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Policy Brief

More Prairie Prosperity: Economy and Fiscal Policy in North Dakota

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Introduction

With regard to economic health, productivity is fundamental. There are a variety of macroeconomic measures that indicate economic health. These often include GDP per capita, personal income per capita, and the rate of unemployment. Across states in the Union, variation in these measures is a function of location, allocation of human capital, and policy that is friendly to business. This last factor is the one most under the control of policymakers who would like to strengthen economic development.

The federal system within the United States allows each state to act as a laboratory of policy experimentation. While the federal government significantly influences the policy environment for all states, states can set policy with a significant amount of leeway. Legislative, executive, and judicial branches operating at the state level can generate significant variation in fiscal policy and regulation of business. In general, fiscal policies that limit expenditures will tend to put less stress on state finances than those that engage in expansive programs of expenditure. Other details, like the extent of net indebtedness, the maintenance of solvency of state retirement funds and the efficiency of expenditures represent fiscal health in finer resolution. In the modern federalist system, we must also consider the extent of financial flows between local, state, and national levels of government to understand the extent of financial interdependence and financial autonomy.

The height of incomes and extent of fiscal health are factors that influence the attractiveness of a state for labor and for business. In popular conversation, North Dakota is viewed as a state that is relatively open to business. Using data from the Fraser Economic Freedom Index of North America, we can evaluate the manner in which North Dakota and neighboring states are more or less accommodating of business operations. In general, the data we consider here aligns with the perception that North Dakota is a state where personal incomes are high, the cost of doing business is low, and fiscal policy is constrained. However, some important details, such as the state's level of expenditures as a percent of GDP, push against this narrative.

Our investigation of data informs the following findings:

- North Dakota is constrained by a tight labor supply. Policies that can attract labor without adding to the cost of doing business could attract both workers and businesses to the state. Eliminating individual income taxes to zero could serve to incentivize growth in the labor stock.
- The State Government of North Dakota collects more revenue as a percentage of GDP than any state in the region. This has allowed the state to maintain consistent budget surpluses. These surpluses also can enable policymakers to wisely revise tax policy to better attract labor and business to the state.
- Local governments are fiscally dependent upon the state government. Revenues of local governments are comprised mainly of property taxes and state-to-local transfers, with nearly 50% of local revenues in 2021 being derived from these transfers.
- State managed retirement funds have served as a source of informal borrowing for the state. North Dakota does not stand out, in this respect, compared to other states. Again, a strong fiscal position can enable the state to reduce borrowing from these funds.
- Overall, the FRASER Economic Freedom Index ranking of North Dakota is consistent with policy and perception, though some exceptions stand out.

Economic Health

Employment in the Labor Market

With regard to labor, North Dakota stands out from the rest of the nation. Since 1987, the average annual unemployment rate has not risen above 5%. Even immediately following the financial crisis of 2008, the average annual unemployment rate in North Dakota was no higher than 3.92%. During 2020, the average rate of unemployment was just short of 5%. In 2023, the average unemployment rate was 1.87%, and over the last decade has typically experienced an unemployment rate under 3%. This is obviously low compared to the national average where the natural rate of unemployment is estimated to be between 4% to 5% in the previous decade.

North Dakota also boasts an impressively high rate of labor force participation. The labor force comprises 53.16% of North Dakota's population, a measure that is the 8th highest in the nation. The labor force participation rate, which does not include those unable to work, whether due to age, health, or institutionalization, is 69.21%, higher than any other state in the Union.

These statistics reflect a relatively tight labor market in North Dakota. It is no coincidence that, in 2023, North Dakota out ranked every state in the region except for Minnesota with regard to the average level of private hourly earnings with an average rate of $32.93, with wages still rising higher in 2024. Together, these data suggest that North Dakota is a state filled with economic opportunity that could be better developed by a more plentiful labor stock.

The labor market is an obvious bottleneck for North Dakota businesses. It is possible that policy changes could make North Dakota a more competitive market for labor. Individuals working in North Dakota must pay 2.5% of their taxable wages to the state. Since a tight labor supply is an impediment to businesses, any drive to attract businesses to North Dakota would be more effective by making conditions more favorable to labor on this margin. Still, North Dakota finds itself in the fortunate position that private wages in the state are significantly lower than many states outside of the region with similarly tight labor markets. This leaves room for average wages to rise in light of growing labor demand.

Likewise, reduction of income taxes to 0% would translate to higher wages for workers. From 2017 to 2022, individual income taxes comprised between 4% and 5% of the state revenues. It does not appear that the state of North Dakota would have difficulty covering this reduction in revenue from income taxes. And since 2008, we have had a budget surplus in excess of 5% of annual revenue on 12 different occasions. In 2022, this surplus was a value greater than 20% of state revenues. Further, the state's significant level of net savings generates interest income that could be viewed as offsetting these losses. Businesses attracted to the state will promote economic development that generates greater revenues. In general, policymakers should be mindful that they can greatly aid the development of business in the state by identifying and implementing labor friendly policies that simultaneously improve conditions for businesses in North Dakota. Setting individual income tax rates to 0% is a path toward accommodation where the benefits are provided to all participants in the labor market and to businesses hiring labor in the state.

Figure 1: States with the Lowest Unemployment and Highest Labor Force Participation Rates (2023)

	Unemployment Rate	Labor Force Participation Rate	Average Private Hourly Earnings
ND	**1.87%**	**69.21%**	**$32.93**
SD	1.99%	68.22%	$28.96
VT	2.00%	64.68%	$32.32
MD	2.10%	65.09%	$34.56
NH	2.18%	65.06%	$34.21
NE	2.26%	69.10%	$30.69
AL	2.47%	57.21%	$29.45
UT	2.63%	69.51%	$33.05
MN	2.84%	68.38%	$35.86
IA	2.97%	67.77%	$28.52
WI	3.03%	65.83%	$31.47
CO	3.16%	68.40%	$35.91
MA	3.35%	65.03%	$40.46

Source: Bureau of Labor Statistics; gathered from Federal Reserve Economic Data

Analysis is supported by data from this and similar applications throughout the manuscript. The reader is invited to further investigate data across states and across time using the interactive area and map plot applications. For data selected using a slider, you may need to reselect the variable name using the dropdown menu within the application to update the data. Likewise, for data selected using the dropdown menu, immediately select a new value on the slider to update the data. To view interactive tables mentioned in this brief, please visit:
https://jameslcaton.com/StateoftheState/MorePrairieProsperity-EconomyAndFiscalPolicyInNorthDakota.html

Personal Income and Components

On various measures of economic well-being, North Dakota performs better than most of the nation and often leads the Upper Midwest. North Dakota leads the region in economic productivity. Per capita personal incomes are the highest in the region ($73,264). Higher per capita personal income is an indication of prosperity in general. The impact of personal income on the standard of living, however, is informed by the distribution of this income.

Figure 2: Personal Income and Share by Components (2022)

Personal Income and Share by Components (2022)	IA	MN	ND	NE	SD
Personal Income Per Capita	$62,708	$71,682	**$73,264**	$66,921	$70,991
Proprietor Income Share	11.76%	8.22%	**15.98%**	11.00%	17.88%
Farm Earnings Income Share	5.11%	1.46%	**8.95%**	2.93%	7.01%
Farm Proprietor Income Share	4.65%	1.25%	**8.38%**	2.42%	6.49%
non-farm Earnings Income Share	65.04%	69.97%	**65.90%**	68.22%	60.74%
non-farm Proprietor Income Share	7.11%	6.97%	**7.60%**	8.58%	11.38%
Wages, Salary, and Supplements Share	58.39%	63.22%	**58.87%**	60.14%	49.87%
Dividends Interest and Rent	18.29%	20.03%	**22.80%**	21.31%	22.87%
Personal Current Transfer Receipts	18.74%	17.24%	**14.83%**	16.71%	16.58%
Earnings Share Adjustment by Place of Residence	0.88%	-0.47%	**-4.12%**	-1.07%	-0.26%
Govt and Govt Enterprise Income Share	9.98%	8.53%	**11.57%**	10.91%	9.19%

How is Income Distributed?

We can think of income as being divided between proprietors - business owners who are commonly referred to as entrepreneurs - and non-proprietors who typically receive their income in the form of wages and salaries. In North Dakota, proprietors receive approximately 16% of personal income earned in the state and region. The only other state in the region where entrepreneurs receive a comparable portion of personal income is South Dakota, whose proprietors earned 17.9% of personal income earned in the state.

Proprietors' personal income can be split between farm proprietors and non-farm proprietors. In 2022, farm proprietors in North Dakota earned a share of personal income (8.4%) greater than for farm proprietors in any other state in both the region and nation. North Dakota also ranks first in the region with regard to farm earnings per capita. This is a persistent feature of the North Dakota economy. For this category, North Dakota is often trading 1st and 2nd place with its southern neighbor, South Dakota, where in 2022 farmers earned 6.5% of personal income. At 11.4%, non-farm proprietor income as a share of personal income is greater in South Dakota than in any other state in the region. North Dakota ranks 4th in this category, exactly in the middle regionally, with a value of 7.6%. When non-farm earnings measured on a per capita basis, North Dakota ranks 2nd in the region.

Notice that the discrepancy between farm proprietor income and farm earnings is quite small. Earnings earned by labor are a relatively small share of farm earnings. Although non-farm proprietor income is often a similar share of total income as farm proprietor income, total non-farm earnings are typically between 60% and 80% of all personal income in a state. For each state in the region, if you subtract non-farm proprietor income from non-farm earnings, the result is within 1 percent of wages, salary, and supplements. In other words, a significant share of non-farm earnings is received by labor, and the vast majority of labor income is earned in non-farm industries.

The vast majority of individuals do not run a business, so the largest share of personal income typically is received by labor. Comparing North Dakota to other states in the region, we can see that overall workplace compensation (listed as wages, salaries, and supplements) in North Dakota has, for more than a decade been significantly higher than for any state. North Dakota suffers from relative labor scarcity, which tends to drive up wages. Part of the high wages can also be attributed to the extent of oil extraction occurring in North Dakota, a sector where low-skill workers earn relatively higher wages. Over 4% of personal income earned in North Dakota in 2022 came from mining, quarrying, and oil and gas extraction. The next highest regional competitor in this category is Kansas, with about 0.7% of personal income earned from this productive sector. Changes in the contribution of construction to personal income in North Dakota have tended to closely follow changes in personal income derived from mining, quarrying, and oil and gas extraction. As mining productivity increased during the last decade, so did demand for housing and services by labor. Western North Dakota did not have an adequate stock of housing to meet these demands. Many small communities in the region grew as a result. The relationship between mining and construction appears to be strong and linear.

Broken down among other sectors as a percent of state income, top components include:

Figure 3: Percent of Total Personal Income (2022)

% of Total Personal Income (2022)	IA	MN	ND	NE	SD
Government and Government Enterprises	9.98%	8.53%	**11.57%**	9.31%	9.19%
Health and social services	5.92%	9.0%	**8.25%**	7.34%	8.58%
Construction	4.51%	4.29%	**4.49%**	4.47%	4.50%
Wholesale	3.32%	4.25%	**4.46%**	3.18%	3.42%
Manufacturing	11.63%	8.49%	**4.31%**	7.94%	6.37%
Retail Trade	3.99%	3.68%	**4.12%**	3.90%	4.16%
Mining, Quarrying, and Oil and Gas Extraction	0.01%	0.22%	**4.08%**	0.03%	0.12%
Transportation and warehousing	2.33%	2.10%	**3.24%**	3.77%	1.42%
Professional, Scientific, and Technical Services	3.39%	6.59%	**3.13%**	4.69%	3.18%
Finance and Insurance	5.98%	5.90%	**3.07%**	4.84%	6.05%
Real Estate and Rental Leasing	1.01%	1.29%	**2.12%**	0.64%	2.05%
Accommodation and Food Services	1.74%	1.87%	**1.97%**	1.82%	2.16%
Administrative and Support and Waste Management and Remediation Services	2.09%	2.35%	**1.53%**	2.75%	1.25%
Information	1.03%	1.62%	**1.08%**	1.35%	0.76%
Management of Companies and Enterprise	1.45%	3.49%	**1.02%**	2.19%	1.0%
Other Services	2.25%	2.32%	**2.10%**	2.31%	2.10%

Sectors with Less than 1% share of personal income for North Dakota not listed.

A significant amount of personal income in North Dakota is derived from government expenses and government enterprises, and this has traditionally been the case. In 2022, 11.6% of personal income was received from government and government enterprises. Although North Dakota spends relatively more in this category as a proportion of personal income, the general trend in the state and across the region is that expenses for government and government enterprises have been shrinking as a percent of GDP as real per capita incomes and population have been increasing. Even on a per capita basis, government expenditures across the region decreased significantly in 2021 and again in 2022. In fact, on a per capita basis since at least 2015, real income derived from activity within government and government enterprise has not been lower than it is now. For North Dakota, in particular, real per capita government expenditures have not been lower than they are now since 2008.

If we compare North Dakota with other states, we notice that North Dakota lags behind most others in the share of income earned in areas requiring intensive human capital:

- Professional, Scientific, and Technical Services
- Management of Companies and Enterprises
- Finance and Insurance
- Educational Services

This is partly due to North Dakota's position as, perhaps, the most rural state in the Union. While development of these sectors need not be a target of policy, development can be facilitated by continuation of policies that attract business to North Dakota, thereby supporting continued urbanization in North Dakota's major centers. Ideally, growing investment can facilitate business development that will continue to attract professionals with cutting edge knowledge in technically advanced industries to North Dakota's urban areas.

Fiscal Health

Fiscal policy refers to the financial program and financial condition of a government. Each year, state and local governments generate revenues and expenditures. State and local governments are typically expected to use revenues to support and maintain travel infrastructure, primary and secondary education, public safety operations, natural resource management and public parks, and so forth. When expenditures exceed revenues, a government must borrow to make up the difference. A government must also pay interest on its debts and is incumbent to interest owed for bonds that it has accumulated.

To evaluate fiscal health, we depend primarily on state level datasets provided by the U.S. Census. The most recent data reflects revenues and expenditures at the state level, but does not include revenues and expenditures of local governments. The number of categories provided by this data is also restricted.

The second, more expansive and more granular, data set reflects revenues, expenditures, and financial holdings and liabilities at the state and local levels from 2005 to 2021. We also provide state level data reflecting the solvency of public retirement funds (Public Plans Data) and corporate and individual income tax rates (Tax Foundation) as well as data reflecting oil production and oil revenues and prices in the state of North Dakota (ND Oil and Gas Division; US Energy Information Administration).

Shared Responsibilities and Intergovernmental Transfers

To understand the health of the state as a whole, we must consider fiscal policy at both the state and local levels. A significant portion of the budget of the state of North Dakota is comprised of transfers from the Federal Government. Federal transfers comprised over 40% of North Dakota's general revenue in 2021. Likewise, over 25% of North Dakota's expenditures in 2021 were dedicated to transfers from the state to local governments. As a percentage of local revenues, this amounted to 48.1% of all local revenues. In 2022, intergovernmental transfers from the state of North Dakota comprised over 23% of North Dakota's general revenue, indicating that transfers to local governments as a portion of the budget remained stable.

We analyze each level of expenditure keeping in mind the relationship of expenditures and transfers at each level. State and local government share funding responsibilities. We observe consistent features at both levels. In 2021, 15.1% of state expenditures were dedicated to education expenses, whereas 38.8% of local expenditures were dedicated to education expenses. Maintenance of highways also entailed a large portion of expenditures at both levels, comprising 7.6% of the state budget and 12.5% of all local budgets. At the local level, a limited sphere of oversight tends, even without explicit earmarking, to focus local expenditures on education and highways, which comprise a majority of the average local expenditures across the state. At the state level, expenditures under the headings of intergovernmental transfers, public welfare, education, and insurance trusts comprised the largest share of the expenditure budget. This pattern of expenditure allocation at the state and local level follows a similar pattern across the region and across time.

Figure 4: Significant Expenditures and Revenues: North Dakota

Percent of Budget by Sector (2021)	Expenditures	Revenues	Expenditures	Revenues
	State	State	Local	Local
Intergovernmental Transfer	25.8%	40.2%	0.6%	48.1%
Public Welfare	18.4%	---	1.4%	---
Education	15.1%	---	38.8%	---
Insurance Trust	10.5%	---	1.22%	---
Highways	7.6%	---	12.5%	---
Insurance Trust Expenditures	10.5%	---	1.2%	---
Other	4.1%	18.8%	4.2%	0.6%
Natural Resources	3.5%	---	2.7%	---
Health	3.1%	---	1.7%	---
Financial Administration	2.2%	---	1.4%	---
Interest	1.2%	6.6%	3.8%	2.6%
Corrections	1.3%	---	2.0%	---
Utilities	0.5%	---	6.3%	---
Police	0.5%	---	4.4%	---
Housing	0.3%	---	1.3%	---
Parks and Recreation	0.3%	---	4.5%	---
Air Transportation	0.2%	---	2.7%	---
Solid Waste	0.04%	---	1.7%	---
Fire	0.0%	---	1.7%	---
Sewarage	0.0%	---	2.5%	---
Property	---	0.1%	---	24.2%
Sales and Gross Receipts	---	15.3%	---	6.0%
Current Charges	---	8.9%	---	9.2%
Income Tax	---	6.5%	---	0.0%

Figure 5: Percent State General Revenue (2022)

Percent State General Revenue (2022)	IA	MN	ND	NE	SD
Expenditures	87.0%	87.8%	**79.3%**	86.7%	88.0%
Budget Surplus	13.0%	12.2%	**20.7%**	13.3%	12.0%
Intergovernmental Expenditures	22.6%	28.2%	**23.1%**	21.2%	16.8%
Intergovernmental Revenues	34.4%	33.3%	**22.6%**	39.3%	50.0%
Other Taxes	0.2%	0.1%	**25.6%**	0.2%	0.1%
Sale and Gross Receipt	19.4%	20.0%	**14.2%**	21.2%	29.7%

Major Revenues Sources

State Finances

Revenues

The annual budget of the state of North Dakota can be divided into two broad categories: revenues derived from own sources and intergovernmental revenues that are transfers from either the federal government or local governments within the state. In 2021, 40.2% of the state's revenues were derived from external sources, namely, the federal government, exceeded only by Missouri. And in 2022, this value fell to 22.6%. For much of the decade preceding 2020, as a recipient of external funds, North Dakota ranked no higher than the third lowest and for 5 of those years received the lowest amount of transfers amongst states in the region. With regard to the state's own sources of funding, the largest sources of revenue include other taxes (18.8%), sales and gross receipts (15.3%), current charges (8.9%), interest earnings (6.6%), and individual income taxes (4.8%). Among other sources, current charges include payments to state supported entities such as "tuition paid to a university, payments to a public hospital, and tolls on highways (The Tax Policy Briefing Book)."

The largest portion revenue from own sources in 2021, other taxes, includes taxes derived from the extraction and sale of oil in North Dakota. In 2005, this source of revenue comprised only 9.7% of state revenues, whereas sales and gross receipts represented 21.2%. The second largest source of revenue for the state is revenue generated from oil extraction. This revenue is included in the category, other taxes. This has been a consistently large portion of state revenues since 2008 when it composed 18.1% of the state budget. Since then, it has comprised as much as 38.5% of revenue. As of 2021, 18.8% of the state budget is derived from this source. In 2022, 25.6% of general revenue was derived from oil production. Oil production in 2023 and 2024 has modestly improved as the price of crude oil has mostly remained in the range of $70-$90 per barrel during that time. It seems that North Dakota has reached a stable baseline for crude production and, therefore, real revenues derived from crude oil.

In the past several years, we have seen oil production and state revenues tied to this productivity stabilize in North Dakota. This stability indicates that the apparent state of fiscal policy in North Dakota is not transitory. This status quo is, therefore, an appropriate interpretive anchor. State revenue derived from oil production essentially explains the strong fiscal position of North Dakota compared to its neighbors. On a per capita basis, 2021 revenues from other taxes collected by North Dakota is nearly as large as the entire gap in revenues per capita when comparing the amount of revenue collected by North Dakota with the amount collected by Minnesota. In 2021 and 2022, North Dakota and Minnesota ranked first and second in the region with regard to revenues collected per capita. In 2021 North Dakota collected $13,488 in general revenue per capita, $2,536 of which from the per capita measure of other taxes. Minnesota collected $10,448 per capita in general revenue, from which $243 is derived from other taxes. To be fair, North Dakota's general revenue from its own sources amounted to $8,068 per capita, whereas Minnesota drew $7,354 per capita from its own sources. The remainder of this discrepancy between general revenue and revenue from own sources is attributed to intergovernmental transfers. Likewise, in 2022 North Dakota collected greater than $3,700 more in revenues per capita than Minnesota. And, as in 2021, this discrepancy is nearly identical to the amount of other taxes collected by North Dakota, which was $3,670 in 2022.

Following other taxes, the next largest sources of income for North Dakota are derived from sales and gross receipts and current charges. Sales tax and taxes on gross receipts are a ubiquitous source of revenue across all states. In 2022, North Dakota was below all other states in the region with regard to the portion of revenues collected from sales and gross receipt taxes, receiving 14.2% of its revenues from this source. As a portion of general revenue, South Dakota leads this category with a value of 29.7%. In 2021, current charges amounted to nearly $1,200 per capita. For current charges received on a per capita basis, North Dakota ranked 3rd in the region in 2021, surpassed by Iowa ($1,502) and Kansas ($1,885). Unlike other sources of revenue, revenue derived from current charges indicates demand for a service provided.

In 2021, a major portion of North Dakota's annual revenue has been derived from federal transfers. North Dakota ranked first in the region by this measure receiving $5,421 per capita. As a percent of GDP, this amounted to 5.9%. That may not seem like much, but as a percentage of general revenue, this is 39.7%. Compare this to second place Minnesota who receive federal funds amounting to $3,164 per capita.

These high amounts of federal funding, however, are in part due to the response to Covid-19. Between 2005 and 2019, federal transfers comprised no more the 31.2% of the state budget. In 2022, North Dakota received only $3,242 per capita in intergovernmental revenue, the third lowest in the region. This amounted to 22.5% of the state budget for the year: less than any other state in the region. Perhaps more impressive, the budget surplus of North Dakota in 2022 was 20.1% of general revenues, larger than any other state in the region.

As a source of state revenue, revenue generated from income taxes in North Dakota is amongst the lowest in the region. In 2021, only 6.47% of North Dakota's revenue was generated from individual and corporate income taxes. Only South Dakota ranked lower according to this measure, with 1.04% of its revenue generated from income taxes (this income tax specifically targets banks, so it is not counted for the income tax bracket data). Iowa (19.36%), Kansas (21.83%), Missouri (22.44%), Nebraska (25.49%), and Minnesota (33.12%) all generated a larger portion of their revenue from individual and corporate income taxes.

Tax Brackets

The extent of revenue generated from income taxes is a function of the rate at which incomes of individuals and corporations are taxed. Although we do not yet have granular revenue data available at the state level for 2024, we see that North Dakota is still amongst the states with the lowest income tax rates. North Dakota's maximum individual income tax rate is 2.5%, significantly lower than all other states, except those with an individual income tax rate of 0.0%. States with the highest individual income tax rate include New York (10.9%), Hawaii (11.0%), and California (13.3%).

With a rate of 4.23%, North Dakota is again among the states with the lowest maximum corporate income tax rates. Aside from states with a corporate income tax rate of 0.0% (Nevada, Ohio, South Dakota, Texas, Washington, and Wyoming), Only Oklahoma (4.0%), Missouri (4.0%), and North Carolina (2.5%) have maximum corporate income tax rates lower than North Dakota. At a rate of 9.8%, the corporate income tax rate in Minnesota is the highest in the nation. Minnesota is followed by Alaska (9.4%), Maine (8.93%), and California (8.84%).

Expenditures

Using broad categories, state expenditures are comprised of *intergovernmental expenditure, current operations, capital outlay, assistance and subsidies, interest on debt,* and *insurance benefits and repayments*. As mentioned above, intergovernmental transfers typically refer to transfers from the state to local governments. On a per capita basis in 2021, North Dakota spent more on intergovernmental transfers than any other state in the region ($3,442), although Minnesota ($3,440) was not far behind by this measure. As a percentage of GDP, Minnesota (4.19%) led second place North Dakota (3.77%).

While we do not have data on state to local transfers, typically *intergovernmental expenditures* are mostly, if not wholly, comprised of state-to-local transfers. In 2022, *intergovernmental expenditures*, amounted to $3,314 per capita, ahead of Minnesota's $2,986 per capita.

In 2021, North Dakota led all other states in the region in percent of GDP accounted for by spending on current operations, though as a percentage of expenditures North Dakota's spending on current operations (52.67%) ranks third to last in the region. Although expenditures are quite high, one must keep in mind that the cost of operations is partly offset by current charges. This would indicate that although a significant value of services are provided by the state of North Dakota, these services do not represent pure transfers.

Capital outlays consist mostly of costs incurred due to construction of facilities and otherwise include buildings and equipment that are refurbished. The result is assets owned by the state. It is useful, then, to see capital expenditures as a form of savings to the extent that property could be sold by the state. This is particularly the case for the construction and refurbishment of buildings whose values tend to be maintained and has often increased in recent decades as the price of land and costs of construction have increased. During years where general revenues were relatively elevated due to increases in revenue extraction from oil production, so too were capital expenditures elevated. In 2021, the real value of capital expenditure measured in 2023 dollars was $852 million, well below a high of $1.3 billion set in 2015. Measured in per capita terms, North Dakota has led the region in capital expenditures every year except for 2018 and 2020, both of which were led by South Dakota. Although from the perspective of the state budget, this can be thought of as a form of savings, much like home ownership is a form of savings, the high level of capital investment by the state also influences resource allocation. Policymakers may want to consider dedicating these funds to a different part of the budget to the extent that these projects do not appear to efficiently support the function intended for services provided by the state.

Finally, North Dakota's per capita expenditures for public welfare are about average for the region. North Dakota ranked third in 2021 with a real value per capita expenditure of $2,449, with Minnesota leading at $3,374 and Nebraska in last with $2,170. These measures are generally stable, with similar rankings in 2022.

State Retirement Funds

The final area of state expenditure that we consider relates significantly to the level of state indebtedness and includes unfunded liabilities that policymakers should monitor closely. The North Dakota State Investment Board of Trustees oversees retirement systems in the state of North Dakota: the Teachers' Fund for Retirement (TFFR) and the North Dakota Public Employees Retirement System (NDPERS). Although these funds have tended to perform well in the last two decades, good performance of a fund does not offset discrepancies between the value of assets and liabilities. An aging population will certainly put increased stress on public retirement systems in the State of North Dakota.

The state retirement funds must be managed so that the expected value of future payouts is offset by the expected value of assets that would need to be sold in order to generate the funds required to meet expected obligations. Using the actuarial valuations under GASB (Governmental Accounting Standards Board) standards, we can compare the actuarial value of assets and liabilities to estimate the percent of liabilities that are expected to be covered by a retirement fund.

Of the state's two funds, NDPERS is significantly larger than TFFR. Using GASB standard, in 2023 the actuarial value of NDPERS liabilities is $4.58 billion and the actuarial value of assets is $3.26 billion, leaving $1.32 billion of liabilities unfunded. This amounts to 71.2% of liabilities from NDPERS being funded. Using the same standards, in 2022 the smaller TFFR had $116.1 million in assets and $140.6 million in liabilities, leaving an unfunded amount of $24.5 million, meaning that 82.5% of TFFR liabilities are funded.

Underfunding of plans is somewhat common. By comparison across the region, in 2022 the assets of South Dakota Retirement System are valued at 110.8% of its liabilities. The Minnesota General Employees Retirement Plan is 83.6%, with various plans for teachers, public safety, and state employees being 76.9%, 97.0%, and 95.1% funded, respectively. The Nebraska Public Employees Retirement System for school employees is only funded at 53.4% as of 2022. Iowa's Public Employees' Retirement System was 58.0% funded in 2022 and its Municipal Fire and Police Retirement System was 64.3% funded. However, poor behavior by neighboring states does not excuse the practice of borrowing from state retirement funds, especially when budget surpluses enable the state to cover these shortfalls. Keep in mind that the budget surplus was over $0.5 billion in 2018, over $0.75 billion in 2019, and over $1.25 billion in 2020. Responsible fiscal policy can enable the state of North Dakota to fully cover retirement funds in 2 to 3 years without touching the budget stabilization fund.

Local Finances

Expenditures

As indicated in Table 4, local expenditures in

North Dakota focuses primarily and maintaining roads and supporting education. Aside from these, there is a relatively clear distinction in North Dakota between services managed at the state level and those managed at the local level. Among *utilities*, *police*, *housing*, *parks and recreation*, *air transportation* (airports), *solid waste*, *fire*, and *sewage*, none make up greater than 0.5% of all state expenditures. Each of these categories typically makes up more than 1% of local budgets. These services, then, are dependent on local revenues.

Focusing on education expenditure, we see that as a proportion of all state and local expenditures, *education* comprises 28.4% of this total. Education expenditures in 2021 amounted to $3.4 billion, with state expenditures comprising $1.4 billion of this amount. Local expenditures comprise the remaining $2 billion. State and local expenditures share close to an even split of maintaining roads and highways in North Dakota, spending a total of $1.4 billion. with the state paying about $45 million more than local governments on this maintenance.

In 2021, nearly half of all local expenditures were supported by state transfers. A shrinking local budget may impact the provision of services not significantly supported by state funds unless compensated for by transfers from the of North Dakota. To the extent that these local services become dependent upon state funds in lieu of locally generated revenue, local autonomy concerning the provision of these goods will be weakened in favor of control at the state level.

Property Taxes and Local Revenues

In 2017, we outlined this problem in "Prairie Prosperity: An Economic Guide for the State of Economic North Dakota". Property tax relief increased local dependency on state transfers, with state contributions to education increasing from $381.9 million in 2008, the year preceding property tax relief, to $853.4 million in 2015. In that time, local expenditures for schools decreased from $531.3 million to $457.3 million, a 14% reduction.

The role of property taxes deserves special consideration in our analysis as property taxes play a critical role in supporting local expenditures and, therefore, autonomy in local decision-making. There are two primary sources of revenue for local governments in North Dakota. One source is property taxes. The other is intergovernmental transfers: funds provided to local governments by the state and federal governments. In 2021, 48.1% of local revenue was derived from state transfers.

Typically, property taxes are viewed as supporting education expenses as these expenses comprise about a third of local budgets. In recent years, property taxes are typically around 25% of the annual local budget. In 2021, this amounted to 23.3% of local revenues. As the sum of state transfers and local property tax collections amount to over 72% of state revenues, less than 28% of local revenue remains when these two categories are removed.

Following the logic of our 2017 study, we see that property tax relief has left a lasting effect on local government revenues. In 2008, state-to-local transfers comprised 31.0% of local revenue. Between 2005 and 2008, state-to-local transfers were no higher than 34.1% of local revenue. Since that time, state-to-local transfers have typically comprised 40% to 45% of local budgets in North Dakota and reached as high as 46.1% in 2016. When we add federal-to-local transfers, overall revenues from intergovernmental transfers have typically been in the range of 45% to 50%.

Removal of property taxes would mean that a reduction of at least 20% of current revenues would most likely be offset by state-to-local transfers. Or there is the possibility that these budget reductions are not offset by transfers. In either case, governmental transfers will make a larger portion of overall revenues and local governments will exercise less autonomy and will be poorer. Further, increased expenditure burden for the state would likely degrade North Dakota's fiscal position without clearly benefiting the state's residents.

While taxes are a cost to whoever is obliged to pay them, property taxes carry the advantage that they do not penalize productivity and, to the extent that they are administered locally, improve the independence of local governance from external interference. If fiscal policy is managed wisely, revenue sources can be balanced in a manner that enables policymakers to improve the quality of life for residents of North Dakota and shape a policy environment that is friendly to business.

Economic Freedom

The prosperity of a region is dependent upon the quality of and incentives generated by its institutions. Institutions are coordination devices that improve the predictability of behavior among those who adopt the institutions (Searle 2005). Institutions can take a variety of forms that are as simple as a well regulated system of roads and traffic lights to the vastly more complex legal institutions that guarantee one's right to person and property. Federal, state, and local governments are all institutions, as is the obligation of paying one's taxes. In order for institutions to function, it is critical that actors have incentive to follow the rules of behavior indicated by the institution (Grief 2008; Grief and Kingston 2011). This is especially true with regard to constraints placed on state actors. If rules do not constrain the scope of action for executives, bureaucrats, and the like, then the predictability of legal protections and the legal consequences for engaging in prohibited activities become less effective (Hayek 1944; 1960). For example, corruption in the form of bribery or nepotism may become an attractive substitute for the rule of law.

Good institutions promote productive

business activities. Productive and efficient businesses improve social welfare by reducing the cost of providing goods and services, by improving the quality of those goods and services at a given cost, and by generating new kinds of goods and services. The higher the costs of doing business, the smaller the magnitude of improvements of all three kinds. Innovation that improves efficiency or generates novelty is most likely to occur within a competitive environment with low barriers to entry. Often, regulations are formed to protect incumbents from competition or to protect the domain of some activity provided by the state. Or simply the provision of funds by the state can lead to the hiring of labor that puts pressure on private industry that competes for the same labor.

To compare institutional health between states, we employ the Economic Freedom Index of North America, provided by the FRASER Institute. North Dakota is one of the nation's leaders in facilitating business. Economic performance is a function of institutional factors that can either facilitate or encumber economic activity. According to the latest measures from the FRASER Institute's Economic Freedom Index of North America, North Dakota is the state with the 8th highest measure of economic freedom, and it has the highest economic freedom of any state in the Upper Midwest. As with any aggregate, any given policy or regulation governing economic activity in North Dakota may be better or worse than this average. In general, though, regulation in North Dakota seems more to facilitate than to obstruct, economic development.

Economic freedom that is under the control of political actors does not cover the full range of inputs that comprise the overall economic freedom score. State level policies only influence scores for government spending, taxation, and regulation. Other categories are wholly attributed to federal policies.

Figure 6: Government Spending, Taxation and regulation

2021 EFNA Summary*	1	2	3	Overall
IA	7.55	7.15	7.63	7.94
MN	7.71	6.35	7.46	7.8
ND	**7.51**	**7.58**	**7.67**	**8.01**
NE	7.94	6.94	7.60	7.96
SD	7.43	7.35	7.65	7.95

1: Government Spending
2: Taxation
3: Regulation

1. Government Spending

With regard to government spending, North Dakota has tended to rank behind other states in the region. We have observed the reason for this earlier in reviewing expenditure data. As a percentage of GDP, North Dakota's expenditure budget typically ranks in the top 3 within the region. And often per capita state expenditures for North Dakota have been greater than for any other state in the region. In fact, in 2016 state level expenditures as a percentage of GDP were the highest in the region at least dating back to 2005. This high level of expenditure is likely a consequence of gathering consistently large revenues. In every year since 2005, North Dakota has collected more revenue as a percentage of GDP than any state in the region except in 2017.

With regard to the EFNA rating for government spending, North Dakota has ranked in the bottom 3 within the region and, often, has ranked last in this regard. Still, unlike many other states in the region which began to perform more poorly on this measure after the 2008 Financial Crisis, North Dakota has returned to the range of scores that it received prior to the Crisis, at times allowing the state to perform modestly better than Iowa, Missouri, and South Dakota on this margin.

1A. General Consumption Expenditures by Government As a Percentage of Income

With regard to spending that contributes to consumption, North Dakota tends to place in the bottom 3 to 4 spots within the region. The years where North Dakota has performed better according to this measure (e.g., 2012-2014) have been years not where government spending fell significantly, but rather, years where the level of real GDP was elevated due to higher than usual oil revenues. In 2022, North Dakota ranked last in the region. Not coincidentally, per capita revenue in North Dakota was $14,327, nearly $4,000 more than Minnesota which had the second-highest level of revenues per capita at a value of $10,609.

1B. Transfers and Subsidies as a Percentage of Income

Since the early 2000s, North Dakota's EFNA score has followed an improving trend with regard to transfers and subsidies. Transfers here refer to interpersonal transfers as opposed to intergovernmental transfers, though there can be overlap between these two categories. This score is impacted by *assistance and subsidies*. As this score does not perfectly correlate with *transfers and subsidies* from the state expenditure data on a per capita basis, as a percent of revenue, or as a percent of expenditures, this may also reflect intergovernmental transfers that favor particular local governments in excess of income derived from those governments. (See description from FRASER).

1C. Insurance and Retirement Payments as a Percentage of Income

Governments often provide retirement benefits to government employees. This can take the form of increased payments to a privately managed retirement account, but often takes the form of a state managed retirement fund. As described above, such funds often serve as a convenient source of borrowing by state governments that are not officially recognized as state borrowing. As we previously observed, most states draw significantly from these funds as a source of revenue. Thus, state involvement in such funds represents intervention into financial markets. The larger the fund supported by the state, the greater the drop in this measure of Economic Freedom. Most states score quite low on this measure. Within the region, North Dakota tends to fall in the middle of the pack.

2. Taxation

Overall, North Dakota leads the region with regard to taxation. This should be no surprise as the combination of income tax rates for individuals and corporations is relatively low for the region. Overall, this measure may be deceptive as North Dakota's revenues as a percent of GDP and on a per capita basis are consistently in excess of other states in the region.

Figure 6: Government Spending, Taxation and Regulation

State and Local General Revenue as Percent of GDP (2021)	IA	MN	ND	NE	SD
State and Local Property Taxes as Pecent of GDP	2.8%	2.6%	**1.9%**	2.8%	2.4%
State and Local General Revenue as Percent of GDP	14.5%	17.8%	**19.1%**	15.5%	13.0%
State and Local Sales Gross Receipt Taxes as Percent of GDP	2.8%	2.8%	**2.7%**	2.4%	3.5%
EFNA 2A Score	7.19	3.9	**7.53**	6.25	6.6
EFNA 2B Score	5	4.5	**5.5**	5	6
EFNA 2C Score	7.74	8.18	**8.58**	7.57	8.29
EFNA 2D Score	8.67	8.8	**8.7**	8.93	8.49

2A. Income and Payroll Tax Revenue as a Percentage of Income;
2B. Top Marginal Income Tax Rate

North Dakota's income tax is relatively low. The maximum income tax is 2.5% for individuals and 4.31% for corporations. Less than 7% of revenue collected in 2021 was derived from income taxes. Most other states in the region collect between 19% and 35% of revenue from income taxes, with the exception of South Dakota, which collects income taxes only from financial institutions.

2C. Property Tax and Other Taxes as a Percentage of Income

Among states in the region, North Dakota collects the lowest value of property taxes as a percentage of GDP: 1.9%. This is 0.5% below the state with the next lowest value of property taxes as a percent of GDP.

2D. Sales Taxes as a Percentage of Income

Although North Dakota collects the second smallest amount of sales and gross receipts taxes as a portion of GDP compared to its neighbors, its EFNA score is only the third highest in the region: 8.7. Strangely, Minnesota, which collects the second-highest proportion of GDP in this form, receives the second-best score in the region: 8.8. In all, the broader region scores highly according to this indicator.

3. Regulation

Area 3 is a general measure of regulation. However, at the state level, policy only affects labor market regulation. Other measures of regulation reflect federal policy.

3A. Labor Market Freedom

The strong upward trend for all states indicates that freedom from regulation in labor markets have significantly improved over the last several decades. North Dakota has led the region since 2012 with respect to labor market freedom. A consistently high score on this measure suggests that North Dakota's regulatory environment is generally favorable toward employers. Keep in mind that a tight labor supply, reflected by a low unemployment rate alongside a relatively high labor force participation rate, reflects that economic conditions are generally favorable for employees in North Dakota. Minnesota's labor protections, reflected by a low score in this area, may play a role in attracting labor to the state. As noted previously, policy could make conditions more favorable to labor by eliminating the individual income tax.

Assessing the State of the State

Overall, economic conditions in North Dakota are exceedingly favorable in comparison to conditions in other states. Per capita personal incomes in North Dakota are high compared to most other states. Taxes in the state for most, excluding oil producers, are relatively easy. The fiscal position of North Dakota is strong, with consistent budget surpluses across the last two decades. Policymakers have responsibly managed the state's finances over the last two decades. This leaves them in a position to responsibly manage tax policies to reduce unnecessary fiscal risks and to alleviate burdens that discourage labor and businesses from moving to the state. Supposing that policymakers intend to reduce taxes, we find that reduction of individual income taxes would serve to benefit both business owners and employees across the state, with reduction of corporate income taxes serving to further incentivize business development within the region. These reductions would be justified by the size of typical budget surpluses.

At the local level, a relatively high level of fiscal dependence on the state exists amongst local governing entities. Independence of local revenue streams supports autonomy of local governing entities. The main source of funds available to local governments, aside from transfers, are property taxes. These together comprised over 72% of local revenues in North Dakota 2021. With regard to current attempts to transform tax policy, we feel compelled to note that less than 28% of local budgets will remain independent of higher levels of government if property taxes are eliminated.

North Dakota Finds itself in a unique position to craft a fiscal and regulatory environment that sustains the economic prosperity that we have experienced in recent decades. Policymakers must work to ensure that state funds are responsibly allocated and that this fiscal and regulatory environment is conducive to business development in North Dakota.

To view interactive tables mentioned in this brief, please visit:
https://jameslcaton.com/StateoftheState/MorePrairieProsperity-EconomyAndFiscalPolicyInNorthDakota.html

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