### Educational Context to Rosebud County Districts (2020 – 2022)

By
Dr. Robin Clausen
Research Liaison
Montana Office of Public Instruction

Consortiums of education institutions develop based on shared challenges and a common mission. The Circle of Schools was convened on the Northern Cheyenne Indian Reservation in 2009 to bring together regional community, school, and tribal leadership for the purpose of working together to support student success. The common challenges faced by participants include rurality and poverty. Of particular importance is Native student success throughout the consortium as challenges among this population are unique and persistent. A common belief amongst participants is a shared cultural understanding and desire to educate all students to their greatest potential.

The purpose of this document is to provide data which can illustrate the context behind the participating K-12 institutions (private, public, and tribal). The data provided in this report is by no means a comprehensive summary of all the relevant data from these institutions. It simply represents data that is available at the Montana Office of Public Instruction. The report does provide essential student and teacher characteristics- data which can be used to help interpret and address the challenges and opportunities for students throughout Rosebud County. It focuses on district level reporting rather than school level (both elementary districts and high school) to better account for the division in elementary districts between the lower grades and the 7<sup>th</sup> and 8<sup>th</sup> grade schools.

# **Student Enrollments**

Key to an education institution's sustainability is the enrollment base that the educational community serves. Since 2015 there have been enrollment declines present for Lame Deer Elementary and Colstrip HS (especially seen in the difference between 2020 and 2021). Enrollment has been steady in Ashland Elementary. Enrollment at Lame Deer HS has increased since 2015, seen especially in the change from 2020 to 2021.

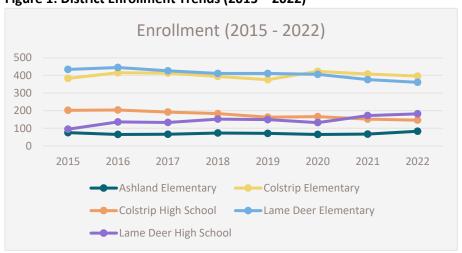


Figure 1: District Enrollment Trends (2015 – 2022)

A measure of the quality of an education institution are Student Teacher Ratios. These ratios are calculated based on teaching staff and do not include the help of other educators (coaches, paraprofessionals) who may have an impact on student learning. The per pupil ratios throughout Circle of Schools districts are relatively low when compared to the state. This is common in rural areas where the student population is small. During the pandemic these ratios remained relatively stable. The lowest ratios are for Ashland Elementary and Colstrip HS.

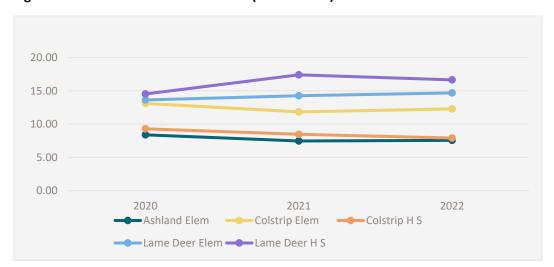


Figure 2: Covid Student Teacher Ratios (2020 – 2022)

# **Student Demographics**

A common characteristic of the Circle of Schools districts is large Native student/mixed race populations. In the graph below, missing data is signified if the count of students is below 6 according to our privacy policy. As seen in the graph, Native student populations as a proportion of the student population is high in comparison with the state.

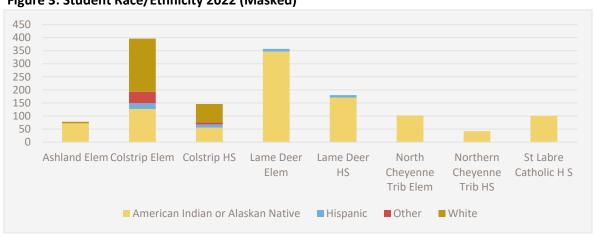


Figure 3: Student Race/Ethnicity 2022 (Masked)

## **Poverty Metrics**

All students in three districts quality for Free Lunch. This does not include St. Labre and the Northern Cheyenne tribal schools that also receive USDA funding. The three districts that are 100% eligible are the Community Eligibility Provision (USDA) districts. These districts have more than 40% of their students are directly certified. In CEP districts, all students are considered as eligible for free lunch. Colstrip Elementary (34.09%) and High School (30.82%) do not meet that threshold.

Table 1: Free and Reduced Lunch Rates (2022) – National School Lunch Program

со	County	Le	District Name	NSLP	School Enrollment	%NSLP
44	Rosebud	800	Ashland Elem	83	83	100.00%
44	Rosebud	796	Colstrip Elem	135	396	34.09%
44	Rosebud	797	Colstrip H S	45	146	30.82%
44	Rosebud	792	Lame Deer Elem	361	361	100.00%
44	Rosebud	1230	Lame Deer H S	182	182	100.00%

In CEP schools, we can identify the percentage of students that receive SNAP or TANF benefits. In Lame Deer High School, 66.9% of families receive these benefits. In Ashland School, 65.2% of families receive SNAP or TANF. For all CEP schools in Montana, the average direct certification rate is 59.1%. In addition, we can also calculate the percentage of families in the community that reside below the poverty line. This district metric is provided by the Census Bureau and is reliant on income tax data. Rates for Ashland (28.57%), Colstrip HS (13.08%), and Lame Deer Elementary (33.01%) can be compared to the average district rate for Montana (16.31%).

### **Attendance**

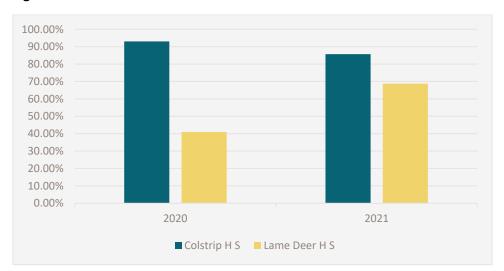
Attendance is another indicator that can provide insights about the student population and their educational experience. Since 2015, Satisfactory Attendance data have been calculated for all schools in Montana. The Satisfactory Attendance data point provides the percent of students who attend school as least 95% of the time. This is an important benchmark since the 95% attendance figure is a common expectation that education institutions have of their students. Common use of this attendance metric is seen in ESSA reporting standards. Data for Northern Cheyenne Tribal Elem, Northern Cheyenne HS, and St Labre HS could not be calculated.

70.00% 60.00% 50.00% 40.00% 30.00% 20.00% 10.00% 0.00% 2015 2016 2017 2018 2019 2020 2021 Ashland Elem ——Colstrip Elem ——Colstrip H S ——Lame Deer Elem ——Lame Deer H S

Figure 4: Satisfactory Attendance (2020 – 2021)

## **Graduation and Dropout**

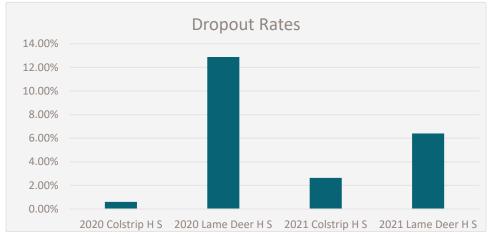
In 2020 and 2021 there were interesting patterns in Graduation and Dropout that occur during the pandemic. Graduation rates decline in Colstrip HS district, meanwhile graduation rates improved for Lame Deer HS. The cohort graduation rates track students beginning in 9<sup>th</sup> grade and considers those students entering or leaving the cohort. It is considered a reliable metric for understanding student success since it looks at relative achievement throughout all high school years, not only the senior year.



**Figure 5: Covid Graduation Rates** 

Correspondingly, event dropout rates declined in Lame Deer and rose in Colstrip HS. The event dropout rate is calculated by counting the incidence of dropout each year in grades 9-12 and then dividing this by the student population. This is seen as a reliable metric since it looks at all high school grades in a single year, rather than focusing on the senior year.

**Figure 6: Covid Dropout Rates** 



#### **Assessment**

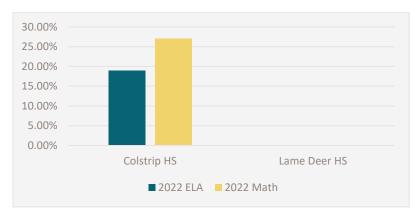
### **SBAC Summative**

Test scores on the Smarter Balanced (SBAC) assessment, the statewide assessment that all public schools participate in at the end of the academic year, showed declines at the state level in both math (1.8%) and ELA (3.0%) assessments (since 2021). Proficiency rates in Rosebud County remain stable with what was previously reported. In 2022, more students scored proficient or above in ELA than in Math in Colstrip. The results for Colstrip are lower than statewide trends. As recommended in the previous report, trends in the other schools may aptly be analyzed for improvement.

### ACT

Proficiency levels for the 11<sup>th</sup> grade math and ELA assessment are calculated by OPI in line with statute. Trends year over year at the state level as are not as pronounced on the ACT as on the SBAC. At the state level, typically more students are proficient in the ELA assessment than with the math assessment. That is not the case with Colstrip where more students are proficient in math than in ELA. Scores for Lame Deer HS did not meet the minimum reporting requirement according to the privacy policy of OPI.

Figure 8: 2022 ACT Results



#### **Teacher Characteristics**

The composition of the teacher labor force in Rosebud County remains remarkably consistent. As noted earlier, there is a low pupil to teacher ratio. This report provides three additional measures (teacher count, the count of Native educators, and teacher salaries.

#### **Teacher Count**

While the full-time equivalent level has not substantially changed in these schools, the count of teachers has changed in each of the Circle of Schools institutions through the pandemic years. For example, Ashland Elementary teacher population increased by 66.7%. In Lame Deer Elementary where there is a decline in the teacher population from 2020 to 2022 (-11.1%).

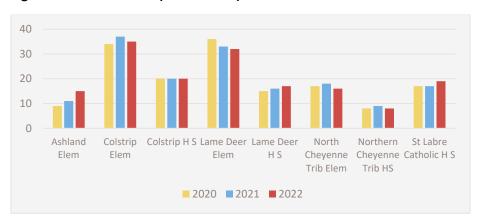


Figure 9: Teacher Count (2020 - 2022)

# **Native Educators**

The population of Native educators is highest with Lame Deer Elementary and Ashland Elementary. For example, in Lame Deer Elementary, 19.35 percent of educators are Native American. This is important since Native educators can serve as important role models for Native students.

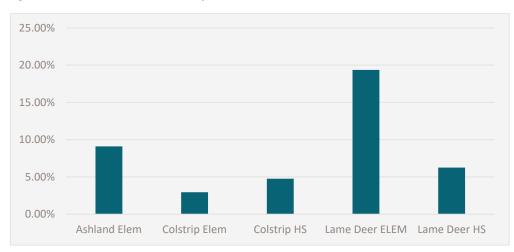


Figure 10: Percent Native Faculty (2022)

### **Teacher Salary**

Minimum teacher salary remains similar between Ashland, Colstrip Elementary, and Colstrip HS. All minimum salaries are under \$40,000. Minimum salaries have increased for Colstrip Elementary since 2019. Minimum salary for Ashland Elementary decreased since 2019. There remains a difference between the highest salaries for each of the districts. For example, when comparing the highest salaries in Colstrip HS to Ashland Elementary, there is a \$22,980.41 difference. Lame Deer, Northern Cheyenne Tribal, and St. Labre did not report salary data to the Maefairs system.

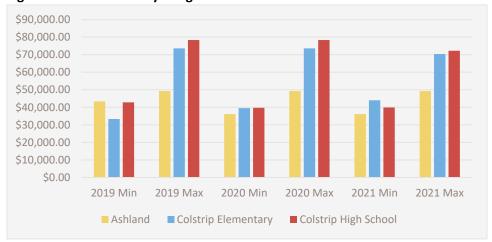


Figure 11: Teacher Salary Range Over Time

### **Conclusions**

Despite the pandemic, the school, student, and teacher characteristics remain remarkably resilient in Rosebud County. Historical challenges remain. Achievement trends indicate low performance in many schools, however there may be more important ways to acknowledge change while ensuring that all students are held to the same standard.

Enrollment matches historical trends in most schools. Per pupil ratios remain remarkably consistent. Satisfactory attendance rates increased for all schools except for Colstrip High School. Graduation rates have improved for Lame Deer High School. Dropout rates have also declined in Lame Deer High School. Achievement remains a challenge, especially with Math education. As noted earlier, statewide there have been declines in ELA and Math achievement, seen especially in Math. Teacher counts have improved. When comparing teacher counts to FTE, we see more part time teachers in the system, as noted in Ashland. Reporting districts share in common minimum salaries which are like minimum starting salaries in rural areas reported throughout the state. There does remain a challenge with experienced teachers and their salaries. There is a difference in the maximum salaries reported for Colstrip and Ashland.

Data for this report was pulled from the MT OPI Statewide Longitudinal Data System. OPI hosts a tool (GEMS) which allows the user to find official results for their school and enables comparisons to other schools. GEMS can be found at <a href="https://gems.opi.mt.gov">https://gems.opi.mt.gov</a>. The author of this report can be contacted for helpful advice on how to use this tool or to answer questions about the two reports submitted to the Circle of Schools. The author can be reached at <a href="mailto:robin.clausen@mt.gov">robin.clausen@mt.gov</a> or 406-444-3793.