

# PURDUE

---

U N I V E R S I T Y



## **THE OFFICE OF RISK MANAGEMENT ANNUAL REPORT 2022-23**

## Program Summary

The Office of Risk Management coordinates and maintains a comprehensive risk-financing program on behalf of the University, Purdue Global, and other affiliated organizations, which involves: (1) the purchase of commercial insurance coverage for protection against catastrophic loss, and (2) the management of a loss fund (the “Risk Management Fund” or the “Fund”), which covers self-insured exposures as well as commercial insurance premiums, deductibles/retentions, and operating expenses of the Office of Risk Management. The risk financing program protects University and affiliate assets and activities both domestically and internationally. Outlined below are major exposures and coverage groups:

### Property

- Insured through Factory Mutual Global Insurance (FM Global)
  - Provides replacement cost coverage for buildings and contents, fine arts, and business interruption
  - Policy limits \$1.5 billion per occurrence
  - Per occurrence deductible is \$500,000 for the University, with a special deductible of \$750,000 for Wade power plant coverage
  - Per occurrence deductible is \$100,000 for Purdue Global
  - A.M. Best financial strength rating of A

### General Liability and Educators Legal Liability

- Insured through United Educators, Lexington, and Ironshore
  - Provides a broad range of coverage including general liability, professional, employment practices, director and officer’s liability, and other exposures.
  - Catastrophic excess general liability coverage limit of \$50 million per occurrence and annual aggregate
  - Catastrophic excess educators’ legal liability/directors & officer’s liability coverage limit of \$50 million per occurrence and annual aggregate
  - Per occurrence deductible is \$2 million.
  - A.M. Best financial strength rating of A

### Cyber

- Insured through Beazley and Starr
  - Provides both first party expense coverage and third-party liability coverage associated with the unauthorized disclosure of data, as well as alteration, corruption, and or destruction of stored data.
  - Policy limits: \$15 million per claim and in the aggregate
  - Each claim retention/deductible is \$1,000,000
  - A.M. Best financial strength rating of A

### Fidelity (Employee Faithful Performance of Duties) and Commercial Crime

- Insured through Fidelity and Deposit Company of Maryland (a Zurich company)
  - Policy limits: \$10 million per occurrence with no annual aggregate
  - Per occurrence deductible is \$100,000
  - A.M. Best financial strength rating of A+

### Auto Liability and Physical Damage

- Auto liability insured through United Educators and Liberty Surplus Insurance Corp
  - Catastrophic excess liability coverage limit of \$50 million per occurrence and no annual aggregate
  - Per occurrence deductible is \$2 million
  - A.M. Best financial strength rating of A
- Auto physical damage is primarily self-insured by the University, with some catastrophic coverage under the University's property policy

### Aviation

- Insured through Starr Aviation
  - Provides aircraft liability and physical damage coverage, as well as general liability coverage associated with ownership and operations of an airport
  - Liability limit of \$100 million (turbine craft) and \$25 million (piston craft) per occurrence with no annual aggregate limit. Airport operations liability coverage limit is \$100 million.
  - Each physical damage claim deductible is \$10,000 for piston craft (\$0 for turbine)
  - A.M. Best financial strength rating of A

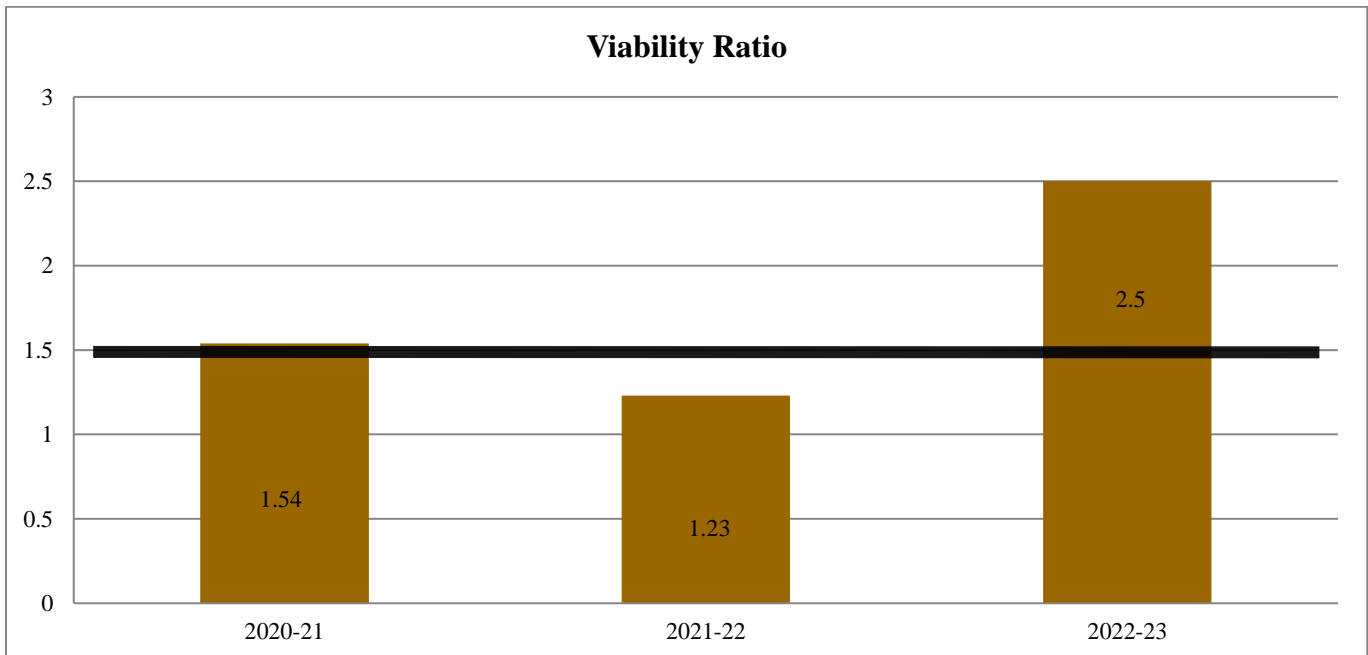
In addition to these major coverage categories, the Office of Risk Management procures special insurance coverage on behalf of various University units considering the activities in which they and their students engage. Examples of these coverages are international travel insurance and some aspects of the insurance for injuries incurred by our athletes involved in intercollegiate athletics.

### **Program Financial Health**

The chart on the next page depicts the Viability Ratio of the Risk Management Fund. This ratio measures the funds available to cover outstanding obligations (including reserves established for outstanding claims), as well as estimates of claims incurred but not reported (IBNR). In other words, the viability ratio is a function of Total Claims Outstanding and IBNR over Fund Balance. The black bar in the chart represents the minimum desired Viability Ratio (1.5) under normal circumstances.

As a reminder, the Office of Risk Management maintains the Risk Management Fund in part by recharging amounts to the various University units to cover premiums and other costs associated with its risk management and insurance services provided to the University. For this insurance year, the Office of the Treasurer approved an increase in the recharge rates paid by University units.

We are happy to report that the Risk Management Fund currently has resources to cover its obligations at a ratio of 2.5 times obligations. This ratio not only exceeds our minimum desired threshold, but also reflects a significant improvement over the past two insurance years, for which we had reported a weaker Fund balance. The improved viability ratio for the current year is largely due to an increase in revenue (resulting from the Treasurer-approved recharge rate increase, as well as a large insurance recovery<sup>1</sup>). It also benefitted from a reduction in our Claims Outstanding and Claims IBNR. These factors have contributed to healthy growth in our Fund balance.



Due to the impact of inflation, global catastrophic claim history, and the availability and pricing of reinsurance impacting the University’s insurers, the insurance markets remain hard, with rising premium costs in many lines of coverage. The need to cover these higher external premiums has continued to negatively impact the University’s Risk Management Fund, thus serving as a counterbalance to the revenue increase that the Fund experienced this year.

To assure the University is minimizing the cost of its risk financing programs and maximizing the efficiency of those programs, we continue to consult annually with industry specialists to advise us on exploring alternative risk financing vehicles, such as creating and or utilizing a captive insurance company. Based on the cost-benefit analysis conducted through this exercise, we continue to confirm it is highly unlikely the University would realize any worthwhile savings associated with approaching the market to purchase reinsurance over an owned captive, versus Purdue’s current practice of procuring

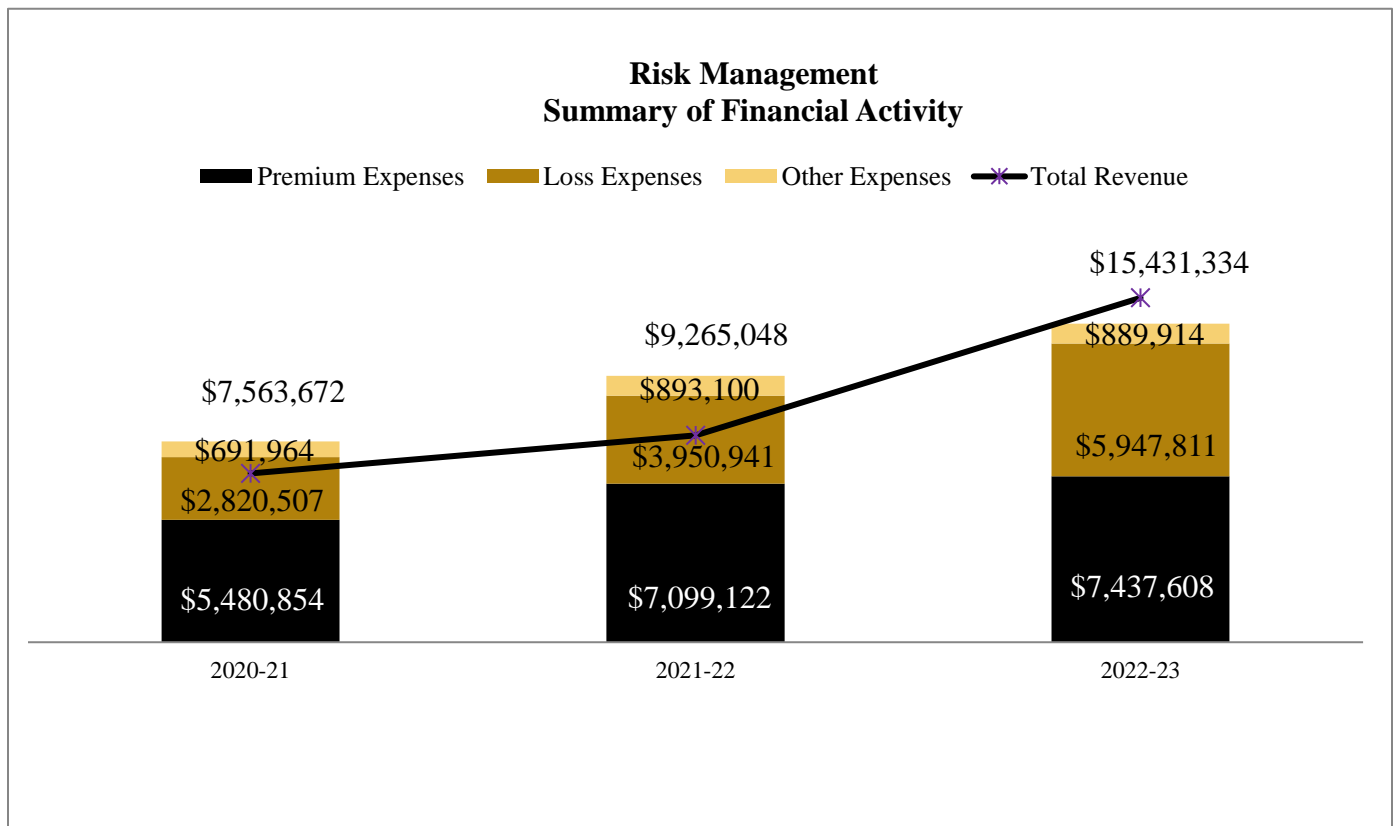
<sup>1</sup> In November 2022 we received \$1 million under a “cyber extortion” policy we previously had in place with Hiscox. This was a specialized coverage that had been procured in FY21-22 as part of our cyber coverage package with Beazley. While this policy is no longer available, it was fortuitous that we obtained it when we did, as it yielded first dollar coverage (no deductible) of the losses associated with the July 2022 Krannert ransomware incident.

excess insurance over a large retention program. This year we once again explored larger retentions that might enhance the Fund’s future efficiency; however, we concluded that the resulting premium reductions did not justify the additional loss exposure associated with those higher retentions.

### Statement of Revenues, Expenses, and Changes in Net Position

Illustrated below is a graph summary of the financial activity of the Risk Management Fund over the last three years. For a more detailed Statement of Revenues, Expenses, and Changes in Net Position for the Office of Risk Management, please see [Exhibit A](#) to this report.

As a reminder, the University’s insurance year commences on October 1 and ends on September 30. In the most recent insurance year (2022-23), the Risk Management Fund incurred a net operating surplus of \$1.2 million on total revenue of \$15.4 million. As noted above, the Fund’s operating revenues are generated by recharges to the various units to cover both premiums and risk management/insurance services. Premiums can vary year-over-year depending on the billing cycle of the insurer and whether policies from prior years are audited and retro-billed against the current insurance year. Of course, premium variations, as well as loss recovery variations from external insurers, affect Fund revenue each year. The available Fund balance as of September 30 (insurance year-end) was \$5.3 million and reflects the overall amount of available reserve to cover current obligations associated with claims outstanding, and incurred but not reported loss calculations (via actuarial formula).



## Premium History

See the chart below regarding insurance premium history including the current reporting year.

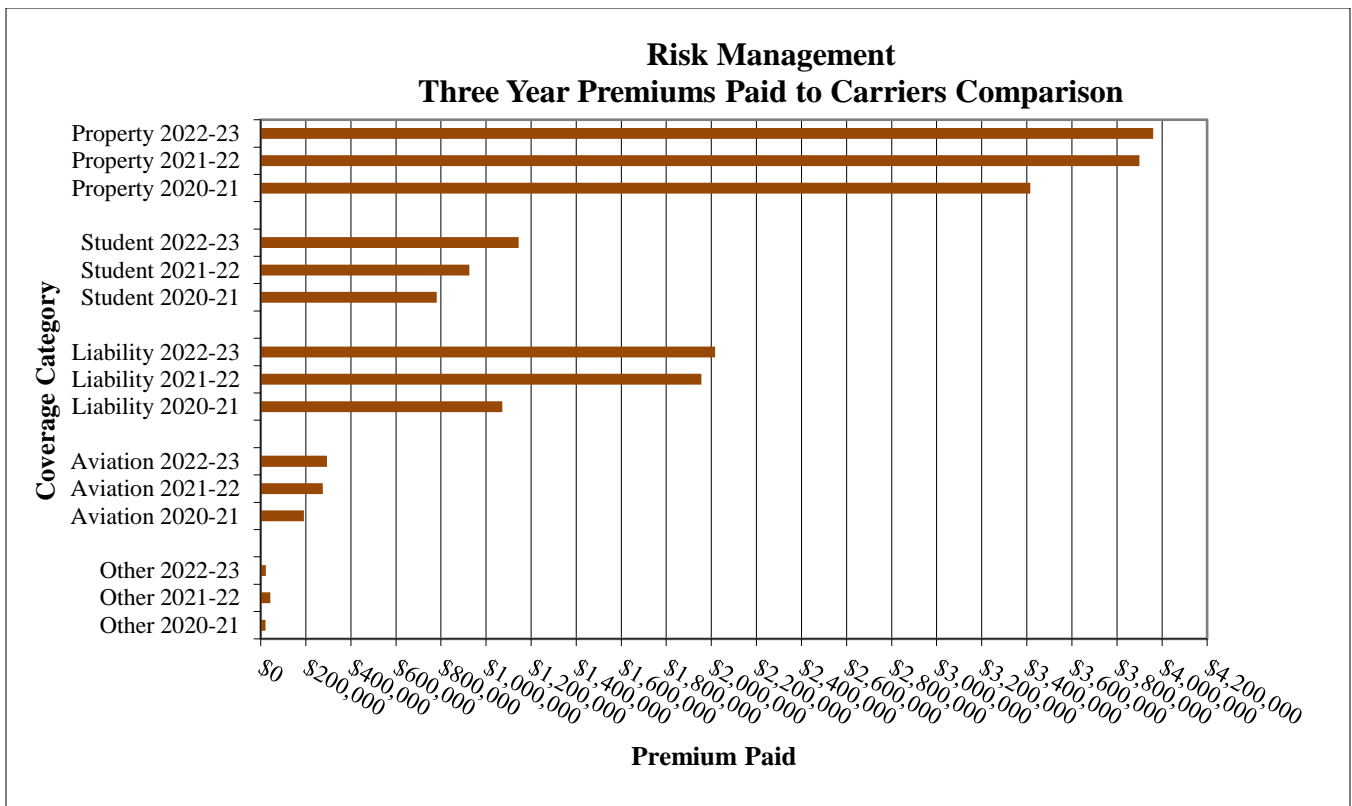
Property insurance premiums increased by only 1% with an overall increase to annual premium of 5.6%. The 1% rate increase was remarkable and significantly less than what most of our peers experienced. A portion of the overall 5.6% premium increase was associated with an inflationary increase in building values, as well as new construction occurring in the Purdue ecosystem. Applying a slightly higher rate to an increasing value base results in an increase in overall premium.

Student coverage experienced an upward swing due to the resumption of international travel by students in our programming for study abroad.

General liability and educators' legal liability premiums were up 7.3%. This was significantly less of an increase from the prior year and on par with general market trends. United Educators, and our layered excess program, remained the most cost-effective insurance solution with the widest breadth of coverage.

Aviation rates remained the same as expiring coverage due to a rate guarantee contingent on a favorable loss ratio. Total premium, however, increased by approximately 2% year over year. This is attributable to changes in the fleet of aircraft, and associated valuations. Our incumbent aviation underwriter (Starr) remained the most competitive for the University's fleet of teaching aircraft.

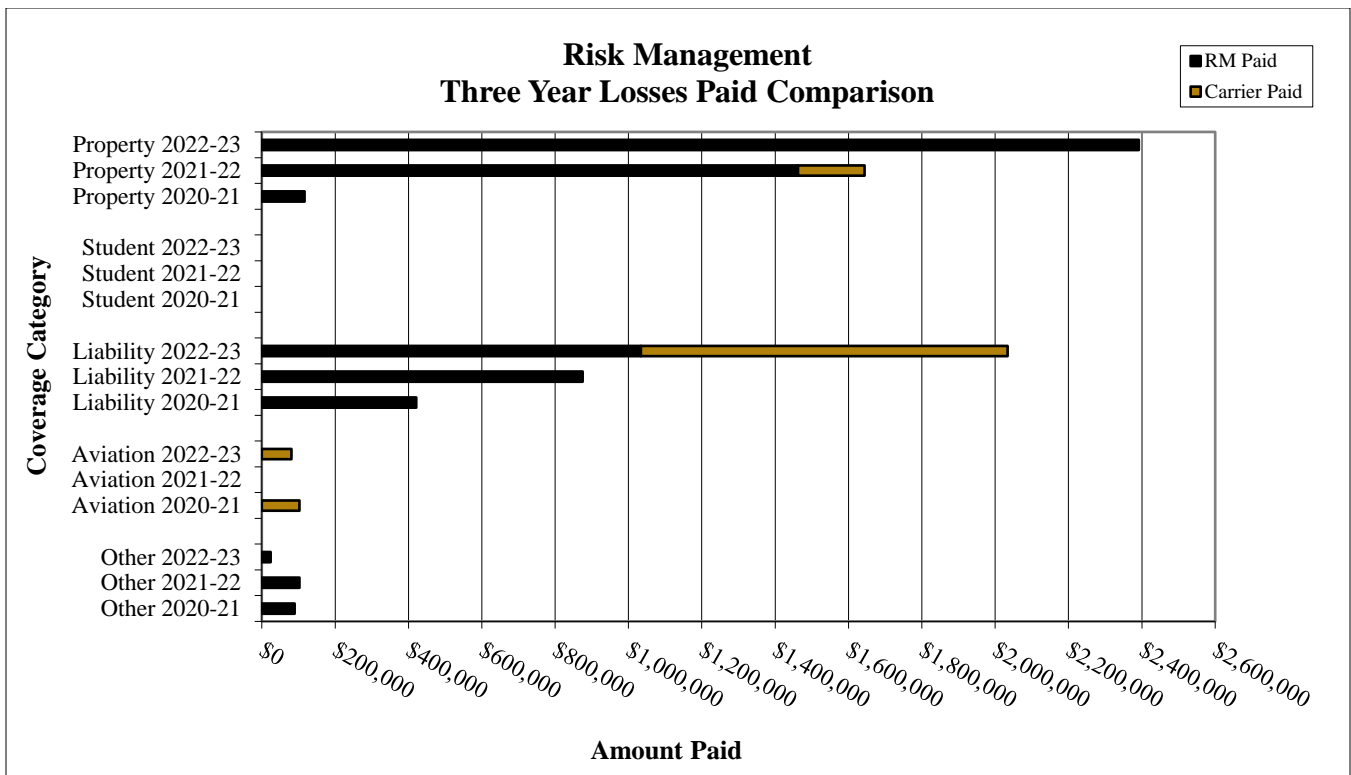
Cyber premiums are included in the general liability premiums in the chart below. As we advised you last year, we experienced unprecedented challenges in reaching our desired policy limit capacity of \$20 million. Excess insurers quoted exorbitant premiums that would have been imprudent for us to consider on layers over \$15 million. For this reason, we decided to reduce the coverage limits the University secures from \$20 million to \$15 million. We also restructured our layers of coverage and reduced the number of insurers from four to two. We were able to convince our primary insurer, Beazley, to assume the first \$10 million vs the \$5 million they previously supported. Starr provided the excess layer of \$5 million. These structural changes reduced our premiums from a quoted \$1.5 million to \$840,000, saving the University approximately \$660,000. We were also able to negotiate coverage enhancements associated with this new structure. We now have \$15 million in ransomware coverage versus the previous \$7.5 million. Because loss prevention and loss mitigation remain a constant primary focus, risk improvement plans continue to be discussed with University IT and executive management. With the benefit of improvement planning and the guidance of cyber-consultants, we will secure our ability to maintain current coverage limits at the next renewal.



### Loss History

The following chart shows the University’s three-year losses paid comparison, broken out by losses paid by the Risk Management Fund and losses paid by the insurance company. Property losses increased by approximately \$700,000 over the prior year. This was attributable to two large water damage losses associated with Waterfield Housing at the Fort Wayne Campus and a large fire loss at Zucrow Labs at the West Lafayette Campus. The chart shows no losses for student coverage, as these claims are administered and paid directly by the underwriter and not processed by the Office of Risk Management. Liability-related claim payments were up by approximately \$1.1 million due primarily to a cyber related claim.

The University had some minor physical damage related claims associated with its teaching aircraft this year.



## Loss Prevention and Loss Control

Loss control efforts are performed collaboratively with University departments and operations across the system. Examples of facilitated and completed risk management prevention activities, which based on our advisors' estimates could mitigate potential cumulative loss exposure by as much as \$32 million, are as follows:

- Improve housekeeping in mechanical rooms, attics at Knoy to ensure timely sprinkler activation.
- Improve ignitable liquid handling procedures at Zucrow Labs.
- Improve housekeeping in mechanical rooms and attics, in BCC.
- Improve housekeeping in mechanical room and attics, in the Math Data Center.
- Protect the DC lube oil pumps cabling from a lube oil fire at the power plant.
- Provided physical improvements to prevent stormwater flooding at Ground Services Building Utility Vault.
- Replace the corroded sprinklers located in the old dock outside the Walb Student Union kitchen.
- Significant additional cyber security enhancements.
- Implemented additional construction plan review services.
- Maintenance of an extensive communication network with departmental areas system wide.
- Excellent loss mitigation and prompt facility response on losses continues to help minimize loss potential associated with water damage across campus.
- Continued active participation in various campus safety committees



## Forward View of Plan Year 2023-24

The property and liability insurance markets continued to be challenging this year. Some areas, however, have begun to show signs of less volatility and greater stability. The University itself fared quite well, with most rate increases less than the average market increase. We continued to struggle with placements for some of our affiliated entities as underwriters continue to be very cautious regarding habitational exposures and their ability to secure adequate reinsurance at fair pricing. We are projecting the market will continue to stabilize with pockets of hard segments for another year or two.

- **General Liability and Educators' Legal Liability:** The University's primary general liability and educator's legal liability insurance program was placed once again with the incumbent underwriters United Educators. Premium increases were 6% on general liability and 2.3% on educators' legal liability, respectively. Increases on excess policies were Ironshore 14.9% and Lexington 17.4%. The aggregate blended increase for these lines of coverage came in at 8.6%. This is comparable for entities of our size in the education industry. The cost of reinsurance for these excess underwriters is the largest driver of increases.
- **Property:** The University's property insurance program was renewed for a fourth year with incumbent insurer FM Global. This insurer remained the most cost-effective underwriter with sufficient policy limit capacity of \$1.5 billion. The University's property renewal rate increased by 4% with an overall increase to annual premium of approximately 12%. The small 4% rate increase was remarkable considering market conditions. It was significantly less than what others in the market experienced. FM's initial quote was a 6% increase; however, we were able to negotiate that amount down to 4%. A portion of the overall 12% premium increase was associated with an inflationary increase in building values, as well as new construction occurring in the Purdue ecosystem. Applying a slightly higher rate to an increasing value base results in an increase in overall premium.
- **Aviation:** The University's incumbent aviation underwriter (Starr) remained the most economical aviation underwriter for the University. We had a multiyear agreement for guaranteed rates subject to a stipulated loss ratio parameter. With our loss mitigation programs engaged and a good loss year, our rates remain flat or at no increase. Any increase in year-over-year premium is reflective of changes in aircraft fleet valuations. We were able to negotiate another provisional rate guarantee for the 2023-24 insurance year (providing our loss ratio does not exceed 150%). Purdue continues to have one of the lowest aviation premiums among its peer group.
- **Cyber:** The University and affiliated entities experienced a much easier renewal this year with the cyber markets being in a greater sense of calm. A 10% premium reduction was negotiated on the primary \$10 million in coverage. We were also able to secure some coverage enhancements in the areas of cryptojacking, computer hardware replacement, and reputational harm. We were also able to negotiate a 23% decrease in premium on our excess \$5 million policy. With efforts of improvement planning and the guidance of cyber-consultants, we will continue to enhance our relationship with cyber underwriters within the industry, further securing our ability to demand the most preferential coverage at the lowest possible premiums.

As a reminder, a small sampling of the benefits provided under cyber coverage include (i) first party coverages for the restoration of lost or damaged data, software, and hardware; and (ii) the cost of experts/consultants and legal advisors to help manage through security breach incidents, provide notifications to affected parties, and ensure compliance with other legal requirements.

Second party coverage includes liability that may fall to the University for data in our care and control.

## **PARI and Other Affiliates**

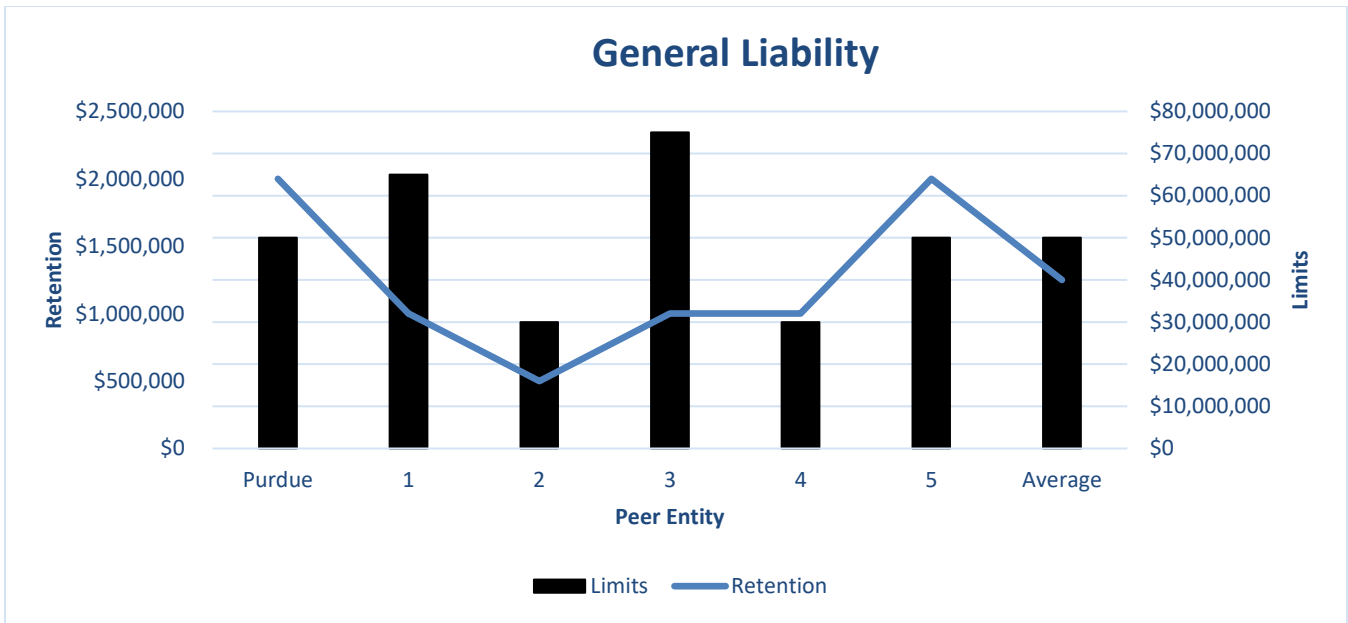
The Office of Risk Management continues to advise EVPR Plaut and other members of the Board of Managers of Purdue Applied Research Institute, LLC on appropriate risk coverage for its planned activities. In addition, our office continues to monitor and support the activities of Purdue Research Foundation, Purdue for Life Foundation, and Purdue University Global regarding their insurance programs.

In an effort to maximize our future loss prevention on highly specialized research facilities, we have negotiated loss prevention engineering services from our property insurance underwriter pertaining to preconstruction plan reviews, with the intent to identify loss mitigation strategies that can be designed into our buildings at inception. This takes into consideration future research and use that may take place in those specialized facilities. We anticipate these efforts will improve the safety for our faculty and students, not to mention the prevention of future down time due to facility damage.

## **Peer Benchmarking**

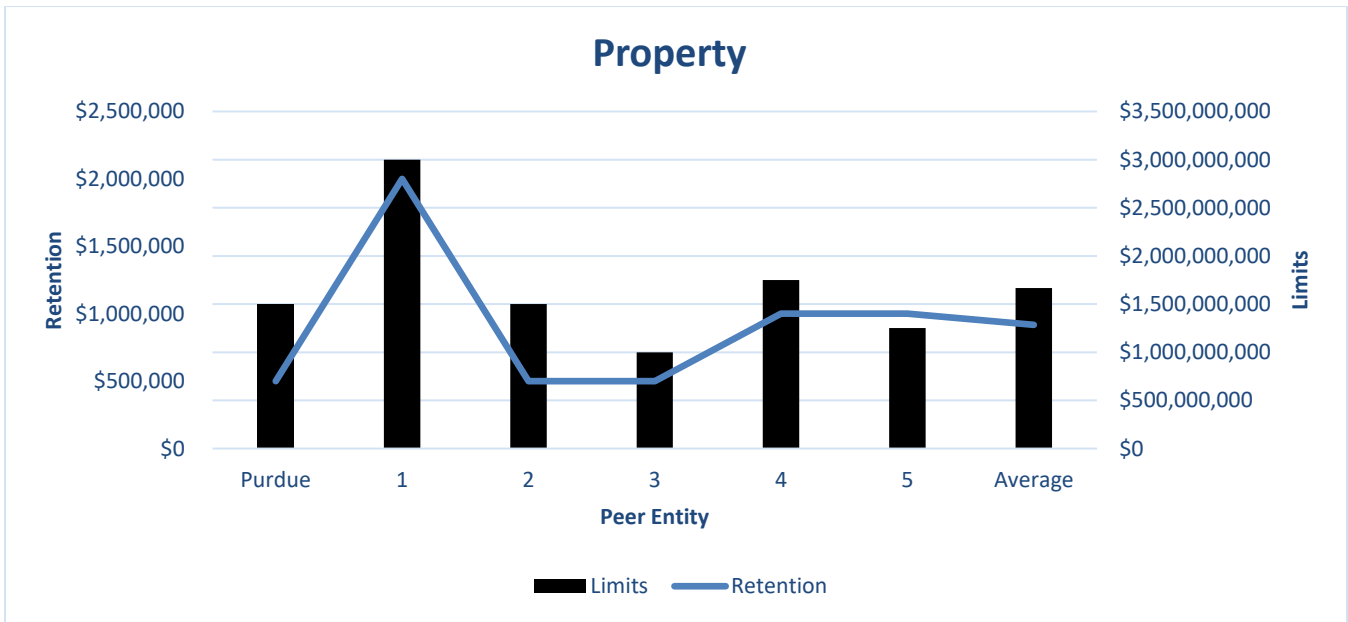
The following benchmarking indicates where Purdue ranks with a limited number of its peers in relation to coverage limits and deductibles. It should be noted that only limited peer institutions were willing to provide benchmarking data and would not include pricing. They advised us that openly providing information might adversely affect their underwriting going forward. (By way of orientation, please note that the **blue** line on each chart represents retention levels that correspond to the numbers on the left side. The **black** bars represent coverage limits that correspond to the numbers on the right side.)

These comparative charts indicate that the coverage Purdue purchases in the areas of general liability, property, and cyber are generally in line with the peer group average. Purdue does have a much higher retention for general liability, but its property insurance deductible is about half of the peer group average—an indication of the University’s relative degree of success in managing property insurance costs through a tough market over the past several years. With regard to cyber coverage, we generally fall in alignment with the peer averages for both coverage and deductibles. Based on Purdue’s individual risk profile, we are advised by our consultants that we are at the optimal deductible position for program efficiency.



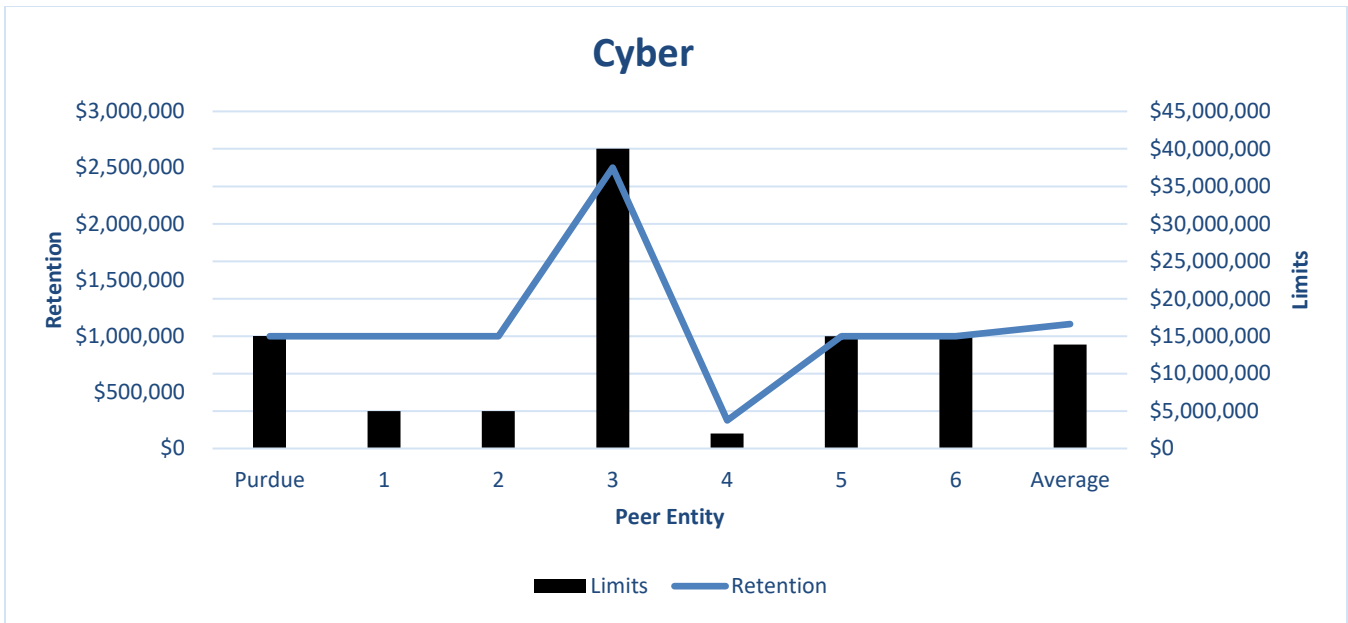
Average deductible: \$1,250,000

Average limit: \$50,000,000



Average deductible: \$916,667

Average limit: \$1,666,666,667



Average deductible: \$1,107,143

Average Limit: \$13,857,143

Exhibit A

**Risk Management**  
**Statement of Revenues, Expenses, and Changes in Net Position**  
**For the Years Ended September 30**

	2023	2022	2021
<b>Revenue</b>			
Revenue Paid to the Risk Management Program	\$ 11,079,082	\$ 6,570,085	\$ 5,367,683
General Fund Property Allocation	3,121,523	1,937,438	1,937,438
Interest Earnings on Reserves	114,470	90,810	127,005
Loss Recovery by Commercial Carriers	1,052,190	181,087	102,771
Third Party Recoveries	41,461	483,991	28,775
Internal Transfer	22,608	1,637	
<b>Total Revenue</b>	<b>\$ 15,431,334</b>	<b>\$ 9,265,048</b>	<b>\$ 7,563,672</b>
<b>Expenses</b>			
Premium Related Expenses			
Premiums Paid to Carriers	7,282,593	6,929,676	5,316,589
Broker Fees	155,015	169,446	164,265
<i>Total Premium Related Expenses</i>	<i>\$ 7,437,608</i>	<i>\$ 7,099,122</i>	<i>\$ 5,480,854</i>
Loss Related Expenses			
Losses Paid	4,530,476	2,622,129	1,730,370
Claim-Related Legal Fees	1,397,642	1,311,962	1,072,467
Third-Party Administrator Expenses	19,693	16,850	17,670
<i>Total Loss Related Expenses</i>	<i>\$ 5,947,811</i>	<i>\$ 3,950,941</i>	<i>\$ 2,820,507</i>
Other Expenses			
Loss Control Program Expenses	94,769	18,649	7,396
Premium Rebate Expense			
RM Grant Program Expenses			
Office of Risk Management Expenses	795,145	874,451	683,143
<i>Total Other Expenses</i>	<i>\$ 889,914</i>	<i>\$ 893,100</i>	<i>\$ 690,539</i>
<b>Total Expenses</b>	<b>\$ 14,275,333</b>	<b>\$ 11,943,163</b>	<b>\$ 8,991,900</b>
<b>Change in Net Position</b>	<b>\$ 1,156,001</b>	<b>\$ (2,678,115)</b>	<b>\$ (1,428,228)</b>
<b>Net Position as of September 30</b>	<b>\$ 9,254,389</b>	<b>\$ 8,124,918</b>	<b>\$ 10,542,478</b>
Less Claims Outstanding	(1,904,208)	(3,137,691)	(3,703,606)
Less Claims Incurred But Not Reported (IBNR)	(1,804,854)	(3,482,648)	(2,996,281)
Less PG-Funds Held in Trust	(255,894)	(255,894)	(255,894)
<b>Unobligated Net Position</b>	<b>\$ 5,289,433</b>	<b>\$ 1,248,685</b>	<b>\$ 3,586,697</b>