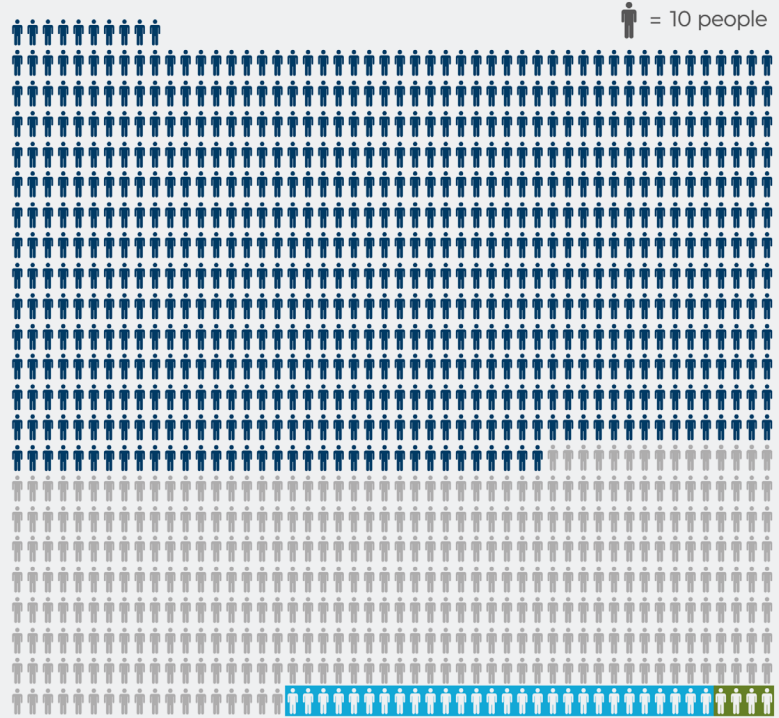




The City of Davis would have seen **60% more COVID-19 cases** from Oct 2020 – Jan 2022 without the Healthy Davis Together program.



# The Effects of Healthy Davis Together

## A COVID-19 Response Program

### Evaluation Findings on HDT Impacts

To assess whether HDT mitigated the effects of the COVID-19 pandemic in Davis, Mathematica evaluated the program’s effect from October 2020 to January 2022 on four key areas: (1) disease occurrence, (2) testing uptake, (3) health behaviors and perceptions, and (4) economic indicators.

**Disease occurrence.** We found moderate evidence that HDT decreased COVID-19 case prevalence. Although impacts were not statistically significant across the entire analysis period, the program lowered case rates in Davis during surge periods, including the 2020 winter holiday surge and the Delta and Omicron surges (Exhibit 1). We estimate that case counts in Davis would have been 60 percent higher without HDT, and that Davis avoided 4,144 COVID-19 cases in the first 16 months of the program, which translated to 275 averted COVID-related hospitalizations and 35 averted COVID-related deaths. Our review of weekly hospital admission data indicated that, during winter 2020 and winter 2021 surges, the number of averted intensive care unit hospitalizations likely kept some of Yolo County’s beds available for other life-threatening emergencies, which could have prevented additional deaths in the community. Further, based on county-wide analyses, we found strong evidence that Healthy Yolo Together led to fewer outpatient doctor visits for COVID-like illness in Yolo County than in matched comparison counties in California.

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### What is Healthy Davis Together?

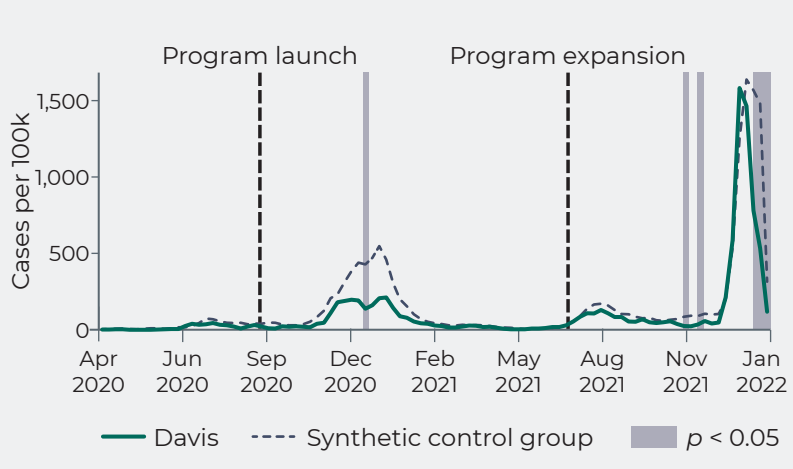
The City of Davis and the University of California, Davis launched Healthy Davis Together (HDT) in September 2020 to help prevent the spread of COVID-19, facilitate a return to normal activities in Davis, and generate learnings on community-level pandemic interventions. The program offered a broad and changing set of interventions to people who live or work in Davis, though some activities focused on vulnerable segments of the community. Program components included the following:

- / Free saliva-based COVID-19 testing
- / Mobile testing and vaccination sites
- / Incentives to increase testing uptake to capture asymptomatic infections
- / Education to reduce vaccine misinformation
- / Communication campaigns to encourage people to get regularly tested and follow public health guidelines to curb transmission
- / Large-scale distribution of personal protective equipment
- / Partnerships with community leaders and organizations
- / Investments in local businesses and workers

In July 2021, the program expanded under the Healthy Yolo Together umbrella and offered COVID-19 testing to all Yolo County residents.



**Exhibit 1. Healthy Davis Together’s impact on case rates**

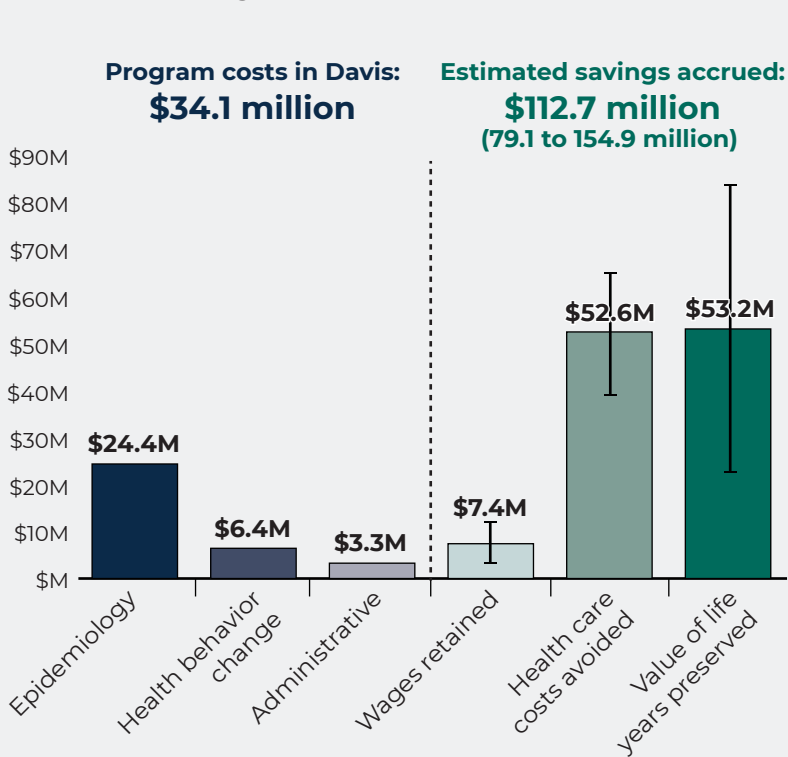


**Testing uptake.** We found strong evidence that HDT substantially increased testing volumes in Davis by up to 210 percent. HDT increased the share of Davis residents who tested at least once and the average number of times residents reported being tested for COVID-19. Davis residents reported easier access to COVID-19 testing than those in surrounding Yolo County communities, and there was suggestive evidence that the small incentives (\$5 to \$10 gift cards) that HDT offered effectively encouraged people to get tested.

**Health behaviors.** Evidence of HDT’s effect on health behaviors was mixed. We found strong evidence that HDT increased the share of Davis residents who got fully vaccinated and moderate evidence that more Davis residents viewed COVID-19 vaccines as safe and effective than residents in surrounding Yolo County communities. After HDT expanded through Healthy Yolo Together, the program’s effect on vaccination rates in Yolo County was minimal. More Davis residents than residents in surrounding Yolo County communities showed concern about transmitting COVID-19 to their fellow residents, but there were months during which Davis residents exhibited riskier behaviors, including socializing with others outside of their household and not wearing a mask. A potential explanation for this finding is that Davis residents might have felt protected by the high testing and vaccination rates in the community. We found no evidence of HDT’s effect on certain social behaviors, such as attending large group gatherings.

**Economic indicators.** We found moderate evidence that HDT mitigated the effect of the pandemic on Davis’s economy. Although overall impacts on economic indicators were not statistically significant, the program improved labor force participation in Davis during roughly half the measurement period, with effects pronounced after the federal Paycheck Protection Program ended in May 2021. The unemployment rate was also significantly lower in Davis than in the comparison group in November and December 2021, though not in other months. HDT had no significant effect on taxable sales (overall or in the specific service sectors hard hit by the pandemic).

**Exhibit 2. Healthy Davis Together program costs and estimated savings**



Note: Results are based on Monte Carlo simulation methods. Because we conducted simulations separately for the category-specific and overall savings, the total does not necessarily equal the sum of its components.

## Savings from HDT

We conducted a high-level cost-benefit analysis of the program to provide a ballpark estimate of savings accrued to Davis because of HDT.

Our evaluation revealed that HDT was highly cost effective. Although HDT spent \$34.1 million on program activities in Davis through January 2022, we estimated that HDT saved the Davis community \$112.7 million (with a 95 percent confidence interval of \$79.1 million to \$154.9 million) because of wages retained from averted cases, health care spending avoided from averted hospitalizations, and the value of life years preserved from averted deaths (Exhibit 2).

## Key Insights from the Evaluation

**Taken together, the results of Mathematica’s independent evaluation suggest that HDT was a cost-effective program that successfully increased testing in Davis and led to modest but meaningful improvements in the health and economy of the Davis community.** The program flattened the curve during COVID-19 surges and helped the labor market in Davis bounce back more quickly than in other California cities after federal support programs ended.

### Our Evaluation Process

For Mathematica’s evaluation of HDT, we compared changes in outcomes in Davis between October 2020 and January 2022 with corresponding changes in a set of comparison communities that we matched to Davis on demographics, community features, and pre-program outcomes. We collaborated with the HDT scientific leadership team to acquire HDT’s testing and Resident Survey data along with publicly available data from the California Department of Public Health, U.S. Bureau of Labor Statistics, California Secretary of State, and U.S. Census Bureau. Our analyses measured the impact of the entire suite of program interventions—which changed over time—on all Davis residents. To calculate program savings, we first converted the number of averted cases we estimated into estimates of averted COVID-related hospitalizations and deaths, using information from the literature, online data repositories, and other public sources. We then translated these estimates into monetary savings by calculating wages retained for averted cases, health care savings for averted hospitalizations, and the statistical value of the life years preserved life for averted deaths.