The Economic Contribution of the Island Mountain Development Group 2023

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Contents

	Acknowledgements						
Executive Summary							
1	IMDG Introduction and Overview	6					
	1.1 Subsidiaries of IMDG						
	1.2 Economic Environment of IMDG						
	1.2.1 Ft. Belknap and regional economic activity						
	1.2.2 Forecasting Methodology	12					
2	Economic Analysis with the IMPLAN Model	14					
	2.1 The IMPLAN Modeling Methodology	15					
	2.2 The Direct and Indirect Economic Contributions of IMDG	15					
3	The Economic Impact of IMDG	16					
4	Summary	20					
4	Appendix: Forecasting Models	21					



List of Tables

1.1 1.2 1.3 3.1	IMDG Economic Information in 2019\$s	9 13 17
3.2	2020 and 2023 impact comparison	18
3.3	Tax Summary	18
.IST O ` 1.2	Figures Percent of employment by NAICS code	10
1.1	FBIC Labor Market	10
1.3		11
1.4	County income data where IMDG operates	12
1.5	FBIC labor market indicators	14
3.1	Top 10 sector output impact in the four county region	19
3.2	Top 10 sectors in terms percent of total private industry output	19



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Executive Summary

Island Mountain Development Group (IMDG) is a LLC founded by the Gros Ventre and Assiniboine Nations of the Fort Belknap Indian Community (FBIC) to be the economic development branch of the two nations. It is a company aiding in creating a self-sustaining business opportunities, workforce training, motivate a positive business environment and resource development.

IMDG's primary business is Financial Technology which owns and operates three small dollar installment based lending services. Between 2019 and 2020 have been busy for IMDG. In those two years IMDG acquired Classic Design Homes and Legacy West Subdivision, a new home subdivision and expanded its E-Commerce operations to include a second E-Commerce office in Billings. IMDG established Buffalo Horse to provide solutions to government and commercial clients, Snake Butte Construction and Fort Belknap Information Technology were reorganized as affiliates of Buffalo Horse to support economic development. In 2021, Buffalo Horse and Heartland Consulting combined to form a new joint venture partnership: Heartlands Joint Venture. These expansions have led to considerable growth of IMDG's Operating Revenues. Overall, in the past five years (2019–2023), IMDG's revenues, payroll, income, and employment have increased by noteworthy 147%, 193%, 370%, and 125% respectively. Average annual growth rates for these indicators range from 10%, for employment, to 36% for income.

IMDG provides an important economic impact to regional households, business and governments. This report estimates IMDG's impacts on jobs, income, and economic output. The goal of this analysis is to provide information to affected parties on the potential economic implications resulting from IMDG business activities. Given the growth of IMDG, this report, and those that precede it, aims to quantify growth the overall impact of IMDG over the past several years.

This report uses the IMPLAN economic model to make two projections for the four county – Blaine, Hill, Phillips, and Yellowstone counties – regional economy. IMPLAN uses a system of county-level secondary data input-output (I-O) models designed to estimate economic impacts of a variety of events, including those made by individual firms. IMPLAN use multipliers to quantify changes in various aggregate economic variables, such as labor income, employment, and output. These multipliers are used to estimate the indirect and induced effects of changes in regional economies.

The economic impacts to the Montana economy of Island Mountain Development Group estimated in this study include:

- About 1,179 jobs resulting directly and indirectly from IMDG activities;
- Labor income resulting from these jobs amounting to \$96.3 million;
- About \$132.3 million in value added to the region;
- Over \$381.0 million in added gross output;
- IMDG and downstream economic activity generated \$2.5 million in state tax revenue and \$21 million in federal tax revenue; and
- The sectors which IMDG activities have the largest dollar impact are housing and insurance;
 while in terms of percent of overall sector activity, information and administrative services receive the largest impact.





These estimates constitute a conservative measure of the additional economic benefits to regional households, businesses, and governments ultimately derive from IMDG, as this analysis assumes activity is fixed at current levels.

About Dr. Robert Sonora

In addition to consulting and authoring, Dr. Robert Sonora, is a Clinical Professor of Finance and an Adjunct Professor of Economics and Forest Economics at the University of Montana. Before moving to the College of Business he was Associate Director of the Bureau of Business and Economic Research also at the University of Montana between 2019 and 2023. Before joining the BBER he spent over 20 years in academia at Ohio Wesleyan University, the University of Texas-Arlington and Fort Lewis College in Colorado as a Professor of Economics. For ten years he was the Director of the Office of Business and Economic Research at Fort Lewis College. He served as a member of the Colorado Business Outlook Committee based at the University of Colorado, Boulder; the Board of Directors at the Region 9 Economic Development District of SW Colorado; and the Economic Advisory Panel for the Southern Ute Indian Tribe. He has been quoted numerous times in local, national, and international press, provided expert testimony for the Montana State Legislature, appeared as a guest on radio and TV, as well as writing a monthly column and numerous Op-Ed pieces. He has published over 100 academic, economic impact, and non-academic articles and is two time Fulbright recipient. Dr. Sonora has a BA in economics is from Connecticut College, MA in international economics from the University of Essex in the UK and a MA and Ph.D. in economics from The Ohio State University.



1 IMDG Introduction and Overview

Island Mountain Development Group was established as the economic arm of the Gros Ventre and Assiniboine tribes of the the Fort Belknap Indian Community (FBIC) in 2009. IMDG's focus is to establish profitable business and a well-educated and solid workforce:

IMDG's mission is to build a self-sustaining local economy through the creation of business opportunities, jobs, and resource development. Today, IMDG and Tribal Members are working together to bring about true, generational change and economic prosperity to the Fort Belknap Indian Community. Since inception, IMDG has developed a strategic and viable platform that has enabled continuous growth across multiple business verticals.^a

IMDG's primary business is in an E-Commerce contact center which now owns and operates three small dollar installment loan services. Ongoing real estate projects include: The Fort Belknap Housing Development, IMDG and the Fort Belknap Tribal Housing Authority are considering areas suitable for residential development on the FBIC reservation and work will include infrastructure and homesite planning and investment. The Eagle Valley Estates project is under construction and, when finished in 2026, will consist of 20 homes on a 160-acre subdivision on Water Plant Road.

In 2019 IMDG opened a second E-Commerce office in Billings, MT adding over 50 new employees. By 2023, IMDG and its subsidiaries employed 170 in Billings. In 2020 IMDG established Buffalo Horse to provide solutions to government and commercial clients with unique skill sets to support clients' needs, from construction to business continuity to US National Security concerns. Snake Butte Construction and Fort Belknap Information Technology were reorganized as affiliates of Buffalo Horse, under common management, to support economic development in September 2020. Buffalo Horse and Heartland Consulting combined in 2021 to form a new joint venture partnership: Heartlands Joint Venture.

In December of 2021, IMDG opened the Little River Trading Post, a convenience store on tribal land. IMDG operates 2 satellite offices, Billings and Havre, MT. The Havre office opened in February 2022. The Havre office is home to the Contact Center for GVA Holdings which is primarily focused on profit generating financial lending operations for Fort Belknap, but is open and available for all IMDG Verticals. IMDG currently employees over 81 in Havre.

^aSource: Island Mountain Development Group.

¹They are: Cash Advance NOW, Target Cash Now, and BrightLending. IMDG closed Green Trust Cash (by 11/2020), North Star Finance and Island Finance (12/2020), and Riverbend Finance (4/2021). An asset assignment was completed of the Spot On Loans.



1.1 Subsidiaries of IMDG

Currently, IMDG consists of six subsidiaries, they are:

Buffalo Horse, Inc. (BHI) Provides solutions for government agencies and private entities. The company project delivery work includes:

- Security
- Intelligence Support
- Specialized Construction
- Administrative and General Management Consulting Services
- Professional Financial/Budget Consulting Services
- Call Center/Help Desk Support
- Cybersecurity
- Environmental Remediation
- I.T. Services
- Access Control

Spirit Box Technologies Provides a full spectrum of innovative IT solutions for small, mid and large enterprises, including:

- Network design and install;
- Computer troubleshooting;
- Computer setup; and
- Professional development

Classic Design Homes (CDH) A premier custom home design/build company;

- **Gros Ventre/Assiniboine Holdings (GVA)** owns and operates three small-dollar installment-based lending companies: Target Cash Now, Bright Lending, and Cash Advance Now provide short-term loans to individuals with limited options;
- **Island Mountain Enterprises, LLC (IME)** focuses on business development on and off the Fort Belknap Indian Reservation. It facilitates and supports building profitable, long-term sustainable business ventures that offer stable workforce and career development opportunities for the tribal community;
- **Island Mountain Real Estate Group** Assist Fort Belknap Reservation tribal members with achieving affordable housing; and



Snake Butte Construction (SBC) Professional construction and construction related services, including:

- General Construction
- Design/Build
- Construction + Project Management and reviews
- Construction Management Services
- Accuracy Checks for Cost Estimates

Table 1.1 displays the revenues, income, payroll, and employment for 2019 – 2023, inflation adjusted to 2019 dollars. The last two columns display the average annual growth and gross growth rates for each of these metrics, respectively. It should be noted that 2021 was a COVID year which partially explains the decline in IMDG's performance over the period. Nevertheless, as the table illustrates, the growth of IMDG has been substantial, each of these factors have averaged over 17% growth per year. Comparing this data to the previous economic study using 2020 data, revenues, payroll and benefits, and income are 41.8%, 112.8%, 17.7% higher than they were four years ago, a considerable investment by IMDG.

Table 1.1: IMDG Economic Information in 2019\$s

						Annual	Total Growth
	2019	2020	2021	2022	2023	growth	2019-23
Operating Revenues	\$74,286	\$129,250	\$72,087	\$169,677	\$183,223	19.8%	146.6%
Payroll and Benefits	\$16,819	\$23,192	\$30,556	\$32,720	\$49,341	24.0%	193.4%
Operating Income	\$5,034	\$20,105	\$11,443	\$32,081	\$23,658	36.3%	369.9%
Employment	223	226	302	389	332	10.5%	48.9%

Revenues, income, and payroll are in 1,000s

Table 1.2 shows the breakdown of expenditures, payroll, and employees by city of operation and type of job for 2023. As the table shows, IMDG in Billings represents the largest share of total IMDG economic activity, however, IMDG in Hays remains a significant percentage of total activity. This economic activity undoubtedly brings welcome economic relief in a region which is somewhat disadvantaged, see Section 1.2 below.

While the COVID-19 pandemic had an undeniable impact on FBIC's regional economy, by taking a cautious approach to managing day-to-day operations IMDG was able to effectively continue operations without sacrificing business results.

1.2 Economic Environment of IMDG

Fort Belknap Indian Reservation is the homeland of the Assiniboine and Gros Ventre Tribes. Fort Belknap Indian Reservation is forty miles south of the Canadian border and twenty miles north of the Missouri River and is the fourth largest Native American reservation in Montana. Tribal



Table 1.2: IMDG Expenditures, payroll, and employees by location

City County	Hays Blaine	Havre Hill	Billings Yellowstone	Total
Expenditures	Dialific	11111	Tellowstone	
Call center	\$31,389	\$29,396	\$43,845	\$104,630
Construction	\$773	\$0	\$676	\$1,450
Admin/Business svcs	\$36,416	\$4,173	\$12,897	\$53,486
Total	\$68,578	\$33,569	\$57,419	\$159,566
Payroll				
Call center	\$3,673	\$3,440	\$5,130	\$12,242
Construction	\$555	\$0	\$486	\$1,041
Admin/Business svcs	\$24,550	\$2,813	\$8,695	\$36,058
Total	\$28,778	\$6,253	\$14,311	\$49,341
Employees				
Call center	63	59	88	210
Construction	8	0	7	15
Admin/Business svcs	96	11	34	141
Total	167	70	129	366

Payroll and expenditures are in 1,000s

Source: Island Mountain Development Group.

membership is 7,000 enrolled members – though not all members live on the reservation. The regions primary industry is agriculture, consisting of small cattle ranches, alfalfa, and larger dry land farms. IMDG is headquartered in the town of Hays in Blaine County, Montana as is the majority of the Fort Belknap Indian Community, though a small percentage is in Phillips County. The analysis will focus on the counties which IMDG has an economic presence, Blaine, Hill, and Yellowstone, however, given that some of the FBIC is locate in Phillips County, the overall economic impact will include this county as well as it is likely that IMDG has an impact on that county.

1.2.1 Ft. Belknap and regional economic activity

Newly available data makes it possible to observe tribal labor markets directly, rather than rely on multiyear averages or county level data. Figures 1.1a-1.1c show the moving average, to remove some of the seasonal fluctuations, of FBIC's labor force, number of employed and the unemployment rate – the labor force and employed are in numbers of people and the unemployment rate is the percent of the labor force which is classified as unemployed. Recall, to be classified as a member of the labor force and, therefore, either employed or unemployed, individuals must be either working or looking for work, otherwise they are considered discouraged workers or too old or young. According the most recent US Census data (2022), FBIC has a population of 3,377 of which roughly 35% are under the age of 18 and 10.5% are over the age of 64.



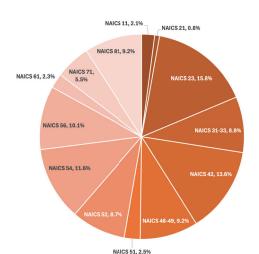
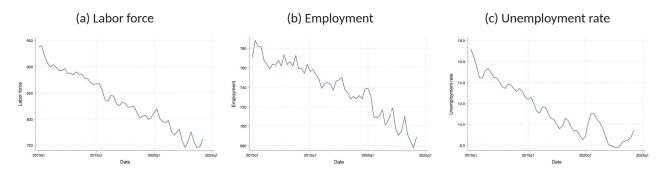


Figure 1.2: Percent of employment by NAICS code

Figure 1.1: FBIC Labor Market



Sources: Bureau of Labor Statistics, MT Department of Labor and Industry

Figure 1.2 illustrates the relative importance of NAICS sectors in Blaine, Hill, Phillips and Yellowstone counties.² As the figure shows, the five largest sectors in the region – construction, wholesale trade, professional services, administrative services, and transportation and warehousing – account for over 60% of the employment. Finance and insurance accounts for almost 9% of regional employment.

Figure 1.3 illustrates labor data and forecasts for the three counties in which IMDG operates: Blaine, Hill, and Yellowstone. In these figures actual data is presented from 2010Q1-2025Q4 – data after 2023Q4 date (the vertical dashed line) are forecasts. Forecasts were done using an econometric model which is similar in spirit to what many other states and municipalities. We use a similar methodology to that employed by New York City in their revenue forecasting.³ In the most basic terms, the this forecasting model uses local and national data incorporated into a

²The NAICS codes are: Agriculture (11); mining (21); construction (23); manufacturing (31-33); wholesale trade (42); transportation and warehousing (48-49); information (51); finance and insurance (52); professional services (54); administrative services (56); education (61); arts, entertainment, and recreation (71); and other services (81).

³Hartzog, Melanie and Francesco Brinidis (2016). *Tax Revenue Forecasting Documentation report for Financial Plan Fiscal Years* 2016-2020, NYC Office of Management and Budget, New York City.



econometric model, discussed in further detail below, in Section 1.2.2.

The labor market data for Blaine County looks similar to those found in FBIC. Declines in the labor force and employment can be explained, in part, to emigration from these three counties to other areas. According to US Census's *County-to-County Migration Flows: 2016-2020 ACS* data between 2016 and 2020 Blaine, Hill, and Yellowstone Counties saw a net migration gain of -408, -487 and -293 respectively. A second notable observation is that while there is a general decline employment and the labor force in Blaine and Hill, unlike in Yellowstone County, COVID did not have a significant impact on these two labor market indicators. However, we do see a short term increase in their respective unemployment rates.

Next, we turn our attention to quarterly county inflation adjusted income indicators. Figures 1.4a – 1.4c show per employee income, average weekly income, and total county income respectively for 2010 – 2025. We observe that for the period 2010-2025 income is generally rising across the board, though weekly wages and per employee income in Yellowstone do out pace Blaine and Hill Counties – again, data beyond the dashed vertical line represent forecasts. These two figures, 1.4a and 1.4a, are useful in making direct comparisons across counties to measure individual levels of welfare – that is as a measure of "utility". Similarly, total income can be used to gauge overall economic activity.

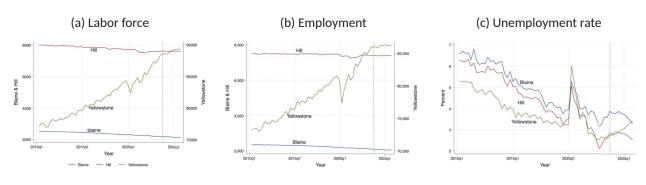


Figure 1.3: County labor data where IMDG operates

Sources: Bureau of Labor Statistics, MT Department of Labor and Industry. Data after vertical line are forecasts.

Phillips County appears to have stalled in the aftermath of COVID, but the other two counties total income is steadily increasing, likely due to the types of individuals migrating to Billings. However, we do see that earnings is also easing post-COVID, suggesting that the region has yet to fully recover from the pandemic.

While tribal level income and/or earning data is not available except in broad brushstrokes, it is likely that FBIC income dynamics follow the same pattern as in Blaine County, as can be seen in Table 1.3. The data, which is the five year average for 2018-2022, shows that FBIC has been catching up with county and state *household* income levels, there remains a considerable gap between state and tribal levels of education, poverty rates, and per capita income. Again, all data is infla-



tion adjusted to 2017 prices. Inflation adjusted household, denoted HH in the table, income is roughly three-quarters the state average, up from 50% of state household income from the last IMDG economic report. While high school graduation rates are roughly the same as the state the percent of the FBIC population with a bachelors degree (BA) or higher is a third of the state average, though about 60% of FBIC has attended some college or graduated. Poverty on the Fort Belknap Reservation is just about 2.5 times the state average, a considerable improvement over the past few years.

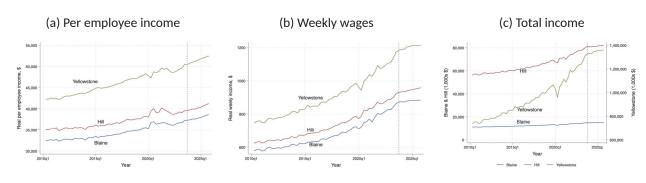


Figure 1.4: County income data where IMDG operates

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis. Data after vertical line are forecasts.

These statistics, combined with the county data presented in Figures 1.1, speak to gains made on the FBIC through the efforts of IMDG, whose mission includes economic development. IMDG is a "...Native American economic development corporation dedicated to creating a self-sustaining, local economy through the creation of business opportunities, jobs and by providing workplace training, positive role models, and resource development." The data presented is the time-frame during which IMDG matured and expanded, and, given the results presented here, future data updates should result improvements to the economic situation on the Fort Belknap Reservation.

1.2.2 Forecasting Methodology

The main econometric component of the forecast consists of two structural statistical models. The first step uses data derived from a national econometric model from IHS Markit.⁵ IHS Markit updates national economic forecasts two to three times a year, so we can make comparisons across different states of the economy. Estimates were done using least squares using Newey-West standard errors to correct for autocorrelation. We experimented with multiple models to until we found the "best fit". To ensure our model and interpretation was consistent, we used the same independent variables across all models.

Using county level data collected from the Bureau of Economic Analysis and the Bureau of Labor Statistics, we forecast four major macroeconomic variables the Ft. Belknap Reservation and each

⁴Source: Island Mountain Development Group.

⁵Source: "US Economic Outlook". In this context IHS is not an abbreviation for the Indian Health Service.



Table 1.3: FBIC compared to Blaine, Hill, and Yellowstone Counties and Montana

	Ft. Belknap	Blaine	Hill	Yellowstone	MT
Real HH Median Income	\$43,789	\$42,725	\$48,922	\$60,956	\$56,254
Real per capita income	\$16,169	\$29,651	\$38,420	\$53,043	\$50,293
BA or higher	12.3%	23.5%	23.7%	32.8%	33.9%
HS graduation	38.8%	89.7%	90.4%	94.6%	94.2%
Poverty	28.9%	19.8%	18.4%	10.7%	12.3%

Notes: All data is the 2018 - 2022 average. Real income is in 2017 dollars.

Sources: FBIC data is from the Center for Indian Country Development, Federal Reserve Bank of Minneapolis. State and national income data is from the BEA, state and national labor market data is from the BLS; and state and national education data is from the US Census Bureau.

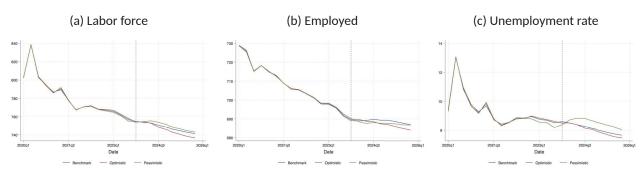
of the three counties: real personal income, employment, weekly wages, and output, as measured by gross county product (GCP), the county level analog to gross domestic product.

IHS Markit prepares three different forecasts: a benchmark, optimistic, and pessimistic. In the optimistic forecast, the banking sector remains resilient, funding robust growth (15% probability). The pessimistic forecast is defined by a mild recession occurs as tightening lending standards restrain spending and production (30% probability). The benchmark forecast foresees a continuation of current expected monetary policy. The primary driver in each of these scenarios is the Federal Reserve's (FED) choice of federal funds rate, the primary tool the FED uses to conduct policy. In the optimistic case, the FED is more likely to raise the federal funds rate vis-á-vis the pessimistic scenario. Montana is a very interest rate sensitive state economy and therefore it is changes in monetary policy are likely to have a larger impact here than in other, larger, states, such as California or Texas.

We next look at forecasts of FBIC's labor market under these three scenarios. Figure 1.5 illustrates the impacts in the benchmark (blue) economy, the optimistic scenario (red), and the pessimistic outcome (green). As the figures show, there is not too much difference between any of these estimates. Perhaps counter-intuitively the forecasts show slight *worse* outcomes under the optimistic scenario for employment and the overall size of the labor force – though forecasts for the unemployment rate do meet a priori expectations. This is likely due to the Federal Reserve's behavior during each of these episodes. In the IHS Markit forecast, the Fed will raise interest rates to fight inflation, which undermines tribal labor markets, and lower them if there is a recession, which is a boost. Industry in Montana is highly sensitive to interest rates as many of the firms here have relatively little access to equity markets and have to rely on bank borrowing to finance new investment.



Figure 1.5: FBIC labor market indicators



Source: Center for Indian Country Development, Federal Reserve Bank of Minneapolis, IHS Markit, and author estimates. Data after vertical line are forecasts.

2 Economic Analysis with the IMPLAN Model

The primary impact of railroad related economic activity stems from the tens of thousands of non-resident visitors who bring hundreds of millions of dollars to the region in new spending, spurring economic activity. This study used the IMPLAN input-output model to quantify the economic impacts of tourism spending in the regional economy. The model estimates employment, total output, value added, and compensation based on employment and revenues generated by IMDG and its affiliates. Economic benefits refer to dollars generated and distributed throughout the economy due to the existence of IMDG as a regional business.

Regional economic impacts occur because of events or activities that create new expenditures within that region. New spending – that is, spending which is over and above existing expenditures, and which does not displace other spending elsewhere in the region – not only adds to economic activity in its own right, but it also induces further spending as the recipients of wages, sales, and tax revenues spend a portion of their income in the local economy. Changes in the path of investment, migration, prices, and wages are also possible.

Secondary effects, or the multiplier effects, estimate the indirect and induced employment and earnings generated in the study area due to the inter-industry relationships between dollar inflows and local businesses. Thus, the train passengers visit the area and provide employment and income to not only the railroad and hospitality workers, office staff, and support for its direct operations but also spending on other goods and services during their time spent in the region.

Local businesses also make purchases of goods and services to support its operations, leading to auxiliary jobs in the community in transportation, utilities, wholesale goods, and soon – this is the indirect impact. Furthermore, employees spend their earnings on goods and services in the community, leading to jobs in retail, accounting, entertainment, and soon – this is the induced impact. Conceptually, multipliers quantify the number of jobs. Multipliers are static and do not account



for disruptive shifts in infrastructure without specifically addressing infrastructure changes. This study was conducted using the IMPLAN model and the underlying 2022 data-set (most current).

2.1 The IMPLAN Modeling Methodology

IMPLAN uses Input-Output (I-O) matrix modeling based on the work of Wassily Leontief. The fundamental concept is that all industries, households, and government in the economy are connected through buy-sell relationships such that any given economic activity initiates a "ripple" of up- and down-stream economic activity throughout a region. IMPLAN is an I-O modeling system that uses annual, regional data to map these buy-sell relationships so users can predict how specific economic changes will impact a given regional economy or estimate the effect of pastor existing economic activity.

IMPLAN's databases gather data from a number of federal sources, converting them to a consistent sectoring scheme and year, estimating the missing components, and controlling the newly formatted data against other known data sources to maintain accuracy. IMPLAN Sector codes are based on definitions put forth by the Bureau of Economic Analysis. Each year, IMPLAN gathers current data at the national level and updates the national Input-Output matrices. Data for state, county, zip code,and congressional districts are then gathered and controlled to the national totals.⁶

As powerful and flexible as this tool is, the answers it provides are only as good as the questions posed to it. The majority of work in this study was to carefully craft the inputs used to construct a scenario for the economy that faithfully represents all of the events, income flows, and the direct and indirect impacts that because of IMDG.

2.2 The Direct and Indirect Economic Contributions of IMDG

The analysis of the economic impact of IMDG using IMPLAN can be conceptually broken down into three separate and distinct components:

- (1) *Direct effects*: Payroll, vendor purchases, tax payments and other economic flows that come from the operations of the facility itself;
- (2) *Indirect effects*: Comprises other economic activities which are connected to IMDG but are not part of the facility itself; and
- (3) Induced effects: Direct and indirect spending is received as income by individuals, businesses and governments within the state, and re-spent in the economy, supporting additional jobs and income streams, such as the retail and restaurant industries, the so-called "multiplier".

We will refer to the aggregate of these individual effects as the "gross" or "aggregate" effects.

⁶Source: Clouse, Candi (2021). "How IMPLAN Works", IMPLAN.



There are four key economic indicators that IMPLAN reports, they are:

Output All analysis in IMPLAN is based on Output, as it is more commonly known: revenue or sales. Note that for wholesale and retail sectors, Output is equal to gross wholesale margin or gross retail margin, respectively, not gross sales. Output then can be decomposed into several components

Output = Employee Compensation + Proprietor Income + Tax on Production and Imports

+ Other Property Income + Intermediate Inputs

Value added Value Added represents the difference between Output and the cost of Intermediate Inputs. Value Added is a large portion of Output and includes: as it encompasses labor income, proprietor income, employee compensation, other property income, and taxes on production and import

Labor Income This represents the combined cost of total payroll paid to employees (e.g., wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated businesses in a given year.

Employment Following the norms of the Bureau of Labor Statistics and the Bureau of Economic Analysis, this is essentially the full-time/part-time annual average. This is done as: 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each, etc.

Taxes This is calculated at the sub-county (including special districts), county, state, and federal levels.

The study focus on four counties in central Montana: Blaine, Hill, Phillips, and Yellowstone. As discussed above IMDG's businesses are located in Blaine, Hill, and Yellowstone counties, however the analysis also includes Phillips County as a portion of the FBIC is located in this county.

To conduct the analysis the three primary IMDG businesses were analyzed individually and then aggregated to get the full impact of IMDG on the four county region. Because most of IMDG's is revenue is due to financial services, this data was aggregated with GVA Holdings and Buffalo Source Inc. which provides similar services. Finally, Little River Trading Post was also analyzed separately.

3 The Economic Impact of IMDG

This analysis considers two economic scenarios for the Fort Belknap regional economy. The economic impact reflects the alternative resting point for the economy in the absence of Island Mountain, including the absence of jobs that currently exist in Blaine county. In 2019 IMDG opened an additional contact center in Billings, MT and a further center was opened in Havre in Hill County in 2022. The results of the economic impact can be found in Table 3.1. We consider the individual impacts for the four county IMDG region: Blaine, Hill, Phillips, and Yellowstone counties. The results are broken down into the three primary sectors of IMDG's output: Financial services, real estate and construction, and retail. The aggregate economic impact is also presented. Note you cannot simply add the three sector impacts to get the regional affects because there is potentially a degree of cross sector indirect and induced impacts. Note, no employment data for the retail



business Little River Trading Post is available, so the study only includes the indirect and induced effect of employment for this business – therefore, the overall employment impact is larger than the data presented. Monetary values are in 2023 dollars.

Table 3.1: Total Economic Impact Summary

	Employment	Labor Income Value Added		Output		
Impact Type	(jobs)	(thousands 2023 \$s)				
IMDG Holdin	gs, GVA, and Bu	ffalo Horse				
Direct	351	\$44,982	\$53,061	\$207,128		
Indirect	408	\$25,069	\$28,822	\$84,366		
Induced	279	\$14,923	\$26,014	\$46,602		
Total	1,038	\$84,974	\$107,897	\$338,096		
Island Mount	ain Real Estate					
Direct	15	\$2,154	\$13,216	\$13,128		
Indirect	2	\$151	\$221	\$487		
Induced	10	\$533	\$930	\$1,666		
Total	27	\$2,838	\$14,367	\$15,281		
Little River Tr	ading Post					
Direct†	NA	\$790	\$182	\$4,066		
Indirect	9	\$515	\$843	\$1,861		
Induced	6	\$294	\$512	\$917		
Total	15	\$1,599	\$1,537	\$6,844		
Aggregate						
Direct	419	\$52,167	\$71,162	\$236,336		
Indirect	443	\$27,190	\$31,561	\$91,610		
Induced	317	\$16,952	\$29,553	\$52,943		
Total	1,179	\$96,309	\$132,276	\$380,889		

†No employee data was available so the analysis estimates the indirect and induced effects only.

Reviewing the remaining results yields additional evidence for the economic impacts of IMDG and both the regional and state economy. Focusing only on the aggregate aggregate numbers, we see that IMDG's activity generates almost 1,200 direct, indirect, and induced jobs; supports about \$96.3 million in labor income; \$132.3 million in value added; and \$380.9 million in total output. Definitions of each of these measure are provided on page 16. We can also see that the biggest driver of IMDG's economic impact is its support operations based in IMDG Holdings, GVA, and Buffalo Horse, Inc. While a large portion of these economic contributions are associated with the IMDG, non-IMDG businesses, workers and households reap considerable economic gains as well. This is easily seen from a more detailed look at the jobs and revenues that owe their existence to IMDG activities.

A comparison of the economic impact done in 2020 was also done to compare how IMDG's overall economic effect has changed since COVID. The previous study was done using REMI, so to make a meaningful comparison, a similar aggregate model was also conducted in IMPLAN but using 2020



Table 3.2: 2020 and 2023 impact comparison

	Ye		
Impact	2020	2023	% difference
Employment	639	1,179	84.8%
Labor Income	\$47,790	\$96,309	101.5%
Value Added	\$61,428	\$132,276	115.3%
Output	\$208,174	\$380,889	83.0%

Note: income, value added, and output results in thousands of constant 2023 dollars.

values. Also the previous study focused on Blaine and Yellowstone counties, whereas this study uses FBIC's four county region which also includes Hill and Phillips counties. In addition, prices have been updated to 2023 prices, which, given the inflationary episode in 2021-22, will allow us to compare similar nominal values. Results of this exercise can be found in Table 3.2. As the table shows, the growth of IMDG since the last report has had a notable impact on the four county region's economy. Employment, income and value added, and output are about 85% higher, over 100% higher, and almost 85% greater respectively.

Table 3.3 shows the tax revenues generate by IMDG and downstream economic activities. Negative numbers which are due to transfer payments, subsides, etc. Put another way, these tax numbers reflect net taxes which are taxes minus transfers and subsides. Focusing on total taxes, both county and state indirect receipts are negative, but overall state tax receipts are positive. The final row of the table indicates that state and federal taxes supported by IMDG and downstream economic activity are about \$2.7 million and \$21 million respectively.

Table 3.3: Tax Summary

	Sı	ub-county			
Impact	General	Special Districts	County	State	Federal
Direct	\$979	\$1,351	\$1,104	\$5,269	\$11,231
Indirect	-\$1,577	-\$2,186	-\$1,753	-\$4,057	\$5,685
Induced	\$206	\$284	\$235	\$1,490	\$4,102
Total	-\$392	-\$550	-\$414	\$2,703	\$21,018

Note: In thousands of 2023 dollars.

Figure 3.1 illustrates the ten sectors on which IMDG has the largest impact in terms of output. This output comes about as IMDG spending is received as income by area businesses and governments, who in turn produce output, hire workers and spend in the state economy. Note these impacts include indirect and induced effects of IMDG activity. Perhaps unsurprisingly, housing enjoys the largest impact from overall IMDG activities, about \$14 million. This is closely followed by insurance with roughly \$13.5 million. Of the ten largest, miscellaneous professional services still receives an indirect and induced impact of about \$1.5 million.



Marketing research and misc. professional svcs. Advertising, public relations, and related Data processing, hosting, and related Other financial investment activities Cable and other subscription programming Securities and brokerage Retail - Electronics and appliance Radio and television broadcasting Insurance agencies, brokerages, and related Tenant-occupied housing \$0 \$3,000 \$9,000 \$6,000 \$12,000 \$15,000 Thousands

Figure 3.1: Top 10 sector output impact in the four county region

Note: Output is in thousands of dollars. Region includes: Blaine, Hill, Phillips, and Yellowstone counties.

Finally, Figure 3.2 illustrates which industries IMDG activity has on the percent of overall *private* sector output. Put another way, these are the sectors which IMDG has the biggest impact, regardless of the size of any given sector. IMDG contributes a considerable amount to retail electronic and related sales. Housing, data processing, advertising, and insurance, and mailing services are clustered in the 4-6% range.

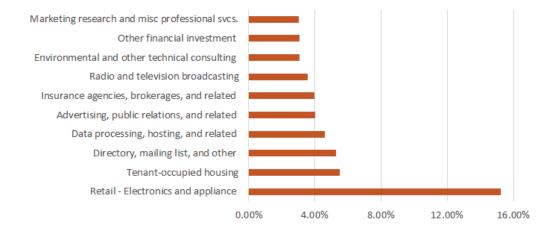


Figure 3.2: Top 10 sectors in terms percent of total private industry output

Region includes: Blaine, Hill, Phillips, and Yellowstone counties.



4 Summary

The total economic contribution of IMDG in Montana, defined as the economic activity of the IMDG, plus the additional economic activity that is induced or indirectly connected to IMDG operations, is substantial. Simply focusing solely on the *indirect and induced* economic impacts of IMDG, using IMPLAN we find that because of IMDG there are:

- 760 more indirect and induced jobs;
- an additional \$44,1 million in indirect and induced labor income received by households, annually;
- \$61.1 in indirect and induced regional value added; and
- \$144.6 million more indirect and induced regional output.

These are impressive impacts, which are due to the economic linkages in the region and the considerable growth of IMDG over the past five years or so. Table 1.2 shows revenues, payroll, and income have increased substantially since 2019. And this investment in the regional economy has become a While the bulk of those economic impacts occur in the four county region of the state where most IMDG operations take place, there are measurable, significant impact in all regions of Montana. As large as these economic contributions are, they doubtless understate the full contributions of IMDG.

This study has presented a comprehensive assessment of the ultimate impact that the presence of IMDG has on the Montana economy based on the company's operations in 2023, the most recent year with full operating data available.



A Appendix: Forecasting Models

To forecast the Fort Belknap and its regional economy, presented in Figures 1.3 – 1.5, we used a regression forecast model based on the strategy used by New York City to predict employment and income from 2020 to 2023. Data for the estimates is collected from the Bureau of Economic Analysis, the Bureau of Labor Statistics, and IHS Markit. Data is quarterly and extends from 2010Q1 to 2023Q4. To make forecasts, the length of the data was extended to 2025Q4. The Newey-West regression model used is written as:

$$y_t = \begin{cases} \alpha + x_t'\beta + \epsilon_t \text{ if } t \le 2023Q4\\ \alpha + \hat{x}_t'\beta + \epsilon_t \text{ if } t > \overline{T} \end{cases}$$
 (1)

where y represents the various dependent variables used in the analysis: real gross domestic product, the unemployment rate, interest rates, a recession indicator and inflation. x is a $1 \times k$ vector of independent variables used to model y. \hat{x} are the IHS Markit forecasts of the vector x. ϵ is an error term and α and β are coefficients to be estimated, as is standard, it assumed that α and β are identical across each time "regime". All models are converted into natural logs and then taking "anti-logs" to retrieve levels. To account for error autocorrelation, one period of Newey-West errors are used. Estimated dependent variables are, then

$$\hat{y}_t^f = \begin{cases} \hat{\alpha} + x_t' \hat{\beta} \text{ if } t \le 2023Q4\\ \hat{\alpha} + \hat{x}_t' \hat{\beta} \text{ if } t > 2023Q4 \end{cases}$$
 (2)

where " $\hat{}$ "s represent estimates and \hat{y}_t^f is forecast estimates.

We experimented with multiple models to until we found the "best fit". To ensure our model and interpretation was consistent, we used the same vector of independent variables across all models. We also experimented with the ARIMA(p,d,q)-X class of models, with little change in the results. A simple alternative forecasting method is to simply regress the dependent variables on a polynomial time trend, though this is best for estimating the long run trend and does not capture short run economic shocks.