Assessing the Impact of the *Yellowstone* Television Series on Montana's Tourism Economy

BY PATRICK M. BARKEY AND MELISSA WEDDELL

Since 2020, the *Yellowstone* television series, produced by Paramount Studios, has been filmed in its entirety in and around the Bitterroot Valley of western Montana.

As part of its application for a tax credit based on its film production expenditures, as spelled out in the Montana Economic Development Industry Advancement (MEDIA) Act that became law in July 2019, the studio made available detailed information on its productionrelated expenditures in the state. The Bureau of Business and Economic Research (BBER) at the University of Montana made use of this and other information to compile an analysis of how those expenditures interacted with the state economy to support jobs, incomes, spending and investment across the economy.

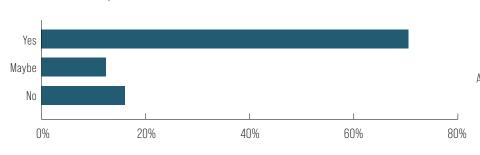


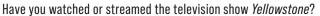
Photo Courtesy of the Paramount Network

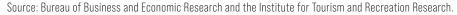
The BBER's research report, released in April 2022, found that the approximately \$72 million in spending that qualified for tax credits under the MEDIA act, along with the 116 Montana residents employed in production activities, had a significant impact on the overall economy. Specifically, the bureau's April 2022 report found that the production activities over the five-month period between October 2020 and February 2021 related to Season 4 of the show ultimately supported 527 new jobs across a full range of industries; \$25.3 million in additional personal income; and \$85.3 million in additional gross receipts for Montana business and non-business organizations.

These findings occurred both directly through spending of the studio itself, and spending subsequently induced in the economy,

FIGURE 1 SURVEY RESPONSES FROM MONTANA VISITORS







as spending received by vendors, employees, and governments was partially re-spent in the local economy to add to the total impact.

The conclusion of the April 2022 BBER report was that the significant spending associated with the production of the show, and the composition of that spending toward local goods and services, resulted in the production activities supporting many more jobs and much more income than the studio's direct spending accounted for.

Broadening Our Understanding of Impacts

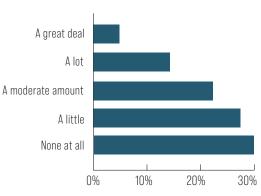
The spending and income-based approach of the BBER's April 2022 study of production activities for Yellowstone Season 4 in Montana yielded significant insights on the nature and magnitude of those activities as they relate to the state

economy. The analysis also benefited greatly from the detailed expenditure records made available. The study serves as an important example of what is involved with a specific production and how production activities connect with the rest of the state economy.

But as a complete analysis of what the production activity does to affect the economy, the study fell short, as it acknowledged:

... the advertising value of films that use Montana as a backdrop doubtless would add to the ultimate impact of film production on the state economy, but impacts from those sources are not included in this report.

Film tourism, the niche of tourism where visitors explore locations and destinations made famous from movies and television, seems especially applicable to Yellowstone. The title of the show itself is associated with



How much did Yellowstone influence your decision to visit Montana?

the famously beautiful national park, and the story lines, characters, and backdrop of the show embraces the Mountain West in general, and the landscape of western Montana in particular. The Montana Office of Tourism spends millions in advertising campaigns to make potential visitors aware of our state's attractions. Yet the popularity of Yellowstone - the highest rated non-sports television show of 2021-22 – has arguably eclipsed those efforts and raised the image of Montana to a wider audience of potential visitors.

To enhance the original study, BBER teamed up with the Institute for Tourism and Recreation Research (ITRR) to include a survey-based approach to the issue of Yellowstoneinduced tourism spending. In partnership with the nationally recognized survey research vendor Qualtrics, we assembled a national

panel of respondents who were not residents of Montana and had visited the state within the last three years. Using a survey designed and developed by BBER and ITRR, respondents were asked a number of questions about the purpose, frequency, and duration of their visit(s) to the state. They were also asked questions to measure the degree to which *Yellowstone* was an influence on their decision to visit.

Survey Findings

The survey responses were tallied only for those non-Montana residents who said that they had visited Montana in the last three years. The critical portion of the survey was the response to two questions that asked specifically about exposure to Yellowstone. Remarkably, 71.2% of those surveyed said that they had watched the show (Figure 1). Another 12.5% were unsure, leaving only 16.2% who answered no to the question. With viewership of 10 to 12 million for individual episodes for a national audience, this is clearly a sub-population of the country that is much more likely to tune into the show.

A subsequent question asked how the show influenced their decision to visit Montana, with five choices ranging from "not at all" to "a great deal." From Figure 1 we see that 19.3% of visitors responded that *Yellowstone* influenced their visitation decision "a lot" or "a great deal." This is another remarkable result.

This information was combined with spending profiles developed and maintained by ITRR on all visitors to Montana to estimate visitor spending that was induced by the show for the calendar year 2021. Our estimate is that 2.1 million visitors came to Montana because of the television show in that year, spending \$730 million in our state.

Findings

When the results of the April 2022 study are extended to include the impact of visitor spending, the impact of the show's production and viewing on the state economy changes dramatically. Using the BBER's policy analysis model, we constructed a "no Yellowstone" scenario of the economy in which the filming and production activities for Season 4 in the state did not take place, and the spending of the 2.1 million visitors who said that viewing the show motivated their visits did not occur. Comparing this hypothetical, "no Yellowstone" economy to the actual economy gives a measure of how the show adds to the economy.

Adding tourist spending into the analysis has clearly increased our estimates of *Yellowstone*'s Read the full report: http://www.bber. umt.edu/pubs/econ/ FilmIndustryImpact2022.pdf





Photos Courtesy of the Paramount Network



Photo Courtesy of the Paramount Network

contribution to the economy, as summarized in Table 1. All of the impact estimates include both the production activities reported in the April 2022 study and the *Yellowstone*induced tourism spending.

We find that *Yellowstone* has ultimately boosted employment by more than 10,000 jobs statewide, compared to the number of jobs that would have existed had the show not been produced or aired. These jobs fall into a wide range of industry and occupational categories.

Unsurprisingly, many of the jobs are in industries that receive the spending of visitors, including the accommodations and food and the arts and entertainment industries. However, the job impacts also are significant in seemingly unrelated industries, such as health care and transportation, reflecting the propagation of spending throughout the economy.

This kind of job impact supports significant gains to households in the form of income. We estimate that Yellowstone has boosted income received by households - personal income – by \$376.1 million, with \$324.7 million of that sum representing after-tax, or disposable, income available for spending. As reported in the table, there are impacts on state government tax revenues as well. We find that the Yellowstoneinduced activity in the state economy has produced \$44.5 million more in taxes collected by the state that are directed, in whole or in part, to the state's general fund. The largest of those, of course, is the state individual income tax, which has seen a \$17.3 million increase because of the show.

TABLE 1 THE CONTRIBUTION OF Yellowstone To the montana economy

TOTAL EMPLOYMENT	10,240 jobs
PERSONAL INCOME	\$376,100,000
Disposable Personal Income	\$324,700,000
SELECTED STATE REVENUES	\$44,500,000
OUTPUT	\$1,059,400,000
POPULATION GROWTH	3,305 people

Conclusion

The surge in interest and attention that Montana has received because of the success of the *Yellowstone* television series has had significant impacts on the state economy. The production activity from filming the series in the state has already been shown to support a sizable number of jobs here. Expanding the analysis to incorporate the show's impact on tourism spending reveals much larger impacts to the state economy.

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