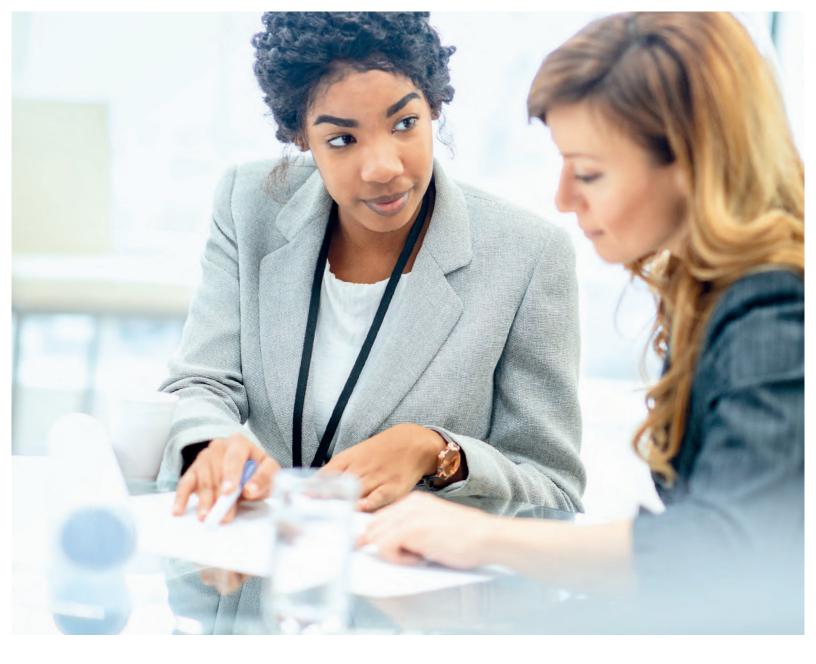


Providing peace of mind to our policyholders.





Being there when it matters most.

Donegal Group Inc. is an insurance holding company that offers property and casualty insurance through its wholly owned insurance subsidiaries. Our Class A common stock and Class B common stock trade on the NASDAQ Global Select Market under the symbols DGICA and DGICB, respectively.

DONEGAL GROUP INC ANNUAL REPORT Our insurance subsidiaries and Donegal Mutual Insurance Company have interrelated operations and conduct business together as the Donegal Insurance Group. The Donegal Insurance Group, which is rated A (Excellent) by A.M. Best Company, offers commercial and personal insurance products through a network of independent insurance agencies in 24 states.

We are focused on several primary strategies, including achieving sustained excellent financial performance, strategically modernizing our operations and processes to transform our business, capitalizing on opportunities to grow profitably and delivering a superior experience to our agents and customers.



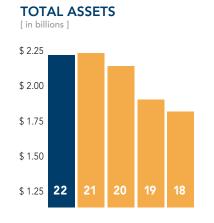
Financial Highlights

YEAR ENDED DECEMBER 31,	2022	2021	2020	2019	2018
INCOME STATEMENT DATA					
Premiums earned	\$ 822,489,450	\$ 776,015,201	\$ 742,040,339	\$ 756,078,400	\$ 741,290,873
Investment income, net	34,016,112	31,125,631	29,504,466	29,514,955	26,907,656
Investment gains (losses)	(10,184,797)	6,477,286	2,777,919	21,984,617	(4,801,509)
Total revenues	848,220,546	816,465,791	777,819,910	812,451,471	771,828,320
Income (loss) before income tax expense (benefit)	(3,638,099)	30,338,508	63,272,503	57,081,030	(48,236,849)
Income tax expense (benefit)	(1,678,694)	5,084,334	10,457,251	9,929,286	(15,476,509)
Net income (loss)	(1,959,405)	25,254,174	52,815,252	47,151,744	(32,760,340)
Basic earnings (loss) per share - Class A	(0.06)	0.83	1.84	1.68	(1.18)
Diluted earnings (loss) per share - Class A	(0.06)	0.83	1.83	1.67	(1.18)
Cash dividends per share - Class A	0.66	0.64	0.60	0.58	0.57
Basic earnings (loss) per share - Class B	(0.07)	0.74	1.65	1.51	(1.09)
Diluted earnings (loss) per share - Class B	(0.07)	0.74	1.65	1.51	(1.09)
Cash dividends per share - Class B	0.59	0.57	0.53	0.51	0.50

BALANCE SHEET DATA AT YEAR END

Total investments	\$ 1,304,657,242 \$	1,276,845,897 \$	1,221,201,784 \$	1,110,553,363 \$	1,030,798,566
Total assets	2,243,349,335	2,255,175,399	2,160,520,324	1,923,161,131	1,832,078,267
Debt obligations	35,000,000	35,000,000	90,000,000	40,000,000	65,000,000
Stockholders' equity	483,593,012	531,036,087	517,774,120	451,015,519	398,869,901
Book value per share	14.79	16.95	17.13	15.67	14.05







To Our Stockholders: A Look at 2022

The year 2022 was a challenging one for the property and casualty insurance industry. The impact of economic inflation on costs to settle property and automobile claims accelerated to heights not seen in 40 years. Ongoing supply chain disruption and labor shortages drove repair and replacement costs upward. Higher energy costs and interest rates also contributed to elevated costs of materials and services. Severe weather events throughout the year increased demand for supplies and labor, putting additional pressure on the duration of repairs and costs DONEGAL to resolve claims.

DONEGAL GROUP INC ANNUAL REPORT Insurance companies have generally responded by increasing premium rates and tightening underwriting guidelines to catch up to, and keep pace with, the historic cost increases.

Donegal recognized the spike in loss costs beginning in late 2021 and began to respond with substantial rate increases across nearly all of our lines of business. The pace and magnitude of those rate increases accelerated as loss trends deteriorated during 2022. We also tightened underwriting controls to enhance our risk selection. While it will take time for those actions to show up in our results, our substantial investments in data analytics and actuarial talent are providing substantial insights and empowering data-driven decisions at a much faster velocity than just a few years ago. As our revenues reflect rate increases and loss costs stabilize, we believe we will be well positioned to take advantage of favorable market opportunities and to generate sustained excellent financial results.





Financial Summary

Total revenues increased 3.9% for 2022 compared to 2021, reflecting a 6.0% increase in net premiums earned and a 9.3% increase in net investment income. Net investment losses of \$10.2 million for 2022, compared to net investment gains of \$6.5 million for 2021, were primarily related to a decrease in the market value of equity securities we held at December 31, 2022.

The combined ratio increased to 103.3% for 2022, compared to 101.0% for 2021, primarily due to higher claim frequency and severity during 2022 compared to 2021. Net favorable reserve development for losses incurred in prior accident years partially offset the increased loss activity. Net favorable development totaled \$44.8 million for 2022, reducing the loss ratio by 5.4 percentage points, compared to \$31.2 million for 2021 that reduced the loss ratio by 4.0 percentage points. We attribute the 2022 development primarily to lower-than-expected loss emergence for the 2020 and 2021 accident years, with primary favorable impact in the commercial automobile and personal automobile lines of business.

We had a net loss of \$2.0 million, or 6 cents per Class A share, for 2022, compared to net income of \$25.3 million, or 83 cents per diluted Class A share, for 2021. Our book value per share was \$14.79 at December 31, 2022, compared to \$16.95 at year-end 2021. After-tax unrealized losses within our available-for-sale fixed-maturity portfolio due to a spike in market interest rates reduced our book value by \$1.39 per share during 2022.

Commercial Lines Segment

Commercial lines net premiums written grew by \$18.0 million, or 3.6%, compared to 2021 due to solid premium increases and strong renewal premium retention. Our commercial lines segment generated a statutory combined ratio of 103.7% for 2022, compared to 104.9% for 2021. We experienced significant improvement in the performance of our commercial automobile line of business in 2022, due to a multi-year effort to substantially increase pricing and reduce exposures in unprofitable states. Our commercial multi-peril line of business performance reflected continuing inflationary pressures on loss costs and higher large fire loss severity in 2022. While workers' compensation loss trends continued to remain fairly stable throughout 2022, our loss ratio increased modestly as mandated rate reductions lowered our overall premium base. Our 2023 commercial growth strategy will focus primarily on states we have identified as favorable opportunities to achieve targeted risk-adjusted returns, and we are aggressively implementing pricing increases and taking permissible non-renewal actions to decrease our exposures in underperforming classes and states.

Personal Lines Segment

After several years of declining premiums due to intentional actions, we experienced a 7.0% increase in personal lines net premiums written. We primarily attribute this growth to the successful launch of new products with enhanced pricing segmentation, modernized rating methodology, application of predictive analytical models and utilization of thirdparty data to augment pricing and risk selection. The personal lines statutory combined ratio of 102.8% for 2022, compared to 94.4% for 2021, reflected higher claim frequency and severity in the personal automobile line of business. We also experienced an increase in the severity of large fire losses within our homeowners line of business. We are closely monitoring our new business flow and profitability of the personal lines segment and plan to continue implementing rate increases throughout 2023 to offset the higher loss trends we and our peers have experienced.



Intentional Strategies for Our Business

State-Specific Action Plans

Data-Driven Analytics

Intelligent Technology

DONEGAL GROUP INC ANNUAL REPORT

State-Specific Action Plans

We executed numerous action plans in 2022 that related to state-specific strategies for growth or reduction of premiums, optimal agency distribution and enhanced profit generation. While we expect to benefit from many of those actions gradually over several years, we noted more favorable 2022 underwriting performance for the states where we emphasized growth versus those we focused on for profit improvement. We continue to align resources to ensure higherthan-average growth in profitable states in 2023, while taking aggressive actions to improve profit in underperforming states. We are refining our geographic strategy by categorizing growth and profit improvement markets at a sub-state level to further optimize our geographic risk profile. We expect that our continuing emphasis on geographic differentiation and diversification will favorably impact our underwriting results with increasing magnitude over the next few years.



Data-Driven Analytics

We continue to expand our Enterprise Analytics capabilities to integrate data and analytics into strategy and decision-making at all levels of our organization. As internal and external demands for data and analytics continue to grow, Donegal Mutual will be investing in underlying cloud-based data infrastructure, data management and tools that will be critical for the future application of analytics.

Our Enterprise Analytics team provides reporting and analyses that enable us to draw insights from data and take appropriate actions. We have also made significant strides in enhancing our products through utilization of external data, refined pricing and robust product management. The team also supports our product teams, providing advanced predictive models and actuarial methods to develop refined, risk-based pricing and underwriting guidance.

Intelligent Technology

The ongoing Donegal Mutual systems modernization project progressed well in 2022. Following the successful systems deployment and launch of new personal lines products in three states in late 2021, we completed the phased rollout of new personal lines products in six of the remaining seven states throughout 2022.

We expect to release these products in Michigan in the second quarter of 2023 upon receipt of regulatory approvals. We look forward to deploying the next major release of new systems in late March 2023 that include three

additional commercial lines of business (businessowners, commercial automobile and commercial umbrella) to complement the workers' compensation line already on the new platform. We have planned for an expedited rollout to accommodate new business and renewal conversion for policies in these business lines in 24 states. In addition to a new sophisticated businessowners product, the deployment will enable increased ease-ofdoing-business for our agents with greatly enhanced straight-through-processing capabilities. We expect these new and enhanced capabilities will help us compete more effectively for smaller commercial accounts that we expect will generate more predictable and consistent margins relative to larger accounts. We also plan to introduce a new commercial lines service center in late 2023, which will represent an optional service enhancement for agencies who prefer that we interact directly with their customers for mid-term policy coverage changes and other service requests.

Our technology and business teams have already begun to plan for the next major deployment that will allow migration of remaining personal lines policies from our legacy systems to the new platform beginning in early 2024. This personal lines-focused effort will progress in parallel with the commercial product migration throughout 2023, allowing our commercial lines team to closely monitor and manage the success of the products and straight-through processing enhancements before commencing work in 2024 to migrate our remaining legacy commercial products to the new systems platform. This final commercial release will include development of a new modernized commercial package product that will allow us to serve a broader array of commercial policyholders in the future.



A Look Ahead

While we continue to work to combat the economic and market headwinds that have impacted our recent profitability, we are pleased with the execution and initial benefits of our various strategic initiatives. We added experienced leadership talent to augment our team, and we are making great strides toward transforming and modernizing the Donegal organization at many levels. We are confident that the substantial improvements we are making to our operations will allow us to better serve our agents and policyholders for many years to come, while our unrelenting focus on improving our results will lead to sustainable profitability over time.



Kevin G. Burke
PRESIDENT AND CHIEF
EXECUTIVE OFFICER

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 **FORM 10-K**

\checkmark	ANNUAL REPORT PURSUANT TO SECT	TION 13 OR 15(d) OF THE	SECURITIES EXCH	ANGE ACT OF 1934
	For the fi	scal year ended December	r 31, 2022	
		OR	Ź	
	TRANSITION REPORT PURSUANT TO	SECTION 13 OR 15(d) OF T	THE SECURITIES E	XCHANGE ACT OF 1934
		d from		
	•	nmission file number 0-15		
		GAL GROU		
	(Exact name	e of registrant as specified in	n its charter)	
	Delaware		23-24	24711
	(State or other jurisdiction of		(I.R.S. E	Employer
	incorporation or organization)		*	ation No.)
	1195 River Road, Marietta, Pennsylvania		17:	547
	(Address of principal executive offices)		(Zip	code)
		one number, including area co	de: (800) 877-0600	
Securities	registered pursuant to Section 12(b) of the Act:			
	Title of Each Class	Trading Symbols	Name of Each E	xchange on Which Registered
	Class A Common Stock, \$.01 par value	DGICA	The NASDA	AQ Global Select Market
	Class B Common Stock, \$.01 par value	DGICB	The NASDA	AQ Global Select Market
Securities	registered pursuant to Section 12(g) of the Act: N	Jone.		
Indicate b	y check mark whether the registrant is a well-kno	wn seasoned issuer as defined	in Rule 405 of the Sec	urities Act: Yes □. No ☑.
	y check mark if the registrant is not required to fil			
1934 duri	by check mark whether the registrant (1) has filed a right preceding 12 months (or for such shorter parements for the past 90 days. Yes \square . No \square .			
of Regula	by check mark whether the registrant has submitted tion S-T ($\$232.405$ of this chapter) during the pred). Yes \square . No \square .			
Indicate b	y check mark whether the registrant is a large acc ing growth company. See definitions of "large acc in Rule 12b-2 of the Act. (Check one):			
-	elerated filer ☐ Accelerated filer ☑ growth company ☐	Non-accele	erated filer	Smaller reporting company ☑
new or re	rging growth company, indicate by check mark if vised financial accounting standards provided pure	suant to Section 13(a) of the Ex	xchange Act. □.	
control ov	y check mark whether the registrant has filed a rever financial reporting under Section 404(b) of the per issued its audit report. Yes ☑. No □.			
the filing	es are registered pursuant to Section 12(b) of the Arreflect the correction of an error to previously issu	ied financial statements. □.		-
received b	by check mark whether any of those error corrections any of the registrant's executive officers during	the relevant recovery period p	oursuant to Section 240	0.10D-1(b). □.
	by check mark whether the registrant is a shell com			
state the	aggregate market value of the voting and non-voti	ng common equity held by nor	i-aimiates computed b	y reference to the price at which the

completed second fiscal quarter. \$263,925,837.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 27,163,117 shares of Class A common stock and 5,576,775 shares of Class B common stock outstanding on March 1, 2023.

Documents Incorporated by Reference

The registrant incorporates by reference portions of the registrant's definitive proxy statement relating to registrant's annual meeting of stockholders to be held April 20, 2023 into Part III of this report.

common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently

DONEGAL GROUP INC. INDEX TO FORM 10-K REPORT

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Item 1. Business.

Introduction

Donegal Group Inc., or DGI, is an insurance holding company whose insurance subsidiaries and affiliates offer property and casualty insurance in 24 Mid-Atlantic, Midwestern, New England, Southern and Southwestern states. DGI has no significant business operations and is separate and distinct from its insurance subsidiaries. As used in this Form 10-K Report, the terms "we," "us" and "our" refer to Donegal Group Inc. and its insurance subsidiaries. Our Class A common stock and our Class B common stock trade on the NASDAQ Global Select Market under the symbols "DGICA" and "DGICB," respectively.

Donegal Mutual Insurance Company, or Donegal Mutual, organized us as an insurance holding company on August 26, 1986. At December 31, 2022, Donegal Mutual held approximately 43% of our outstanding Class A common stock and approximately 84% of our outstanding Class B common stock. Donegal Mutual's ownership provides Donegal Mutual with approximately 71% of the combined voting power of our outstanding shares of Class A common stock and our outstanding shares of Class B common stock. Our insurance subsidiaries and Donegal Mutual have interrelated operations due to an intercompany pooling agreement and other intercompany agreements and transactions we describe in Note 3 of the Notes to Consolidated Financial Statements. While maintaining the separate corporate existence of each company, our insurance subsidiaries conduct business together with Donegal Mutual and its insurance subsidiaries as the Donegal Insurance Group. The Donegal Insurance Group is not a legal entity, is not an insurance company and does not issue or administer insurance policies. Rather, it is a trade name that refers to the group of insurance companies that are affiliated with Donegal Mutual.

At December 31, 2022, we had three segments: our investment function, our commercial lines of insurance and our personal lines of insurance. We set forth financial information about these segments in Note 19 of the Notes to Consolidated Financial Statements. The commercial lines products of our insurance subsidiaries consist primarily of commercial automobile, commercial multi-peril and workers' compensation policies. The personal lines products of our insurance subsidiaries consist primarily of homeowners and private passenger automobile policies.

Our insurance subsidiaries and Donegal Mutual provide their policyholders with a selection of insurance products and pursue profitability by adhering to a strict underwriting discipline. Our insurance subsidiaries derive a substantial portion of their insurance business from smaller to mid-sized regional communities. We believe this focus provides our insurance subsidiaries with competitive advantages in terms of local market knowledge, marketing, underwriting, claims servicing and policyholder service. At the same time, we believe our insurance subsidiaries have cost advantages over many smaller regional insurers that result from economies of scale our insurance subsidiaries realize through centralized accounting, administrative, data processing, investment and other services.

We believe we have a substantial opportunity, as a well-capitalized regional insurance holding company with a solid business strategy, to grow profitably and compete effectively with larger national property and casualty insurers. Our downstream holding company structure, with Donegal Mutual holding approximately 71% of the combined voting power of our common stock, has proven its effectiveness and success over the 36 years of our existence. Over that time period, we have grown significantly in terms of revenue and financial strength, and the Donegal Insurance Group has developed an excellent reputation as a regional group of property and casualty insurers.

We have been an effective consolidator of smaller "main street" property and casualty insurance companies. While we are currently placing less emphasis on pursuing acquisitions due to several ongoing major initiatives to enhance our technology infrastructure as well as our analytical and processing capabilities, we expect to continue to acquire other insurance companies to expand our business in a given region over time. Since 1998, we and Donegal Mutual have completed seven transactions involving acquisitions of property and casualty insurance companies or participation in the business of property and casualty insurance companies through Donegal Mutual's entry into quota-share reinsurance agreements with them.

Donegal Mutual completed the merger of Mountain States Mutual Casualty Company, or Mountain States, with and into Donegal Mutual effective May 25, 2017. Donegal Mutual was the surviving company in the merger, and Mountain States' insurance subsidiaries, Mountain States Indemnity Company and Mountain States Commercial Insurance Company (collectively, the "Mountain States insurance subsidiaries"), became insurance subsidiaries of Donegal Mutual upon completion of the merger. Upon completion of the merger, Donegal Mutual assumed all of the policy obligations of Mountain States and began to market its products together with the Mountain States insurance subsidiaries as the Mountain States Insurance Group in four Southwestern states. Donegal Mutual also entered into a 100% quota-share reinsurance agreement with the Mountain States insurance subsidiaries on the merger date. Beginning with policies effective in 2021, Donegal Mutual began to place the

business of the Mountain States Insurance Group into the underwriting pool we describe in "History and Organizational Structure." As a result, our consolidated financial results through December 31, 2020 excluded the results of the Mountain States Insurance Group operations in those Southwestern states.

Available Information

You may obtain our Annual Reports on Form 10-K, including this Form 10-K Report, our quarterly reports on Form 10-Q, our current reports on Form 8-K, our proxy statement and our other filings pursuant to the Securities Exchange Act of 1934, or the Exchange Act, without charge by viewing our website at www.donegalgroup.com. You may also view our Code of Business Conduct and Ethics and the charters of the executive committee, the audit committee, the compensation committee and the nominating committee of our board of directors on our website. Upon request to our corporate secretary, we will also provide printed copies of any of these documents to you without charge. We have provided the address of our website solely for the information of investors. We do not intend the reference to our website address to be an active link or to otherwise incorporate the contents of our website into this Form 10-K Report. In addition to our website, the Securities and Exchange Commission (the "SEC") maintains an Internet site at www.sec.gov that contains our reports, proxy and information statements and other information that we electronically file with, or furnish to, the SEC.

History and Organizational Structure

In the mid-1980's, Donegal Mutual, as a mutual insurance company, recognized the desirability of developing additional sources of capital and surplus so it could remain competitive, expand its business and ensure its long-term viability. Accordingly, Donegal Mutual determined that the implementation of a downstream holding company structure was a viable business strategy to accomplish that objective. Thus, in 1986, Donegal Mutual formed us as a downstream holding company, and we incorporated in the state of Delaware as Donegal Group Inc. After Donegal Mutual formed us, we in turn formed Atlantic States as our wholly owned property and casualty insurance company subsidiary.

In connection with the formation of Atlantic States and the establishment of our downstream insurance holding company system, Donegal Mutual and Atlantic States entered into a proportional reinsurance agreement, or pooling agreement. Under the pooling agreement, Donegal Mutual and Atlantic States contribute substantially all of their respective premiums, losses and loss expenses to the underwriting pool, and the underwriting pool, acting through Donegal Mutual, then allocates 80% of the pooled business to Atlantic States. Thus, Donegal Mutual and Atlantic States share the underwriting results of the pooled business in proportion to their respective participation in the underwriting pool.

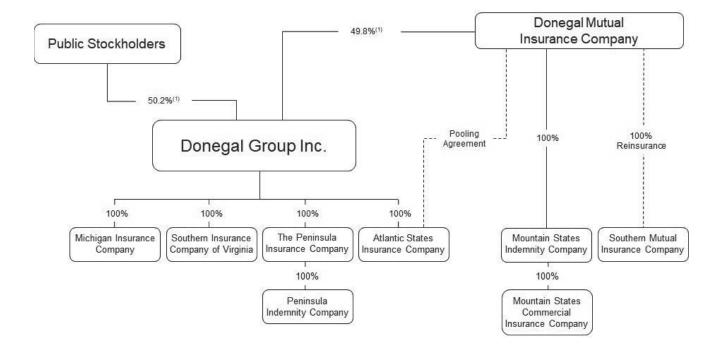
The member companies of the Donegal Insurance Group, which include our insurance subsidiaries, share a combined business plan to enhance market penetration and underwriting profitability objectives. We believe Donegal Mutual's majority interest in the combined voting power of our Class A common stock and of our Class B common stock fosters our ability to implement our business philosophies, enjoy management continuity, maintain superior employee relations and provide a stable environment within which we can grow our businesses.

The products the member companies of the Donegal Insurance Group offer are generally complementary, which permits the Donegal Insurance Group to offer a broad range of products in a given market and to expand the Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products the member companies of the Donegal Insurance Group offer generally relate to specific risk profiles within similar classes of business, such as preferred tier products versus standard tier products. The member companies of the Donegal Insurance Group do not allocate all of the standard risk gradients to one company. As a result, the underwriting profitability of the business the individual companies write directly will vary. However, the underwriting pool homogenizes the risk characteristics of all business that Donegal Mutual and Atlantic States write directly and all business that Donegal Mutual assumes from its affiliates and places into the underwriting pool. The business Atlantic States derives from the underwriting pool represents a significant percentage of our total consolidated revenues.

As the capital of Atlantic States and our other insurance subsidiaries has increased, the underwriting capacity of our insurance subsidiaries has increased proportionately. The size of the underwriting pool has also increased substantially. Therefore, as we originally planned in the mid-1980s, Atlantic States has successfully raised the capital necessary to support the growth of its direct business as well as to accept increases in its allocation of business from the underwriting pool. The portion of the underwriting pool allocated to Atlantic States has increased from an initial allocation of 35% in 1986 to an 80% allocation since March 1, 2008. We do not anticipate any further change in the pooling agreement between Atlantic States and Donegal Mutual, including any change in the percentage participation of Atlantic States in the underwriting pool.

In addition to Atlantic States, our insurance subsidiaries are Southern Insurance Company of Virginia, or Southern, The Peninsula Insurance Company and its wholly owned subsidiary, Peninsula Indemnity Company, or collectively, Peninsula, and Michigan Insurance Company, or MICO. Donegal Mutual has a 100% quota-share reinsurance agreement with Southern Mutual Insurance Company, or Southern Mutual, and Donegal Mutual places its assumed business from Southern Mutual into the underwriting pool. Donegal Mutual wholly owns and has a 100% quota-share reinsurance agreement with the Mountain States insurance subsidiaries. Beginning with policies effective in 2021, Donegal Mutual places its assumed business from the Mountain States insurance subsidiaries into the underwriting pool.

The following chart depicts our organizational structure, including all of our property and casualty insurance subsidiaries and affiliates:



⁽¹⁾ Because of the different relative voting power of our Class A common stock and our Class B common stock, our public stockholders hold approximately 29% of the combined voting power of our Class A common stock and our Class B common stock and Donegal Mutual holds approximately 71% of the combined voting power of our Class A common stock and our Class B common stock.

Relationship with Donegal Mutual

Donegal Mutual provides facilities, management and other services to us and our insurance subsidiaries. In addition, Donegal Mutual purchases and maintains the information technology systems that support the business of Donegal Mutual and our insurance subsidiaries. Donegal Mutual allocates certain related expenses to Atlantic States in accordance with the relative participation of Donegal Mutual and Atlantic States in the pooling agreement. Our insurance subsidiaries other than Atlantic States reimburse Donegal Mutual for allocated costs of services Donegal Mutual provides on their behalf based on their proportion of the total direct premiums written of the Donegal Insurance Group and other metrics. Allocated expenses from Donegal Mutual for services it provided to Atlantic States and our other insurance subsidiaries totaled \$199.2 million, \$186.6 million and \$153.9 million for 2022, 2021 and 2020, respectively. To enhance process efficiencies, Donegal Mutual paid certain expenses directly in 2022 and 2021 that our insurance subsidiaries paid directly in 2020, resulting in higher allocations of expenses from Donegal Mutual to our insurance subsidiaries and lower direct expense payments by our insurance subsidiaries in 2022 and 2021 compared to 2020.

Donegal Mutual is the employer of record for all personnel who provide services for our insurance subsidiaries. Donegal Mutual strives to maintain a culture that is based on integrity and respect, with an environment designed to facilitate excellent service to the agents and customers of the Donegal Insurance Group. At December 31, 2022, Donegal Mutual had 876 employees, of which 458 were based in its Marietta, Pennsylvania headquarters and 418 were based in regional offices or were permanent remote employees. There were 866 full-time employees and 10 part-time employees. Many of Donegal Mutual's employees work remotely from their homes or follow a hybrid schedule that includes working several days in their assigned office to allow for enhanced collaboration and interaction with other employees. Donegal Mutual targets employee compensation that is competitive and consistent with an employee's position, knowledge, experience and skill level. Donegal Mutual provides annual wage increases that are based on merit. Donegal Mutual provides an annual cash incentive plan for all of its employees that provides an opportunity for Donegal Mutual's employees to earn a bonus as a percentage of their annual wages that varies based on the level of underwriting profit Donegal Insurance Group achieves for a calendar year. In addition, Donegal Mutual provides to its full-time employees a comprehensive employee benefits program, including medical, dental and vision insurance, paid time off, and a 401(k) retirement plan that includes company matching provisions. Donegal Mutual also provides substantial training, development and wellness programs and resources to its employees.

Our insurance subsidiaries have a catastrophe reinsurance agreement with Donegal Mutual, pursuant to which Donegal Mutual provides coverage for losses related to any catastrophic occurrence over a set retention of \$3.0 million (\$2.0 million for 2022, 2021 and 2020) for each participating insurance subsidiary, with a combined retention of \$6.0 million (\$5.0 million for 2022, 2021 and 2020) for a catastrophe involving a combination of participating insurance subsidiaries, up to the amount Donegal Mutual and our insurance subsidiaries retain under catastrophe reinsurance agreements with unaffiliated reinsurers. The purpose of the catastrophe reinsurance agreement is to lessen the effects of an accumulation of losses arising from one event to levels that are appropriate given each subsidiary's size, underwriting profile and surplus.

Donegal Mutual had a quota-share reinsurance agreement with MICO for policies effective through December 31, 2021. The purpose of the quota-share reinsurance agreement with MICO was to transfer to Donegal Mutual 25% of the premiums and losses related to MICO's business. Donegal Mutual placed its assumed business from MICO into the underwriting pool. Donegal Mutual and MICO terminated this reinsurance agreement on a run-off basis effective January 1, 2022. As a result, MICO retains 100% of its net premiums and losses beginning with policies effective as of that date.

Donegal Mutual had a quota-share reinsurance agreement with Peninsula for policies effective through December 31, 2021. The purpose of the quota-share reinsurance agreement with Peninsula was to transfer to Donegal Mutual 100% of the premiums and losses related to the workers' compensation product line of Peninsula in certain states. Donegal Mutual placed its assumed business from Peninsula into the underwriting pool. Donegal Mutual and Peninsula terminated this reinsurance agreement on a run-off basis effective January 1, 2022. As a result, Peninsula retains 100% of its net workers' compensation premiums and losses beginning with policies effective as of that date.

We and Donegal Mutual have maintained a coordinating committee since our formation in 1986. The coordinating committee consists of two members of our board of directors, neither of whom is a member of Donegal Mutual's board of directors, and two members of Donegal Mutual's board of directors, neither of whom is a member of our board of directors. The purpose of the coordinating committee is to establish and maintain a process for an ongoing evaluation of the transactions between Donegal Mutual, our insurance subsidiaries and us. The coordinating committee considers the fairness of each intercompany transaction to Donegal Mutual and its policyholders and to us and our stockholders.

A new agreement or any change to a previously approved agreement must receive coordinating committee approval. The approval process for a new agreement between Donegal Mutual and us or one of our insurance subsidiaries or a change in such an agreement is as follows:

- both of our members on the coordinating committee must determine that the new agreement or the change in an existing agreement is fair and equitable to us and in the best interests of our stockholders;
- both of Donegal Mutual's members on the coordinating committee must determine that the new agreement or the change in an existing agreement is fair and equitable to Donegal Mutual and in the best interests of its policyholders;
- our board of directors must approve the new agreement or the change in an existing agreement; and
- Donegal Mutual's board of directors must approve the new agreement or the change in an existing agreement.

The coordinating committee also meets annually to review each existing agreement between Donegal Mutual and us or our insurance subsidiaries, including all reinsurance agreements between Donegal Mutual and our insurance subsidiaries. The purpose of this annual review is to examine the results of the agreements over the past year and, in the case of reinsurance agreements, over several years and to determine if the results of the existing agreements remain fair and equitable to us and our stockholders and fair and equitable to Donegal Mutual and its policyholders or if Donegal Mutual and we should mutually agree to certain adjustments to the terms of the agreements. In the case of reinsurance agreements, the annual adjustments typically relate to the reinsurance premiums and loss retention amounts. These agreements are ongoing in nature and will continue in effect throughout 2023 in the ordinary course of our business.

Our members on the coordinating committee, as of the date of this Form 10-K Report, are Barry C. Huber and Richard D. Wampler, II. Donegal Mutual's members on the coordinating committee as of such date are Michael W. Brubaker and Cyril J. Greenya. We refer to our proxy statement for our annual meeting of stockholders to be held on April 20, 2023 for further information about the members of the coordinating committee.

We believe our relationships with Donegal Mutual offer us and our insurance subsidiaries a number of competitive advantages, including the following:

- enabling our stable management, the consistent underwriting discipline of our insurance subsidiaries, external growth, long-term profitability and financial strength;
- creating operational and expense synergies from the combination of resources and integrated operations of the Donegal Insurance Group;
- producing more stable and uniform underwriting results for our insurance subsidiaries over extended periods of time than we could achieve without our relationship with Donegal Mutual;
- providing opportunities for growth because of the ability of Donegal Mutual to affiliate and enter into reinsurance agreements with, or otherwise acquire control of, mutual insurance companies and place the business it assumes into the underwriting pool; and
- providing Atlantic States with a significantly larger underwriting capacity because of the underwriting pool Donegal Mutual and Atlantic States have maintained since 1986.

In the first quarter of 2023, our board of directors and the board of directors of Donegal Mutual each undertook a review of the relationships between Donegal Mutual and DGI and determined that continuing the current relationships and the current corporate structure of Donegal Mutual and DGI is in the best interests of DGI and its various constituencies.

Business Strategy

We and Donegal Mutual are focused on several primary strategies, including achieving sustained excellent financial performance, strategically modernizing our operations and processes to transform our business, capitalizing on opportunities to grow profitably and delivering a superior experience to our agents and policyholders. Our strategies are designed to provide value to the policyholders of Donegal Mutual and our respective insurance subsidiaries and, ultimately, to provide value to our stockholders. The annual net premiums earned of our insurance subsidiaries have increased from \$301.5 million in 2006 to \$822.5 million in 2022, a compound annual growth rate of 6.5%.

The combined ratio of our insurance subsidiaries and that of the United States property and casualty insurance industry as computed using United States generally accepted accounting principles, or GAAP, and statutory accounting principles, or SAP, for the years 2018 through 2022 are shown in the following table:

	2022	2021	2020	2019	2018
Our GAAP combined ratio	103.3 %	101.0 %	96.0 %	99.5 %	110.1 %
Our SAP combined ratio	103.3	100.8	95.4	98.7	109.4
Industry SAP combined ratio (1)	104.0	99.6	98.4	98.9	99.2

⁽¹⁾ As reported (projected for 2022) by A.M. Best Company.

We and Donegal Mutual believe we can continue to expand our insurance operations over time through organic growth and acquisitions of, or affiliations with, other insurance companies. We and Donegal Mutual have enhanced the performance of companies we have acquired, while leveraging the acquired companies' core strengths and local market knowledge to expand their operations. Our insurance subsidiaries and Donegal Mutual also seek to increase their premium base by making quality independent agency appointments, enhancing their competitive position within each agency, introducing new and enhanced insurance products and developing and maintaining automated systems to improve service, communications and efficiency.

A detailed review of our business strategies follows:

• Achieving sustained excellent financial performance.

Our insurance subsidiaries seek to achieve consistent underwriting profitability. Underwriting profitability is a fundamental component of our long-term financial strength because it allows our insurance subsidiaries to generate profits without relying exclusively on their investment income for profitability. Our insurance subsidiaries seek to enhance their underwriting results by:

- carefully selecting the product lines they underwrite;
- carefully selecting the individual risks they underwrite;
- utilizing data analytics and predictive modeling tools to inform risk selection and pricing decisions;
- managing their property exposures in catastrophe-prone areas; and
- evaluating their claims history on a regular basis to ensure the adequacy of their underwriting guidelines and product pricing.

Our insurance subsidiaries maintain discipline in their pricing by effecting rate increases to sustain or improve their underwriting results without unduly affecting their customer retention. In addition to appropriate pricing, our insurance subsidiaries seek to ensure that their premium rates are adequate relative to the amount of risk they insure. Our insurance subsidiaries review loss trends on a regular basis to identify changes in the frequency and severity of their claims and to assess the adequacy of their rates and underwriting standards. Our insurance subsidiaries also carefully monitor and audit the information they use to price their policies for the purpose of enabling them to receive an adequate level of premiums for the risk they assume. For example, our insurance subsidiaries audit the payroll data of their workers' compensation customers to verify that the assumptions used to price a particular policy were accurate. By implementing appropriate rate increases and understanding the risks our insurance subsidiaries agree to insure, our insurance subsidiaries seek to achieve consistent underwriting profitability.

Our insurance subsidiaries monitor the performance of the product lines they underwrite and the geographies in which they offer their insurance products. Our insurance subsidiaries take specific actions to remediate underperforming product lines or geographies that include pricing increases, underwriting adjustments, reunderwriting initiatives as well as discontinuing a given product or withdrawing from a geography when our insurance subsidiaries determine they cannot reasonably expect to generate targeted profitability over time.

Our insurance subsidiaries have no material exposures to asbestos or environmental liabilities. Our insurance subsidiaries seek to provide more than one policy to a given personal lines or commercial lines customer because this "account selling"

strategy diversifies their risk and has historically improved their underwriting results. Our insurance subsidiaries also use reinsurance to manage their exposure and limit their maximum net loss from large single risks or risks in concentrated areas.

Our insurance subsidiaries maintain stringent expense controls under direct supervision of their senior management. We centralize the processing and administrative activities of our insurance subsidiaries to realize operating synergies and better expense control. Our insurance subsidiaries utilize technology to automate much of their underwriting, claims and billing processes and to facilitate agency and policyholder communications on an efficient, timely and cost-effective basis. Our insurance subsidiaries have increased their annual premium per employee, a measure of efficiency that our insurance subsidiaries use to evaluate their operations, from approximately \$470,000 in 1999 to approximately \$1.1 million in 2022.

Return on invested assets is an important element of the financial results of our insurance subsidiaries. The investment strategy of our insurance subsidiaries is to generate an appropriate amount of after-tax income on invested assets while limiting the potential impact of equity market volatility and minimizing credit risk through investments in high-quality securities. As a result, our insurance subsidiaries seek to invest a high percentage of their assets in diversified, highly rated and marketable fixed-maturity instruments. The fixed-maturity portfolios of our insurance subsidiaries consist of both taxable and tax-exempt securities. Our insurance subsidiaries maintain a portion of their portfolios in short-term securities to provide liquidity for the payment of claims and operation of their respective businesses. Our insurance subsidiaries maintain a small percentage (2.7% at December 31, 2022) of their portfolios in equity securities that have a history of paying cash dividends or that our insurance subsidiaries expect will appreciate in value over time.

• Strategically modernizing our operations and processes to transform our business.

In 2018, Donegal Mutual initiated a multi-year systems modernization project to replace its remaining legacy systems, streamline business processes and workflows and enhance data analytics and modeling capabilities. In February 2020, Donegal Mutual implemented the first release of new systems related to the project, and our insurance subsidiaries began to issue workers' compensation policies from the new systems in the second quarter of 2020. In August 2021, Donegal Mutual implemented the second release of new systems related to the project, including a new agency portal and the rating, underwriting and policy issuance capabilities necessary to support the launch of new personal lines products, and our insurance subsidiaries began to issue new personal lines products from the new systems in the fourth quarter of 2021. Over the next several years, Donegal Mutual expects to implement new systems for the remaining lines of business the Donegal Insurance Group offers currently. The next release of new systems related to the project will include three commercial lines of business with enhanced straight-through-processing capabilities. This release is scheduled for implementation beginning in the first half of 2023.

We have an enterprise analytics department that is focused on integrating data and analytics into strategy and decision-making at all levels of our organization. The enterprise analytics team is responsible for core functions of rate-making, predictive analytics, data management and business intelligence. These responsibilities include the development and expansion of risk-based pricing segmentation, analytical innovation, predictive modeling solutions, formal data strategies, performance monitoring and enhanced reporting mechanisms. We developed and began executing a pricing and analytics roadmap that will continue to deliver data-driven insights to our underwriters. This roadmap includes ongoing development and enhancement of quality tools that allow us to operationalize pricing and underwriting predictive models, integrate internal and external data for better-informed pricing and underwriting decisions and enhance the automation and precision of our rate indication methodology. Our enterprise analytics team is continuing to develop new tools and solutions that are enhancing our product portfolio management capabilities, competitive intelligence, pricing sophistication and utilization of data to monitor and manage our operations. The team also generates reporting and analyses that enable us to draw business insights from data that drive actions to improve performance.

We are expanding our focus on process excellence, including the formalization of a structure to readily identify opportunities for operational efficiencies and to build a multi-year roadmap for addressing those opportunities. We are also expanding our data management personnel and capabilities to continually ensure the data upon which we rely for our business decisions and financial reporting is complete, accurate and secure. We have assigned an innovation task force the responsibility to research emerging technologies and identify potential technology solutions that might assist us in further modernizing our operations.

• Capitalizing on opportunities to grow profitably.

Continued expansion of our insurance subsidiaries within their existing markets will be a key source of their continued premium growth, and maintaining an effective network of independent agencies is integral to this expansion. Our insurance subsidiaries seek to be among the top three insurers within each of the independent agencies for the lines of business our

insurance subsidiaries write by providing a consistent, competitive and stable market for their products. We believe that the consistency of the product offerings of our insurance subsidiaries enables our insurance subsidiaries to compete effectively for independent agents with other insurers whose product offerings may fluctuate based on industry conditions. Our insurance subsidiaries offer a competitive compensation program to their independent agents that rewards them for producing profitable growth and maintaining profitable books of business with our insurance subsidiaries.

Our insurance subsidiaries execute a combined annual business plan with Donegal Mutual and its insurance subsidiaries. Within the past several years, we enhanced the annual planning process to ensure that we are directing efforts and resources toward geographic regions, market segments, product lines and classes of business that will give us the best opportunities to achieve sustained growth and profitability. As part of the planning process, we perform a detailed analysis of internal and external data with respect to each state within our operating regions. We assess state-specific marketing dynamics and opportunities, including an evaluation of the historical experience of our insurance subsidiaries. We then assign a strategic posture for each state and develop action plans to execute state-specific strategies for growth or reduction of premiums, agency distribution and enhanced profit generation over the next several years.

In recent years, the consolidation of independent agencies has accelerated, resulting in the acquisition of independent agencies from which our insurance subsidiaries and Donegal Mutual currently receive business by national cluster groups and aggregators. We have a national accounts team that is responsible for the management and expansion of our relationships with these national agency groups. The national accounts team serves as a centralized point of contact for these groups and works directly with our regional sales and marketing teams to support and develop relationships with independent agents affiliated with national agency groups. We believe our relationships with existing and emerging national agency groups will continue to expand and that these groups represent a significant opportunity for profitable future growth.

• Delivering a superior experience to our agents and policyholders.

Donegal Mutual and our insurance subsidiaries strive to maintain technology comparable to that of their larger competitors. "Ease of doing business" is an increasingly important component of an insurer's value to an independent agency. Our insurance subsidiaries provide fully automated underwriting and policy issuance portals that substantially ease data entry and facilitate the quoting and issuance of policies for the independent agents of our insurance subsidiaries. As a result, applications of the independent agents for our insurance subsidiaries can result in policy issuance without further re-entry of information. These systems also interface with the agency management systems of the independent agents of our insurance subsidiaries. In addition, we are employing new agency relationship management solutions to expand the abilities of our insurance subsidiaries to manage their agency relationships and enhance their agency communications and interactions.

Our insurance subsidiaries also provide their independent agents with ongoing support to enable them to better attract and service customers, including:

- training programs;
- marketing support;
- availability of a personal lines service center that provides comprehensive service for our policyholders; and
- accessibility to and regular interactions with marketing and underwriting personnel and senior management of our insurance subsidiaries.

We plan to introduce a new commercial lines service center in late 2023, which will represent an optional service enhancement for agencies who prefer that we interact directly with their customers for mid-term policy coverage changes and other service requests.

Our insurance subsidiaries appoint independent agencies with a strong underwriting and growth track record. We believe that our insurance subsidiaries will drive continued long-term growth by carefully selecting, motivating and supporting their independent agencies.

We believe that excellent policyholder service is important in attracting new policyholders and retaining existing policyholders. Our insurance subsidiaries work closely with their independent agents to provide a consistently responsive level of claims service, underwriting and customer support. Our insurance subsidiaries seek to respond expeditiously and effectively to address customer and independent agent inquiries in a number of ways, including:

- availability of a customer call center, secure website and mobile application for claims reporting;
- availability of a secure website and mobile application for access to policy information and documents, payment processing and other features;
- · timely replies to information requests and policy submissions; and
- prompt responses to, and processing of, claims.

Our insurance subsidiaries periodically conduct policyholder surveys to evaluate the effectiveness of their service to policyholders. The management of our insurance subsidiaries meets on a regular basis with the personnel of the independent insurance agents our insurance subsidiaries appoint to seek service improvement recommendations, react to service issues and better understand local market conditions.

 Acquiring property and casualty insurance companies to augment the organic growth of our insurance subsidiaries.

We have been an effective consolidator of smaller "main street" property and casualty insurance companies. While we are currently placing less emphasis on pursuing acquisitions due to several ongoing major initiatives to enhance our technology infrastructure as well as our analytical and processing capabilities, we expect to continue to acquire other insurance companies to expand our business in a given region over time.

Since 1998, we and Donegal Mutual have completed seven transactions involving acquisitions of property and casualty insurance companies or participation in the business of property and casualty insurance companies through Donegal Mutual's entry into quota-share reinsurance agreements with them. We and Donegal Mutual intend to continue our growth by pursuing affiliations and acquisitions that meet our criteria. Our primary criteria are:

- location in regions where our insurance subsidiaries and Donegal Mutual are currently conducting business or that offer an attractive opportunity to conduct profitable business;
- a mix of business similar to the mix of business of our insurance subsidiaries and Donegal Mutual;
- annual premium volume between \$50.0 million to \$100.0 million; and
- fair and reasonable transaction terms.

We believe that our relationship with Donegal Mutual assists us in pursuing affiliations with, and subsequent acquisitions of, mutual insurance companies because, through Donegal Mutual, we understand the concerns and issues that mutual insurance companies face. In particular, Donegal Mutual has had success affiliating with underperforming mutual insurance companies that were operating at a competitive disadvantage due to lack of economies of scale compared to other industry participants, and we have either acquired them following their conversion to a stock company or benefited from their underwriting results as a result of Donegal Mutual's entry into a 100% quota-share reinsurance agreement with them and placement of that assumed business into the pooling agreement. We evaluate a number of areas for operational synergies when considering acquisitions, including product underwriting, expenses, the cost of reinsurance and technology.

We believe that our ability to make direct acquisitions of stock insurance companies and to make indirect acquisitions of mutual insurance companies through Donegal Mutual provides us with flexibility that is a competitive advantage in making acquisitions. We also believe our historic record demonstrates our ability to acquire control of an underperforming insurance company utilizing a number of different acquisition structures and affiliation strategies, re-underwrite its book of business, reduce its cost structure and return it to sustained profitability.

While Donegal Mutual and we generally engage in preliminary discussions with potential direct or indirect acquisition candidates from time to time, neither Donegal Mutual nor we make any public disclosure regarding a proposed acquisition until Donegal Mutual or we have entered into a definitive acquisition agreement.

The following table highlights our and Donegal Mutual's history of insurance company acquisitions and affiliations since 1998:

Company Name	State of Domicile	Year Control Acquired	Method of Acquisition/Affiliation
Southern Heritage Insurance Company (1)	Georgia	1998	Purchase of stock by us in 1998.
Le Mars Mutual Insurance Company of Iowa and then Le Mars Insurance Company (1)	Iowa	2002	Surplus note investment by Donegal Mutual in 2002; conversion to stock company in 2004; acquisition of stock by us in 2004.
Peninsula Insurance Group	Maryland	2004	Purchase of stock by us in 2004.
Sheboygan Falls Mutual Insurance Company and then Sheboygan Falls Insurance Company (1)	Wisconsin	2007	Contribution note investment by Donegal Mutual in 2007; conversion to stock company in 2008; acquisition of stock by us in 2008.
Southern Mutual Insurance Company (2)	Georgia	2009	Surplus note investment by Donegal Mutual and quota-share reinsurance in 2009.
Michigan Insurance Company	Michigan	2010	Purchase of stock by us in 2010.
Mountain States Mutual Casualty Company ⁽³⁾	New Mexico	2017	Merger with and into Donegal Mutual in 2017.

To reduce administrative and compliance costs and expenses, these subsidiaries subsequently merged into one of our existing insurance subsidiaries.

Competition

The property and casualty insurance industry is highly competitive on the basis of both price and service. Numerous companies compete for business in the geographic areas where our insurance subsidiaries operate. Many of these other insurance companies are substantially larger and have greater financial resources than those of our insurance subsidiaries. In addition, because our insurance subsidiaries and Donegal Mutual market their respective insurance products exclusively through independent insurance agencies, most of which represent more than one insurance company, our insurance subsidiaries face competition within agencies, as well as competition to retain qualified independent agents. Insurance companies that are substantially larger than our insurance subsidiaries are likely to benefit from certain cost synergies, and insurance companies that market their products directly to end consumers are likely to incur lower relative acquisition costs compared to those of our insurance subsidiaries.

Products and Underwriting

We report the results of our insurance operations in two segments: commercial lines of insurance and personal lines of insurance. The commercial lines our insurance subsidiaries write consist primarily of commercial automobile, commercial multi-peril and workers' compensation insurance. The personal lines our insurance subsidiaries write consist primarily of private passenger automobile and homeowners insurance. We describe these lines of insurance in greater detail below:

Commercial

- Commercial automobile policies that provide protection against liability for bodily injury and property damage arising from automobile accidents and protection against loss from damage to automobiles owned by the insured.
- Commercial multi-peril policies that provide protection to businesses against many perils, usually combining liability and physical damage coverages.
- Workers' compensation policies employers purchase to provide benefits to employees for injuries sustained during employment. The workers' compensation laws of each state determine the extent of the coverage we provide.

⁽²⁾ Control acquired by Donegal Mutual.

⁽³⁾ Donegal Mutual completed the merger of Mountain States with and into Donegal Mutual effective May 25, 2017. Donegal Mutual was the surviving company in the merger, and Mountain States insurance subsidiaries became insurance subsidiaries of Donegal Mutual upon completion of the merger. Donegal Mutual also entered into a 100% quota-share reinsurance agreement with the Mountain States insurance subsidiaries on the merger date. Beginning with policies effective in 2021, Donegal Mutual places the business of the Mountain States Insurance Group into the underwriting pool.

Personal

- Private passenger automobile policies that provide protection against liability for bodily injury and property damage
 arising from automobile accidents and protection against loss from damage to automobiles owned by the insured.
- Homeowners policies that provide coverage for damage to residences and their contents from a broad range of
 perils, including fire, lightning, windstorm and theft. These policies also cover liability of the insured arising from
 injury to other persons or their property while on the insured's property and under other specified conditions.

In recent years, we have taken actions to shift our business mix to a higher proportion of commercial business, where we believe we will continue to have opportunities to achieve profitable, sustainable long-term growth. We are executing state-specific strategies that include accelerating growth in states where we see opportunities for profitable growth and reducing exposures in states we have targeted for profit improvement. While we expect to place greater emphasis on commercial growth for the foreseeable future, we desire to maintain a profitable book of personal business to provide enhanced stability across our product portfolio and increase our brand value to our independent agents. We commenced a phased rollout of new personal lines products in the fourth quarter of 2021. These products feature various coverage enhancements, modernized rating methodology, enhanced pricing segmentation, application of predictive analytical models and utilization of third-party data to augment pricing and risk selection. We implemented a new personal lines agency portal and the rating, underwriting and policy issuance capabilities necessary to support the launch in the ten states where Donegal Mutual and our insurance subsidiaries offer personal lines. The portal and systems are now live in nine of the ten states in which our insurance subsidiaries offer personal lines, and we plan to complete the rollout of the new personal lines products in the remaining state in the first half of 2023. Due to ongoing inflationary pressures on loss costs, we will carefully manage personal lines premium growth in 2023, and our insurance subsidiaries plan to continue implementing premium rate increases throughout the year.

The following table sets forth the net premiums written of our insurance subsidiaries by line of insurance for the periods indicated:

	Year Ended December 31,									
	20	22	20)21	2020					
(dollars in thousands)	Amount	%	Amount	%	Amount	%				
Commercial lines:										
Automobile	\$ 167,774	19.9 %	\$ 161,947	20.1 %	\$ 135,294	18.2 %				
Workers' compensation	111,892	13.3	113,256	14.1	109,960	14.8				
Commercial multi-peril	200,045	23.7	188,242	23.4	147,993	19.9				
Other	40,086	4.7	38,340	4.8	32,739	4.5				
Total commercial lines	519,797	61.6	501,785	62.4	425,986	57.4				
Personal lines:										
Automobile	181,129	21.5	170,578	21.2	184,602	24.9				
Homeowners	120,087	14.2	109,974	13.7	111,886	15.1				
Other	22,517	2.7	21,930	2.7	19,666	2.6				
Total personal lines	323,733	38.4	302,482	37.6	316,154	42.6				
Total business	\$ 843,530	100.0 %	\$ 804,267	100.0 %	\$ 742,140	100.0 %				

The commercial lines and personal lines underwriting departments of our insurance subsidiaries evaluate and select those risks that they believe will enable our insurance subsidiaries to achieve an underwriting profit. Within each of the underwriting departments, our insurance subsidiaries have dedicated product development and management teams responsible for the development of quality products at competitive prices to promote growth and profitability as well as the enhancement of our current products to meet targeted customer needs.

In order to achieve underwriting profitability on a consistent basis, our insurance subsidiaries:

- assess and select primarily standard and preferred risks;
- · adhere to disciplined underwriting guidelines;

- seek to price risks appropriately based on exposure, risk characteristics, utilization of predictive models and application of underwriting judgment and
- utilize various types of risk management and loss control services.

Our insurance subsidiaries also review their existing portfolio of insured accounts to determine whether certain risks or classes of business continue to meet their underwriting guidelines and margin expectations. If a given account or class of business no longer meets those underwriting guidelines or margin expectations, our insurance subsidiaries will take appropriate action regarding that account or class of business, including raising premium rates or non-renewing policies to the extent applicable laws and regulations permit.

As part of the effort of our insurance subsidiaries to maintain acceptable underwriting results, they conduct annual reviews of agencies that have failed to meet their underwriting profitability criteria. The review process includes an analysis of the underwriting and re-underwriting practices of the agency, the completeness and accuracy of the applications the agency submits, the adequacy of the training of the agency's staff and the agency's record of adherence to the underwriting guidelines and service standards of our insurance subsidiaries. Based on the results of this review process, the marketing and underwriting personnel of our insurance subsidiaries develop, together with the agency, a plan to improve its underwriting profitability. Our insurance subsidiaries monitor the agency's compliance with the plan and take other measures as required in the judgment of our insurance subsidiaries, including the termination, to the extent applicable laws and regulations permit, of agencies that are unable to achieve acceptable underwriting profitability.

Distribution

Our insurance subsidiaries market their products primarily in the Mid-Atlantic, Midwestern, New England, Southern and Southwestern regions through approximately 2,300 independent insurance agencies. At December 31, 2022, the Donegal Insurance Group actively wrote business in 24 states (Alabama, Colorado, Delaware, Georgia, Illinois, Indiana, Iowa, Maine, Maryland, Michigan, Nebraska, New Hampshire, New Mexico, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, and Wisconsin). Beginning with policies effective in 2021, Donegal Mutual includes the business it writes directly and assumes from the Mountain States insurance subsidiaries in four Southwestern states (Colorado, New Mexico, Texas and Utah) in the pooling agreement between Donegal Mutual and Atlantic States. This business had no impact on our results of operations prior to 2021. We believe the relationships of our insurance subsidiaries with their independent agents are valuable in identifying, obtaining and retaining profitable business. Our insurance subsidiaries maintain a stringent agency selection procedure that emphasizes appointing agencies with proven marketing strategies for the development of profitable business, and our insurance subsidiaries only appoint agencies with a strong underwriting history and potential growth capabilities. Our insurance subsidiaries also regularly evaluate the independent agencies that represent them based on their profitability and performance in relation to the objectives of our insurance subsidiaries seek to be among the top three insurers within each of their agencies for the lines of business our insurance subsidiaries write.

The following table sets forth the percentage of direct premiums our insurance subsidiaries write, including 80% of the direct premiums Donegal Mutual and Atlantic States include in the underwriting pool, in each of the states where they conducted a significant portion of their business in 2022:

Pennsylvania	35.1 %
Michigan	15.8
Maryland	8.6
Delaware	6.4
Virginia	5.9
Georgia	4.6
Wisconsin	3.5
Ohio	3.5
Indiana	2.6
North Carolina	2.3
Iowa	1.8
Tennessee	1.7
Other	8.2
Total	100.0 %

Our insurance subsidiaries employ a number of policies and procedures that we believe enable them to attract, retain and motivate their independent agents. We believe that the consistency of the product offerings of our insurance subsidiaries enables our insurance subsidiaries to compete effectively for independent agents with other insurers whose product offerings may fluctuate based upon industry conditions. Our multi-year systems modernization project is further enhancing the ability of our insurance subsidiaries to conduct business with their independent agents and to develop and implement new products. Our insurance subsidiaries have a competitive compensation program for their independent agents that includes base commissions, growth incentive plans and a profit-sharing plan, consistent with applicable state laws and regulations, under which the independent agents may earn additional commissions based upon the volume of premiums produced and the profitability of the business our insurance subsidiaries receive from that agency. We have an agency stock purchase plan that allows our independent agents to purchase our Class A common stock at a discount to market prices to further align the interests of our independent agents with the interests of our stockholders.

Our insurance subsidiaries encourage their independent agents to focus on "account selling," or serving all of a particular insured's property and casualty insurance needs, which our insurance subsidiaries believe generally results in more favorable loss experience than covering a single risk for an individual insured.

Technology

Donegal Mutual owns and manages the technology that our insurance subsidiaries utilize on a daily basis. The technology is comprised of highly integrated agency-facing and back-end processing systems that operate within an advanced, modernized infrastructure that provides high service levels for performance, reliability, security and availability. Donegal Mutual maintains disaster recovery and backup systems and tests these systems on a regular basis. Our insurance subsidiaries bear their proportionate share of information services expenses based on their respective percentage of the total net premiums written of the Donegal Insurance Group.

The business strategy and ultimate success of our insurance subsidiaries depends on the effectiveness of efficient and integrated business systems and technology infrastructure. These systems enable our insurance subsidiaries to provide quality service to agents and policyholders by processing business in a timely and dependable manner, communicate and share data with agents and provide a variety of methods for the payment of premiums. These systems also allow for the accumulation and analysis of data and information for the management of our insurance subsidiaries. Donegal Mutual is currently in the midst of a multi-year effort to modernize certain of its key infrastructure and applications systems we describe in more detail under "Business - Business Strategy - Strategically modernizing our operations and processes to transform our business."

The modernized proficiency of these integrated technology systems facilitates high service levels for the agents and policyholders of our insurance subsidiaries, increased efficiencies in processing the business of our insurance subsidiaries and lower operating costs. Key components of these technology systems include agency interface systems, automated policy management systems, a claims processing system and a billing administration system. The agency interface systems provide

our insurance subsidiaries with a comprehensive single source to facilitate data sharing both to and from agents' systems and also provides agents with an integrated means of processing new business. The automated policy management systems provide agents with the ability to generate underwritten quotes and automatically issue policies that meet the underwriting guidelines of our insurance subsidiaries with limited or no intervention by their personnel. The claims processing system allows our insurance subsidiaries to process claims efficiently and in an automated environment. The billing administration system allows our insurance subsidiaries to process premium billing and collection efficiently and in an automated environment.

We believe Donegal Mutual's agency-facing technology systems compare well against those of many national property and casualty insurance carriers in terms of feature capabilities and service levels. Donegal Mutual maintains a regular interactive forum with its independent agents to be proactive in identifying opportunities for continued automation and technology enhancements.

Claims

The management of claims is a critical component of the philosophy of our insurance subsidiaries to achieve underwriting profitability on a consistent basis and is fundamental to the successful operations of our insurance subsidiaries and their dedication to excellent service. Our senior claims management oversees the claims processing units of each of our insurance subsidiaries to assure consistency in the claims settlement process. The field office staff of our insurance subsidiaries receives support from home office technical, litigation, material damage, subrogation and medical audit personnel.

The claims departments of our insurance subsidiaries rigorously manage claims to assure that they settle legitimate claims quickly and fairly and that they identify questionable claims for defense. In the majority of cases, the personnel of our insurance subsidiaries, who have significant experience in the property and casualty insurance industry and know the service philosophy of our insurance subsidiaries, adjust claims. Our insurance subsidiaries provide various means of claims reporting on a 24-hours a day, seven-days a week basis, including toll-free numbers and electronic reporting through our website and mobile application. Our insurance subsidiaries strive to respond to notifications of claims promptly, generally within the day reported. Our insurance subsidiaries believe that, by responding promptly to claims, they provide quality customer service and minimize the ultimate cost of the claims. Our insurance subsidiaries engage independent adjusters as needed to handle claims in areas in which the volume of claims is not sufficient to justify the hiring of internal claims adjusters by our insurance subsidiaries. Our insurance subsidiaries also employ independent adjusters and private investigators, structural experts and outside legal counsel to supplement their internal staff and to assist in the investigation of claims. Our insurance subsidiaries have a special investigative unit primarily staffed by former law enforcement officers that attempts to identify and prevent fraud and abuse and to investigate questionable claims.

The management of the claims departments of our insurance subsidiaries develops and implements policies and procedures for the establishment of adequate claim reserves. Our insurance subsidiaries employ an actuarial staff that regularly reviews their reserves for incurred but not reported claims. The management and staff of the claims departments resolve policy coverage issues, manage and process reinsurance recoveries and handle salvage and subrogation matters. The litigation and personal injury sections of our insurance subsidiaries manage all claims litigation. Branch office claims above certain thresholds require home office review and settlement authorization. Our insurance subsidiaries provide their claims adjusters reserving and settlement authority based upon their experience and demonstrated abilities. Larger or more complicated claims require consultation and approval of senior claims department management.

Liabilities for Losses and Loss Expenses

Liabilities for losses and loss expenses are estimates at a given point in time of the amounts an insurer expects to pay with respect to incurred policyholder claims based on facts and circumstances the insurer knows at that point in time. For example, legislative, judicial and regulatory actions may expand coverage definitions, retroactively mandate coverage or otherwise require our insurance subsidiaries to pay losses for damages that their policies explicitly excluded or did not intend to cover. At the time of establishing its estimates, an insurer recognizes that its ultimate liability for losses and loss expenses will exceed or be less than such estimates. Our insurance subsidiaries base their estimates of liabilities for losses and loss expenses on assumptions as to future loss trends, expected claims severity, judicial theories of liability and other factors. However, during the loss adjustment period, our insurance subsidiaries may learn additional facts regarding individual claims, and, consequently, it often becomes necessary for our insurance subsidiaries to refine and adjust their estimates for these liabilities. We reflect any adjustments to the liabilities for losses and loss expenses of our insurance subsidiaries in our consolidated results of operations in the period in which our insurance subsidiaries make adjustments to their estimates.

Our insurance subsidiaries maintain liabilities for the payment of losses and loss expenses with respect to both reported and unreported claims. Our insurance subsidiaries establish these liabilities for the purpose of covering the ultimate costs of

settling all losses, including investigation and litigation costs. Our insurance subsidiaries base the amount of their liability for reported losses primarily upon a case-by-case evaluation of the type of risk involved, knowledge of the circumstances surrounding each claim and the insurance policy provisions relating to the type of loss the policyholder incurred. Our insurance subsidiaries determine the amount of their liability for unreported claims and loss expenses on the basis of historical information by line of insurance. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results. Our insurance subsidiaries monitor their liabilities closely and recompute them periodically using new information on reported claims and a variety of statistical techniques. Our insurance subsidiaries do not discount their liabilities for losses and loss expenses.

Reserve estimates can change over time because of unexpected changes in assumptions related to our insurance subsidiaries' external environment and, to a lesser extent, assumptions related to our insurance subsidiaries' internal operations. For example, our insurance subsidiaries have experienced an increase in claims severity and a lengthening of the claim settlement periods on bodily injury claims during the past several years. In addition, the COVID-19 pandemic and related government mandates and restrictions resulted in various changes from historical claims reporting and settlement trends during 2020 and resulted in significant increases in loss costs in 2021 and 2022 due to a number of factors, including supply chain disruption, higher new and used automobile values, increases in the cost of replacement automobile parts and rising labor rates. These trend changes give rise to greater uncertainty as to the pattern of future loss settlements. Related uncertainties regarding future trends include social inflation, availability and cost of replacement automobile parts and building materials, availability of skilled labor, the rate of plaintiff attorney involvement in claims and the cost of medical technologies and procedures. Assumptions related to our insurance subsidiaries' external environment include the absence of significant changes in tort law and the legal environment that increase liability exposure, consistency in judicial interpretations of insurance coverage and policy provisions and the rate of loss cost inflation. Internal assumptions include consistency in the recording of premium and loss statistics, consistency in the recording of claims, payment and case reserving methodology, accurate measurement of the impact of rate changes and changes in policy provisions, consistency in the quality and characteristics of business written within a given line of business and consistency in reinsurance coverage and collectability of reinsured losses, among other items. To the extent our insurance subsidiaries determine that underlying factors impacting their assumptions have changed, our insurance subsidiaries make adjustments in their reserves that they consider appropriate for such changes. Accordingly, our insurance subsidiaries' ultimate liability for unpaid losses and loss expenses will likely differ from the amount recorded at December 31, 2022. For every 1% change in our insurance subsidiaries' loss and loss expense reserves, net of reinsurance recoverable, the effect on our pre-tax results of operations would be approximately \$6.7 million.

The establishment of appropriate liabilities is an inherently uncertain process and we can provide no assurance that our insurance subsidiaries' ultimate liability will not exceed our insurance subsidiaries' loss and loss expense reserves and have an adverse effect on our results of operations and financial condition. Furthermore, we cannot predict the timing, frequency and extent of adjustments to our insurance subsidiaries' estimated future liabilities, because the historical conditions and events that serve as a basis for our insurance subsidiaries' estimates of ultimate claim costs may change. As is the case for substantially all property and casualty insurance companies, our insurance subsidiaries have found it necessary in the past to increase their estimated future liabilities for losses and loss expenses in certain periods and, in other periods, their estimated future liabilities for losses and loss expenses have exceeded their actual liabilities for losses and loss expenses. Changes in our insurance subsidiaries' estimates of their liability for losses and loss expenses generally reflect actual payments and their evaluation of information received subsequent to the prior reporting period. Our insurance subsidiaries recognized a decrease in their liability for losses and loss expenses of prior years of \$44.8 million, \$31.2 million and \$12.9 million in 2022, 2021 and 2020, respectively. Our insurance subsidiaries made no significant changes in their reserving philosophy or claims management personnel, and they have made no significant offsetting changes in estimates that increased or decreased their loss and loss expense reserves in those years. The 2022 development represented 7.2% of the December 31, 2021 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile and commercial automobile lines of business for accident years prior to 2022. The majority of the 2022 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2021 development represented 5.6% of the December 31, 2020 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile, workers' compensation and commercial automobile lines of business for accident years prior to 2021. The majority of the 2021 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2020 development represented 2.6% of the December 31, 2019 net carried reserves and resulted primarily from lower-thanexpected severity in the workers' compensation and personal automobile lines of business, partially offset by higher-thanexpected severity in the commercial automobile and commercial multi-peril lines of business, for accident years prior to 2020. The majority of the 2020 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO.

Excluding the impact of severe weather events and the COVID-19 pandemic, our insurance subsidiaries have noted stable amounts in the number of claims incurred and the number of claims outstanding at period ends relative to their premium base in

recent years across most of their lines of business. However, the amount of the average claim outstanding has increased gradually over the past several years due to various factors such as rising inflation and increased litigation trends. We have also experienced a general slowing of settlement rates in litigated claims and lengthening of repair completion times for property and automobile claims. Our insurance subsidiaries could have to make further adjustments to their estimates in the future. However, on the basis of our insurance subsidiaries' internal procedures, which analyze, among other things, their prior assumptions, their experience with similar cases and historical trends such as reserving patterns, loss payments, pending levels of unpaid claims and product mix, as well as court decisions, economic conditions and public attitudes, we believe that our insurance subsidiaries have made adequate provision for their liability for losses and loss expenses.

Atlantic States' participation in the underwriting pool with Donegal Mutual exposes Atlantic States to adverse loss development on the business that Donegal Mutual contributes to the underwriting pool. However, pooled business represents the predominant percentage of the net underwriting activity of both companies, and Donegal Mutual and Atlantic States share proportionately any adverse risk development relating to the pooled business. The business in the underwriting pool is homogeneous, and each company has a pro-rata share of the entire underwriting pool. Since the predominant percentage of the business of Atlantic States and Donegal Mutual is pooled and the results shared by each company according to its participation level under the terms of the pooling agreement, the intent of the underwriting pool is to produce a more uniform and stable underwriting result from year to year for each company than either would experience individually and to spread the risk of loss between the companies.

Differences between liabilities reported in our financial statements prepared on a GAAP basis and our insurance subsidiaries' financial statements prepared on a SAP basis result from anticipating salvage and subrogation recoveries for GAAP but not for SAP. These differences amounted to \$28.7 million, \$23.5 million and \$21.0 million at December 31, 2022, 2021 and 2020, respectively.

The following table sets forth a reconciliation of the beginning and ending GAAP net liability of our insurance subsidiaries for unpaid losses and loss expenses for the periods indicated:

	Year Ended December 31,							
(in thousands)		2022		2021		2020		
Gross liability for unpaid losses and loss expenses at beginning of year	\$	1,077,620	\$	962,007	\$	869,674		
Less reinsurance recoverable		451,261		404,818		362,768		
Net liability for unpaid losses and loss expenses at beginning of year		626,359		557,189		506,906		
Provision for net losses and loss expenses for claims incurred in the current year		608,900		551,918		472,709		
Change in provision for estimated net losses and loss expenses for claims incurred in prior years		(44,821)		(31,208)		(12,945)		
Total incurred		564,079		520,710		459,764		
Net losses and loss expense payments for claims incurred during:								
The current year		302,272		269,317		236,984		
Prior years		218,304		182,223		172,497		
Total paid		520,576		451,540		409,481		
Net liability for unpaid losses and loss expenses at end of year		669,862		626,359		557,189		
Plus reinsurance recoverable		451,184		451,261		404,818		
Gross liability for unpaid losses and loss expenses at end of year	\$	1,121,046	\$	1,077,620	\$	962,007		

The following table sets forth the development of the liability for net unpaid losses and loss expenses of our insurance subsidiaries from 2012 to 2022. Loss data in the table includes business Atlantic States received from the underwriting pool.

"Net liability at end of year for unpaid losses and loss expenses" sets forth the estimated liability for net unpaid losses and loss expenses recorded at the balance sheet date for each of the indicated years. This liability represents the estimated amount of net losses and loss expenses for claims arising in the current and all prior years that are unpaid at the balance sheet date, including losses incurred but not reported.

The "Net liability re-estimated as of" portion of the table shows the re-estimated amount of the previously recorded liability based on experience for each succeeding year. The estimate increases or decreases as payments are made and more information becomes known about the severity of the remaining unpaid claims. For example, the 2012 liability has developed a deficiency after ten years because we expect the re-estimated net losses and loss expenses to be \$24.7 million more than the estimated liability we initially established in 2012 of \$250.9 million.

The "Cumulative deficiency (excess)" shows the cumulative deficiency or excess at December 31, 2022 of the liability estimate shown on the top line of the corresponding column. A deficiency in liability means that the liability established in prior years was less than the amount of actual payments and currently re-estimated remaining unpaid liability. An excess in liability means that the liability established in prior years exceeded the amount of actual payments and currently re-estimated unpaid liability remaining.

The "Cumulative amount of liability paid through" portion of the table shows the cumulative net losses and loss expense payments made in succeeding years for net losses incurred prior to the balance sheet date. For example, the 2012 column indicates that at December 31, 2022 payments equal to \$268.4 million of the currently re-estimated ultimate liability for net losses and loss expenses of \$275.6 million had been made.

		Year Ended December 31,													
(in thousands)	20	12	2013	3 2	014	201	5 20	16	201	7	2018	2019	2020	2021	2022
Net liability at end year for unpaid losses and loss expenses),936	\$265,6	505 \$29	2,301	\$322,0	054 \$347	7,518	\$383,	401 \$4	475,398	\$506,906	\$557,189	\$626,359	\$669,862
Net liability re- estimated as of:															
One year later	261	,294	280,0	74 29	9,501	325,0)43 354	1,139	419,	032	462,466	493,961	525,981	581,538	
Two years later	268	3,877	281,7	82 29	9,919	329,1	115 375	5,741	413,	535	450,862	479,927	498,724		
Three years later	270),473	281,6	666 30	4,855	338,1	118 376	5,060	404,	902	440,168	463,441			
Four years later	270),794	284,4	29 30	7,840	339,2	228 372	2,230	398,	560 4	432,027				
Five years later	271	,954	285,1	30 31	0,354	338,0)20 370),960	396,	695					
Six years later	272	2,553	287,4	39 31	0,380	338,2	200 372	2,346							
Seven years later	274	1,111	287,0	063 31	1,594	339,6	525								
Eight years later	274	1,472	288,2	298 31	3,354										
Nine years later	275	5,385	289,0												
Ten years later		5,638	ĺ												
Cumulative deficiency	2	1.702	22 /	K1 2	1.052	17.4	571 2	1,828	12	204	(42 271)	(43,465	(50.465)	(44.921)	
(excess) Cumulative amount of liability paid through:		1,702	23,4	=======================================	1,053	17,5	22	+,020	13,		(43,371)	(43,403	(58,465)	(44,821)	
One year later	\$126	5,677	\$131,7	766 \$13	1,779	\$149,7	746 \$163	3,005	\$175,	883 S	195,956	\$172,497	\$182,223	\$218,304	
Two years later		1,208	194,1		6,637	228,5),678	276,		275,993	276,069		Ψ210,50.	
Three years later		5,956	233,3		1,654	274,2		5,338	317,		335,310	343,912	· ·		
Four years later		5,094	255,4		4,248	300,7		1,628	342,		371,231	3 .5,7 12			
Five years later		1,502	265,8		7,178	309,6		7,946	362,		,, <u>2</u> 51				
Six years later		9,437	272,4		2,327	315,1		9,496	302,	001					
Seven years later		3,386	275,3		5,106	321,7		,,,,,,							
Eight years later		5,026	277,3		0,306	321,	, , ,								
Nine years later		5,433	279,9		0,500										
Ten years later		3,446	217,7	20											
Ten years rater	200	,,,,,,													
_							Ended Deco								
thousands)	2014		015	2016		017	2018	2	019	2020		2021	2022		
•	538,258	\$578	8,205	\$606,665	\$670	6,672	\$814,665	\$86	9,674	\$962,00	07 \$1,0	077,620	\$1,121,046		
	245,957	250	6,151	259,147	293	3,271	339,266	36	2,768	404,81	18 4	51,261	451,184		
-	292,301	322	2,054	347,518	383	3,401	475,398	50	6,906	557,18	89 6	526,359	669,862		
ross re-estimated liability e-estimated	564,561	594	4,072	628,241	679	9,800	755,701	79	2,676	872,83	33 9	33,712			
recoverable et re-estimated	251,207	254	4,447	255,895	283	3,105	323,674	32	9,235	374,10		52,174			
liability	313,354	339	9,625	372,346	390	6,695	432,027	46	3,441	498,72	24 5	81,538			
Gross cumulative deficiency (excess)	26,303	15	5,867	21,576	i (3,128	(58,964)	(7	6,998)	(89,17	74) (1	43,908)			

Third-Party Reinsurance

Our insurance subsidiaries and Donegal Mutual purchase certain third-party reinsurance on a combined basis. Our insurance subsidiaries use several different reinsurers, all of which, consistent with the requirements of our insurance subsidiaries and Donegal Mutual, have an A.M. Best rating of A- (Excellent) or better or, with respect to foreign reinsurers, have a financial condition that, in the opinion of our management, is equivalent to a company with at least an A- (Excellent) rating from A.M. Best.

The external reinsurance our insurance subsidiaries and Donegal Mutual purchased for 2022 included:

- excess of loss reinsurance, under which Donegal Mutual and our insurance subsidiaries recovered losses over a set retention of \$2.0 million (\$3.0 million retention for all losses except for workers' compensation for 2023); and
- catastrophe reinsurance, under which Donegal Mutual and our insurance subsidiaries recovered 100% of an accumulation of many losses resulting from a single event, including natural disasters, over a set retention of \$15.0 million up to aggregate losses of \$185.0 million per occurrence (over a set retention of \$25.0 million up to aggregate losses of \$175.0 million per occurrence for 2023).

For property insurance, our insurance subsidiaries had excess of loss reinsurance that provided for coverage of \$38.0 million per loss over a set retention of \$2.0 million (\$37.0 million per loss over a set retention of \$3.0 million for 2023). For liability insurance, our insurance subsidiaries had excess of loss reinsurance that provided for coverage of \$73.0 million per occurrence over a set retention of \$2.0 million (\$72.0 million per occurrence over a set retention of \$3.0 million for 2023). For workers' compensation insurance, our insurance subsidiaries had excess of loss reinsurance that provided for coverage of \$18.0 million on any one life over a set retention of \$2.0 million (no change for 2023).

Our insurance subsidiaries and Donegal Mutual also purchased facultative reinsurance to cover certain exposures, including property exposures that exceeded the limits provided by their respective treaty reinsurance.

Investments

At December 31, 2022, 100.0% of all debt securities our insurance subsidiaries held had an investment-grade rating. The investment portfolios of our insurance subsidiaries did not contain any mortgage loans or any non-performing assets at December 31, 2022.

The following table shows the composition of the debt securities (at carrying value) in the investment portfolios of our insurance subsidiaries, excluding short-term investments, by rating at December 31, 2022:

(dollars in thousands)		December 3	31, 2022	
Rating ⁽¹⁾		Percent		
U.S. Treasury and U.S. agency securities ⁽²⁾	\$	396,191	32.7 %	
Aaa or AAA		25,010	2.1	
Aa or AA		343,138	28.3	
A		200,629	16.6	
BBB		247,263	20.3	
Total	\$	1,212,231	100.0 %	

⁽¹⁾ Ratings assigned by Moody's Investors Services, Inc. or Standard & Poor's Corporation.

Our insurance subsidiaries invest in both taxable and tax-exempt securities as part of their strategy to maximize after-tax income. Tax-exempt securities made up approximately 19.9%, 21.1% and 22.9% of the fixed-maturity securities in the combined investment portfolios of our insurance subsidiaries at December 31, 2022, 2021 and 2020, respectively.

⁽²⁾ Includes mortgage-backed securities of \$229.3 million.

The following table shows the classification of our investments and the investments of our insurance subsidiaries at December 31, 2022, 2021 and 2020 (at carrying value):

	December 31,							
	202	22	202	21	2020			
		Percent of		Percent of		Percent of		
(dollars in thousands)	Amount	Total	Amount	Total	Amount	Total		
Fixed maturities ⁽¹⁾ :								
Held to maturity:								
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 103,362	7.9 %	\$ 89,268	7.0 %	\$ 77,435	6.3 %		
Obligations of states and political subdivisions	382,097	29.3	371,436	29.1	312,319	25.6		
Corporate securities	190,949	14.6	191,147	15.0	173,270	14.2		
Mortgage-backed securities	12,031	1.0	16,254	1.2	23,585	1.9		
Total held to maturity	688,439	52.8	668,105	52.3	586,609	48.0		
Available for sale: U.S. Treasury securities and obligations of U.S. government corporations and agencies	63,521	4.9	32,185	2.5	47,815	3.9		
Obligations of states and political subdivisions	40,156	3.1	57,378	4.5	68,965	5.7		
Corporate securities	202,838	15.5	221,611	17.4	212,708	17.4		
Mortgage-backed securities	217,277	16.6	221,455	17.3	225,648	18.5		
Total available for sale	523,792	40.1	532,629	41.7	555,136	45.5		
Total fixed maturities	1,212,231	92.9	1,200,734	94.0	1,141,745	93.5		
Equity securities ⁽²⁾	35,105	2.7	63,420	5.0	58,556	4.8		
Short-term investments ⁽³⁾	57,321	4.4	12,692	1.0	20,901	1.7		
Total investments	\$1,304,657	100.0 %	\$1,276,846	100.0 %	\$1,221,202	100.0 %		

⁽¹⁾ We refer to Notes 1 and 4 to our Consolidated Financial Statements. We value those fixed maturities we classify as held to maturity at amortized cost; we value those fixed maturities we classify as available for sale at fair value. The total fair value of fixed maturities we classified as held to maturity was \$598.0 million at December 31, 2022, \$697.4 million at December 31, 2021 and \$632.6 million at December 31, 2020. The amortized cost of fixed maturities we classified as available for sale was \$571.9 million at December 31, 2022, \$523.3 million at December 31, 2021 and \$535.0 million at December 31, 2020.

⁽²⁾ We value equity securities at fair value. The total cost of equity securities was \$30.8 million at December 31, 2022, \$43.3 million at December 31, 2021 and \$42.4 million at December 31, 2020

⁽³⁾ We value short-term investments at cost, which approximates fair value.

The following table sets forth the maturities (at carrying value) in the fixed maturity portfolio of our insurance subsidiaries at December 31, 2022, 2021 and 2020:

	December 31,					
	2022		2021		2020	
		Percent of		Percent of		Percent of
(dollars in thousands)	Amount	Total	Amount	Total	Amount	Total
Due in ⁽¹⁾ :						
One year or less	\$ 39,094	3.2 %	\$ 48,771	4.1 %	\$ 73,166	6.4 %
Over one year through three years	107,689	8.9	93,100	7.7	85,805	7.5
Over three years through five years	133,068	11.0	120,038	10.0	111,258	9.8
Over five years through ten years	357,114	29.5	362,266	30.2	341,947	30.0
Over ten years through fifteen years	191,118	15.8	165,327	13.8	139,604	12.2
Over fifteen years	154,840	12.7	173,523	14.4	140,732	12.3
Mortgage-backed securities	229,308	18.9	237,709	19.8	249,233	21.8
	\$1,212,231	100.0 %	\$1,200,734	100.0 %	\$1,141,745	100.0 %

⁽¹⁾ Based on stated maturity dates with no prepayment assumptions. Actual maturities will differ because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

As shown above, our insurance subsidiaries held investments in mortgage-backed securities having a carrying value of \$229.3 million at December 31, 2022. The mortgage-backed securities consist primarily of investments in governmental agency balloon pools with stated maturities between one and 35 years. The stated maturities of these investments limit the exposure of our insurance subsidiaries to extension risk in the event that interest rates rise and prepayments decline. Our insurance subsidiaries perform an analysis of the underlying loans when evaluating a mortgage-backed security for purchase, and they select those securities that they believe will provide a return that properly reflects the prepayment risk associated with the underlying loans.

The following table sets forth the investment results of our insurance subsidiaries for the years ended December 31, 2022, 2021 and 2020:

	Year Ended December 31,			
(dollars in thousands)	2022	2021	2020	
Invested assets ⁽¹⁾	\$ 1,290,752	\$ 1,249,024	\$ 1,165,878	
Investment income ⁽²⁾	34,016	31,126	29,504	
Average yield	2.6 %	2.5 %	2.5 %	
Average tax-equivalent yield	2.7	2.6	2.7	

⁽¹⁾ Average of the aggregate invested amounts at the beginning and end of the period.

A.M. Best Rating

Donegal Mutual and our insurance subsidiaries have an A.M. Best rating of A (Excellent), based upon the respective current financial condition and historical statutory results of operations of Donegal Mutual and our insurance subsidiaries. We believe that the A.M. Best rating of Donegal Mutual and our insurance subsidiaries is an important factor in their marketing of their products to their agents and customers. A.M. Best's ratings are industry ratings based on a comparative analysis of the financial condition and operating performance of insurance companies. A.M. Best's classifications are A++ and A+ (Superior), A and A- (Excellent), B++ and B+ (Good), B and B- (Fair), C++ and C+ (Marginal), C and C- (Weak), D (Poor), E (Under Regulatory Supervision), F (Liquidation) and S (Suspended). A.M. Best bases its ratings upon factors relevant to the payment of claims of policyholders and are not directed toward the protection of investors in insurance companies. According to A.M. Best, the "Excellent" rating that the Donegal Insurance Group maintains is assigned to those companies that, in A.M. Best's opinion, have an excellent ability to meet their ongoing insurance obligations.

⁽²⁾ Investment income is net of investment expenses and does not include investment gains or losses or provision for income taxes.

Regulation

The supervision and regulation of insurance companies consists primarily of the laws and regulations of the various states in which the insurance companies transact business, with the primary regulatory authority being the insurance regulatory authorities in the state of domicile of the insurance company. Such supervision and regulation relate to numerous aspects of an insurance company's business and financial condition. The primary purpose of such supervision and regulation is the protection of policyholders. The authority of the state insurance departments includes the establishment of standards of solvency that insurers must meet and maintain, the licensing of insurers and insurance agents to do business, the nature of, and limitations on, investments, premium rates for property and casualty insurance, the provisions that insurers must make for current losses and future liabilities, the deposit of securities for the benefit of policyholders, the approval of policy forms, notice requirements for the cancellation of policies and the approval of certain changes in control. State insurance departments also conduct periodic examinations of the affairs of insurance companies and require the filing of annual and other reports relating to the financial condition of insurance companies.

In addition to state-imposed insurance laws and regulations, the National Association of Insurance Commissioners, or the NAIC, maintains a risk-based capital system, or RBC, for assessing the adequacy of the statutory capital and surplus of insurance companies that augments the states' current fixed dollar minimum capital requirements for insurance companies. At December 31, 2022, our insurance subsidiaries and Donegal Mutual each exceeded the minimum levels of statutory capital the RBC rules require by a substantial margin.

Generally, every state has guaranty fund laws under which insurers licensed to do business in that state can be assessed on the basis of premiums written by the insurer in that state in order to fund policyholder liabilities of insolvent insurance companies. Under these laws in general, an insurer is subject to assessment, depending upon its market share of a given line of business, to assist in the payment of policyholder claims against insolvent insurers. Our insurance subsidiaries and Donegal Mutual have made accruals for their portion of assessments related to such insolvencies based upon the most current information furnished by the guaranty associations.

We are part of an insurance holding company system of which Donegal Mutual is the ultimate controlling person. All of the states in which our insurance companies and Donegal Mutual maintain a domicile have legislation that regulates insurance holding company systems. Each insurance company in the insurance holding company system must register with the insurance supervisory agency of its state of domicile and furnish information concerning the operations of companies within the insurance holding company system that may materially affect the operations, management or financial condition of the insurers within the system. Pursuant to these laws, the respective insurance departments in which our subsidiaries and Donegal Mutual maintain a domicile may examine our insurance subsidiaries or Donegal Mutual at any time, require disclosure of material transactions by the holding company with another member of the insurance holding company system and require prior notice or prior approval of certain transactions, such as "extraordinary dividends" from the insurance subsidiaries to the holding company. We have insurance subsidiaries domiciled in Michigan, Pennsylvania and Virginia.

The Pennsylvania Insurance Holding Companies Act, which generally applies to Donegal Mutual, us and our insurance subsidiaries, requires that all transactions within an insurance holding company system to which an insurer is a party must be fair and reasonable and that any charges or fees for services performed must be reasonable. Any management agreement, service agreement, cost sharing arrangement and material reinsurance agreement must be filed with the Pennsylvania Insurance Department, or the Department, and is subject to the Department's review. We have filed with the Department the pooling agreement between Donegal Mutual and Atlantic States that established the underwriting pool and all material agreements between Donegal Mutual and our insurance subsidiaries.

Approval of the applicable insurance commissioner is also required prior to consummation of transactions affecting the control of an insurer. In virtually all states, including the states where our insurance subsidiaries are domiciled, the acquisition of 10% or more of the outstanding capital stock of an insurer or its holding company or the intent to acquire such an interest creates a rebuttable presumption of a change in control. Pursuant to an order issued in April 2003, the Department approved Donegal Mutual's ownership of up to 70% of our outstanding Class A common stock and Donegal Mutual's ownership of up to 100% of our outstanding Class B common stock.

Our insurance subsidiaries have the legal obligation under state insurance laws to participate in involuntary insurance programs for automobile insurance, as well as other property and casualty insurance lines, in the states in which they conduct business. These programs include joint underwriting associations, assigned risk plans, fair access to insurance requirements plans, reinsurance facilities, windstorm plans and tornado plans. Legislation establishing these programs requires all companies that write lines covered by these programs to provide coverage, either directly or through reinsurance, for insureds who are unable to obtain insurance in the voluntary market. The legislation creating these programs usually allocates a pro rata portion

of risks attributable to such insureds to each company on the basis of the direct premiums it has written in that state or the number of automobiles it insures in that state. Generally, state law requires participation in these programs as a condition to obtaining a certificate of authority. Our loss ratio on insurance we write under these involuntary programs has traditionally been significantly greater than our loss ratio on insurance we voluntarily write in those states.

Regulatory requirements, including RBC requirements, may impact our insurance subsidiaries' ability to pay dividends. The amount of statutory capital and surplus necessary for our insurance subsidiaries to satisfy regulatory requirements, including RBC requirements, was not significant in relation to our insurance subsidiaries' statutory capital and surplus at December 31, 2022. Generally, the maximum amount that one of our insurance subsidiaries may pay to us as ordinary dividends during any year after notice to, but without prior approval of, the insurance commissioner of its domiciliary state is limited to a stated percentage of that subsidiary's statutory capital and surplus at December 31 of the preceding fiscal year or the net income of that subsidiary for its preceding fiscal year. Our insurance subsidiaries did not pay any dividends to us in 2022. Our insurance subsidiaries paid dividends to us of \$5.0 million and \$14.0 million in 2021 and 2020, respectively. At December 31, 2022, the amount of ordinary dividends our insurance subsidiaries could pay to us during 2023, without the prior approval of their respective domiciliary insurance commissioners, is shown in the following table.

Name of Insurance Subsidiary	 Ordinary Dividend Amount		
Atlantic States	\$ 26,357,936		
MICO	7,544,187		
Peninsula	6,009,019		
Southern	 6,446,312		
Total	\$ 46,357,454		

Donegal Mutual Insurance Company

Donegal Mutual organized as a mutual fire insurance company in Pennsylvania in 1889. At December 31, 2022, Donegal Mutual had admitted assets of \$726.4 million and policyholders' surplus of \$346.9 million. At December 31, 2022, Donegal Mutual had total liabilities of \$379.5 million, including reserves for net losses and loss expenses of \$186.5 million and unearned premiums of \$70.0 million. Donegal Mutual's investment portfolio of \$466.2 million at December 31, 2022 consisted primarily of investment-grade bonds of \$224.9 million and its investment in our Class A common stock and our Class B common stock. At December 31, 2022, Donegal Mutual owned 11,578,470 shares, or approximately 43%, of our Class A common stock, which Donegal Mutual carried on its books at \$152.7 million, and 4,708,571 shares, or approximately 84%, of our Class B common stock, which Donegal Mutual carried on its books at \$62.1 million. We present Donegal Mutual's financial information in accordance with SAP as the NAIC Accounting Practices and Procedures Manual requires. Donegal Mutual does not, nor is it required to, prepare financial statements in accordance with GAAP.

Information about Our Executive Officers

The following table sets forth information regarding the executive officers of Donegal Mutual and the Registrant as of the date of this Form 10-K Report:

Name	Age	Position
Kevin G. Burke	57	President and Chief Executive Officer of us since 2015; President and Chief Executive Officer of Donegal Mutual since 2018; Executive Vice President and Chief Operating Officer of Donegal Mutual from 2014 to 2018; Senior Vice President of Human Resources of Donegal Mutual and us from 2005 to 2014; other positions from 2000 to 2005.
Jeffrey D. Miller	58	Executive Vice President and Chief Financial Officer of Donegal Mutual and us since 2014; Senior Vice President and Chief Financial Officer of Donegal Mutual and us from 2005 to 2014; other positions from 1993 to 2005.
Kristi S. Altshuler	42	Senior Vice President and Chief Analytics Officer of us since 2020; Senior Vice President and Chief Analytics Officer of Donegal Mutual since 2019; Director of Willis Towers Watson from 2018 to 2019; Director of Pricing Innovation of USAA from 2014 to 2018; other positions at USAA from 2001 to 2014.
W. Daniel DeLamater	50	Senior Vice President of us since 2022; Senior Vice President and Head of Field Operations & National Accounts of Donegal Mutual since 2022; Senior Vice President of National Accounts for Donegal Mutual from 2020 to 2022; President of Southern Mutual Insurance Company since 2016; other positions at Southern Mutual Insurance Company from 2000 to 2016.
William A. Folmar	64	Senior Vice President of Claims of Donegal Mutual and Senior Vice President of us since 2019; Vice President of Claims of Donegal Mutual from 2010 to 2019; other positions from 1998 to 2010.
Jeffery T. Hay	48	Senior Vice President and Chief Underwriting Officer of Donegal Mutual and Senior Vice President of us since 2021; Senior Director of Willis Towers Watson from 2018 to 2021; Head of Personal Lines Product Management of The Hartford from 2015 to 2018; other positions at The Hartford from 2005 to 2015.
Christina M. Hoffman	48	Senior Vice President and Chief Risk Officer of Donegal Mutual and us since 2019; Senior Vice President of Internal Audit of Donegal Mutual and Senior Vice President of us from 2013 to 2019; Vice President of Internal Audit of Donegal Mutual and Vice President of us from 2009 to 2013.
Matthew T. Hudnall	45	Senior Vice President of Commercial Lines of Donegal Mutual and Senior Vice President of us since 2022; Senior Vice President of Underwriting of Preferred Mutual from 2021 to 2022; Vice President of Small Commercial Underwriting of Hanover Insurance Group from 2016 to 2021; Vice President of Casualty Underwriting at Hanover Insurance Group from 2013 to 2016.
Robert R. Long, Jr.	64	Senior Vice President and General Counsel of Donegal Mutual and us since 2018; Vice President and House Counsel of Donegal Mutual from 2012 to 2018; other positions from 2010 to 2012.
Sanjay Pandey	56	Senior Vice President and Chief Information Officer of Donegal Mutual and us since 2013; other positions from 2000 to 2013.
David W. Sponic	58	Senior Vice President of Personal Lines of Donegal Mutual and Senior Vice President of us since 2022; Vice President of Personal Lines of Donegal Mutual from 2008 to 2022; other positions from 1990 to 2008.
V. Anthony Viozzi	49	Senior Vice President and Chief Investment Officer of Donegal Mutual and us since 2012; Vice President of Investments of Donegal Mutual and us from 2007 to 2012.
Daniel J. Wagner	62	Senior Vice President and Treasurer of Donegal Mutual and us since 2005; other positions from 1987 to 2005.

Cautionary Statement Regarding Forward-Looking Statements

This Form 10-K Report and the documents we incorporate by reference in this Form 10-K Report contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include certain discussions relating to underwriting, premium and investment income volumes, business strategies, reserves, profitability and business relationships and our other business activities during 2022 and beyond. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expect," "plan," "intend," "anticipate," "believe," "estimate," "objective," "project," "predict," "potential," "goal" and similar expressions. These forward-looking statements reflect our current views about future events and our current assumptions, and are subject to known and unknown risks and uncertainties that may cause our results, performance or achievements to differ materially from those we anticipate or imply by our forward-looking statements. We cannot control or predict many of the factors that could determine our future financial condition or results of operations. Such factors may include those we describe under "Risk Factors." The forward-looking statements contained in this Form 10-K Report reflect our views and assumptions only as of the date of this Form 10-K Report. Except as required by law, we do not intend to update, and we assume no responsibility for updating, any forward-looking statements we have made. We qualify all of our forward-looking statements by these cautionary statements.

Item 1A. Risk Factors.

Risk Factors

Risks Relating to the Property and Casualty Insurance Industry

Industry trends, such as increasing loss severity due to higher rates of litigation against the insurance industry and individual insurers, the willingness of courts to expand covered causes of loss, rising jury awards, escalating medical, automobile and property repair costs and other factors may contribute to increased costs and result in ultimate loss settlements that exceed the reserves of our insurance subsidiaries.

Loss severity in the property and casualty insurance industry has increased in recent years, principally driven by factors such as distracted driving, larger court judgments, higher jury awards and increasing medical and automobile and property repair costs, including increases due to inflation and supply chain disruption. In addition, many classes of complainants have brought legal actions and proceedings that tend to increase the size of judgments. The propensity of policyholders and third-party claimants to litigate and the willingness of courts to expand causes of loss and the size of awards, to eliminate exclusions and to increase coverage limits may result in ultimate settlements of current and future losses that exceed the loss reserves of our insurance subsidiaries.

Our insurance subsidiaries are subject to catastrophe losses and losses from other severe weather events, which are unpredictable and may adversely affect our results of operations, liquidity and financial condition.

The underwriting results of our insurance subsidiaries are subject to weather and other conditions that may adversely affect our financial condition, liquidity or results of operations. Because the occurrence and severity of catastrophes are inherently unpredictable and may vary significantly from year to year and region to region, our historical results of operations may not be indicative of our future results of operations. Our property and casualty insurance operations expose us to claims arising from catastrophic events affecting multiple policyholders. Such catastrophic events consist of various natural disasters, including, but not limited to, hurricanes, tropical storms, tornadoes, windstorms, hailstorms, fires and wildfires, flooding, landslides, earthquakes, severe winter weather events and man-made disasters such as terrorist attacks, explosions and infrastructure failures. Historically, our insurance subsidiaries have experienced weather-related losses from hurricanes and tropical storms in Mid-Atlantic and Southern states, tornadoes and hailstorms in Mid-Atlantic, Midwestern and Southern states and severe winter weather events in Mid-Atlantic, Midwestern and New England states.

Losses from catastrophic events are a function of both the extent of our insurance subsidiaries' exposures, the frequency and severity of the events themselves and the level of reinsurance coverage our insurance subsidiaries purchase. The increased frequency and severity of weather-related catastrophes and other losses, such as from wildfires and flooding, incurred by the industry in recent years may be indicative of changing weather patterns due to climate change. Should those patterns continue to emerge, increased weather-related catastrophes in the states in which our insurance subsidiaries operate would lead to higher overall losses that they may be unable to offset through pricing actions.

Our insurance subsidiaries seek to reduce their exposure to catastrophe losses through their underwriting strategies and their purchase of catastrophe reinsurance. Nevertheless, reinsurance may prove inadequate under certain circumstances. While the emerging science regarding climate change and its connection to extreme weather events continues to be studied, climate change, to the extent it produces rising temperatures and changes in weather patterns, could affect the frequency and severity of weather events and other losses and thus impact the affordability and availability of catastrophe reinsurance coverage for our insurance subsidiaries. Our insurance subsidiaries' ability to appropriately manage catastrophe risk depends partially on catastrophe models, which may be affected by inaccurate or incomplete data, the uncertainty of the frequency and severity of future events and the uncertain impact of changing climate conditions that tend to occur gradually over time.

Changing climate conditions could lead to new or revised regulations with which our insurance subsidiaries would have to comply. Such regulations could impact the ability of our insurance subsidiaries to manage their exposures in areas impacted by increased weather activity, require our insurance companies to alter the terms and conditions of their policies or impact the ability of our insurance subsidiaries to obtain sufficient pricing increases to offset higher loss activity.

Our insurance subsidiaries must establish premium rates and loss and loss expense reserves from forecasts of the ultimate costs they expect will arise from risks underwritten during the policy period, and the profitability of our insurance subsidiaries could be adversely affected if their premium rates or reserves are insufficient to satisfy their ultimate costs.

One of the distinguishing features of the property and casualty insurance industry is that it prices its products before it knows its costs, since insurers generally establish their premium rates before they know the amount of losses they will incur. Accordingly, our insurance subsidiaries establish premium rates from forecasts of the ultimate costs they expect to arise from risks they have underwritten during the policy period. Proposed increases in premium rates are subject to regulatory approval on a state-by-state basis, and there is a lag between the time that our insurance subsidiaries file for such approval and the date upon which our insurance subsidiaries can implement any such approved premium rate increase across their book of business for a product in a particular state. The premium rates our insurance subsidiaries charge may not be sufficient to cover the ultimate losses they incur. Further, our insurance subsidiaries must establish reserves for losses and loss expenses as balance sheet liabilities based upon estimates involving actuarial and statistical projections at a given time of what our insurance subsidiaries expect their ultimate liability to be. Significant periods of time often elapse between the occurrence of an insured loss, the reporting of the loss and the settlement of that loss. It is possible that our insurance subsidiaries' ultimate liability could exceed these estimates because of the future development of known losses, the existence of losses that have occurred but are currently unreported and larger than historical settlements of pending and unreported claims. The process of estimating reserves is inherently judgmental and can be influenced by a number of factors, including the following:

- trends in claim frequency and severity;
- changes in operations;
- emerging economic and social trends;
- economic and social inflation; and
- changes in the regulatory and litigation environments.

If our insurance subsidiaries determine that their reserves are insufficient to cover their ultimate liability, they will increase their reserves. An increase in reserves results in an increase in losses and a reduction in net income for the period in which our insurance subsidiaries recognize a deficiency in reserves. Accordingly, an increase in reserves may adversely impact the business, liquidity, financial condition and results of operations of our insurance subsidiaries.

The financial results of our insurance subsidiaries depend primarily on their ability to underwrite risks effectively and to charge adequate rates to policyholders.

The financial condition, cash flows and results of operations of our insurance subsidiaries depend on their ability to underwrite and set rates accurately for a full spectrum of risks across a number of lines of insurance. Rate adequacy is necessary to generate sufficient premium to pay losses, loss adjustment expenses and underwriting expenses and to realize a profit.

The ability to underwrite and set rates effectively is subject to a number of risks and uncertainties, including those related to:

- the availability of sufficient, reliable data;
- the ability to conduct a complete and accurate analysis of available data;
- the ability to recognize in a timely manner changes in trends and to project both the severity and frequency of losses with reasonable accuracy;
- uncertainties generally inherent in estimates and assumptions;
- the ability to project changes in certain operating expense levels with reasonable certainty;
- the development, selection and application of appropriate rating formulae or other pricing methodologies;
- the effective development, governance and appropriate use of modeling tools to assist with correctly and consistently achieving the intended results in underwriting and pricing;

- the ability to innovate with new pricing strategies and the success of those innovations upon implementation;
- the ability to secure regulatory approval of premium rates on an adequate and timely basis;
- the ability to predict policyholder retention accurately;
- unanticipated court decisions, legislation or regulatory action;
- unanticipated changes in our claim settlement practices;
- changes in driving patterns for auto exposures;
- changes in weather patterns for property exposures;
- changes in the medical sector of the economy that impact bodily injury loss costs;
- changes in new and used car prices, auto repair costs and auto parts prices, including the increasing integration of sophisticated technology-related components;
- the impact of emerging technologies, including driver assistance technologies and autonomous vehicles, on pricing, insurance coverages and loss costs;
- the impact of inflation and other factors on the cost and availability of construction materials and labor;
- the ability to monitor property concentration in catastrophe-prone areas, such as hurricane, earthquake and wind/hail regions; and
- the general state of the economy in the states in which our insurance subsidiaries operate.

Such risks may result in our insurance subsidiaries basing their premium rates on inadequate or inaccurate data or inappropriate assumptions or methodologies and may cause our estimates of future changes in the frequency or severity of claims to be incorrect. As a result, our insurance subsidiaries could underprice risks, which would negatively affect our margins, or our insurance subsidiaries could overprice risks, which could reduce their premium volume and competitiveness. In either event, underpricing or overpricing risks could adversely impact our operating results, financial condition and cash flows.

The pace of innovation within the insurance industry is rapidly increasing, and our insurance subsidiaries may be unable to effectively implement new technologies and anticipate changes in customer preferences and insurance needs, which could put our insurance subsidiaries at a competitive disadvantage and adversely affect their future profitability.

Innovation, recent technological developments, changing customer demographics and preferences, societal shifts and emerging technologies are greatly impacting the insurance industry. Our insurance subsidiaries compete with much larger insurers that are focused on implementing technology and innovative solutions to select and price risks, enhance the experience of their customers and improve their operations. If our insurance subsidiaries are unable to anticipate changes in customer expectations and keep pace with the technological changes their competitors implement, our insurance subsidiaries may not be able to attract and maintain quality accounts, adequately price risks or operate as efficiently as their competitors. In addition, emerging technologies such as electric and autonomous vehicles, driver-assistance and accident avoidance features on vehicles, sensor technology and other forms of automation may reduce the future need for, or decrease the future pricing of, the insurance products our insurance subsidiaries offer.

Loss or significant restriction of the use of credit scoring in the pricing and underwriting of the personal lines insurance products by our insurance subsidiaries could adversely affect their future profitability.

Our insurance subsidiaries use credit scoring as a factor in making risk selection and pricing decisions for personal lines insurance products where allowed by state law. There is increasing regulatory debate as to whether use of credit scoring unfairly discriminates against people with low incomes, minority groups and the elderly. Consumer groups and regulators often call for the prohibition or restriction on the use of credit scoring in underwriting and pricing. Laws or regulations that significantly curtail the use of credit scoring in the underwriting process could reduce the future profitability of our insurance subsidiaries.

Changes in applicable insurance laws or regulations or changes in the way insurance regulators administer those laws or regulations could adversely affect the operating environment of our insurance subsidiaries and increase their exposure to loss or put them at a competitive disadvantage.

Property and casualty insurers are subject to extensive supervision in their domiciliary states and in the states in which they do business. This regulatory oversight includes matters relating to:

- licensing and examination;
- approval of premium rates;
- market conduct;
- policy forms;
- limitations on the nature and amount of certain investments;
- claims practices;
- mandated participation in involuntary markets and guaranty funds;
- reserve adequacy;
- insurer solvency;
- transactions between affiliates;
- the amount of dividends that insurers may pay; and
- restrictions on underwriting standards.

Such regulation and supervision are primarily for the benefit and protection of policyholders rather than stockholders.

The NAIC and state insurance regulators re-examine existing laws and regulations from time to time, specifically focusing on areas such as:

- · insurance company investments;
- issues relating to the solvency of insurance companies;
- risk-based capital guidelines;
- restrictions on the terms and conditions included in insurance policies;
- · certain methods of accounting;
- reserves for unearned premiums, losses and other purposes;
- the values at which insurance companies may carry investment securities and the definition of other-than-temporary impairment of investment securities; and
- interpretations of existing laws and the development of new laws.

Changes in state laws and regulations, as well as changes in the way state regulators view related-party transactions in particular, could change the operating environment of our insurance subsidiaries and have an adverse effect on their business.

Insurance companies are subject to assessments, based on their market share in a given line of business, to assist in the payment of unpaid claims and related costs of insolvent insurance companies. Such assessments could adversely affect the financial condition of our insurance subsidiaries.

Our insurance subsidiaries are subject to assessments pursuant to the guaranty fund laws of the various states in which they conduct business. Generally, under these laws, our insurance subsidiaries can be assessed, depending upon the market share of our insurance subsidiaries in a given line of insurance business, to assist in the payment of unpaid claims and related costs of insolvent insurance companies in those states. We cannot predict the number and magnitude of future insurance company failures in the states in which our insurance subsidiaries conduct business, but future assessments could adversely affect the business, financial condition and results of operations of our insurance subsidiaries.

Risks Relating to Us and Our Business

The emergence of COVID-19 has affected the business operations of our insurance subsidiaries and Donegal Mutual, and economic disruption related to COVID-19 or a future pandemic may adversely affect our revenues, profitability, results of operations, cash flows, liquidity and financial condition.

During 2020 and 2021, the COVID-19 pandemic resulted in significant disruptions in economic activity throughout our operating regions. We cannot predict at this time the ultimate impact that the economic and financial disruption related to the ongoing COVID-19 pandemic or any other future pandemic will have on us. Risks related to COVID-19 or a future pandemic include, but are not limited to, the following:

- the business operations or a specific operational function of our insurance subsidiaries and Donegal Mutual could be disrupted by the illness of significant numbers of their employees and remedial efforts that would be required upon discovery of exposure to a communicable illness within their facilities;
- the business operations of our insurance subsidiaries and Donegal Mutual are dependent upon technology systems for which regular physical access is required to maintain critical operational capabilities, and the business operations of our insurance subsidiaries and Donegal Mutual would be adversely impacted by government mandates requiring closure of facilities where those technology systems are located or restricting physical access to such facilities;
- the revenues of our insurance subsidiaries and Donegal Mutual may decrease as a result of reduced demand for their insurance products as economic disruption adversely impacts current and potential insurance customers;
- our insurance subsidiaries and Donegal Mutual may incur an increase in their losses and loss expenses in certain lines
 of business as a result of a pandemic and related economic disruption, and such losses and loss expenses may exceed
 the reserves our insurance subsidiaries and Donegal Mutual have established or may establish in the future;
- our insurance subsidiaries and Donegal Mutual may incur increased costs related to legal disputes over policy coverages or exclusions and their defense against litigation related to a pandemic;
- legislative, judicial and regulatory actions may expand coverage definitions, retroactively mandate coverage or
 otherwise require our insurance subsidiaries and Donegal Mutual to pay losses for damages that their policies
 explicitly excluded or did not intend to cover;
- legislative, judicial and regulatory actions may require our insurance subsidiaries and Donegal Mutual to reduce or refund premiums, suspend cancellation of policies for non-payment of premiums or otherwise grant extended grace periods and time allowances for the payment of premium balances due to them;
- our insurance subsidiaries and Donegal Mutual may not be able to collect premium balances due to them, resulting in reduced operating cash flows and an increase in premium write-offs that would increase their operating expenses;
- our insurance subsidiaries may suffer declines in the market values of their investments as a result of financial market volatility related to pandemic concerns and related economic disruption; and
- economic disruption related to a pandemic could result in significant declines in the credit quality of issuers, ratings downgrades or changes in financial market conditions and regulatory changes that might adversely impact the value of the fixed-maturity investments that our insurance subsidiaries own.

Donegal Mutual is our controlling stockholder. Donegal Mutual and its directors and executive officers have potential conflicts of interest between the best interests of our stockholders and the best interests of the policyholders of Donegal Mutual.

Donegal Mutual controls the election of all of the members of our board of directors. Six of the eleven members of our board of directors are also directors of Donegal Mutual. Donegal Mutual and we share the same executive officers. These common directors and executive officers have a fiduciary duty to our stockholders and also have a fiduciary duty to the policyholders of Donegal Mutual. Among the potential conflicts of interest that could arise from these separate fiduciary duties are the following:

- we and Donegal Mutual periodically review the percentage participation of Atlantic States and Donegal Mutual in the underwriting pool that Donegal Mutual and Atlantic States have maintained since 1986;
- our insurance subsidiaries and Donegal Mutual annually review and then establish the terms of certain reinsurance agreements between our insurance subsidiaries and Donegal Mutual;
- we and Donegal Mutual allocate certain shared expenses among ourselves and our insurance subsidiaries in accordance with various inter-company expense-sharing agreements; and
- we and our insurance subsidiaries may enter into other transactions or contractual relationships with Donegal Mutual.

Donegal Mutual has sufficient voting power to determine the outcome of substantially all matters submitted to our stockholders for approval.

Each share of our Class A common stock has one-tenth of a vote per share and generally votes as a single class with our Class B common stock. Each share of our Class B common stock has one vote per share and generally votes as a single class with our Class A common stock. Donegal Mutual has the right to vote approximately 71% of the combined voting power of our Class A common stock and our Class B common stock and has sufficient voting control to and has acted to:

- elect all of the members of our board of directors, who determine our management and policies; and
- control the outcome of any corporate transaction or other matter submitted to a vote of our stockholders for approval, including mergers or other acquisition proposals and the sale of all or substantially all of our assets, in each case regardless of how all of our stockholders other than Donegal Mutual vote their shares.

The interests of Donegal Mutual in maintaining this greater-than-majority voting control of us may have an adverse effect on the price of our Class A common stock and the price of our Class B common stock because of the absence of any potential "takeover" premium and may, therefore, be inconsistent with the interests of our stockholders other than Donegal Mutual.

Donegal Mutual's majority voting control of us, certain provisions of our certificate of incorporation and by-laws and certain provisions of Delaware law make it remote that anyone could acquire actual control of us unless Donegal Mutual were in favor of another person's acquisition of control of us.

Donegal Mutual's majority voting control of us, certain anti-takeover provisions in our certificate of incorporation and bylaws and certain provisions of the Delaware General Corporation Law, or the DGCL, could delay or prevent the removal of members of our board of directors and could make a merger, tender offer or proxy contest involving us more expensive as well as unlikely to succeed, even if such events were in the best interests of our stockholders other than Donegal Mutual. These factors could also discourage a third party from attempting to acquire control of us. In particular, our certificate of incorporation and by-laws include the following anti-takeover provisions:

- our board of directors is classified into three classes, so that our stockholders elect only one-third of the members of our board of directors each year;
- · our stockholders may remove our directors only for cause;
- our stockholders may not take stockholder action except at an annual or special meeting of our stockholders;
- the request of stockholders holding at least 20% of the combined voting power of our Class A common stock and our Class B common stock is required for a stockholder to call a special meeting of our stockholders;

- our by-laws require that stockholders provide advance notice to us to nominate candidates for election to our board of directors or to propose any other item of stockholder business at a stockholders' meeting;
- we do not permit cumulative voting rights in the election of our directors;
- our certificate of incorporation does not provide for preemptive rights in connection with any issuance of securities by us; and
- our board of directors may issue, without stockholder approval unless otherwise required by law, preferred stock with such terms as our board of directors may determine.

We have authorized preferred stock that we could issue without stockholder approval to make it more difficult for a third party to acquire us.

We have 2.0 million authorized shares of preferred stock that we could issue in one or more series without further stockholder approval, unless the DGCL or the rules of the NASDAQ Global Select Market otherwise require, and upon such terms and conditions, and having such rights, privileges and preferences, as our board of directors may determine. Our potential issuance of preferred stock may make it more difficult for a third party to acquire control of us.

Because we are an insurance holding company, no person can acquire or seek to acquire a 10% or greater interest in us without first obtaining approval of the insurance commissioners of the states of domicile of each of our insurance subsidiaries.

We own insurance subsidiaries domiciled in the states of Michigan, Pennsylvania and Virginia, and Donegal Mutual owns or controls insurance companies domiciled in Georgia and New Mexico. The insurance laws of each of these states provide that no person can acquire or seek to acquire a 10% or greater interest in us without first filing specified information with the insurance commissioners of those states and obtaining the prior approval of the proposed acquisition of a 10% or greater interest in us by each of the state insurance commissioners based on statutory standards designed to protect the safety and soundness of us and our insurance subsidiaries.

Our insurance subsidiaries and Donegal Mutual currently conduct business in a limited number of states, with a concentration of business in Pennsylvania, Michigan, Maryland, Delaware, Virginia and Georgia. Any single catastrophe occurrence or other condition affecting losses in these states could adversely affect the results of operations of our insurance subsidiaries.

Our insurance subsidiaries and Donegal Mutual conduct business in 24 states located primarily in the Mid-Atlantic, Midwestern, New England, Southern and Southwestern states. A substantial portion of their business consists of private passenger and commercial automobile, homeowners, commercial multi-peril and workers' compensation insurance in Pennsylvania, Michigan, Maryland, Delaware, Virginia and Georgia. While our insurance subsidiaries and Donegal Mutual actively manage their respective exposure to catastrophes through their underwriting processes and the purchase of reinsurance, a single catastrophic occurrence, destructive weather pattern, general economic trend, terrorist attack, regulatory development or other condition affecting one or more of the states in which our insurance subsidiaries conduct substantial business could materially adversely affect their business, financial condition and results of operations. Common catastrophic events include hurricanes, earthquakes, tornadoes, wind and hailstorms, fires and wildfires, explosions and severe winter storms.

If the independent agents who market the products of our insurance subsidiaries and Donegal Mutual do not maintain their current levels of premium writing with us and Donegal Mutual, fail to comply with established underwriting guidelines of our insurance subsidiaries and Donegal Mutual or otherwise inappropriately market the products of our insurance subsidiaries and Donegal Mutual, the business, financial condition and results of operations of our insurance subsidiaries could be adversely affected.

Our insurance subsidiaries and Donegal Mutual market their insurance products solely through a network of approximately 2,300 independent insurance agencies. This agency distribution system is one of the most important components of the competitive profile of our insurance subsidiaries and Donegal Mutual. As a result, our insurance subsidiaries and Donegal Mutual depend to a material extent upon their independent agents, each of whom has the authority to bind one or more of our insurance subsidiaries or Donegal Mutual to insurance coverage. To the extent that such independent agents' marketing efforts fail to result in the maintenance of their current levels of volume and quality or they bind our insurance subsidiaries or Donegal Mutual to unacceptable insurance risks, fail to comply with the established underwriting guidelines of our insurance

subsidiaries and Donegal Mutual or otherwise inappropriately market the products of our insurance subsidiaries and Donegal Mutual, the business, financial condition and results of operations of our insurance subsidiaries could suffer.

The business of our insurance subsidiaries and Donegal Mutual may not continue to grow and may be materially adversely affected if our insurance subsidiaries and Donegal Mutual cannot retain existing, and attract new, independent agents or if insurance consumers increase their use of insurance distribution channels other than independent agents.

The ability of our insurance subsidiaries and Donegal Mutual to retain existing, and to attract new, independent agents is essential to the continued growth of the business of our insurance subsidiaries and Donegal Mutual. If independent agents find it easier to do business with the competitors of our insurance subsidiaries and Donegal Mutual, our insurance subsidiaries and Donegal Mutual could find it difficult to retain their existing business or to attract new business. While our insurance subsidiaries and Donegal Mutual believe they maintain good relationships with the independent agents they have appointed, our insurance subsidiaries and Donegal Mutual cannot be certain that these independent agents will continue to sell the products of our insurance subsidiaries and Donegal Mutual to the consumers these independent agents represent. Some of the factors that could adversely affect the ability of our insurance subsidiaries and Donegal Mutual to retain existing, and attract new, independent agents include:

- the significant competition among insurance companies to attract independent agents;
- the labor-intensive and time-consuming process of selecting new independent agents;
- the insistence of our insurance subsidiaries and Donegal Mutual that independent agents adhere to certain standards;
- the ability of our insurance subsidiaries and Donegal Mutual to pay competitive and attractive commissions, bonuses and other incentives to independent agents; and
- the ongoing consolidation of independent agencies, which may result in the acquisition of independent agencies from which our insurance subsidiaries and Donegal Mutual currently receive business by larger entities with which our insurance subsidiaries and Donegal Mutual do not have business relationships.

While our insurance subsidiaries and Donegal Mutual sell insurance to policyholders solely through their network of independent agencies, many competitors of our insurance subsidiaries and Donegal Mutual sell insurance through a variety of delivery methods, including independent agencies, captive agencies and direct sales. To the extent that current and potential policyholders change their distribution channel preference, the business, financial condition and results of operations of our insurance subsidiaries may be adversely affected.

Dividends from our insurance subsidiaries are the primary source of funds for the payment of our operating expenses and dividends to our stockholders; however, there are regulatory restrictions and business considerations that may limit the amount of dividends our insurance subsidiaries may pay to us.

As a holding company, we rely primarily on dividends from our insurance subsidiaries as a source of funds to meet our corporate obligations and to pay dividends to our stockholders. The amount of dividends our insurance subsidiaries can pay to us is subject to regulatory restrictions and depends on the amount of surplus our insurance subsidiaries maintain. From time to time, the NAIC and various state insurance regulators consider modifying the method of determining the amount of dividends that an insurance company may pay without prior regulatory approval. The maximum amount of ordinary dividends that our insurance subsidiaries can pay to us in 2023 without prior regulatory approval is approximately \$46.4 million. Other business and regulatory considerations, such as the impact of dividends on surplus that could affect the ratings of our insurance subsidiaries, competitive conditions, RBC requirements, the investment results of our insurance subsidiaries and the amount of premiums that our insurance subsidiaries write could also adversely impact the ability of our insurance subsidiaries to pay dividends to us.

If A.M. Best downgrades the rating it has assigned to Donegal Mutual or any of our insurance subsidiaries, it would adversely affect their competitive position.

Industry ratings are a factor in establishing and maintaining the competitive position of insurance companies. A.M. Best, an industry-accepted source of insurance company financial strength ratings, rates Donegal Mutual and our insurance subsidiaries. A.M. Best ratings provide an independent opinion of an insurance company's financial health and its ability to meet its obligations to its policyholders. We believe that the financial strength rating of A.M. Best is material to the operations of Donegal Mutual and our insurance subsidiaries. For example, certain lenders require customers to purchase insurance from an

insurance carrier that has received an A.M. Best rating that exceeds a certain level. Currently, Donegal Mutual and our insurance subsidiaries each have an A (Excellent) rating from A.M. Best. In March 2022, A.M. Best affirmed its A (Excellent) ratings of Donegal Mutual and our insurance subsidiaries. However, if A.M. Best were to downgrade the rating of Donegal Mutual or any of our insurance subsidiaries, it would adversely affect the competitive position of Donegal Mutual or that insurance subsidiary and make it more difficult for it to market its products and retain its existing policyholders.

The growth and profitability of our insurance subsidiaries depend, in part, on the effective maintenance and ongoing development of Donegal Mutual's information technology systems, and the allocation of related costs to our insurance subsidiaries may adversely impact their profitability.

Our insurance subsidiaries utilize Donegal Mutual's information technology systems to conduct their insurance business, including policy quoting and issuance, claims processing, processing of incoming premium payments and other important functions. As a result, the ability of our insurance subsidiaries to grow their business and conduct profitable operations depends on Donegal Mutual's ability to maintain its existing information technology systems and to develop new technology systems that will support the business of Donegal Mutual and our insurance subsidiaries in a cost-efficient manner and provide information technology capabilities equivalent to those of our competitors. The allocation among our insurance subsidiaries and Donegal Mutual of the costs of developing and maintaining Donegal Mutual's information technology systems may adversely impact our insurance subsidiaries' expense ratio and underwriting profitability, and such costs may exceed Donegal Mutual's and our expectations.

Donegal Mutual is currently in the midst of a multi-year effort to modernize certain of its key infrastructure and applications systems, and the allocation of related costs to our insurance subsidiaries has resulted in an increase to their expense ratio. These new systems are intended to provide various benefits to the member companies of the Donegal Insurance Group, including streamlined workflows and business processes, service enhancements for their agents and policyholders, opportunities to implement new product models and innovative business solutions, greater utilization of data analytics and operational efficiencies. Our insurance subsidiaries began to issue workers' compensation policies from the new systems in the second quarter of 2020 and began to issue personal lines policies from the new systems, including a new personal lines agency portal, in the fourth quarter of 2021. Over the next several years, Donegal Mutual expects to implement new systems for the remaining lines of business that the Donegal Insurance Group offers currently, including three commercial lines of business with enhanced straight-through-processing capabilities beginning in the first half of 2023. Even with Donegal Mutual's and our best planning and efforts and the involvement of third-party experts, Donegal Mutual may not complete the implementation of these new systems within its planned timeframes or budget. Further, Donegal Mutual may not complete the implementation of these new systems within its planned timeframes or budget. Further, Donegal Mutual's information technology systems may not deliver the benefits Donegal Mutual and we expect and may fail to keep pace with our competitors' information technology systems. As a result, Donegal Mutual and our insurance subsidiaries may not have the ability to grow their business and meet their profitability objectives.

Our strategy to grow in part through acquisitions of other insurance companies exposes us to risks that could adversely affect our results of operations and financial condition.

The affiliation with, and acquisition of, other insurance companies involves risks that could adversely affect our results of operations and financial condition. The risks associated with these affiliations and acquisitions include:

- the potential inadequacy of reserves for losses and loss expenses of the other insurer;
- the need to supplement management of the other insurer with additional experienced personnel;
- conditions imposed by regulatory agencies that make the realization of cost-savings through integration of the operations of the other insurer with our operations more difficult;
- our management's lack of familiarity with the geography, demographics and distribution systems in the markets the other insurer serves that cause the other insurer to fail to meet the growth and profitability objectives we anticipated at the time of the acquisition or affiliation;
- the need of the other insurer for additional capital that we did not anticipate at the time of the acquisition or affiliation; and
- the use of more of our management's time in improving the operations of the other insurer than we originally anticipated.

If we cannot obtain sufficient capital to fund the organic growth of our insurance subsidiaries and to make acquisitions, we may not be able to expand our business.

Our strategy is to expand our business through the organic growth of our insurance subsidiaries and through our strategic acquisitions of regional insurance companies. Our insurance subsidiaries may require additional capital in the future to support this strategy. If we cannot obtain sufficient capital on satisfactory terms and conditions, we may not be able to expand the business of our insurance subsidiaries or to make future acquisitions. Our ability to obtain additional financing will depend on a number of factors, many of which are beyond our control. For example, we may not be able to obtain additional debt or equity financing because we or our insurance subsidiaries may already have substantial debt at the time, because we or our insurance subsidiaries do not have sufficient cash flow to service or repay our existing or additional debt or because financial institutions are not making financing available. In addition, any equity capital we obtain in the future could be dilutive to our existing stockholders.

Competition within the property and casualty insurance industry may adversely impact the revenues and profit margins of our insurance subsidiaries.

The property and casualty insurance industry is intensely competitive. Competition can be based on many factors, including:

- the perceived financial strength of the insurer;
- premium rates;
- policy terms and conditions;
- policyholder service;
- · reputation; and
- experience.

Our insurance subsidiaries and Donegal Mutual compete with many regional and national property and casualty insurance companies, including direct sellers of insurance products, insurers having their own agency organizations and other insurers represented by independent agents. Many of these insurers have greater capital than our insurance subsidiaries and Donegal Mutual, have substantially greater financial, technical and operating resources, have substantially greater exposure and access to potential customers and have equal or higher ratings from A.M. Best than our insurance subsidiaries and Donegal Mutual. In addition, our competitors may become increasingly better capitalized in the future as the property and casualty insurance industry continues to consolidate.

The greater capitalization of many of the competitors of our insurance subsidiaries and Donegal Mutual enables them to operate with lower profit margins and, therefore, allows them to market their products more aggressively, to take advantage more quickly of new marketing opportunities and to offer lower premium rates. In addition to established insurers, our insurance subsidiaries and Donegal Mutual compete with a growing number of start-ups, some of which have received substantial infusions of capital, that seek to disrupt traditional business platforms and distribution channels. Our insurance subsidiaries and Donegal Mutual may not be able to maintain their current competitive position in the markets in which they operate if their competitors offer prices for their products that are lower than the prices our insurance subsidiaries and Donegal Mutual are prepared to offer. Moreover, if these competitors lower the price of their products and our insurance subsidiaries and Donegal Mutual meet their pricing, the profit margins and revenues of our insurance subsidiaries and Donegal Mutual may decrease and their ratios of claims and expenses to premiums may increase. All of these factors could materially adversely affect the financial condition and results of operations of our insurance subsidiaries and their A.M. Best ratings.

The investment portfolios of our insurance subsidiaries consist primarily of fixed-income securities; therefore, the investment income and the fair value of the investment portfolios of our insurance subsidiaries could decrease as a result of a number of factors.

Our insurance subsidiaries invest the premiums they receive from their policyholders and maintain investment portfolios that consist primarily of fixed-income securities. The effective management of these investment portfolios is an important component of the profitability of our insurance subsidiaries. Our insurance subsidiaries derive a significant portion of their

operating income from the income they receive on their invested assets. A number of factors may affect the quality and/or yield of their investment portfolios, including the general economic and business environment, government monetary policy, changes in the credit quality of the issuers of the fixed-income securities our insurance subsidiaries own, changes in market conditions and regulatory changes. The fixed-income securities our insurance subsidiaries own consist primarily of securities issued by domestic entities that are backed by either the credit or collateral of the underlying issuer. Factors such as an economic downturn, disruption in the credit market or the availability of credit, a regulatory change pertaining to a particular issuer's industry, a significant deterioration in the cash flows of the issuer or a change in the issuer's marketplace may adversely affect the ability of our insurance subsidiaries to collect principal and interest from the issuer in which they invest.

The investments of our insurance subsidiaries are also subject to risk resulting from interest rate fluctuations. As we experienced when market interest rates increased significantly in 2022, increasing interest rates or a widening in the spread between interest rates available on U.S. Treasury securities and corporate debt or asset-backed securities will typically have an adverse impact on the market values of fixed-rate securities. If interest rates decline, our insurance subsidiaries will generally have a lower overall rate of return on investments of cash their operations generate. In addition, in the event of the call or maturity of investments in a low interest rate environment, our insurance subsidiaries may not be able to reinvest the proceeds in securities with comparable interest rates. Changes in interest rates may reduce both the profitability and the return on the invested capital of our insurance subsidiaries.

We and our insurance subsidiaries depend on key personnel. The loss of any member of our executive management or the senior management of our insurance subsidiaries could negatively affect the continuation of our business strategies and achievement of our growth objectives.

The loss of, or failure to attract, key personnel could significantly impede our financial plans, growth, marketing and other objectives and those of our insurance subsidiaries. The continued success of our insurance subsidiaries depends to a substantial extent on the ability and experience of their senior management. Our insurance subsidiaries and we believe that our future success is dependent on our ability to attract and retain additional skilled and qualified personnel and to expand, train and manage our employees. We and Donegal Mutual have employment agreements with our senior officers, including all of our named executive officers.

The reinsurance agreements on which our insurance subsidiaries rely do not relieve our insurance subsidiaries from their primary liability to their policyholders, and our insurance subsidiaries face a risk of non-payment from their reinsurers as well as the non-availability of reinsurance in the future.

Our insurance subsidiaries rely on reinsurance agreements to limit their maximum net loss from large single catastrophic risks or excess of loss risks in areas where our insurance subsidiaries may have a concentration of policyholders. Reinsurance also enables our insurance subsidiaries to increase their capacity to write insurance because it has the effect of leveraging the surplus of our insurance subsidiaries. Although the reinsurance our insurance subsidiaries maintain provides that the reinsurer is liable to them for any reinsured losses, the reinsurance agreements do not generally relieve our insurance subsidiaries from their primary liability to their policyholders if the reinsurer fails to pay the reinsurance claims of our insurance subsidiaries. To the extent that a reinsurer is unable to pay losses for which it is liable to our insurance subsidiaries, our insurance subsidiaries remain liable for such losses. At December 31, 2022, our insurance subsidiaries had approximately \$148.3 million of reinsurance receivables from third-party reinsurers relating to paid and unpaid losses. Any insolvency or inability of these reinsurers to make timely payments to our insurance subsidiaries under the terms of their reinsurance agreements would adversely affect the results of operations of our insurance subsidiaries.

Michigan law requires MICO to provide certain medical benefits under the personal injury protection, or PIP, coverage of the personal automobile and commercial automobile policies it writes in the state of Michigan. Michigan law also requires MICO to be a member of the Michigan Catastrophic Claims Association, or MCCA, in order to write automobile insurance. The MCCA receives funding through assessments that its members collect from policyholders in the state and provides reinsurance for PIP claims that exceed a set retention. At December 31, 2022, MICO had approximately \$60.7 million of reinsurance receivables from MCCA relating to paid and unpaid losses. The MCCA has generated significant operating deficits in past years. While the MCCA generated an increase in surplus in recent years, the MCCA board approved the return of a significant portion of its accumulated surplus to policyholders in the form of cash refunds in early 2022. Although we currently consider the risk to be remote, should the MCCA be unable to fulfill its payment obligations to MICO in the future, MICO's financial condition and results of operations could be adversely affected.

In addition, our insurance subsidiaries face a risk of the non-availability of reinsurance or an increase in reinsurance costs that could adversely affect their ability to write business or their results of operations. Market conditions beyond the control of our insurance subsidiaries, such as the amount of surplus in the reinsurance market and the frequency and severity of natural

and man-made catastrophes, affect both the availability and the cost of the reinsurance our insurance subsidiaries purchase. If our insurance subsidiaries cannot maintain their current level of reinsurance or purchase new reinsurance protection in amounts that our insurance subsidiaries consider sufficient, our insurance subsidiaries would either have to accept an increase in their net risk retention or reduce their insurance writings, either of which could adversely affect them. For example, due to increased reinsurance pricing and reduced reinsurance market capacity, our insurance subsidiaries increased their net retentions under several of their reinsurance programs for 2023.

The disruption or failure of Donegal Mutual's information technology systems or the compromise of the security of those systems that results in the theft or misuse of confidential information could materially impact adversely the business of Donegal Mutual and our insurance subsidiaries.

Our insurance subsidiaries' business operations depend significantly upon the availability and successful operation of Donegal Mutual's information technology systems. In addition, in the normal course of their operations, Donegal Mutual and our insurance subsidiaries collect, utilize and maintain confidential information regarding individuals and businesses. While Donegal Mutual has established various security measures to protect its information technology systems and confidential data, unanticipated computer viruses, malware, ransomware, power outages, unauthorized access or other cyberattacks could disrupt those systems or result in the misappropriation or loss of confidential data. Donegal Mutual could experience technology system failures or other outages that would impact the availability of its information technology systems. Donegal Mutual has experienced brief disruptions of systems in the past, including those systems that allow underwriting and processing of new policies. Disruption in the availability of Donegal Mutual's information technology systems could affect the ability of Donegal Mutual and our insurance subsidiaries to underwrite and process their policies timely, process and settle claims promptly and provide expected levels of customer service to agents and policyholders.

While Donegal Mutual has identified threats to the security of its information technology systems, Donegal Mutual and we are unaware of any significant breach of the security measures Donegal Mutual maintains. A significant breach of the security of Donegal Mutual's information technology systems that results in the misappropriation or misuse of confidential information could damage the business reputation of Donegal Mutual and our insurance subsidiaries and could expose Donegal Mutual and our insurance subsidiaries to litigation. The financial impact to Donegal Mutual, us and our insurance subsidiaries of a significant breach could be material.

Risks Relating to Our Common Stock

The price of our common stock may be adversely affected by its low trading volume.

Our Class A common stock and our Class B common stock have limited liquidity. Reported average daily trading volume for our Class A common stock and our Class B common stock for the year ended December 31, 2022 was approximately 73,246 shares and approximately 1,289 shares, respectively. This limited liquidity could subject our shares of Class A common stock and our shares of Class B common stock to greater price volatility.

Donegal Mutual's majority voting control of our stock, anti-takeover provisions of our certificate of incorporation and by-laws and certain state laws make it unlikely anyone could acquire control of us unless Donegal Mutual were in favor of the acquisition of control.

Donegal Mutual's ownership of our Class A common stock and Class B common stock, certain anti-takeover provisions of our certificate of incorporation and by-laws, certain provisions of Delaware law and the insurance laws and regulations of Georgia, Michigan, New Mexico, Pennsylvania and Virginia could delay or prevent the removal of members of our board of directors and could make it more difficult for a merger, tender offer or proxy contest involving us to succeed, even if our stockholders other than Donegal Mutual believed any of such events would be beneficial to them. These factors could also discourage a third party from attempting to acquire control of us. The classification of our board of directors could also have the effect of delaying or preventing a change in our control.

In addition, we have 2,000,000 authorized shares of preferred stock that we could issue in one or more series without stockholder approval, to the extent applicable law permits, and upon such terms and conditions, and having such rights, privileges and preferences, as our board of directors may determine. Our ability to issue preferred stock could make it difficult for a third party to acquire us. We have no current plans to issue any preferred stock.

Item 1B. Unresolved Staff Comments.

We have no unresolved written comments from the Securities and Exchange Commission staff regarding our filings under the Exchange Act.

Item 2. Properties.

We and our insurance subsidiaries share administrative headquarters with Donegal Mutual in a building in Marietta, Pennsylvania that Donegal Mutual owns. Donegal Mutual allocates to our insurance subsidiaries their proportionate share of building-related expenses under a services allocation agreement. The Marietta headquarters has approximately 270,000 square feet of office space. Southern owns a facility of approximately 10,000 square feet in Glen Allen, Virginia.

Item 3. Legal Proceedings.

Our insurance subsidiaries are parties to routine litigation that arises in the ordinary course of their insurance business. We believe that the resolution of these lawsuits will not have a material adverse effect on the financial condition or results of operations of our insurance subsidiaries. However, regardless of outcome, litigation and related matters could have an adverse impact on us and our insurance subsidiaries due to defense and settlement costs, diversion of management resources, negative publicity, reputational harm and other factors.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our Class A common stock and Class B common stock trade on the NASDAQ Global Select Market under the symbols "DGICA" and "DGICB," respectively.

At the close of business on March 1, 2023, we had approximately 1,792 holders of record of our Class A common stock and approximately 225 holders of record of our Class B common stock.

We declared dividends of \$0.66 per share on our Class A common stock and \$0.59 per share on our Class B common stock in 2022, compared to \$0.64 per share on our Class A common stock and \$0.57 per share on our Class B common stock in 2021.

Unregistered Sales of Equity Securities and Use of Proceeds.

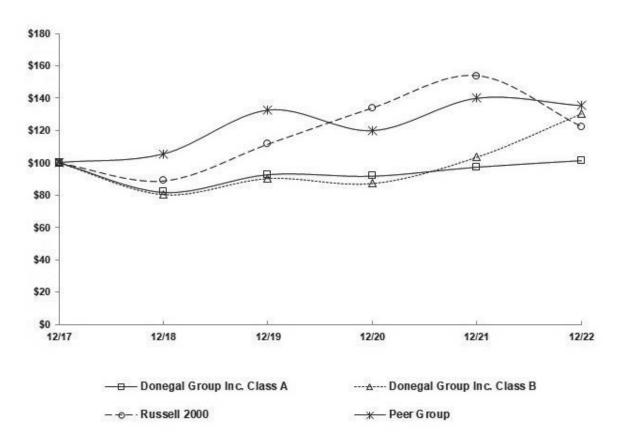
Between October 1, 2022 and December 31, 2022, Donegal Mutual purchased shares of our Class A common stock as set forth in the table below:

Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
Month #1	Class A – None	Class A – None	Class A – None	
October 1-31, 2022	Class B – None	Class B – None	Class B – None	
Month #2	Class A – 157,148	Class A – \$15.24	Class A – 157,148	(1)
November 1-30, 2022	Class B – None	Class B – None	Class B – None	
Month #3	Class A – 102,360	Class A – \$14.97	Class A – 102,360	(1)
December 1-31, 2022	Class B – None	Class B – None	Class B – None	
Total	Class A – 259,508 Class B – None	Class A – \$15.13 Class B –None	Class A – 259,508 Class B – None	

⁽¹⁾ Donegal Mutual purchased these shares pursuant to its disclosure on April 29, 2022 that it will, at its discretion, purchase shares of our Class A common stock and Class B common stock at market prices prevailing from time to time in the open market subject to the provisions of SEC Rule 10b-18 and in privately negotiated transactions. Such disclosure did not stipulate a maximum number of shares that may be purchased under this program.

Stock Performance Chart.

The following graph provides an indicator of cumulative total stockholder returns on our Class A common stock and our Class B common stock for the period beginning on December 31, 2017 and ending on December 31, 2022, compared to the Russell 2000 Index and a peer group comprised of six property and casualty insurance companies over the same period. The peer group consists of Cincinnati Financial Corp., Hanover Insurance Group Inc., Horace Mann Educators Corp., Kemper Corp., Selective Insurance Group Inc. and United Fire Group Inc. The graph shows the change in value of an initial \$100 investment on December 31, 2017, assuming reinvestment of all dividends.



	2017	2018	2019	2020	2021	2022
Donegal Group Inc. Class A	\$100.00	\$81.96	\$92.74	\$91.80	\$97.30	\$101.23
Donegal Group Inc. Class B	100.00	80.44	90.43	87.32	103.58	130.35
Russell 2000	100.00	88.99	111.70	134.00	153.85	122.41
Peer Group	100.00	105.40	132.70	119.87	140.13	135.46

Research Data Group prepared the foregoing performance graph and data. The performance graph and accompanying data shall not be deemed "filed" as part of this Form 10-K Report for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section and should not be deemed incorporated by reference into any other filing we make under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate the performance graph and accompanying data by reference into such filing.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Donegal Mutual Insurance Company ("Donegal Mutual") organized us as an insurance holding company on August 26, 1986. See "Business - History and Organizational Structure" for more information. Our insurance subsidiaries, Atlantic States Insurance Company ("Atlantic States"), Southern Insurance Company of Virginia ("Southern"), The Peninsula Insurance Company and Peninsula Indemnity Company (collectively, "Peninsula"), and Michigan Insurance Company ("MICO") and their affiliates write commercial and personal lines of property and casualty coverages exclusively through a network of independent insurance agents in certain Mid-Atlantic, Midwest, New England, Southern and Southwestern states. The commercial lines products of our insurance subsidiaries consist primarily of commercial automobile, commercial multi-peril and workers' compensation policies. The personal lines products of our insurance subsidiaries consist primarily of homeowners and private passenger automobile policies.

At December 31, 2022, Donegal Mutual held approximately 43% of our outstanding Class A common stock and approximately 84% of our outstanding Class B common stock. This ownership provides Donegal Mutual with approximately 71% of the combined voting power of our outstanding shares of Class A common stock and our outstanding shares of Class B common stock.

Donegal Mutual and Atlantic States have participated in a proportional reinsurance agreement, or pooling agreement, since 1986. Under the pooling agreement, Donegal Mutual and Atlantic States contribute substantially all of their respective premiums, losses and loss expenses to the underwriting pool, and the underwriting pool, acting through Donegal Mutual, then allocates 80% of the pooled business to Atlantic States. Thus, Donegal Mutual and Atlantic States share the underwriting results of the pooled business in proportion to their respective participation in the underwriting pool. The operations of our insurance subsidiaries and Donegal Mutual are interrelated due to the pooling agreement and other factors. While maintaining the separate corporate existence of each company, our insurance subsidiaries conduct business together with Donegal Mutual and its insurance subsidiaries as the Donegal Insurance Group is not a legal entity, is not an insurance company and does not issue or administer insurance policies. Rather, it is a trade name that refers to the group of insurance companies that are affiliated with Donegal Mutual. See "Business - Relationship with Donegal Mutual" for more information regarding the pooling agreement and other transactions with our affiliates.

Donegal Mutual and our insurance subsidiaries operate together as the Donegal Insurance Group and share a combined business plan designed to achieve market penetration and underwriting profitability objectives. The products our insurance subsidiaries and Donegal Mutual offer are generally complementary, thereby allowing Donegal Insurance Group to offer a broader range of products to a given market and to expand Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products of Donegal Mutual and our insurance subsidiaries generally relate to specific risk profiles targeted within similar classes of business, such as preferred tier products compared to standard tier products, but we do not allocate all of the standard risk gradients to one company. Therefore, the underwriting profitability of the business the individual companies write directly will vary. However, because the pool homogenizes the risk characteristics of the predominant percentage of the business Donegal Mutual and Atlantic States write directly and each company shares the underwriting results according to each company's participation percentage, each company realizes its percentage share of the underwriting results of the pool.

Donegal Mutual completed the merger of Mountain States Mutual Casualty Company, or Mountain States, with and into Donegal Mutual effective May 25, 2017. Donegal Mutual was the surviving company in the merger, and Mountain States' insurance subsidiaries, Mountain States Indemnity Company and Mountain States Commercial Insurance Company (collectively, the "Mountain States insurance subsidiaries"), became insurance subsidiaries of Donegal Mutual upon completion of the merger. Upon completion of the merger, Donegal Mutual assumed all of the policy obligations of Mountain States and began to market its products together with the Mountain States insurance subsidiaries as the Mountain States Insurance Group in four Southwestern states. Donegal Mutual also entered into a 100% quota-share reinsurance agreement with the Mountain States insurance subsidiaries on the merger date. Beginning with policies effective in 2021, Donegal Mutual began to place the business of the Mountain States Insurance Group into the underwriting pool. As a result, our consolidated financial results through December 31, 2020 excluded the results of the Mountain States Insurance Group operations in those Southwestern states.

In July 2013, our board of directors authorized a share repurchase program pursuant to which we have the authority to purchase up to 500,000 additional shares of our Class A common stock at prices prevailing from time to time in the open market subject to the provisions of the SEC Rule 10b-18 and in privately negotiated transactions. We did not purchase any

shares of our Class A common stock under this program during 2022 or 2021. We have purchased a total of 57,658 shares of our Class A common stock under this program from its inception through December 31, 2022.

On April 29, 2022, Donegal Mutual disclosed that it will, at its discretion, purchase shares of our Class A common stock and our Class B common stock at market prices prevailing from time to time in the open market subject to the provisions of SEC Rule 10b-18 and in privately negotiated transactions. Such disclosure did not stipulate a maximum number of shares that may be purchased under this program. During 2022, Donegal Mutual purchased 1,035,778 shares of our Class A common stock and 54,231 shares of our Class B common stock.

In accordance with Section 12b-2 of the Exchange Act, we are no longer a "smaller reporting company" as of December 31, 2022. However, under Item 10(f)(2)(i) of Regulation S-K, we are permitted to avail ourselves of the scaled disclosure requirements available to smaller reporting companies in this Form 10-K Report. Having ceased to be a smaller reporting company, we will no longer be able to avail ourselves of such scaled disclosure beginning with our quarterly report on Form 10-Q for the quarterly period ending March 31, 2023. We have historically not availed ourselves of most aspects of such scaled disclosure and do not expect any material increase in financial or legal expenses for additional disclosure requirements as a result of the change in status.

Critical Accounting Policies and Estimates

We combine our financial statements with those of our insurance subsidiaries and present them on a consolidated basis in accordance with GAAP.

Our insurance subsidiaries make estimates and assumptions that can have a significant effect on amounts and disclosures we report in our financial statements. The most significant estimates relate to the reserves of our insurance subsidiaries for property and casualty insurance unpaid losses and loss expenses. While we believe our estimates and the estimates of our insurance subsidiaries are appropriate, the ultimate amounts may differ from the estimates we provided. We regularly review our methods for making these estimates, and we reflect any adjustment we consider necessary in our results of operations for the period in which we make an adjustment.

Liability for Losses and Loss Expenses

Liabilities for losses and loss expenses are estimates at a given point in time of the amounts an insurer expects to pay with respect to incurred policyholder claims based on facts and circumstances the insurer knows at that point in time. For example, legislative, judicial and regulatory actions may expand coverage definitions, retroactively mandate coverage or otherwise require our insurance subsidiaries to pay losses for damages that their policies explicitly excluded or did not intend to cover. At the time of establishing its estimates, an insurer recognizes that its ultimate liability for losses and loss expenses will exceed or be less than such estimates. Our insurance subsidiaries base their estimates of liabilities for losses and loss expenses on assumptions as to future loss trends, expected claims severity, judicial theories of liability and other factors. However, during the loss adjustment period, our insurance subsidiaries may learn additional facts regarding individual claims, and, consequently, it often becomes necessary for our insurance subsidiaries to refine and adjust their estimates for these liabilities. We reflect any adjustments to the liabilities for losses and loss expenses of our insurance subsidiaries in our consolidated results of operations in the period in which our insurance subsidiaries make adjustments to their estimates.

Our insurance subsidiaries maintain liabilities for the payment of losses and loss expenses with respect to both reported and unreported claims. Our insurance subsidiaries establish these liabilities for the purpose of covering the ultimate costs of settling all losses, including investigation and litigation costs. Our insurance subsidiaries base the amount of their liability for reported losses primarily upon a case-by-case evaluation of the type of risk involved, knowledge of the circumstances surrounding each claim and the insurance policy provisions relating to the type of loss the policyholder incurred. Our insurance subsidiaries determine the amount of their liability for unreported claims and loss expenses on the basis of historical information by line of insurance. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results. Our insurance subsidiaries monitor their liabilities closely and recompute them periodically using new information on reported claims and a variety of statistical techniques. Our insurance subsidiaries do not discount their liabilities for losses and loss expenses.

Reserve estimates can change over time because of unexpected changes in assumptions related to our insurance subsidiaries' external environment and, to a lesser extent, assumptions related to our insurance subsidiaries' internal operations. For example, our insurance subsidiaries have experienced an increase in claims severity and a lengthening of the claim settlement periods on bodily injury claims during the past several years. In addition, the COVID-19 pandemic and related government mandates and restrictions resulted in various changes from historical claims reporting and settlement trends during

2020 and resulted in significant increases in loss costs in 2021 and 2022 due to a number of factors, including supply chain disruption, higher new and used automobile values, increases in the cost of replacement automobile parts and rising labor rates. These trend changes give rise to greater uncertainty as to the pattern of future loss settlements. Related uncertainties regarding future trends include social inflation, availability and cost of replacement automobile parts and building materials, availability of skilled labor, the rate of plaintiff attorney involvement in claims and the cost of medical technologies and procedures. Assumptions related to our insurance subsidiaries' external environment include the absence of significant changes in tort law and the legal environment that increase liability exposure, consistency in judicial interpretations of insurance coverage and policy provisions and the rate of loss cost inflation. Internal assumptions include consistency in the recording of premium and loss statistics, consistency in the recording of claims, payment and case reserving methodology, accurate measurement of the impact of rate changes and changes in policy provisions, consistency in the quality and characteristics of business written within a given line of business and consistency in reinsurance coverage and collectability of reinsured losses, among other items. To the extent our insurance subsidiaries determine that underlying factors impacting their assumptions have changed, our insurance subsidiaries make adjustments in their reserves that they consider appropriate for such changes. Accordingly, our insurance subsidiaries' ultimate liability for unpaid losses and loss expenses will likely differ from the amount recorded at December 31, 2022. For every 1% change in our insurance subsidiaries' loss and loss expense reserves, net of reinsurance recoverable, the effect on our pre-tax results of operations would be approximately \$6.7 million.

The establishment of appropriate liabilities is an inherently uncertain process and we can provide no assurance that our insurance subsidiaries' ultimate liability will not exceed our insurance subsidiaries' loss and loss expense reserves and have an adverse effect on our results of operations and financial condition. Furthermore, we cannot predict the timing, frequency and extent of adjustments to our insurance subsidiaries' estimated future liabilities, because the historical conditions and events that serve as a basis for our insurance subsidiaries' estimates of ultimate claim costs may change. As is the case for substantially all property and casualty insurance companies, our insurance subsidiaries have found it necessary in the past to increase their estimated future liabilities for losses and loss expenses in certain periods and, in other periods, their estimated future liabilities for losses and loss expenses have exceeded their actual liabilities for losses and loss expenses. Changes in our insurance subsidiaries' estimates of their liability for losses and loss expenses generally reflect actual payments and their evaluation of information received subsequent to the prior reporting period.

Our insurance subsidiaries recognized a decrease in their liability for losses and loss expenses of prior years of \$44.8 million, \$31.2 million and \$12.9 million in 2022, 2021 and 2020, respectively. Our insurance subsidiaries made no significant changes in their reserving philosophy or claims management personnel, and they have made no significant offsetting changes in estimates that increased or decreased their loss and loss expense reserves in those years. The 2022 development represented 7.2% of the December 31, 2021 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile and commercial automobile lines of business for accident years prior to 2022. The majority of the 2022 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2021 development represented 5.6% of the December 31, 2020 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile, workers' compensation and commercial automobile lines of business for accident years prior to 2021. The majority of the 2021 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2020 development represented 2.6% of the December 31, 2019 net carried reserves and resulted primarily from lower-than-expected severity in the workers' compensation and personal automobile lines of business, partially offset by higher-than-expected severity in the commercial automobile and commercial multi-peril lines of business, for accident years prior to 2020. The majority of the 2020 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO.

Excluding the impact of severe weather events and the COVID-19 pandemic, our insurance subsidiaries have noted stable amounts in the number of claims incurred and the number of claims outstanding at period ends relative to their premium base in recent years across most of their lines of business. However, the amount of the average claim outstanding has increased gradually over the past several years due to various factors such as rising medical loss costs and increased litigation trends. We have also experienced a general slowing of settlement rates in litigated claims. Our insurance subsidiaries could have to make further adjustments to their estimates in the future. However, on the basis of our insurance subsidiaries' internal procedures, which analyze, among other things, their prior assumptions, their experience with similar cases and historical trends such as reserving patterns, loss payments, pending levels of unpaid claims and product mix, as well as court decisions, economic conditions and public attitudes, we believe that our insurance subsidiaries have made adequate provision for their liability for losses and loss expenses.

Atlantic States' participation in the pool with Donegal Mutual exposes Atlantic States to adverse loss development on the business of Donegal Mutual that the pool includes. However, pooled business represents the predominant percentage of the net underwriting activity of both companies, and Donegal Mutual and Atlantic States share proportionately any adverse risk development relating to the pooled business. The business in the pool is homogeneous and each company has a pro-rata share

of the entire pool. Since the predominant percentage of the business of Atlantic States and Donegal Mutual is pooled and the results shared by each company according to its participation level under the terms of the pooling agreement, the intent of the underwriting pool is to produce a more uniform and stable underwriting result from year to year for each company than either would experience individually and to spread the risk of loss between the companies.

Our insurance subsidiaries' liability for losses and loss expenses by major line of business at December 31, 2022 and 2021 consisted of the following:

	2022	2021	
	(in thousands)		
Commercial lines:			
Automobile	\$ 174,833	\$ 172,302	
Workers' compensation	120,539	122,398	
Commercial multi-peril	203,567	168,445	
Other	23,071	18,530	
Total commercial lines	522,010	481,675	
Personal lines:			
Automobile	108,715	109,915	
Homeowners	28,481	26,169	
Other	10,656	8,600	
Total personal lines	147,852	144,684	
Total commercial and personal lines	669,862	626,359	
Plus reinsurance recoverable	451,184	451,261	
Total liability for losses and loss expenses	\$1,121,046	\$1,077,620	

We have evaluated the effect on our insurance subsidiaries' loss and loss expense reserves and our stockholders' equity in the event of reasonably likely changes in the variables we consider in establishing loss and loss expense reserves. We established the range of reasonably likely changes based on a review of changes in accident year development by line of business and applied it to our insurance subsidiaries' loss reserves as a whole. The selected range does not necessarily indicate what could be the potential best or worst case or the most-likely scenario. The following table sets forth the effect on our insurance subsidiaries' loss and loss expense reserves and our stockholders' equity in the event of reasonably likely changes in the variables considered in establishing loss and loss expense reserves:

Change in Loss and Loss Expense Reserves Net of Reinsurance	Adjusted Loss and Loss Expense Reserves Net of Reinsurance at December 31, 2022	Percentage Change in Equity at December 31, 2022(1)	Adjusted Loss and Loss Expense Reserves Net of Reinsurance at December 31, 2021	Percentage Change in Equity at December 31, 2021(1)
		(dollars in thousands)		_
-10.0%	\$602,876	10.9%	\$563,723	9.3%
-7.5	619,622	8.2	579,382	7.0
-5.0	636,369	5.5	595,041	4.7
-2.5	653,115	2.7	610,700	2.3
Base	669,862	_	626,359	_
2.5	686,609	-2.7	642,018	-2.3
5.0	703,355	-5.5	657,677	-4.7
7.5	720,102	-8.2	673,336	-7.0
10.0	736,848	-10.9	688,995	-9.3

⁽¹⁾ Net of income tax effect.

Our insurance subsidiaries base their reserves for unpaid losses and loss expenses on current trends in loss and loss expense development and reflect their best estimates for future amounts needed to pay losses and loss expenses with respect to incurred events currently known to them plus incurred but not reported ("IBNR") claims. Our insurance subsidiaries develop their reserve estimates based on an assessment of known facts and circumstances, review of historical loss settlement patterns, estimates of trends in claims severity, frequency, legal and regulatory changes and other assumptions. Our insurance subsidiaries consistently apply actuarial loss reserving techniques and assumptions, which rely on historical information as adjusted to reflect current conditions, including consideration of recent case reserve activity. Our insurance subsidiaries use the point estimate their actuaries select. For the year ended December 31, 2022, the actuaries developed a range from a low of \$621.6 million to a high of \$721.6 million and selected a point estimate of \$669.9 million. The actuaries' range of estimates for commercial lines in 2022 was \$486.4 million to \$560.5 million, and the actuaries selected a point estimate of \$522.0 million. The actuaries' range of estimates for personal lines in 2022 was \$135.2 million to \$161.1 million, and the actuaries selected a point estimate of \$147.9 million. For the year ended December 31, 2021, the actuaries developed a range from a low of \$575.7 million to a high of \$681.5 million and selected a point estimate of \$626.4 million. The actuaries' range of estimates for commercial lines in 2021 was \$442.8 million to \$524.0 million, and the actuaries selected a point estimate of \$481.7 million. The actuaries' range of estimates for personal lines in 2021 was \$132.9 million to \$157.5 million, and the actuaries selected a point estimate of \$144.7 million.

Our insurance subsidiaries seek to enhance their underwriting results by carefully selecting the product lines they underwrite. For personal lines products, our insurance subsidiaries insure standard and preferred risks in private passenger automobile and homeowners lines. For commercial lines products, the commercial risks that our insurance subsidiaries primarily insure are business offices, wholesalers, service providers, contractors, artisans and light manufacturing operations. Our insurance subsidiaries have limited exposure to asbestos and other environmental liabilities. Through the consistent application of this disciplined underwriting philosophy, our insurance subsidiaries have avoided many of the "long-tail" issues other insurance companies have faced. We consider workers' compensation to be a "long-tail" line of business, in that workers' compensation claims tend to be settled over a longer time frame than those in the other lines of business of our insurance subsidiaries.

The following table presents 2022 and 2021 claim count and payment amount information for workers' compensation. Workers' compensation losses primarily consist of indemnity and medical costs for injured workers.

	For the Year Ended Decemb			ecember 31,
(dollars in thousands)		2022		2021
Number of claims pending, beginning of period		3,336		2,898
Number of claims reported		6,683		6,883
Number of claims settled or dismissed		6,653		6,445
Number of claims pending, end of period		3,366		3,336
Losses paid	\$	55,809	\$	50,664
Loss expenses paid		12,062		10,067

Management Evaluation of Operating Results

Despite challenging insurance market conditions and increasing property and casualty loss severity trends that affected our results in recent years, we believe that our focused business strategy, including our insurance subsidiaries' ongoing implementation of premium rate increases and refinements to their disciplined underwriting practices, have positioned us well for 2023 and beyond.

Because our insurance subsidiaries do not prepare GAAP financial statements, we evaluate the performance of our commercial lines and personal lines segments utilizing statutory accounting practices ("SAP"), which include financial measures that reflect the growth trends and underwriting results of our insurance subsidiaries.

We use the following financial data to monitor and evaluate our operating results:

	Year Ended December 31,			
(in thousands)	2022	2021	2020	
Net premiums written:				
Commercial lines:				
Automobile	\$ 167,774	\$ 161,947	\$ 135,294	
Workers' compensation	111,892	113,256	109,960	
Commercial multi-peril	200,045	188,242	147,993	
Other	40,086	38,340	32,739	
Total commercial lines	519,797	501,785	425,986	
Personal lines:				
Automobile	181,129	170,578	184,602	
Homeowners	120,087	109,974	111,886	
Other	22,517	21,930	19,666	
Total personal lines	323,733	302,482	316,154	
Total net premiums written	\$ 843,530	\$ 804,267	\$ 742,140	
Components of combined ratio:				
Loss ratio	68.6 %	67.1 %	62.0 %	
Expense ratio	34.1	33.3	33.0	
Dividend ratio	0.6	0.6	1.0	
Combined ratio	103.3 %	101.0 %	96.0 %	
	103.5 70	101.0 /0	70.0 70	
Revenues:				
Net premiums earned:	Ф 710 172	Ф 460 422	Ф 412 077	
Commercial lines	\$ 510,153	\$ 468,433	\$ 412,877	
Personal lines	312,337	307,582	329,163	
Total net premiums earned	822,490	776,015	742,040	
Net investment income	34,016	31,126	29,504	
Investment (losses) gains	(10,185)	6,477	2,778	
Other	1,900	2,848	3,497	
Total revenues	\$ 848,221	\$ 816,466	\$ 777,819	
		Year Ended Dece	mber 31,	
(in thousands)	2022	2021	2020	
Components of net (loss) income:				
Underwriting (loss) income:				
Commercial lines	\$ (22.60	55) \$ (35,1)	74) \$ (858)	
Personal lines	(13,50			
SAP underwriting (loss) income	(36,1)			
GAAP adjustments	8,60			
GAAP underwriting (loss) income	(27,50			
Net investment income	34,0			
Investment (losses) gains	(10,18	· ·		
Other			30 1,043	
(Loss) income before income tax (benefit) expense	(3,63			
Income tax (benefit) expense	(1,6'			
Net (loss) income	\$ (1,9	<u> </u>		
()	+ (1,).		 	

Non-GAAP Information

We prepare our consolidated financial statements on the basis of GAAP. Our insurance subsidiaries prepare financial statements based on SAP. SAP financial measures are considered non-GAAP financial measures under applicable SEC rules because the SAP financial measures include or exclude certain items that the most comparable GAAP financial measures do not ordinarily include or exclude. Our calculation of non-GAAP financial measures may differ from similar measures other companies use. As a result, investors should exercise caution when comparing our non-GAAP financial measures to the non-GAAP financial measures other companies use. The SAP financial measures we utilize are net premiums written and statutory combined ratio.

Net Premiums Written

We define net premiums written as the amount of full-term premiums our insurance subsidiaries record for policies effective within a given period less premiums our insurance subsidiaries cede to reinsurers. Net premiums earned is the most comparable GAAP financial measure to net premiums written. Net premiums earned represent the sum of the amount of net premiums written and the change in net unearned premiums during a given period. Our insurance subsidiaries earn premiums and recognize them as revenue over the terms of their policies, which are one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding 12-month period compared to the comparable period one year earlier.

The following table provides a reconciliation of our net premiums earned to our net premiums written for 2022, 2021 and 2020:

	Year Ended December 31,			
	2022	2021	2020	
Net premiums earned	\$ 822,489,450	\$ 776,015,201	\$ 742,040,339	
Change in net unearned premiums	21,039,149	28,251,308	99,554	
Net premiums written	\$ 843,528,599	\$ 804,266,509	\$ 742,139,893	

The increase in the change in net unearned premiums for 2021 compared to 2020 primarily reflects the inclusion of the business of the Mountain States Insurance Group in the underwriting pool beginning with policies effective in 2021.

Statutory Combined Ratio

The combined ratio is a standard measurement of underwriting profitability for an insurance company. The combined ratio does not reflect investment income, net investment gains or losses, federal income taxes or other non-operating income or expense. A combined ratio of less than 100% generally indicates underwriting profitability.

The statutory combined ratio is a non-GAAP financial measure that is based upon amounts determined under SAP. We calculate our statutory combined ratio as the sum of:

- the statutory loss ratio, which is the ratio of calendar-year net incurred losses and loss expenses to net premiums earned:
- the statutory expense ratio, which is the ratio of expenses incurred for net commissions, premium taxes and underwriting expenses to net premiums written; and
- the statutory dividend ratio, which is the ratio of dividends to holders of workers' compensation policies to net premiums earned.

The calculation of our statutory combined ratio differs from the calculation of our GAAP combined ratio. In calculating our GAAP combined ratio, we do not deduct installment payment fees from incurred expenses, and we base the expense ratio on net premiums earned instead of net premiums written. Differences between our GAAP loss ratio and our statutory loss ratio result from anticipating salvage and subrogation recoveries for our GAAP loss ratio but not for our statutory loss ratio.

The following table presents comparative details with respect to our GAAP and statutory combined ratios for the years ended December 31, 2022, 2021 and 2020:

Year Ended December 31,			
2022	2021	2020	
60.9 %	61.3 %	55.1 %	
7.7	5.8	6.9	
34.1	33.3	33.0	
0.6	0.6	1.0	
103.3 %	101.0 %	96.0 %	
98.0 %	108.6 %	112.7 %	
97.3	94.6	86.3	
116.9	114.1	98.4	
80.8	77.5	74.0	
103.7	104.9	97.8	
103.8	94.4	91.3	
111.0	102.9	97.2	
52.1	49.3	74.9	
102.8	94.4	92.4	
103.3	100.8	95.4	
	98.0 % 97.3 116.9 80.8 103.7 103.8 111.0 52.1 102.8	2022 2021 60.9 % 61.3 % 7.7 5.8 34.1 33.3 0.6 0.6 103.3 % 101.0 % 98.0 % 108.6 % 97.3 94.6 116.9 114.1 80.8 77.5 103.7 104.9 103.8 94.4 111.0 102.9 52.1 49.3 102.8 94.4	

Results of Operations

YEAR ENDED DECEMBER 31, 2022 COMPARED TO YEAR ENDED DECEMBER 31, 2021

Net Premiums Earned

Our insurance subsidiaries' net premiums earned increased to \$822.5 million for 2022, an increase of \$46.5 million, or 6.0%, compared to 2021, primarily reflecting solid premium retention and renewal premium increases. Our insurance subsidiaries earn premiums and recognize them as income over the terms of the policies they issue. Such terms are generally one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding twelve-month period compared to the same period one year earlier.

Net Premiums Written

Our insurance subsidiaries' 2022 net premiums written increased 4.9% to \$843.5 million, compared to \$804.3 million for 2021. Commercial lines net premiums written increased \$18.0 million, or 3.6%, for 2022 compared to 2021. We attribute the increase in commercial lines net premiums written primarily to modest new business writings, strong premium retention and a continuation of renewal premium increases in lines other than workers' compensation, offset partially by planned attrition in regions we have targeted for profit improvement. Personal lines net premiums written increased \$21.3 million, or 7.0%, for 2022 compared to 2021. We attribute the increase in personal lines net premiums written primarily to renewal premium increases, strong policy retention and new business writings in certain states where we have introduced an updated suite of products.

Investment Income

For 2022, our net investment income increased 9.3% to \$34.0 million, compared to \$31.1 million for 2021, due primarily to higher average reinvestment yields and higher average invested assets for 2022 compared to 2021.

Net Investment (Losses) Gains

Our net investment losses for 2022 were \$10.2 million. Our net investment gains for 2021 were \$6.5 million. The net investment (losses) gains for 2022 and 2021 were primarily related to (decreases) increases in unrealized (losses) gains within our equity securities portfolio. We did not recognize any impairment losses during 2022 or 2021.

Losses and Loss Expenses

Our insurance subsidiaries' loss ratio, which is the ratio of incurred losses and loss expenses to premiums earned, was 68.6% for 2022, compared to 67.1% for 2021. Our insurance subsidiaries' commercial lines loss ratio decreased to 67.1% for 2022, compared to 68.6% for 2021. This decrease resulted primarily from the commercial automobile loss ratio decreasing to 64.2% for 2022, compared to 75.0% for 2021. The personal lines loss ratio increased to 71.0% for 2022, compared to 64.8% for 2021. The personal automobile loss ratio increased to 72.1% for 2022, compared to 65.6% for 2021, primarily due to an increase in automobile claim severity due to the ongoing impact of supply chain disruption and labor shortages on the costs of repair and replacement vehicles. The homeowners loss ratio increased to 76.1% for 2022, compared to 69.6% for 2021, primarily due to increased average claim severity due to the ongoing impact of supply chain disruption and labor shortages on repair and replacement costs for homes. Our insurance subsidiaries experienced favorable loss reserve development of approximately \$44.8 million, or 5.4 percentage points of the loss ratio, during 2022 in their reserves for prior accident years, compared to approximately \$31.2 million, or 4.0 percentage points of the loss ratio, during 2021. The favorable loss reserve development in 2022 resulted primarily from lower-than-expected loss emergence in the personal automobile and commercial automobile lines of business for accident years prior to 2022. Weather-related losses of \$63.5 million, or 7.7 percentage points of the loss ratio, for 2022 increased from \$45.3 million, or 5.8 percentage points of the loss ratio, for 2021, with the increase primarily impacting the commercial multi-peril line of business. Large fire losses, which we define as individual fire losses in excess of \$50,000, were \$53.5 million, or 6.5 percentage points of the loss ratio, for 2022, compared to \$45.6 million, or 5.9 percentage points of the loss ratio, for 2021. The increase was related to increased average claim severity of both commercial property and home fires in 2022 compared to 2021, which we attribute in part to inflationary repair cost increases.

Underwriting Expenses

Our insurance subsidiaries' expense ratio, which is the ratio of policy acquisition and other underwriting expenses to premiums earned, was 34.1% for 2022, compared to 33.3% for 2021. We attribute the modest increase to higher technology system-related expenses for 2022 compared to 2021, offset somewhat by lower commercial growth incentive costs for our agents and decreased underwriting-based incentive costs for our employees for 2022 compared to 2021. The increase in technology systems-related expenses for 2022 was primarily due to an increased allocation of costs from Donegal Mutual to our insurance subsidiaries following the successful implementation of the second phase of our ongoing systems modernization project in August 2021.

Policyholder Dividends

Our insurance subsidiaries pay policyholder dividends primarily on workers' compensation policies on a sliding scale based on the profitability of a given policy.

Combined Ratio

Our insurance subsidiaries' combined ratio was 103.3% and 101.0% for 2022 and 2021, respectively. The combined ratio represents the sum of the loss ratio, the expense ratio and the dividend ratio, which is the ratio of workers' compensation policy dividends incurred to premiums earned. We attribute the increase in our combined ratio primarily to the increase in the loss ratio.

Interest Expense

Our interest expense for 2022 decreased to \$620,558, compared to \$895,605 for 2021. We attribute the decrease to lower average borrowings under our lines of credit during 2022 compared to 2021.

Income Taxes

Our income tax benefit was \$1.7 million for 2022, compared to income tax expense of \$5.1 million for 2021. Our effective tax rate for 2021 was 16.8%.

Net (Loss) Income and (Loss) Earnings Per Share

Our net loss for 2022 was \$2.0 million, or \$.06 per share of Class A common stock and \$.07 per share of Class B common stock, compared to net income for 2021 of \$25.3 million, or \$0.83 per share of Class A common stock on a diluted basis and \$0.74 per share of Class B common stock. We had 27.1 million and 25.8 million Class A shares outstanding at December 31, 2022 and 2021, respectively. We had 5.6 million Class B shares outstanding for both periods. There are no outstanding securities that dilute our shares of Class B common stock.

Book Value Per Share

Our stockholders' equity decreased by \$47.4 million during 2022, primarily due to \$45.4 million of after-tax unrealized losses within our available-for-sale fixed-maturity portfolio, resulting in a decrease in our book value per share to \$14.79 at December 31, 2022, compared to \$16.95 a year earlier.

YEAR ENDED DECEMBER 31, 2021 COMPARED TO YEAR ENDED DECEMBER 31, 2020

Net Premiums Earned

Our insurance subsidiaries' net premiums earned increased to \$776.0 million for 2021, an increase of \$34.0 million, or 4.6%, compared to 2020, primarily reflecting the inclusion of the business of the Mountain States Insurance Group in the underwriting pool beginning with policies effective in 2021, as well solid premium retention and renewal premium increases. Our insurance subsidiaries earn premiums and recognize them as income over the terms of the policies they issue. Such terms are generally one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding twelve-month period compared to the same period one year earlier.

Net Premiums Written

Our insurance subsidiaries' 2021 net premiums written increased 8.4% to \$804.3 million, compared to \$742.1 million for 2020. Commercial lines net premiums written increased \$75.8 million, or 17.8%, for 2021 compared to 2020. We attribute the increase in commercial lines net premiums written primarily to the inclusion of the business of the Mountain States Insurance Group in the underwriting pool beginning with policies effective in 2021, as well as solid premium retention and renewal premium increases. Personal lines net premiums written decreased \$13.7 million, or 4.3%, for 2021 compared to 2020. We attribute the decrease in personal lines net premiums written primarily to net attrition as a result of measures our insurance subsidiaries implemented to improve underwriting profitability, partially offset by the impact of premium rate increases.

Investment Income

For 2021, our net investment income increased to \$31.1 million, compared to \$29.5 million for 2020, due primarily to higher average invested assets for 2021 compared to 2020.

Net Investment Gains

Our net investment gains for 2021 and 2020 were \$6.5 million and \$2.8 million, respectively. The net investment gains for 2021 and 2020 were primarily related to increases in unrealized gains within our equity securities portfolio. We did not recognize any impairment losses during 2021 or 2020.

Losses and Loss Expenses

Our insurance subsidiaries' loss ratio, which is the ratio of incurred losses and loss expenses to premiums earned, was 67.1% for 2021, compared to 62.0% for 2020. Our insurance subsidiaries' commercial lines loss ratio increased to 68.6% for 2021, compared to 63.9% for 2020. This increase resulted primarily from the workers' compensation loss ratio increasing to 57.7% for 2021, compared to 51.1% for 2020, and the commercial multi-peril loss ratio increasing to 76.9% for 2021, compared to 65.9% for 2020. The personal lines loss ratio increased to 64.8% for 2021, compared to 59.5% for 2020. The personal automobile loss ratio increased to 65.6% for 2021, compared to 60.1% for 2020, primarily due to an increase in

automobile claim frequency as driving activity generally returned to pre-pandemic levels. The homeowners loss ratio increased to 69.6% for 2021, compared to 61.8% for 2020. Our insurance subsidiaries experienced favorable loss reserve development of approximately \$31.2 million, or 4.0 percentage points of the loss ratio, during 2021 in their reserves for prior accident years, compared to favorable loss reserve development of approximately \$12.9 million, or 1.7 percentage points of the loss ratio, during 2020. The favorable loss reserve development in 2021 resulted primarily from lower-than-expected loss emergence in the personal automobile, workers' compensation and commercial automobile lines of business for accident years prior to 2021. Weather-related losses of \$45.3 million, or 5.8 percentage points of the loss ratio, for 2021 decreased from \$51.4 million, or 6.9 percentage points of the loss ratio, for 2020, with the decrease primarily impacting the commercial multi-peril line of business. Large fire losses, which we define as individual fire losses in excess of \$50,000, were \$45.6 million, or 5.9 percentage points of the loss ratio, for 2021, compared to \$22.8 million, or 3.1 percentage points of the loss ratio, for 2020. The significant increase was related to a higher incidence of both commercial property and home fires in 2021 compared to 2020.

Underwriting Expenses

Our insurance subsidiaries' expense ratio, which is the ratio of policy acquisition and other underwriting expenses to premiums earned, was 33.3% for 2021, compared to 33.0% for 2020. We attribute the modest increase to higher technology system-related expenses for 2021 compared to 2020, offset somewhat by lower commercial growth incentive costs for our agents and decreased underwriting-based incentive costs for our agents and employees for 2021 compared to 2020. The increase in technology systems-related expenses for 2021 was primarily due to an increased allocation of costs from Donegal Mutual to our insurance subsidiaries following the successful implementation of the second phase of our ongoing systems modernization project in August 2021.

Policyholder Dividends

Our insurance subsidiaries pay policyholder dividends primarily on workers' compensation policies on a sliding scale based on the profitability of a given policy. We attribute the decrease in dividends incurred for 2021 compared to 2020 to a modest decline in the profitability of the workers' compensation line of business over the respective periods to which the dividends applied.

Combined Ratio

Our insurance subsidiaries' combined ratio was 101.0% and 96.0% for 2021 and 2020, respectively. The combined ratio represents the sum of the loss ratio, the expense ratio and the dividend ratio, which is the ratio of workers' compensation policy dividends incurred to premiums earned. We attribute the increase in our combined ratio primarily to the increase in the loss ratio.

Interest Expense

Our interest expense for 2021 decreased to \$895,605, compared to \$1.2 million for 2020. We attribute the decrease to lower average borrowings under our lines of credit during 2021 compared to 2020.

Income Taxes

Our income tax expense was \$5.1 million for 2021, compared to \$10.5 million for 2020. Our effective tax rate for 2021 was 16.8%, compared to 16.5% for 2020. Our income tax expense for 2020 included a \$1.6 million income tax benefit related to the carryback of 2018 net operating losses to past tax years with higher statutory income tax rates than are currently in effect, as allowed under the Coronavirus Aid, Relief and Economic Security Act that was enacted in March 2020.

Net Income and Earnings Per Share

Our net income for 2021 was \$25.3 million, or \$0.83 per share of Class A common stock on a diluted basis and \$0.74 per share of Class B common stock, compared to net income for 2020 of \$52.8 million, or \$1.83 per share of Class A common stock on a diluted basis and \$1.65 per share of Class B common stock. We had 25.8 million and 24.6 million Class A shares outstanding at December 31, 2021 and 2020, respectively. We had 5.6 million Class B shares outstanding for both periods. There are no outstanding securities that dilute our shares of Class B common stock.

Book Value Per Share

Our stockholders' equity increased by \$13.3 million during 2021 as a result of our net income, offset somewhat by a reduction of net unrealized gains within our available-for-sale fixed maturity investments. Our book value per share decreased to \$16.95 at December 31, 2021, compared to \$17.13 a year earlier, primarily as a result of an increase in the number of Class A shares outstanding during the year.

Financial Condition

Liquidity and Capital Resources

Liquidity is a measure of an entity's ability to secure enough cash to meet its contractual obligations and operating needs as they arise. Our major sources of funds from operations are the net cash flows generated from our insurance subsidiaries' underwriting results, investment income and maturing investments.

We have historically generated sufficient net positive cash flow from our operations to fund our commitments and build our investment portfolio, thereby increasing future investment returns. The pooling agreement with Donegal Mutual historically has been cash flow positive because of the profitability of the underwriting pool. Because we settle the pool monthly, our cash flows are substantially similar to the cash flows that would result from the underwriting of direct business. We maintain a high degree of liquidity in our investment portfolio in the form of marketable fixed maturities, equity securities and short-term investments. We structure our fixed-maturity investment portfolio following a "laddering" approach so that projected cash flows from investment income and principal maturities are evenly distributed from a timing perspective. This laddering approach provides an additional measure of liquidity to meet our obligations and the obligations of our insurance subsidiaries should an unexpected variation occur in the future. Net cash flows provided by operating activities in 2022, 2021 and 2020 were \$67.1 million, \$76.7 million and \$101.1 million, respectively.

At December 31, 2022, we had no outstanding borrowings under our line of credit with M&T and had the ability to borrow up to \$20.0 million at interest rates equal to the then-current LIBOR rate plus 2.00%. At December 31, 2022, Atlantic States had a \$35.0 million outstanding advance with the FHLB of Pittsburgh that carries a fixed interest rate of 1.74% and is due in August 2024. In March 2020, Atlantic States issued \$50.0 million of debt to the FHLB of Pittsburgh in exchange for a cash advance in the same amount for contingent liquidity funding in light of uncertainty surrounding the economic impact of the COVID-19 pandemic. Atlantic States repaid this advance when it became due in March 2021. In September 2021, upon receipt of approval from the Michigan Department of Insurance and Financial Services, MICO repaid in full the \$5.0 million surplus note held previously by Donegal Mutual, along with accrued interest of \$178,082. We discuss in Note 9 – Borrowings our estimate of the timing of the amounts payable for the borrowings under our lines of credit based on their contractual maturities.

We estimate the timing of claim payments associated with the liabilities for losses and loss expenses of our insurance subsidiaries based on historical experience and expectations of future payment patterns. Amounts Atlantic States assumes pursuant to the pooling agreement with Donegal Mutual represent a substantial portion of our insurance subsidiaries' gross liabilities for losses and loss expenses, and amounts Atlantic States cedes pursuant to the pooling agreement represent a substantial portion of our insurance subsidiaries' reinsurance recoverable on unpaid losses and loss expenses. We include cash settlement of Atlantic States' assumed liabilities from the pool in monthly settlements of pooled activity, as we net amounts ceded to and assumed from the pool. Although Donegal Mutual and we do not anticipate any changes in the pool participation levels in the foreseeable future, any such change would be prospective in nature and therefore would not impact the timing of expected payments by Atlantic States for its percentage share of pooled losses occurring in periods prior to the effective date of such change.

The cash dividends we declared to our stockholders totaled \$20.9 million, \$19.6 million and \$17.3 million in 2022, 2021 and 2020, respectively. There are no regulatory restrictions on our payment of dividends to our stockholders, although there are restrictions under applicable state laws on the payment of dividends from our insurance subsidiaries to us. Our insurance subsidiaries are required by law to maintain certain minimum surplus on a statutory basis and are subject to regulations under which their payment of dividends from statutory surplus is restricted and may require prior approval of their domiciliary insurance regulatory authorities. Our insurance subsidiaries are also subject to risk-based capital ("RBC") requirements. The amount of statutory capital and surplus necessary for our insurance subsidiaries to satisfy regulatory requirements, including the RBC requirements, was not significant in relation to our insurance subsidiaries' statutory capital and surplus at December 31, 2022. Amounts available for distribution to us as dividends from our insurance subsidiaries without prior approval of insurance regulatory authorities in 2023 are approximately \$26.4 million from Atlantic States, \$6.5 million from Southern, \$6.0 million from Peninsula and \$7.5 million from MICO, or a total of approximately \$46.4 million.

Investments

At December 31, 2022 and 2021, our investment portfolio of primarily investment-grade bonds, common stock, short-term investments and cash totaled \$1.3 billion, representing 58.2% and 59.2%, respectively, of our total assets. See "Business - Investments" for more information.

		December 31,				
	2022	2022		21		
		Percent of		Percent of		
(dollars in thousands)	Amount	Total	Amount	Total		
Fixed maturities:						
Total held to maturity	\$ 688,439	52.8 %	\$ 668,105	52.3 %		
Total available for sale	523,792	40.1	532,629	41.7		
Total fixed maturities	1,212,231	92.9	1,200,734	94.0		
Equity securities	35,105	2.7	63,420	5.0		
Short-term investments	57,321	4.4	12,692	1.0		
Total investments	\$ 1,304,657	100.0 %	\$1,276,846	100.0 %		

The carrying value of our fixed maturity investments represented 92.9% and 94.0% of our total invested assets at December 31, 2022 and 2021, respectively.

Our fixed maturity investments consisted of high-quality marketable bonds, of which 100.0% were rated at investment-grade levels at December 31, 2022 and 2021, respectively.

At December 31, 2022, the net unrealized loss on our available-for-sale fixed maturity investments, net of deferred taxes, amounted to \$38.0 million, compared to a net unrealized gain of \$7.4 million at December 31, 2021.

Impact of Inflation

Our insurance subsidiaries establish their property and casualty insurance premium rates before they know the amount of losses and loss settlement expenses or the extent to which inflation may impact such expenses. Consequently, our insurance subsidiaries attempt, in establishing rates, to anticipate the potential future impact of inflation. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results.

Impact of Changing Climate Conditions

Insured losses from severe weather events could significantly impact the underwriting results of our insurance subsidiaries. Losses from catastrophic events are a function of both the extent of our insurance subsidiaries' exposures, the frequency and severity of the events themselves and the level of reinsurance coverage our insurance subsidiaries purchase. The increased frequency and severity of weather-related catastrophes and other losses, such as from wildfires and flooding, incurred by the industry in recent years may be indicative of changing weather patterns due to climate change. Should those patterns continue to emerge, increased weather-related catastrophes in the states in which our insurance subsidiaries operate would lead to higher overall losses that they may be unable to offset through pricing actions.

Our insurance subsidiaries seek to reduce their exposure to catastrophe losses through their underwriting strategies and their purchase of catastrophe reinsurance. While the emerging science regarding climate change and its connection to extreme weather events continues to be studied, climate change, to the extent it produces rising temperatures and changes in weather patterns, could affect the frequency and severity of weather events and other losses and thus impact the affordability and availability of catastrophe reinsurance coverage for our insurance subsidiaries. Our insurance subsidiaries' ability to appropriately manage catastrophe risk depends partially on catastrophe models, which rely on historical data that might not be representative of the frequency and severity of future events. Such models might also be unable to anticipate the uncertain impact of changing climate conditions that tend to occur gradually over time. Because the policies of our insurance subsidiaries renew not less frequently than annually, our insurance subsidiaries have the ability to respond to the impact of changing climate conditions through adjustments to their underwriting standards, pricing, and policy terms and conditions, subject to applicable regulatory approvals.

Changing climate conditions could lead to new or revised regulations with which our insurance subsidiaries would have to comply. Such regulations could impact the ability of our insurance subsidiaries to manage their exposures in areas impacted by increased weather activity, require our insurance companies to alter the terms and conditions of their policies or impact the ability of our insurance subsidiaries to obtain sufficient pricing increases to offset higher loss activity.

Impact of New Accounting Standards

In September 2016, the FASB issued guidance that amends previous guidance on the impairment of financial instruments by adding an impairment model that requires an entity to recognize expected credit losses as an allowance rather than impairments as credit losses are incurred. The intent of this guidance is to reduce complexity and result in a more timely recognition of expected credit losses. In November 2019, the FASB issued guidance that delays the effective date for "smaller reporting companies," as defined in Item 10(f)(1) of Regulation S-K, to annual and interim reporting periods beginning after December 15, 2022 from December 15, 2019. We are a smaller reporting company and our adoption of this guidance on January 1, 2023 will result in an after-tax adjustment to retained earnings estimated between \$1.5 million and \$2.5 million. We do not expect the adoption of this guidance to have a significant impact on our results of operations or cash flows.

Off-Balance Sheet Arrangements

As of December 31, 2022 and 2021, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to the impact of interest rate changes, to changes in fair values of investments and to credit risk.

In the normal course of business, we employ established policies and procedures to manage our exposure to changes in interest rates, fluctuations in the fair market value of our debt and equity securities and credit risk. We seek to mitigate these risks by various actions we describe below.

Interest Rate Risk

Our exposure to market risk for a change in interest rates is concentrated in our investment portfolio. We monitor this exposure through periodic reviews of our asset and liability positions. We regularly monitor estimates of cash flows and the impact of interest rate fluctuations relating to our investment portfolio. Generally, we do not hedge our exposure to interest rate risk because we have the capacity to, and do, hold fixed-maturity investments to maturity.

Principal cash flows and related weighted-average interest rates by stated maturity dates for the financial instruments we held at December 31, 2022 that are sensitive to interest rates are as follows:

*** * 1 4 1

(in thousands)	Pri	ncipal Cash Flows	Weighted- Average Interest Rate
Fixed-maturity and short-term investments:			
2023	\$	96,897	3.54 %
2024		46,799	3.98
2025		63,851	4.00
2026		70,116	4.00
2027		73,460	3.83
Thereafter		967,145	3.04
Total	\$ 1	1,318,268	
Fair value	\$ 1	1,179,158	
Debt:			
2024	\$	35,000	1.74 %
Total	\$	35,000	
Fair value	\$	35,000	

Actual cash flows from investments may differ from those depicted above as a result of calls and prepayments.

Equity Price Risk

Our portfolio of equity securities, which we carry on our consolidated balance sheets at estimated fair value, has exposure to price risk, which is the risk of potential loss in estimated fair value resulting from an adverse change in prices. Our objective is to mitigate this risk and to earn competitive relative returns by investing in a diverse portfolio of high-quality, liquid securities.

Credit Risk

Our objective is to earn competitive returns by investing in a diversified portfolio of securities. Our portfolio of fixed maturity securities and, to a lesser extent, short-term investments is subject to credit risk. We define this risk as the potential loss in fair value resulting from adverse changes in the borrower's ability to repay the debt. We manage this risk by performing an analysis of prospective investments and through regular reviews of our portfolio by our investment personnel. We also limit the amount of our total investment portfolio that we invest in any one security.

Our insurance subsidiaries provide property and liability insurance coverages through independent insurance agencies located throughout their operating areas. Our insurance subsidiaries bill the majority of this business directly to the insured, although our insurance subsidiaries bill a portion of their commercial business through their agents, to whom they extend credit in the normal course of business.

Because the pooling agreement does not relieve Atlantic States of primary liability as the originating insurer, Atlantic States is subject to a concentration of credit risk arising from the business Atlantic States cedes to Donegal Mutual. Our insurance subsidiaries maintain reinsurance agreements with Donegal Mutual and with a number of other major unaffiliated authorized reinsurers.

Item 8. Financial Statements and Supplementary Data.

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Donegal Group Inc. Consolidated Balance Sheets

	December 31,		
	2022	2021	
Assets			
Investments			
Fixed maturities			
Held to maturity, at amortized cost (fair value \$598,044,681 and \$697,400,964)	\$ 688,439,360	\$ 668,104,568	
Available for sale, at fair value (amortized cost \$571,912,727 and \$523,293,046)		532,629,015	
Equity securities, at fair value		63,419,973	
Short-term investments, at cost, which approximates fair value		12,692,341	
Total investments		1,276,845,897	
Cash		57,709,375	
Accrued investment income		8,214,971	
Premiums receivable	173,846,294	168,862,580	
Reinsurance receivable	456,522,223	455,411,009	
Deferred policy acquisition costs	73,170,230	68,028,373	
Deferred tax asset, net	21,603,017	6,685,619	
Prepaid reinsurance premiums		176,935,842	
Property and equipment, net	2,755,105	2,956,930	
Accounts receivable - securities	1,842	2,930,930	
Federal income taxes recoverable		5,290,938	
Receivable from Michigan Catastrophic Claims Association			
		18,112,800	
Due from affiliate		1,922,717	
Goodwill	5,625,354	5,625,354	
Other intangible assets		958,010	
Other		1,612,732	
Total assets	\$2,243,349,335	\$2,255,175,399	
Liabilities and Stockholders' Equity			
Liabilities			
Losses and loss expenses	\$1,121,045,758	\$1,077,620,301	
Unearned premiums	577,653,130	572,958,422	
Accrued expenses	4,226,390	4,028,659	
Reinsurance balances payable	3,495,824	3,946,105	
Borrowings under lines of credit	35,000,000	35,000,000	
Cash dividends declared to stockholders	5,296,990	4,915,268	
Cash refunds due to Michigan policyholders	_	18,112,800	
Due to affiliate	5,173,289	_	
Other	7,864,942	7,557,757	
Total liabilities	1,759,756,323	1,724,139,312	
Stockholders' Equity			
Preferred stock, \$.01 par value, authorized 2,000,000 shares; none issued	_	_	
Class A common stock, \$.01 par value, authorized 50,000,000 shares, issued 30,120,263			
and 28,756,203 shares and outstanding 27,117,675 and 25,753,615 shares	301,203	287,562	
Class B common stock, \$.01 par value, authorized 10,000,000 shares, issued 5,649,240 shares and outstanding 5,576,775 shares	56 402	56 402	
	56,492 325,601,647	56,492 304,889,481	
Additional paid-in capital	325,601,647		
Accumulated other comprehensive (loss) income		3,283,551	
Retained earnings		263,745,358	
Treasury stock, at cost		(41,226,357)	
Total lightifies and stockholders' equity	483,593,012	\$31,036,087	
Total liabilities and stockholders' equity	\$2,243,349,335	\$2,255,175,399	

Donegal Group Inc. Consolidated Statements of (Loss) Income and Comprehensive (Loss) Income

	Years Ended December 31,		
	2022	2021	2020
Statements of (Loss) Income			
Revenues			
Net premiums earned (includes affiliated reinsurance of \$232,105,306, \$212,591,341 and \$192,861,276 - see note 3)	\$822,489,450	\$776,015,201	\$742,040,339
Investment income, net of investment expenses	34,016,112	31,125,631	29,504,466
Installment payment fees	1,516,330	2,416,873	3,063,097
Lease income	383,451	430,800	434,089
Net investment (losses) gains (includes (\$979,972), \$382,602 and \$572,106 accumulated other comprehensive income reclassification)	(10,184,797)	6,477,286	2,777,919
Total revenues	848,220,546	816,465,791	777,819,910
Expenses			
Net losses and loss expenses (includes affiliated reinsurance of \$177,849,040, \$131,367,599 and \$87,374,791 - see note 3)	564,078,993	520,709,542	459,764,293
Amortization of deferred policy acquisition costs	142,430,000	128,733,000	119,072,000
Other underwriting expenses	137,923,739	129,367,893	125,862,651
Policyholder dividends	5,560,407	5,198,515	7,394,310
Interest	620,558	895,605	1,196,406
Other, net	1,244,948	1,222,728	1,257,747
Total expenses	851,858,645	786,127,283	714,547,407
(Loss) income before income tax (benefit) expense	(3,638,099)	30,338,508	63,272,503
Income tax (benefit) expense (includes (\$205,794), \$80,346 and \$120,142 income tax (benefit) expense from reclassification items)	(1,678,694)	5,084,334	10,457,251
Net (loss) income	\$ (1,959,405)	\$ 25,254,174	\$ 52,815,252
Basic (loss) earnings per common share:			
Class A common stock	\$ (0.06)	\$ 0.83	\$ 1.84
Class B common stock	\$ (0.07)	\$ 0.74	\$ 1.65
Diluted (loss) earnings per common share:			
Class A common stock	\$ (0.06)	\$ 0.83	\$ 1.83
Class B common stock	\$ (0.07)	\$ 0.74	\$ 1.65
Statements of Comprehensive (Loss) Income			
Net (loss) income	\$ (1,959,405)	\$ 25,254,174	\$ 52,815,252
Other comprehensive (loss) income, net of tax			
Unrealized (loss) gain on securities:			
Unrealized holding (loss) gain arising during the period, net of income tax (benefit) expense of (\$12,164,443), (\$2,008,078) and \$2,944,892	(45,761,476)	(7,544,805)	11,078,406
Reclassification adjustment for losses (gains) included in net (loss) income, net of income tax (benefit) expense of (\$205,794), \$80,346 and \$120,142	774,178	(302,256)	(451,964)
Other comprehensive (loss) income	(44,987,298)	(7,847,061)	10,626,442
Comprehensive (loss) income		\$ 17,407,113	\$ 63,441,694
Comprehensive (loss) income		ψ 1/, τυ/,113	Ψ 03,441,074

Donegal Group Inc. Consolidated Statements of Stockholders' Equity

Common Stock Accumulated Additional Paid-In Other Comprehensive Total Stockholders' Class A Class B Class A Class B Retained Treasury Amount Amount Capital Income (Loss) Stock Equity Balance, January 1, 26,203,935 5,649,240 \$262,040 \$56,492 504,170 \$451,015,519 2020 \$268,151,601 \$ 223,267,573 \$ (41,226,357) Issuance of common stock (stock compensation 2,059,036 plans) 153,233 1,532 2,057,504 Stock-based 1,294,606 12,946 18,582,085 18,595,031 compensation 52,815,252 52,815,252 Net income Cash dividends . . . (17,337,160)(17,337,160)Grant of stock options 358,377 (358,377)Other comprehensive 10,626,442 10,626,442 income Balance, December 31. 5,649,240 2020 27,651,774 \$276,518 \$56,492 \$289,149,567 \$ 11,130,612 \$ 258,387,288 \$ (41,226,357) \$517,774,120 Issuance of common stock (stock compensation 1,578 plans) 157,783 2,161,142 2,162,720 Stock-based 9,466 13,260,855 13,270,321 compensation 946,646 25,254,174 25,254,174 Net income Cash dividends (19,578,187)(19,578,187)Grant of stock 317,917 options (317,917)Other comprehensive (7,847,061)(7,847,061)Balance, December 31, 2021 28,756,203 5,649,240 \$287,562 \$56,492 \$304,889,481 3,283,551 \$ 263,745,358 \$ \$ (41,226,357) \$531,036,087 Issuance of common stock (stock compensation 2,122,277 plans) 2,123,890 161,254 1,613 Stock-based compensation 1,202,806 12,028 18,252,148 18,264,176 (1,959,405)(1,959,405)Net loss Cash dividends . (20,884,438)(20,884,438)Grant of stock 337,741 (337,741)options Other comprehensive loss (44,987,298)(44,987,298)Balance, December 31, \$301,203 \$ (41,703,747) \$ 240,563,774 2022 30,120,263 5,649,240 \$56,492 \$325,601,647 \$ (41,226,357) \$483,593,012

Donegal Group Inc. Consolidated Statements of Cash Flows

	Year	rs Ended December 31,	
	2022	2021	2020
Cash Flows from Operating Activities:			
Net (loss) income	\$ (1,959,405)	\$ 25,254,174	\$ 52,815,252
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation, amortization and other non-cash items	4,841,559	5,837,809	6,721,621
Net investment losses (gains)	10,184,797	(6,477,286)	(2,777,919)
Changes in Assets and Liabilities:			
Losses and loss expenses	43,425,457	115,612,864	92,333,588
Unearned premiums	4,694,708	35,768,824	27,042,113
Accrued expenses	197,731	(25,086,539)	661,454
Premiums receivable	(4,983,714)	733,752	(3,863,383)
Deferred policy acquisition costs	(5,141,857)	(8,871,415)	127,901
Deferred income taxes	(2,958,735)	1,095,306	6,448
Reinsurance receivable	(1,111,214)	(46,502,159)	(41,887,382)
Accrued investment income	(646,321)	(278,092)	(870,850)
Amounts due to affiliate	7,096,006	(12,216,212)	224,324
Reinsurance balances payable	(450,281)	712,582	1,117,439
Prepaid reinsurance premiums	16,344,443	(7,517,509)	(26,942,566)
Current income taxes	(3,219,959)	(2,201,569)	(3,174,200)
Other, net	796,805	867,438	(399,440)
Net adjustments	69,069,425	51,477,794	48,319,148
Net cash provided by operating activities	67,110,020	76,731,968	101,134,400
Cash Flows from Investing Activities:			
Purchases of fixed maturities:			
Held to maturity	(74,902,605)	(125,630,220)	(157,048,527)
Available for sale		(123,030,220) (163,593,018)	(176,500,255)
Purchases of equity securities		(25,354,790)	(6,964,092)
Sales of fixed maturities:	(13,002,000)	(23,334,770)	(0,704,072)
Available for sale	24,381,244	6,281,963	22,172,930
Maturity of fixed maturities:	24,361,244	0,281,903	22,172,930
Held to maturity	53,747,886	44,211,076	47,448,424
Available for sale	, ,	165,867,395	172,084,542
Sales of equity securities		26,585,663	6,091,288
Net sales (purchases) of property and equipment		1,224,806	(89,702)
Net (purchases) of property and equipment Net (purchases) sales of short-term investments		8,207,814	(6,869,933)
Net cash used in investing activities		(62,199,311)	(99,675,325)
<u> </u>	(90,490,303)	(02,199,311)	(99,073,323)
Cash Flows from Financing Activities:			
Issuance of common stock		14,181,702	19,292,324
Cash dividends paid		(19,099,220)	(16,976,093)
Payments on subordinated debentures		(5,000,000)	_
Payments on lines of credit		(50,000,000)	_
Borrowings under lines of credit			50,000,000
Net cash (used in) provided by financing activities	(1,197,760)	(59,917,518)	52,316,231
Net (decrease) increase in cash	(32,586,043)	(45,384,861)	53,775,306
Cash at beginning of year		103,094,236	49,318,930
Cash at end of year		\$ 57,709,375	\$103,094,236
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Donegal Group Inc. Notes to Consolidated Financial Statements

1 - Summary of Significant Accounting Policies

Organization and Business

Donegal Mutual Insurance Company ("Donegal Mutual") organized us as an insurance holding company on August 26, 1986. Our insurance subsidiaries, Atlantic States Insurance Company ("Atlantic States"), Southern Insurance Company of Virginia ("Southern"), the Peninsula Insurance Group ("Peninsula"), which consists of Peninsula Indemnity Company and The Peninsula Insurance Company and Michigan Insurance Company ("MICO"), and affiliates write personal and commercial lines of property and casualty coverages exclusively through a network of independent insurance agents in certain Mid-Atlantic, Midwestern, New England, Southern and Southwestern states.

At December 31, 2022, we had three segments: our investment function, our commercial lines of insurance and our personal lines of insurance. The commercial lines products of our insurance subsidiaries consist primarily of commercial automobile, commercial multi-peril and workers' compensation policies. The personal lines products of our insurance subsidiaries consist primarily of homeowners and private passenger automobile policies.

At December 31, 2022, Donegal Mutual held approximately 43% of our outstanding Class A common stock and approximately 84% of our outstanding Class B common stock. This ownership provides Donegal Mutual with approximately 71% of the total voting power of our common stock. Our insurance subsidiaries and Donegal Mutual have interrelated operations due to a pooling agreement and other intercompany agreements and transactions. While each company maintains its separate corporate existence, our insurance subsidiaries and Donegal Mutual conduct business together as the Donegal Insurance Group. As such, Donegal Mutual and our insurance subsidiaries share the same business philosophy, the same management, the same employees and the same facilities and offer the same types of insurance products.

Atlantic States, our largest subsidiary, participates in a proportional reinsurance agreement, or pooling agreement, with Donegal Mutual. Under the pooling agreement, Donegal Mutual and Atlantic States contribute substantially all of their respective premiums, losses and loss expenses to the underwriting pool, and the underwriting pool, acting through Donegal Mutual, then allocates 80% of the pooled business to Atlantic States. Thus, Donegal Mutual and Atlantic States share the underwriting results of the pooled business in proportion to their respective participation in the underwriting pool.

In addition, Donegal Mutual has a 100% quota-share reinsurance agreement with Southern Mutual Insurance Company, or Southern Mutual. Donegal Mutual places its assumed business from Southern Mutual into the underwriting pool.

Donegal Mutual completed the merger of Mountain States Mutual Casualty Company, or Mountain States, with and into Donegal Mutual effective May 25, 2017. Donegal Mutual was the surviving company in the merger, and Mountain States' insurance subsidiaries, Mountain States Indemnity Company and Mountain States Commercial Insurance Company (collectively, the "Mountain States insurance subsidiaries"), became insurance subsidiaries of Donegal Mutual upon completion of the merger. Upon completion of the merger, Donegal Mutual assumed all of the policy obligations of Mountain States and began to market its products together with the Mountain States insurance subsidiaries as the Mountain States Insurance Group in four Southwestern states. Donegal Mutual also entered into a 100% quota-share reinsurance agreement with the Mountain States insurance subsidiaries on the merger date. Beginning with policies effective in 2021, Donegal Mutual began to place the business of the Mountain States Insurance Group into the underwriting pool. As a result, our consolidated financial results through December 31, 2020 excluded the results of the Mountain States Insurance Group operations in those Southwestern states.

The same executive management and underwriting personnel administer products, classes of business underwritten, pricing practices and underwriting standards of Donegal Mutual and our insurance subsidiaries. In addition, as the Donegal Insurance Group, Donegal Mutual and our insurance subsidiaries share a combined business plan to achieve market penetration and underwriting profitability objectives. The products our insurance subsidiaries and Donegal Mutual market are generally complementary, thereby allowing the Donegal Insurance Group to offer a broader range of products to a given market and to expand the Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products of Donegal Mutual and our insurance subsidiaries generally relate to specific risk profiles targeted within similar classes of business, such as preferred tier versus standard tier products, but we do not allocate all of the standard risk gradients to one company. Therefore, the underwriting profitability of the business the individual companies write directly will vary. However, the underwriting pool homogenizes the risk characteristics of all business that Donegal Mutual and Atlantic

States write directly. The business Atlantic States derives from the underwriting pool represents a significant percentage of our total consolidated revenues. We refer to Note 3 - Transactions with Affiliates for more information regarding the pooling agreement.

Basis of Consolidation

Our consolidated financial statements, which we have prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), include our accounts and those of our wholly owned subsidiaries. We have eliminated all significant inter-company accounts and transactions in consolidation. The terms "we," "us," "our" or the "Company" as we use them in the notes to our consolidated financial statements refer to the consolidated entity.

Use of Estimates

In preparing our consolidated financial statements, our management makes estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the balance sheet and revenues and expenses for the period then ended. Actual results could differ significantly from those estimates.

We make estimates and assumptions that could have a significant effect on amounts and disclosures we report in our consolidated financial statements. The most significant estimates relate to our insurance subsidiaries' reserves for property and casualty insurance unpaid losses and loss expenses. While we believe our estimates and the estimates of our insurance subsidiaries are appropriate, the ultimate amounts may differ from the estimates provided. We regularly review our methods for making these estimates as well as the continuing appropriateness of the estimated amounts, and we reflect any adjustment we consider necessary in our current results of operations.

Reclassification

We have made certain reclassifications in our prior period financial statements to conform to the current year presentation.

Investments

We classify our debt securities into the following categories:

Held to Maturity - Debt securities that we have the positive intent and ability to hold to maturity; reported at amortized cost.

Available for Sale - Debt securities not classified as held to maturity; reported at fair value, with unrealized gains and losses excluded from income and reported as a separate component of stockholders' equity (net of tax effects).

Short-term investments are carried at amortized cost, which approximates fair value.

We make estimates concerning the valuation of our investments and the recognition of other-than-temporary declines in the value of our investments. For equity securities, we measure investments at fair value and recognize changes in fair value in our results of operations. With respect to a debt security that is in an unrealized loss position, we first assess if we intend to sell the debt security. If we determine we intend to sell the debt security, we recognize the impairment loss in our results of operations. If we do not intend to sell the debt security, we determine whether it is more likely than not that we will be required to sell the debt security prior to recovery. If we determine it is more likely than not that we will be required to sell the debt security prior to recovery, we recognize an impairment loss in our results of operations. If we determine it is more likely than not that we will not be required to sell the debt security prior to recovery, we then evaluate whether a credit loss has occurred. We determine whether a credit loss has occurred by comparing the amortized cost of the debt security to the present value of the cash flows we expect to collect. If we expect a cash flow shortfall, we consider that a credit loss has occurred. If we determine that a credit loss has occurred, we consider the impairment to be other than temporary. We then recognize the amount of the impairment loss related to the credit loss in our results of operations, and we recognize the remaining portion of the impairment loss in our other comprehensive income, net of applicable taxes. In addition, we may write down securities in an unrealized loss position based on a number of other factors, including when the fair value of an investment is significantly below its cost, when the financial condition of the issuer of a security has deteriorated, the occurrence of industry, company or geographic events that have negatively impacted the value of a security and rating agency downgrades.

We amortize premiums and discounts on debt securities over the life of the security as an adjustment to yield using the effective interest method. We compute investment gains and losses using the specific identification method.

We amortize premiums and discounts for mortgage-backed debt securities using anticipated prepayments.

Fair Values of Financial Instruments

We use the following methods and assumptions in estimating our fair value disclosures:

Investments - We present our investments in available-for-sale fixed maturity and equity securities at estimated fair value. The estimated fair value of a security may differ from the amount that we could realize if we sold the security in a forced transaction. In addition, the valuation of fixed maturity investments is more subjective when markets are less liquid, increasing the potential that the estimated fair value does not reflect the price at which an actual transaction would occur. We utilize nationally recognized independent pricing services to estimate fair values for our fixed maturity and equity investments. We generally obtain two prices per security. The pricing services utilize market quotations for fixed maturity and equity securities that have quoted prices in active markets. For fixed maturity securities that generally do not trade on a daily basis, the pricing services prepare estimates of fair value measurements based predominantly on observable market inputs. The pricing services do not use broker quotes in determining the fair values of our investments. Our investment personnel review the estimates of fair value the pricing services provide to determine if the estimates we obtain are representative of fair values based upon the general knowledge of our investment personnel of the market, their research findings related to unusual fluctuations in value and their comparison of such values to execution prices for similar securities. Our investment personnel monitor the market and are familiar with current trading ranges for similar securities and the pricing of specific investments. Our investment personnel review all pricing estimates that we receive from the pricing services against their expectations with respect to pricing based on fair market curves, security ratings, coupon rates, security type and recent trading activity. Our investment personnel review documentation with respect to the pricing services' pricing methodology that they obtain periodically to determine if the primary pricing sources, market inputs and pricing frequency for various security types are reasonable. We refer to Note 5 - Fair Value Measurements for more information regarding our methods and assumptions in estimating fair values.

Cash and Short-Term Investments - The carrying amounts we report in the balance sheet for these instruments approximate their fair values.

Premiums and Reinsurance Receivables and Payables - The carrying amounts we report in the balance sheet for these instruments related to premiums and paid losses and loss expenses approximate their fair values.

Revenue Recognition

Our insurance subsidiaries recognize insurance premiums as income over the terms of the policies they issue. Our insurance subsidiaries calculate unearned premiums on a daily pro-rata basis.

Policy Acquisition Costs

We defer our insurance subsidiaries' policy acquisition costs, consisting primarily of commissions, premium taxes and certain other underwriting costs, reduced by ceding commissions, related directly to the successful acquisition of new or renewal insurance contracts. We amortize these deferred policy acquisition costs over the period in which our insurance subsidiaries earn the premiums. The method we follow in computing deferred policy acquisition costs limits the amount of such deferred costs to their estimated realizable value, which gives effect to the premium to be earned, related investment income, losses and loss expenses and certain other costs we expect to incur as our insurance subsidiaries earn the premium. Estimates in the calculation of policy acquisition costs have not shown material variability because of uncertainties in applying accounting principles or as a result of sensitivities to changes in key assumptions.

Property and Equipment

We report property and equipment at depreciated cost that we compute using the straight-line method based upon estimated useful lives of the assets.

Losses and Loss Expenses

Liabilities for losses and loss expenses are estimates at a given point in time of the amounts an insurer expects to pay with respect to incurred policyholder claims based on facts and circumstances the insurer knows at that point in time. For example, legislative, judicial and regulatory actions may expand coverage definitions, retroactively mandate coverage or otherwise require our insurance subsidiaries to pay losses for damages that their policies explicitly excluded or did not intend to cover. At

the time of establishing its estimates, an insurer recognizes that its ultimate liability for losses and loss expenses will exceed or be less than such estimates. Our insurance subsidiaries base their estimates of liabilities for losses and loss expenses on assumptions as to future loss trends, expected claims severity, judicial theories of liability and other factors. However, during the loss adjustment period, our insurance subsidiaries may learn additional facts regarding individual claims, and, consequently, it often becomes necessary for our insurance subsidiaries to refine and adjust their estimates for these liabilities. We reflect any adjustments to the liabilities for losses and loss expenses of our insurance subsidiaries in our consolidated results of operations in the period in which our insurance subsidiaries make adjustments to their estimates.

Our insurance subsidiaries maintain liabilities for the payment of losses and loss expenses with respect to both reported and unreported claims. Our insurance subsidiaries establish these liabilities for the purpose of covering the ultimate costs of settling all losses, including investigation and litigation costs. Our insurance subsidiaries base the amount of their liability for reported losses primarily upon a case-by-case evaluation of the type of risk involved, knowledge of the circumstances surrounding each claim and the insurance policy provisions relating to the type of loss the policyholder incurred. Our insurance subsidiaries determine the amount of their liability for unreported claims and loss expenses on the basis of historical information by line of insurance. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results. Our insurance subsidiaries monitor their liabilities closely and recompute them periodically using new information on reported claims and a variety of statistical techniques. Our insurance subsidiaries do not discount their liabilities for losses and loss expenses.

Reserve estimates can change over time because of unexpected changes in assumptions related to our insurance subsidiaries' external environment and, to a lesser extent, assumptions related to our insurance subsidiaries' internal operations. For example, our insurance subsidiaries have experienced an increase in claims severity and a lengthening of the claim settlement periods on bodily injury claims during the past several years. In addition, the COVID-19 pandemic and related government mandates and restrictions resulted in various changes from historical claims reporting and settlement trends during 2020 and resulted in significant increases in loss costs in 2021 and 2022 due to a number of factors, including supply chain disruption, higher new and used automobile values, increases in the cost of replacement automobile parts and rising labor rates. These trend changes give rise to greater uncertainty as to the pattern of future loss settlements. Related uncertainties regarding future trends include social inflation, availability and cost of replacement automobile parts and building materials, availability of skilled labor, the rate of plaintiff attorney involvement in claims and the cost of medical technologies and procedures. Assumptions related to our insurance subsidiaries' external environment include the absence of significant changes in tort law and the legal environment that increase liability exposure, consistency in judicial interpretations of insurance coverage and policy provisions and the rate of loss cost inflation. Internal assumptions include consistency in the recording of premium and loss statistics, consistency in the recording of claims, payment and case reserving methodology, accurate measurement of the impact of rate changes and changes in policy provisions, consistency in the quality and characteristics of business written within a given line of business and consistency in reinsurance coverage and collectability of reinsured losses, among other items. To the extent our insurance subsidiaries determine that underlying factors impacting their assumptions have changed, our insurance subsidiaries make adjustments in their reserves that they consider appropriate for such changes. Accordingly, our insurance subsidiaries' ultimate liability for unpaid losses and loss expenses will likely differ from the amount recorded.

Our insurance subsidiaries seek to enhance their underwriting results by carefully selecting the product lines they underwrite. Our insurance subsidiaries' personal lines products primarily include standard and preferred risks in private passenger automobile and homeowners lines. Our insurance subsidiaries' commercial lines products primarily include business offices, wholesalers, service providers, contractors, artisans and light manufacturing operations. Our insurance subsidiaries have limited exposure to asbestos and other environmental liabilities.

Income Taxes

We currently file a consolidated federal income tax return that includes us and our insurance subsidiaries.

We account for income taxes using the asset and liability method. The objective of the asset and liability method is to establish deferred tax assets and liabilities for the temporary differences between the financial reporting basis and the tax basis of our assets and liabilities at enacted tax rates we expect to be in effect when we realize or settle such amounts.

Credit Risk

Our objective is to earn competitive returns by investing in a diversified portfolio of securities. Our portfolio of fixed maturity securities and, to a lesser extent, short-term investments is subject to credit risk. We define this risk as the potential loss in fair value resulting from adverse changes in the borrower's ability to repay its debt to us. We manage this risk by

performing an analysis of prospective investments and through regular reviews of our portfolio by our investment personnel. We also limit the amount of our total investment portfolio that we invest in any one security.

Our insurance subsidiaries provide property and liability insurance coverages through independent insurance agencies located throughout their operating areas. Our insurance subsidiaries bill the majority of this business directly to their policyholders, although our insurance subsidiaries bill a portion of their commercial business through their agents, to whom they extend credit in the normal course of business.

Our insurance subsidiaries have reinsurance agreements with Donegal Mutual and with a number of major unaffiliated reinsurers.

Reinsurance Accounting and Reporting

Our insurance subsidiaries rely upon reinsurance agreements to limit their maximum net loss from large single risks or risks in concentrated areas and to increase their capacity to write insurance. Reinsurance does not relieve our insurance subsidiaries from liability to their respective policyholders. To the extent that a reinsurer cannot pay losses for which it is liable under the terms of a reinsurance agreement with one or more of our insurance subsidiaries, our insurance subsidiaries retain continued liability for such losses. However, in an effort to reduce the risk of non-payment, our insurance subsidiaries require all of their reinsurers to have an A.M. Best rating of A- or better or, with respect to foreign reinsurers, to have a financial condition that, in the opinion of our management, is equivalent to a company with an A.M. Best rating of A- or better. We refer to Note 10 - Reinsurance for more information regarding the reinsurance agreements of our insurance subsidiaries.

Stock-Based Compensation

We measure all share-based payments to our directors and the directors and employees of our subsidiaries and affiliates, including grants of stock options, using a fair-value-based method and record such expense in our results of operations. In determining the expense we record for stock options we grant to our directors and the directors and employees of our subsidiaries and affiliates, we estimate the fair value of each option award on the date of grant using the Black-Scholes option pricing model. The significant assumptions we utilize in applying the Black-Scholes option pricing model are the risk-free interest rate, expected term, dividend yield and expected volatility.

In 2022, 2021 and 2020, we realized \$360,452, \$438,850 and \$302,901, respectively, in tax benefits upon the exercise of stock options.

Earnings Per Share

We calculate basic earnings per share by dividing net income by the weighted-average number of common shares outstanding for the period. Diluted earnings per share reflects the dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

We have two classes of common stock, which we refer to as Class A common stock and Class B common stock. Our Class A common stock is entitled to the declaration and payment of cash dividends that are at least 10% higher than those we declare and pay on our Class B common stock. Accordingly, we use the two-class method for the computation of earnings per common share. The two-class method is an earnings allocation formula that determines earnings per share separately for each class of common stock based on dividends declared and an allocation of remaining undistributed earnings using a participation percentage that reflects the dividend rights of each class.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the underlying fair value of acquired entities. When completing acquisitions, we seek also to identify separately identifiable intangible assets that we have acquired. We assess goodwill and intangible assets with an indefinite useful life for impairment annually. We also assess goodwill and other intangible assets for impairment upon the occurrence of certain events. In making our assessment, we consider a number of factors including operating results, business plans, economic projections, anticipated future cash flows and current market data. Inherent uncertainties exist with respect to these factors and to our judgment in applying them when we make our assessment. Impairment of goodwill and other intangible assets could result from changes in economic and operating conditions in future periods.

2 - Impact of New Accounting Standards

In September 2016, the FASB issued guidance that amends previous guidance on the impairment of financial instruments by adding an impairment model that requires an entity to recognize expected credit losses as an allowance rather than impairments as credit losses are incurred. The intent of this guidance is to reduce complexity and result in a more timely recognition of expected credit losses. In November 2019, the FASB issued guidance that delays the effective date for "smaller reporting companies," as defined in Item 10(f)(1) of Regulation S-K, to annual and interim reporting periods beginning after December 15, 2022 from December 15, 2019. We are a smaller reporting company and our adoption of this guidance on January 1, 2023 will result in an after-tax adjustment to retained earnings estimated between \$1.5 million and \$2.5 million. We do not expect the adoption of this guidance to have a significant impact on our results of operations or cash flows.

3 - Transactions with Affiliates

Our insurance subsidiaries conduct business and have various agreements with Donegal Mutual that we describe in the following subparagraphs:

a. Reinsurance Pooling and Other Reinsurance Arrangements

Atlantic States, our largest insurance subsidiary, and Donegal Mutual have a pooling agreement under which both companies contribute substantially all of their direct written business to the pool and receive an allocated percentage of the pooled underwriting results, excluding certain reinsurance Donegal Mutual assumes from our insurance subsidiaries. Beginning with policies effective in 2021, Donegal Mutual began to place the business of the Mountain States Insurance Group into the underwriting pool. In addition, Donegal Mutual has a 100% quota-share reinsurance agreement with Southern Mutual Insurance Company, or Southern Mutual, and Donegal Mutual places its assumed business from Southern Mutual into the underwriting pool. Atlantic States has an 80% share of the results of the pool, and Donegal Mutual has a 20% share of the results of the pool. The intent of the pooling agreement is to produce more uniform and stable underwriting results from year to year for each pool participant than they would experience individually and to spread the risk of loss between the participants based on each participant's relative amount of surplus and relative access to capital. Each participant in the pool has at its disposal the capacity of the entire pool, rather than being limited to policy exposures of a size commensurate with its own capital and surplus.

The following amounts represent reinsurance Atlantic States ceded to the pool during 2022, 2021 and 2020:

	2022	2021	2020
Premiums earned	\$ 314,321,443	\$ 305,729,418	\$ 266,400,636
Losses and loss expenses	202,228,589	222,737,225	181,205,743
Prepaid reinsurance premiums	154,472,615	152,323,262	146,387,565
Liability for losses and loss expenses	277,641,902	274,033,812	232,540,607

The following amounts represent reinsurance Atlantic States assumed from the pool during 2022, 2021 and 2020:

	2022	2021	2020
Premiums earned	\$ 578,216,706	\$ 573,891,394	\$ 514,172,448
Losses and loss expenses	395,794,813	383,455,320	309,315,497
Unearned premiums	280,031,908	289,976,879	262,004,199
Liability for losses and loss expenses	496,849,769	455,564,733	377,530,215

Donegal Mutual and MICO had a quota-share reinsurance agreement under which Donegal Mutual assumed 25% of the premiums and losses related to the business of MICO for policies effective through December 31, 2021. Donegal Mutual and MICO terminated this reinsurance agreement on a run-off basis effective January 1, 2022. Donegal Mutual and Peninsula had a quota-share reinsurance agreement under which Donegal Mutual assumed 100% of the premiums and losses related to the workers' compensation product line of Peninsula in certain states for policies effective through December 31, 2021. Donegal Mutual and Peninsula terminated this reinsurance agreement on a run-off basis effective January 1, 2022. Donegal Mutual places its assumed business from MICO and Peninsula into the underwriting pool.

The following amounts represent reinsurance ceded to Donegal Mutual pursuant to these quota-share reinsurance agreements during 2022, 2021 and 2020:

	2022	2021	2020
Premiums earned	\$ 17,989,939	\$ 37,996,474	\$ 39,315,398
Losses and loss expenses	5,194,974	20,037,608	15,471,037
Prepaid reinsurance premiums		18,548,821	17,155,909
Liability for losses and loss expenses	22,642,908	36,659,853	35,306,627

Each of our insurance subsidiaries had a catastrophe reinsurance agreement with Donegal Mutual that provided coverage under any one catastrophic occurrence above a set retention of \$2,000,000, with a combined retention of \$5,000,000 for a catastrophe involving a combination of our insurance subsidiaries, up to the amount Donegal Mutual and our insurance subsidiaries retained under catastrophe reinsurance agreements with unaffiliated reinsurers.

The following amounts represent reinsurance that our insurance subsidiaries ceded to Donegal Mutual pursuant to these reinsurance agreements during 2022, 2021 and 2020:

	2022	2021		2021		2020
Premiums earned	\$ 13,800,018	\$	17,574,161	\$ 15,595,138		
Losses and loss expenses	10,517,709		9,309,624	25,259,527		
Liability for losses and loss expenses	1,271,006		1,658,057	3,812,339		

The following amounts represent the effect of affiliated reinsurance transactions on net premiums our insurance subsidiaries earned during 2022, 2021 and 2020:

	2022	2021	2020
Assumed	\$ 578,216,706	\$ 573,891,394	\$ 514,172,448
Ceded	(346,111,400)	(361,300,053)	(321,311,172)
Net	\$ 232,105,306	\$ 212,591,341	\$ 192,861,276

The following amounts represent the effect of affiliated reinsurance transactions on net losses and loss expenses our insurance subsidiaries incurred during 2022, 2021 and 2020:

	2022	2021	2020
Assumed	\$ 395,790,312	\$ 383,452,056	\$ 309,311,098
Ceded	(217,941,272)	(252,084,457)	(221,936,307)
Net	\$ 177,849,040	\$ 131,367,599	\$ 87,374,791

b. Expense Sharing

Donegal Mutual provides facilities, management and other services to us and our insurance subsidiaries. In addition, Donegal Mutual purchases and maintains the information technology systems that support the business of Donegal Mutual and our insurance subsidiaries. Donegal Mutual allocates certain related expenses to Atlantic States in relation to the relative participation of Atlantic States and Donegal Mutual in the pooling agreement. Our insurance subsidiaries other than Atlantic States reimburse Donegal Mutual for allocated costs of services Donegal Mutual provides on their behalf based on their proportion of the total direct premiums written of the Donegal Insurance Group and other metrics. Donegal Mutual allocates costs related to its development and maintenance of information technology systems over the estimated useful life of those systems (generally five years) and charges a proportionate share of those costs to our insurance subsidiaries based on their percentage of the total net premiums written of the Donegal Insurance Group. Allocated expenses from Donegal Mutual for services it provided to our insurance subsidiaries totaled \$199,177,393, \$186,568,897 and \$153,941,121 for 2022, 2021 and 2020, respectively. To enhance process efficiencies, Donegal Mutual paid certain expenses directly in 2022 and 2021 that our insurance subsidiaries paid directly in 2020, resulting in higher allocations of expenses from Donegal Mutual to our insurance subsidiaries and lower direct expense payments by our insurance subsidiaries in 2022 and 2021 compared to 2020.

Donegal Mutual is currently in the midst of a multi-year effort to modernize certain of its key technology infrastructure and application systems. Donegal Mutual placed the first and second releases of new systems into service in 2020 and 2021, respectively. Donegal Mutual allocated \$7.6 million, \$5.1 million and \$2.8 million of related costs to our insurance subsidiaries

in 2022, 2021 and 2020, respectively. Donegal Mutual will allocate to our insurance subsidiaries their proportionate share of the remaining \$25.7 million of its costs for the first and second releases over the next four years. Donegal Mutual incurred an additional \$18.1 million of deferred costs related to releases under development that were not yet ready for their intended use at December 31, 2022.

Our management believes that the allocation methods Donegal Mutual utilizes are reasonable. In addition, Donegal Mutual and we maintain a coordinating committee that consists of two members of our board of directors, neither of whom is a member of Donegal Mutual's board of directors, and two members of Donegal Mutual's board of directors, neither of whom is a member of our board of directors. The purpose of the coordinating committee is to maintain a process for an ongoing evaluation of the fairness of the terms of all transactions between Donegal Mutual and our insurance subsidiaries.

We include in our consolidated balance sheet the net amount of intercompany balances due to or from Donegal Mutual. During 2021, Donegal Mutual and our insurance subsidiaries aligned the timing of monthly settlements of various intercompany balances, including affiliated reinsurance transactions, expenses Donegal Mutual allocates to our insurance subsidiaries, premiums Donegal Mutual collects on behalf of our insurance subsidiaries, and losses and loss expenses Donegal Mutual pays on behalf of our insurance subsidiaries.

c. Lease Agreement

We lease office equipment with terms ranging from 3 to 10 years to Donegal Mutual under a lease agreement dated January 1, 2011.

4 - Investments

The amortized cost and estimated fair values of our fixed maturities at December 31, 2022 and 2021 are as follows:

	2022						
Held to Maturity	Amortized Cost	Gross Unrealized Gains		Gross Unrealized Losses		Estimated Fair Value	
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 103,362,028	\$	856	\$	10,566,154	\$ 92,796,730	
Obligations of states and political subdivisions	382,097,461		1,809,879		60,494,134	323,413,206	
Corporate securities	190,948,922		_		20,510,543	170,438,379	
Mortgage-backed securities	12,030,949				634,583	11,396,366	
Totals	\$ 688,439,360	\$	1,810,735	\$	92,205,414	\$ 598,044,681	
	,,,						
			20)22			
Available for Sale	Amortized Cost	Gro	20 oss Unrealized Gains		oss Unrealized Losses	Estimated Fair Value	
Available for Sale U.S. Treasury securities and obligations of U.S. government corporations and agencies		Gro	oss Unrealized		oss Unrealized		
U.S. Treasury securities and obligations of U.S.	Amortized Cost		oss Unrealized Gains	Gı	oss Unrealized Losses	Value	
U.S. Treasury securities and obligations of U.S. government corporations and agencies	Amortized Cost \$ 68,537,456		oss Unrealized Gains	Gı	coss Unrealized Losses 5,124,827	\$ 63,521,312	
U.S. Treasury securities and obligations of U.S. government corporations and agenciesObligations of states and political subdivisions	Amortized Cost \$ 68,537,456 45,448,157		oss Unrealized Gains 108,683 33,994	Gı	5,124,827 5,326,367	\$ 63,521,312 40,155,784	
U.S. Treasury securities and obligations of U.S. government corporations and agenciesObligations of states and political subdivisionsCorporate securities	Amortized Cost \$ 68,537,456 45,448,157 218,040,945		108,683 33,994 8,315	Gı	5,124,827 5,326,367 15,211,215	\$ 63,521,312 40,155,784 202,838,045	

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2021

Held to Maturity	Amortized Cost	Gre	oss Unrealized Gains	Gre	oss Unrealized Losses	Estimated Fair Value
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 89,267,988	\$	1,922,976	\$	1,015,040	\$ 90,175,924
Obligations of states and political subdivisions	371,435,776		17,856,745		948,113	388,344,408
Corporate securities	191,147,051		11,576,693		772,809	201,950,935
Mortgage-backed securities	16,253,753		675,944			16,929,697
Totals	\$ 668,104,568	\$	32,032,358	\$	2,735,962	\$ 697,400,964

Available for Sale	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 32,501,080	\$ 144,377	\$ 460,831	\$ 32,184,626
Obligations of states and political subdivisions	55,458,687	2,002,035	82,631	57,378,091
Corporate securities	215,668,644	6,817,036	874,405	221,611,275
Mortgage-backed securities	219,664,635	3,000,806	1,210,418	221,455,023
Totals	\$ 523,293,046	\$ 11,964,254	\$ 2,628,285	\$ 532,629,015

At December 31, 2022, our holdings of obligations of states and political subdivisions included general obligation bonds with an aggregate fair value of \$240.7 million and an amortized cost of \$283.5 million. Our holdings also included special revenue bonds with an aggregate fair value of \$122.9 million and an amortized cost of \$144.0 million. With respect to both categories of bonds, we held no securities of any issuer that comprised more than 10% of that category at December 31, 2022. Education bonds and water and sewer utility bonds represented 48% and 35%, respectively, of our total investments in special revenue bonds based on their carrying values at December 31, 2022. Many of the issuers of the special revenue bonds we held at December 31, 2022 have the authority to impose ad valorem taxes. In that respect, many of the special revenue bonds we held are similar to general obligation bonds.

At December 31, 2021, our holdings of obligations of states and political subdivisions included general obligation bonds with an aggregate fair value of \$284.9 million and an amortized cost of \$272.7 million. Our holdings also included special revenue bonds with an aggregate fair value of \$160.8 million and an amortized cost of \$154.2 million. With respect to both categories of bonds, we held no securities of any issuer that comprised more than 10% of that category at December 31, 2021. Education bonds and water and sewer utility bonds represented 48% and 35%, respectively, of our total investments in special revenue bonds based on their carrying values at December 31, 2021. Many of the issuers of the special revenue bonds we held at December 31, 2021 have the authority to impose ad valorem taxes. In that respect, many of the special revenue bonds we held are similar to general obligation bonds.

We have segregated within accumulated other comprehensive income the net unrealized losses of \$15.1 million arising prior to the November 30, 2013 reclassification date for fixed maturities reclassified from available for sale to held to maturity. We are amortizing this balance over the remaining life of the related securities as an adjustment of yield in a manner consistent with the accretion of discount on the same fixed maturities. We recorded amortization of \$510,819, \$897,073 and \$1.4 million in other comprehensive income in 2022, 2021 and 2020, respectively. At December 31, 2022 and 2021, net unrealized losses of \$4.7 million and \$5.2 million, respectively, remained within accumulated other comprehensive (loss) income.

We set forth below the amortized cost and estimated fair value of fixed maturities at December 31, 2022 by contractual maturity. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

	Amortized Cost	Estimated Fair Value
Held to maturity		
Due in one year or less	\$ 24,608,278	\$ 24,736,944
Due after one year through five years	86,581,717	83,910,606
Due after five years through ten years	245,818,039	218,039,676
Due after ten years	319,400,377	259,961,089
Mortgage-backed securities	12,030,949	11,396,366
Total held to maturity	\$ 688,439,360	\$ 598,044,681
Available for sale		
Due in one year or less	\$ 14,601,260	\$ 14,485,681
Due after one year through five years	163,170,354	154,175,256
Due after five years through ten years	123,462,268	111,296,437
Due after ten years	30,792,676	26,557,767
Mortgage-backed securities	239,886,169	217,276,790
Total available for sale	\$ 571,912,727	\$ 523,791,931

The cost and estimated fair values of our equity securities at December 31, 2022 were as follows:

	Cost Gross Gains Gross Losses			Gross Losses	E	stimated Fair Value	
Equity securities	\$ 30,770,633	\$	5,666,467	\$	1,332,260	\$	35,104,840

The cost and estimated fair values of our equity securities at December 31, 2021 were as follows:

	Cost			Gross Gains	 Gross Losses	Value Value		
Equity securities	\$	43,262,577	\$	20,413,667	\$ 256,271	\$	63,419,973	

The amortized cost of fixed maturities on deposit with various regulatory authorities at December 31, 2022 and 2021 amounted to \$9,473,047 and \$8,852,886, respectively.

We derived net investment income, consisting primarily of interest and dividends, from the following sources:

	2022	2021	2020
Fixed maturities	\$ 34,945,437	\$ 32,343,878	\$ 30,750,231
Equity securities	897,429	1,437,948	1,386,343
Short-term investments	817,428	321,117	427,392
Other	29,250	29,250	29,250
Investment income	36,689,544	34,132,193	32,593,216
Investment expenses	(2,673,432)	(3,006,562)	(3,088,750)
Net investment income	\$ 34,016,112	\$ 31,125,631	\$ 29,504,466

We present below gross gains and losses from investments and the change in the difference between fair value and cost of investments:

		2022		2021		2020	
Gross realized gains:							
Fixed maturities	\$	1,149,761	\$	676,724	\$	818,350	
Equity securities		1,765,923		1,430,465		106,075	
Real estate		477,287					
		3,392,971		2,107,189		924,425	
Gross realized losses:		_					
Fixed maturities		2,129,736		294,126		246,243	
Equity securities		4,113,526		462,335		3,555,304	
		6,243,262		756,461		3,801,547	
Net realized (losses) gains		(2,850,291)		1,350,728		(2,877,122)	
Gross unrealized gains on equity securities		258,532		5,627,949		8,426,806	
Gross unrealized losses on equity securities		(7,593,038)		(501,391)		(2,771,765)	
Net investment (losses) gains	\$	(10,184,797)	\$	6,477,286	\$	2,777,919	
Change in difference between fair value and cost of investments:							
Fixed maturities	\$(1	177,147,840)	\$(27,576,934)	\$ 3	33,876,212	
Equity securities		15,823,189		4,010,973		4,088,003	
Totals	\$(]	161,324,651)	\$(23,565,961)	\$.	37,964,215	

We held fixed maturities with unrealized losses representing declines that we considered temporary at December 31, 2022 as follows:

	Less than	12 months	12 months	or longer	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 90,245,322	\$ 5,326,954	\$ 47,237,638	\$ 10,364,027	
Obligations of states and political subdivisions	261,464,427	49,327,324	47,945,038	16,493,177	
Corporate securities	298,706,256	22,272,711	72,959,284	13,449,047	
Mortgage-backed securities	143,885,626	10,940,722	69,878,986	12,458,518	
Totals	\$794,301,631	\$ 87,867,711	\$ 238,020,946	\$ 52,764,769	

We held fixed maturities with unrealized losses representing declines that we considered temporary at December 31, 2021 as follows:

Less than	12 months	12 months or longer			
Fair Value	Unrealized Losses	Fair Value	Unrealized Losses		
\$ 27,691,051	\$ 412,055	\$ 28,426,248	\$ 1,063,816		
56,654,480	899,139	7,090,499	131,605		
92,736,747	1,609,931	1,462,717	37,283		
90,006,234	1,128,197	2,361,232	82,221		
\$267,088,512	\$ 4,049,322	\$ 39,340,696	\$ 1,314,925		
	Fair Value \$ 27,691,051 56,654,480 92,736,747 90,006,234	Fair Value Losses \$ 27,691,051 \$ 412,055 56,654,480 899,139 92,736,747 1,609,931 90,006,234 1,128,197	Fair Value Unrealized Losses Fair Value \$ 27,691,051 \$ 412,055 \$ 28,426,248 56,654,480 899,139 7,090,499 92,736,747 1,609,931 1,462,717 90,006,234 1,128,197 2,361,232		

We make estimates concerning the valuation of our investments and the recognition of other-than-temporary declines in the value of our investments. For equity securities, we measure investments at fair value, and we recognize changes in fair value in our results of operations. With respect to a debt security that is in an unrealized loss position, we first assess if we intend to sell the debt security. If we determine we intend to sell the debt security, we recognize the impairment loss in our results of

operations. If we do not intend to sell the debt security, we determine whether it is more likely than not that we will be required to sell the debt security prior to recovery. If we determine it is more likely than not that we will be required to sell the debt security prior to recovery, we recognize an impairment loss in our results of operations. If we determine it is more likely than not that we will not be required to sell the debt security prior to recovery, we then evaluate whether a credit loss has occurred. We determine whether a credit loss has occurred by comparing the amortized cost of the debt security to the present value of the cash flows we expect to collect. If we expect a cash flow shortfall, we consider that a credit loss has occurred. If we determine that a credit loss has occurred, we consider the impairment to be other than temporary. We then recognize the amount of the impairment loss related to the credit loss in our results of operations, and we recognize the remaining portion of the impairment loss in our other comprehensive income, net of applicable taxes. In addition, we may write down securities in an unrealized loss position based on a number of other factors, including when the fair value of an investment is significantly below its cost, when the financial condition of the issuer of a security has deteriorated, the occurrence of industry, company or geographic events that have negatively impacted the value of a security and rating agency downgrades. We held 882 debt securities that were in an unrealized loss position at December 31, 2022. Based upon our analysis of general market conditions and underlying factors impacting these debt securities, we considered these declines in value to be temporary.

We did not recognize any impairment losses in 2022, 2021 or 2020. We had no sales or transfers from our held to maturity portfolio in 2022, 2021 or 2020. We had no derivative instruments or hedging activities during 2022, 2021 or 2020.

5 - Fair Value Measurements

We account for financial assets using a framework that establishes a hierarchy that ranks the quality and reliability of inputs, or assumptions, used in the determination of fair value, and we classify financial assets and liabilities carried at fair value in one of the following three categories:

- Level 1 quoted prices in active markets for identical assets and liabilities;
- Level 2 directly or indirectly observable inputs other than Level 1 quoted prices; and
- Level 3 unobservable inputs not corroborated by market data.

For investments that have quoted market prices in active markets, we use the quoted market price as fair value and include these investments in Level 1 of the fair value hierarchy. We classify publicly traded equity securities as Level 1. When quoted market prices in active markets are not available, we base fair values on quoted market prices of comparable instruments or price estimates we obtain from independent pricing services. We classify our fixed maturity investments and non-publicly traded equity securities as Level 2. Our fixed maturity investments consist of U.S. Treasury securities and obligations of U.S. government corporations and agencies, obligations of states and political subdivisions, corporate securities and mortgage-backed securities.

We present our investments in available-for-sale fixed maturity and equity securities at estimated fair value. The estimated fair value of a security may differ from the amount that we could realize if we sold the security in a forced transaction. In addition, the valuation of fixed maturity investments is more subjective when markets are less liquid, increasing the potential that the estimated fair value does not reflect the price at which an actual transaction would occur. We utilize nationally recognized independent pricing services to estimate fair values or obtain market quotations for substantially all of our fixed maturity and equity investments. We generally obtain two prices per security. The pricing services utilize market quotations for fixed maturity and equity securities that have quoted prices in active markets. For fixed maturity securities that generally do not trade on a daily basis, the pricing services prepare estimates of fair value measurements based predominantly on observable market inputs. The pricing services do not use broker quotes in determining the fair values of our investments. Our investment personnel review the estimates of fair value the pricing services provide to determine if the estimates we obtain are representative of fair values based upon the general knowledge of the market of our investment personnel, their research findings related to unusual fluctuations in value and their comparison of such values to execution prices for similar securities. Our investment personnel monitor the market and are familiar with current trading ranges for similar securities and pricing of specific investments. Our investment personnel review all pricing estimates that we receive from the pricing services against their expectations with respect to pricing based on fair market curves, security ratings, coupon rates, security type and recent trading activity. Our investment personnel review documentation with respect to the pricing services' pricing methodology that they obtain periodically to determine if the primary pricing sources, market inputs and pricing frequency for various security types are reasonable. At December 31, 2022, we received two estimates per security from the pricing services, and we priced substantially all of our Level 1 and Level 2 investments using those prices. In our review of the estimates the pricing services provided at December 31, 2022, we did not identify any material discrepancies, and we did not make any adjustments to the estimates the pricing services provided.

We present our cash and short-term investments at estimated fair value. The carrying values in our balance sheet for premium receivables, reinsurance receivables related to paid losses and loss expenses and reinsurance balances payable approximate their fair values. The carrying amounts reported in the balance sheet for our borrowings under lines of credit approximate their fair values. We classify these items as Level 3.

We evaluate our assets and liabilities on a regular basis to determine the appropriate level at which to classify them for each reporting period. Based on our review of the methodology and summary of inputs the pricing services use, we have concluded that our Level 1 and Level 2 investments were classified properly at December 31, 2022 and 2021.

The following table presents our fair value measurements for our investments in available-for-sale fixed maturity and equity securities at December 31, 2022:

	Fair Value Measurements Using									
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)						
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 63,521,312	\$ —	\$ 63,521,312	\$ —						
Obligations of states and political subdivisions	40,155,784		40,155,784							
Corporate securities	202,838,045		202,838,045							
Mortgage-backed securities	217,276,790		217,276,790							
Equity securities	35,104,840	32,820,452	2,284,388							
Total investments in the fair value hierarchy	\$ 558,896,771	\$ 32,820,452	\$ 526,076,319	<u>\$</u>						
Mortgage-backed securities Equity securities	217,276,790 35,104,840	·	217,276,790 2,284,388							

The following table presents our fair value measurements for our investments in available-for-sale fixed maturity and equity securities at December 31, 2021:

	Fair Value Measurements Using									
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)						
U.S. Treasury securities and obligations of U.S. government corporations and agencies	\$ 32,184,626	\$ —	\$ 32,184,626	\$ —						
Obligations of states and political subdivisions	57,378,091		57,378,091	_						
Corporate securities	221,611,275		221,611,275	_						
Mortgage-backed securities	221,455,023		221,455,023	_						
Equity securities	63,419,973	61,130,385	2,289,588							
Total investments in the fair value hierarchy	\$ 596,048,988	\$ 61,130,385	\$ 534,918,603	\$						

6 - Deferred Policy Acquisition Costs

Changes in our insurance subsidiaries' deferred policy acquisition costs are as follows:

	2022	2021	2020
Balance, January 1	\$ 68,028,373	\$ 59,156,958	\$ 59,284,859
Acquisition costs deferred	147,571,857	137,604,415	118,944,099
Amortization charged to earnings	(142,430,000)	(128,733,000)	(119,072,000)
Balance, December 31	\$ 73,170,230	\$ 68,028,373	\$ 59,156,958

7 - Property and Equipment

Property and equipment at December 31, 2022 and 2021 consisted of the following:

2022	2021	Estimated Useful Life	
\$ 8,245,030	\$ 8,382,877	3-15 years	
42,794	322,703	5 years	
2,575,207	2,575,207	5-50 years	
1,386,936	1,386,936	5 years	
12,249,967	12,667,723		
(9,494,862)	(9,710,793)		
\$ 2,755,105	\$ 2,956,930		
	\$ 8,245,030 42,794 2,575,207 1,386,936 12,249,967 (9,494,862)	\$ 8,245,030 \$ 8,382,877 42,794 322,703 2,575,207 2,575,207 1,386,936 1,386,936 12,249,967 12,667,723 (9,494,862) (9,710,793)	

Depreciation expense for 2022, 2021 and 2020 amounted to \$173,535, \$208,641 and \$257,397, respectively.

8 - Liability for Losses and Loss Expenses

The establishment of an appropriate liability for losses and loss expenses is an inherently uncertain process, and we can provide no assurance that our insurance subsidiaries' ultimate liability will not exceed their loss and loss expense reserves and have an adverse effect on our results of operations and financial condition. For example, legislative, judicial and regulatory actions may expand coverage definitions, retroactively mandate coverage or otherwise require our insurance subsidiaries to pay losses for damages that their policies explicitly excluded or did not intend to cover. Furthermore, we cannot predict the timing, frequency and extent of adjustments to our insurance subsidiaries' estimated future liabilities, because the historical conditions and events that serve as a basis for our insurance subsidiaries' estimates of ultimate claim costs may change. As is the case for substantially all property and casualty insurance companies, our insurance subsidiaries have found it necessary in the past to increase their estimated future liabilities for losses and loss expenses in certain periods, and, in other periods, their estimates have exceeded their actual liabilities. Changes in our insurance subsidiaries' estimate of their liability for losses and loss expenses generally reflect actual payments and their evaluation of information received since the prior reporting date.

We summarize activity in our insurance subsidiaries' liability for losses and loss expenses as follows:

	2022	2021	2020
Balance at January 1	\$1,077,620,301	\$ 962,007,437	\$ 869,673,849
Less reinsurance recoverable	(451,261,306)	(404,818,480)	(362,768,427)
Net balance at January 1	626,358,995	557,188,957	506,905,422
Incurred related to:			
Current year	608,900,206	551,917,571	472,709,060
Prior years	(44,821,213)	(31,208,029)	(12,944,767)
Total incurred	564,078,993	520,709,542	459,764,293
Paid related to:			
Current year	302,272,322	269,316,762	236,984,291
Prior years	218,304,130	182,222,742	172,496,467
Total paid	520,576,452	451,539,504	409,480,758
Net balance at December 31	669,861,536	626,358,995	557,188,957
Plus reinsurance recoverable	451,184,222	451,261,306	404,818,480
Balance at December 31	\$1,121,045,758	\$1,077,620,301	\$ 962,007,437

Our insurance subsidiaries recognized a decrease in their liability for losses and loss expenses of prior years of \$44.8 million, \$31.2 million and \$12.9 million in 2022, 2021 and 2020, respectively. Our insurance subsidiaries made no significant changes in their reserving philosophy or claims management personnel, and they have made no significant offsetting changes in estimates that increased or decreased their loss and loss expense reserves in those years. The 2022 development represented 7.2% of the December 31, 2021 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile and commercial automobile lines of business for accident years prior to 2022. The majority of the 2022

development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2021 development represented 5.6% of the December 31, 2020 net carried reserves and resulted primarily from lower-than-expected loss emergence in the personal automobile, workers' compensation and commercial automobile lines of business for accident years prior to 2021. The majority of the 2021 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO. The 2020 development represented 2.6% of the December 31, 2019 net carried reserves and resulted primarily from lower-than-expected severity in the workers' compensation and personal automobile lines of business, partially offset by higher-than-expected severity in the commercial automobile and commercial multi-peril lines of business, for accident years prior to 2020. The majority of the 2020 development related to decreases in the liability for losses and loss expenses of prior years for Atlantic States and MICO.

Short-duration contracts are contracts for which our insurance subsidiaries receive premiums that they recognize as revenue over the period of the contract in proportion to the amount of insurance protection our insurance subsidiaries provide. Our insurance subsidiaries consider the policies they issue to be short-duration contracts. We consider our insurance subsidiaries' material lines of business to be personal automobile, homeowners, commercial automobile, commercial multi-peril and workers' compensation.

Our insurance subsidiaries determine incurred but not reported ("IBNR") reserves by subtracting the cumulative loss and loss expense amounts our insurance subsidiaries have paid and the case reserves our insurance subsidiaries have established at the balance sheet date from their actuaries' estimate of the ultimate cost of losses and loss expenses. Accordingly, our insurance subsidiaries' IBNR reserves include their actuaries' projections of the cost of unreported claims as well as their actuaries' projected development of case reserves on known claims and reopened claims. Our insurance subsidiaries' methodology for estimating IBNR reserves has been in place for many years, and their actuaries made no significant changes to that methodology during 2022.

The actuaries for our insurance subsidiaries generally prepare an initial estimate for ultimate losses and loss expenses for the current accident year by multiplying earned premium by an "a priori," or expected, loss ratio for each line of business our insurance subsidiaries write. Expected loss ratios represent the actuaries' expectation of losses at the time our insurance subsidiaries price and write their policies, before the emergence of any actual claims experience. The actuaries determine an expected loss ratio by analyzing historical experience and adjusting for loss cost trends, loss frequency and severity trends, premium rate level changes, reported and paid loss emergence patterns and other known or observed factors.

The actuaries use a variety of actuarial methods to estimate the ultimate cost of losses and loss expenses. These methods include paid loss development, incurred loss development and the Bornhuetter-Ferguson method from which the actuaries select loss development factor assumptions. The actuaries base their selection of a point estimate on a judgmental weighting of estimates each of these methods produce.

The actuaries consider loss frequency and severity trends when they develop expected loss ratios and point estimates. Loss frequency is a measure of the number of claims per unit of insured exposure, and loss severity is a measure of the average size of claims. Factors that affect loss frequency include changes in weather patterns or economic activity. Factors that affect loss severity include changes in policy limits, reinsurance retentions, inflation rates and judicial interpretations.

Our insurance subsidiaries create a claim file when they receive notice of an actual demand for payment, an event that may lead to a demand for payment or when they otherwise determine that a demand for payment could potentially lead to a future demand for payment on another coverage under the same policy or another policy they have issued. In recent years, our insurance subsidiaries have noted an increase in the period of time between the occurrence of a casualty loss event and the date on which they receive notice of a liability claim. Changes in the length of time between the loss occurrence date and the claim reporting date affect the actuaries' ability to accurately predict loss frequency and the amount of IBNR reserves our insurance subsidiaries require.

Our insurance subsidiaries generally create a claim file for a policy at the claimant level by type of coverage and generally recognize one count for each claim event. In certain lines of business where it is common for multiple parties to claim damages arising from a single claim event, our insurance subsidiaries recognize one count for each claimant involved in the event. Atlantic States recognizes one count for each claim event, or claimant involved in a multiple-party claim event, related to losses Atlantic States assumes through its participation in its pooling agreement with Donegal Mutual. Our insurance subsidiaries accumulate the claim counts and report them by line of business. For purposes of the claim development tables we present below, our insurance subsidiaries count claims on policies they issue even if they eventually close such claims without making a loss payment. Claims our insurance subsidiaries close without making a loss payment typically generate loss expenses. The methods our insurance subsidiaries have used to summarize claim counts have not changed significantly over the time periods we report in the tables below.

The following tables present information about incurred and paid claims development as of December 31, 2022, net of reinsurance, as well as cumulative claim frequency and the total of IBNR reserves plus expected development on reported claims that our insurance subsidiaries included within their net incurred claims amounts. The tables include unaudited information about incurred and paid claims development for the years ended December 31, 2013 through 2021, which we present as supplementary information.

					Claims and A		aim Adjustm ber 31,	ent Expenses	, Net of Rein	sura	nce	A	t Decemb	er 31, 2022
Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021		2022	E Dev on	tal IBNR Plus xpected velopment Reported Claims	Cumulative Number of Reported Claims
					Unaudited									
(dollars and re	ported claims	s in thousands)											
2013	\$124,965	\$ 130,737	\$ 131,594	\$ 132,643	\$ 132,604	\$132,934	\$ 132,853	\$ 132,690	\$ 132,787	\$	132,735	\$	51	60
2014		124,426	124,806	124,210	126,200	126,779	126,734	126,861	126,977		127,108		65	7
2015			137,569	139,333	139,181	142,493	142,408	142,073	142,010		141,965		135	70
2016				150,216	153,937	157,516	157,943	156,935	156,436		156,227		522	73
2017					166,690	127,728	175,939	174,784	173,730		173,032		901	79
2018						186,580	183,358	181,558	180,787		179,732		1,695	8
2019							161,056	157,689	156,300		154,805		2,559	68
2020								111,483	103,585		100,339		3,324	43
2021									119,364		118,752		6,432	47
2022											126,203		19,934	48
									Total	\$	1,410,898			
Personal Automobile										_				
			•	Cumulative P Fo	aid Claims a r the Year E			stment Expe	nses, Net of F	Reins	urance			
	2013	2014	2015					stment Exper	nses, Net of F	Reins	2022			
	2013	2014		Fo	r the Year E	nded Decem	ber 31,	•		Reins				
Year	2013	2014		Fo	r the Year E	nded Decem	ber 31,	•		Reins				
Year	2013 \$ 84,241	2014 \$ 109,051		Fo	r the Year E	nded Decem	ber 31,	•		Reins				
		\$ 109,051	2015 \$ 120,118	\$ 125,946	2017 Unaudited \$ 130,026	2018 \$131,326	2019 \$ 131,642	\$ 132,215	\$ 132,300		2022 132,420			
Year (in thousands)			2015	2016	2017 Unaudited	2018 \$131,326 123,815	\$ 131,642 124,926	2020	2021		132,420 126,701			
Year (in thousands) 2013 2014 2015		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395	\$ 131,326 123,815 135,027	\$ 131,642 124,926 139,121	\$ 132,215 125,619 140,028	\$ 132,300 125,762 140,892		132,420 126,701 141,172			
Year (in thousands) 2013 2014 2015 2016		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321	\$ 131,642 124,926 139,121 151,159	\$ 132,215 125,619 140,028 153,521	\$ 132,300 125,762 140,892 154,769		132,420 126,701 141,172 155,521			
Year (in thousands) 2013 2014 2015		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395	\$131,326 123,815 135,027 143,321 142,372	\$ 131,642 124,926 139,121 151,159 159,879	\$ 132,215 125,619 140,028 153,521 166,099	\$ 132,300 125,762 140,892 154,769 169,190		132,420 126,701 141,172 155,521 170,895			
Year (in thousands) 2013 2014 2015 2016 2017		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321	\$ 131,642 124,926 139,121 151,159 159,879 150,175	\$ 132,215 125,619 140,028 153,521 166,099 163,036	\$ 132,300 125,762 140,892 154,769 169,190 169,651		132,420 126,701 141,172 155,521 170,895 173,922			
Year (in thousands) 2013 2014 2015 2016 2017 2018 2019		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321 142,372	\$ 131,642 124,926 139,121 151,159 159,879	\$ 132,215 125,619 140,028 153,521 166,099 163,036 127,187	\$ 132,300 125,762 140,892 154,769 169,190 169,651 141,004		132,420 126,701 141,172 155,521 170,895 173,922 146,667			
Year (in thousands) 2013 2014 2015 2016 2017 2018 2019 2020		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321 142,372	\$ 131,642 124,926 139,121 151,159 159,879 150,175	\$ 132,215 125,619 140,028 153,521 166,099 163,036	\$ 132,300 125,762 140,892 154,769 169,190 169,651 141,004 81,783		132,420 126,701 141,172 155,521 170,895 173,922 146,667 89,736			
Year (in thousands) 2013 2014 2015 2016 2017 2018 2019 2020 2021		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321 142,372	\$ 131,642 124,926 139,121 151,159 159,879 150,175	\$ 132,215 125,619 140,028 153,521 166,099 163,036 127,187	\$ 132,300 125,762 140,892 154,769 169,190 169,651 141,004		132,420 126,701 141,172 155,521 170,895 173,922 146,667 89,736 93,998			
Year (in thousands) 2013 2014 2015 2016 2017 2018 2019 2020		\$ 109,051	\$ 120,118 104,736	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507	\$131,326 123,815 135,027 143,321 142,372	\$ 131,642 124,926 139,121 151,159 159,879 150,175	\$ 132,215 125,619 140,028 153,521 166,099 163,036 127,187	\$ 132,300 125,762 140,892 154,769 169,190 169,651 141,004 81,783 76,477	\$	132,420 126,701 141,172 155,521 170,895 173,922 146,667 89,736 93,998 83,616			
Year (in thousands) 2013 2014 2015 2016 2017 2018 2019 2020 2021		\$ 109,051	\$ 120,118 104,736 93,611	\$ 125,946 114,893 116,303	\$ 130,026 120,491 128,395 129,507 111,964	\$131,326 123,815 135,027 143,321 142,372 115,585	\$ 131,642 124,926 139,121 151,159 159,879 150,175 103,101	\$ 132,215 125,619 140,028 153,521 166,099 163,036 127,187	\$ 132,300 125,762 140,892 154,769 169,190 169,651 141,004 81,783	\$	132,420 126,701 141,172 155,521 170,895 173,922 146,667 89,736 93,998			

Liabilities for claims and claims adjustment expenses, net of reinsurance

Homeowners At December 31, 2022

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31,

Accident Year	2013	2014	2015	2016	2017 Unaudited	2018	2019	2020	2021	2022	Total IB Plus Expe Developn on Repor Claim	cted ient ted	Cumulative Number of Reported Claims
(dollars and rep	ortad alaims	in thousands	`		Onaudited								
(donars and rep	orteu ciainis	iii uiousaiius	,										
2013	\$ 50,887	\$ 51,121	\$ 51,122	\$ 50,874	\$ 50,988	\$ 50,971	\$ 51,008	\$ 51,064	\$ 51,053	\$ 51,021	\$	_	13
2014		56,916	58,378	57,680	57,332	57,288	57,402	57,367	57,371	57,353		_	17
2015			63,359	63,925	63,053	63,071	63,099	62,993	63,043	63,036		10	14
2016				62,443	64,064	63,735	63,355	63,279	63,409	63,472		35	12
2017					79,283	79,911	79,305	79,247	79,065	78,815		62	17
2018						81,965	83,385	82,905	82,566	82,058		230	18
2019							73,294	73,554	73,234	72,168		457	16
2020								61,633	62,718	61,595		835	14
2021									67,677	66,996	1,	455	11
2022										82,433	7,	556	9
									Total	\$ 678,947			

Homeowners

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021		2022
					Unaudited						
(in thousands)											
2013	\$ 40,949	\$ 49,410	\$ 50,210	\$ 50,478	\$ 51,043	\$ 50,902	\$ 50,967	\$ 50,965	\$ 50,955	\$	50,923
2014		45,823	56,255	56,990	57,195	56,995	57,243	57,336	57,339		57,318
2015			51,885	61,542	62,204	62,590	62,844	62,943	62,936		62,938
2016				50,125	61,145	62,760	63,144	63,162	63,217		63,266
2017					67,077	77,663	78,006	78,127	78,454		78,528
2018						70,385	79,892	80,905	81,464		81,568
2019							58,074	69,145	70,416		70,884
2020								51,226	60,348		60,809
2021									52,161		63,920
2022										_	63,107
									Total		653,261
			All outsta	nding liabi	lities before	2013, net	of reinsuran	nce			219
			Liabilities	s for claims	and claims	adjustmen	t expenses,	net of reins	urance	\$	25,905

Commercial Automobile

At December 31, 2022

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31,

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	 2022	Plus Dev on	tal IBNR Expected relopment Reported Claims	Cumulative Number of Reported Claims
					Unaudited								
(dollars and rep	ported claims	in thousands)										
2013	\$ 32,902	\$ 33,749	\$ 34,751	\$ 35,240	\$ 36,404	\$ 36,435	\$ 36,569	\$ 36,181	\$ 36,165	\$ 36,133	\$	27	8
2014		42,760	44,544	47,326	48,213	49,284	49,168	49,308	49,291	49,285		33	11
2015			46,526	48,323	51,412	54,259	54,517	54,619	53,793	53,477		74	12
2016				54,302	57,353	65,905	67,127	66,894	66,085	65,922		179	13
2017					61,484	67,927	67,697	67,249	65,310	64,631		205	14
2018						79,307	81,396	82,313	83,043	82,226		860	15
2019							88,864	91,245	90,290	86,140		3,066	16
2020								90,367	87,766	85,016		5,973	14
2021									109,824	99,231		16,504	14
2022										115,287		38,312	14
									Total	\$ 737,348			

Commercial Automobile

	To the Tell Ended December 61,									
Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
					Unaudited					
(in thousands)										
2013	\$ 16,306	\$ 23,557	\$ 26,879	\$ 31,053	\$ 34,083	\$ 36,004	\$ 36,106	\$ 36,092	\$ 36,087	\$ 36,081
2014		22,707	31,089	39,436	44,374	47,290	48,418	48,603	48,714	48,757
2015			23,875	35,342	41,678	48,261	51,605	51,992	52,728	53,052
2016				27,033	38,237	48,837	57,237	60,485	64,421	65,076
2017					28,707	40,213	49,703	57,128	59,889	62,187
2018						33,862	47,941	57,451	69,487	74,421
2019							36,948	53,026	63,575	72,139
2020								31,884	46,459	60,665
2021									39,851	56,101
2022										 46,242
									Total	574,721
			All outsta	anding liabi	lities before	2013, net	of reinsura	ince		56
			Liabilitie	s for claims	and claims	adjustmer	nt expenses	, net of rein	surance	\$ 162,683

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31,

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
					Unaudited							
(dollars and rep	ported claims	in thousands)									
2013	\$ 35,683	\$ 35,679	\$ 37,292	\$ 37,205	\$ 37,981	\$ 37,365	\$ 37,453	\$ 37,495	\$ 37,630	\$ 37,598	\$ —	6
2014		48,204	50,135	51,843	52,336	53,294	53,116	52,926	52,933	53,502	_	7
2015			42,070	43,874	44,728	45,104	45,873	45,366	45,420	45,595	_	6
2016				43,005	46,988	48,267	48,871	48,732	48,823	48,802	137	6
2017					56,185	56,043	56,517	54,812	55,076	54,244	208	7
2018						66,265	66,470	67,749	67,810	65,911	1,632	7
2019							71,865	73,836	76,326	75,821	4,491	7
2020								83,195	79,910	76,490	8,388	8
2021									116,827	117,574	22,939	7
2022										142,395	44,828	6
									Total	\$ 717,932		

Commercial Multi-Peril

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021		2022		
					Unaudited								
(in thousands)													
2013	\$ 19,875	\$ 26,216	\$ 29,159	\$ 33,614	\$ 35,104	\$ 36,321	\$ 37,333	\$ 37,436	\$ 37,488	\$	37,575		
2014		27,920	35,520	40,936	47,021	50,017	51,615	52,103	52,252		52,875		
2015			21,837	29,419	34,323	39,162	42,849	44,090	44,439		44,764		
2016				19,660	29,402	34,612	41,193	43,435	44,944		47,432		
2017					27,399	36,926	42,691	46,361	49,488		51,494		
2018						30,597	42,296	48,050	54,913		59,118		
2019							28,210	41,266	47,522		55,951		
2020								34,729	46,193		52,646		
2021									46,768		69,735		
2022											57,641		
									Total		529,231		
			All outsta	nding liabil	lities before	2013, net	of reinsura	nce			699		

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance For the Year Ended December 31,

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021		2022	Total IBNR Plus Expected Development on Reported Claims	Cumulative Number of Reported Claims
					Unaudited								
(dollars and repo	rted claims in	thousands)											
2013	\$ 46,325	\$ 47,027	\$ 44,289	\$ 42,828	\$ 42,327	\$ 42,555	\$ 42,651	\$ 42,341	\$ 42,427	\$	43,059	\$ 1	6
2014		51,508	51,553	49,288	48,537	47,540	47,693	47,849	47,620		47,794	14	6
2015			53,332	49,615	45,991	44,986	43,006	42,597	42,225		42,043	240	5
2016				58,814	49,802	47,883	44,969	44,098	43,559		43,484	561	5
2017					60,450	56,351	52,687	51,464	49,557		48,802	1,105	5
2018						62,197	55,291	52,514	47,912		47,007	1,470	6
2019							60,998	59,624	57,728		56,480	1,897	6
2020								57,172	57,850		57,384	2,990	5
2021									67,035		65,530	6,505	6
2022										_	67,046	21,062	6
									Total	\$	518,629		

Workers' Compensation

Accident Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	_	2022
					Unaudited						
(in thousands)											
2013	\$ 13,052	\$ 26,043	\$ 32,783	\$ 36,351	\$ 38,877	\$ 39,617	\$ 40,361	\$ 40,827	\$ 41,209	\$	41,599
2014		13,932	28,513	36,284	40,393	42,465	43,866	44,403	44,671		45,314
2015			13,071	27,531	34,192	36,929	37,936	38,596	39,096		39,478
2016				14,709	30,344	37,178	40,570	41,208	41,543		41,809
2017					15,581	31,990	39,684	42,954	44,242		45,174
2018						17,644	31,928	37,072	41,611		43,279
2019							16,939	33,009	41,740		47,121
2020								14,591	32,817		44,089
2021									20,931		42,633
2022											18,643
									Total		409,139
			All outstar	nding liabil	ities before	2013, net o	of reinsurar	nce		_	4,843
			Liabilities	for claims	and claims	adjustment	expenses,	net of rein	surance	\$	114,333

The following table presents a reconciliation of the net incurred and paid claims development tables to the liability for claims and claims adjustment expenses in our consolidated balance sheet:

(in thousands)	At	December 31, 2022
Net outstanding liabilities:	-	
Personal automobile	\$	97,163
Homeowners		25,905
Commercial automobile		162,683
Commercial multi-peril		189,400
Workers' compensation		114,333
Other		30,510
		619,994
Reinsurance recoverable:		
Personal automobile	\$	104,349
Homeowners		14,712
Commercial automobile		101,574
Commercial multi-peril		108,853
Workers' compensation		90,454
Other		7,808
		427,750
Unallocated loss adjustment expenses	\$	73,302
Gross liability for unpaid losses and loss expenses	\$	1,121,046

The following table presents supplementary information about average historical claims duration as of December 31, 2022:

	Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance												
Years	1	2	3	4	5	6	7	8	9	10			
onal automobile	65.4 %	16.7 %	8.5 %	4.2 %	2.4 %	0.9 %	0.5 %	0.2 %	0.4 %	0.1 %			
eowners	81.0	15.6	1.3	0.5	0.3	0.1	0.1	_	_	_			
mercial automobile	42.3	18.1	13.7	11.8	6.0	3.6	0.8	0.3	_	_			

Person Home Commercial automobile 0.2 Commercial multi-peril 45.3 17.2 9.4 10.8 5.7 3.1 2.4 0.4 0.7 8.2 1.8 0.9 Workers' compensation 30.9 32.0 15.7 3.4 1.2 0.9 1.1

9 - Borrowings

Lines of Credit

In August 2020, we entered into a credit agreement with Manufacturers and Traders Trust Company ("M&T") that related to a \$20.0 million unsecured demand line of credit. The line of credit has no expiration date, no annual fees and no covenants. At December 31, 2022, we had no outstanding borrowings from M&T and had the ability to borrow up to \$20.0 million at interest rates equal to the then-current LIBOR rate plus 2.00%.

Atlantic States is a member of the FHLB of Pittsburgh. Through its membership, Atlantic States has the ability to issue debt to the FHLB of Pittsburgh in exchange for cash advances. Atlantic States has a fixed-rate cash advance of \$35.0 million that was outstanding at December 31, 2022. The cash advance carries a fixed interest rate of 1.74% and is due in August 2024. In March 2020, Atlantic States issued \$50.0 million of debt to the FHLB of Pittsburgh in exchange for a cash advance in the same amount that carried a fixed interest rate of 0.83%. Atlantic States obtained this contingent liquidity funding in light of uncertainty surrounding the economic impact of the COVID-19 pandemic. Atlantic States repaid this advance when it became due in March 2021. The table below presents the amount of FHLB of Pittsburgh stock Atlantic States purchased, collateral pledged and assets related to Atlantic States' membership in the FHLB of Pittsburgh at December 31, 2022.

FHLB stock purchased and owned as part of the agreement	\$ 1,573,300
Collateral pledged, at par (carrying value \$42,471,534)	46,378,384
Borrowing capacity currently available	4,620,984

Subordinated Debentures

In September 2021, upon receipt of approval from the Michigan Department of Insurance and Financial Services, MICO repaid in full the \$5.0 million surplus note held previously by Donegal Mutual, along with accrued interest of \$178,082.

10 - Reinsurance

Unaffiliated Reinsurers

Our insurance subsidiaries and Donegal Mutual participate in a consolidated third-party reinsurance program, for which the coverage and parameters are common to all of our insurance subsidiaries and Donegal Mutual. The program utilizes several different reinsurers, all of which have an A.M. Best rating of A- (Excellent) or better or, with respect to foreign reinsurers, have a financial condition that, in the opinion of our management, is equivalent to a company with at least an A- rating from A.M. Best. The following information describes the external reinsurance Donegal Mutual and our insurance subsidiaries had in place for 2022:

- excess of loss reinsurance, under which Donegal Mutual and our insurance subsidiaries recovered losses over a set retention of \$2.0 million; and
- catastrophe reinsurance, under which Donegal Mutual and our insurance subsidiaries recovered 100% of an accumulation of many losses resulting from a single event, including natural disasters, over a set retention of \$15.0 million up to aggregate losses of \$185.0 million per occurrence.

As many as 29 reinsurers provided coverage for 2022 on any one treaty with no reinsurer taking more than 17.5% of any one treaty. The amount of coverage provided under each of these types of reinsurance depended upon the amount, nature, size and location of the risks being reinsured.

In order to write automobile insurance in the State of Michigan, MICO is required to be a member of the Michigan Catastrophic Claims Association ("MCCA"). The MCCA provides reinsurance to MICO for personal automobile and commercial automobile personal injury claims in the state of Michigan over a set retention. In November 2021, the MCCA approved the return of approximately \$3.0 billion of its estimated surplus to its member insurance companies and provided guidance to those companies with respect to the payment of refunds to Michigan policyholders in the first half of 2022. We recorded a receivable from the MCCA and a corresponding payable for cash refunds due to Michigan policyholders in the amount of \$18.1 million on our balance sheet as of December 31, 2021. In March 2022, we received such payment from the MCCA and subsequently paid the refunds due to our Michigan policyholders.

In addition to the pooling agreement and third-party reinsurance, our insurance subsidiaries had a catastrophe reinsurance agreement with Donegal Mutual, under which each of our insurance subsidiaries recovered 100% of an accumulation of multiple losses resulting from a single event, including natural disasters, over a set retention of \$2.0 million up to aggregate losses of \$13.0 million per occurrence. The agreement also provided additional coverage for an accumulation of losses from a single event including a combination of our insurance subsidiaries over a combined retention of \$5.0 million.

Our insurance subsidiaries and Donegal Mutual also purchased facultative reinsurance to cover certain exposures, including property exposures in excess of the covered limits of their respective treaty reinsurance.

The following amounts represent ceded reinsurance transactions with unaffiliated reinsurers during 2022, 2021 and 2020:

	2022	2021	2020
Premiums written	\$ 37,002,702	\$ 38,173,733	\$ 34,165,635
Premiums earned	36,947,675	37,984,833	35,358,765
Losses and loss expenses	31,096,016	29,999,528	9,835,268
Prepaid reinsurance premiums	6,118,784	6,063,759	5,874,859
Liability for losses and loss expenses	149,628,406	138,909,584	133,158,907

Total Reinsurance

The following amounts represent total ceded reinsurance transactions with both affiliated and unaffiliated reinsurers during 2022, 2021 and 2020:

	2022	2021	2020
Premiums earned	\$ 383,059,075	\$ 399,284,886	\$ 356,669,937
Losses and loss expenses	249,037,288	282,083,985	231,771,575
Prepaid reinsurance premiums	160,591,399	176,935,842	169,418,333
Liability for losses and loss expenses	451,184,222	451,261,306	404,818,480

The following amounts represent the effect of reinsurance on premiums written for 2022, 2021 and 2020:

	2022	2021	2020
Direct	\$ 641,971,207	\$ 609,204,706	\$ 586,681,839
Assumed	568,272,026	601,864,198	539,070,557
Ceded	(366,714,634)	(406,802,395)	(383,612,503)
Net premiums written	\$ 843,528,599	\$ 804,266,509	\$ 742,139,893

The following amounts represent the effect of reinsurance on premiums earned for 2022, 2021 and 2020:

	2022	2021	2020
Direct	\$627,331,528	\$601,408,581	\$584,537,580
Assumed	578,216,997	573,891,506	514,172,696
Ceded	(383,059,075)	(399,284,886)	(356,669,937)
Net premiums earned	\$822,489,450	\$776,015,201	\$742,040,339
Percentage of assumed premiums earned to net premiums earned	70.3 %	74.0 %	69.3 %

11 - Income Taxes

Our provision for income tax (benefit) expense for 2022, 2021 and 2020 consisted of the following:

	2022			2021	2020
Current federal income tax	\$	1,280,041	\$	3,998,431	\$ 10,450,803
Deferred federal income tax		(2,958,735)		1,085,903	6,448
Income tax (benefit) expense	\$	(1,678,694)	\$	5,084,334	\$ 10,457,251

Our effective tax rate is different from the amount computed at the statutory federal rate of 21%. The reasons for such difference and the related tax effects are as follows:

 2022		2021		2020
\$ (3,638,099)	\$	30,338,508	\$	63,272,503
(764,001)		6,371,087		13,287,226
(1,446,102)		(1,491,154)		(1,468,806)
384,944		401,717		395,663
(93,675)		(115,713)		(113,845)
_		_		(1,640,084)
(360,452)		(438,850)		(302,901)
 600,592		357,247		299,998
\$ (1,678,694)	\$	5,084,334	\$	10,457,251
\$	\$ (3,638,099) (764,001) (1,446,102) 384,944 (93,675) — (360,452) 600,592	\$ (3,638,099) \$ (764,001) (1,446,102) 384,944 (93,675) — (360,452) 600,592	\$ (3,638,099) \$ 30,338,508 (764,001) 6,371,087 (1,446,102) (1,491,154) 384,944 401,717 (93,675) (115,713) — — (360,452) (438,850) 600,592 357,247	\$ (3,638,099) \$ 30,338,508 \$ (764,001) 6,371,087 (1,446,102) (1,491,154) 384,944 401,717 (93,675) (115,713) — — (360,452) (438,850) 600,592 357,247

The tax effects of temporary differences that give rise to significant portions of our deferred tax assets and deferred tax liabilities at December 31, 2022 and 2021 are as follows:

	2022			2021
Deferred tax assets:				
Unearned premium	\$	17,560,126	\$	16,674,502
Loss reserves		9,712,582		9,568,677
Net unrealized losses		11,088,307		_
Net operating loss carryforward		_		25,174
Net state operating loss carryforward - DGI Parent		8,068,185		7,865,563
Other		1,472,110		1,859,687
Total gross deferred tax assets		47,901,310		35,993,603
Less valuation allowance		(8,068,185)		(7,865,563)
Net deferred tax assets		39,833,125		28,128,040
Deferred tax liabilities:				
Deferred policy acquisition costs		15,365,749		14,285,958
Loss reserve transition adjustment		856,267		1,148,529
Other		2,008,092		6,007,934
Total gross deferred tax liabilities		18,230,108		21,442,421
Net deferred tax asset	\$	21,603,017	\$	6,685,619

Our income tax expense for 2020 included a \$1.6 million income tax benefit related to the carryback of 2018 net operating losses to past tax years with higher statutory income tax rates than are currently in effect, as allowed under the Coronavirus Aid, Relief and Economic Security Act that was enacted in March 2020.

We provide a valuation allowance when we believe it is more likely than not that we will not realize some portion of a deferred tax asset. At December 31, 2022 and 2021, we established a valuation allowance of \$8.1 million and \$7.9 million, respectively, for our net state operating loss carryforward. We determined that we were not required to establish a valuation allowance for the other net deferred tax assets of \$39.8 million and \$28.1 million at December 31, 2022 and 2021, respectively, since it is more likely than not that we will realize these deferred tax assets through reversals of existing temporary differences, future taxable income and our implementation of tax-planning strategies.

Tax years 2016 through 2022 remained open for examination by tax authorities at December 31, 2022. Federal income taxes recoverable at December 31, 2022 and 2021 included refunds of \$2.3 million due to us for tax years prior to 2021.

12 - Stockholders' Equity

Each share of our Class A common stock outstanding at the time of the declaration of any dividend or other distribution payable in cash upon the shares of our Class B common stock is entitled to a dividend or distribution payable at the same time and to stockholders of record on the same date in an amount at least 10% greater than any dividend declared upon each share of our Class B common stock. In the event of our merger or consolidation with or into another entity, the holders of our Class A common stock and the holders of our Class B common stock are entitled to receive the same per share consideration in such merger or consolidation. In the event of our liquidation, dissolution or winding-up, any assets available to common stockholders will be distributed pro-rata to the holders of our Class A common stock and our Class B common stock after payment of all of our obligations.

On July 18, 2013, our board of directors authorized a share repurchase program pursuant to which we have the authority to purchase up to 500,000 additional shares of our Class A common stock at prices prevailing from time to time in the open market subject to the provisions of the SEC Rule 10b-18 and in privately negotiated transactions. We did not purchase any shares of our Class A common stock under this program during 2022, 2021 or 2020. We have purchased a total of 57,658 shares of our Class A common stock under this program from its inception through December 31, 2022.

At December 31, 2022 and 2021, our treasury stock consisted of 3,002,588 and 72,465 shares of Class A common stock and Class B common stock, respectively.

13 - Stock Compensation Plans

Equity Incentive Plans

Since 1996, we have maintained an Equity Incentive Plan for Employees. During 2019, we adopted a plan that made a total of 4,500,000 shares of Class A common stock available for issuance to employees of our subsidiaries and affiliates. The plan provides for the granting of awards by our board of directors in the form of stock options, stock appreciation rights, restricted stock or any combination of the above. The plan provides that stock options may become exercisable up to five years from their date of grant, with an option price not less than fair market value on the date preceding the date of grant. We have not granted any stock appreciation rights.

Since 1996, we have maintained an Equity Incentive Plan for Directors. During 2019, we adopted a plan that made 500,000 shares of Class A common stock available for issuance to our directors and the directors of our subsidiaries and affiliates. We may make awards in the form of stock options. The plan also provides for the issuance of 500 shares of restricted stock on the first business day of January in each year to each of our directors and each director of Donegal Mutual who does not serve as one of our directors. We issued 8,500 shares of restricted stock on January 4, 2022 under our director plan. We issued 10,000 shares of restricted stock on January 4, 2021 under our director plan. We issued 8,500 shares of restricted stock on January 2, 2020 under our director plan.

No further shares are available for future option grants for plans in effect prior to 2019.

We measure all share-based payments to employees, including grants of employee stock options, using a fair-value-based method and record such expense in our results of operations. In determining the expense we record for stock options granted to directors and employees of our subsidiaries and affiliates, we estimate the fair value of each option award on the date of grant using the Black-Scholes option pricing model. The significant assumptions we utilize in applying the Black-Scholes option pricing model are the risk-free interest rate, expected term, dividend yield and expected volatility. The risk-free interest rate is the implied yield currently available on U.S. Treasury zero coupon issues with a remaining term equal to the expected term used as the assumption in the model. We base the expected term of an option award on our historical experience for similar awards. We determine the dividend yield by dividing the per share dividend by the grant date stock price. We base the expected volatility on the volatility of our stock price over a historical period comparable to the expected term.

The weighted-average grant date fair value of options we granted during 2022 was \$1.48. We calculated this fair value based upon a risk-free interest rate of 3.91%, an expected life of three years, an expected volatility of 22% and an expected dividend yield of 5%.

The weighted-average grant date fair value of options we granted during 2021 was \$1.21. We calculated this fair value based upon a risk-free interest rate of 0.91%, an expected life of three years, an expected volatility of 20% and an expected dividend yield of 4%.

The weighted-average grant date fair value of options we granted during 2020 was \$1.15. We calculated this fair value based upon a risk-free interest rate of 0.20%, an expected life of three years, an expected volatility of 20% and an expected dividend yield of 4%.

We charged compensation expense for our stock compensation plans against income before income taxes of \$818,853, \$965,701 and \$1.1 million for the years ended December 31, 2022, 2021 and 2020, respectively, with a corresponding income tax benefit of \$171,959, \$202,797 and \$229,698. At December 31, 2022 and 2021, our total unrecognized compensation cost related to non-vested share-based compensation granted under our stock compensation plans was \$1.7 million and \$1.5 million, respectively. We expect to recognize this cost over a weighted average period of 2.1 years.

During 2022, we received cash from option exercises under all stock compensation plans of \$17.4 million. We realized actual tax benefits for the tax deductions from option exercises of share-based compensation of \$360,452 for 2022. During 2021, we received cash from option exercises under all stock compensation plans of \$12.3 million. We realized actual tax benefits for the tax deductions from option exercises of share-based compensation of \$438,850 for 2021. During 2020, we received cash from option exercises under all stock compensation plans of \$17.5 million. We realized actual tax benefits for the tax deductions from option exercises of share-based compensation of \$302,901 for 2020.

Information regarding activity in our stock option plans follows:

	Number of Options	Weighted- Average Exercise Price Per Share
Outstanding at December 31, 2019	10,435,990	\$15.09
Granted - 2020	935,099	14.45
Exercised - 2020	(1,294,606)	13.52
Forfeited - 2020	(303,908)	15.23
Expired - 2020	(78,223)	13.64
Outstanding at December 31, 2020	9,694,352	15.24
Granted - 2021	906,500	14.39
Exercised - 2021	(946,646)	13.00
Forfeited - 2021	(404,664)	15.69
Expired - 2021	(1,139,816)	16.40
Outstanding at December 31, 2021	8,109,726	15.22
Granted - 2022	956,600	14.08
Exercised - 2022	(1,202,806)	14.50
Forfeited - 2022	(545,618)	15.35
Expired - 2022	(935,723)	16.81
Outstanding at December 31, 2022	6,382,179	\$14.94
Exercisable at:		
December 31, 2020	7,786,934	\$15.42
December 31, 2021	6,297,849	\$15.43
December 31, 2022	4,627,630	\$15.21

Shares available for future option grants at December 31, 2022 totaled 1.4 million shares under all plans.

The following table summarizes information about stock options outstanding at December 31, 2022:

Grant Date	Exercise Price	Number of Options Outstanding	Weighted-Average Remaining Contractual Life	Number of Options Exercisable
December 19, 2013	15.90	1,492,596	1.0 years	1,492,596
December 18, 2014	15.80	979,839	2.0 years	979,839
December 20, 2018	13.69	497,470	1.0 years	497,470
December 19, 2019	14.98	868,050	2.0 years	868,050
December 17, 2020	14.43	755,424	3.0 years	503,611
January 4, 2021	14.07	10,000	3.0 years	6,667
December 16, 2021	14.39	825,200	4.0 years	275,064
February 9, 2022	14.15	3,000	4.1 years	1,000
April 18, 2022	13.28	10,000	4.3 years	3,333
December 15, 2022	14.09	940,600	5.0 years	
	Total	6,382,179		4,627,630

Employee Stock Purchase Plan

Since 1996, we have maintained an Employee Stock Purchase Plan. During 2011, we adopted a plan that made 300,000 shares of our Class A common stock available for issuance, which we amended in 2019 to make 500,000 shares of our Class A common stock available for issuance. The 2011 plan expired during 2021. During 2021, we adopted a new plan that made 500,000 shares of our Class A common stock available for issuance and extends over a 10-year period. The plan provides for shares to be offered to all eligible employees at a purchase price equal to the lesser of 85% of the fair market value of our

Class A common stock on the last day before the first day of each enrollment period (June 1 and December 1 of each year) under the plan or 85% of the fair market value of our Class A common stock on the last day of each subscription period (June 30 and December 31 of each year).

A summary of plan activity follows:

	Shares	Issued
	Price	Shares
January 1, 2020	12.28	20,424
July 1, 2020	12.09	22,662
January 1, 2021	11.96	23,336
July 1, 2021	11.88	24,619
January 1, 2022	12.15	24,907
July 1, 2022	11.56	23,454

On January 1, 2023, we issued 26,545 shares at a price of \$12.07 per share under this plan.

Agency Stock Purchase Plan

Since 1996, we have maintained an Agency Stock Purchase Plan. During 2018, we adopted a plan that made 350,000 shares of our Class A common stock available for issuance to agents of our insurance subsidiaries and Donegal Mutual. During 2021, we amended the 2018 plan to make 400,000 shares of our Class A common stock available for issuance. The 2018 plan expired in 2021. During 2021, we adopted a new plan that made 500,000 shares of our Class A common stock available for issuance to agents of our insurance subsidiaries and Donegal Mutual. The plan permits an agent to invest up to \$12,000 per subscription period (April 1 to September 30 and October 1 to March 31 of each year) under various methods. We issue stock at the end of each subscription period at a price equal to 90% of the average market price during the last ten trading days of each subscription period. During 2022, 2021 and 2020, we issued 104,393, 99,828 and 101,647 shares, respectively, under this plan. The expense we recognized under this plan was not material.

14 - Statutory Net Income, Capital and Surplus and Dividend Restrictions

The following table presents selected information, as filed with state insurance regulatory authorities, for our insurance subsidiaries as determined in accordance with accounting practices prescribed or permitted by such insurance regulatory authorities:

	2022	2021	2020
Atlantic States:			
Statutory capital and surplus	\$ 263,579,356	\$ 278,883,189	\$ 279,796,696
Statutory unassigned surplus	158,056,862	174,073,348	175,777,393
Statutory net (loss) income	(3,124,687)	(7,417,845)	20,735,871
Southern:			
Statutory capital and surplus	64,463,124	64,238,221	57,142,228
Statutory unassigned surplus	7,523,951	7,330,382	300,409
Statutory net (loss) income	(410,561)	6,927,576	4,350,677
Peninsula:			
Statutory capital and surplus	52,234,684	47,867,789	49,285,069
Statutory unassigned surplus	33,925,484	29,558,589	30,975,869
Statutory net income	4,192,697	3,536,404	10,955,796
MICO:			
Statutory capital and surplus	75,441,871	75,197,207	72,183,575
Statutory unassigned surplus	53,422,483	53,201,571	45,247,698
Statutory net (loss) income	(233,391)	7,704,417	12,240,173

Our principal source of cash for payment of dividends is dividends from our insurance subsidiaries. State insurance laws require our insurance subsidiaries to maintain certain minimum capital and surplus amounts on a statutory basis. Our insurance subsidiaries are subject to regulations that restrict the payment of dividends from statutory surplus and may require prior approval of their domiciliary insurance regulatory authorities. Our insurance subsidiaries are also subject to risk-based capital ("RBC") requirements that may further impact their ability to pay dividends. Our insurance subsidiaries' statutory capital and surplus at December 31, 2022 exceeded the amount of statutory capital and surplus necessary to satisfy regulatory requirements, including the RBC requirements, by a significant margin. Amounts available for distribution to us as dividends from our insurance subsidiaries without prior approval of insurance regulatory authorities in 2023 are approximately \$26.4 million from Atlantic States, \$6.5 million from Southern, \$6.0 million from Peninsula and \$7.5 million from MICO, or a total of approximately \$46.4 million.

15 - Reconciliation of Statutory Filings to Amounts Reported in the Consolidated Financial Statements

Our insurance subsidiaries must file financial statements with state insurance regulatory authorities using accounting principles and practices prescribed or permitted by those authorities. We refer to these accounting principles and practices as statutory accounting principles ("SAP"). Accounting principles used to prepare these SAP financial statements differ from those used to prepare financial statements on the basis of GAAP.

Reconciliations of statutory net income and capital and surplus, as determined using SAP, to the net (loss) income and stockholders' equity amounts included in the accompanying consolidated financial statements are as follows:

	Year Ended December 31,						
	2022	2021	2020				
Statutory net income of insurance subsidiaries	\$ 424,058	\$ 10,750,552	\$ 48,282,517				
Increases (decreases):							
Deferred policy acquisition costs	5,141,857	8,871,415	(127,901)				
Deferred federal income taxes	2,958,735	(1,085,903)	(6,448)				
Salvage and subrogation recoverable	5,195,800	2,551,800	713,400				
Consolidating eliminations and adjustments	(14,791,466)	(18,769)	(9,516,984)				
Parent-only net (loss) income	(888,389)	4,185,079	13,470,668				
Net (loss) income	\$ (1,959,405)	\$ 25,254,174	\$ 52,815,252				
		December 31,					
	2022	December 31, 2021	2020				
Statutory capital and surplus of insurance subsidiaries	2022 \$ 455,719,035		2020 \$ 458,407,568				
Statutory capital and surplus of insurance subsidiaries Increases (decreases):		2021					
• •		2021					
Increases (decreases):	\$ 455,719,035	\$ 466,186,406	\$ 458,407,568				
Increases (decreases): Deferred policy acquisition costs	\$ 455,719,035 73,170,230	2021 \$ 466,186,406 68,028,373	\$ 458,407,568 59,156,958				
Increases (decreases): Deferred policy acquisition costs Deferred federal income taxes	\$ 455,719,035 73,170,230 (23,794,084)	2021 \$ 466,186,406 68,028,373 (21,294,388)	\$ 458,407,568 59,156,958 (18,586,428)				
Increases (decreases): Deferred policy acquisition costs Deferred federal income taxes Salvage and subrogation recoverable	\$ 455,719,035 73,170,230 (23,794,084) 28,706,200	2021 \$ 466,186,406 68,028,373 (21,294,388) 23,510,400	\$ 458,407,568 59,156,958 (18,586,428) 20,958,600				
Increases (decreases): Deferred policy acquisition costs Deferred federal income taxes Salvage and subrogation recoverable Non-admitted assets and other adjustments, net	\$ 455,719,035 73,170,230 (23,794,084) 28,706,200 712,623	2021 \$ 466,186,406 68,028,373 (21,294,388) 23,510,400 929,862	\$ 458,407,568 59,156,958 (18,586,428) 20,958,600 1,315,378				
Increases (decreases): Deferred policy acquisition costs Deferred federal income taxes Salvage and subrogation recoverable Non-admitted assets and other adjustments, net Fixed maturities	\$ 455,719,035 73,170,230 (23,794,084) 28,706,200 712,623 (49,367,986)	2021 \$ 466,186,406 68,028,373 (21,294,388) 23,510,400 929,862 5,958,434	\$ 458,407,568 59,156,958 (18,586,428) 20,958,600 1,315,378 15,309,610				

16 - Supplementary Cash Flow Information

The following table reflects net income taxes and interest we paid during 2022, 2021 and 2020:

	2022 2021		2021	2020			
Income taxes	\$	4,500,000	\$	6,200,000	\$	12,800,000	
Interest		623,947		1,150,211		1,191,800	

17 - Earnings Per Share

We have two classes of common stock, which we refer to as Class A common stock and Class B common stock. Our Class A common stock is entitled to be paid cash dividends that are at least 10% higher than the cash dividends we pay on our Class B common stock. Accordingly, we use the two-class method for the computation of earnings per common share. The two-class method is an earnings allocation formula that determines earnings per share separately for each class of common stock based on dividends declared and an allocation of remaining undistributed earnings using a participation percentage reflecting the dividend rights of each class.

We present below a reconciliation of the numerators and denominators we used in the basic and diluted per share computations for our Class A common stock:

Year Ended December 31,						
	2022		2021		2020	
\$	(1,571)	\$	21,131	\$	43,609	
	26,409		25,388		23,707	
\$	(0.06)	\$	0.83	\$	1.84	
\$	(1,571)	\$	21,131	\$	43,609	
	26,409		25,388		23,707	
			146		180	
	26,409		25,534		23,887	
\$	(0.06)	\$	0.83	\$	1.83	
	\$ \$ \$	\$ (1,571) 26,409 \$ (0.06) \$ (1,571) 26,409 ————————————————————————————————————	\$ (1,571) \$ 26,409 \$ (0.06) \$ \$ (1,571) \$ 26,409	\$ (1,571) \$ 21,131 26,409 25,388 \$ (0.06) \$ 0.83 \$ (1,571) \$ 21,131 26,409 25,388 — 146 26,409 25,534	\$ (1,571) \$ 21,131 \$ 26,409 25,388 \$ (0.06) \$ 0.83 \$ \$ (1,571) \$ 21,131 \$ 26,409 25,388 — 146 26,409 25,534	

We used the following information in the basic and diluted per share computations for our Class B common stock:

	Year Ended December 31,						
(in thousands)	2022			2021		2020	
Basic and diluted (loss) earnings per share:							
Numerator:							
Allocation of net (loss) income	\$	(388)	\$	4,123	\$	9,206	
Denominator:							
Weighted-average shares outstanding		5,577		5,577		5,577	
Basic and diluted (loss) earnings per share	\$	(0.07)	\$	0.74	\$	1.65	

We did not include any effect of dilutive securities in the computation of diluted loss per share for 2022 because we sustained a net loss for the period.

18 - Condensed Financial Information of Parent Company

Condensed Balance Sheets

(in thousands)

December 31,				2022	_	2021
Assets						
Investment in subsidiaries/affiliates (equity method)			\$	509,513	\$	554,804
Short-term investments				7,325		9
Cash				3,288		14,375
Property and equipment				586		716
Other				4,589		2,455
Total assets			\$	525,301	\$	572,359
Liabilities and Stockholders' Equity						
Liabilities						
Cash dividends declared to stockholders			\$	5,297	\$	4,915
Notes payable to subsidiary				35,000		35,000
Other				1,411		1,408
Total liabilities				41,708		41,323
Stockholders' equity				483,593		531,036
Total liabilities and stockholders' equity			\$	525,301	\$	572,359
Condensed Statements of (Loss) Income and Con (in thousands)	mpre	ehensive (1	Loss) Income		
Year Ended December 31,		2022		2021		2020
Statements of (Loss) Income						
Revenues						
Dividends from subsidiaries	\$		\$	5,000	\$	14,000
Realized investment gains						_
Other		526		481		463
Total revenues		526		5,481		14,463
Expenses						
Operating expenses		1,245		1,223		1,258
Interest		787		787		794
Total expenses		2,032		2,010		2,052
(Loss) income before income tax benefit and equity in undistributed net (loss) income of subsidiaries		(1,506)		3,471		12,411
Income tax benefit		(618)		(714)		(1,059)
(Loss) income before equity in undistributed net (loss) income of subsidiaries		(888)		4,185		13,470
Equity in undistributed net (loss) income of subsidiaries		(1,071)		21,069		39,345
Net (loss) income	\$	(1,959)	\$	25,254	\$	52,815
Statements of Comprehensive (Loss) Income	_	(-,,-,)	Ť		Ť	,
Net (loss) income	\$	(1,959)	\$	25,254	\$	52,815
Other comprehensive (loss) income, net of tax	φ	(1,939)	Ψ	23,234	φ	32,013
Unrealized (loss) gain - subsidiaries		(44,988)		(7,847)		10,627
Other comprehensive (loss) income, net of tax		(44,988)	_		_	10,627
	•		•	(7,847)	•	
Comprehensive (loss) income	\$	(46,947)	\$	17,407	\$	63,442

Condensed Statements of Cash Flows

(in thousands)

Year Ended December 31,	2022		2021		 2020
Cash flows from operating activities:					
Net (loss) income	\$	(1,959)	\$	25,254	\$ 52,815
Adjustments:					
Equity in undistributed net loss (income) of subsidiaries		1,071		(21,069)	(39,345)
Other		(1,972)		(536)	(5,615)
Net adjustments		(901)		(21,605)	(44,960)
Net cash (used) provided		(2,860)		3,649	7,855
Cash flows from investing activities:					
Net (purchases) sale of short-term investments		(7,316)			2,493
Net purchase of property and equipment				(13)	(18)
Investment in subsidiaries		(768)		(916)	(1,037)
Other		(28)			
Net cash (used) received		(8,112)		(929)	1,438
Cash flows from financing activities:					
Cash dividends paid		(20,503)		(19,099)	(16,976)
Issuance of common stock		20,388		15,433	20,654
Net cash (used) received		(115)		(3,666)	3,678
Net change in cash		(11,087)		(946)	12,971
Cash at beginning of year		14,375		15,321	2,350
Cash at end of year	\$	3,288	\$	14,375	\$ 15,321

19 - Segment Information

We have three reportable segments, which consist of our investment function, our commercial lines of insurance and our personal lines of insurance. Using independent agents, our insurance subsidiaries market commercial lines of insurance to small and medium-sized businesses and personal lines of insurance to individuals.

We evaluate the performance of the commercial lines and personal lines primarily based upon our insurance subsidiaries' underwriting results as determined under SAP for our total business.

We do not allocate assets to the commercial and personal lines and review the two segments in total for purposes of decision-making. We operate only in the United States, and no single customer or agent provides 10 percent or more of our revenues.

Financial data by segment is as follows:

	2022		2021	2020
		(in	thousands)	
Revenues:				
Premiums earned:				
Commercial lines	\$ 510,153	\$	468,433	\$ 412,877
Personal lines	 312,337		307,582	 329,163
GAAP premiums earned	822,490		776,015	742,040
Net investment income	34,016		31,126	29,504
Investment (losses) gains	(10,185)		6,477	2,778
Other	1,900		2,848	3,497
Total revenues	\$ 848,221	\$	816,466	\$ 777,819
	 2022		2021	2020
		(in	thousands)	
(Loss) income before income taxes:				
Underwriting (loss) income:				
Commercial lines	\$ (22,665)	\$	(35,174)	\$ (858)
Personal lines	(13,506)		17,235	31,764
SAP underwriting (loss) income	(36,171)		(17,939)	30,906
GAAP adjustments	 8,667		9,945	 (959)
GAAP underwriting (loss) income	 (27,504)		(7,994)	29,947
Net investment income	34,016		31,126	29,504
Investment (losses) gains	(10,185)		6,477	2,778
Other	35		730	1,043
(Loss) income before income taxes	\$ (3,638)	\$	30,339	\$ 63,272

20 - Guaranty Fund and Other Insurance-Related Assessments

Our insurance subsidiaries' liabilities for guaranty fund and other insurance-related assessments were \$1.9 million and \$1.7 million at December 31, 2022 and 2021, respectively. These liabilities included \$663,883 and \$602,523 related to surcharges collected by our insurance subsidiaries on behalf of regulatory authorities for 2022 and 2021, respectively.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Donegal Group Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Donegal Group Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of income and comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes and financial statement schedule III (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 6, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Estimate of Liabilities for Losses and Loss Expenses

As discussed in Notes 1 and 8 to the consolidated financial statements, the Company estimates the liabilities for losses and loss expenses (reserves) through an internal reserve analysis that relies upon generally accepted actuarial practices. The Company develops reserve estimates by line of business and, as experience emerges and other information develops, the reserve estimates are assessed in aggregate and adjusted as necessary. As of December 31, 2022, the Company recorded a liability of \$1.121 billion for reserves.

We identified the evaluation of the estimate of reserves as a critical audit matter. The evaluation of the Company's estimate of reserves involved a high degree of auditor judgment due to the inherent uncertainties in the use of actuarial methods and assumptions, which considered internal and external factors. Assumptions included the selection of loss development factors, a priori ratios, and the weighting of actuarial methods when more than one was used. Evaluating the actuarial methods and assumptions required specialized skills and auditor judgment.

The following are the primary procedures we performed to address this critical audit matter. We evaluated, with the involvement of actuarial professionals, when appropriate, the design and tested the operating effectiveness of certain

internal controls related to the Company's reserving process. These included controls related to the Company's actuarial analyses and determination of the Company's estimate of recorded reserves. We involved actuarial professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's actuarial methods by comparing them to generally accepted actuarial practices
- developing an independent estimate of reserves for certain lines of business using methods consistent with generally accepted actuarial practices by independently forming assumptions of loss development factors, a priori ratios, and the weighting of actuarial methods when more than one was used, considering internal and external factors
- assessing the Company's internal actuarial analysis for certain lines of business by reviewing the assumptions and actuarial methods used, which included the selection of loss development factors, *a priori* ratios, and the weighting of actuarial methods when more than one was used, considering internal and external factors
- developing a range of reserves and comparing to the Company's recorded reserves and assessing movement of the Company's recorded reserves within that range.



We or our predecessor firms have served as the Company's auditor since 1986.

Philadelphia, Pennsylvania March 6, 2023

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) at December 31, 2022 covered by this Form 10-K Report. Based on such evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, at December 31, 2022, our disclosure controls and procedures are effective in recording, processing, summarizing and reporting, on a timely basis, information we are required to disclose in the reports that we file or submit under the Exchange Act and our disclosure controls and procedures are also effective to ensure that information we disclose in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as that term is defined in Rule 13a-15(f) under the Exchange Act. Under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, our management has conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO Framework"). Based on our evaluation under the COSO Framework, our management has concluded that our internal control over financial reporting was effective at December 31, 2022.

The effectiveness of our internal control over financial reporting at December 31, 2022 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in its report, which is included in this Form 10-K Report.

Changes in Internal Control over Financial Reporting

Donegal Mutual implemented a new application system that Donegal Mutual and our insurance subsidiaries began to utilize during 2021 for the allocation of expenses and, beginning in 2022, for reinsurance premiums and commissions. The new application system provides for further automation of, and enhanced internal controls over these processes. The implementation of the new system is part of a multi-year accounting systems and process modernization initiative Donegal Mutual is implementing to achieve various benefits for Donegal Mutual and our insurance subsidiaries, including streamlined financial reporting workflows and a more efficient control environment.

Such changes resulted in changes to procedures related to our financial reporting. Prior to the implementation of the new systems, we identified and designed new internal controls that we incorporated into our internal controls over financial reporting. Following the implementation, we validated these new controls according to our established processes. We did not implement these changes in internal controls to respond to any actual or perceived significant deficiencies in our internal control over financial reporting.

Item 9B. Other Information	tem 9B.	b. Omer	IIIIOI IIIauoii
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None.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Donegal Group Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Donegal Group Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and December 31, 2021, the related consolidated statements of income and comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes and financial statement schedule III (collectively, the consolidated financial statements), and our report dated March 6, 2023 expressed an unqualified opinion on those consolidated financial statements

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG LLP

Philadelphia, Pennsylvania March 6, 2023

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Other than the information we provide below and the information regarding executive officers included in Part I of this Form 10-K Report, we incorporate the response to this Item 10 by reference to our proxy statement we will file with the SEC on or about March 17, 2023 relating to our annual meeting of stockholders that we will hold on April 20, 2023, or our Proxy Statement.

We incorporate the full text of our Code of Business Conduct and Ethics by reference to Exhibit 14 to this Form 10-K Report.

Item 11. Executive Compensation.

We incorporate the response to this Item 11 by reference to our Proxy Statement. Neither the Report of our Compensation Committee nor the Report of our Audit Committee included in our Proxy Statement shall constitute or be deemed to constitute a filing with the SEC under the Securities Act or the Exchange Act or be deemed to have been incorporated by reference into any filing we make under the Securities Act or the Exchange Act, except to the extent we specifically incorporate the Report of Our Compensation Committee or the Report of Our Audit Committee by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

We incorporate the response to this Item 12 by reference to our Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

We incorporate the response to this Item 13 by reference to our Proxy Statement.

Item 14. Principal Accounting Fees and Services.

We incorporate the response to this Item 14 by reference to our Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

- (a) Financial statements, financial statement schedule and exhibits filed:
 - (i) Consolidated Financial Statements

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Schedule III — Supplementary Insurance Information	101
Report of Independent Registered Public Accounting Firm	Filed herewith

We have omitted all other schedules since they are not required, not applicable or the information is included in the financial statements or notes to the financial statements.

(c) Exhibits

Exhibit No.	Description of Exhibits	Reference
3.1	Certificate of Incorporation of Donegal Group Inc., as amended.	(i)
3.2	Second Amended and Restated By-laws of Donegal Group Inc.	(q)
3.3	State of Delaware Certificate of Change of Registered Agent and/or Registered Office	(r)
4.1	Description of Donegal Group Inc's Securities Registered pursuant to Section 12 of the Exchange Act.	(m)
Managemer	nt Contracts and Compensatory Plans or Arrangements	
10.1	Donegal Group Inc. 2013 Equity Incentive Plan for Employees.	(g)
10.2	Donegal Group Inc. 2013 Equity Incentive Plan for Directors.	(g)
10.3	Employment Agreement dated as of October 1, 2020 among Donegal Mutual Insurance Company, Donegal Group Inc. and Kevin G. Burke.	(1)
10.4	Employment Agreement dated as of October 1, 2020 among Donegal Mutual Insurance Company, Donegal Group Inc. and Jeffrey D. Miller.	(1)
10.5	Form of Employment Agreement dated as of October 1, 2020 among Donegal Mutual Insurance Company, Donegal Group Inc. and Our Executive Officers Other Than Kevin G. Burke and Jeffrey D. Miller.	Filed herewith
10.6	Donegal Mutual Insurance Company 401(k) Plan.	(a)

10.7	Amendment No. 1 effective January 1, 2000 to Donegal Mutual Insurance Company 401(k) Plan.	(a)
10.8	Amendment No. 2 effective January 6, 2000 to Donegal Mutual Insurance Company 401(k) Plan.	(b)
10.9	Amendment No. 3 effective July 23, 2001 to Donegal Mutual Insurance Company 401(k) Plan.	(b)
10.10	Amendment No. 4 effective January 1, 2002 to Donegal Mutual Insurance Company 401(k) Plan.	(b)
10.11	Amendment No. 5 effective December 31, 2001 to Donegal Mutual Insurance Company 401(k) Plan.	(b)
10.12	Amendment No. 6 effective July 1, 2002 to Donegal Mutual Insurance Company 401(k) Plan.	(c)
10.13	Donegal Group Inc. 2015 Equity Incentive Plan for Employees.	(h)
10.14	Donegal Group Inc. 2015 Equity Incentive Plan for Directors.	(h)
10.15	Donegal Group Inc. 2019 Equity Incentive Plan for Employees.	(j)
10.16	Donegal Group Inc. 2019 Equity Incentive Plan for Directors.	(j)
10.17	Donegal Group Inc. Cash Incentive Bonus Plan for 2020.	(k)
10.18	Donegal Group Inc. 2020 Long-Term Executive Incentive Plan.	(k)
10.19	Donegal Group Inc. Cash Incentive Bonus Plan for 2021.	(m)
10.20	Donegal Group Inc. 2021 Employee Stock Purchase Plan.	(n)
10.21	Donegal Group Inc. Cash Incentive Bonus Plan for 2022.	(p)
10.22	Donegal Group Inc. Cash Incentive Bonus Plan for 2023.	Filed herewith
10.23	Donegal Group Inc. 2023 Long-Term Executive Incentive Plan.	Filed herewith
Other Mat	erial Contracts	
Other Mat	erial Contracts Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company.	(e)
	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between	
10.24	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and	(e)
10.24 10.25	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity	(e) (f)
10.24 10.25 10.26	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance	(e) (f) (p)
10.24 10.25 10.26	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance Company and Michigan Insurance Company.	(e) (f) (p)
10.24 10.25 10.26 10.27 10.28	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance Company and Michigan Insurance Company. Donegal Group Inc. 2021 Agency Stock Purchase Plan.	(e) (f) (p) (f) (o)
10.24 10.25 10.26 10.27 10.28 10.29	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance Company and Michigan Insurance Company. Donegal Group Inc. 2021 Agency Stock Purchase Plan. Discretionary Loan Agreement between Donegal Group Inc. and M&T Bank dated August 1, 2020.	(e) (f) (p) (f) (o) (m)
10.24 10.25 10.26 10.27 10.28 10.29 14	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance Company and Michigan Insurance Company. Donegal Group Inc. 2021 Agency Stock Purchase Plan. Discretionary Loan Agreement between Donegal Group Inc. and M&T Bank dated August 1, 2020. Code of Business Conduct and Ethics.	(e) (f) (p) (f) (o) (m) (d) Filed
10.24 10.25 10.26 10.27 10.28 10.29 14 21	Amended and Restated Proportional Reinsurance Agreement dated March 1, 2010 between Donegal Mutual Insurance Company and Atlantic States Insurance Company. Amended and Restated Tax Sharing Agreement dated December 1, 2010 among Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, Le Mars Insurance Company, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Amended and Restated Services Allocation Agreement dated September 1, 2021 among Donegal Mutual Insurance Company, Donegal Group Inc., Atlantic States Insurance Company, Southern Insurance Company of Virginia, The Peninsula Insurance Company, Peninsula Indemnity Company and Michigan Insurance Company. Quota-share Reinsurance Agreement dated December 1, 2010 between Donegal Mutual Insurance Company and Michigan Insurance Company. Donegal Group Inc. 2021 Agency Stock Purchase Plan. Discretionary Loan Agreement between Donegal Group Inc. and M&T Bank dated August 1, 2020. Code of Business Conduct and Ethics. Subsidiaries of Registrant.	(e) (f) (p) (f) (o) (m) (d) Filed herewith Filed

32.1	Section 1350 Certification of Chief Executive Officer.	Filed herewith
32.2	Section 1350 Certification of Chief Financial Officer.	Filed herewith
Exhibit 10 1.INS	XBRL Instance Document	Filed herewith
Exhibit 10 1.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith
Exhibit 10 1.PRE	XBRL Taxonomy Presentation Linkbase Document	Filed herewith
Exhibit 10 1.CAL	XBRL Taxonomy Calculation Linkbase Document	Filed herewith
Exhibit 10 1.LAB	XBRL Taxonomy Label Linkbase Document	Filed herewith
Exhibit 10 1.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Filed herewith

⁽a) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 1999.

- (b) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2001.
- (c) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2002.
- (d) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2003.
- (e) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2009.
- (f) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2010.
- (g) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 8-K Report dated April 22, 2013.
- (h) We incorporate such exhibit by reference to the copy of such plan in Registrant's definitive proxy statement for its Annual Meeting of Stockholders held on April 16, 2015 filed on March 16, 2015.
- We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-Q Report for the quarter ended June 30, 2019.
- (j) We incorporate such exhibit by reference to the copy of such plan in Registrant's definitive proxy statement for its Annual Meeting of Stockholders held on April 18, 2019 filed on March 18, 2019.
- (k) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2019.
- (1) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 8-K Report dated October 1, 2020.
- (m) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2020.
- (n) We incorporate such exhibit by reference to the copy of such plan in Registrant's definitive proxy statement for its Annual Meeting of Stockholders held on April 15, 2021 filed on March 15, 2021.
- (o) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form S-3 Registration Statement filed on September 30, 2021.
- (p) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 10-K Report for the year ended December 31, 2021.
- (q) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 8-K Report dated July 22, 2022.
- (r) We incorporate such exhibit by reference to the like-described exhibit in Registrant's Form 8-K Report dated August 10, 2022.

Item 16. Form 10-K Summary.

None.

DONEGAL GROUP INC. AND SUBSIDIARIES SCHEDULE III — SUPPLEMENTARY INSURANCE INFORMATION

Years Ended December 31, 2022, 2021 and 2020

(\$ in thousands)

Segment	I	Net Premiums Earned	 Net evestment Income]	Net Losses and Loss Expenses	0	mortization f Deferred Policy Acquisition Costs	Other nderwriting Expenses	 Net Premiums Written
Year Ended December 31, 2022									
Commercial lines	\$	510,153	\$ 	\$	342,456	\$	91,965	\$ 89,056	\$ 519,797
Personal lines		312,337	_		221,623		50,465	48,868	323,733
Investments			34,016					_	
	\$	822,490	\$ 34,016	\$	564,079	\$	142,430	\$ 137,924	\$ 843,530
Year Ended December 31, 2021									
Commercial lines	\$	468,433	\$ 	\$	321,483	\$	84,927	\$ 85,345	\$ 501,785
Personal lines		307,582			199,227		43,806	44,023	302,482
Investments			31,126						
	\$	776,015	\$ 31,126	\$	520,710	\$	128,733	\$ 129,368	\$ 804,267
Year Ended December 31, 2020									
Commercial lines	\$	412,877	\$ 	\$	264,053	\$	66,253	\$ 72,245	\$ 425,986
Personal lines		329,163			195,711		52,819	53,618	316,154
Investments			29,504		_				
	\$	742,040	\$ 29,504	\$	459,764	\$	119,072	\$ 125,863	\$ 742,140

DONEGAL GROUP INC. AND SUBSIDIARIES SCHEDULE III — SUPPLEMENTARY INSURANCE INFORMATION, CONTINUED

(\$ in thousands)

	At December 31,					
Segment		Deferred Policy equisition Costs	Liability For Losses and Loss Expenses	Unearned Premiums	Other Policy Claims and Benefits Payable	
2022						
Commercial lines	\$	43,756	\$ 859,842	\$ 345,437	\$ —	
Personal lines		29,414	261,204	232,216	_	
Investments						
	\$	73,170	\$1,121,046	\$ 577,653	\$	
2021						
Commercial lines	\$	41,225	\$ 814,681	\$ 347,213	\$ —	
Personal lines		26,803	262,939	225,745	_	
Investments						
	\$	68,028	\$1,077,620	\$ 572,958	\$	

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DONEGAL GROUP INC.

By: /s/ Kevin G. Burke

Kevin G. Burke, President and Chief Executive

Officer

Date: March 6, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Kevin G. Burke	President, Chief Executive Officer and a Director	March 6, 2023
Kevin G. Burke	(principal executive officer)	
/s/ Jeffrey D. Miller	Executive Vice President and Chief Financial Officer	March 6, 2023
Jeffrey D. Miller	(principal financial and accounting officer)	
/s/ Scott A. Berlucchi	Director	March 6, 2023
Scott A. Berlucchi		
/s/ Dennis J. Bixenman	Director	March 6, 2023
Dennis J. Bixenman		
/s/ Jack L. Hess	Director	March 6, 2023
Jack L. Hess		
/s/ Barry C. Huber	Director	March 6, 2023
Barry C. Huber		
/s/ David C. King	Director	March 6, 2023
David C. King		
/s/ Kevin M. Kraft, Sr.	Director	March 6, 2023
Kevin M. Kraft, Sr.		
/s/ Jon M. Mahan	Director	March 6, 2023
Jon M. Mahan		
/s/ S. Trezevant Moore, Jr.	Director	March 6, 2023
S. Trezevant Moore, Jr.		
/s/ Annette B. Szady	Director	March 6, 2023
Annette B. Szady		
/s/ Richard D. Wampler, II	Director	March 6, 2023
Richard D. Wampler, II		









Corporate Information

ANNUAL MEETING

April 20, 2023 at 10:00 a.m.
Virtual meeting via online webcast at:
www.virtualshareholdermeeting.com/
DGICA2023

CORPORATE OFFICES

1195 River Road P.O. Box 302 Marietta, Pennsylvania 17547-0302 (800) 877-0600

E-mail Address: investors@donegalgroup.com Donegal Web Site: www.donegalgroup.com

TRANSFER AGENT

Computershare Trust Company, N.A. P.O. Box 43006 Providence, Rhode Island 02940-3006 (800) 317-4445

Web Site: www.computershare.com Hearing Impaired: TDD: 800-952-9245

DIVIDEND REINVESTMENT AND STOCK PURCHASE PLAN

We offer a dividend reinvestment and stock purchase plan through our transfer agent. For information contact:

Donegal Group Inc.
Dividend Reinvestment and
Stock Purchase Plan
Computershare Trust Company, N.A.
P.O. Box 43006
Providence, Rhode Island 02940-3006

STOCKHOLDERS

The following represent the number of our common stockholders of record as of December 31, 2022:

Class A common stock 1,657 Class B common stock 225

BOARD OF DIRECTORS

Kevin G. Burke Chairman of the Board and a Director Scott A. Berlucchi Director Dennis J. Bixenman Director Jack L. Hess Director Barry C. Huber Director David C. King Director Kevin M. Kraft, Sr. Director Jon M. Mahan Director S. Trezevant Moore, Jr. Director Annette B. Szady Director Richard D. Wampler, II Director

OFFICERS

Jennifer R. Miller

President and Chief Executive Officer
Executive Vice President and
Chief Financial Officer
Senior Vice President and
Chief Analytics Officer
Senior Vice President
Senior Vice President
Senior Vice President
Senior Vice President and
Chief Risk Officer
Senior Vice President
Senior Vice President and General Counsel
Senior Vice President and Chief Information Officer
Senior Vice President
Senior Vice President and
Chief Investment Officer
Senior Vice President and
Treasurer
Vice President
Vice President and
Controller
Vice President and
Assistant Treasurer
Vice President and
Secretary

Assistant Secretary

1195 River Road, P.O. Box 302 Marietta, PA 17547-0302 (800) 877-0600 www.donegalgroup.com

