




TRANSPORT FINDINGS

What do People want to do instead of Commuting to Work?

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Findings

The COVID-19 pandemic resulted in a sudden shift to working at home. People stopped commuting to their jobs. We fielded two surveys in New Jersey during the pandemic and included questions on what respondents did with time saved from not commuting as well as which activities they wished to see continue after the pandemic subsides. Key results include that a majority of respondents reported spending more time with their family, almost half spent time watching TV or were on the internet, a large share slept later, and many walked more for exercise. We also queried respondents on activities they would like to continue after the pandemic is over, with nearly half desiring to work at home at least some of the time and about a third desiring to commute less. We also present results by gender, finding some differences in time use and preferences.

1. QUESTIONS

In March 2020 as the COVID-19 pandemic swept across the world commuting to work came to a halt. While many people could not work, those who could were suddenly put in a situation where they had to work from home, except for those classified as “essential”. This led to massive time savings for many, one study estimating that during the early months of the pandemic this came to 60 million hours per day in the US (Barrero, Bloom, and Davis 2020). The exogenous shock of being forced to work at home provides an opportunity to examine how this time was used and examine what people saw as the benefits associated with not commuting. Based on a survey of New Jersey residents we answer three questions:

1. What activities did people engage in with the time saved?
2. What activities do they hope to continue post-COVID?
3. Are there differences in how men and women spent their newfound time?

The fundamentals of transportation planning posit that there is utility to reducing commute time and this is used as justification for large road expansions (though these are long known to be ineffective at congestion reduction, see e.g. Noland and Lem (2002)). There is a literature that has proposed that there are benefits to commuting (see e.g. Ory et al. (2004)) at least for some people, perhaps due to the separation of work and home activities. Research by Hensher, Beck, and Balbontin (2021) suggests that the increase in working from home may have increased the value of time (with implications for transport appraisal based on the value of time). Some studies have examined the reallocation of activities during the pandemic, concluding

that some increase their work activities, but leisure and home-based activities also increase (Hensher, Beck, and Balbontin (2022) for Australia, and Barrero, Bloom, and Davis (2020) for the US).

2. METHODS

We collected two rounds of data using a Qualtrics online research panel. Our target population was residents in New Jersey, USA. The surveys both included a large battery of questions related to travel behavior, but we focus here on just the two questions described below. Both waves of the survey were collected during the winter peaks of the pandemic. The first survey was administered between November 30th, 2020 and February 25th, 2021 (N=1419) and the second survey between December 1st, 2021 and February 22nd, 2022 (N=1032), the latter coinciding with the Omicron wave. Responses from those who were employed were 936 and 732, respectively. Of these 73% (n=683) during the first survey worked from home at least some of the time, dropping to 63% (n=460) during the second survey. This reduction is not surprising as despite the intensity of the Omicron wave many employers were allowing in-office activity to occur more frequently. Over 97% of respondents in both surveys reported being employed before Covid.

While Qualtrics claims to provide representative data, we found that the second survey had a smaller proportion of older people compared to Census data on the New Jersey population. Thus, we weighted both samples using the PopGen software (Konduri et al. 2016; MARG 2016) so that it would be representative of New Jersey's population on age, income, ethnicity, and gender. A few records (nine in survey 1, two in survey 2) were dropped for those who indicated "prefer not to answer" for gender and ethnicity, as these could not be weighted. We have included unweighted and weighted summary statistics for both surveys as supplemental material. This includes summary statistics for the full dataset and the subsample of those who were employed, along with the Census data for New Jersey. The subsample is based on the weighted full sample. The main shortcoming of the data is that we over represent those with more education.

Our analysis is focused on two questions included in our survey:

- On days you work or study from home, have you been able to engage in other activities with the time saved by not commuting?
- Which of the following experiences (if any) have you had during the pandemic that you would most like to continue after COVID-19 is no longer a threat?

Both questions contained a list of activities and respondents could select as many as they wished. An “other” option was also provided, but received very few open text responses most without useful information. While the first question also asked about studying at home, we excluded those who were only students so we could focus exclusively on those with jobs.

We also produce a cross tabulation of these questions by gender. We use the Chi Squared test to determine whether there are differences between the two years (comparing the responses between winter 2020-21 and winter 2021-22) and between genders (comparing the genders in each survey).

3. FINDINGS

We report our findings for each question, for both surveys (winter 2020-21 and winter 2021-22), and by reported gender (men and women). Results are displayed in [Table 1](#), [Table 2](#), [Table 3](#), and [Table 4](#). We highlight key results, but the tables are a rich source of information for readers to examine.

The largest share of our respondents report that time spent not commuting allows them to spend more time with their family, with a small increase during the second Covid wave (54% and 57%, respectively). Increased time was also spent on other household activities, in particular for watching TV and using the internet (about 48% of respondents, though women reported more time in this activity than men during the second wave). More women also reported spending more time preparing and enjoying meals than men, as well as on household chores, the latter even more so during the Omicron wave (47% of women, vs. 33% of men).

Time spent not commuting also allowed individuals to schedule their time, including work activities differently. About a quarter of our respondents reported working longer hours than before. Over a third of respondents reported sleeping later and this increased to 44% in the second wave. Respondents also reported an increase in making their own schedule between the first and second waves. A larger fraction of women reported sleeping later as a result of working from home in both waves. Time savings would have also occurred from not preparing for a day at work, such as personal grooming or getting dressed up, though we did not ask explicitly about these activities.

Time was also spent on recreational activities, in particular walking for exercise was reported by over 40% of respondents. Men reported both more running and bicycling for exercise than women in both waves.

Our respondents reported that they would like to see various activities continue after the pandemic is over ([Table 3](#) and [Table 4](#)). Nearly half of our respondents indicated a preference to continue working at home, at least some of the time; interestingly women expressed a greater preference for this in the second wave of our survey. About one-third of the respondents expressed a preference for less commuting, driving, and traveling, though the preference

Table 1. On days you work or study from home, have you been able to engage in other activities with the time saved by not commuting? Comparison of both surveys, percent based on those reporting working from home at least one day per week.

	Working from home (N=683), Winter 2020/ 21 (%)	Working from home (N=460), Winter 2021/ 22 (%)	Chi Squared (P value)
Family/household activities			
Spend more time with family	54.4	57.2	0.350
Watch more TV or spend more time on the internet	47.5	48.6	0.715
Spend more time cooking or enjoying meals	38.3	39.5	0.683
Spend more time on household chores	32.9	39.6	0.020
Personal scheduling / work activities			
Work longer hours than before	26.3	29.3	0.265
Wake up later in the morning	35.7	43.5	0.008
I can make my own schedule	16.6	28.0	0.000
Recreational activities			
Spend more time on personal hobbies	22.1	24.4	0.365
Walk for exercise	43.1	46.0	0.333
Running or other exercise activities	20.9	19.4	0.536
Bicycle for exercise	17.2	13.8	0.123

Note: All results weighted to be representative of the New Jersey population.

for these were less than the preference for working at home. More women than men expressed a preference for less commuting, driving, and traveling. About 40% indicated they would like to continue to take more walks. More time with family and cooking at home more frequently were also experiences that about 40% indicated they would like to see continue.

These findings all provide a useful perspective on how we think about commute time, working at home, and the associated benefits.

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Table 2. On days you work or study from home, have you been able to engage in other activities with the time saved by not commuting? Comparison between men and women respondents, both surveys. Percent based on those reporting working from home at least one day per week.

	Working from home (N=683), Winter 2020/21 (%)			Working from home (N=460), Winter 2021/22 (%)		
	Men (N=315)	Women (N=368)	Chi Squared (P-value)	Men (N=240)	Women (N=220)	Chi Squared (P-value)
Family/household activities						
Spend more time with family	53.8	55.1	0.734	58.1	56.3	0.697
Watch more TV or spend more time on the internet	48.4	46.5	0.620	42.6	55.0	0.008
Spend more time cooking or enjoying meals	31.0	46.5	0.000	34.1	45.3	0.014
Spend more time on household chores	30.3	35.8	0.128	32.7	46.8	0.002
Personal scheduling / work activities						
Work longer hours than before	26.6	25.9	0.836	30.9	27.7	0.452
Wake up later in the morning	27.0	45.4	0.000	38.4	48.8	0.025
I can make my own schedule	16.3	17.0	0.807	24.2	32.0	0.063
Recreational activities						
Spend more time on personal hobbies	23.9	20.1	0.231	20.0	28.9	0.026
Walk for exercise	40.4	46.1	0.134	47.5	44.5	0.519
Running or other exercise activities	23.0	18.6	0.157	20.5	18.3	0.552
Bicycle for exercise	20.6	13.5	0.013	17.3	10.1	0.026

Note: All results weighted to be representative of the New Jersey population.

Table 3. Which of the following experiences (if any) have you had during the pandemic that you would most like to continue after COVID-19 is no longer a threat? Comparison of both surveys, percent based on those reporting that they are employed.

	Working population (N= 936), Winter 2020/21 (%)	Working population (N= 732), Winter 2021/22 (%)	Chi Squared (P value)
Preferences that might affect transportation			
Working from home, at least some of the time	47.0	47.6	0.80
Commuting less	29.0	35.2	0.01
Driving less	34.8	34.7	0.95
Traveling less	27.8	25.5	0.30
Taking more walks	40.7	43.5	0.25
Shopping online more	40.2	43.5	0.18
Conducting meetings online	25.5	33.6	0.00
Cooking at home more often	43.5	48.5	0.04
Other preferences			
Spending more time with family	40.9	43.4	0.32
Spending less money	36.5	47.2	0.00
A slower pace of life	30.2	34.0	0.10
Keeping in touch with family and friends using video-conferencing	28.5	25.0	0.11

Note: All results weighted to be representative of the New Jersey population.

Table 4. Which of the following experiences (if any) have you had during the pandemic that you would most like to continue after COVID-19 is no longer a threat? Comparison between men and women respondents, both surveys, percent based on those reporting that they are employed.

	Working population (N= 936), Winter 2020/21 (%)			Working population (N= 732), Winter 2021/22 (%)		
	Men (N=438)	Women (N=498)	Chi Squared (P value)	Men (N=378)	Women (N=354)	Chi Squared (P value)
Preferences that might affect transportation						
Working from home, at least some of the time	49.1	44.6	0.169	42.9	52.6	0.009
Commuting less	25	33.7	0.004	30.7	40	0.008
Driving less	33.6	36.2	0.405	32.6	36.8	0.233
Traveling less	29	26.4	0.375	24.9	26.2	0.687
Taking more walks	35.3	41.1	0.069	38.1	49.2	0.002
Shopping online more	37.4	43.6	0.054	36.1	51.2	0.000
Conducting meetings online	26.4	24.4	0.483	32	35.3	0.345
Cooking at home more often	40.8	46.6	0.074	42.8	54.4	0.002
Other preferences						
Spending more time with family	41.7	40	0.597	41.7	45.1	0.354
Spending less money	30.2	43.8	0.000	43.7	50.8	0.054
A slower pace of life	23.6	37.9	0.000	27.8	40.5	0.000
Keeping in touch with family and friends using video-conferencing	26.4	30.9	0.129	22.4	27.8	0.092

Note: All results weighted to be representative of the New Jersey population.



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