PURDUE UNIVERSITY

THE OFFICE OF RISK MANAGEMENT ANNUAL REPORT 2023-24

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 FM
  - Provides replacement cost coverage for buildings and contents, fine arts, and business interruption
  - Policy coverage limit of $1.5 billion per occurrence
  - Per occurrence deductible is $500,000 for the University, with a special deductible of $1,000,000 for boiler and machinery within the Wade power plant
  - 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, Ironshore, Vantage, Lexington, and Westchester
  - 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 Hartford Insurance Group
  - Catastrophic excess liability coverage limit of $50 million per occurrence, with 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

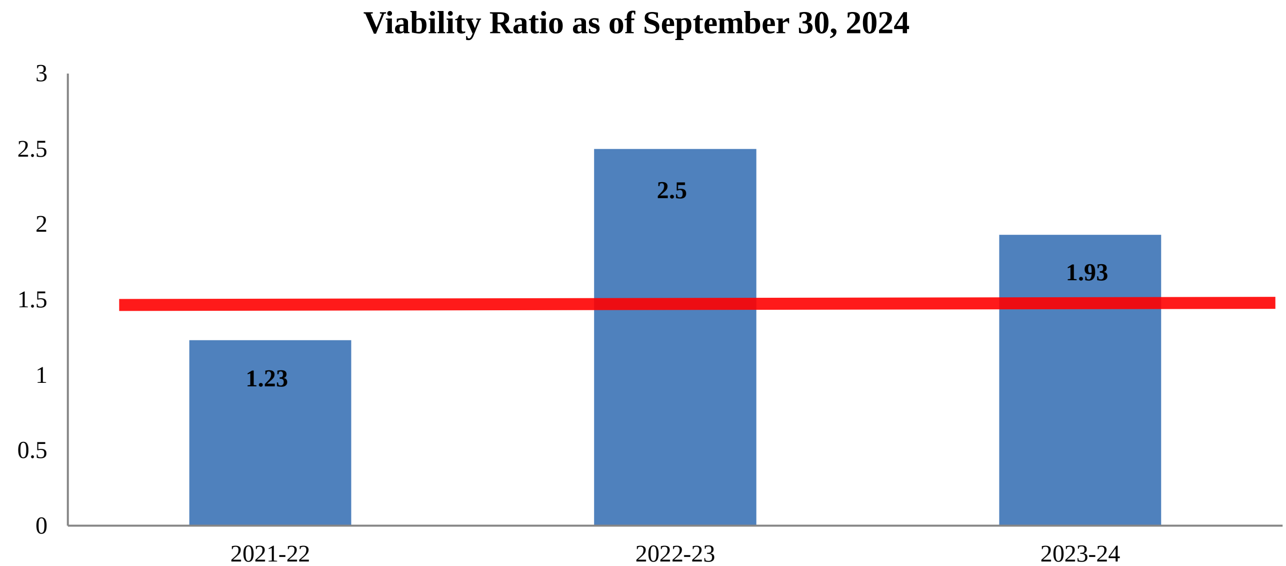
In addition to these major coverage categories, the Office of Risk Management procures special insurance coverage on behalf of various University units considering the activities in which they and their students engage. Examples of these coverages are international travel insurance and some aspects of 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 red 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 internal recharge rate remained the same as the prior year with no changes.

We are happy to report that the Risk Management Fund currently has resources to cover its obligations at a ratio of 1.9 times obligations. Our minimum desired viability ratio is 1.5 times obligations and is reflected by the red line. The favorable viability ratio for the current year is largely due to a slight increase in revenue associated with larger investment income returns, an increase in recoveries from third parties, and reduced cumulative losses.



Fund Balance: $11.8 M - Fund Obligations: 6.1 M
Unobligated Fund Balance: $5.4 M

The impact of inflation, global catastrophic claim history, and the availability and pricing of reinsurance continue to impact the University's insurers, and 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 Risk Management Fund, thus serving as a counterbalance to the revenue increase that the Fund experienced.

Risk Financing Analytics

This year the office of Risk Management partnered with consultant AON Risk Services to deploy a proprietary analysis tool to assist with evaluating the efficiency of Purdue's dollar spend on risk financing. More specifically, the analysis examined our policy limits, retentions, loss payments, and premium spend by line of insurance coverage (general liability, educators' legal liability, auto, property, and cyber). A Monte Carlo loss modeling analysis was also utilized to identify the University's expected losses and potential catastrophic loss exposure (by line of coverage as per above) for a range of loss probabilities ranging from a one-in-one year exposure to a one-in-one thousand-year loss event. The above data was then incorporated into a total cost of risk efficiency model to analyze program total cost of risk at various, policy limits, loss scenarios and retention levels. The goal was to measure Purdue's total cost of risk efficiency. Recommendations were then made regarding possible programming improvements in order to optimize the overall program.

The results of the analysis confirmed the current risk financing programming is performing well, reducing risk volatility while providing good value to Purdue. The loss modeling validated that coverage limits purchased by the University are adequate up to 99.6% of the time (1 out of 250-year loss cycle) for the liability exposure, 99.9% of the time (1 out of 1000-year loss cycle) for property exposure, and 97% of the time (1 out of 42-year loss cycle) for the cyber exposure. Industry risk professionals recommend organizations purchase limits adequate to cover the 99.6% to 99.8% range of loss expectancy.

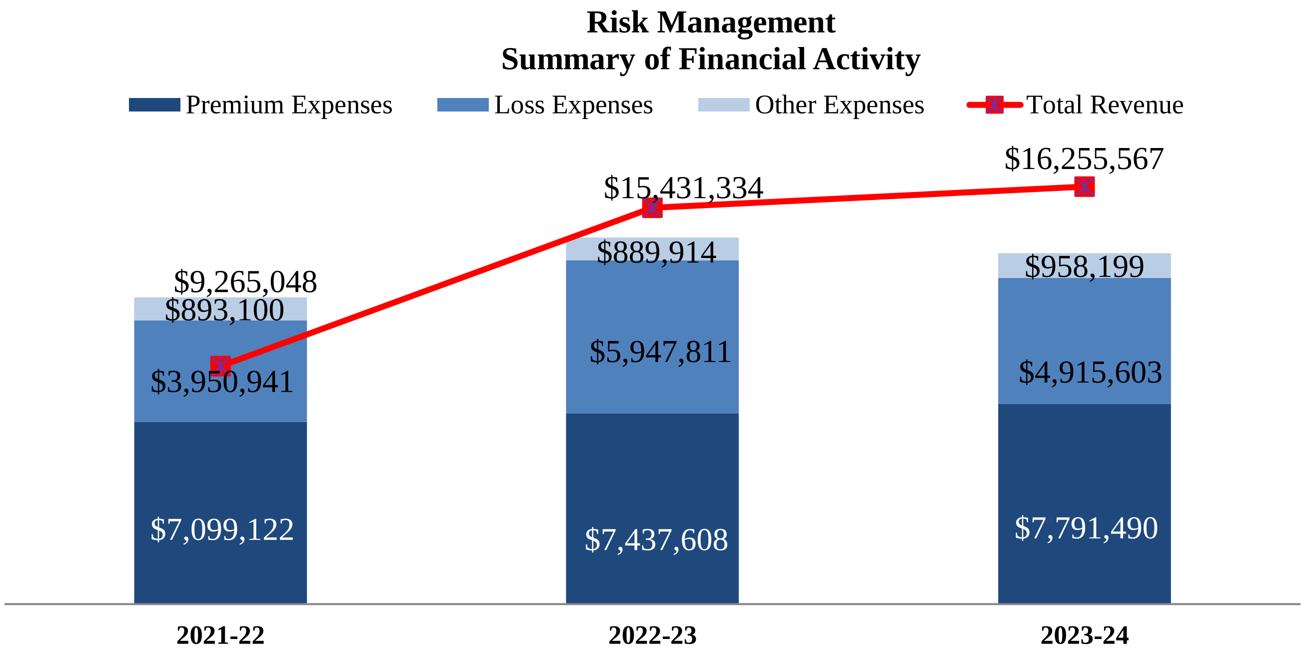
Recommendations from the report included suggestions to consider enhancing the cyber insurance policy limits in future years (providing the market allows for this to be accomplished efficiently) and to continue monitoring alternate methods of risk financing and deploying those options when it makes sense to do so.

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 (2023-24), the Risk Management Fund incurred a net operating surplus of approximately $2.6 million on total revenue of approximately $16 million. As noted above, the Fund’s operating revenues are driven by recharges to the various units to cover premiums, self-insured losses/deductibles, 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 $11.8 million and reflects the overall amount of available reserve to cover current obligations associated with claims outstanding, and incurred but not reported loss calculations of $6.4 million (via actuarial formula).

In short, the current state of the Risk Management Fund is very healthy.



Premium History

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

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. 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 the amount of new construction occurring in the Purdue ecosystem. Applying a slightly higher rate to an increasing value base results in an increase in overall premium.

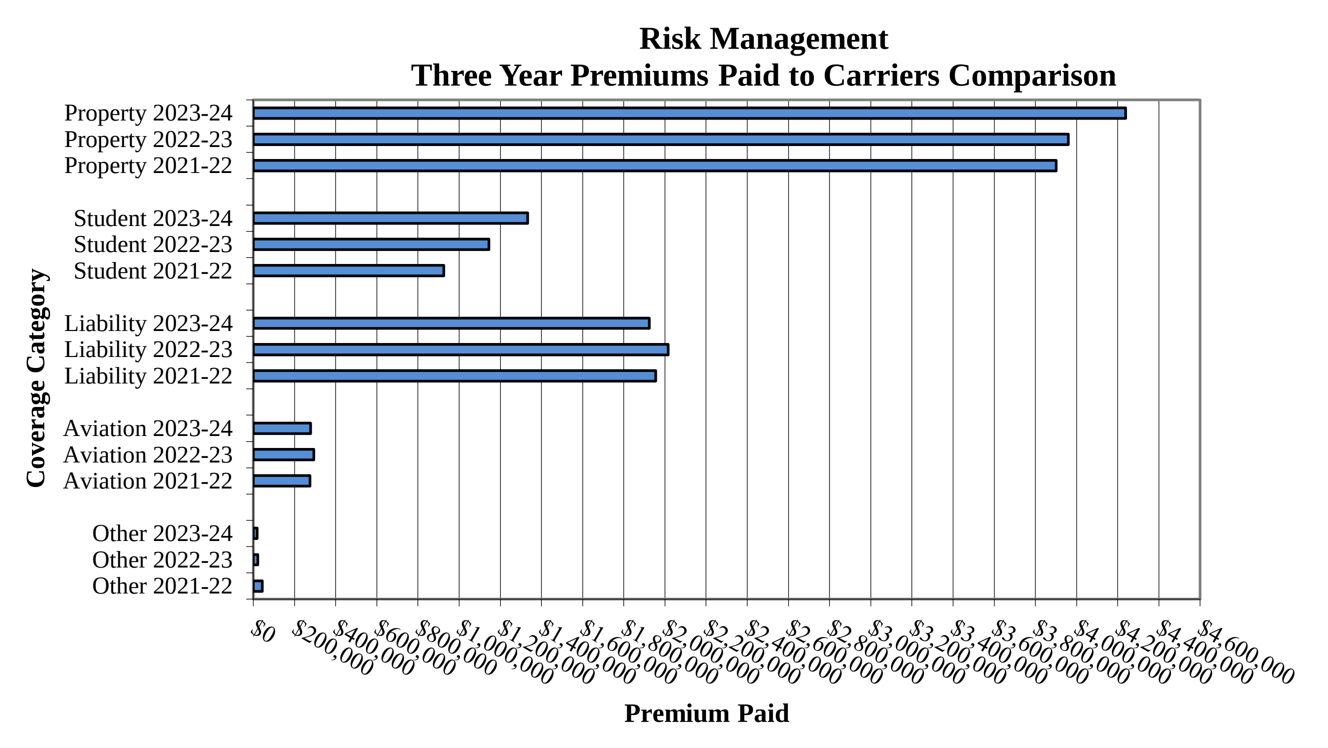
Student coverage experienced an upward swing due to the growth of international travel.

The general liability premium increase was 6% and the educators' legal liability premium increase was 2.3%. Increases on excess policies were experienced with carriers Ironshore (14.9%) and Lexington (17.4%). The aggregate blended increase for these various 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 rate increases. Please note, however, that the chart below actually reflects an aggregate *decrease* in premium from the prior insurance year. The reason for the appearance of an aggregate premium reduction, despite actual rate increases, rests in the fact that a portion of the billable premium was not billed and paid withing the applicable policy period.

Aviation rates remained the same as the prior year due to a multiyear rate guarantee we were able to secure, contingent on maintaining a favorable loss ratio. We had very few claims in this area and thus ended the year with an enviable loss ratio. Any change in year-over-year premium is merely reflective of changes in aircraft fleet valuations.

Cyber premiums are included in the general liability premiums in the chart below. This year the University and affiliated entities experienced a 10% premium reduction on the primary $10 million coverage layer. We were also able to achieve this benefit by making some coverage enhancements in the areas of cryptojacking, computer hardware replacement, and reputational harm. We also experienced a 23% decrease in premium on our $5 million excess policy. These reductions were mostly caused by improved market conditions for cyber underwriters and our continued efforts of improvement planning in the area of cyber security.

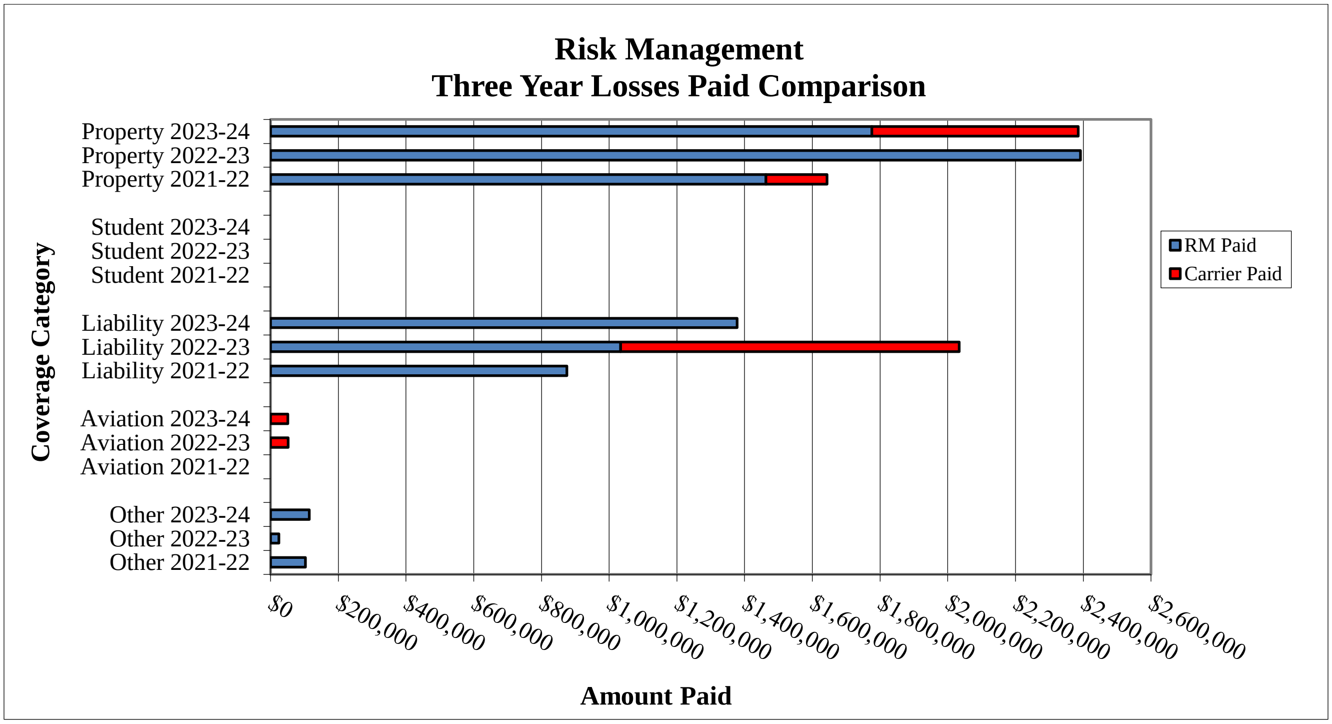
As a reminder, a small sampling of the benefits provided under cyber coverage include (i) first party coverages for the restoration of lost or damaged data, software, and hardware; (ii) second party coverage for liability that may fall to the University for data in our care and control; and (iii) the 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. This coverage continues to prove its value, as we were able to navigate through a recent cyber attack with no material loss with the benefit of the expert forensic and legal resources available under the policy.



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 decreased slightly over the prior year. This decrease was attributable to fewer incidents resulting in a loss. The chart shows no losses for student coverage, as these claims are administered and paid directly by the underwriter and are not processed by the Office of Risk Management. Liability-related claim payments were down by approximately $1.2 million, as liability losses returned to the historical average of our typical exposure in this area. You may recall, the prior year included a large cyber-related claim of approximately $1 million, but the good news was that this claim was fully covered under our policy.

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



Loss Prevention and Loss Control

Loss control efforts continue to be performed collaboratively with University departments and operations across the system. Examples of facilitated and completed risk management prevention activities, which are based on our advisor's estimates, could mitigate potential cumulative loss exposure by as much as $57 million:

- Physical Facilities: provided automatic shut offs for hydraulic systems, improved hot work programs, improved housekeeping and removed clutter/excess combustible materials, completed process hazard analysis, and corrected obstructions to sprinkler system.
- Utilities: enhanced physical inspection of post indicator valves and sprinkler control valves.
- Housing and Food Services: Improved housekeeping and valve supervision program, locked sprinkler protection control valves, and enhanced fire pump maintenance.
- Athletics: improved hot works programs and performed alignment checks on fire pumps.
- Regional Campuses: roof reinforcements regarding snow load, improved storm water emergency response plan and improved water leak detection in server room.
- Cyber security enhancements.
- 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 2024-25

The property and liability insurance markets continue to be challenging, although some areas are showing signs of less volatility and greater stability. The University itself faired quite well, with most rate increases less than the average market increase. We continue to struggle with placements for some of our affiliated entities, as underwriters continue to be cautious regarding liabilities associated with maintaining residential properties 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 underwriter United Educators. Due to restrictive underwriting and a very difficult reinsurance market, in order to achieve the University's desired excess coverage tower of $20 million excess of $30 million, it was necessary to utilize four separate underwriters in the construction of that coverage "tower." Each of the four underwriters was only willing to contribute a $5 million limit. Overall, we ended up with a total premium increase of approximately 13%. 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 the increase.
- ***Property:*** The University's property insurance program was renewed for a fifth year with incumbent insurer FM. 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 1.5% with an overall increase to annual premium of approximately 3.5% before any premium credits. Approximately 2% of the overall 3.5% 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.

  FM continues to offer several premium credits that make them stand out in the marketplace, these included a membership credit (loyalty credit) of $342,556 and a resiliency credit for enhanced risk mitigation of $228,370. Because of FM's corporate status as a mutual insurance company (owned by its policy holders), it is able to reward its member owners with credits tied to excess or unallocated reserves. We feel fortunate that our risk profile, our mitigation programs, and our strong relationship with FM allow us to benefit from these credits.
- ***Aviation:*** The University's incumbent aviation underwriter (Starr) continues to remain the most economical aviation underwriter for the University. We continue under a multiyear agreement for guaranteed rates subject to a stipulated loss ratio parameter. Thanks to our robust mitigation programs resulting in 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. Purdue continues to have one of the lowest aviation premiums among its peer group.
- ***Cyber:*** The University and affiliated entities continued to enjoy reduced rates for an additional year, as the cyber markets remains in a sense of calm. A 5% premium reduction was negotiated on the primary $10 million in coverage with the incumbent underwriter Beazley. We were able to secure addition coverage enhancements in the area of fraudulent fund transfers (more than doubling the current coverage sublimit). On the $5 million excess layer (placed with Starr), we were also able to negotiate a 5% decrease in premium. With continuous improvement efforts in our IT ecosystem 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

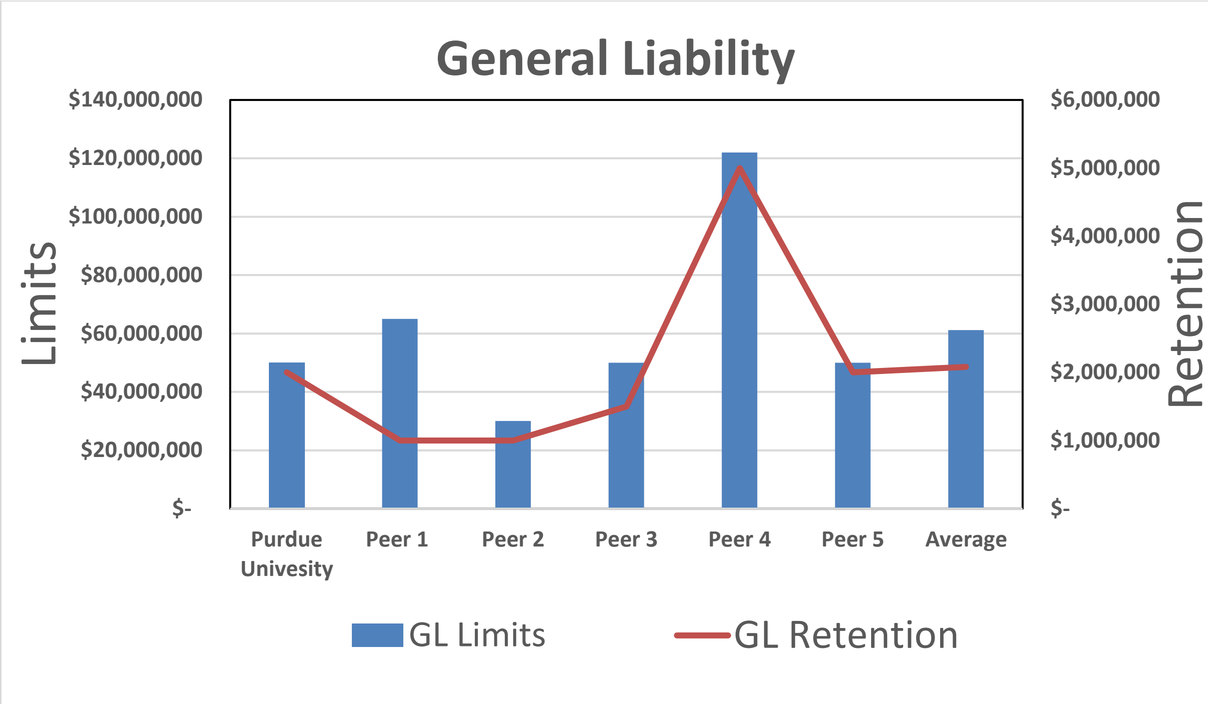
The Office of Risk Management continues to advise EVPR Plaut and other members of the Board of Managers of Purdue Applied Research Institute, LLC on appropriate risk coverage for its planned activities. In addition, our office continues to monitor and support the activities of Purdue Research Foundation,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

We continue our efforts to maximize our future loss prevention on highly specialized research facilities through a negotiated loss prevention engineering services from our property insurance underwriter related 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 continue to improve the safety for our faculty and students, not to mention the prevention of future down time due to facility damage.

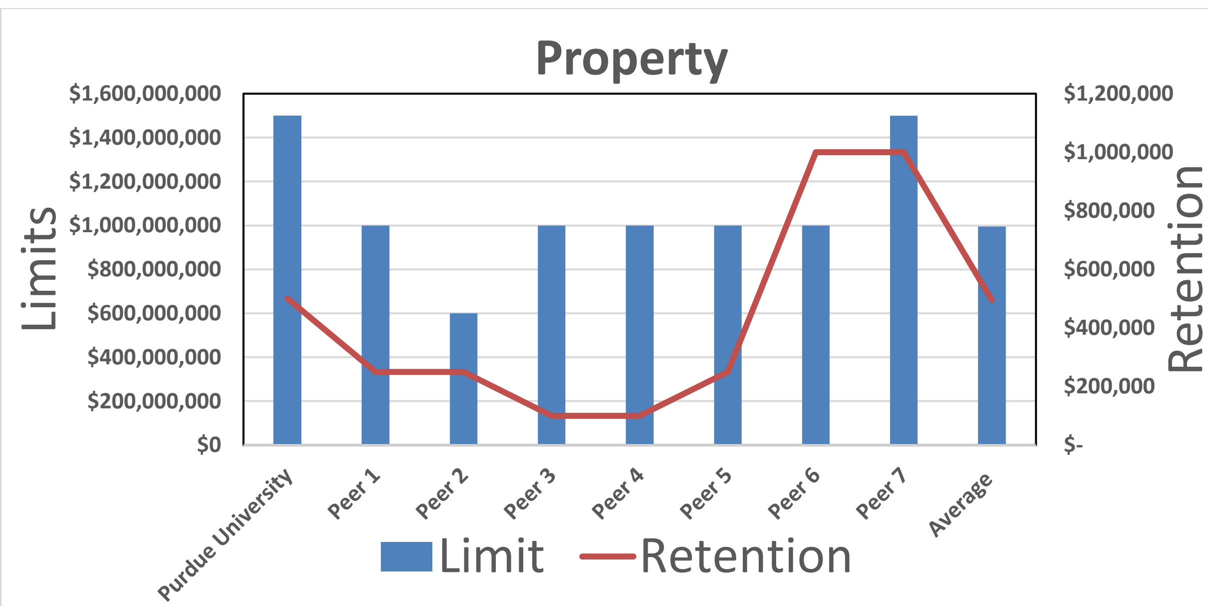
Peer Benchmarking

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 a limited number of peer institutions were willing to provide benchmarking data, and even then would not include pricing in most cases, advising us that openly providing that information might adversely affect their underwriting going forward. (By way of orientation, please note that the red line on each chart represents retention levels that correspond to the numbers on the right side. The blue bars represent coverage limits that correspond to the numbers on the left side.)

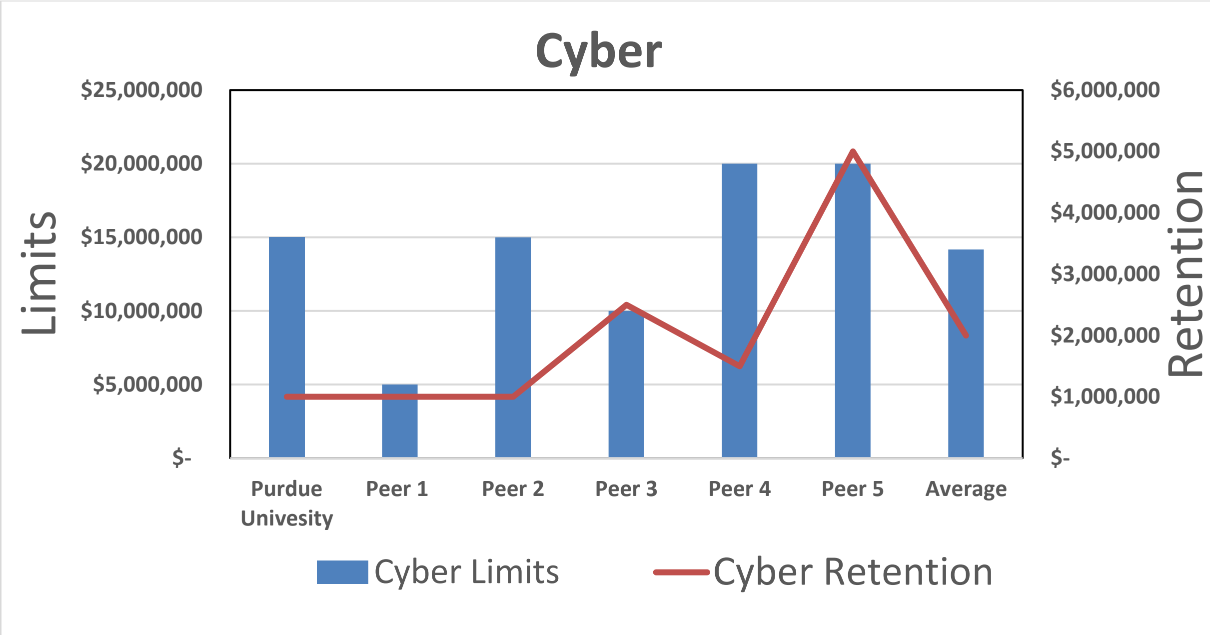
With regard to general liability insurance, Purdue is generally in line with limits purchased and deductible retained. In the area of property coverage, we fall in general alignment with regard to retention; however, we are able to secure slightly higher limits than our peer group. Purdue is usually able to secure higher limits in the property market due to its outstanding loss control efforts. The cyber chart indicates that Purdue is able to secure a much smaller retention than the peer grouping. This again is due to Purdue’s strong efforts in cyber risk control. The aviation graph indicates Purdue has a much lower cost per unit of coverage (per average aircraft seat) and much higher coverage limits than the peer group.



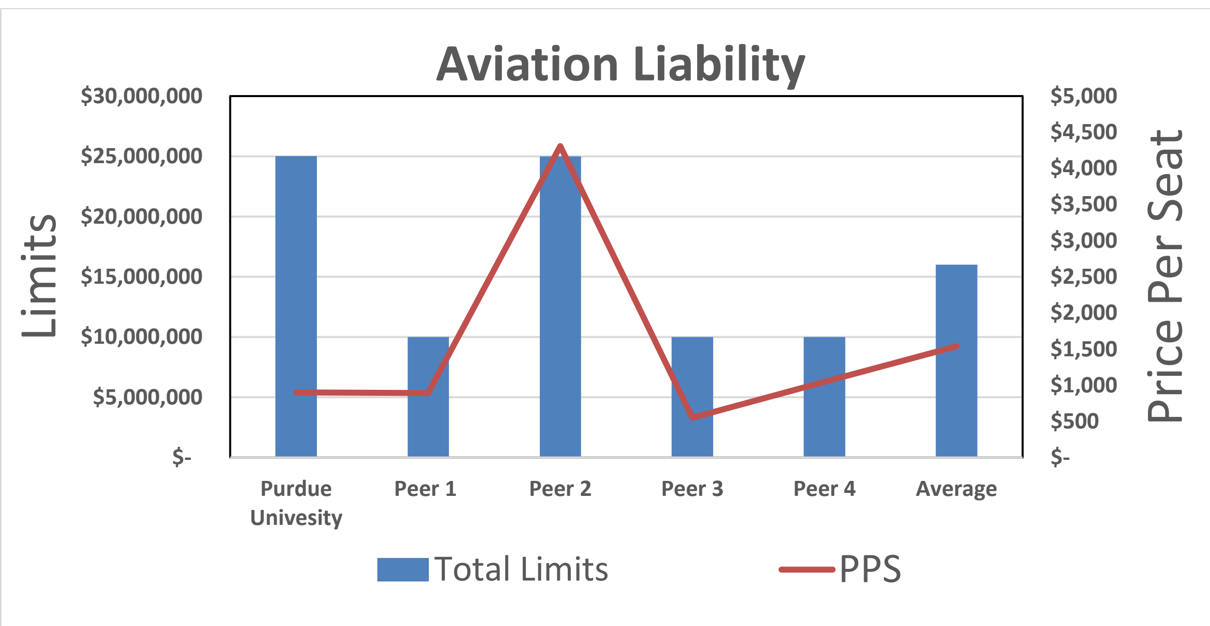
Average deductible: $2,083,000 Average limit: $61,167,000



Average deductible: $494,000 Average limit: $994,444,000



Average deductible: $2,000,000   Average Limit: $14,167,000



Average price per seat: $1,500   Average limit: $16,000,000

Exhibit A

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

		2024		2023		2022
Revenue						
Revenue Paid to the Risk Management Program	$	13,317,179	$	11,079,082	$	6,570,085
General Fund Property Allocation		1,937,438		3,121,523		1,937,438
Interest Earnings on Reserves		256,569		114,470		90,810
Loss Recovery by Commercial Carriers		660,390		1,052,190		181,087
Third Party Recoveries		83,991		41,461		483,991
Internal Transfer		-		22,608		1,637
Total Revenue	**$**	**16,255,567**	**$**	**15,431,334**	**$**	**9,265,048**
Expenses						
Premium Related Expenses						
Premiums Paid to Carriers		7,633,970		7,282,593		6,929,676
Broker Fees		157,520		155,015		169,446
Total Premium Related Expenses	$	7,791,490	$	7,437,608	$	7,099,122
Loss Related Expenses						
Losses Paid		3,899,014		4,530,476		2,622,129
Claim-Related Legal Fees		1,000,379		1,397,642		1,311,962
Third-Party Administrator Expenses		16,210		19,693		16,850
Total Loss Related Expenses	$	4,915,603	$	5,947,811	$	3,950,941
Other Expenses						
Loss Control Program Expenses		81,898		94,769		18,649
Premium Rebate Expense						
RM Grant Program Expenses						
Office of Risk Management Expenses		876,301		795,145		874,451
Total Other Expenses	$	958,199	$	889,914	$	893,100
Total Expenses	**$**	**13,665,292**	**$**	**14,275,333**	**$**	**11,943,163**
Change in Net Position	**$**	**2,590,275**	**$**	**1,156,001**	**$**	**(2,678,115)**
Net Position as of September 30	**$**	**11,777,810**	**$**	**9,254,389**	**$**	**8,124,918**
Less Claims Outstanding		(3,274,225)		(1,904,208)		(3,137,691)
Less Claims Incurred But Not Reported (IBNR)		(2,830,610)		(1,804,854)		(3,482,648)
Less PG-Funds Held in Trust		(255,894)		(255,894)		(255,894)
Unobligated Net Position	**$**	**5,417,081**	**$**	**5,289,433**	**$**	**1,248,685**