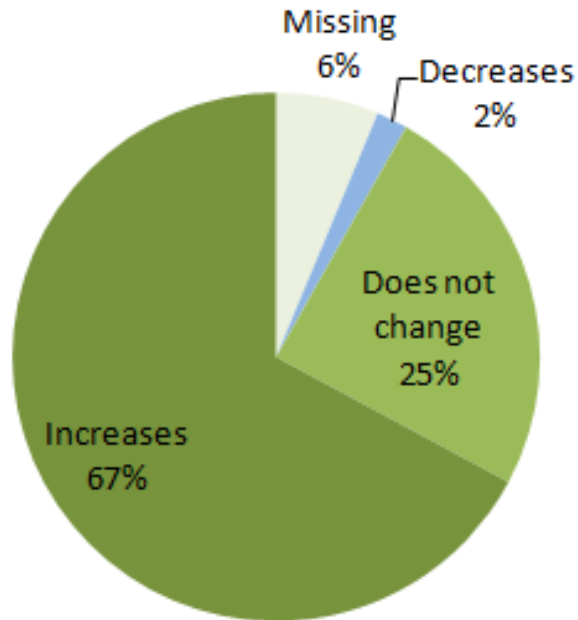


“Telework is a win-win situation – a good fit for the associate as well as out department.”

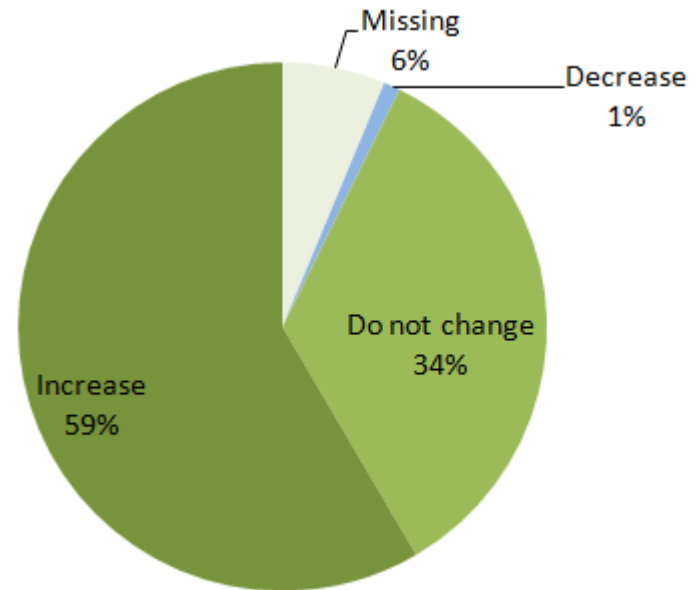
*-Ecolab IT Manager*



# Increased Productivity



67% Employees Reported Increased Productivity



59% Employees Reported Increased Available Work Hours



# Road Less Traveled

Teleworkers  
take 80%  
fewer trips  
during the day

**-80%**



Teleworkers  
take  
93% fewer  
daily trips  
during peak  
hours

**-93%**



Teleworkers reduced  
their daily VMT by 92%  
vs. non-teleworkers  
on telework days

**-92%**





# Emission Impacts

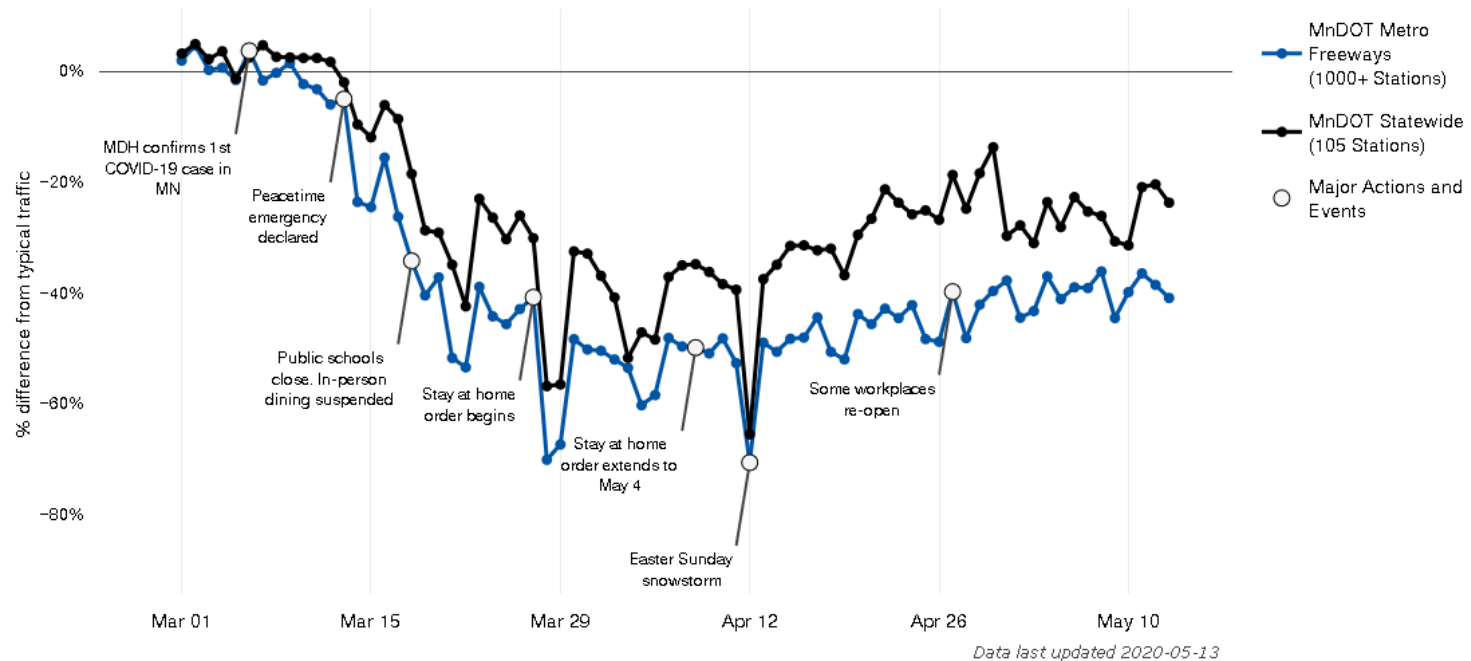
4,212  
eWorkPlace  
Participants

means 8.2 million  
fewer pounds of CO<sub>2</sub>  
released each year

which is equivalent  
to planting 1,000  
acres of forest



# COVID-19 (Telework?) Impact on Traffic Volumes in Minnesota



- <https://metrotransitmnh.shinyapps.io/covid-traffic-trends/>

# COVID-19 (Telework?) Impact on Traffic Volumes in Minnesota

## March 4, 2020

Data last updated 2020-05-13

Decreases in freeway travel are occurring across the Twin Cities metropolitan region

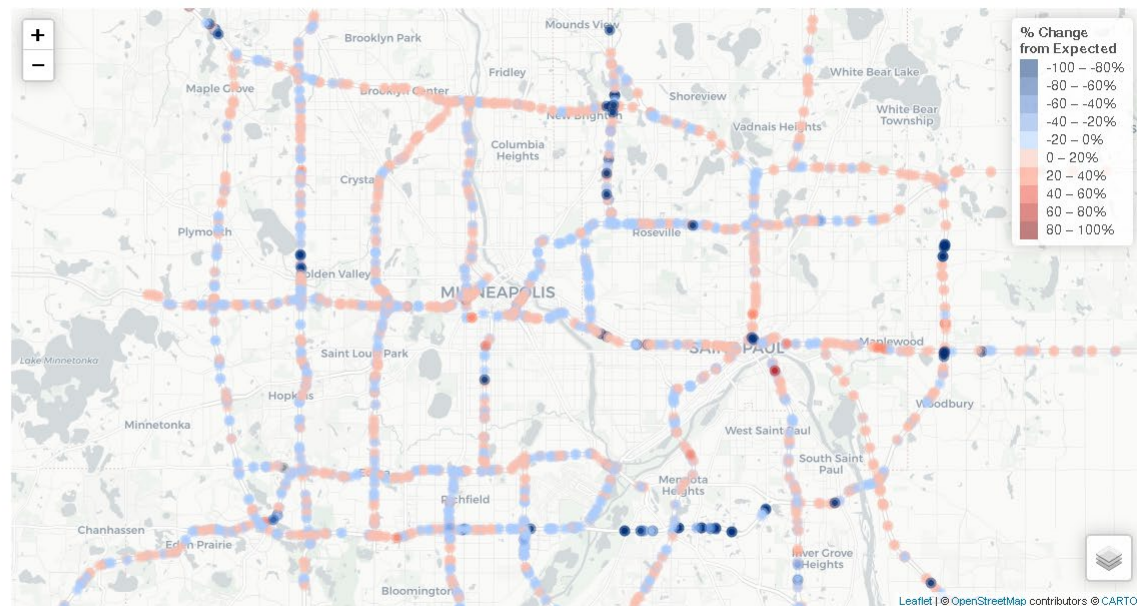
The map shows the decreases in travel at individual traffic monitoring sites across the Twin Cities Metropolitan area. Traffic monitoring is performed by the Minnesota Department of Transportation (MnDOT) using detectors built into the infrastructure of the roads. These detectors are usually used to estimate congestion along Metro area highways.

Select a date to see change in the map over time

03/04/2020

Select a corridor

I-94, TH 7, I-35W, TH 61, I-94 CD, I-35E, ▾



For an accessible version of this information, please contact us at [public.info@metrotransitmn.org](mailto:public.info@metrotransitmn.org)

- <https://metrotransitmn.shinyapps.io/covid-traffic-trends/>



# COVID-19 (Telework?) Impact on Traffic Volumes in Minnesota

## March 18, 2020

Decreases in freeway travel are occurring across the Twin Cities metropolitan region

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03/18/2020

Select a corridor

I-94, TH 7, I-35W, TH 61, I-94 CD, I-35E, ▼



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# COVID-19 (Telework?) Impact on Traffic Volumes in Minnesota

May 13, 2020

Decreases in freeway travel are occurring across the Twin Cities metropolitan region

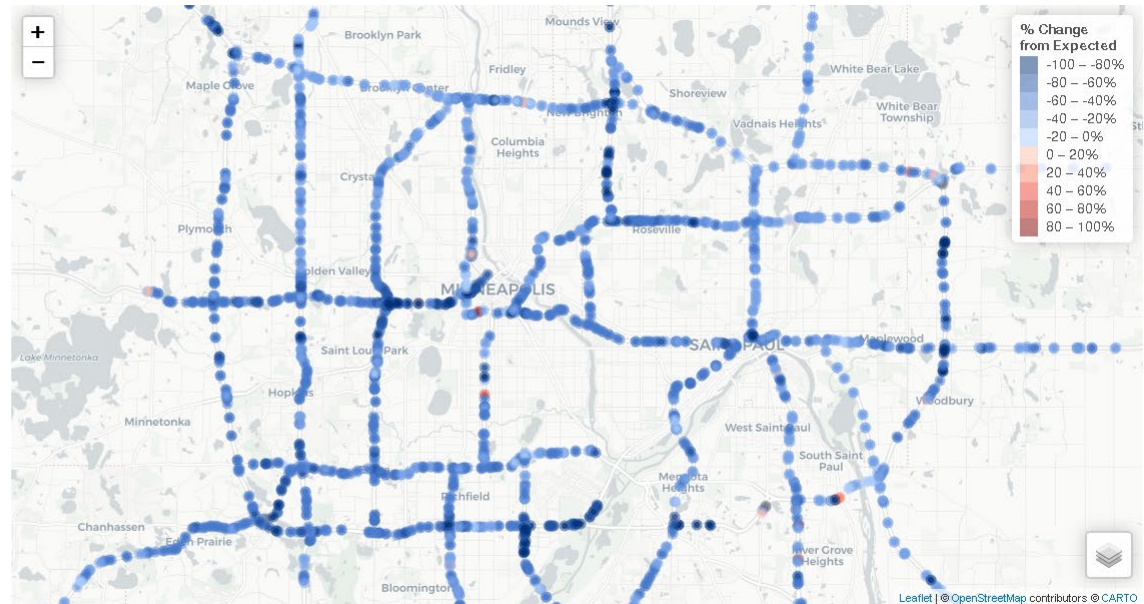
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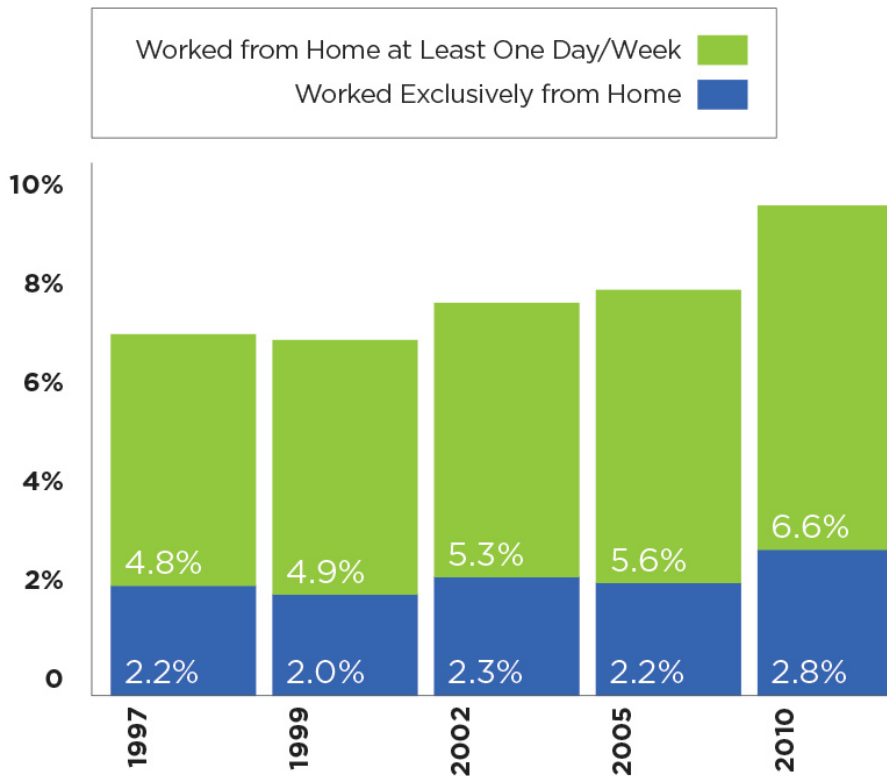
# Recent Traffic Volumes in Minnesota

- [https://www.gstatic.com/covid19/mobility/2020-05-07\\_US\\_Minnesota\\_Mobility\\_Report\\_en.pdf](https://www.gstatic.com/covid19/mobility/2020-05-07_US_Minnesota_Mobility_Report_en.pdf)
- County by County report
- As of May 7:
  - 46% decline in Work Place trips
  - 48% decline in transit trips



# Telework is growing

**Percentage of American Workers Who Work from Home (1997 - 2010)**





# Workers who could work at Home

- Workers who could work from home 28.8%
- Who did work at home 24.8%
- Worked at least one day/week at home 8.08%

\* US Bureau of Labor Statistics period 2017-2018



# Should not forget

Workers who could work at home

## Race

- White 29.9%
- Asian 37.0%
- Black 19.7%
- Hispanic 16.2%



# Should not forget

Workers who could work at home

## Educational Attainment

- Less than High School 4.2%
- High School Graduates 12.6%
- Some collage or Associate Degree 24.2%
- Bachelor's degree or Higher 51.9%



# Questions for future

- Will telecommuting be the part of the “new normal?” To what degree will companies continue to allow their employees the freedom to telecommute? Two to three days per week of telecommuting is considered ideal for employee performance.
- What will be the impact of this new normal (if any) on vehicle miles traveled and highway congestion? An approximate 5% reduction in peak period volume could eliminate most of the Minneapolis/St. Paul region’s congestion. How will increased home delivery play into this equation?





# Questions for future

- What public policy strategies are needed to ensure that telecommuting continues to the level necessary to reduce trips and to either eliminate or significantly reduce peak period congestion?
- This can have major impacts on transportation investment needs and improvement of air quality.
- We seek to study telecommuting's geographical and equitable implications during the COVID-19 pandemic. The availability of broadband also will also significantly impact the findings.



# Broadband Needs

- Increasing needs for Speed and Capacity
- Ever increasing need for reliability
- Disparity due to cost and availability





# THANKS

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  - 612-626-9946