UTAH HERO PROJECT



Tracking Covid-19 to Inform the Return to Normal



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Included in this Report

Findings from Utah business and consumer surveys











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Introduction

The Utah Health and Economic Recovery Outreach (HERO) Project began in May 2020 as a collaborative statewide testing and analysis project designed to help decision-makers understand the community-based activity of the SARS-CoV-2 virus and Covid-19 infection rates. The goal of the HERO Project is to collect and utilize high-quality local data to help inform decision-makers seeking to guide Utah's citizens and economy through a safe return to normalcy.

In the six-month first phase of the project, the HERO Project team of statisticians, researchers, and doctors oversaw the construction of a sampling method uniquely equipped to estimate the prevalence of Covid-19 in the general population through representative sampling. Key findings from this phase included a low overall rate of infection in Utahns and a relatively high rate of detection by health authorities in the state, meaning that only a small number of Utahns had been infected, but that—compared to other states—few cases were going undetected.

Immediately following Phase 1 of the project, Phases 2 and 3 focus on adding to the information available to decision-makers through several new efforts:

- Continued testing throughout the state, coupled with longitudinal analyses, to provide insight into changing infection rates and detection by health authorities.
- Student- and teacher-testing in Utah K-12 schools, to advise officials as they seek to return students to classrooms safely and effectively.
- Surveying and analysis on the impacts of Covid-19 on Utah businesses and consumers, to support the state's economic recovery.
- Collecting information on vaccine uptake, impact, and implications, to inform the state's distribution efforts and ongoing management of the pandemic.

This report focuses on the HERO Project's **economic impact analyses**, which compile critical insight on the economic conditions and outlook of Utah businesses and consumers. These analyses are planned to continue for several months, describing survey efforts, results, and implications for ongoing decision-making.

Key Findings

Findings as of March 12, 2021

Lower Case Counts are Correlated with Increased Consumer Mobility and Spending

Utahns are 32% more likely to go to a store if case counts fall by 50%, and 61% more likely if case counts fall by 90%. Nationally, state mask mandates are more effective at slowing increased case counts compared to county mandates, and more likely to encourage consumer confidence. In Utah, a survey found that if everyone wore a mask consumers were 59% more likely to go to a store.

Utahns are More Confident About the State's Economy than the National Economy

HERO Project researchers conducted consumer surveys to understand perceptions of economic activity throughout the pandemic. Utahns have indicated a more optimistic outlook for the state than for the nation as a whole, and this outlook has become more positive over the last several months.

Businesses Are Still Recovering and Assessing Unknown Risk

A November survey of over 10,000 Utah businesses indicates most still assess their well-being as recovering, even businesses with increased activity compared to before the pandemic. The uncertainty of Covid-19 risks to employees and customers, as well as vaccine distribution, is of great concern. Federal relief was effective for the Utah businesses that were able to access the programs in 2020.



Impacts on Utah Business and Consumers



Introduction

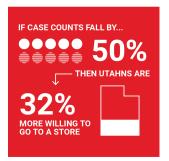
Using Utah survey data and national data sets, researchers from the David Eccles School of Business are examining the effects of the pandemic on the economy. In consultation with the HERO Project, this initiative assesses the effects of case counts and mask mandates on consumer mobility and spending, and establishes baseline measures for consumer perceptions and business conditions. Their latest findings are helping decision-makers in Utah establish policies and programs to support recovery.

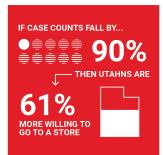
Case Counts and Mask Mandates

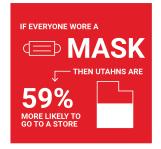
Mobility and spending are two strong indicators for a healthy economy. While many consumers have maintained spending through online platforms, correlations between mobility and spending can indicate engagement in the local economy, as opposed to purchases made through national retailers. Using national mobility data from millions of cell phone GPS locations and credit card spending, researchers investigated the impacts of case counts and mask mandates correlated with these useful real-time measures of the economy.

Case Counts

Since the beginning of the pandemic, consumers are more responsive to case counts in their area. Across the nation, a 10% increase in case counts leads to a 7.7% decrease in mobility. Surveys of Utahns confirm this finding.







Mask Mandates

Mask mandates were found to be most effective when issued at a state level. Critically, researchers found that mask mandates saved lives and livelihoods by slowing the spread of Covid-19 while also increasing mobility and spending. Survey evidence collaborates this finding suggesting that people are much more willing to go out to a store if more people are wearing a mask.

Consumer Economic Expectations

HERO researchers have also undertaken survey research with Utah consumers to understand widespread perceptions of the pandemic's impact on income, spending, and saving. Asking about these perceptions in the context of individual consumers, their friends, the average Utahn, and the average American, and tracking shifts over the last several months has allowed researchers to investigate the complex economic effects of Covid-19.

Researchers have found that consumers describe their current spending as less than it was last year at this same time, with the average respondent indicating a 4% decrease when comparing February 2020 and February 2021. Savings have also decreased slightly during the same timeframe, potentially due to the abnormal amount of savings in the late winter and early spring of 2020 as the pandemic began spreading in the United States. This is despite a slight increase in income, to the tune of 2%.

From December through February, consumer expectations have broadly become more optimistic for not only consumers themselves, but for their friends, Utahns, and Americans as well. Further, respondents seem to perceive their own financial standing as less negatively impacted than that of their peers, and that of Utahns less negatively than Americans overall. This likely reflects both the generally strong economy in Utah as well as the state's focus on supporting economic recovery throughout the Covid-19 crisis.

Eccles Business Survey

In November 2020, A survey of over 10,000 Utah businesses sought to investigate the current business climate; longer-term business expectations; the drivers of slow job creation and the extents of work-from-home; uncertainty surrounding Covid-19, and the impacts of federal aid programs. The survey yielded three main findings:

- At the time, most businesses across most industries did not expect to be fully recovered until at least February 2021, even though the largest industries by employment had already surpassed pre-Covid-19 business activity.
- Businesses still face unprecedented uncertainty around the risk of transmission to employees and customers, as well as delays to vaccine distribution.
- Federal programs, including the Paycheck Protection Program, effectively reduced layoffs at small businesses but limitations to widespread program utilization limited its effectiveness.

Next Steps

In 2021, the HERO Project plans to continue conducting economic analyses to understand the conditions of Utah's consumers and businesses. As the state continues to recover economically—especially in the wake of probable widespread vaccination in the near future—this investigation will continue to support the state in supporting the prosperity of Utahns and local organizations. Specifically, HERO Project researchers plan to:

- Continue consumer surveying to understand how Utahns perceive Covid-19's impact on spending, savings, and income.
- Collaborate with a large group of Utah businesses to gather and disseminate information regarding economic recovery.

Sources

Seegert, Nathan & Gaulin, Maclean & Yang, Mu-Jeung & Navarro-Sanchez, Francisco. (2020). Information Revelation of Decentralized Crisis Management: Evidence from Natural Experiments on Mask Mandates. Working Paper Marriner S. Eccles Institute for Economics and Quantitative Analysis.

Gaulin, Maclean & Seegert, Nathan & Yang, Mu-Jeung. (2020). Doing Good Rather Than Doing Well: What Stimulates Personal Data Sharing and Why? Working Paper Marriner S. Eccles Institute for Economics and Quantitative Analysis.

Yang, Mu-Jeung & Seegert, Nathan & Gaulin, Maclean & Looney, Adam & Orleans, Brian & Pavia, Andrew & Stratford, Kristina & Samore, Matthew & Alder, Steven. (2020). What Is the Active Prevalence of COVID-19?. Working Paper Marriner S. Eccles Institute for Economics and Quantitative Analysis.

Seegert, Nathan & Yang, Mu-Jeung & Gaulin, Maclean & Looney, Adam. (2020). What Drives the Effectiveness of Social Distancing in Combating COVID-19 across U.S. States?. Working Paper Marriner S. Eccles Institute for Economics and Quantitative Analysis.

Samore, Matthew & Looney, Adam & Orleans, Brian & Greene, Tom & Seegert, Nathan & Delgado, Julio & Presson, Angela & Zhang, Chong & Ying, Jian & Zhang, Yue & Shen, Jincheng & Slev, Patricia & Gaulin, Maclean & Yang, Mu-Jeung & Pavia, Andrew. (2020). SARS-CoV-2 seroprevalence and detection fraction in Utah urban populations from a probability-based sample. medRxiv: the preprint server for health sciences. 10.1101/2020.10.26.20219907.

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