TELECOMMUTING IMPACTS OF COVID-19

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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
Focused on 35W/94 reconstruction
Collaborated with MnDOT, Hennepin County, City of Minneapolis
Funded by Federal TDM grant and MnDOT till 12/2018
COVID-19: The World Went Remote

- 43.5% of households had at least one person telecommuting in MN (BTS)

- 12.2% of workers in Minneapolis Downtown summer of 2020
  30% in May 2021, expect 50% this fall of 218,000 in February 2020
  (Minneapolis Downtown Council)

- 32% reduction in trips to workplace (Minnesota)

- 42% reduction in trips to workplace (Hennepin County)
  - Google Mobility changes on June 10, 2021 vs. baseline

- 35.2% full time WFH in May vs. 8.2% in February (Federal Reserve)

- 71.7% of workers that could work from home effectively did (Federal Reserve)
<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>29.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>37.0%</td>
</tr>
<tr>
<td>Black</td>
<td>19.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.2%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>4.2%</td>
</tr>
<tr>
<td>High school graduates</td>
<td>12.6%</td>
</tr>
<tr>
<td>Some college or associate degree</td>
<td>24.2%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>51.9%</td>
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</tbody>
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Income makes the difference

Source: Census, Pulse Survey, September 2 – 14, 2020
Who is teleworking?

Persons 18+ in households where at least 1 person substituted in-person work for telework due to COVID-19, for Minnesota
Recessions of 1990, 2001 and 2008 impacted the top 25% of income earners and bottom 25% income earners at about the same rate.

Covid-19 recession, the top 25% whose jobs can be done remotely has bounced mostly back but for the bottom 25% working at restaurants, hotels, theme parks etc. have experience job losses of more than 20%.
Women disproportionately represented in low income jobs
47% women Vs 37% men

Unemployment for women jumped by 12% vs men 10%
- Non degree women 15% vs men 11%

Child and family care proportionally falls more on women.

Women do three-times as much unpaid care work than men- Covid has added to this burden

Average women stands to lose between $600,000 to $800,000 in lifetime earning according to Newsweek

Extended school day or before and after school program is needed

workforce flexibility may help in long term.
Working days at home as percentage of all working days

BLS American Time Use Survey (2017-2018)
   Full time workers 5.0%

Federal Reserve Bank of Atlanta, Stanford University & University of Chicago Business School employers survey (May 2020)
   2019: 5.5%
   After Covid 16.6%

Becker Friedman Institute (April 2021): After Covid working from Home 20%

Metropolitan Council Panel Survey (Spring & Fall)
   Future Teleworking Employees Preference: 64.6%
   Employees who believe employers will likely allow telecommuting: 69% to 72%
March 2021 Traffic Volume Trends

Figure 1 - Moving 12-Month Total on All Roads
Traffic impacts of major events

- Oil Embargo of 1973-74, 12 Month moving average 2.12% reduction
- Great Recession of 2007-2008 reduced Traffic volume by 3% but it took 8 years to recover it
- Covid-19 traffic reduction approx. 40% by April below 2020, 12 month moving average dropped by 15.8% by 2/2021
- Urban Traffic Volume reduction is higher than Rural
- Minnesota Traffic Volume reduction is one of the largest in the country
- Peak Period volume reduction is higher than AADT
• Time lost due to Congestion: 99 Hours To 26 Hour
• Total Saving: $51 Billion or $980 per driver
• Trips to Downtown first 2 months of 2021 down 44%
• Large trucks, local delivery Fleets and essential workers see free flow traffic
• Trips to Downtown Minneapolis from Feb 2020
  • April 2020 -75% September 2020 -56%
  • December 2020 -61% Feb 2021 -52%
• Telemedicine approved by Medicare, automation speeding up, iPhone has 5G
• Zoom worth more than $100 Billion, App downloaded 485 million times in 2020, 3.3 trillion annual meeting minutes, 45 Billion webinar minutes
• Google Hangouts, Skype & Microsoft Teams, Adobe connect, Cisco Webex, GoToMeeting, Facetime, WhatsApp, WeChat Etc
In the post-COVID-19 future, C-suite executives expect an increase in hybrid work.

Past and future expectations of time spent at work location,\(^1\) % respondents

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\(^1\)Question: What level of remote working (for roles typically associated with being office-based) does your organization have?

McKinsey
Post Covid work arrangements

• JP Morgan Chase: Employee can pick one permanent remote day as long it is not Monday and Friday and request additional day.
• Apple: expect employees to be in the office Monday, Tuesday and Thursday and two weeks of remote work annually
• Google expect 60% to return to original office, 20% to different locations, 20% work from home. Office workers Hybrid
• Citibank embracing flexibility
Challenges and opportunities

• Never let a crisis do to waste
• 2020 Birthrate down 4%(largest in 50 Years) and additional deaths more than one million
• Transit: How to meet the mobility needs of transit dependents while potentially loosing commuting clients?
• Will transit passes and other strategies will still work?
• How to modal ever changing work from home plans?
• Do capacity increasing capital projects still equitable and economically justifiable and feasible?
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