

SUMMARY REPORT | SEPTEMBER 6, 2019

Background for Identifying Wyoming's

GRAND CHALLENGES

This executive summary and associated full report¹ provide an overview of Wyoming's strengths and challenges according to public priorities and Wyoming's ranking in key sectors. Their purpose is to inform discussions about what grand challenges the University of Wyoming should tackle with publicly engaged, transdisciplinary research.

Public Priorities

Priority issues in public opinion: Residents of Wyoming view economic issues as the number one concern facing Wyoming and their communities. They also identified insufficient state resources/lack of tax revenue, availability of healthcare, and environmental concerns/public land policy as the top problems facing Wyoming today.^{2,3}

Executive and Legislative priorities: Economic development is also a major state government focus. In particular, the Economically Needed Diversity Options for Wyoming (ENDOW) initiative provides a comprehensive approach to diversifying the state's economy.⁴ Governor Gordon has specified three related priorities: (1) Set Wyoming on a sustainable fiscal path and continue Wyoming's efforts to diversify its economy; (2) Ensure citizens have access to quality education; and (3) Provide local

communities with the tools and resources needed to thrive.⁵ Legislative primary goals are to: (1) Address the state's volatile revenue picture; (2) Find reasonable solutions for healthcare and education; and (3) Build a stable workforce that can endure into the future.⁶

Wyoming's citizen and governmental entities agree—**Wyoming's economy is the most pressing issue facing the state today.** Education, healthcare, and investing in local communities are also top priorities for the executive and legislative bodies of Wyoming.

Indicator Data on Wyoming Challenges & Strengths

WYSAC researchers reviewed data on state rankings in key sectors, in particular for when Wyoming ranked in the best or worst 10.

Agriculture is one of the top industries in Wyoming, particularly in cattle, sheep, sugar beets, barley, beans, and farm space.¹ Challenges include political and legal decisions about land and wildlife management;⁷ tariffs, subsidies, and quotas;⁷ sustainability;⁷ commodity price cycles and volatility in the market;⁸ weather

phenomenon from floods to droughts;⁹ and urban growth.⁹ Wyoming has been ranked last in investments to support regional food systems and make nutritious foods more readily available, and 43rd for investments in making agriculture more ecologically sustainable.¹⁰

In national rankings of **economic** indicators, Wyoming places well in Gross Domestic Product (GDP), employment, and poverty rates.¹

On the other hand, Wyoming is ranked poorly in economic growth, the gender pay gap, children living in households that were food insecure at some point during the year, population change, and proportion of the eligible population using federal anti-poverty programs TANF (Temporary Assistance for Needy Families) and SNAP (Supplemental Nutrition Assistance Program).¹

Overall, Wyoming ranks well in **education**, placing 7th overall in education quality in one study.¹¹ Wyoming excels in pupil to teacher ratios; percent of people who have completed high school; associate's degree graduation rates; public school revenue and expenditures; pass rates for GEDs and high school equivalency tests; low debt at graduation; and percent of children under age 6 whose family members read to them less than 4 days per week.¹ Still, Wyoming has some opportunities within education. Wyoming is ranked among the worst in the nation for high school dropout rates, high school graduation rates among students of color, and college participation.¹

In **environment**, Wyoming has low air pollution, but has the highest CO₂ emissions in the United States.¹² Wyoming's carbon dioxide emissions

per person decreased 10% from 2005 to 2015, but remain seven times the national average.¹² Wyoming's water quality is also among the worst in the nation. The Environmental Protection Agency ranks Wyoming among the worst 10 states for toxic water, air, and overall net releases.¹³

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In **health**, Wyoming has been ranked 24th for overall health outcomes.¹⁴ Strengths include low cancer death rate, low percentage of children in poverty, infant care, and rates of disease.¹ Challenges include having a high percentage of uninsured, a high occupational fatality rate, a low rate of primary care physicians, and a very high suicide rate.¹ Wyoming also has opportunities for growth related to screenings and immunizations, substance use, and diabetes management.¹

Infrastructure is a national challenge, with the U.S. earning a D+ grade in one analysis.¹⁵ Wyoming's infrastructure issues include 3,127 (10%) structurally deficient bridges, 99 high-hazard dams, and 8% of Wyoming's public roads being in poor condition. Additionally, the state has \$458 million in drinking water and \$91 million in wastewater infrastructure needs over the next 20 years and \$149 million gap in estimated school capital expenditures.¹⁵ Wyoming is ranked 49th for broadband coverage and speeds.¹⁶

In **natural resources**, Wyoming extractive industries accounted for 20% of the State's GDP in 2016, and jobs in the extractive industries made up 7% of statewide employment.¹⁷ Wyoming leads the nation in the production of coal, producing 41% of total U.S. production.¹⁷ Wyoming ranks highly in carbon-based energy production and has potential for growth in geothermal, wind, and solar energy.¹ Wyoming has opportunities to reduce the amount of energy consumed.¹

In **politics**, Wyoming is the most Republican-leaning state in the nation.¹⁸ It also can run 367 days on its rainy day fund, as of fiscal year 2018.¹⁹ Wyoming ranks last in the nation for the proportion of women in the state legislature.²⁰

In **social** benchmarks, Wyoming has low rates of violent crime, child abuse, and familial risk factors.¹ However, the state ranks poorly for juvenile custody rates; the rate of youth residing in juvenile detention, correctional, and/or residential facilities; the felony disenfranchisement rate (the number of people barred from voting due to a felony conviction, per 100,000 residents); and the disparity in incarceration rates for Hispanic vs. White residents.¹

What Does it All Mean?

There are many challenges facing Wyoming, providing a wealth of potential research opportunities. These challenges include:

Economic opportunity—diversification is needed for the welfare of present day residents of Wyoming and those in the future.

Natural resources—outdoor spaces, wildlife, recreation farm/ranch land, and energy production are very important to the State's identity and economy. Decisions about Wyoming's public space certainly have environmental and economic implications.

Infrastructure—public investment priorities are needed for structurally deficient bridges, high-hazard dams, drinking and waste water infrastructure needs, road repairs, and school infrastructure needs.

Inequality—Wyoming has significant inequality and racial disparities in education and criminal justice systems, gender disparities in pay and political representation, gaps between eligibility and enrollment in federal anti-poverty programs, and health disparities.

Health—occupational facilities, suicides, and substance use severely impact the health of Wyomingites. Improving access to care, preventative services, and insurance coverage would improve Wyomingites' health.

Opportunities to diversify Wyoming's economy and tackle challenges may include investing in: renewable energy and clean water; higher education participation; equity in education, economics, and politics; food system diversification and sustainability; enrollment in existing anti-poverty programs; state infrastructure; and health.

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Endnotes

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