MONTANA LEGISLATIVE BRANCH

Legislative Fiscal Division

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Director
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DATE: February 24, 2023

TO: Senator Hertz

FROM: Sam Schaefer, Joe Baan

RE: SB 14 Expanded Analysis

ABSTRACT

Film tax credits are used by many states to incentivize media production in their state. The question is often posed if additional economic activity because of media credits generates enough tax revenue to pay for the credit. In situations where the credit is not capped, this analysis finds that newly generated revenues do not pay for the cap unless a very large economic multiplier on indirect economic activity is assumed. Under current law in Montana there is a cap of $12 million per tax year. Given the amount of media production in the state it is very likely that the credit currently pays for itself in revenues generated from film production activity. Under SB 14 this cap increases to $30 million per year. This analysis estimates that this new cap can be reached by existing media production in the state.

GENERAL FUND REVENUES AND GROSS STATE PRODUCT

Historically in Montana, general fund revenue collections have had a strong correlation with Gross State Product (GSP). When GSP rises, general fund revenues have typically rose at a commensurate rate, albeit during recessions or periods of strong GSP growth the general fund is typically more reactive. Figure 1 to the right shows indexed growth for both Montana general fund revenues and GSP.

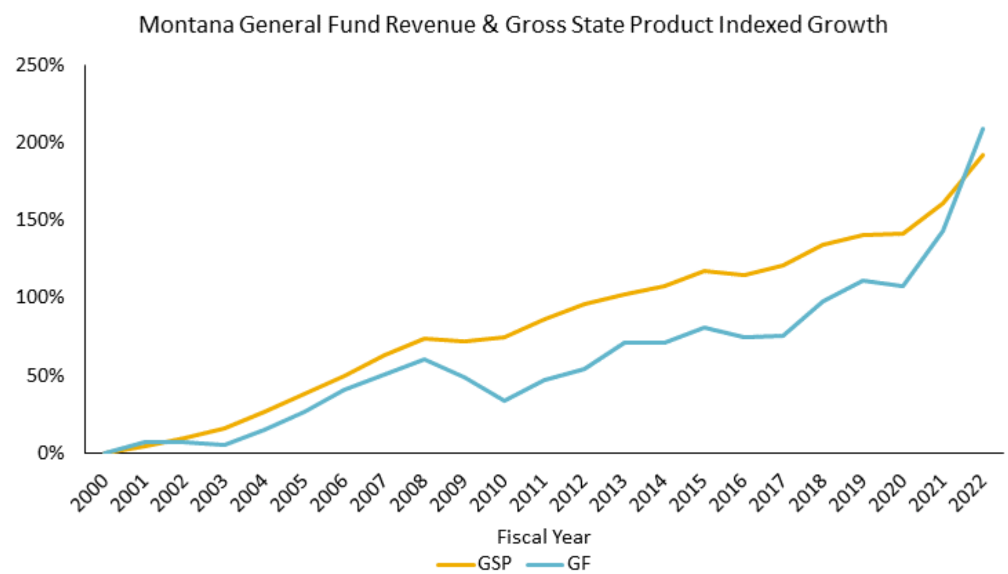

Figure 1

Given the relationship between the two, Montana's general fund revenues have maintained levels at a relatively constant share of GSP. Over the past two decades, general fund revenues have totaled 5.0% of GSP on average (Figure 2). This share ranged from a low of 4.4% in FY 2010 to a recent high of 6.0% in FY 2022. For this analysis, it is assumed that the general fund receives 5.0% of production in the state.

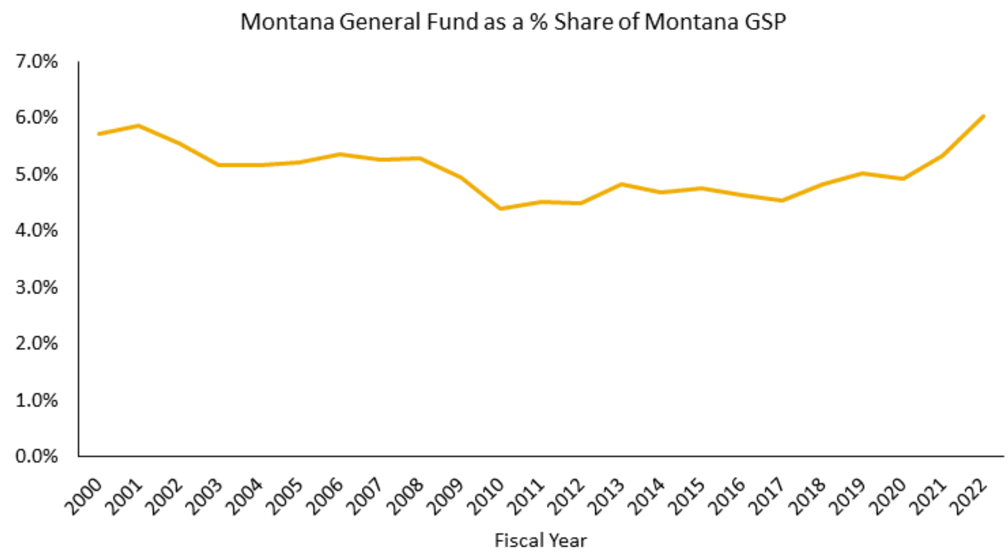

Figure 2

FILM CREDIT EXAMPLE WITH NO CAP

Montana currently offers a tax credit for certain production and postproduction costs of qualifying film, television, and other media productions. The credit varies depending upon the specific production expenditure. For this analysis, it is assumed that the total credits issued are equal to 25% of qualified expenditures, which is consistent with discussions with the Department of Revenue based upon submitted expense reports.

As a hypothetical example, assume that a production company spent $100 million in qualified expenditures on production of a film. In a scenario where there is no cap on the credit, the credit amount would be $25 million. Given the relationship between state general fund collections and GSP, $100 million in new production would yield $5 million to the general fund. In addition to the general fund, this production would also impact lodging taxes that are state special revenue funds, as well as any local jurisdictions who levy a local-option sales tax.

Given the general fund revenue effective tax rate of 5% on production, there would need to be additional economic activity as a result of the film production for the credit to "pay for itself". This additional activity is known as an economic multiplier.

Since 2005, the state of Georgia has offered a tax credit of up to 30% to companies with qualified expenditures. Unlike most states, Georgia does not put a cap on the amount of the credit offered. According to the policy brief "Film Tax Credits and the Economic Impact on the Film Industry on Georgia's Economy" from Kennesaw State University, Georgia's Department of Economic Development (GDEcD) assumes a multiplier of 3.57. This implies that for every $1 spent on direct production, another $3.57 is created indirectly. However, this multiplier has been widely critiqued, and a recent report from the Georgia Department of Audits & Accounts stated that, "Our original audit noted that GDEcD's economic impact calculations used an inflated multiplier, which nearly doubled the credit's impact." Comparatively, the author of the Kennesaw State policy brief estimated that the multiplier ranges from 1.61 to 2.07. Table 1 below shows an estimate for total general fund revenues under a projected direct spend of $100 million with the various multiplier estimates.

Film Production General Fund Revenues with Multiplier Effects Assume 25% Credit with no Cap						
Direct Spending	Credit	Multiplier	Indirect Spending	Total Direct/Indirect Production	GF Revenues	GF (Shortfall)/Surplus
$100,000,000	$25,000,000	0	$0	$100,000,000	$5,000,000	($20,000,000)
$100,000,000	$25,000,000	1.61	$161,000,000	$261,000,000	$13,050,000	($11,950,000)
$100,000,000	$25,000,000	2.07	$207,000,000	$307,000,000	$15,350,000	($9,650,000)
$100,000,000	$25,000,000	3.57	$357,000,000	$457,000,000	$22,850,000	($2,150,000)

Table 1

This suggests that a significant economic multiplier is required for uncapped film credits to "pay for themselves".

POTENTIAL TOURISM IMPACTS

In addition to examining direct and indirect production spending, it also makes sense to examine if recent productions in Montana have increased tourism to the state. Figure 3 is historical tourism related GSP as well as the long-term trend prior to the *Yellowstone* tv series premiere. Figure 3 illustrates that prior to the Covid-19 public health emergency tourism related GSP followed a consistent trend. At the start of the public health emergency, it saw a noticeable decline, but by FY 2021 had returned to its historical trend. Then in FY 2022 it grew by 25.7% compared to FY 2021 values, and 19.5% above the long-term trend growth. This growth above trend accounted for an additional $1.2 billion in GSP for the state of Montana. Using the effective tax rate on GSP of 5% from above on this additional $1.2 billion yields an additional $60 million in general fund revenues. In addition to these general fund revenues, another $6.0 million would have been generated for select lodging and rental car state special revenues. As Figure 3 illustrates, travel to Montana in recent years coincidentally follows both the end of pandemic-driven lockdowns and the *Yellowstone* series moving their entire production to the state of Montana. While a portion of increased visitation may be attributable to the tv series, establishing an estimate with certainty is quite difficult. It could also be argued that the increased visitation was due to the expansion of interest in outdoor activities due to Covid-19.

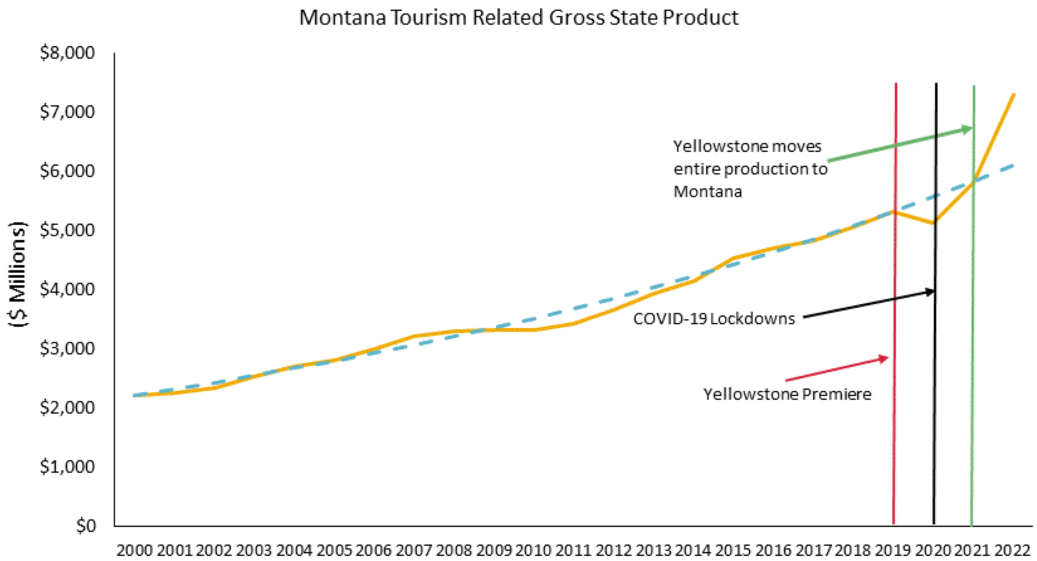

Figure 3

EXISTING MONTANA MEDIA FILM CREDIT

As noted earlier, Montana's film credit is equal to approximately 25% of qualified production expenditures. Montana's film credit, initially established in 2019, does have a cap that increased from $10 million to $12 million beginning in tax year (TY) 2022. In tax years 2020 and 2021, the cap of $10 million was reached. It is expected that the $12 million cap for TY 2022 will also be reached.

With the cap of $12 million being reached, this would imply that a minimum of $48 million in qualified spending occurred in TY 2022. According to the study, "The Economic Impact of Montana Film Production", from

Econsult Solutions Inc (ESI), there was a total of $77.5 million in total Montana production spending from July 2020-June 2022. This was out of a total of $191.9 million in total production spend. Therefore, Montana production spending represented approximately 40% total production. Table 2 below shows the spending (in $ millions) by those productions who received the credit and those who did not. The study notes that the "Other MT Productions" were "productions that did not apply for the MEDIA Act Tax Credit Program either because the incentive was not available during the time of filming, the production did not qualify for the incentive, or the production qualified but did not apply."

Production Type	Number of Productions	Total Production Spend	Total MT Production Spend
MEDIA Tax Act Productions	32	$130.1	$42.6
Other MT Productions	163	61.8	34.9
Total	195	$191.9	$77.5

Table 2

Given that the LFD does not have access to actual production expenditure reports, it is possible that this ratio may be higher or lower in TY 2022, but for the purposes of this report this ratio will be used for the remainder of this analysis. The study notes that *Yellowstone* Season 5 production, which began filming in May 2022, was not included in their analysis. The *Yellowstone* spinoff, 1923, which began filming in Butte in the summer of 2022 was not included either. The study claims that the *Yellowstone* series planned to increase production in season 5 to fourteen episodes with an estimated cost was $7 million per episode. This would amount to $98 million, and using the MT production ratio of 40% from above yields nearly $40 million in qualified Montana spending. According to the news article "1923 Production Brings Millions of Dollars to Butte", production in Butte alone was expected to spend upwards of $30 million in the Butte economy. With limited data on other productions occurring in the state, it is difficult to get a sense of additional annual media production spending in the state. For the two productions listed in TY 2022, a similar analysis from Table 1 above is shown below in Table 3, with the credit cap of $12 million being pro-rated between the two of them. A multiplier of 1.84 was used, which is the midpoint of the two multiplier estimates (1.61 and 2.07) referenced earlier.

Production Type	Estimated Total MT Production Spend	MEDIA Tax Act Credits	Economic Multiplier	Indirect Spending	General Fund Revenues	GF (Shortfall)/ Surplus
Yellowstone Season 5	$40.0	$6.9	1.84	$73.60	$5.68	($1.18)
1923	30.0	5.1	1.84	55.2	$4.26	(0.88)
Total	$70.0	$12.0		$128.80	$9.94	($2.06)

Table 3 ($ Millions)

Table 3 shows that by using admittingly conservative estimates on the total Montana production spend for these select two productions, the credit nearly pays for itself. Given that there are certainly many more productions, as illustrated in Table 2, it is very likely that at the current credit level of $12 million per year the economic activity generated from film production, coupled with a portion of tourism in the state benefits the general fund. This especially holds true if the reason that the productions are in Montana is because of the credit, and without the credit they would film elsewhere.

FISCAL NOTE ANALYSIS

The fiscal note for SB 14 states that "Based on anticipated productions, it is expected that the proposed $30 million cap for TY 2023 would be reached." If the two productions in Table 3 were able to fully leverage a capless credit they would have been eligible for an estimated $17.5 million in credits. This would leave $12.5 million of unclaimed credits, which would require an additional Montana production spend of $50 million to reach the cap. Given Table 2 and the conservative estimates in Table 3, ***it is very likely that existing production in the state would reach the new cap of $30 million and would be reached with no additional production coming to the state.*** This is not to say that additional production and resulting state revenues would not come to the state, but that existing media production is high enough to reach the proposed cap of $30 million.

ADDITIONAL LITERATURE AND ANALYSES FINDINGS

Film tax credits and the economic impact of the film industry on Georgia's economy

- This peer reviewed academic journal article looks at Georgia's film tax credit and the impact to the state's economy. Georgia's film credit is somewhat like Montana's with both credits having some local spending/hiring requirements, and more importantly both credits are transferable. The main difference is that the credit is not capped in Georgia, and in 2018 the credits totaled $800 Million.
- The largest estimates in this paper for total economic impact from the $2.7 billion in direct spending and 16,000 direct jobs is equal to an economic impact of $4.2 billion in output, and 32,000 Jobs.
- Economic impact multipliers of the Georgia film tax credit range from 1.55 to 2.00
- The paper includes its own short literature review of other academic papers that study Film Incentives and states "… the consensus of the economic literature regarding the economic impact of film incentives is that they have not been successful drivers of economic growth."

The Economic Impact of Montana Film Production: An Analysis of the Industry and the MEDIA Act

- This is a third-party evaluation of the economic impacts of the MEDIA Act produced by Econsult Solutions Inc. (ESI) specifically looking at the impacts of productions filmed from July 2020 to June 2022. Over that time $25.6 million of the MEDIA credits had been reviewed and reserved by the Department of Revenue.
- ESI estimates "state revenues" from the whole film industry to the state to be $14 million from January 2019 to June 2022. However, according to their tables, the total "state revenues" attributable only to productions taking advantage of MEDIA credits is $10.1 million. Including "local and county revenues" the total tax revenue attributable to MEDIA credit productions is $14 million.

[Bureau of Business and Economic Research, University of Montana]

- BBER has written multiple reports with respect to the filming of *Yellowstone* in Montana. Specifically, BBER released a report in April 2022 looking at the direct effects of the filming of *Yellowstone* in Montana over the five-month period (October 2020-February 2021) when season 4 was filming. In January 2023 BBER released a report looking at the effects *Yellowstone* has had on the tourism economy in Montana.
- April 2022 report was produced for Paramount and the Media Coalition of Montana. The January 2023 report was commissioned by Paramount.
- In the April 2022 report BBER asserts that *Yellowstone* increased “selected state revenues” by $10.6 million over this period.
- In the January 2023 report BBER uses survey data to claim that 17.3% of tourists that visited Montana in 2021 only came here because of *Yellowstone*. Of the 12.5 million tourists that visited Montana in 2021, this represents 2.1 million visitors.
- The January 2023 report uses this 17.3% assumption and combines the direct impacts measured in the April 2022 report, to assert that the direct and indirect impacts of *Yellowstone* to the state general fund was $44.5 million in 2021.
- Of this, $17.3 million was individual income tax, $15.9 million was “selective sales tax”, $2.8 million from corporate income tax, $3.9 million from license taxes, and $4.7 million in other taxes.
- BBER does not define “selective sales tax”. In calendar year 2021, the only state-wide sales taxes that contributed to the general fund were accommodation and rental car taxes. It is assumed these are the taxes BBER references.

[Do Tax Incentives Affect Business Location and Economic Development? Evidence from State Film Incentives]

- This peer reviewed academic journal article estimates the effect of state film incentives (SFIs) on filming locations for both TV series and feature films, as well as possible effects on related industries using data of all SFIs up until 2017.
- Evidence that SFIs do affect the location of TV series filming with estimates corresponding to no more than 1.5 additional TV series.
- No evidence that SFIs affect the filming locations of feature films.
- No evidence that SFIs have spillover effects on related industries such as independent artists, caterers, hotels and motels, costume rentals, transportation, and non-residential buildings.
- Preliminary non-robust evidence that TV series continue to film in states that have since repealed their SFIs
- No effect on outcomes based on the magnitude of subsidy rates for the three measured categories (state resident payroll, non-resident payroll, and non-labor expenditures)
- Generally, when SFIs have positive benefits they are concentrated in states with existing industries that are medium or large. States with industries that are smaller have fewer benefits from SFIs.

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