

The Business Side of Mines

Faculty Forum

May 1, 2024

Paul C. Johnson President and Professor

Kirsten M. Volpi EVP CFO COO

What We Would Like You To Walk Away With Today

A better understanding of:

- How Mines runs as a business
- Mines' financial situation
- Trends in revenues and expenses, and implications for our future
- Mines' investments in faculty
- Mines' investments in research
- Mines' investments in infrastructure
- Department funding, budgets, and comparison to revenue generation



What's Happening Across Higher Education?

West Virginia University Slashes Majors and Cuts Staff Despite Protests

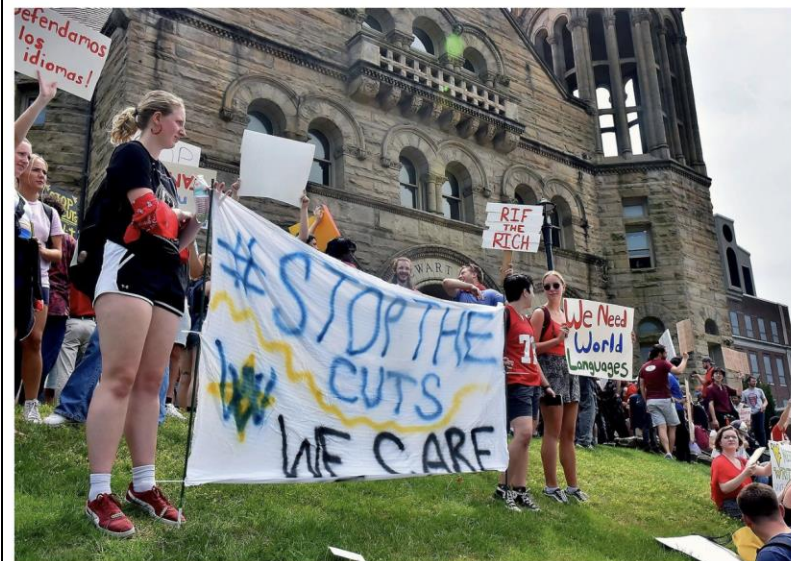
School will eliminate dozens of academic programs and over 140 faculty positions amid budget deficit

By [Melissa Korn](#) [Follow](#)

Sept. 15, 2023 1:51 pm ET

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Students protested against the administration's cuts at West Virginia University in Morgantown, W.Va., last month. PHOTO: RON RITTENHOUSE/THE DOMINION-POST/ASSOCIATED PRESS

The West Virginia University Board of Governors voted Friday to cut 28 academic programs and eliminate 143 faculty jobs—despite opposition from students, alums and faculty—in favor of what they say is a necessary step toward financial viability.

'Simply Stunned': A Sudden Financial Crisis Has Left U. of Arizona Fearful of What's to Come

By [Michael Vasquez](#) | FEBRUARY 2, 2024



MEGAN MENDOZA, THE REPUBLIC, USA TODAY NETWORK

Robert Robbins, president of the U. of Arizona, listens at a meeting last month on the university's finances.

Once flush with cash, the University of Arizona in November [announced](#) a large — and unexpected — budget deficit. This week, administrators unveiled some aspects of the financial-recovery plan, which includes cost cutting: They predict layoffs, along with cuts across a wide array of departments and academic divisions. Cuts in athletics, too, are a real possibility.

THE WALL STREET JOURNAL.

THE SATURDAY ESSAY

Why Americans Have Lost Faith in the Value of College

Three generations of 'college for all' in the U.S. has left most families looking for alternatives.

In the past decade, the percentage of Americans who expressed a lot of confidence in higher education fell from 57% to 36%, [according to Gallup](#). A decline in undergraduate enrollment since 2011 has translated into 3 million fewer students on campus. Nearly half of parents [say they would prefer](#) not to send their children to a four-year college after high school, even if there were no obstacles, financial or otherwise. Two-thirds of high-school students think they will be just fine without a college degree.

Your Questions

What is our financial outlook?

Why is it that we can afford all these new buildings, but there are no resources for [fill in the blank]?

Have we grown the faculty in relationship to student growth?

How is tuition revenue distributed? What percentage goes back to the departments and academic affairs?

How much does Mines co-invest in externally-funded research projects?

What's going on with equal pay/equal work?



What Are Our Funding Sources?

All Funds FY2024 Forecast \$478.4M

Auxiliaries

- Housing
- Dining
- Parking
- Student Fees

(expenses for these are funded by their dedicated auxiliary revenue streams; e.g., rent, parking, meal plans, etc.)

\$77.2M | 16%

Restricted Funds

- Endowment Payouts
- Gifts
- Outside Financial Aid

(uses specified by donors and funding sources)

\$34.3M | 7%

Sponsored Projects

(funds can only be used for items specified in the project budgets, with the exception of IDC)

\$106.3M | 22%

General Fund

- Tuition
- State Support
- IDC
- Other

(our discretionary funding)

IDC \$19.5M

\$260.6M | 55%



What goes in the General Fund?

General Fund FY2024 Forecast \$260.6M

State
Support
FFS and COF

\$33.6M | 13%

Tuition

\$196.0M | 75%

Indirect
Costs (IDC)
from Grants
& Contracts

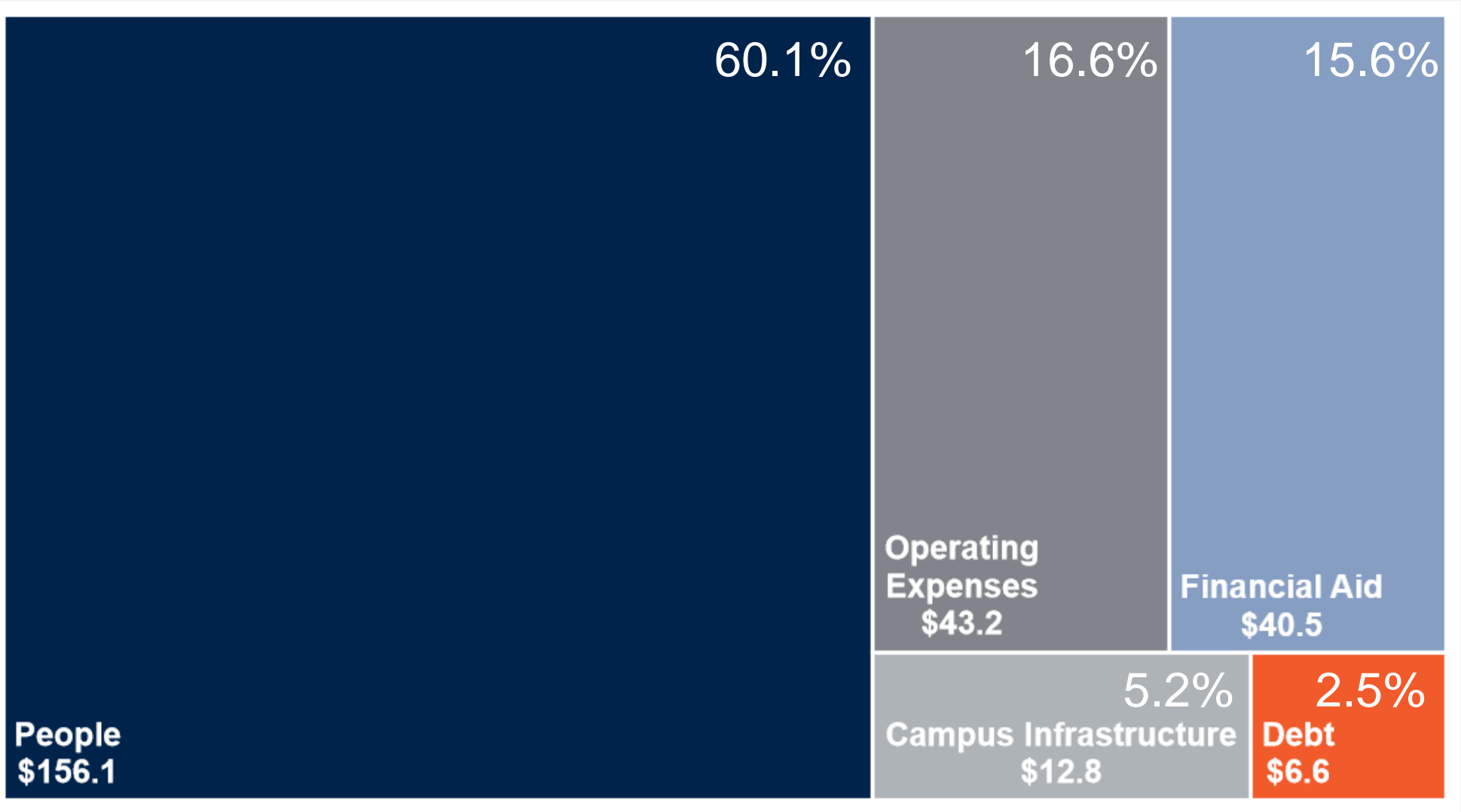
\$19.5M | 8%

Other
Income
Investments, Mines
Fund, and Other

\$11.5M | 4%



What Does the General Fund Support?



FY2024 General Fund Expenses Forecast



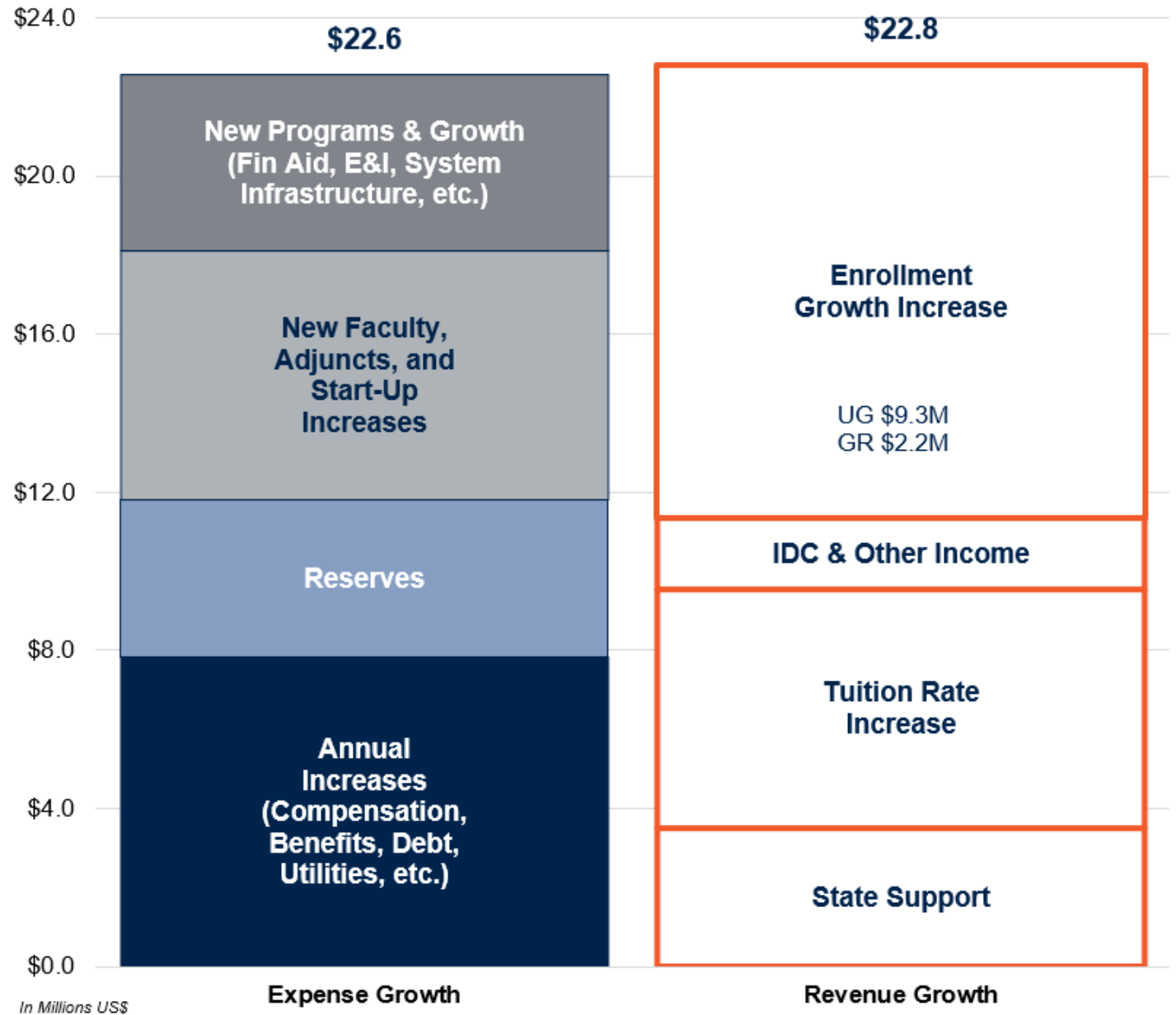
How are our major revenue and expense items changing with time?

	10 Years Ago	Now	Average Change per Year over 10 Years	Budgeted FY2024 to FY2025 Change
Revenue-Related Trends				
Total Students	5794	7608	2.8%	4.4%
Resident UG Tuition per FTE student	\$ 14,790	\$ 18,390	2.2%	2.9%
Non-resident UG Tuition per FTE student	\$ 31,740	\$ 41,580	2.7%	3.0%
Resident Grad Tuition per FTE student	\$ 14,796	\$ 18,558	2.3%	3.0%
Non-resident Grad Tuition per FTE student	\$ 31,518	\$ 41,580	2.8%	3.0%
State Funding (\$M)	\$ 17	\$ 34	7.2%	10.5%
Expense-Related Trends				
Number of Employees (FTE)	1035	1352	2.7%	0.8%
Average Employee Compensation (per FTE)	\$ 77,534	\$101,074	2.7%	3.0%
Health Benefits Cost (per FTE)	\$ 10,716	\$ 14,362	3.0%	14%
Average UG Financial Aid per Student	\$ 3,580	\$ 7,095	7.1%	TBD
Operating Costs & General Fund Debt (\$M)	\$ 33.4	\$ 62.5	6.5%	7.0%



Why has growth been such an important part of MINES@150?

FY2024 to FY2025 Budget Changes





DOING THE MATH

College is a big investment of your time, energy and finances. We have financial aid professionals who are here to help with all of your questions.

COST OF ATTENDANCE

	Resident (Colorado)	Non-Resident (Out-of-state)
Tuition	\$18,390	\$41,580
Room & Board	\$16,820	\$16,820
Fees	\$2,796	\$2,796
Books & Supplies	\$1,500	\$1,500
Personal Expenses	\$2,556	\$2,556
Total Cost	\$42,062	\$65,252



COLORADO SCHOOL OF
MINES

Considerations that Will Shape our Future Financial Situation & Planning

- Nearing our undergraduate enrollment capacity
- Tuition rate increases will be moderated by the market and the state ($\leq 3\%$ per year are likely)
- Externally-determined expenses (utilities, benefits, etc.) are growing at $>3\%$ per year
- Expectations for student support services have grown

- Competition for STEM students is growing while the national student pool is shrinking
- Our cost of attendance is high compared to other top national public universities
- Public focus on ROI and debt has increased

- Our portfolio includes very large to very small academic programs
- Limited sharing of resources across programs; mostly non-scalable course delivery
- Graduate enrollment – in particular, non-thesis post-bac enrollment has not grown as needed



Implications and Priorities for Our Future

- Need to continue to differentiate and strive to make Mines "**Top-of-Mind and First-Choice**" relative to other universities
- Needs to double UG and Grad applications
- Need to grow non-thesis post-bac enrollment; need to increase enrollment in low-enrolled courses
- Need to seek other non-tuition derived revenue streams and investments
- Need to figure out what we shouldn't do anymore and what we need to do differently
- Need to have equitable participation in our mission across all programs



Special Topics



How much does Mines co-invest in our research programs?

FY2023 Mines Research Investment



Mines Research Unrestricted Revenue & General Fund Investment Statement		FY2023
Institutional Revenues Collected		
Unrestricted Revenue: IDC Recovered		\$ 18,300,000
Grant Paid Tuition Revenue		8,838,000
Charge Outs (Salary and Fringe)		352,000
Total Revenues		\$ 27,490,000
Direct Investments		
Research Administration Support (ORA & VPRTT)		\$ 3,670,000
Graduate Student Tuition and Fees (GF only)		2,906,000
Graduate Student Payroll (GF only)		261,000
40% of T/TT Faculty Salaries/Fringes (GF only)		15,260,000
Technology Transfer (Legal Fees for Patents)		370,000
IDC Returns to Campus (VPRTT, DH, Pls, Center Directors)		3,820,000
Charge Out Salary Usage (To Dept Rollforward for Adjuncts, Other Usage)		265,000
Faculty Start-Up Packages		8,565,000
Cost of Research Space (Organized Building Research FY17 & FY20)		8,451,080
Total Direct Investments		\$ 43,568,080
GF Investment In Research Enterprise		\$ 16,078,080
Research Expenses From External Funding Sources		\$ 86,566,862



How have we been able to add new buildings to campus?

Major Capital Projects	Year of Completion	Cost (\$M)	Funding Sources		
			Auxiliaries and Student Fees	Endowment, Gifts, and Other Restricted Funds	General Fund
McNeil Hall	2020	11.4	2.0		9.4
Spruce Hall	2020	43.2	43.2		
1750 Jackson	2020	45.8	45.8		
Parking Garage I	2020	18.0	18.0		
Labriola Innovation Complex	2024	25.0	5.0	17.0	3.0
Beck Venture Center	2024	24.7		12.2	12.5
Early Childhood Education Center	2024	10.2		1.3	8.9
Property Purchases	2020-24	23.1		7.9	15.2
New Classroom Building	2025	43.8	4.0		39.8
Mines Park Redevelopment	2025	152.1	152.1		
Parking Garage II	2025	35.8	35.8		
South Campus Utilities	2025	22.8			22.8
Sophomore Housing	2026	200.0	200.0		
Energy and Materials Res. Facility	2026	240.0		240.0	
	Total	\$895.8	\$505.9	\$278.3	\$111.6
		% of Total	56%	31%	12%



Why haven't we invested in research buildings?



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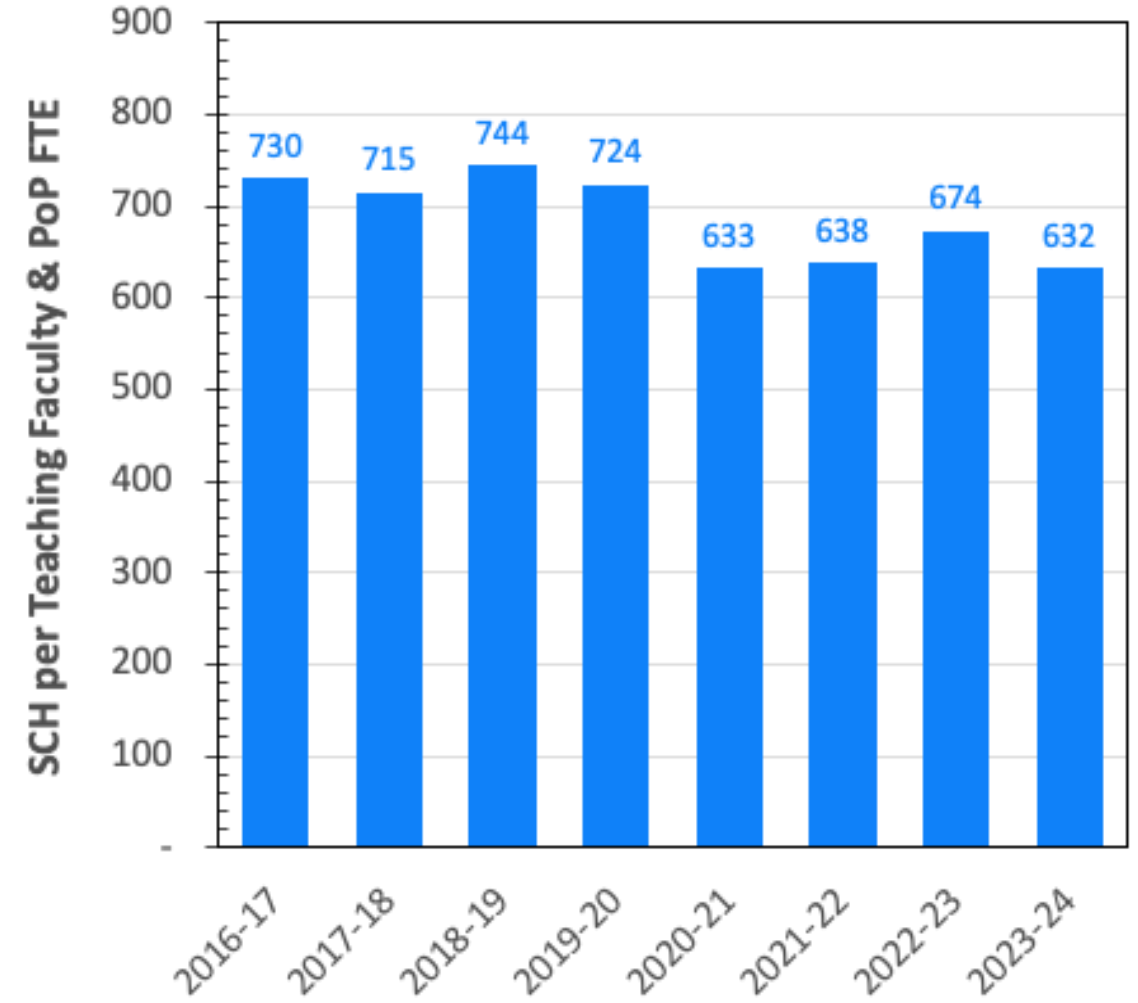
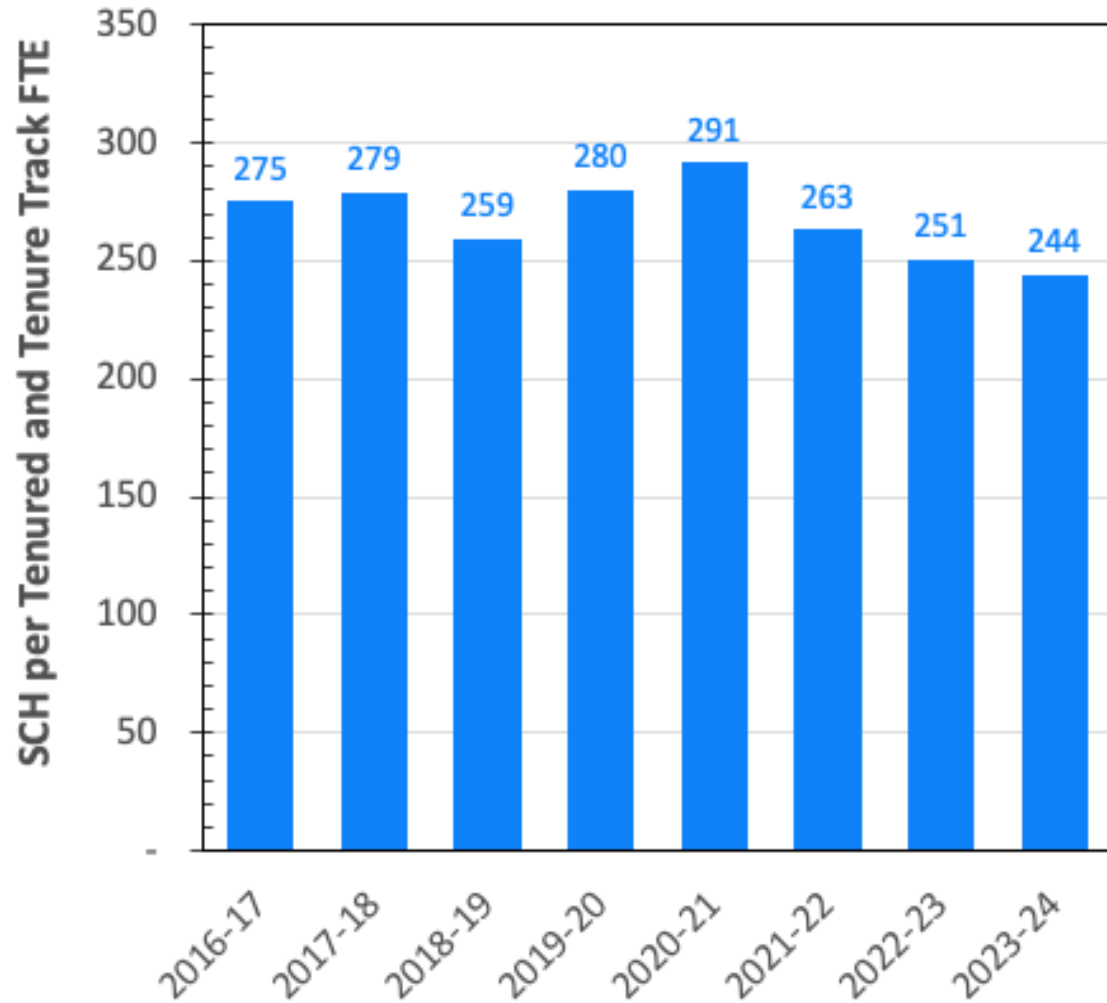


Other Examples of Recent Investments in Upgrades to Academic and Research Space

Recent Lab / Research Investments	Year Funded	General Fund Investment
Coorstek 250	FY22	\$3,505,000
Brown 316A/B Renovation	FY23	\$3,347,642
Denver Federal Center	FY24/25	\$1,930,000
GRLA 1018	FY22	\$445,200
Alderson Lab	FY22	\$420,000
GRLA 111	FY22	\$411,365
Edgar Mine / Blast Chamber	FY23	\$250,000
Lab Equipment	FY21	\$200,000



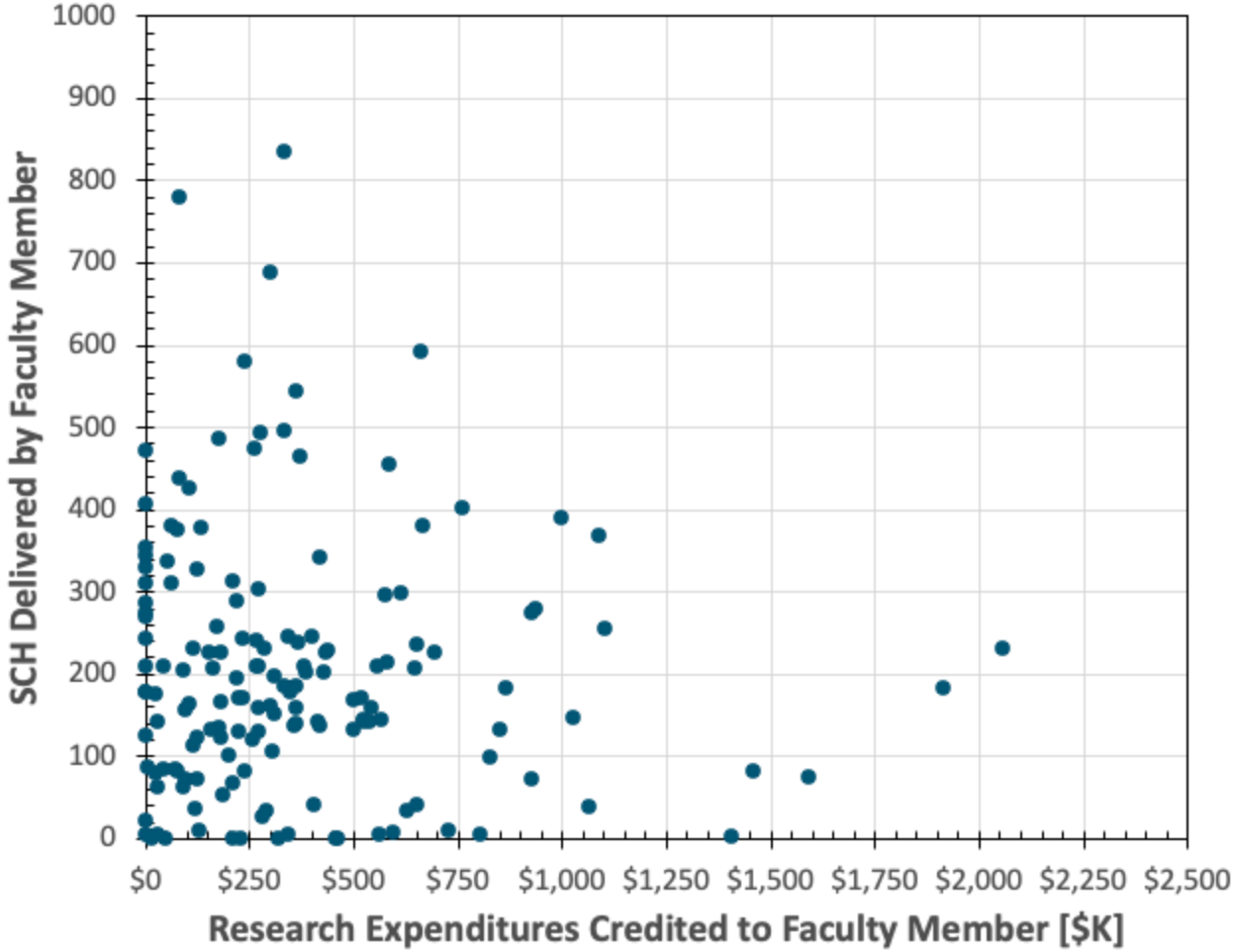
Has Faculty Hiring Kept Up with Student Growth?



Average SCH Taught per Faculty



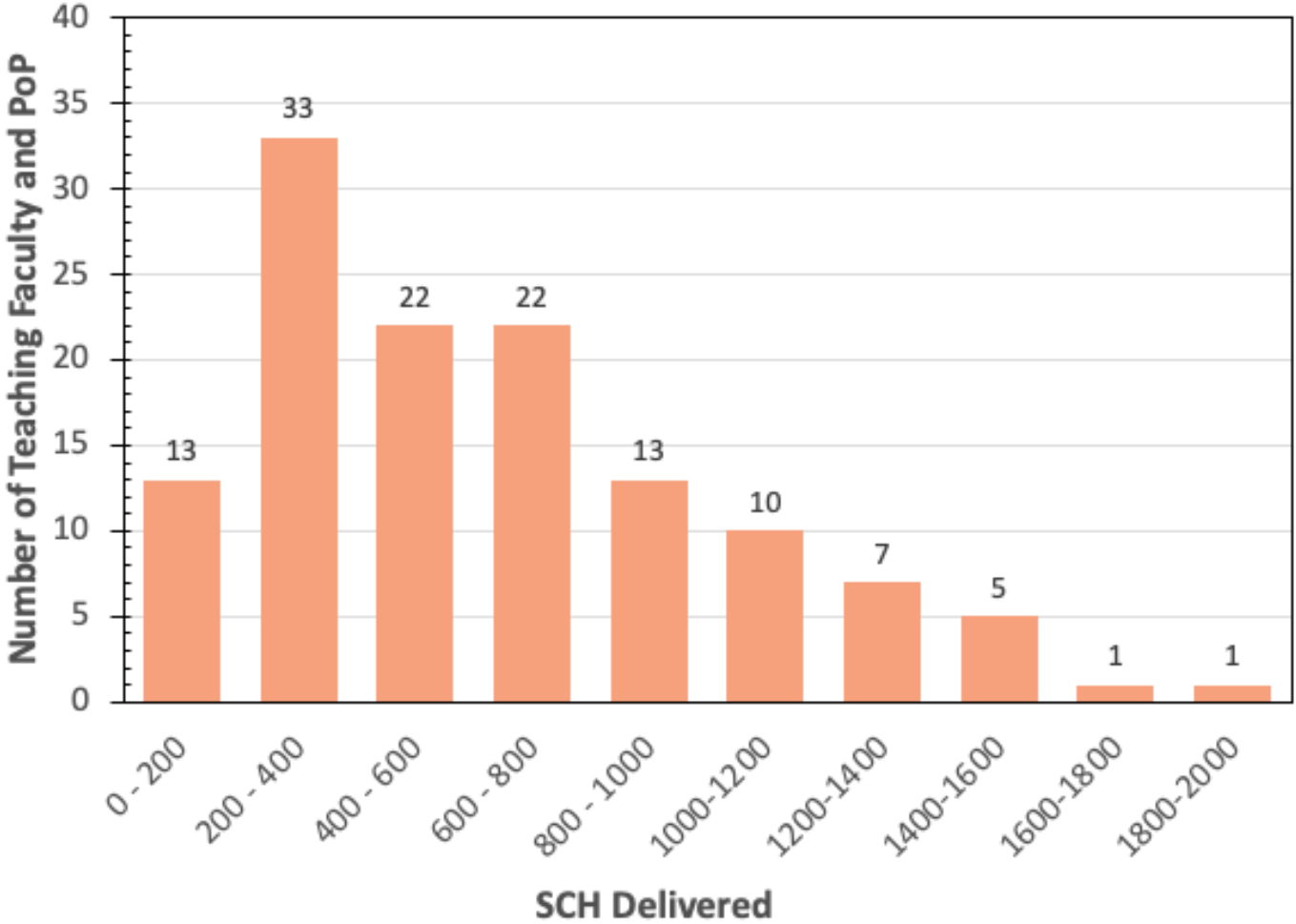
Why Doesn't It Feel Like Full-Time Faculty Hiring Has Kept Up with Student Growth?



Research Expenditure Credited per T/TT Faculty Member	2018 Avg SCH Instructed per T/TT Faculty Member	2024 Avg SCH Instructed per T/TT Faculty Member
<\$250K	256	217
\$250K - \$500K	249	226
\$500K - \$750K	197	191
\$750K - \$1000K	165	204
>\$1000K	119	145



Why Doesn't It Feel Like Full-Time Faculty Hiring Has Kept Up with Student Growth?



How is the General Fund allocated?

How much goes directly to academic departments?

Undergraduate Tuition	\$144,650,649
Graduate Tuition	\$33,084,683
Online Tuition	\$2,035,507
State Support	\$30,075,196
Indirect Cost Recoveries	\$18,343,328
Investment Income	\$4,835,469
Other Income and Gifts	\$5,760,798
Total General Fund Revenues	\$238,785,630
AA Departments	\$83,497,544
Academic Administration and Support	\$14,102,107
Online Direct Support	\$1,656,938
Enrollment Management	\$7,239,947
Institutional Graduate Support	\$8,795,198
Research Support	\$8,367,796
Global Initiatives	\$1,534,898
Financial Aid	\$37,428,776
Student Life	\$10,182,438
University Administration and Support	\$5,364,738
Finance and Administration	\$12,011,156
Information Technology	\$16,037,423
Buildings, Maintenance, and Operations	\$20,964,231
Other University Operations	\$7,965,699
Debt	\$3,030,317
Total General Fund Expenses	\$238,179,207

Based on FY2023 financials.



Total Funding for Academic Departments

	Total
Budget Allocations for Academic Departments	
Labor	\$65,837,443
Academic Faculty	\$55,574,569
Administrative Faculty	\$2,769,427
Adjuncts (Actual and Acting as Adjuncts)	\$3,492,006
Classified	\$2,510,591
Other Labor	\$1,490,850
Operating	\$1,740,368
Graduate Support	\$5,924,782
Summer Increments	\$786,772
Department Distributions	
Incentives	\$508,771
Start Up	\$8,699,408
Total of Budgets for Academic Departments	\$83,497,544



Departments Operating Activity

	Dept #1	Dept #2	Dept #3	Dept #4	Dept #5	Dept #6	Dept #7	Dept #8
Delivered Credit Hours	11,456	12,040	8,838	8,963	29,308	15,311	23,295	7,472
Actual Budget	\$6,729,406	\$5,884,486	\$3,745,110	\$3,514,636	\$5,912,423	\$7,763,055	\$6,203,871	\$3,591,494
Budget If SCH Proportioned	\$4,861,372	\$5,109,193	\$3,750,420	\$3,803,463	\$12,436,897	\$6,497,247	\$9,885,271	\$3,170,755
Difference	(\$1,868,034)	(\$775,292)	\$5,309	\$288,827	\$6,524,474	(\$1,265,808)	\$3,681,400	(\$420,739)
Research Expenditures	\$5,422,296	\$9,762,818	\$1,713,468	\$1,105,189	\$1,456,257	\$8,648,385	\$3,798,362	\$483,041

	Dept #9	Dept #10	Dept #11	Dept #12	Dept #13	Dept #14	Dept #15	Dept #16
Delivered Credit Hours	2,092	22,251	3,231	19,597	6,900	15,783	6,937	3,291
Actual Budget	\$2,563,046	\$9,287,958	\$3,161,350	\$5,828,257	\$5,061,446	\$3,682,877	\$7,186,764	\$3,381,365
Budget If SCH Proportioned	\$887,744	\$9,442,248	\$1,371,080	\$8,316,018	\$2,928,026	\$6,697,541	\$2,943,727	\$1,396,541
Difference	(\$1,675,302)	\$154,290	(\$1,790,270)	\$2,487,761	(\$2,133,420)	\$3,014,665	(\$4,243,037)	(\$1,984,824)
Research Expenditures	\$5,454,208	\$11,264,934	\$3,487,383	\$10,338,705	\$6,410,774	\$116,625	\$12,492,445	\$2,104,205

75% of all SCH come from 8 departments; 83% of all research expenditures come from 8 departments; 5 are in both groups



What We Hope You Are Walking Away With Today

A better understanding of:

- How Mines runs as a business
- Mines' financial situation
- Trends in funding and expenses, and implications for our future
- Mines' investment in faculty during MINES@150
- Mines' investment in research during MINES@150
- Mines' investment in infrastructure during MINES@150
- Department funding vs revenue



Implications and Priorities for Our Future

- Need to continue to differentiate and strive to make Mines "**Top-of-Mind and First-Choice**" relative to other universities
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Questions?

